## Serengeti National Park

## 1. World Heritage Property Data

#### 1.1 - Name of World Heritage property

Serengeti National Park

### 1.2 - World Heritage property details

## 1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)	Total (ha)	Inscription year
Serengeti National Park	-2.333 / 34.567	1476300	0	1476300	1981
Total (ha)		1476300	0	1476300	

#### 1.4 - Map(s)

Title	Date	Link to source
Map of the Serengeti-Mara Ecosystem	1980	
Map of the Serengeti National Park and the surrounding area	1980	
Serengeti Ecosystem Official Map, scale 1:250000	2010	

#### Comment

The Ecosystem Map does not include some Buffer protected areas to the property like Kijereshi Game Reserve on Western Border of the property. Please see attached link for an updated map https://drive.google.com/file/d/1g9MOOnskdqno\_Eo2DUCTLd202laINDQI/view?usp=sharing

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

- 1. Natural site datasheet from WCMC
- 2. Tanzania Tourism Board
- 3. Serengeti National Park

#### Comment

Please note social media accounts: Facebook:Serengeti National Park Instagram:serengeti\_national\_park and tanzaniaparks Youtube:www.youtube.com/user/Tanzaniaparks Twitter: @tzparks

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

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

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

2.2 - Please provide comments on 2.1 if necessary No comments

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

No

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

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

Not applicable

2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years? No

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

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

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

The UNESCO National commission in Tanzania coordinate both MAB and WH Programmes, the Site is Managed jointly as Biosphere Reserve with Ngorongoro Mixed WH site.

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 No knowledge of this.

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

Not aware

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

None

3. Statement of Outstanding Universal Value

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

## Statement of Outstanding Universal Value Brief synthesis

In the vast plains of Serengeti National Park, comprising 1.5 million hectares of savannah, the annual migration of two million wildebeests plus hundreds of thousands of gazelles and zebras - followed by their predators in their annual migration in search of pasture and water – is one of the most impressive nature spectacles in the world. The biological diversity of the park is very high with at least four globally threatened or endangered animal species: black rhinoceros, *elephant, wild dog, and cheetah*.

**Criterion (vii):** The Serengeti plains harbour the largest remaining unaltered animal migration in the world where over one million wildebeest plus hundreds of thousands of other ungulates engage in a 1,000 km long annual circular trek spanning the two adjacent countries of Kenya and Tanzania. This spectacular phenomenon takes place in a unique scenic setting of 'endless plains': 25,000 km<sup>2</sup> of treeless expanses of spectacularly flat short grasslands dotted with rocky outcrops (kopjes) interspersed with rivers and woodlands. The Park also hosts one of the largest and most diverse large predator-prey interactions worldwide, providing a particularly impressive aesthetic experience.

**Criterion (x):** The remarkable spatial-temporal gradient in abiotic factors such as rainfall, temperature, topography and geology, soils and drainage systems in Serengeti National Park manifests in a wide variety of aquatic and terrestrial habitats. The combination of volcanic soils combined with the ecological impact of the migration results in one of the most productive ecosystems on earth, sustaining the largest number of ungulates and the highest concentration of large predators in the world. The ecosystem supports 2 million wildebeests, 900,000 Thomson's gazelles and 300,000 zebras as the dominant herds. Other herbivores include 7,000 elands, 27,000 topis, 18,000 hartebeests, 70,000 buffalos, 4,000 giraffes, 15,000 warthogs, 3,000 waterbucks, 2,700 elephants, 500 hippopotamuses, 200 black rhinoceroses, 10 species of antelope and 10 species of primate. Major predators include 4,000 lions, 1000 leopards, 225 cheetahs, 3,500 spotted hyenas and 300 wild dogs. Of these, the black rhino *Diceros bicornis*, leopard *Panthera pardus*, African elephant *Loxodonta africana* and cheetah *Acynonix jubatus* are listed in the IUCN Red List. There are over 500 species of birds that are perennially or seasonally present in the Park, of which five species are endemic to Tanzania. The Park has the highest ostrich population in Tanzania and probably Africa, making the population globally important.

#### Integrity

Serengeti National Park is at the heart the larger Serengeti ecosystem, which is defined by the area covered by the annual migration. The property is contiguous with Ngorongoro Conservation Unit, an area of 528,000ha declared a World Heritage Site in 1979. The entire ecosystem also includes the Maswa Game Reserve (2,200km<sup>2</sup>) in the south, Grumeti and Ikorongo Game Reserves in the east, Maasai Mara National Reserve in Kenya (1,672km<sup>2</sup>) to the north, and Loliondo Game Controlled Area in the west. This entire ecosystem is intact and no barriers hamper the migration. Serengeti National Park is sufficiently large and intact to ensure the survival and vigour of all the species contained therein, if maintained in its present state but does not, by itself, ensure the protection of the entire ecosystem. However, all other parts of the ecosystem do have a greater or lesser degree of protection. A potential threat is the plan to build a transport infrastructure through the Serengeti. This would essentially cut the ecosystem into two halves, with predictably negative consequences on the Serengeti. Adding Maswa Game Reserve and Maasai Mara National Reserve to the World Heritage List, or giving then the status of a buffer zone would further safeguard the Outstanding Universal Values of this property.

Another major potential threat to the integrity of the Park is the scarcity of surface water for the animals during dry years, as only one river (Mara) flows perennially through the Park. An extension of the Park boundary to reach Lake Victoria providing a corridor for animals to access water in times of drought is planned for the future to address this issue.

#### Protection and management requirements

The site has a well designated and partially demarcated boundary, and since 2009 funds have been allocated to demarcate the entire boundary. Its management is regulated by both international and government policies and legal obligations. The National Parks Ordinance Cap 412 of 1959 provides for Tanzania National Parks with the mandate to manage the site. In addition, The 1974 Tanzanian Wildlife Conservation Act and the 2009 Wildlife Conservation Act provide for both within the site and adjacent area protection of resources, respectively. A General Management Plan (2006-2016) has been formulated to guide the daily management of the site in a sustainable manner and is currently being implemented. The Plan provides guidance on how to execute the various activities within the park under four main Themes: Ecosystem Management, Outreach services, Tourism Management and Park Operations. The site has a reasonable level of human and financial resources for effective management, but as the activities expand, and more challenges emerge, the lack of sufficient resources remains a potential future constraint. The major management concerns include poaching, tourism pressure, wildfires, and lack of adequate capacity in resource monitoring. Another important management challenge is water: despite numerous sources of water during the rain season, there is only one perennial river (Mara) which is transnational. However, this river currently faces multiple human-mediated cross-boundary threats.

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	Unaltered Large mammal migration cycle,notably ungulates	×			
3.2.2	High flora and fauna Biodiversity	×			
3.2.3	Threatened and endangered species	×			
3.2.4	Mosaic of Habitats in one contiguous ecosystem (Grasslands, bush land, woodlands and forests)	×			
3.2.5	Large population of ungulates	×			
3.2.6	Endless grassland Savannah plains	×			
3.2.7	Natural self regulating ecosystems, linked to the Masai Mara Reserve	×			
3.2.8	Large predator-prey populations and interactions	×			
3.2.9	Direct economic benefits from tourism	×			
3.2.10	Wilderness, pristine condition of large areas	×			
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 None

#### 4. Factors Affecting the Property

#### 4.1. Buildings and Development

#### 4.1.1 - Housing

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant

Relevant

× Not relevant

## 4.1.2 - Commercial development

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

× Not relevant

#### 4.1.3 - Industrial areas

#### Previous answer Cycle 2 (24/09/2010):

Not relevant

Relevant

× Not relevant

#### 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Inside

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

#### 4.1.5 - Interpretative and visitation facilities

Previous answer Cycle 2 (24/09/2010):

Relevant, Positive, Current, Inside

$\sim$	Delevent
~	Relevant

Not relevant

	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×		×				1
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

The itemized list above may affect the property positively as the development of it my enhance visitors experience and services. They are all developed after obtaining clearance on their EIA or Environmental Auditing. Park Management conduct frequent monitoring to ensure facilities comply stipulation of their EIA.

## 4.2. Transportation Infrastructure

#### 4.2.1 - Ground transport infrastructure

## Previous answer Cycle 2 (24/09/2010):

• Relevant, Positive, Negative, Potential, Inside

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

#### 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (24/09/2010):

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

X Relevant				Not relevant					
	Impact Origin			Trend of impact					
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing		
O Positive X	×	×	×	×		<b>→</b>			
Negative									

### 4.2.3 - Air transport infrastructure

Previous answer Cycle 2 (24/09/2010):

• Relevant, Positive, Potential, Outside

× Relevant				Not relevant				
	Impact Origin		Origin	Origin Tren		Trend of impact		
Impact	4 Current	Potential	Inside	Coutside	Secreasing	⇒ Stable	Increasing	
O Positive X	×		×			$\rightarrow$		
Negative X		×						

## 4.2.4 - Marine transport infrastructure

Previous answer Cycle 2 (24/09/2010):

Relevant, Negative, Potential, Outside

Relevant

× Not relevant

## 4.2.5 - Effects arising from use of transportation infrastructure

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

# 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

The transport infrastructure enhance visitors experience and services, and facilitate management activities in the property. The growing tourists number relatively increase the traffic. The park Management is currently working to develop Traffic Management system that will ensure the visitors experience is maintained, improve security and ensure minimal damage to wildlife resources and environment.

#### 4.3. Services Infrastructures

#### 4.3.1 - Water infrastructure

Previous answer Cycle 2 (24/09/2010):

• Relevant, Positive, Potential, Inside, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	Solution Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×			$\rightarrow$		
Negative X		×		×				

#### 4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (24/09/2010):

Relevant, Positive, Current, Inside

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

#### 4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (24/09/2010):

Not relevant

Relevant

× Not relevant

#### 4.3.4 - Localised utilities

Previous answer Cycle 2 (24/09/2010):

• Relevant, Positive, Negative, Current, Inside

X Relevant	X Relevant					Not relevant				
	Impact Origin		Origin		Trend of impact					
Impact	Current	Potential	Inside	C Outside	Solution Decreasing	⇒ Stable	Increasing			
Positive X	×		×				~			
Negative										
<b>4.3.5 - Major linear utilitie</b> Previous answer Cycle 2 (24/0										

Not relevant

Relevant

× Not relevant

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

Water related infrastructure in the property are developed for use by staff and visitors. The location and distribution are based on Property Integrated Water Resources Management Plan. The plan provide potential development areas regarding to water needs. The potential dams development outside the park especially in Mara River tributaries may affect the integrity of the property. Communication towers across the property are installed for improving security and communication within the proper

#### 4.4. Pollution

#### 4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Inside

× Not relevant

## 4.4.2 - Ground water pollution

### Previous answer Cycle 2 (24/09/2010):

Not relevant

X Relevant				Not relevant				
	Impact C		Origin		Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X		×	×	×		$\rightarrow$		

#### 4.4.3 - Surface water pollution

Previous answer Cycle 2 (24/09/2010):

Not relevant

X Relevant					Not relevant					
	Impact		Origin		Trend of impact					
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing			
O Positive										
Negative X		×		×		$\rightarrow$				

### 4.4.4 - Air pollution

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Inside

X Relevant	I	Not relevant						
	Impact		Origin		Trend of impact			
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X		×	×			$\rightarrow$		
<ul> <li>4.4.5 - Solid waste</li> <li>Previous answer Cycle 2 (24/09/</li> <li>Not relevant</li> </ul>	2010):							
Relevant			X Not relevant					
<ul> <li>4.4.6 - Input of excess energy</li> <li>Previous answer Cycle 2 (24/09/</li> <li>Not relevant</li> </ul>								

# 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

× Not relevant

Serengeti Ecosystem is bordered by local communities that through their activities affects negatively the catchment areas of rivers that flow into the property. Also some measure are undertaken at the catchment areas including raising conservation awareness and enforcing conservation laws. The government has recently put a ban a single use plastic bags. Moreover, the park has taken measure to enforce Trash In and Trash Out policy that assisted in controlling solid waste in the property.

#### 4.5. Biological resource use/modification

#### 4.5.1 - Fishing/collecting aquatic resources

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant

Relevant

× Not relevant

#### 4.5.2 - Aquaculture

#### Previous answer Cycle 2 (24/09/2010):

Not relevant

Relevant

× Not relevant

#### 4.5.3 - Land conversion

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Outside

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

#### 4.5.4 - Livestock farming/Grazing of domesticated animals

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Outside

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

## 4.5.5 - Crop production

- Previous answer Cycle 2 (24/09/2010):
  - Relevant, Negative, Current, Outside

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

## 4.5.6 - Commercial wild plant collection

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant	X Not relevant
<ul> <li>4.5.7 - Subsistence wild plant collection</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Relevant, Negative, Potential, Outside</li> </ul>	
Relevant	X Not relevant

## 4.5.8 - Commercial hunting

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Outside

X Relevant			I	Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	Outside	Secreasing	⇒ Stable	Increasing	
O Positive								
Negative X	×			×	<b>N</b>			

## 4.5.9 - Subsistence hunting

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Outside

Relevant

× Not relevant

#### 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Outside

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

## 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

Poaching for bush meat is still a problem although it is decreasing mainly due to increased enforcement measures by management and awareness raising within the communities around the property and entire ecosystem.

#### 4.6. Physical resource extraction

#### 4.6.1 - Mining

Previous answer Cycle 2 (24/09/2010):

Relevant

Relevant	X Not relevant
<ul><li>4.6.2 - Quarrying</li><li>Previous answer Cycle 2 (24/09/2010):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul><li>4.6.3 - Oil and gas</li><li>Previous answer Cycle 2 (24/09/2010):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.6.4 - Water (extraction)</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant

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

#### 4.7. Local conditions affecting physical fabric

#### 4.7.1 - Wind

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant

Relevant

Relevant

X Not relevant

## 4.7.2 - Relative humidity

#### Previous answer Cycle 2 (24/09/2010):

Not relevant

× Not relevant

## 4.7.3 - Temperature

## Previous answer Cycle 2 (24/09/2010):

Not relevant

× Not relevant

## 4.7.4 - Radiation/Light

#### Previous answer Cycle 2 (24/09/2010):

Not relevant

Relevant	X Not relevant
<ul><li>4.7.5 - Dust</li><li>Previous answer Cycle 2 (24/09/2010):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.7.6 - Water (rain/water table)</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul><li>4.7.7 - Pests</li><li>Previous answer Cycle 2 (24/09/2010):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.7.8 - Micro-organisms</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant

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

## 4.8. Social/Cultural uses of heritage

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

- Previous answer Cycle 2 (24/09/2010):
  - Relevant, Positive, Current, Outside

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

## 4.8.2 - Society's valuing of heritage

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	Secreasing	⇒ Stable	Increasing
O Positive							
Negative X	×		×			$\rightarrow$	

## 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Outside

Relevant	X Not relevant

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

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	S Decreasing	⇒ Stable	Increasing

O Positive			
Negative X	×	×	1

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

Previous answer Cycle 2 (24/09/2010):

Relevant, Negative, Current, Outside

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

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

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Outside

X Relevant			١	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×	×	×			1

# 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

The interaction of human and wildlife in the property and entire Serengeti Ecosystem has been part of the ecosystem for millions of years. Such interactions may cause both positive and negative impacts for both human and wildlife. With cultural uses of the property resources enhance conservation of resources through preservation of shared value with communities.

#### 4.9. Other human activities

#### 4.9.1 - Illegal activities

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×	×	×			7
4.9.2 - Deliberate destruction Previous answer Cycle 2 (24/09 • Not relevant	-						
Relevant		X Not relevant					
<ul><li>4.9.3 - Military training</li><li>Previous answer Cycle 2 (24/09</li><li>Relevant, Positive, Curre</li></ul>							
Relevant			X Not relevan	t			
4.9.4 - War Previous answer Cycle 2 (24/09 • Not relevant	/2010):						
Relevant			X Not relevan	t			
4.9.5 - Terrorism Previous answer Cycle 2 (24/09	/2010):						

Not relevant

Relevant	X Not relevant
<ul> <li>4.9.6 - Civil unrest</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Relevant, Negative, Potential, Inside, Outside</li> </ul>	
Relevant	X Not relevant

# 4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or positively

Settlements in the buffer zone and migratory wildlife corridor affect negatively the Ecosystem Integrity. There is an increase in human population and poor Land Use Plans in villages around the property. Poaching of wildlife for bush meat is still a threat especially to migrating ungulates, when they disperse outside the property. While outside the property, they interact with human and may be poached.

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

#### 4.10.1 - Storms

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant	X Not relevant

#### 4.10.2 - Flooding

Previous answer Cycle 2 (24/09/2010):

Not relevant

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

## 4.10.3 - Drought

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Current, Potential, Inside

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

## 4.10.4 - Desertification

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant	X Not relevant
<ul> <li>4.10.5 - Changes to oceanic waters</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.10.6 - Temperature change</li> <li>Previous answer Cycle 2 (24/09/2010):</li> <li>Relevant, Negative, Potential, Inside</li> </ul>	
	Not relevant

X Relevant				Not relevant			
	Impact Origin			Trend of impact			
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×	×	×			1

#### 4.10.7 - Other climate change impacts

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Inside, Outside

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

## 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

Climatic changes with frequent droughts and unpredictable heavy rains put the property in high risk of some wildlife species, their habitats and environment.

#### 4.11. Sudden ecological or geological events

### 4.11.1 - Volcanic eruption

- Previous answer Cycle 2 (24/09/2010):
  - Relevant, Negative, Potential, Outside

Relevant	X Not relevant

#### 4.11.2 - Earthquake

#### Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Outside

X Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Gurrent	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive							
Negative X		×	×	×		$\rightarrow$	

### 4.11.3 - Tsunami/Tidal wave

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

× Not relevant

#### 4.11.4 - Avalanche/Landslide

- Previous answer Cycle 2 (24/09/2010):
  - Not relevant

Relevant

Relevant

× Not relevant

## 4.11.5 - Erosion and siltation/Deposition

Previous answer Cycle 2 (24/09/2010):

Not relevant

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	Gurrent	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	→ Stable	Increasing
O Positive							
Negative X	×	×		×			/

#### 4.11.6 - Fire (wildfire)

Previous answer Cycle 2 (24/09/2010):

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

× Relevant		Not relevant	
	Impact	Origin	Trend of impact

Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive							
Negative X	×	×		×	<b>N</b>		

# 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

The extreme weather events are negatively affecting the property, as of recent (2019/2020) rain have negatively affected the property in terms of Management cost repairing and recover infrastructure to support Management activities and makes some areas unreachable for monitoring and protection activities. Also, the abnormally high rains affect tourism infrastructure and affect overall tourists' experience. In 4.11.5 the recent heavy rains have eroded soils in roads and access circuits.

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

#### 4.12.1 - Translocated species

Previous answer Cycle 2 (24/09/2010):

• Relevant, Negative, Potential, Outside

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

#### 4.12.2 - Invasive/Alien terrestrial species

Previous answer Cycle 2 (24/09/2010):

Relevant, Negative, Potential, Outside

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

#### 4.12.3 - Invasive/Alien freshwater species

Previous answer Cycle 2 (24/09/2010):

Relevant, Negative, Potential, Outside

× Relevant			1	Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive								
Negative X		×		×		$\rightarrow$		

#### 4.12.4 - Invasive/Alien marine species

Previous answer Cycle 2 (24/09/2010):

Not relevant

X Not relevant
X Not relevant

× Not relevant

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

There is a growing number of terrestial invasive plants that take over areas potentially for grazing/browsing of wildlife, these make areas available for use reduced. The continuous spread of invasive species on agricultural areas around the Park may potentially reduce the suitable agricultural areas outside the park and force farmers to extend agricultural areas towards the park boundary hence squeezing towards property boundaries.

#### 4.13. Management and institutional factors

## 4.13.1 - Management system/Management plan

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing	
O Positive X	×		×	×				

#### 4.13.2 - Legal framework

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

## 4.13.3 - Governance

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

## 4.13.4 - Management activities

Previous answer Cycle 2 (24/09/2010):

Relevant, Positive, Current, Potential, Inside

× Relevant			l	Not relevant					
	Impact Origin			Trend of impact					
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing		
O Positive X	×	×	×	×		<b>→</b>			
Negative									

#### 4.13.5 - Financial resources

X Relevant			I	Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×	×		$\rightarrow$		
Negative								

## 4.13.6 - Human resources

X Relevant				Not relevant					
	Impact Origin			Trend of impact					
Impact	Gurrent	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing		
Positive X	×	×	×	×		<b>→</b>			

	Negative							
--	----------	--	--	--	--	--	--	--

## 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (24/09/2010):

• Relevant, Positive, Current, Potential, Inside

× Relevant			I	Not relevant				
	Impact Origin			Trend of impact				
Impact	4 Current	<b>9</b> Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×	×		<b>→</b>		
Negative								

### 4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (24/09/2010):

Not relevant

## × Not relevant 4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or

## positively

Relevant

The property has reviewed its General Management Plan-GMP (2006-2016) into a new GMP (2014-2024). The reviewed GMP is approved and in use The property is governed by different statutes enacted to allow for conservation and management of wildlife resources in the property. The property has been a research hub and is one of the most researched wildlife ecosystem, it is home to Serengeti Wildlife Research Centre (SWRC). The property generate its financial resources from wildlife based tourism.

## 4.14. Other factor(s)

#### 4.14.1 - Other factor(s)

No other factors

## 4.15. Factors Summary Table

#### 4.15.1 - Factors Summary Table

Name	Impact			Origin		Trend		
4.1 Buildings and Development								
4.1.4 Major visitor accommodation and associated infrastructure								
	٢		9	۲		<b>→</b>		
4.1.5 Interpretative and visitation facilities	٢	9		٩				
4.2 Transportation Infrastructure								
4.2.1 Ground transport infrastructure	0	9		۹				
	0		9			1		
4.2.2 Underground transport infrastructure	٢	9	9	0	Ċ	<b>→</b>		
4.2.3 Air transport infrastructure		9		٢		<b>→</b>		
			9					
4.2.5 Effects arising from use of transportation infrastructure	٢	9	9	٢		1		
	0							
4.3 Services Infrastructures								
4.3.1 Water infrastructure	٢	4	9	٢		<b>→</b>		
	٢		9		Ċ			
4.3.2 Renewable energy facilities	٢	9		٢		1		
4.3.4 Localised utilities	٢	9		٢				

4.4 Pollution						
4.4.2 Ground water pollution						
	0		9	٢	۴	<b>→</b>
4.4.3 Surface water pollution						
	0		9		٢	<b>→</b>
4.4.4 Air pollution						
	0		9	٢		<b>→</b>
4.5 Biological resource use/modification						
4.5.3 Land conversion						
	9	9			Ċ	/
4.5.4 Livestock farming/Grazing of domesticated animals						
	0	4			Ċ	/
4.5.5 Crop production						
	9	9			Ċ	
4.5.8 Commercial hunting						
	0	4			۴	<b>N</b>
4.5.10 Forestry/Wood production					~	
	0	4		٢	Ċ	<b>→</b>
4.8 Social/Cultural uses of heritage	0	<i></i>			04	
4.8.1 Ritual/Spiritual/Religious and associative uses	٢	4		٢	<u>ল</u> ে	-
4.8.2 Society's valuing of heritage						
	0	9		٩		<b>→</b>
4.8.4 Changes in traditional ways of life and knowledge system						
	0		9		Ċ	1
4.8.5 Identity, social cohesion, changes in local population and community			-			
	0	4			Ċ	7
4.8.6 Impacts of tourism/Visitation/Recreation						
	9		9	٢	Ċ	
4.9 Other human activities						
4.9.1 Illegal activities						
	9	9	9	٩	Ċ	1
4.10 Climate change and severe weather events						
4.10.2 Flooding						
	0	9	9	٢	Ċ	1
4.10.3 Drought						
	9	9	9		Ċ	
4.10.6 Temperature change	6				~	
	9		4	٢	Ċ	
4.10.7 Other climate change impacts			~		05	
	9		9	٢	Ċ	
4.11 Sudden ecological or geological events						

4.11.2 Earthquake						
	0		9	٢	Ċ	<b>→</b>
4.11.5 Erosion and siltation/Deposition						
	0	4	9		Ċ	
4.11.6 Fire (wildfire)						
	٢	9	9		Ċ	\$
4.12 Invasive/alien species or hyper-abundant species						
4.12.1 Translocated species						
	9	9	9		Ċ	1
4.12.2 Invasive/Alien terrestrial species						
	0		9		Ċ	
4.12.3 Invasive/Alien freshwater species						
	0		9		Ċ	<b>→</b>
4.13 Management and institutional factors						
4.13.1 Management system/Management plan	٥	4		٢	Ċ	<b>→</b>
4.13.2 Legal framework	٥	4		٢	Ċ	<b>→</b>
		-				
4.13.3 Governance	٢	4		٢		<b>→</b>
		~~	~~~~		~	
4.13.4 Management activities	0	4	4	٢	(F	<b>→</b>
4.13.5 Financial resources	0	9	9	۲	Ċ	<b>→</b>
4.13.6 Human resources	٢	9	9	۹	Ċ	<b>→</b>
4.13.7 Low impact research/monitoring activities	٢	9	9	۹	Ċ	<b>→</b>
Legend Current Potential O Negative O Positive	<li>Insi</li>	de		C Outsi	de	

4.16. Assessment of current and potential positive and negative factors

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

4.1 Buildings and Development

Name		Impact		Origin	Trend
4.1.4 Maj	1.1.4 Major visitor accommodation and associated infrastructure				
			9	٩	<b>→</b>
Spatial c	cale - Area affected by the factor				
Spatial S					
	Restricted				
×	Localised				
	Extensive				
	Widespread				
Tempora	I scale - Occurence of the impact				

	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - Im	pact on the attributes				
	Insignificant				
×	Minor				
	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
	High capacity				
×	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - De	velopement over the last 6 years				
	Decreasing				
	Static				
×	Increasing				
Name		Impact		Origin	Trend
4.1.5 Interp	4.1.5 Interpretative and visitation facilities		9	٢	1

Spatial sc	ale - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - In	npact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Managemo	ent response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources

Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

## 4.2 Transportation Infrastructure

A2 l brow transport infrastructure in a serie and the factor interval and the	Name		Impact		Origin		Trend	
Sprit are statisticated by the factor         Image: Sprit are statisticated by the factor         Image: Sprit are statisticated by the factor           Beakerscale         Scale are statisticated by the factor         Image: Sprit are statisticated by the factor         Image	4.2.1 Gro	4.2.1 Ground transport infrastructure		9				
Resided       Resided       Image: Second Se			0		9			
Resided       Resided       Image: Second Se	Spotial	and a Area offeriad by the factor						
animal	Spatials							
A series of the series of t								
<pre>main and provide the impact of the impa</pre>	×							
Negative decision of the impact         Impaired of area       Impaired of area         Impaired of area								
orace       orace       intermiterio or spondo         intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         X       oragoni       intermiterio or spondo       intermiterio or spondo         Impairie       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Impairie       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Moir       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Major       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Major       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Major       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Major       intermiterio or spondo       intermiterio or spondo       intermiterio or spondo         Major       intermiterio or spondo       intermiterio or spondo       intermiterio or spondoo         Major       intermiterio or spondoo       intermiterio or spondoo       intermiterio or spondoo         Major       intermiterio or spondoo       intermiterio or spondoo       intermiterio or spondoo         Major       intermiterio or spondoo       intermiterioo or spondoo								
Animiter or sponde project          immitter or sponde       immitter or sponde         impitter or sponde       immitter or sponde         immitter or sponde       immitter or sponde	Tempora							
<pre>key figure interface interface</pre>								
<pre>kai and a series of the s</pre>								
Index index in a tribute in a t								
Algoritant          Misginfant         Kine         Signifant         Major         Image: Second Colspan="4" Second Colspan="4" Second Colspan="4">Image: Second Colspan="4" Second Colspan="4">Image: Second Colspan="4" Second Colspan="4" Second Colspan="4">Image: Second Colspan="4" Sec	×	On-going						
x Mor is galitania is gal	Impact -	Impact on the attributes						
image: Significant       Significant         Major       Significant         Mage: Significant       Significant         Mage: Significant       Significant         Mage: Significant       Significant         Maine: Significant       Significant		Insignificant						
Major         Major         Management to respond         Main capacity of management to respond         Vertice Search Capacity of resources         Vertice Search Capacity of resources         Impact Search Capacity of resources         Vertice Search Capacity of resources	×	Minor						
Management to respond         Maile capacity of management to respond         High capacity       Medium capacity       Selection       S		Significant						
Image: Migh capacity       Image: Second Secon		Major						
Medium capacity       Interview       Interview         kw capacity and / or resources       Interview	Manager	nent response - Capacity of management to respond						
Image: A constrained of the second of the		High capacity						
Molegane intervention of the state 6 years         Decreasing         Static         More assing         Name       Impact       Origin       Tend         Association of the state for the state of the state	×	Medium capacity						
Name       Naise         Impart of years         Variable Series         Asis         Asis         Impart Impart Infrastructure       Origin Impart		Low capacity						
i cereasing Static Static Mane Increasing A.2.2 Und transport infrastructure Origin		No capacity and / or resources						
<pre>kaic kaic kaic kaic kaic kaic kaic kaic</pre>	Trend - I	Developement over the last 6 years						
<ul> <li>Increasing</li> <li>Name</li> <li>Inpact</li> <li>Inpact</li></ul>		Decreasing						
Name       Impact       Origin       Trend         4.2.2 Undersonal infrastructure       Impact		Static						
4.2.2 Undersport infrastructure       Image: Constructure       Image: C	×	Increasing						
4.2.2 Undersport infrastructure       Image: Constructure       Image: C								
Spatial scale       Area affected by the factor         Restricted       Localised         Extensive       Extensive			Impact					Trend
Restricted Localised Extensive	4.2.2 Un	derground transport infrastructure	٢	4	4	٢	Ē	<b>→</b>
Restricted Localised Extensive								
Localised       Extensive	Spatial s	cale - Area affected by the factor						
Extensive		Restricted						
	×	Localised						
Widespread		Extensive						
		Widespread						

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

Name	Impact		Origin	Trend	
4.2.3 Air transport infrastructure	٢	9		۲	<b>→</b>

0

9

Spatial scale - Area affected by	the factor

Spatial sca	ale - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	npact on the attributes
	Insignificant
×	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity
×	Medium capacity
	Low capacity

No capacity and / or resources

### Trend - Developement over the last 6 years

field be	
	Decreasing
×	Static
	Increasing

Name	Impact		Origin		Trend	
4.2.5 Effects arising from use of transportation infrastructure	• •		9	٢		
	0					
Spatial scale - Area affected by the factor						

<ul> <li>kcalised</li> <li>kcalised&lt;</li></ul>
Widespread         Temporal - Occurence of the impact         One off or rare         Intermittent or sporadic         Yequent         Yequent         Impact - Impact - Unit without subscience
Temporal sub- Occurence of the impact         One off or rare         Intermittent or sporadic         Frequent         No- off or going
Intermittent or sporadic         Frequent         No- off or rare
Intermittent or sporadic         Frequent         Impact - Impac
Frequent         Impact - Impact Set Set Set Set Set Set Set Set Set Se
Impact - Impact on the attributes
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 - Developement over the last 6 years
Decreasing
Static
X Increasing

## 4.3 Services Infrastructures

Name		Impact			Origin		Trend
4.3.1 Water infrastructure		٢	9	9	٢		<b>→</b>
				9		Ċ	
<b>a</b>							
Spatial sca	Spatial scale - Area affected by the factor						
	Restricted						
	Localised						
×	Extensive						

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

Name	
Name	

Name		Impact			Origin	
4.3.2 Renewable energy facilities	•	9		٢		

## Spatial scale - Area affected by the factor

opatial sea	e - Area anecteu by the factor		
	Restricted		
×	Localised		
	Extensive		
	Widespread		
Temporal s	scale - Occurence of the impact		
	One off or rare		
	Intermittent or sporadic		
	Frequent		
×	On-going		
Impact - Im	pact on the attributes		
	Insignificant		
	Minor		
×	Significant		
	Major		
Manageme	Management response - Capacity of management to respond		
	High capacity		

× Medium capacity

	Low capacity			
	No capacity and / or resources			
Trend - De	Trend - Developement over the last 6 years			
	Decreasing			
	Static			
×	Increasing			

Name	Impact		Origin		Trend	
4.3.4 Localised utilities	٢	4		٢		
Spatial scale - Area affected by the factor						

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

	Decreasing
	Static
×	Increasing

## 4.4 Pollution

Name		Impact	:		Origin		Trend
4.4.2 Ground water pollution							
	ə «		9	٢	Ċ	<b>→</b>	
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						

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

а		

Name	Impact	npact		Origin		Trend
4.4.3 Surface water pollution						
	0		9		Ċ	<b>→</b>

Snatial	scale -	Area affe	acted by	tho	factor

Spatial Sca	
	Restricted
×	Localised
	Extensive
	Widespread
Temporal	scale - Occurence of the impact
	One off or rare
×	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond
	High capacity

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

Name	Impact	Impact		npact		oact Or		Origin		Trend
4.4.4 Air pollution										
	9		9	٩		$\rightarrow$				

## Spatial scale - Area affected by the factor

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

## 4.5 Biological resource use/modification

Name	Impact		Origin		Trend	
4.5.3 Land conversion						
	0	9			Ċ	
Spatial scale - Area affected by the factor						
Restricted						

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

Name	Impact		Origin		Trend	
4.5.4 Livestock farming/Grazing of domesticated animals						
	0	4		Ċ	1	

Spatial scale - Area affected by	w the factor
Spallal Scale - Alea allecteu D	y the factor

Spatial sca	ale - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - In	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond

	High capacity
×	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
	Static
×	

Name	Impact		Origin		Trend	
4.5.5 Crop production						
	9	4			Ċ	

## Spatial scale - Area affected by the factor

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

 Name
 Impact
 Origin
 Trend

 4.5.8 Commercial hunting
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Increasing

×

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

Name		Impact		Origin		Trena	
4.5.10 Fore	4.5.10 Forestry/Wood production						
		9	9		٢	Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						

Management response - Capacity of management to respond

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

## 4.8 Social/Cultural uses of heritage

Name	ne Impact		Origin		Trend		
4.8.1 Ritua	4.8.1 Ritual/Spiritual/Religious and associative uses		9		۲	Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
	velopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Nam		Income			Origin		Terret
Name	ty's valuing of heritage	Impact			Origin		Trend
	too of a rating of heritage		9		٩		<b>→</b>
		0					

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

N	а	m	۱e
	a		10

Name	Impact	t		Origin		Trend
4.8.4 Changes in traditional ways of life and knowledge system						
	0		9		Ċ	

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

opana. ooa	e - Alea anected by the factor
	Restricted
	Localised
×	Extensive
	Widespread
Temporal s	cale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major

## Management response - Capacity of management to respond

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

Name	Impact		Origin		Trend	
4.8.5 Identity, social cohesion, changes in local population and community						
	0	9			Ċ	

## Spatial scale - Area affected by the factor

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

Name	Impact			Origin		Trend
4.8.6 Impacts of tourism/Visitation/Recreation						
	0		9	۲	Ċ	

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

## 4.9 Other human activities

Name		Impact			Origin		Trend
4.9.1 Illega	4.9.1 Illegal activities						
		0	9	9	٢	٢	
Spatial sca	ale - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - In	npact on the attributes						
	Insignificant						
	Minor						
×	Significant						

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

## 4.10 Climate change and severe weather events

Name		Impact			Origin		Trend
4.10.2 Floo	4.10.2 Flooding						
		0	9	9	٢	Ċ	1
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
							_
Name		Impact			Origin		Trend
4.10.3 Drou	gnt						

		9	9	9	٢	1
Spatial sca	le - Area affected by the factor					
	Restricted					
	Localised					
	Extensive					
×	Widespread					
Temporal s	cale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
×	Frequent					
	On-going					
Impact - Im	pact on the attributes					
	Insignificant					
	Minor					

## Management response - Capacity of management to respond

Significant

Major

×

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

× Increasing

Name		Impact		Origin		Trend	
4.10.6 Tem	4.10.6 Temperature change						
		9	9	۲	Ċ	1	
Spatial sca	ale - Area affected by the factor						
	Restricted						
	Localised						
	Extensive						
×	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
×	Frequent						
	On-going						
Impact - In	Impact - Impact on the attributes						
	Insignificant						
	Minor						

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

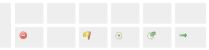
Name	Impact		Origin		Trend	
4.10.7 Other climate change impacts						
	0		9	٢	Ċ	

Spatial scale	e - Area affected	by the factor

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

## 4.11 Sudden ecological or geological events

Name	Impact	Origin	Trend



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

Name	Impact	:		Origin		Trend
4.11.5 Erosion and siltation/Deposition						
	0	4	9		Ċ	1

## Spatial scale - Area affected by the factor

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

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

Name	Impact			Origin		Trend
4.11.6 Fire (wildfire)						
	0	9	9		Ċ	\$

## Spatial scale - Area affected by the factor

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

## 4.12 Invasive/alien species or hyper-abundant species

Name		Impact			Origin		Trend
4.12.1 Tran	slocated species						
		٢	9	9		Ċ	
Spatial sca	le - Area affected by the factor						
-,	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	relopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

Name	Impact		Origin		Trend
4.12.2 Invasive/Alien terrestrial species					
	0	9		Ċ	

# Spatial scale Restricted kestricted Localised Kestricted Widespread Temporal Concurrence of the impact One off or rare Intermittent or sporadic Frequent On-going

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

Static X Increasing

Name	Impact		Origin		Trend
4.12.3 Invasive/Alien freshwater species					
	٢	9		Ċ	<b>→</b>

## Spatial scale - Area affected by the factor

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

## 4.13 Management and institutional factors

Name		Impact		Origin		Trend
	anagement system/Management plan	0	9	<b>.</b>	→	
Spatial s	cale - Area affected by the factor					
	Restricted					
×	Localised					
	Extensive					
	Widespread					
Tempora	al scale - Occurence of the impact					
	One off or rare					
	Intermittent or sporadic					
	Frequent					
×	On-going					
Impact -	Impact on the attributes					
	Insignificant					
	Minor					
×	Significant					
	Major					
Manager	nent response - Capacity of management to respond					
	High capacity					
×	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - D	Developement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact		Origin		Trend
4.13.2 Le	agal framework	٢	4	۲	Ċ	<b>→</b>
Spatial s	scale - Area affected by the factor					
	Restricted					
×	Localised					
	Extensive					
	Widespread					
Tomport						
rempora	al scale - Occurence of the impact					
	One off or rare					

Intermittent or sporadic

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

Name	Impact			Origin		Trend
4.13.3 Governance	٢	9		۲		<b>→</b>

Owner the Lange to the stand best the factory
Spatial scale - Area affected by the factor

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

Increasing	

Name		Impact	:		Origin		Trend
4.13.4 Man	agement activities	٢	9	9	٩	Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
	Frequent						
×	On-going						
Impact - Im	pact on the attributes						
	Insignificant						
×	Minor						
	Significant						
	Major						
Manageme	nt response - Capacity of management to respond						
	High capacity						
×	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - Dev	velopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						

lame				Origin		Trend
4.13.5 Financial resources	٢	4	9	٢	Ċ	<b>→</b>

Spatial sca	le - Area affected by the factor
	Restricted
	Localised
	Extensive
×	Widespread
Temporal s	cale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent

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

× Increasing

Name				Origin		Trend
4.13.6 Human resources	0	9	9	٢	Ċ	<b>→</b>

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

Name	Impact		Origin		Trend	
4.13.7 Low impact research/monitoring activities	٢	9	9	۹	Ċ	<b>→</b>

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

4.17. 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

Not Applicable

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	Unaltered Migration of wild animals	×			
4.18.1.2	Large population of Ungulates	×			
4.18.1.3	Mosaic of different habitats	×			
4.18.1.4					
4.18.1.5					

#### 5. Protection and Management of the Property

#### 5.1. Boundaries and Buffer Zones

5.1.1 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value? The boundaries **do not limit the ability to maintain** the property's Outstanding Universal Value but they **could be improved** 

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

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

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

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

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

The buffer zones of the World Heritage property are known and recognised by both the management authority and local communities/landowners

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

With buffer zones identified and set aside in villages around the property through current Land Use Planning activities, most of the property boundaries are bordered by other protected areas. Also in 5.1.1.3, The boundary of the property is considered to be altered to annex Speke Gulf Game Controlled Area to give wildlife access to permanent water sources (Lake Victoria), since the only permanent source (Mara River) has started to fluctuate and flow rates becoming low, putting OUV at risk.

#### 5.2. Protective Measures

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

Totally protected since 1940, declared a National Park in 1951.

Source: Nomination file, par. 2.b

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?

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

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

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

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

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

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

Since the property is a National Park, it is by default protected under National Parks Act, with Planning governed by regulations under the act where a property is required to have 10 years General Management Plan (GMP), and at Corporate the parent organization (Tanzania National Parks TANAPA) five years Strategic Plans are set that all National Parks implement. The implementation of five years of Corporate Strategic Plans at the property ensure the ten years implementation of the GMP integrate

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

There is clear legal and institutional structure both at the property and buffer areas (Game Reserves and Community Wildlife Management Areas to ensure that Property is protected and OUV is maintained. There is joint ecosystem effort to collaborate in protection activities both within and outside the country.

#### 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 national 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.

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

A 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 at the property is transitioning into three paramilitary levels. On the ground are the Site Managers and heads of departments foreseeing daily activities i.e. community outreach, tourism, claw enforcement, and ecology. The second level is the Zonal Office that comprises other parks in the zones, this foresees strategic management of the property and links with first management level that is the Corporate. Where strategic Planning is set with Board of Trustees oversight

#### 5.3.4 - Management Documents

Title	Status	Available	Date	Link to source
Serengeti National Park - Management Plan: 1990-1995, Draft # 1, January 1990	N/A	Available	1990	

#### Comment

The General Management Plan 1990-1995 was updated to 2006-2016 GMP, With reference to the status of updating the 2006-2016 General Management Plan; The State Party would like to inform that the management plan (2014-2024) have been reviewed and endorsed by Tanzania National Parks (TANAPA''s) Board of Trustees meeting held in June 2017. Please see the document in the attached

linkhttps://drive.google.com/file/d/10ZfscEbzw5k4WdVvcgMrvd9MGJMsLX-l/view?usp=sharing

# 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?

No use has been made of the 2011 Recommendation on the Historic Urban Landscape

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

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

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

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

5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ? No 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

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

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

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

#### 5.3.13 - Is the management system being implemented?

The management system is being only partially implemented

#### 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			×		

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

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

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

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

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

In 5.3.17.2 the property contributes to the sector (tourism) that contributes about 18% of State GDP, and second forex earner hence contribute to multiple-sectoral development. Moreover, property-related activities contribute to employment either directly or indirectly hence improved the communities socio-economic development.

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

Management systems are defined by the Corporate Strategic Plans at the overall mother organization managing National Parks. These Corporate Strategic plans are prepared in line with National and global priorities which basically cover the issues ranked above.

#### 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	5 %	5 %

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.)	5 %	5 %
6.1.1.6	Governmental (national/federal)	%	%
6.1.1.7	Governmental (regional/provincial/state)	%	%
6.1.1.8	Governmental (local/municipal)	%	%
6.1.1.9	In-country donations (NGOs, foundations, etc.)	%	%
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	70 %	70 %
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	20 %	20 %
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

The property operates from the revenue it generates through Wildlife related tourism activities mainly safari. The revenue generated about 20 % is allocated for property (park) operations and development budget, and the remainder is supporting other National Parks with Tanzania National Parks-TANAPA.

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

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

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

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

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

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

		From local communities %	From elsewhere %
6.1.6.1	Men	80 %	90 %
6.1.6.2	Women	20 %	10 %
		Total 100 %	Total 100 %

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

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

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

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

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

Conservation	Fair
Environmental sustainability	Fair
Community participation and inclusion	Fair

Risk preparedness	Poor
Capacity development and education	Fair
Administration	Fair
Research and monitoring	Fair
Awareness raising and public information/communication	Fair
Marketing and promotion	Fair
Interpretation	Fair
Visitor management/tourism	Fair
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.** Not applicable.

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

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

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

#### 7. Scientific Studies and Research Projects

7.1 - Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained? Knowledge about the values and attributes of the World Heritage property is 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 considerable research but it is not directed towards 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 with local communities and partners but there is no active outreach to national or international agencies

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

8. Education, Information and Awareness Building

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

Local communities	Poor
Local/municipal authorities	Fair
Indigenous peoples	Poor
Landowners	Poor
Women	Poor
Youth/children	Poor
Researchers	Good
Local visitors	Poor
National/international tourists	Fair
Tourism industry	Fair
Local businesses and industries	Fair
NGOs	Fair
Other specific groups	Fair
If you selected 'Other specific groups', please describe	

#### 8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better

#### understanding of heritage, promote diversity and foster intercultural dialogue?

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

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

Local communities
Local/municipal authorities
Nomen
Youth/children
Researchers
Local Visitors
National/international tourists
Tourism industry

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

Visitor centre	Fair
Site museum	Poor
Information booths	Fair
Guided tours	Fair
Trails/routes	Fair
Printed information materials	Fair
Online (website, social media, etc.)	Good
Transportation facilities	Poor
Other	Not needed
If 'Other' is selected, please specify	

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

The largest group of visitors are coming into contacts with educational space or materials when they do a tour at the Visitors Centre. Also, the park provides a space for school groups to use through a Youth Hostel with Capacity to accommodate over 80 students at affordable rates. The property also works with private concessions -Lodges and tented Camps to facilitate parks visits by providing transport and accommodation to students groups from schools around the park.

#### 9. Visitor Management

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

455574 / 508171 / 568541 / 572620 / 546184 /

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

Entry tickets and registries
Accommodation establishments
Transportation services
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

Serengeti National Park Annual Revenue Reports

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

400 / 100 / 200 / 72 / 200 / 400 /

#### 9.6 - Please provide the source of information

Serengeti National Reports (2019)

## 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 strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation

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

Current efforts controlling entry and exit of vehicles to/from the park and the restrictions to / prevention of vehicles and increasing vehicle traffic. Environmental damages are caused by increasing number of vehicles, unfavorable routings, off-road drive and over speeding. These require a comprehensive, area-wide and effective Intelligent traffic management system of which the property is currently working to develop through funding from German Development Bank-KfW.

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

Visitor use of the World Heritage property is managed but improvements could be made

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

Yes, using a different system

## If a different system, please specify

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

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

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

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

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

In many locations and easily visible to visitors

9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property? Fees are collected and make a substantial contribution to the management of the World Heritage property

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

Yes

#### If 'Yes', please specify

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

## If 'Yes', please specify

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

The property is working to manage visitors' usage and ensure that visitors are distributed across the wide property area instead of concentrating in a few areas. This will be done by spatial distributing key services like entry gates, picnic sites and water sources like boreholes that will pull both service providers and tourists in those areas less utilized. Another strategy is to open up new access roads to distribute traffic into wider areas and improve visitors' experience.

#### 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

\*Wildebeest Census\*-Shows –Changes in wildebeest population over time \*Wildebeest Movement\*-Shows -How wildebeest are moving through the ecosystem. This can help direct protection efforts, monitor poaching threats and interpret impacts of land use change over time \*Systematic Reconnaissance Flight (SRF) Survey\* Shows –Changes in trends of large ungulate populations and human activities in the census area over time \*Elephant Census\*-Shows –Changes in size and distribution due to protection effo

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

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

#### **10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?** Implementation is underway

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

The progress of implementation of the World Heritage Committee recommendations is reported annually on the State of Conservation (SoC).

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

Serengeti National Park (SENAPA) is guided by a General Management Plan (GMP) to achieve its conservation and management objectives. A monitoring and evaluation framework is used to assess the progress toward achieving this GMP. The M&E system was developed in order to monitor the implementation of activities, targets, and objectives. Also, monitoring of the property is linked and coordinated by the Corporate organization wise M & E unit.

#### 11. Identification of Priority Management Needs

#### 11.1 - Identification of Priority Management Needs

5.2	Protective Measures	
5.2.4	An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	×
5.2.5	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	×
5.2.6	There is acceptable capacity/resources to enforce legislation and/or regulation in the World Heritage property but some deficiencies of enforcement remain	
5.3	Management System/Management Plan	
5.3.5	No use has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	×
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	×
5.3.11	There is coordination between the range of administrative bodies involved in the management of the property, but it could be improved	
5.3.13	The management system at the property is only being partially implemented	
6.1	Funding	
6.1.3	The available budget is acceptable but could be further improved to fully meet the management needs of the World Heritage property	
6.1.7	Human resources partly meet the management needs of the World Heritage property	×
6.1.10	Some use has been made of the World Heritage Strategy for Capacity Development at the World Heritage property	

6.1.12	A site-based capacity building plan or programme is in place and partially implemented; some technical skills are being transferred to those managing the property locally, but most technical work is carried out by external staff	×
7	Scientific Studies and Research Projects	
7.2	There is considerable research in the World Heritage property but it is not directed towards management needs and/or improving understanding of Outstanding Universal Value	
7.3	Research results are shared with local communities and partners but there is no active outreach to national or international agencies	
8	Education, Information and Awareness Building	
8.2	There is a limited and ad hoc education and awareness programme for children and/or youth	
9	Visitor Management	
9.7	There is a strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property but there are some deficiencies in implementation	
9.9	Visitor use of the World Heritage property is managed but improvements could be made	
9.12	The presentation and interpretation of the Outstanding Universal Value of the property is acceptable but improvements could be made	
10	Monitoring	
10.2	Information on the values of the World Heritage property is adequate and key indicators have been defined but monitoring of the status of indicators could be improved	
Pleas	se select 4 more issues.	
D Ple	ease 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

4.3	Services In	Services Infrastructures							
4.3.1		Water infrastructure	3						
4.5	Biological r	esource use/modificatio	n						
4.5.4	Livestock farming/Grazing of domesticated animals	(vii) to contain superlative natural phenomena or areas of the exceptional natural beauty and aesthetic importance;	Consistent application of national laws and policies across the entire Ecosystem Strong national support from political and social leaders to execute their national law and policies, Promoting conservation policies	Monitor burnt areas around the edges of the property and incursions incidences data. Timeframe-Lifetime of property	Lifetime of property	Ministry of Natural Resources and Tourism, Ministry of Livestock and Fisheries	Domestic livestock, upon overgrazing the buffer areas, rapidly collapsing the Ecosys borders and increasingly making incursions into protected areas. Livestock has displaced poaching as the greatest disturbance to migration and sustainable use.		
4.5.5		Crop produc	tion						
4.8	Social/Cult	Iral uses of heritage							
4.8.2	Society's valuing of heritage	(x): to contain the most important and significant natural habitats for in-situ conservation of biological diversity,	Ensuring village land-use plans along GSE are compatible with conservation and shift from conflict towards co-existence between humans & wildlife Ensuring village land-use plans are in consort with regional and national Land Use Planning Commissions and that their implementation follows the tenets of adaptive management with periodic audits and	Institutions and institutions to tailor messages and communication to adapt to changes	Lifelong of a property	Ministry of Natural Resources and Tourism and other sectoral Ministries	The human population on the perimeter of the GSE is growing at double the national average, resulting in rapid land transformation along Ecosystem borders. This creates hard borders around the ecosystem and may affect the ecological sustainability.		

			aco	countability				
4.8.4	.8.4 Changes in traditional ways of life and knowledge system conservation of biological diversity,		In Iral tra situ sy f m Sity, pr Si Si de er M R R	dvocate for the itegration of the aditional knowledge ystem into the ianagement of the roperty. Works with the linistry of Culture and ports to create eliberate plans in ncouraging Indigenous lanagement of Natural esources in the Buffer reas to the ecosystem.	Works with the Ministry of Culture and Sports t create deliberate plans in encouraging Indigenous Management of Natura Resources in the Buffe areas to the ecosystem	o property al	Ministry of Natural Resources and Tourism in collaboration with other line ministries.	Changes in Values system for communities around the property, abandoning ways of life and move to more modernized ways like modern farming system may put the property at risk.
4.8.5	<b>.8.5</b> Identity, social cohesion, important and significant natural population and community conservation of biological diversity,		ural co situ co of pr rsity, p	To coordinate a campaign to create cohesion around a common goal of protecting the property for future generations	Work with relative research institutions and hubs to tailor the right monitoring plans for the attributes.	A lifetime of a property	Ministry of Natural Resources and Tourism with relevant ministries collaboration.	As transition towns around the property are becoming more and more metropolitan, the cohesion and communal management of the resources is falling apart, this may me tragic for natural resources use as governing of resources as common will be tough
4.8.6		Impacts tourism	s of /Visitation/Rec	reation				
4.10	Climate cha	nge and severe	weather even	its				
4.10.3	4.10.3 Drought (vii) to contain superlative natural phenomena or area of the exceptional natural beauty and aesthetic importance		natural a or areas ptional auty and	Develop adaptation and mitigation strategies in line with Protected Areas Mitigation and adaptation measures	Work with relevant National bodies on Climate Change Monitoring	Lifetime of a Property	Ministry of Natural Resources and Tourism in collaboration with relevant line ministries.	Climate change is an imminent threat to ecosystem functioning, that may threaten OUV.
4.10.6	Temperature change	(vii) to contr superlative phenomena of the excep natural bea aesthetic in	natural a or areas ptional uty and	Develop adaptation and mitigation strategies in line with Protected Areas Mitigation and adaptation measures	Work with relevant authorities	Lifetime of a property	Ministry of Natural Resources and Tourism in collaboration with relevant ministries	Temperature changes may trigger other things like wildfires that may affect property values.
4.10.7			Other climatic change impart					
Question	not completed							

## 12.2. Summary - Management Needs

## 12.2.1 - Summary - Management Needs

5.2	Protective Measures				
		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.2.4	An adequate legal framework in the buffer zone for maintaining the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property exists but there are some deficiencies in implementation	Ensure all areas in the buffer zone have land use plans that are well managed , and ensure the protection of all key buffer zone areas	In the next ten years	Ministry of Natural Resources and Tourism	Although the boundary of the property are all clear. There is a need to focus on conservation activities in the buffer areas.

	An adequate legal framework exists for the broader setting of the World Heritage property and the buffer zone, but there are some deficiencies in implementation which undermine the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the property	Ensuring effective management of supported Land Use Plans in buffer areas.and support Community Wildlife Management Areas Managememt	Next Ten	years		Ministry of Natural Resources and Tourism	Supporting the effective functioning of Community Wildlife Management Areas on the buffer of the property is key at ensuring the buffer zone is protected as these are frequently harbours migrating wild animals.
5.3	Management Sys	tem/Management Plan					
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	Integration of the Documents on the Impacts of Climate Change on the Property plans	ASAF	5			There is a need to work with NATCOM and Focal points to ensure integration.
5.3.9	No use has been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property	Integrate Strategy for Reducing Risks from Disasters at World Heritage Risk Management plan	Next	Next three years Tar			Currently, the property is maintaining a risk management system coordinated by the Risk Management Unit at Organization HQ. We will work with the Unit to ensure integration of the Strategy.
6.1	Funding						
6.1.7	Human resources partly meet th management needs of the World Heritage property		taff	Next ten years		Tanzania National Parks	There is already an established Manpower audit that provides staff needs for different departments and units.
6.1.12	A site-based capacity building plan of programme is place and partially implemented; some technice skills are being transferred to those managin the property locally, but most technic work is carrie out by extern staff	property or in al g ng al	r the	Next five years		Tanzania National Parks	Although the site has managed to recruit staff for most technical duties. There is a need to build specific property capacity building for most technical duties.

Summary - Management Needs completed

12.3. Conclusions on the State of Conservation of the Property

12.3.1 - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property? Not applicable (sites inscribed exclusively under criteria vii to x (natural World Heritage properties)

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

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

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

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

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

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

The property is working with UNESCO Advisory bodies and WH Committee to ensure that advise and recommendations respectively to ensure authenticity preserved and authenticity kept intact while maintaining OUV.

#### 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	Positive
Research and monitoring	Very positive
Management effectiveness	Positive
Quality of life for local communities and indigenous peoples	No impact
Recognition	Very positive
Education	No impact
Infrastructure development	Positive
Funding for the property	Positive
International cooperation	Positive
Political support for conservation	No impact
Legal/Policy framework	No impact
Advocacy	No impact
Institutional coordination	Not applicable
Security	Positive
Gender equality	Negative
Provision of ecosystem services/ benefits to local communities	Positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	No impact
Fostering inclusive local economic development and enhancing livelihood	Negative
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Negative
Other	Not applicable
If 'Other', please specify	

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

The property works with different stakeholders to develop and implementation of management, corrective and adaptive strategies for the WH impacts and maintains its status.

#### 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

Since the property is conserving mainly migrating wildebeest and other ungulates that traverse through Nation-States Boundaries. Here are some good practice. Spirit of Collaboration & Partnershipcollective managers responsible for the protection of the natural resources of the Greater Serengeti- Ecosystem (GSE) in the interests of the Nations (Tanzania and Kenya) are working to address key threats to the long-term security and well-being of the GSE. Areas of collaboration includes Anti-poaching and law enforcement- dedicated teams and extraordinary cross-border coordination and partner support over years, the GSE has become one of the most secure multi-jurisdictional protected areas in Africa with growing elephant and rhino populations. Committed to constant vigilance against ivory and rhino horn poaching, we are focusing on combatting commercial bushmeat poaching. There is consensus for continued close inter-agency collaboration, coordinated intelligence, and versatility in adapting new anti-poaching strategies and tools to stay ahead of ivory and bush meat poaching syndicate; continued investment of financial resources to maintain the security of the GSE. Inter-agency Collaboration & Partnerships The inter-agency collaboration between government institutions, across the Kenya-Tanzania border, and including public-private/NGO partnerships and investment has greatly improved the security of the ecosystem. Our continued dialogue optimizes synergies and reduces redundancies.

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

Sustainable Development	
Synergies	
State of Conservation	
Management	
Governance	
Capacity Building	

#### 15. Assessment of the Periodic Reporting Exercise

#### 15.1. Relevance of Periodic Reporting

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

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

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

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

#### 15.2. Use of Data

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

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

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

Periodic reporting data will be used in Soliciting resources support by bringing attention to policymakers and other key stakeholders on key trends that may impact the Property.

#### 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 has been given limited consideration and implementation is in process.

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

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

80 / 60 / 60 /

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

	Additional resources	No	Yes
15.3.5.1	Human resources		×

15.3.5.2

#### 15.4. Format and content of the Periodic Report

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

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

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

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

The Guidance part rather than providing key should provide information on what is need to be filled in rather than providing key words.

#### 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	Fair
UNESCO (other sectors/field offices)	Fair
UNESCO National Commission	Fair
ICOMOS International	Not applicable
IUCN International	Poor
ICCROM international/regional	Poor
ICOMOS national/regional	Not applicable
IUCN national/regional	Poor

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

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

# 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? I found resources useful.

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 Ecosystem Map does not include some Buffer protected areas to the property like Kijereshi Game Reserve on Western Border of the property. Please see attached link for an updated map https://drive.google.com/file/d/1g9MOOnskdqno\_Eo2DUCTLd202laINDQl/view?usp=shari ng

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

The Periodic Reporting exercise is very important exercise that brings managers back to the drawing board and thinks about integrity, authenticity and OUV preservation.

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