

(in compliance with Paragraph 169 of the Operational Guidelines)

Phong Nha – Ke Bang National Park, Viet Nam

1. Executive Summary of the report

At the 40th Meeting session in Istanbul, Turkey, World Heritage Committee expressed concern about issues on the property's Outstanding Universal Value conservation, with recommendations as mentioned Decision No.40 COM 7B.91 as follows

- a) Complete Environmental Impact Assessments in line with IUCN's Advice Note on Environmental Assessment, prior to a decision on the implementation of any tourism development projects, especially on building a cable car within the strictly protected zone of the property;
- b) Sustainable Tourism Development Plan includes the property extension.
- c) Report on the population status of key large mammal species;
- d) The results of law enforcement activities to address illegal logging and poaching).

In order to conserve the property's integrity, and sustainable-nature usage, the Management Board of Phong Nha – Ke Bang National Park (PNKB) has carried out its actions responsibly. There are no any new infrastructure, restoration within the core zone of the property and mitigate the impacts on the Outstanding Universal Value of the property in terms of recommendation by Decision No.40 COM 7B.91. The Special National Heritage Plan for the period of 2016 – 2025, vision to 2035 is being implemented. The Decision No. 38/2016/QĐ-UBND on wildlife rescue in the area of Quang Binh province issued so as to create the legal corridor for conservation and law enforcement.

Law enforcement has been had many positive changes, the forest resources are well protected; The status of hunting, trapping wild animals and harmful to fauna and flora are prevented timely. Number of violations is fewer than previous year; completed the map of plot divisions of the forest; mapped and issued the property boundary; implemented the awareness raising programmes on conservation and improved livelihood for local communities; Mobilized the participation of local communities in the forest protection; Environmental impact assessment on the tourism sites has been implemented; Conducted periodically inspections the property's sites to reduce the negative impacts on the natural resources; Conducted field survey on natural status in the areas where were not been implemented; carried out the monitor of the key species; Decision-making tool such as SMART, METT, GIS have been applied in fields of property management, and research; The property's values are in shared and preserved reasonably.

2. Response to the Decision of the World Heritage Committee

a) Environmental Impact Assessments for the cable car project within the Phong Nha – Ke Bang National Park

Regarding WHC's concern about the cable car project to access Son Doong cave and the potential impacts on the property's Outstanding Universal Value. Quang Binh PPC has just agreed to research, survey and choose the best option so as to protect the integrity of property. Quang Binh People' Committee has not permitted the cable car project that has not had EIA prior to decision in terms of Vietnam Laws and IUCN's guidelines

According to Vietnam Laws and International Conventions, Quang Binh People' Committee commits to implementing measures to conserve the property's integrity; implement strictly the provisions of Vietnam Laws and International Conventions for World Cultural and Natural Heritage Protection in 1972 which Vietnam has signed. The construction of cable car project will be only conducted by the approval of Prime Minister of Vietnam and UNESCO's consensus (or without UNESCO's objection), and related parties.

b) Sustainable Tourism Development Plan including the property extension.

Based on Sustainable Tourism Development Plan in Phong Nha – Ke Bang National Park Region, period 2010-2020, vision to 2025 issued by the Decision No.2822/QĐ-UBND dated on 1^{st} November 2010; and Decision No.209/QĐ-TTg dated on 8th February 2015 of the Prime Minister on approving for General Plan for Phong Nha – Ke Bang National Park, Quang Binh to 2030. Currently, Phong Nha –Ke Bang Managment Board has been implementing The Special National Heritage Plan of 2016 – 2025, vision to 2035. Beside, Quang Binh PPC issued the Strategic Management Plan, Operation Plan, Buffer zone development Plan.

To ensure the integrity of the property, Phong Nha – Ke Bang National Park Management Board has implemented environmental impact assessments according to the regulation of Decree No.18 and Circular No.27 at tourist sites such as Paradise cave, Phong Nha – Tien Son cave, Dark cave – Chay river, Mooc spring Eco-trail. Implement the environmental reports each 6 months; Conduct environment monitoring with its parameters such as air, temperature, humidity, dust, SO2, NO2, CO, pH, dissolved oxygen (DO), suspended solids, COD, BOD5, ammonium, nitrate, nitrite, chromium, iron, copper, Coliform ... Results of monitoring showed that all are in in the limit of Vietnam standard.

In parallel with the environmental impact assessments, periodic environmental monitoring, tourist business establishment within the Park's region has the plan of collection, storage and waste disposal. Sanitation activities is conducted regularly to minimize the dispersal of pollutants into the environment.

The development of tourism based on ecology so as to protect the resources; sustainable tourism is considered as the best measures to create jobs, and increase income for local communities. Quang Binh People's Committee has directed the professional institutions to research, develop strategies, plans for each period and strictly comply regulations to use the natural resources in the long term. Phong Nha Ke Bang National Park Management Board has coordinate the enterprises to exploit tourist routes within the Park, such as Oxalis Company with its tours of Va cave – Nuoc Nut Cave, Son Doong Cave; Truong Thinh Co., Ltd with the route of conquering 7.000m of Paradise cave; surveying and proposing some of projects on eco-tour to put into operation in early 2017. The Park's rangers take part in supervising all of the tours to avoid negative impacts on the heritage values.

Tourism development in Phong Nha - Ke Bang not only contribute to economic development but also an effective solution for the conservation of natural resources. The local government encourages the local to develop accommodation such as home-stay, farm-stay, handicraft production, create jobs and incomes for the local people. Therefore, local economies have improved relatively, reducing pressures on the natural resources of the property.

Those results showed that Quang Binh province strictly implements UNESCO's recommendations in order to conserve OUVs and the property' integrity.

c) The state of conservation of World Natural Heritage Phong Nha – Ke Bang National Park

Law enforcement

In 2016, Phong Nha – Ke Bang National Park Management continued to strengthen law enforcement so as to mitigate the pressure on the resources. The forces of forest rangers carried out regular patrols to "hot areas", border areas, and neighboring region where are adjacent to the property. The Management Board of the Park implemented deterrent measures and handled promptly acts of infringing to forest resources such as illegal exploitation of forest products, hunting, trapping, transporting wildlife. Thus forest resources are well protected, without hotspots of forest exploitation in the region. Hunting, trapping, infringing to the Park's fauna and flora have been prevented and handled promptly. The forces of the park removed the networks of trafficking, transporting wild animals on the road No.20 and the West branch of Ho Chi Minh road. The number of violations has been significantly reduced as compared to the year of 2015.

To improve the efficiency of forest management and protection. The Management Board of the Park has focused on the changes of patrol method to ensure confidentiality; All violations have been detected, promptly stopped and strictly handled; Establish groups in important areas; Build the monthly patrolling plan and establish a fixed networks in the Ranger Station.

In order to achieve the high efficiency in forest management and protection, the Management Board of the Park has coordinated with local authority, relevant departments and agencies to implement the regulations on coordination of forest management and protection; Adjust and supplement and implement action plans to minimize violations of law with the CPC's buffer zone; coordinate with functional forces to inspect along Vietnam - Laos border, adjacent area to the Park. Establish 21 Village Conservation Groups in 9 villages of the buffer zone, made contracts with 28 groups of forest protection in villages; One group of forest protection in border guard station and 70 populationin charge and implement. In addition, The Management Board of the Park has collaborated with Phong Nha – Ke Bang Region Project, Phong Nha Special-use forests project in organizing the propaganda of forest protection, biodiversity protection and fire prevention in 10 communes; organize the training conservation education skills, extra-curricular activities in schools in the buffer zone; Support and transfer the models of community development in buffer zone to reduce pressure on the heritage natural resources.

Up to November 30th 2016, Phong Nha – Ke Bang National Park has carried out 1.863 patrols, removed 49 camps (decreased 30% to the same period last year), removed 1.770 rope trap (decreased 47% to the same period last year), prevent

439 people that entered the Park illegally (decrease 46,6% to the same period last year), make minutes and decisions to handle 172 violations (decrease 20% to the same period), include 80 cases of administrative violation, 90 cases without claimants, one case of criminal prosecution and one case of prosecuting by investigation police. 516.935.000 million VND were contributed to the State budget (decrease 56% to the same period).

Conservation of biodiversity

The Management Board of the Park completed the Forest Inventory Program in 2016; established the temporary cultivation land for households in Ban Doong so as to mitigate the impacts on the property; 45landmarks were built on the boundary of the property; allocated the protected areas for 11 Ranger Station under the approved map; inspected the status of natural resources of Vietnam – Laos border areas in Thuong Trach commune; completed the monitoring of three key species. Updated 16 species of plants and 107 species of animals (current data consist of 2951 species of plants, 1,394 species of animals of which are 154 mammals). Of these, 46 species listed in Vietnam Red Data Book, 55 species in IUCN Red List 2016, 38 species on the list of Decree No. 32/2006/NĐ-CP, 26 species on the list of Decree No.160/2013/NĐ-CP

The Phong Nha – Ke Bang National Park experts had conducted 03 surveys in the remote areas where did not access to so far. The results showed that 92 species of vascular plants of 75 genera, 45 families. The family of Orchidaceae accounts for 18 species; 6 species of Arecaceae and Meliaceae family; 4 species of Euphorbiaceae family. Of these, 9 species listed in Vietnam Red Data Book 2007 (6 species of VU status; 3 species are endangered-EN); 4 species listed in IIA Group of Decree 32-2006/ND-CP of Prime Minister; added 2 new species plants in the list of Phong Nha – Ke Bang National Park's vascular plants, (Lysimachia insignis), (Dendrobium fimbriatum); Recorded the existing of animal species: Rheus macaque (Macaca mulatta), Hatinh langur, Southern white-cheeked gibbon, wild chicken, Babbler, Malayan flying lemur and reptiles and amphibians on the river systems. An other surveys also recorded 63 herds of Southern white-cheeked gibbon (Nomacus siki) with 160 individuals, 81 herds of Red-shanked douc langur (Pygathrix nemaeus) with 319 individuals, 32 herds of Hatinh Langur (Trachypithecus hatinhensis) with 111 individuals. It's mainly recorded by field route surveys and direct observation.

Phong Nha – Ke Bang National Park is home to mammals, include: Asian elephant,, Tiger (*Panthera Tigris*), Asian black bear (*Ursus thibetanus*), Large antlered muntjack (*Muntiacus vuquangensis*), Asian wild dog (*Cuon alpinus*),

Gaur (*Bos frontalis*), Saola (*Pseudoryx nghetinhensis*). However species of Tiger, Asian elephant, Saola, wild dog were not recorded in the field surveys. According to the local people they have been existing in the remote area close to the Viet Nam – Laos border.

Except for the minor impacts of harvesting honey and orchids, the core zone of Phong Nha – Ke Bang National Park is not impacted caused by deforestation, illegal logging and hunting of wild animals. However, the cultivation and land use of Thuong Trach communne's ethnic group impacted the property's buffer zone and the adjacent area.

Phong Nha – Ke Bang National Park has rescued 89 populationwild animals in 2016, including: 53 individuals 2015; 36 of new individuals; released 56 Individuals into the wild; 7 individuals have been rescued unsuccessful. Currently, the Centre for Rescue, Creatures Conservation and Creature Development is taking care of 26 individuals of animal, rescuing 378kg of wild orchid at the Botanical Garden; collected 8,000 seeds of 23 species and produced more than 4,500 seedlings of 20 native species within Phong Nha – Ke Bang National Park region. Those species are being cared and examined to released them into the natural environment. In order to create a legal corridor for wildlife conservation, the Management Board of the Park consulted Quang Binh authority issued the Decision No.38/2016/QĐ-UBND on the regulation of wildlife rescue in Quang Binh province.

To raise conservation awareness, the Management Board of the Park published two books on *"Wild Animal"* and *"Some important plant species"* living in habitat of the Park; published three articles in scientific journals (with ISBN và ISSN index), and an article of discovering new polypodiophyta species in international scientific journal. Defended successfully two scientific research prjects; proposed three scientific projects (two topics of provincial level and one topic of state level); issued the regulation of the field service in Phong Nha – Ke Bang National Park; built the plan and conducted activies related to biodiversity conservation .

In order to preserve of the property's integrity, the Managment Board of the Park has cooperated with Institute of Geology, Vietnam Institute of Geosciences and Mineral Resources, Institute of Chemistry in researching in geology, factors of cave environment to support the conservation of tourism development; Coordinated with British Caving Association on surveying caves and discover 57 caves in 2016 (updated 311 caves with over 200km of total length).

Systematized database on GIS for the planning and management of conservation, such as the vegetation, cave systems, the distribution of endemic species; established scenarios to forecast the possible impacts on resources and livelihoods; cooperated with Lucerne University to research cultures and ethnic groups; conserved cultural history relics within the Park; planed Biodiversity Conservation in Phong Nha – Ke Bang National Park to 2020; conducted the conservation plan of Calocedrus rupestis Aver., period 2016 – 2021; Build the conservation plan of endangered and rare wild animal species in Phong Nha – Ke Bang National Park period 2016 - 2021.

3. Other current conservation issues identified by the State(s) Party(ies) which may have an impact on the property's Outstanding Universal Value

High density and large population of communes in the buffer zone are reasons causing pressures on the resources. On the other hand, low literacy leading to awareness on the conservation and protection the values of the World Heritage Site are still low. Many households in buffer zone communities lack of the cultivated land, and long-term jobs.

Funding for conservation awareness activities, wildlife rescue is not allocated adequately. Infrastructure for wildlife rescue was not ensure the standards; scientific research activities are not funded; lacking of observation system, monitoring the impacts on biodiversity, ecology, geology, cave.

The abnormal changes of climate caused storms, floods, drought leading to landslide, devastating forest, forest fires those are driving forces causing losses of species, habitat and landscape.

The invasive species, particularly *Merremia boisiana*, has invaded and occupied an area of over 4000 ha causing of biodiversity loss, affecting the entire ecosystem..

4. In conformity with Paragraph 172 of the *Operational Guidelines*, describe any potential major restorations, alterations and/or new construction(s) intended within the property, the buffer zone(s) and/or corridors or other areas, where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity.

There are no buildings and new constructions in the core zone, buffer zone, ecological corridors that impacted on the integrity of the property.

5. Public access to the state of conservation report

[Note: this report will be uploaded for public access on the World Heritage Centre's State of conservation Information System (<u>http://whc.unesco.org/en/soc</u>). Should your State Party request that the full report should not be uploaded, only the 1-page executive summary provided in point (1.) above will be uploaded for public access].

Signature of the Authority



Le Thanh Tinh Director of Phong Nha Ke Bang National Park Management Board.

ANNEX I.

LIST OF OFFICIAL DOCUMENTS ON THE BOUNDARY OF PHONG NHA – KE BANG NATIONAL PARK

No.	Name of dossier	Reference No.	Date	Issued by
1	Extension boundary of Phong Nha – Ke Bang National Park	No. 1062/QĐ- TTg	7/5/2013	Prime Minister
2	Buffer zone inside Phong Nha – Ke Bang National - A Rem	No. 2793/QĐ- UBND	10/12/2015	Quang Binh People's Committee
3	Extension boundary in areas of Ranh Hoa Son – Thuong Hoa commune	No. 2999/QĐ- UBND	12/3/2013	Quang Binh People's Committee
4	The National Park boundary in the section of Da Deo pass to U bo Forest Ranger Station	No 466/QĐ-KL QB	11/26/2004	Quang Binh Department for Forest Protection
5	Southern Boundary of the National Park	No. 12/QĐ- UBND	1/5/2015	Quang Binh People's Committee
6	The boundary of three types of forests	No. 2410/QĐ- UBND	9/3/2014	Quang Binh People's Committee
7	The boundary of Semi – Wildlife enclose in Nui Doi mountain	AI 719522	11/28/2007	Quang Binh People's Committee
8	Forest Inventory Map	No 3723/QĐ- UBND	11/21/2016	Quang Binh People's Committee

ANNEX II.

LAW ENFORCEMENT TO ILLEGAL LOGGING AND POACHING

TT	Violation types	No. of cases	Note
1	Timber logging	46	Species were logged including Erythrophloeum fordii Oliv, Calocedrus rupestris Aver., Dalbergia tonkinensis Prain, Vatica cinerea King, Manglietia dandyi Gagnep., Endospermum sinensis Benth
2	Death timber harvesting	1	The timber pieces of <i>Dalbergia tonkinensis</i> , Orchid species
3	None timber forest products	30	Orchid species, Honey bee, flower of forest banana.
4	Animal poaching	43	Species were poached including Sus scrofa, Macaca assamensis, Macaca mulatta, Macaca arctoides, Manis pentadactyla, Paguma larvata, Cuora mouhotii Melanochlora sultanea,
5	Animal transport	1	Macaca assamensis
6	Timber transport	13	Transported some types of timber by vehicles
7	Orchid transport	1	Orchid harvested and transported by vehicles
8	Violation in the fields of forest protection regulated by the State Government	40	Carried the illegal tools, materials such as guns, fish nets, explosive material, traps, detonators
	Total cases	175	

(12/2015 - 12/2016)

ANNEX III. LIST OF MAMMAL SPECIES AND THEIR STATUS DISTRIBUTION

	Name of species	Conservation status				
No.		VN Reed book	Decree 32	IUCN	CITES	Distribution status in the Phong Nha – Ke Bang Park
1	Bos frontalis	EN A1c,d B1+2a C1+2a	IB	VU	I	Recently, 20 population of the species are living in the area of U Bo mountain and Thuong stream met by local people
2	Capricornis milneedwardsii	EN A1c,d B1+2a,b C2a	IB	NT	I	Few population distributing in limestone, soil mountains within the park
3	Pseudoryx nghetinhensis	EN A1c,d B1+2a,b C1+2a	IB	CR	I	Recently, not recorded; horn sample collected by the local people in Minh Hoa district.
4	Muntiacus muntjak					Few population distributing in the valleys whole the park range.
5	Muntiacus vuquangensis	VU A1c,d C1	IB	EN	I	Recently, not recorded by field surveys
6	Rusa unicolor	VU A1c,d B1+2a,b		VU		The dense population, distributing in the valleys whole the park range.
7	Sus scrofa					The dense population, distributing in the valleys whole the park range.
8	Tragulus kanchil					The dense population, distributing in the valleys whole the park range.
9	Canis aureus	DD	IIB			Recently, not recorded by field surveys
10	Cuon alpinus	EN	IB	EN	п	Few individuals. Recently, not recorded by field surveys

		Conservation status				
No.	Name of species	VN Reed book	Decree 32	IUCN	CITES	Distribution status in the Phong Nha – Ke Bang Park
11	Catopuma temmincki	EN A1c,d C1+2a	IB	NT	I	Few individuals. Rescued an individual and released it to the natural resources in 2003-2005.
12	Neofelis nebulosa	EN A1c,d C1+2a	IB	VU	I	Few population, distributing in the valleys whole the park range, especially in areas of Ca Can stream and Cha Noi
13	Panthera pardus	CR A1d C1+2a	IB	NT	I	Few population, distributing whole the park range.
14	Panthera tigris	CR A1d C1+2a	IB	EN	I	Few population, distributing along border area of Lao – Viet Nam. Recently, not recorded by field surveys
15	Pardofelis marmorata	VU A1c,d C1	IB	VU	I	Few population, distributing whole the park range.
16	Prionailurus bengalensis				п	Few population, distributing whole the park range.
17	Prionailurus viverrinus	EN A1c,d C1+2a	IB	EN	п	Few population, distributing wholly the park range.
18	Herpestes javanicus			LC		Few population, distributing wholly the park range.
19	Herpestes urva			LC		Few population, distributing wholly the park range.
20	Aonyx cinerea	VU A1c,d C1+2a	IB	VU	п	Few population, distributing in the streams whole park range.
21	Arctonyx collaris			NT		Popular distribution in whole park, mainly in valleys of limestone and soil mountains

		Conservation status				
No.	Name of species	VN Reed book	Decree 32	IUCN	CITES	Distribution status in the Phong Nha – Ke Bang Park
22	Lutra lutra	VU A1c,d C1+2a	IB	NT/ NT	I	Few population, distributing in the streams of park range.
23	Lutrogale perspicillata	EN A1c,d C1	IB	VU	п	Few population, distributing in the streams of the park range.
24	Martes flavigula			LC		Few population, distributing wholly in the park range.
25	Melogale moschata			LC		Few population, distributing wholly in the park range
26	Melogale personata			DD		Few population, distributing wholly in the park range
27	Mustela kathiah		ПΒ	LC		Few individuals, distributing mainly in the area adjacent to forest, hill, stream in the park range
28	Mustela strigidorsa		ПВ	LC		Few individuals, distributing mainly in the area adjacent to forest, hill, stream in the park range
29	Helarctos malayanus	EN A1c,d C1+2a	IB	VU	п	Few population, distributing in the park range. Recently, not recorded by field surveys
30	Ursus thibetanus	EN A1c,d C1+2a	IB	VU	I	Few population, distributing in the park range. Recently, not recorded by field surveys
31	Arctictis binturong	EN A1c,d C1	IB	VU		Few population, distributing wholly in the park range
32	Arctogalidia trivirgata	LR nt		LC		Few population, distributing wholly in the park range

		Conservation status				
No.	Name of species	VN Reed book	Decree 32	IUCN	CITES	Distribution status in the Phong Nha – Ke Bang Park
33	Chrotogale owstoni	VU A1c,d C1	IIB	VU		Few population, distributing wholly in the park range
34	Paguma larvata			LC		Few population, distributing wholly in the park range
35	Paradoxurus hermaphroditus			LC		Few individuals, distributing wholly in the park range
36	Prionodon pardicolor	VU A1c,d	IIB	LC	I	Few individuals, distributing wholly in the park range
37	Viverra megaspila	VU A1c,d C1	ПВ	VU		Few individuals, distributing wholly in the park range
38	Viverra zibetha		ПВ	NT		Few population, distributing wholly in the park range
39	Viverricula indica		IIB	LC		Few population, distributing wholly in the park range
40	Lepus peguensis					Distributing in the area adjacent to the forest, grass and soil hills.
41	Nesolagus timminsi	EN B1a+2a D	IB	EN		Few individuals, distributing in the area adjacent to the forest, ever-green forest at elevation of 50-400m.
42	Manis javanica	EN A1c,d C1+2a	ПВ	EN	п	Few individuals, distributing in the area primeval forest.
43	Manis pentadactyla	EN A1c,d C1+2a	ΙΙΒ	EN		Few individuals, distributing in the area primeval forest.

		Conservation status				
No.	Name of species	VN Reed book	Decree 32	IUCN	CITES	Distribution status in the Phong Nha – Ke Bang Park
44	Macaca arctoides	VU A1c,d B1+2b,c	IIB	VU	п	Few individuals, distributing wholly in the park range
45	Macaca assamensis	VU A1c,d B1+2b,c	IIB	NT	п	Few individuals, distributing wholly in the park range
46	Macaca leonina	VU A1 c,d	IIB	VU	п	Few individuals, distributing wholly in the park range
47	Macaca mulatta				П	Few individuals, distributing wholly in the park range
48	Pygathrix nemaeus	EN A1a,c,d B2b	IB	EN	I	Met 26 herds with 191 individuals of species in 2015 - 2016, distributing in the areas of Km 40, En cave, Dai A, Dai Cao Cave, Cop Bo Binh, Thung Lau
49	Trachypithecus hatinhensis*	EN A1c,d	IB	EN	п	Met 15 herds with 68 individuals of species in 2015 - 2016, distributing in the areas of limestone mountains of the park range.
50	Trachypithecus ebenus	VU			п	Met 1 herd with 03 individuals of species in 2015 - 2016, distributing in the areas of Km 35, Ho Chi Minh west brand road.
51	Nomascus leuco genys siki	EN A1c,d C2a		EN	I	Met 26 herds with 58 individuals of species in 2015 - 2016, distributing in the areas of U Bo, Dai Cao, Thung Lau
52	Nycticebus bengalensis	VU A1c,d	IB	VU	п	Relative dense population, distributing in areas of secondary forests and adjacent to the forest.
53	Nycticebus pygmaeus	VU A1c,d	IB	VU	П	Relative dense population, distributing in areas of secondary forests and adjacent to the forest.
54	Laonastes sp			EN		Relative dense population, distributing in areas of evergreen forests and adjacent to the forest, mainly in Thuong Hoa, Hoa Son, Dan Hoa, Trung Hoa commune.

	Name of species	Conservation status				
No.		VN Reed book	Decree 32	IUCN	CITES	Distribution status in the Phong Nha – Ke Bang Park
55	Atherurus macrourus					Dense population, distributing in the areas of the limestone mountain foot, and hillsides
56	Hystrix brachyura					Dense population, distributing in the areas of the limestone mountain foot, and hillsides
57	Elephas maximus	CR	IB	EN	I	Distributing along the areas of Lao – Viet Nam Border. Recently, not recorded by the field survey.