

# Gunung Mulu National Park

## 1. World Heritage Property Data

### 1.1 - Name of World Heritage property


Gunung Mulu National Park

### 1.2 - World Heritage property details

### 1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Gunung Mulu National Park	4.133 / 114.917	52864	0	52864	2000
<b>Total (ha)</b>		<b>52864</b>	<b>0</b>	<b>52864</b>	

### 1.4 - Map(s)

Title	Date	Link to source
Site map - Gunung Mulu National Park	1999	

### Comment

The updated map and the relevant soft copies of information have been sent to National Focal Point (Department of National Heritage) in response to WHC letter ref CLT/WHC/NOM/20/154 dated 21 October 2020.

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

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

### Comment

<http://www.sarawakforestry.com> <http://www.mulupark.com> Facebook - Mulu World Heritage Area - National Park Instagram - Mulu National Park Official

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

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

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

### 2.2 - Please provide comments on 2.1 if necessary

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

Not applicable

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

Not applicable

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

No

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

No

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

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

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

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

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**

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

No

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

**3. Statement of Outstanding Universal Value**

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

#### Statement of Outstanding Universal Value

##### Brief synthesis

Gunung Mulu National Park, situated in the Malaysian State of Sarawak on the island of Borneo, is outstanding both for its high biodiversity and for its karst features. The park is dominated by Gunung Mulu, a 2,376 m-high sandstone pinnacle and the property is the most studied tropical karst area in the world. The geological Melinau Formation contains a remarkable concentration of caves, revealing a geological history of over more than 1.5 million years.

High in endemism, Gunung Mulu National Park provides significant natural habitat for a wide range of plant and animal species, both above and below ground. The 52,865 ha park contains seventeen vegetation zones, exhibiting some 3,500 species of vascular plants. Its palm species are exceptionally rich, with 109 species in twenty genera recorded, making it one of the world's richest sites for palm species. Providing protection for a substantial area of Borneo's primary tropical forest and a home for a high diversity of species, including many endemics and threatened species, the large cave passages and chambers provide a major wildlife spectacle in terms of millions of cave swiftlets and bats.

The property is home to one of the world's finest examples of the collapse process in karstic terrain and provides outstanding scientific opportunities to study theories on the origins of cave faunas. The deeply-incised canyons, wild rivers, rainforest-covered mountains, spectacular limestone pinnacles, cave passages and decorations found within the property produce dramatic landscapes and breathtaking scenery that is without rival.

Important both for its high biodiversity and for its karst features, Gunung Mulu National Park, on the island of Borneo in the State of Sarawak, is the most studied tropical karst area in the world. The 52,864-ha park contains seventeen vegetation zones, exhibiting some 3,500 species of vascular plants. Its palm species are exceptionally rich, with 109 species in twenty genera noted. The park is dominated by Gunung Mulu, a 2,377 m-high sandstone pinnacle. At least 295 km of explored caves provide a spectacular sight and are home to millions of cave swiftlets and bats. The Sarawak Chamber, 600 m by 415 m and 80 m high, is the largest known cave chamber in the world.

**Criterion (vii):** Gunung Mulu National Park is an area of exceptional natural beauty, with striking primary forest, karst terrain, mountains, waterfalls and the largest caves on earth. Sarawak Chamber, the largest cave chamber in the world, stretches 600 m in length by 415 m wide and 80 m high. With a volume of 12 million cubic meters and an unsupported roof span of 300 m, this chamber dwarfs any other large chamber so far discovered. Deer Cave at 120 to 150 m in diameter is the largest cave passage in the world known at the present time and the Clearwater Cave System holds the world record as the longest cave in Asia at 110 km of mapped and explored passages. As some of the largest caves in the world they contain fine examples of tropical river caves, flood incuts, vadose, and phreatic caves, exhibiting fine examples of all types of speleothems (structures formed in a cave by the deposition of minerals from water).

**Criterion (viii):** The park is an outstanding example of major changes in the earth's history. Three major rock formations are evident; the Mulu Formation of Paleocene and Eocene shale's, and sandstone, rising to 2,376 m at the summit of Gunung Mulu; the 1.5 km thick Melinau Limestone formation of Upper Eocene, Oligocene and Lower Miocene, rising to 1,682 m at Gunung Api; and the Miocene Setap Shale formation outcropping as a gentle line of hills to the west. Major uplift that occurred during the late Pliocene to Pleistocene is well represented in the 295 km of explored caves as a series of major cave levels. The surface and underground geomorphology and hydrology reveal significant information on the tectonic and climatic evolution of Borneo. The sequence of terrestrial alluvial deposits provides an important record of glacial – interglacial cycles with the series of uplifted caves ranging from 28 m to over 300 m above sea level are at least 2 to 3 million years old, indicating uplift rates of about 19 cm per 1,000 years.

**Criterion (ix):** The property provides significant scientific opportunities to study theories on the origins of cave fauna with over 200 species recorded, including many troglobitic species and it displays outstanding examples of ongoing ecological and biological processes. Seventeen vegetation zones have been identified along with their diverse associated fauna. Some 3,500 species of plants, 1,700 mosses and liverworts and over 4,000 species of fungi have been recorded within the property. There are 20,000 species of invertebrates, 81 species of mammals, 270 species of birds, 55 species of reptiles, 76 species of amphibians and 48 species of fish.

**Criterion (x):** The property supports one of the richest assemblages of flora to be found in any area of comparable size in the world. It is botanically-rich in species and high in endemism, including one of the richest sites in the world for palm species and contains outstanding natural habitats for in-situ conservation for a large number of species; Deer Cave alone has one of the largest colonies in the world of free tailed bats, *Chaerephon plicata* at over 3 million. This one cave also has the largest number of different species of bats to be found in a single cave. Several million cave swiftlets (*Aerodramus* sp.) have been recorded from one cave system, constituting the largest colony in the world. Many species of fauna are endemic and 41 species are included on the endangered species list.

##### Integrity

Covering a vast area ranging in altitude from 28 metres to 2,376 metres above sea level and containing steep escarpments and ridges, karst towers, caves, rivers and associated terraces and floodplains, the terrain of the property lends itself to using natural landscape features as boundaries. The boundaries are marked and for the most part follow rivers with short sections of cut boundaries to the south-west, east and north-west. A section of the boundary to the north-west follows the international border with the State of Brunei.

The Government and management agency for the property are in the process of designating two extensions to the property to overcome limits to the current boundaries, as full catchment protection is lacking. Additionally the neighbouring Gunung Buda National Park, covering catchments of high natural significance, will be added to the property, thus strengthening the security and integrity of the property. The Governments of Malaysia and Brunei are also collaborating to establish what will effectively become a buffer zone for the property by using the Labi Forest Reserve in Brunei that adjoins Gunung Mulu National Park. This collaboration builds upon the on-going Heart of Borneo (HOB) Initiative to which the Governments of Malaysia, Brunei and Indonesia are committed.

Research at the park undertaken by both foreign and local researchers has assisted in providing a greater understanding of the property and its resources. Resulting information assists in decision-making and the formulation of management prescriptions. The State Government's continued policy not to allow road access to the park since its establishment in 1974 ensures that uncontrolled access is greatly minimized. This contributes to the continued maintenance and protection of the park's pristine conditions and ecological integrity. The land claims by the local people have been confirmed to be outside the boundary of the property and have hence resolved conflicts and issues in regards to land tenure and use within the boundary of the property. The State Government has also confirmed that it has no plan to implement dam projects that would significantly impact on the values of the property.

##### Protection and management requirements

Formally gazetted and constituted in 1974, the protection and management of Gunung Mulu National Park is fully backed by the National Parks and Nature Reserves Ordinance of 1998 and its subsidiary legislation, the National Parks and Nature Reserves Regulations of 1999. The Ordinance *inter alia* specifies the type of activities and developments that are allowed inside the boundaries of the national park, the various acts that constitute offences, the penalties applicable, and the process that has to be followed in dealing with such offences. The Regulations specify the prescriptions for carrying out the provisions of the principal Ordinance, for example Part III (C) of the Regulations has a specific section that deals with measures for the protection and management of caves.

Located in the State of Sarawak, Gunung Mulu National Park is under the prime responsibility of the State of Sarawak for management and protection. Management plans have been developed for the property and implementation has been effective.

Management related infrastructure includes a park headquarters, field stations and a system of trails with access restricted to four "show caves". Management interventions ensure that there is limited human interference in the natural system and assist in controlling impacts from increased tourism levels. Currently, over 90%

of the park and 95% of caves are closed to visitors. The only exception is access to areas for research purposes. Further, there is also reduced access to some sensitive caves. The use of an Integrated Development and Management Plan ensures very strict controls on physical developments in relation to sites, scope, scale, and aesthetic characteristics (of physical projects), so as to avoid "over development". Development inside the property requires consultation with all relevant stakeholders especially the Special Park Committee which comprises members of local communities and other relevant stakeholders.

Illegal activities remain one of the major challenges in managing the property. Enforcement is carried out in collaboration with other relevant law enforcement agencies such as the Police, Customs, Airport Security, and the Sarawak Biodiversity Centre for protection of park resources. Patrolling of boundaries is incorporated in annual operations plans. Proposed extensions to the property, gazettement of Gunung Buda National Park, and establishment of Labi Forest Reserve on the Brunei side may provide buffers to illegal activities and assist in preventing them from occurring within the property and in the case of additional reserves this will provide wider refuge for wildlife species within the area. Hunting activities within the boundary of the property also remain an ongoing threat. However, this pressure is mainly confined to nomadic Penan communities who have been given permission to hunt non-totally protected species, such as the wild boar, for subsistence consumption only.

Areas of forest surrounding the property have been heavily logged and cut, up to the rivers that demark much of the boundary of the property and this remains an ongoing threat to its integrity and natural values. Extensions to the Park, covering a total area of about 33,000 ha would provide an additional buffer from illegal activities. However, increased erosion and resulting silt loads have potential to significantly alter the aquatic ecology and require monitoring while logging and conversion of forests adjacent to the property to palm oil plantation also require constant and on going attention due to potential impacts.

## Comment

There are changes in the length of the cave passages in Mulu from the ongoing cave expeditions. The length of the Clearwater Cave system is now 238 km compared to the previous 110km. Also, from the total 295 km of passages found in Mulu in the above statement, we now have a total of 452 km of cave passages, a testimony of ongoing research on the OUVs. The findings can be found in the caving expedition reports and the Mulu Caves Project website <http://www.mulu caves.org>

### 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	Spectacular caves	X			
3.2.2	Exceptional natural beauty and an outstanding wildlife spectacle	X			
3.2.3	Outstanding example of cave geomorphology	X			
3.2.4	Cave ecology (troglobite and stygobite evolution)	X			
3.2.5	One of the richest assemblages of flora biota	X			
3.2.6	One of the richest assemblages of fauna biota	X			
3.2.7					
3.2.8					
3.2.9					
3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

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

#### 4. Factors Affecting the Property

##### 4.1. Buildings and Development

###### 4.1.1 - Housing

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

X Not relevant

###### 4.1.2 - Commercial development

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

X Not relevant

###### 4.1.3 - Industrial areas

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Inside, Outside

<input checked="" type="checkbox"/> Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

#### 4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Inside, Outside

<input checked="" type="checkbox"/> Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
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

Mulu relies heavily on the interpretation of the site, hence the Discovery centre as well as sufficient trail markers and story boards. Not only for the dissemination of information, but safety is a major consideration as well.

### 4.2. Transportation Infrastructure

#### 4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input checked="" type="checkbox"/> Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
Negative							

#### 4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.2.5 - Effects arising from use of transportation infrastructure

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input checked="" type="checkbox"/> Relevant	Not relevant
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Impact	Impact		Origin		Trend of impact		
	🔴 Current	🟡 Potential	🟢 Inside	🟢 Outside	↘ Decreasing	→ Stable	↗ Increasing
🟢 Positive ✕	✕	✕	✕	✕		→	
🔴 Negative ✕	✕		✕	✕			↗

**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**

There has been an increase in the number of longboats in the Melinau River. While there are concerns on the impact of the boats on safety and pollution, the boats are also needed to ensure no land infrastructure is required thus minimizing impact on land while bringing direct benefit to the local community from transporting tourists and related services. There is no negative impact on the OUVs arising from the use of the longboats.

**4.3. Services Infrastructures**

**4.3.1 - Water infrastructure**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	✕ Not relevant
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**4.3.2 - Renewable energy facilities**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	✕ Not relevant
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**4.3.3 - Non-renewable energy facilities**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	✕ Not relevant
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**4.3.4 - Localised utilities**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

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

**4.3.5 - Major linear utilities**

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Inside

Relevant	✕ Not relevant
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**4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively**

**4.4. Pollution**

**4.4.1 - Pollution of marine waters**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	✕ Not relevant
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**4.4.2 - Ground water pollution**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	✕ Not relevant
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#### 4.4.3 - Surface water pollution

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.4.4 - Air pollution

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.4.5 - Solid waste

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input checked="" type="checkbox"/> Relevant	Not relevant
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Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive							
Negative <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

#### 4.4.6 - Input of excess energy

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 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

The success of tourism has resulted in population growth and spurred the development and expansion of villages adjacent to the property namely Kampung Mulu and Batu Bungan. The property and tourism related activities have enhanced personal income and wealth of the local community, this expansion has become a growing challenge which is currently being addressed through the local governance and management plan.

### 4.5. Biological resource use/modification

#### 4.5.1 - Fishing/collecting aquatic resources

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.2 - Aquaculture

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.3 - Land conversion

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.5 - Crop production

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.6 - Commercial wild plant collection

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.7 - Subsistence wild plant collection

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input checked="" type="checkbox"/> Relevant	Not relevant
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Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

#### 4.5.8 - Commercial hunting

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.9 - Subsistence hunting

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

### 4.6. Physical resource extraction

#### 4.6.1 - Mining

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.6.2 - Quarrying

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.6.3 - Oil and gas

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.6.4 - Water (extraction)

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively**

4.7. Local conditions affecting physical fabric

**4.7.1 - Wind**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.2 - Relative humidity**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.3 - Temperature**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.4 - Radiation/Light**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.5 - Dust**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.6 - Water (rain/water table)**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.7 - Pests**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.8 - Micro-organisms**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively**

4.8. Social/Cultural uses of heritage

**4.8.1 - Ritual/Spiritual/Religious and associative uses**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.8.2 - Society's valuing of heritage**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Inside, Outside

<input checked="" type="checkbox"/> Relevant		<input type="checkbox"/> Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

#### 4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input type="checkbox"/> Relevant	<input checked="" type="checkbox"/> Not relevant
-----------------------------------	--

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

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Potential, Outside

<input type="checkbox"/> Relevant	<input checked="" type="checkbox"/> Not relevant
-----------------------------------	--

#### 4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Potential, Inside, Outside

<input checked="" type="checkbox"/> Relevant		<input type="checkbox"/> Not relevant					
	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
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

Hunting and gathering is regarded as indigenous rights to some of the population group staying in the immediate vicinity. Hunting and gathering remains an integral part in Penan lifestyle. Reflecting on the cultural values, should it diminish or disappear, it would impact on the fabric of the indigenous people.

#### 4.9. Other human activities

##### 4.9.1 - Illegal activities

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input type="checkbox"/> Relevant	<input checked="" type="checkbox"/> Not relevant
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##### 4.9.2 - Deliberate destruction of heritage

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input type="checkbox"/> Relevant	<input checked="" type="checkbox"/> Not relevant
-----------------------------------	--

##### 4.9.3 - Military training

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input type="checkbox"/> Relevant	<input checked="" type="checkbox"/> Not relevant
-----------------------------------	--

##### 4.9.4 - War

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input type="checkbox"/> Relevant	<input checked="" type="checkbox"/> Not relevant
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#### 4.9.5 - Terrorism

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

#### 4.9.6 - Civil unrest

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> 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

#### 4.10. Climate change and severe weather events

##### 4.10.1 - Storms

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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##### 4.10.2 - Flooding

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input checked="" type="checkbox"/> Relevant	<input type="checkbox"/> Not relevant
--	---------------------------------------

Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive							
Negative <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

##### 4.10.3 - Drought

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

##### 4.10.4 - Desertification

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

##### 4.10.5 - Changes to oceanic waters

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

##### 4.10.6 - Temperature change

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

##### 4.10.7 - Other climate change impacts

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

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

**4.11. Sudden ecological or geological events**

**4.11.1 - Volcanic eruption**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

**4.11.2 - Earthquake**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

**4.11.3 - Tsunami/Tidal wave**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

**4.11.4 - Avalanche/Landslide**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
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**4.11.5 - Erosion and siltation/Deposition**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

**4.11.6 - Fire (wildfire)**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

<input checked="" type="checkbox"/> Relevant	<input type="checkbox"/> Not relevant
--	---------------------------------------

Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive							
Negative <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

**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**

There have been past occurrences of natural wildfire affecting the limestone hills vegetations in the property. One of the limestone mountain is called Gunung Api which means the "fire mountain" probably due to the forest fires in the past. Fire risk on the limestone vegetation is high during the dry period especially during the el nino.

**4.12. Invasive/alien species or hyper-abundant species**

**4.12.1 - Translocated species**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

**4.12.2 - Invasive/Alien terrestrial species**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

**4.12.3 - Invasive/Alien freshwater species**

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

Not relevant

#### 4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

Not relevant

#### 4.12.5 - Hyper-abundant species

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

Not relevant

#### 4.12.6 - Modified genetic material

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

Not relevant

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

#### 4.13. Management and institutional factors

##### 4.13.1 - Management system/Management plan

Relevant

Not relevant

Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

##### 4.13.2 - Legal framework

Relevant

Not relevant

Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

##### 4.13.3 - Governance

Relevant

Not relevant

Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

##### 4.13.4 - Management activities

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant

Not relevant

Impact	Impact		Origin		Trend of impact		
	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

##### 4.13.5 - Financial resources

Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

#### 4.13.6 - Human resources

<input checked="" type="checkbox"/> Relevant	Not relevant
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	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

#### 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (28/07/2011):

- Relevant, Positive, Current, Potential, Inside, Outside

<input checked="" type="checkbox"/> Relevant	Not relevant
--	--------------

	Impact		Origin		Trend of impact		
Impact	Current	Potential	Inside	Outside	Decreasing	Stable	Increasing
Positive <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Negative							

#### 4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (28/07/2011):

- Not relevant

Relevant	<input checked="" type="checkbox"/> Not relevant
----------	--

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

4.14. Other factor(s)

4.14.1 - Other factor(s)

4.15. Factors Summary Table

4.15.1 - Factors Summary Table

Name	Impact		Origin		Trend	
<b>4.1 Buildings and Development</b>						
4.1.4 Major visitor accommodation and associated infrastructure						
4.1.5 Interpretative and visitation facilities						
<b>4.2 Transportation Infrastructure</b>						
4.2.3 Air transport infrastructure						
4.2.5 Effects arising from use of transportation infrastructure						
<b>4.3 Services Infrastructures</b>						
4.3.4 Localised utilities						
<b>4.4 Pollution</b>						

4.4.5 Solid waste									
4.5 Biological resource use/modification									
4.5.7 Subsistence wild plant collection									
4.8 Social/Cultural uses of heritage									
4.8.3 Indigenous hunting, gathering and collecting									
4.8.6 Impacts of tourism/Visitation/Recreation									
4.10 Climate change and severe weather events									
4.10.2 Flooding									
4.11 Sudden ecological or geological events									
4.11.6 Fire (wildfire)									
4.13 Management and institutional factors									
4.13.1 Management system/Management plan									
4.13.2 Legal framework									
4.13.3 Governance									
4.13.4 Management activities									
4.13.5 Financial resources									
4.13.6 Human resources									
4.13.7 Low impact research/monitoring activities									
<b>Legend</b> Current     Potential     Negative     Positive     Inside     Outside									

#### 4.16. Assessment of current and potential positive and negative factors

##### 4.16.1 - Assessment of current and potential negative and positive factors






#### 4.1 Buildings and Development

Name	Impact			Origin		Trend
4.1.4 Major visitor accommodation and associated infrastructure						

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

<input checked="" type="checkbox"/>	Restricted
<input type="checkbox"/>	Localised

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




Name	Impact	Origin	Trend
4.1.5 Interpretative and visitation facilities	 	 	

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



	Medium capacity
	Low capacity
	No capacity and / or resources
<b>Trend - Development over the last 6 years</b>	
	Decreasing
✘	Static
	Increasing

## 4.2 Transportation Infrastructure

Name	Impact	Origin	Trend
4.2.3 Air transport infrastructure	 		

### Spatial scale - Area affected by the factor

✘	Restricted
	Localised
	Extensive
	Widespread

### Temporal scale - Occurrence of the impact

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

### Impact - Impact on the attributes







	Insignificant
	Minor
	Significant
✘	Major

### Management response - Capacity of management to respond

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

### Trend - Development over the last 6 years

	Decreasing
✘	Static
	Increasing






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

### Spatial scale - Area affected by the factor

✘	Restricted
---	------------

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






### 4.3 Services Infrastructures

Name	Impact	Origin	Trend
4.3.4 Localised utilities	 	 	

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

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

#### 4.4 Pollution

Name	Impact	Origin	Trend
4.4.5 Solid waste			
	 	 	

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

#### 4.5 Biological resource use/modification

Name	Impact	Origin	Trend
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#### 4.5.7 Subsistence wild plant collection


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

<input checked="" type="checkbox"/>	Restricted
<input type="checkbox"/>	Localised
<input type="checkbox"/>	Extensive
<input type="checkbox"/>	Widespread

#### Temporal scale - Occurrence of the impact

<input type="checkbox"/>	One off or rare
<input type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input checked="" type="checkbox"/>	On-going

#### Impact - Impact on the attributes

<input checked="" type="checkbox"/>	Insignificant
<input type="checkbox"/>	Minor
<input type="checkbox"/>	Significant
<input type="checkbox"/>	Major

#### Management response - Capacity of management to respond

<input type="checkbox"/>	High capacity
<input checked="" type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources

#### Trend - Development over the last 6 years

<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing

### 4.8 Social/Cultural uses of heritage

Name	Impact	Origin	Trend
4.8.3 Indigenous hunting, gathering and collecting			




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

<input type="checkbox"/>	Restricted
<input checked="" type="checkbox"/>	Localised
<input type="checkbox"/>	Extensive
<input type="checkbox"/>	Widespread

#### Temporal scale - Occurrence of the impact

<input type="checkbox"/>	One off or rare
<input type="checkbox"/>	Intermittent or sporadic
<input type="checkbox"/>	Frequent
<input checked="" type="checkbox"/>	On-going

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

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

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

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

Impact - Impact on the attributes	
	Insignificant
	Minor
	Significant
X	Major

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

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

#### 4.10 Climate change and severe weather events





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

#### 4.11 Sudden ecological or geological events

Name		Impact			Origin		Trend
4.11.6 Fire (wildfire)							
<b>Spatial scale - Area affected by the factor</b>							
<input checked="" type="checkbox"/>	Restricted						
<input type="checkbox"/>	Localised						
<input type="checkbox"/>	Extensive						
<input type="checkbox"/>	Widespread						
<b>Temporal scale - Occurrence of the impact</b>							
<input checked="" type="checkbox"/>	One off or rare						


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

#### 4.13 Management and institutional factors

Name	Impact	Origin	Trend
4.13.1 Management system/Management plan	 	 	

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

Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing

Name	Impact	Origin	Trend
4.13.2 Legal framework	 	 	






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

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

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

Management response - Capacity of management to respond	
<input checked="" type="checkbox"/>	High capacity
<input type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources

Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing





Name	Impact	Origin	Trend
4.13.3 Governance	 	 	

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

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





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

Name	Impact	Origin	Trend
4.13.4 Management activities	 	 	

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

Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing

Name	Impact	Origin	Trend
4.13.5 Financial resources	 	 	






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

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

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

Management response - Capacity of management to respond	
<input type="checkbox"/>	High capacity
<input checked="" type="checkbox"/>	Medium capacity
<input type="checkbox"/>	Low capacity
<input type="checkbox"/>	No capacity and / or resources






Trend - Development over the last 6 years	
<input type="checkbox"/>	Decreasing
<input checked="" type="checkbox"/>	Static
<input type="checkbox"/>	Increasing

Name	Impact	Origin	Trend
4.13.6 Human resources	 	 	

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

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

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

Name	Impact	Origin	Trend
4.13.7 Low impact research/monitoring activities	  	 	

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

	Decreasing
	Static
X	Increasing

#### 4.17. Serial inscriptions (national or transnational)

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

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

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

	Attribute	Preserved	Compromised	Seriously compromised	Lost
4.18.1.1	Spectacular Caves	X			
4.18.1.2	Exceptional natural beauty and an outstanding wildlife spectacle	X			
4.18.1.3	Outstanding example of cave geomorphology	X			
4.18.1.4	Cave ecology (troglobite and stygobite evolution)	X			
4.18.1.5	One of the richest assemblages of flora and fauna biota	X			

### 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 property has **no buffer zone** and **does not need one**

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

The property has **no known and recognised** buffer zone

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

Whilst there is no established buffer zones surrounding the property, the property is almost encapsulated by protected areas both nationally and internationally that serve as buffer. The OUVs and its attribute are well protected in the centre of the property.

#### 5.2. Protective Measures

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

In Sarawak, the National Parks and Nature Reserves are gazetted under the National Parks and Nature Reserves Ordinance 1998. It is also governed by the National Parks and Nature Reserves Regulation 1999.

Source: Periodic Reporting Cycle 2

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

**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 property has **no buffer zone**

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

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

The National Parks and Nature Reserves Ordinance 1998 including its accompanying Regulations provide the legislative instrument for management, enforcement and prosecution. The Wild Life Protection Ordinance, 1998 covers the protection of wildlife both inside and outside the property.

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

The property is policed by both staff of the management agent and the Sarawak Forestry Corporation. The enforcement within the property is also supported by other enforcement bodies such as the police, auxiliary police, Customs and Immigration. The local communities also involved in the park's protection especially through the Special Park Committee.

## 5.3. Management System/Management Plan

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

Public management system at provincial/regional level

If 'Other', please specify

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

A statutory Management Plan or zoning plan for the property.

Governance mechanisms that foster and respect traditional practices, knowledge and uses of the property

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

A framework for inclusive economic development, including equal access and distribution of resources and opportunities arising from the protection of the property

An integrated management plan combining World Heritage and any other designations

A management plan

An annual work plan or business plan

A disaster, climate or conflict risk management plan

A visitor/visitation management plan

An environmental management framework

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

The management system is a dual system of public and private enterprise. The Sarawak Forestry Corporation is responsible for the overall protection of the Gunung Mulu National Park while Borsarmulu Park Management Sdn Bhd is appointed to manage the Tourism Zone in implementing the Integrated Development and Management Plan 2000-2020 (which affect the Tourism Zone). The Government of Sarawak is currently in the process of reviewing the current management plan.

### 5.3.4 - Management Documents

#### Comment

1. Gunung Mulu National Park Integrated Development and Management Plan 2000-2020. (This document is still in used while waiting for the completion of the new Management Plan.)

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

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

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

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

The policy for dealing with climate change is **fully based** on the agreed World Heritage policy

### 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:

Caves capture the climate change in the past and became a focal points for studies on climate change. Visiting researchers such as Gina Moseley and Kim Cobb on climate change studies such as cave drip water (isotopes). There are also visiting researchers addressing climate changes in terms of fauna and flora that has bearing on climate change.

### 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

A plan for emergencies e.g. fire and flood was developed as preventative measures as well as a reactionary team consisting of fire and rescue in-house squad, trained by the Malaysian fire and rescue services. This team is based in the Park HQ and is also available for any assistance needed from the surrounding villages. The current integrated development plan prescribes the principles of a sound risk management plan, from preventative training to communication abilities to the development of safety policies and protocol.

### 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 many of its activities are being implemented**

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

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

**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										X	
5.3.17.4	The management system of the property integrates a human rights-based approach										X	
5.3.17.5	The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood											X
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											X

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

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

The management system is a dual system of public and private enterprise. The current management plan, IDMP (2000-2020), applies generically and covers the majority of issues/KPI's needed to manage the site effectively. It also provides the basis for including local participation and economic involvement enabling the local community with jobs and opportunities. The plan is currently under review and will address more contemporary issues.

**6. Financial and Human Resources**

**6.1. Funding**

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

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

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

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

The available budget is **adequate** for effective management of the World Heritage property

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

The existing sources of funding are **secure over both the medium- and long-term**

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

Budgeting is done to get the necessary funding from the government for both CAPEX (capital expenditure) and OPEX (operational expenditure) in a five years cycle.

**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	45 %	40 %
6.1.6.2	Women	55 %	60 %
		Total 100 %	Total 100 %

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

Human resources are **adequate** for management needs

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

Conservation	Good
--------------	------

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

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

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

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

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

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

Mulu National Park, due to its isolated nature have long been forced to build capacity locally. In some instances, WH strategy and recommendations apply, to meet the various demands of the park ranging from conservation, enforcement, M&E, logistics to guide training and community education.

**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**

The management plan provides the development of local skills in guiding. There is a appointed person who deals with community education. All technical skills are developed in-house where maintenance of the property is concerned. Mulu is incredibly isolated and all expertise (for the entire range of functions- from food preparations to rescue teams) has to be in-house. Sarawak Forestry recruit and trained staff for enforcement and conservation efforts or bring in existing necessary skills.

**7. Scientific Studies and Research Projects**

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

Knowledge about the values and attributes of the World Heritage property is **adequate**

**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 research are managed and controlled via a permit system that is vetted for appropriate character and suitability via Sarawak Online Research Application System (SORAS). The applicant will be assessed and subjected to measures of control (amount of samples, export permits etc) before getting the research permit. All findings and reports must be submitted to the system for further access and use. Visiting scientists are also invited to give a seminar session with the park local guides.

**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	Good
Local/municipal authorities	Good
Indigenous peoples	Good
Landowners	Good
Women	Good
Youth/children	Good
Researchers	Good
Local visitors	Good
National/international tourists	Good
Tourism industry	Good
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 and effective education and awareness programme for children and youth that contributes to the protection of the World Heritage property

**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
Researchers
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries
NGOs

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

Visitor centre	Good
Site museum	Not needed
Information booths	Not needed
Guided tours	Good
Trails/routes	Good
Printed information materials	Good

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

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

The staff of the property, park guides and most of the local community involved in the tourism and service industry are well versed of the property as a World Heritage. The property is government owned but the land owners adjacent to the property, mostly local communities and indigenous people are well aware of the property.

## 9. Visitor Management

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

21,026 / 21,655 / 23,730 / 22,388 / 18,623 /

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

Entry tickets and registries

Accommodation establishments

Tourism industry

Visitor surveys

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

Two overnight stays

### 9.4 - Please provide the source of information

Accommodation register/Park registration

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

60 / 15 / 110 / 6 / 22 / 12 /

### 9.6 - Please provide the source of information

Sources from BorsarMulu Park Sdn Bhd and Sarawak Forestry Corporation.

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

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

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

The strategy remains flexible and focuses on smaller groupings, safety, local business involvement, visitor's satisfaction.

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

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

### 9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, using a different system

#### If a different system, please specify

via visitor's questionnaire/ tour operator's input/freelance guides input

### 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 Outstanding Universal Value of the property **is adequately presented and interpreted**

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

In **many locations** 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 **some contribution** to the management of the World Heritage property

### 9.15 - Are there locally driven sustainable tourism initiatives?

Yes

#### If 'Yes', please specify

home stays, transport providers, food vendors, porter services, guiding services, etc

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

Yes

If 'Yes', please specify

The Government is also contributing to infrastructure to benefit the locals of Mulu

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

All the tourist that filled in the questionnaire regards Mulu of being worthy of world heritage status.

**10. Monitoring**

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

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

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

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

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

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

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

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

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Good
Local communities	Good
Indigenous peoples	Good
Landowners	Good
Women	Good
Researchers	Good
Tourism industry	Good
Local businesses and industry	Good
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 complete

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

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

**11. Identification of Priority Management Needs**

**11.1 - Identification of Priority Management Needs**

5.1	<b>Boundaries and Buffer Zones</b>	
5.1.3	The property has <b>no buffer zone</b>	
5.1.4	The property has <b>no known and recognised buffer zone</b>	✘
5.2	<b>Protective Measures</b>	
5.2.4	The property has <b>no buffer zone</b>	✘
5.3	<b>Management System/Management Plan</b>	
5.3.9	<b>Some use</b> has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	✘
6.1	<b>Funding</b>	
6.1.10	<b>Some use</b> has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	✘
10	<b>Monitoring</b>	
10.2	Information on the values of the World Heritage <b>property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved</b>	✘

Please select 1 more issues.

Please save this question to reflect changes

## 12. Summary and Conclusions

### 12.1. Summary - Factors affecting the Property

#### 12.1.1 - Summary - Factors affecting the Property

4.2	<b>Transportation Infrastructure</b>						
4.2.5	Effects arising from use of transportation infrastructure	Effect on the criteria and attributes is not significant. Increased motorized longboat activity on Melinau river system potentially affecting the waterways.	To evaluate the affect of the longboats usage and volume on the property and recommend mitigations.	To monitor the effect of the increase in volume of longboats operating	On going	Sarawak River Board including other authorities such as the property and local councils.	At the moment this is perceived as an observation concern
4.4	<b>Pollution</b>						
4.4.5	Solid waste	Effect on the criteria and attributes is not significant. Currently, there is a lack of solid waste disposal services for the residents of Mulu Village which is outside the property.	The local council/municipality has come up with the necessary plan to address this matter.	The Management agent, BorsarMulu records the weight of all the rubbish collected from the Melinau river during (regular) community cleaning efforts. Statistics are available for the last decade.	on going	District Office	Even though this issue is outside the property, it concerns the property as unmanaged solid waste can easily ended up in the waterways and the surrounds.
4.10	<b>Climate change and severe weather events</b>						
4.10.2	Flooding	Flooding occurs occasionally affecting built facilities but not the criteria and the attributes.	Flood level be adjusted and incorporated to future developments where functionality and safety might override aesthetics preferences. Adventure activities be reviewed to enhance safety. Exhibit awareness to possible impacts of climate change.	Monitor and record the level and intensity of flooding	On going	Sarawak Forestry Corporation, Borsamulu Park Sdn Bhd, Drainage and Irrigation Department, Meteorological Department	Flooding is perceived to be more frequent and while dry periods more prominent and prolonged.
4.11	<b>Sudden ecological or geological events</b>						
4.11.6	Fire (wildfire)	Fire risk on the limestone vegetation is high during the dry period especially during the el nino and can affect all the criteria and their attributes.	A plan has been developed for emergencies such fires and the formation of a trained fire and rescue squad. The Fire and Rescue Department has been very responsive in combating wildfire in the	Continuous monitoring of wildfire and implementation of wildlife emergencies Standard Operating Procedures	On going	Fire and Rescue Department, Borsamulu Park Sdn Bhd, Sarawak Forestry, Fire and Rescue Squad	There have been past occurrences of natural wildfire affecting the limestone hills vegetations in the property. One of the limestone mountain is called Gunung Api which means the "fire

property.

mountain" probably due to the forest fires in the past.

Summary - Factors affecting the Property **completed**

12.2. Summary - Management Needs

12.2.1 - Summary - Management Needs

5.1 Boundaries and Buffer Zones					
		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.1.4	The property has <b>no known and recognised buffer zone</b>	Currently there is no buffer zone required to protect and maintain the OUVs and the attributes.	n/a	n/a	Whilst there is no established buffer zones surrounding the property, the property is almost encapsulated by protected areas both nationally and internationally that serve as buffer. The OUVs and its attribute are well protected in the centre of the property.
5.2 Protective Measures					
5.2.4	The property has <b>no buffer zone</b>	Currently there is no buffer zone required to protect and maintain the OUVs and the attributes.	n/a	n/a	Whilst there is no established buffer zones surrounding the property, the property is almost encapsulated by protected areas both nationally and internationally that serve as buffer. The OUVs and its attribute are well protected in the centre of the property.
5.3 Management System/Management Plan					
5.3.9	<b>Some use</b> has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Strategy for Reducing Risks from Disasters at World Heritage Properties will be looked into Effect on the criteria and attributes is not significant.	Immediate	Sarawak Forestry Corporation, BorsaMulu Park Sdn. Bhd.	Currently, a plan has been developed for emergencies such as fire and flood, but preventive and reactive.
6.1 Funding					
6.1.10	<b>Some use</b> has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	The World Heritage Strategy for Capacity Development at the World Heritage property will be looked into and adapted into the upcoming management plan.	Immediate	Sarawak Forestry Corporation, BorsaMulu Park Sdn. Bhd.	The management plan provides the development of local skills in guiding. There is a appointed person who deals with community education. All technical skills are developed in-house where maintenance of the property is concerned. Mulu is incredibly isolated and all expertise (for the entire range of functions- from food preparations to rescue teams) has to be in-house. SFC also recruit and trained staff for enforcement and conservation efforts or bring in existing necessary skills.
10 Monitoring					
10.2	Information on the values of the World Heritage <b>property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved</b>	Sarawak Forestry Corporation promotes researches that enable all OUVs and the attributes to be monitored.	Immediate	Sarawak Forestry Corporation	There are currently a very extensive researches on various subjects being conducted in the property and now being monitored using the Sarawak Online Research Application System (SORAS).

### 12.3. Conclusions on the State of Conservation of the Property

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

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

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

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

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

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

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

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

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

Due to Mulu's natural isolation, threats to OUVs have been virtually non-existent. The success of the property has impacted on the adjacent indigenous villages and caused financial progress and growth, in the meantime the state of conservation is well 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	Very positive
Management effectiveness	Very positive
Quality of life for local communities and indigenous peoples	Very positive
Recognition	Very positive
Education	Very positive
Infrastructure development	Very positive
Funding for the property	Very positive
International cooperation	Very positive
Political support for conservation	Very positive
Legal/Policy framework	Very positive
Advocacy	Very positive
Institutional coordination	Very positive
Security	Very positive
Gender equality	Very positive
Provision of ecosystem services/ benefits to local communities	Very positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	Very 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	Very positive
Other	Not applicable
If 'Other', please specify	

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

The current status is in good stead and remains unthreatened while bringing in wide and encompassing benefits to various stakeholders.

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

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

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

Sustainable Development

State of Conservation
Management
Governance
Capacity Building

## 15. Assessment of the Periodic Reporting Exercise

### 15.1. Relevance of Periodic Reporting

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

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

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

State Party	Good
Site Managers	Good
UNESCO World Heritage Centre	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

### 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
Focal points of other international conventions/programmes

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

Gender balance is explicitly considered and effectively implemented in the process.

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

Yes

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

300 / 200 / 50 /
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#### 15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.3.5.2	Financial resources for organizing consultation meetings/ training	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 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			X	
15.4.2.2	Clarity of questions			X	

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

## 15.5. Training and Guidance

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

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

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

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

## 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

- **Map(s)**

Reason for update: The updated map and the relevant soft copies of information have been sent to National Focal Point (Department of National Heritage) in response to WHC letter ref CLT/WHC/NOM/20/154 dated 21 October 2020.

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

Reason for update: There are changes in the length of the cave passages in Mulu from the ongoing cave expeditions. The length of the Clearwater Cave system is now 238 km compared to the previous 110 km. Also, from the total 295 km of passages found in Mulu in the above statement, we now have a total of 452 km of cave passages, a testimony of ongoing research on the OUVs. The findings can be found in the caving expedition reports and the Mulu Caves Project website <http://www.mulu caves.org>

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**

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