

STATE OF CONSERVATION STATUS OF THE WORLD HERITAGE IN INDONESIA

World Heritage Property
Tropical Rainforest Heritage of Sumatra (N 1167)

February 2014

Background

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

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

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

Road construction

As mentioned in our State of Conservation in 2012, one of three proposals were submitted to the Minister of Forestry on the opening of new roads in Kerinci Seblat National Park (Kambang - Muara Labuh, West Sumatra, along 8 km) was rejected based on the Minister of Forestry letter. So far, no road construction going on in the area KSNP, any physical activity has been stopped. Currently, to keep the proposed area from disturbed, the management of Kerinci Seblat National Park is routine to carry out patrols in the area.

In Bukit Barisan Selatan NP, for road construction between Way Way Heni - Way Haru, referring to the letter of Director General of Forest Protection and Nature Conservation, no. S. 251/IV-KKBHL/2012 dated June 18, 2012 concerning the development plan of Heni Way - Way Haru, park authority may utilize the road for patrolling purposes as well as used by the local community as access to and from the enclave Way Haru.

Based on field checking and notification by mail, the increase in activity structure connecting road between the Karo district and Langkat district where partially entered GLNP area is known that such acts are the work program of Highways

Agency of North Sumatera Province conducted by PT. Waking Mitra Abadi through tenders conducted by the Technical Implementation Unit (UPTD) Binjai. Management of Gunung Leuser National Park has suspended activity increase in road structures in the field and has delivered notice to Langkat Regent and Governor of North Sumatera. Secretary of the North Sumatera region on behalf of the Governor of North Sumatera has submitted a letter to the Minister of Forestry Number: 620/9363/2013 dated 10 September 2013 regarding the Provincial Roads Improvement Award translucent Langkat - Karo with Collaborative Mechanism on GLNP area in Langkat and Karo. Patrols and checks on the use of illegal TNGL area including road structure building activities being conducted by GLNP field officers.

Field officers GLNP has identified and checked against field survey activities for the installation of electrical networks conducted by PT. PLN Binjai area. Surveys were allegedly carried out in the framework of the installation of the electric network for loggers in the region GLNP. The results of the inspection are followed by the delivery of a letter to the head of PT. PLN Areas Binjai Number: S.4091/BBTNGL-2/2013 dated 7 November 2013 which clarifies the installation of electrical network activity survey and asked to dismiss the petition PLN electricity network installation by encroachers.

By letter No. 0508/152/BJI/2013 dated December 10, 2013, PT. PLN Binjai area to the Head of Gunung Leuser National Park explain that in 2011 people in the region GLNP browser ever filed installation of electrical networks and it is not related to the location of the community followed inside GLNP area. Since then, the PT. PLN Binjai area has never done any surveys in the region GLNP. Currently, management of GLNP through officers in the field continues to monitor and control against illegal activities in the area GLNP.

Law enforcement

Some developments related to law enforcement forestry crime in Kerinci Seblat National Park during 2012-2013 are as follows:

1. There are 2 cases of Encroachment in KSNP:
 - a. The first case is in the Renah Pemetik Village at Kerinci District. Verdict has been handed down by the Full Court of the river against 4 suspects (Mr. S, Mr. B, Mr. H and Mr. J) with 6 (six) months in jail and a fine of Rp. 500.000.
 - b. The second case is in Air Dikit, Mukomuko District. Verdict has been handed down by the Full Court of the river against 3 suspects (Mr. K, Mr. E, Mr. A) with 8 (eight) months in jail and a fine of Rp. 1,5 billion.
2. There are 3 cases of Illegal Logging in KSNP.
 - a. Illegal transporting forest product in Kasie Kasubun Village with the suspect's Mr. MBS: 7 months in jail.
 - b. Illegal cutting in Bukit Batu with the suspect 's Mr. BD and Mr. L: 1 year 4 months in prison and a fine of Rp . 20 million subsidiary 1 month confinement.

- c. In Sidomulyo Village Mukomuko district with the suspect Mr. BH has been sentenced to 10 months in prison and a fine of Rp . 100 million subsidiary 2 months in jail.
3. There is 1 case of illegal hunting and wildlife trading in Lempur Tengah Village with the suspect's are Mr. SBK, Mr. YBU, Mr. JBT and was sentenced by the District Court River Loaded with 2 -year prison sentence and a fine of Rp. 2,5 million.

In Bukit Barisan Selatan NP, the activities to reduce encroachments in 2013 as follow:

1. Identification of encroachment on the locations that will be targeted in 2013.
2. BBSNP Encroachment Management Coordination Meeting (starting from district level to the central level. Each meeting is generating formulation in handling Encroachment Agreement in 2013
3. Joint operations were conducted to reduce encroachments with the location targets as follows:
 - a. Pedamaran, Talang Kelampaian and Karang Berak-Tirom located in Siring Tanggamus district; Siring Gading (Way Haru) located in Pesisir Barat district. The operation involved 400 personnel from the elements BBSNP, Lampung's Police, Tanggamus's Police, Army, Private Sectors, Local Government, and NGO's. Operating results include: Demolition of huts as many as 25 units, exotic plants eradication about 141.5 Ha, also planting as much as 2015 local plants such as kongki, cempaka, pulai, medang.
 - b. Sukabumi, involved 100 personnel from the elements BBSNP, West Lampung's Police, Local Government, Army. Operating results: 79.5 ha area of encroachment has been abandoned.
 - c. Serdang, involved 100 personnel from the elements BBSNP, West Lampung's Police, Local Government, Army. Operating results: 51.5 ha area of encroachment has been abandoned and the team managed to knock down 20 units hut.
 - d. Pancurmas, involved 100 people consisting of BBSNP, West Lampung's Police, Local Government, and YABI - RPU . At the time of surgery performed was found 16 families survived and after being briefed by the team, 16 families are pulling down his hut and left his land. About 82 ha area of encroachment has been abandoned.
 - e. Duku Island in Kaur Bengkulu district, involved relevant parties with total personnel of 100 people. The team managed to destroy as much as 68 huts, with details of as many as 22 huts in Talang Air Durian, 21 huts in the Talang Kapak Seratus and as many as 25 huts in the Talang Cikabuan. Outside the target, the team found encroachers as many as 20 families. The encroachers then made a statement to leave the area of arable land in BBSNP forever and not come back again and unpack each hut.
 - f. Ujan Mas in Kaur Bengkulu district, involved relevant parties with total personnel of 100 people. The team decline encroachers as many as 16 families without any resistance from them. They also destroyed 15 huts and 1 bridge which is used for they accessibility.

- g. Bukit Makmur in Kaur Bengkulu district, involved relevant parties with total personnel of 100 people. The team decline encroachers about 25 families without any resistance from them. They also destroyed 19 huts, with details: 9 huts in Talang Air Mantai and 10 huts in Talang Simpang Lima.
- h. Bangun Bersama in Merpas - Kaur Bengkulu district, involved relevant parties with total personnel of 100 people. The team decline 39 families from Desa Batu Lungun village. The team also destroyed 15 huts and 1 bridge which is used for accessibility.
- i. In addition to successfully lose encroachment, team also managed to catch 4 people who tried to block the operation.

Forest protection operations and law enforcement in the GLNP region directed to restore GLNP function area as a conservation area by the destruction of exotic plants (rubber, oil palm, cocoa and crops) and their supporting facilities encroachment activities. Forest protection and law enforcement activities in areas that have been done by GLNP are:

1. On 14 August 2013, Southeast Aceh Regent issued a Decree number: 522/196/2013 dated 14 August 2013 on Encroachment Control Team In Southeast Region of Gunung Leuser National Park. So far teams are formed cannot run optimally.
2. Destruction of illegal plants in TNGL area:
 - a. Destruction of cacao tree on an area of 8 hectares of GLNP in Babussalam sub district, Souteast Aceh.
 - b. Destruction of palm oil, rubber and cocoa on a land area of 14 hectares in Lumban Tua, Southeast Aceh.
 - c. Destruction of rubber trees in an area of 20 ha area GLNP in Cintaraja region, Langkat district.
3. On 11 April 2013, the Head of GLNP and the Director of Special Criminal Investigation Police Aceh signed an agreement on security of Forests in GLNP Region. This agreement became the basis of the investigation activities of the 4 (four) actors GLNP encroachment in the region of Southeast Aceh. The four actors are Government Officials in Southeast Aceh and Aceh Province. Performers encroachment are:
 - a. Mr. R (Head of District Disaster Management Agency, Southeast Aceh)
 - b. Mr. KA (Head of Highways and Human Settlement District, Southeast Aceh)
 - c. Mr. RH (Parliament Members of Southeast Aceh District)
 - d. Mr. U (Parliament Members of Aceh Province)

Case encroachment on behalf Mr. R, Mr. KA and Mr. RH is currently in the process of the trial in the District Court Kutacane, while investigating a case of encroachment on behalf Mr.U terminated because he died.
4. On 4 March 2013 the head of the National Park Management Area II - Kutacane with Southeast Aceh Police Chief signed an agreement on security of Forests in Southeast Region of Gunung Leuser National Park. Follow-up of the agreement is the process of inquiry and investigation of 1 (one) person perpetrators of illegal logging in the GLNP area on behalf of Mr. S and 2 (two) the perpetrator encroachment in the region on behalf Mr. IS (Medan City Council Member) and Mr. TAH (Southeast Aceh parliament members).

5. On 7 May 2013 and 3 July 2013, a joint team consisting of GLNP, Forest Area Consolidation Center Region I Medan, Directorate of Special Criminal Investigation of the North Sumatra Police and the National Land Agency of North Sumatra try to check the illegal activity in GLNP area conducted by PT. Bandar Meriah. The results of checking and counting is known that there are areas GLNP in Langkat district, North Sumatra Province undertaken by PT. Bandar Meriah be in the form of a palm plantation with an area of 88 ha. This case is currently in the process of the investigation team.
6. Case crime of transporting a timber without a valid certificate and the timber supposedly derived from the District Besitang GLNP area, Langkat on behalf Mr. EG and Mr. S are secured on the date 22 December 2012, is currently a list according to the wanted person list of GLNP Number: DPO.01/III/BBTNGL-2/PPNS/2013 dated 25 March 2013 and Listing Wanted People of PPNS GLNP Number: DPO.02/III/BBTNGL-2/PPNS/2013 25 March 2013. While the owner of the timber on the case on behalf Mr. S (Members of Army /Langkat District Military) and any evidence has been handed over to the Military Police Sub Detasmen I/5-3 Pangkalan Brandan .
7. Case crime of transporting a timber without a valid certificate and allegedly the wood comes from GLNP area Langkat district on behalf Mr. S and Mr. MS that occurred on July 17, 2013 Q21 and is now awaiting delivery of Evidence and Suspect investigators told the High Court of North Sumatra.
8. Case crime of transporting a timber without a valid certificate and allegedly the wood comes from GLNP area Langkat district on behalf of Mr. A and Mr. AB which occurred on 27 November 2013 is currently in the process of investigation by GLNP.

Mining

Overlapping area of mining company PT. Arustirta (\pm 1,773 ha) and PT. Aspiration Widya Chandra (\pm 161 ha) with GLNP area has been confirmed to Southeast Aceh Regent and has responded with an explanation and location of mining permits issued by the Regent South Aceh. Overlapping mining areas and GLNP area occurs due to the different extents GLNP area in the province of Aceh between the Decree of the Minister of Forestry and Plantations No. : 170/Kpts-II/2000 about the appointment of forests and waters in Aceh area (Covering area of GLNP in the province of Aceh: 623 987 hectares) with the Decree of the Minister of Forestry Number: 276/kpts-VI/1997 on the appointment of Gunung Leuser National Park Covering an area of \pm 1,094,692 hectares in Aceh and North Sumatra.

According to the regulation of the Minister of Forestry Number : P.44/Menhut-II/2012 of Inauguration of Forest Area, noted that in the case of an area has been designated by the Decree of the Minister, has laid out the limits and boundaries of the minutes of the forest area has been signed by the Boundary Committee, then used as a reference forest boundaries are news events that have been signed by the boundary Committee. Boundary activities and events news GLNP regional boundaries that have been done are referring to the Decree of the Minister of Forestry and Plantations No. : 170/Kpts-II/2000, so the attachment is a reference Decree GLNP area boundaries for the province of Aceh. With reference to Appendix Map Forestry

Ministerial Decree No. 170/Kpts-II/2000 the mining area of PT. Arustirta and PT. Widya Chandra aspirations are beyond GLNP area and is within the Forest Preserve. However, the management of GLNP still coordinating with the Provincial Government of Aceh and South Aceh district in monitoring the use of forest areas.

Boundary Demarcation

After the designation of Kerinci Seblat National Park region by the Minister of Forestry through Decree No. 192/Kpts-II/1996 dated May 1, 1996, then the Kerinci Seblat National Park delineated in the field with the signing of the Minutes Boundary in each province. Based on these boundaries is obtained KSNP broad area of 1,375,349.867 hectares which is then determined by the Minister of Forestry Decree Number. 901/Kpts-II/1999 dated October 14, 1999 on the Establishment of the National Park Kerinci Seblat located in the Province of West Sumatra, Jambi, South Sumatra and Bengkulu area of 1,375,349.867 hectares.

In further developments the addition of extensive KSNP about 14,160 hectares from production forests in the region are assessed Hook Sipurak still worth the time. Based on the broad area of KSNP then changed according to the Decree of the Minister of Forestry No. SK.420/Menhut-II/2004 dated October 19, 2004 on the amendment in part a function of production forest area remains on the hook group sipurak forest located in Jambi Merangin District covering 14,160 hectares be Kerinci Seblat National Park. Then this additional area delineated in accordance with the boundaries of the minutes signed by the Committee of Forest Area Boundary Functions Merangin District on December 8, 2011 with a limit of 29 050 meters length.

In 2013, Kerinci Seblat National Park have done control and maintenance of boundary markers along the 230 kilometers to perform checks and maintenance of boundary markers as boundary markers in 2443 and got the result 204 boundary markers found to be good, 21 bad and 2218 boundary markers are missing/not found.

During the year 2013 in Bukit Barisan NP, park's boundary reconstruction was conducted a long 120 km covering the area:

1. Suoh along 75 km
2. Merpas along 30 km
3. Pangekahan along 15 km

While park's zoning boundary has also been established along 140 km in the area of:

- Sukaraja – Way Nipah along 35 km which includes the core zone, wilderness zone, utilization zone and rehabilitation zone.
- Pematang Langgar along 35 km which includes the core zone, wilderness zone and rehabilitation zone
- Krui along 35 km which includes the traditional utilization zone and wilderness zones.

- Suoh along 35 km which includes the core zone, utilization zone and wilderness zone.

In Gunung Leuser NP, park's boundary was formally established by the Decree of the Minister of Forestry Number: 276/kpts-VI/1997 regarding the appointment of Gunung Leuser National Park Covering an area of \pm 1,094,692 (one million ninety-four thousand six hundred and ninety two) hectares in the Province of DI. Aceh and North Sumatra. However, there is also a Decree of the Ministry of Forestry and Plantations No. 170/Kpts-II/2000 regarding the appointment of forest and waters in the Province of DI. Aceh which makes the park area smaller than the previous decree. The different, causing misperception between GLNP authority and the Provincial Government of Aceh. The park's authority has raised the issue by asking for boundary's confirmation to the Center of Forest Boundary Consolidation (BPKH) Region I through the letter no. S.866/BBTNGL-5/2012 dated 3 April 2012. However, the World Heritage boundary is based on the later decree.

Park's boundary reconstruction has been carried out at the entire outer limit of GLNP region in North Sumatra Province (\pm 372.55 km), while for the province of Aceh \pm 159,83 km with the legal basis of the Decree of the Minister of Forestry and Plantations No. 170/Kpts-II/2000 regarding the appointment of forest and waters in the Province of DI. Aceh.

Park's boundary demarcation was executed in 1974 (in Southeast Aceh) up to 2009 (in Aceh Tamiang and Langkat district). While, the boundaries reconstruction was conducted from 1992 (the Regency of South Aceh, Southeast Aceh, Aceh Tamiang and Langkat) until 2010 (Southwest Aceh Regency).

Based on reports of park's rangers in the field, at several areas, park's boundary markers are damaged and lost. This slows down park's rangers in conducting their activities in securing and protecting park's area from encroachment both by the public and by other parties. To overcome this, in November 2012, park's authority performed park's boundary maintenance in Southeast Aceh Regency to identify and to record park's boundary markers and placing temporary markers by using a sign made from zinc measuring 50 cm x 30 cm labeled " THE BOUNDARY of GUNUNG LEUSER NATIONAL PARK " along \pm 50 km.

Wildlife Monitoring

1. SUMATRAN TIGER

During the year 2013 Kerinci Seblat National Park authority and FFI are conducting Sumatran Tiger Monitoring activities in 2 locations, namely Batang Ule Bungo and Muara Labuh South Solok by using camera trap method where 22 - 24 camera traps are installed with the coverage area of about 200 km² and 100 days observation duration at each location and obtained the following data:

- a. 15 tigers caught on camera
- b. 59 pictures and videos of sumatran tiger



Picture: Sumatran tigers caught on camera in Batang Ule Bungo

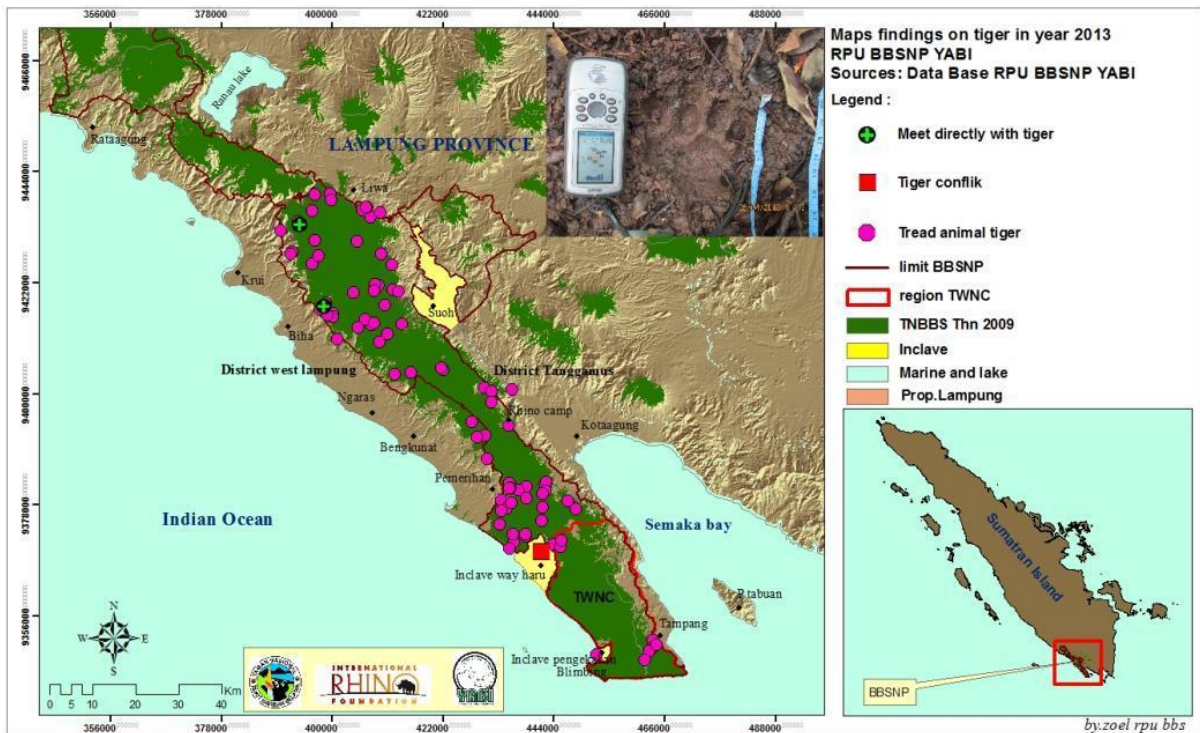


Picture: Sumatran tigers caught on camera in Muara Labuh South Solok

Based on the results of monitoring and inventory of the Sumatran Tiger using Camera Trap method in Plot Monitoring Region I Tanggamus and Region II Liwa where conducted by Bukit Barisan Selatan National Park, known that the population of Sumatran Tiger was estimated at 5-7 individual and 9 prey species caught on camera trap including deer (*Muntiacus muntjac*), monkey (*Macaca nemestrina*), pig (*Sus scrofa*), sambar deer (*Cervus unicolor*), pheasants (*Argusianus argus*).

Besides conducted independently by BBSNP, monitoring and inventory of Sumatran tiger also conducted by some private sector and NGOs such as PT. Adhiniaga Kreasinusa and YABI – RPU. Based on observation conducted by collaboration between PT. Adhiniaga Kreasinusa and national park using camera trap, there are 16 tigers were recorded consisted of 5 male and 11 tigress (3 among pregnant tigress suspected). This is an observation for 6 months from October 2012 s / d April 2013.

Monitoring of Sumatran tiger also conducted by YABI – RPU where the result are showing in map below:

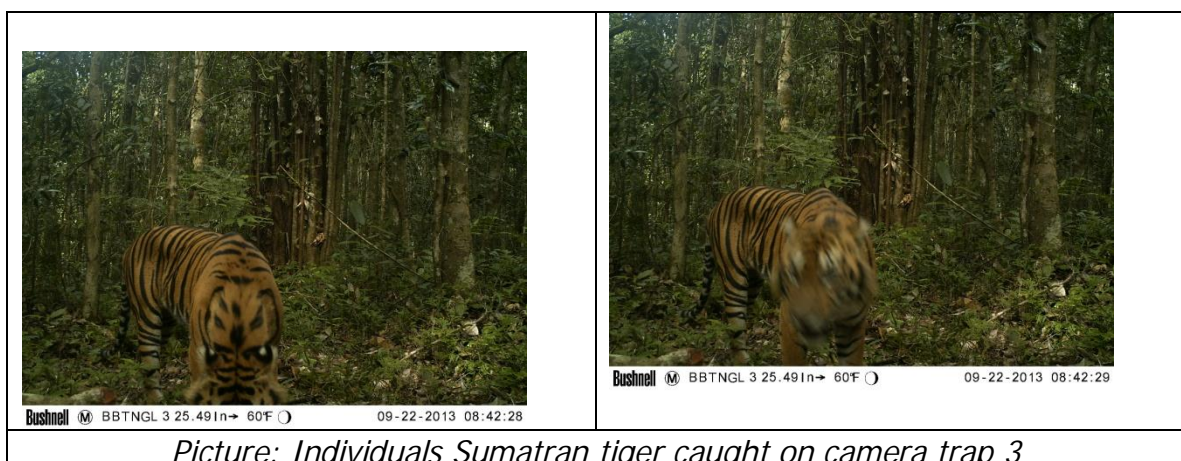


Picture: Maps findings on tiger in year 2013

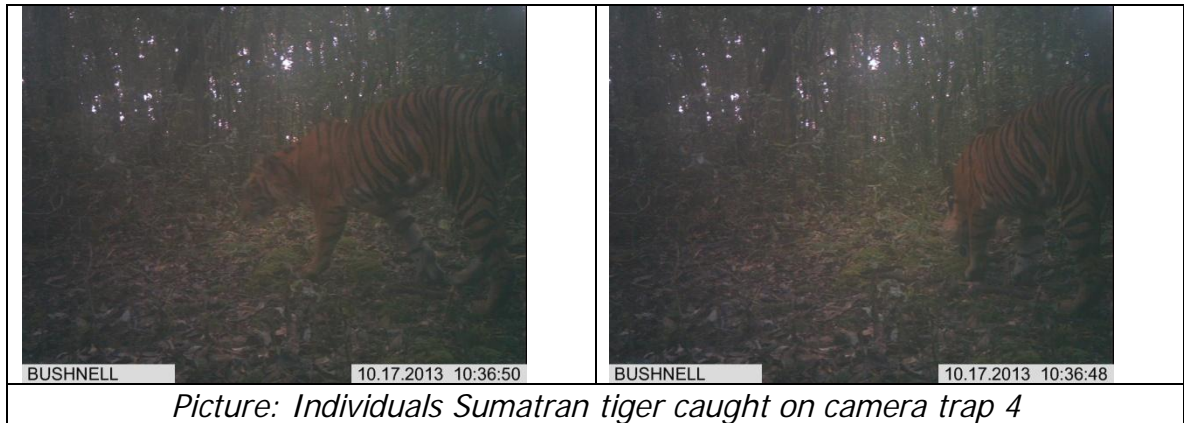
In August 2013, Gunung Leuser National Park installed 4 (four) camera traps for monitoring the Sumatran tiger. Monitoring/survey carried out on two location as bellow:

1. Lawe Malun region, Southeast Aceh (grid cell N22W28).

From the installation of 4 (four) camera traps identified 2 (two) individual of Sumatran tiger with an estimated age of 5 years. Individuals Sumatran tiger caught on camera trap 3 (coordinates: 3.32261676o 97.72263866o E and N) and a camera trap 4 (coordinates: 97. 77639382o E and 3. 3.29839474o N) (each camera trap 1 individual).



Picture: Individuals Sumatran tiger caught on camera trap 3



Based on encounter traces and individuals by using camera traps on the estimated number of Sumatran Tiger N22W28 grid cell is 2 (two) individual.

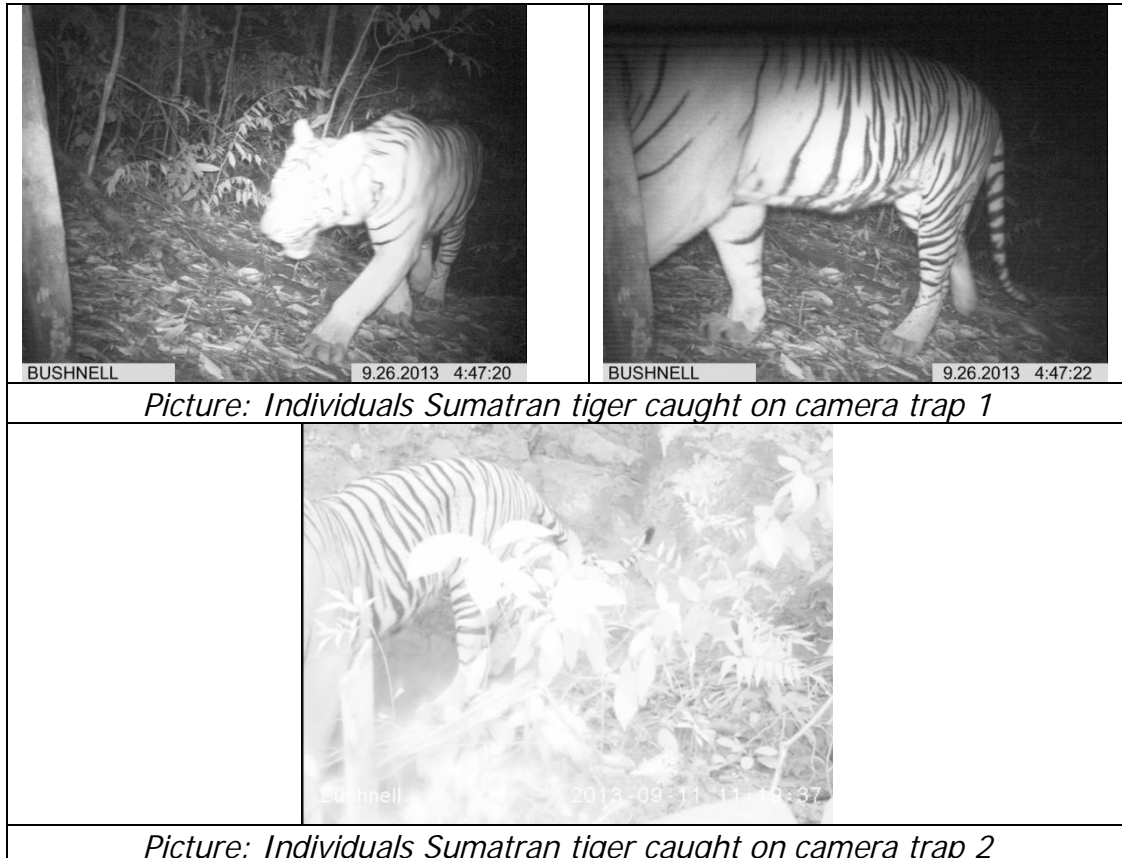
Based on observation, track search, there are 5 (five) Sumatran tiger footprint at three different locations, namely:

NO	Wildlife	Form of encounter			No of animal	Age estimation	Time of encounter		Coordinate point (°)		Notes
		Foot print	AUDIO	VISUAL			Date	Time	X	Y	
1	Sumatran Tiger	V	-	-	1	-	20 August 2013	10.20	97,723	3,322	Feces
2	Sumatran Tiger	V	-	-	1	-	25 August 2013	11.15	97,768	3,372	Feces
3	Sumatran Tiger	V	-	-	1	4 year	25 August 2013	12.00	97,769	3,372	Claw
4	Sumatran Tiger	V	-	-	1	4 year	25 August 2013	12.45	97,760	3,372	Claw
5	Sumatran Tiger	V	-	-	1	4 year	25 August 2013	13.10	97,756	3,372	Claw

Table: Encounter the tiger footprint in N22W28 grid cell

2. Tangkahan region, Langkat (grid cell N24W26)

From the installation of 4 (four) camera traps identified 2 (two) individual of Sumatran tiger with an estimated age of 5 years. Individuals Sumatran tiger caught on camera trap 1 (coordinates: 98.06969444° E and 3.32261676° N) and a camera trap 2 (coordinates: 98.05100000° E and 3.67411111° N) (each camera trap 1 individual).



Based on encounter traces and individuals by using camera traps in the Sumatran tiger population is estimated grid cell N24W26 is 4 (four) individuals.

Based on observation, track search, there are 6 (six) Sumatran tiger footprint at three different locations, namely:

NO	Wildlife	Form encounter of			No of animal	Age estimation	Time encounter of		Coordinate point (°)		Notes
		Foot print	AUDIO	VISUAL			Date	Time	X	Y	
1	Sumatran Tiger	V	-	-	1	5 years	18 August 2013	14.15	98,069 69	3,680 1	Footprint
2	Sumatran Tiger	V	-	-	1	-	18 August 2013	17.30	98,061 58	3,682 8	Feces
3	Sumatran Tiger	V	-	-	1	4 year	20 August 2013	13.10	98,059 69	3,683 5	Footprint
4	Sumatran Tiger	V	-	-	1	4 year	21 August 2013	14.15	98,053 86	3,671 4	Claw
5	Sumatran Tiger	V	-	-	2	5 years and 1 years	21 August 2013	10.00	98,051	3,674 1	Footprint

2. SUMATRAN ELEPHANT

In Kerinci Seblat National Park, monitoring of Sumatran elephant in 2013 was conducted through surveys of Sumatran elephant's existence by using *Path Occupancy/Presence* method (Proportion of Area Occupied). 3 (three) locations of elephant's focus occupation were found with an estimate total population as many as 120 individuals in block Air Berau - Air Tenang - Air Ipuh (50 individuals), Air Seblat (40 individuals), as well as block Sipurak - Sijau - Trunk Ule (30 individuals).

Based on the results of monitoring and inventory of the Sumatera elephant using Camera Trap method in Plot Monitoring Region I Tanggamus and Region II Liwa where conducted by Bukit Barisan Selatan National Park, known that the population of Sumatran elephant was estimated at 20 individuals.

Some NGOs such as YABI – RPU also involved to monitoring and inventory of Sumatera Elephant in BBSNP. They using feces analysis and Path Occupancy method. Some results from YABI - RPU showing in maps below:



Picture: Maps findings on sumatran elephant in 2013

In September 2013, Gunung Leuser National Park authority Sumatran elephants in the region Tangkahan and Bohorok, Langkat district of North Sumatra Province using transect method and installation of camera traps.

From the transects method, identified 2 (two) trace a Sumatran elephant feces at coordinates 98.00217 E and 3.703222 N and footprints on the coordinates 3.711389 E and 98.06031N. While from camera traps installed Sumatran Elephants unidentified individual. Estimation population of Sumatran elephants in Bohorok and Tangkahan cannot be identified due to lack of data.

3. SUMATRAN RHINOS

During the year 2012 to 2013 there was no signs of the sumatran rhinos at the Kerinci Seblat National Park where the survey was conducted. It is, nonetheless, does not reduce the possibility of the Sumatran rhino population existence in other areas within park's region.

In Gunung Leuser National Park to identify Sumatran rhino population and habitat in the park, during October 2013 based on collaboration between park's authority and Leuser International using a camera trap survey and installation (18 units) in the

Manggamat region of GLNP, South Aceh District, Aceh Province. Capturing camera trap made in mid-January 2014.

Based on monitoring result during January to March 2012, camera trap were installed at 28 points in Lembah Mamas, with camera's active duration of 46 to 111 days. As the results, 708 Sumatran rhino photo frames were captured. From the initial identification, there are 5 different individuals of Sumatran rhino existed. These Sumatran rhino photos are very important since it is the first time during these 32 years, one can obtain photos of Sumatran rhino in Gunung Leuser NP. In addition, this eliminates doubts about the existence of the Sumatran rhino in GLNP that has been only known through its footprints, dung, browsing remaining, and mudhole only. Important information gained from this population identification, is that there is still a possibility of the Sumatran rhino in GLNP to breed as proved by the discovery of a pair of Sumatran rhinos in one frame of photo.



Picture: Sumatran rhino photos recorded from camera trap

4. ORANGUTAN

In May 2013, a joint team between Gunung Leuser National Park, Balai KSDA (Conservation Agency Office) North Sumatra, Balai KSDA (Conservation Agency Office) Aceh and SOCP-YEL (NGO'S) did release one (1) individual of Sumatran Orangutan males ("Radaria") aged 10 (ten) years in reintroduction station Jantho (forest Jantho). Radaria a Sumatran orangutan who were evacuated from the Bukit Lawang GLNP area, because the damage threatens visitors and observation facility on February 17, 2011. Then rehabilitated at the Center for Orangutan Quarantine Batumbelin Sibolangit, Sumatran Orangutan Conservation Programme-Sustainable Ecosystem Foundation (SOCP-YEL) until May 2, 2013.

In October 2013, a joint team from GLNP, Balai KSDA (Conservation Agency Office) North Sumatra, Balai KSDA Jambi, SOCP-YEL and Frankfurt Zoological Society (FZS) did release 3 (three) individuals Sumatran Orangutan in Orangutan reintroduction station Alo Lake - Jambi.



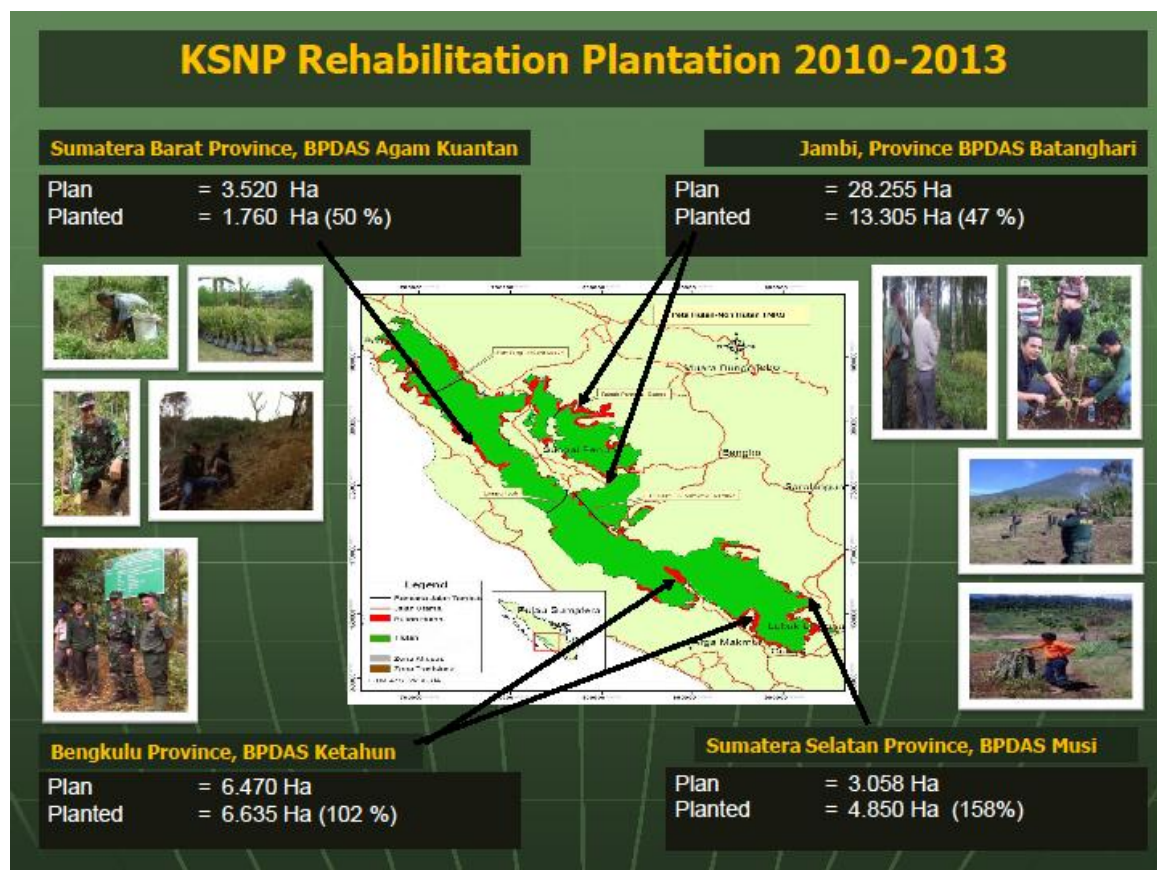
Forest rehabilitation

Kerinci Seblat NP is planning to conduct forest rehabilitation during 2010-2014 as follows:

NO	PROVINCE/REGENCY/ CITY	CATCHME NT AREA	TOTA L AREA	FOREST REHABILITATION				
				201 Ha	2011 Ha	2012 Ha	2013 Ha	2014 Ha
1	2	3	4	5	6	7	8	9
1	JAMBI							
	A. Kerinci	Batanghari	22.80		1.92	6.95	6.44	7.48
	B. Sungai Penuh	Batanghari	1.900	-	-	-	1.18	720
	C. Merangin	Batanghari	3.055	-	-	-	160	2.895
	D. Bungo	Batanghari	500	-	500	-	-	-
	TOTAL		28.25	-	2.425	6.950	7.781	11.09
2	WEST SUMATRA							
	A. Pesisir Selatan	Agam	2.00	150	250	860	355	390
	B. Solok Selatan	Batanghari	830	-	-	-	-	830
	C. Solok	Batanghari	185	-	-	-	-	185
	D. Dharmasraya	Batanghari	500	-	-	-	-	500
	TOTAL		3.52	150	250	860	355	1.905
3	BENGGKULU							
	A. Rejang Lebong	Ketahun &	1.30	-	1.000	-	-	305
	B. Lebong	Ketahun	4.87	-	1.000	2.635	1.235	-
	C. Bengkulu Utara	Ketahun	50	-	-	-	50	-
	D. Mukomuko	Ketahun	245	-	-	-	245	-
	TOTAL		6.47	-	2.000	2.635	1.530	305
4	SOUTH SUMATRA							
	A. Lubuklinggau		760	-	200	-	560	-
	B. Musi Rawas		2.29	-	800	1.418	-	8
	TOTAL		3.05	-	1.000	1.418	560	8
	TOTAL Region III		9.52	-	3.000	4.053	2.090	385
	TOTAL KSNP		41.30	150	5.675	11.86	10.22	13.38

In order to repair the damaged forest areas, the Ministry of Forestry implemented the Forest and Land Rehabilitation (RHL) in cooperation with the TNI (Army) and the Institute for Watershed Management (BPDAS) in 4 provinces namely BPDAS Batanghari in Jambi, BPDAS Musi in South Sumatra, BPDAS Ketahun in Bengkulu, and BPDAS Agam Kuantan in West Sumatra. In this program, Kerinci Seblat National Park allocate an area of 41.303 hectares of degraded land for replanting with appropriate rehabilitation programs are implemented for 5 (five) years from 2010-2014.

Until the year 2013 has made a total planting area of 26.518 ha of land rehabilitation is equal to 64.20 %. In the area of Jambi, from rehabilitation plan covering an area of 28.255 ha has been realized 13.305 ha or 47 %. For Bengkulu region, of the rehabilitation plan covering an area of 6,470 ha has been realized 6,635 ha or 102 %. In region of West Sumatra rehabilitation plan covering an area of 3,520 ha has been realized 1,760 ha or 50 %. In Sumatra south region, the rehabilitation plan covering an area of 3,058 ha has been realized 4,850 ha or 158 % (Picture below):



In Bukit Barisan Selatan National Park during 2013, the manufacturing activities of the plant conservation forest rehabilitation area of 6,800 hectares spread over 4,840 ha in Sekincau resort area and 1,960 ha in Ulu Belu resort area are done in self-managed co-operation with the military (army). Covering an area of 4,000 ha in the first crop maintenance activities are scattered in the area: 1410 ha in Tampang resort area, 1590 ha in Nipah Way Resort, 600 ha in Pugung Tampak Resort and 400 ha in Lombok Resort. Second year plant maintenance 8,000 ha spread over an area:

1700 ha in Ngambur Resort, 2550 ha in Pugung Tampak Resort, 750 hectares in Balik Bukit Resort, 3,000 ha in Sekincau Resort and 1,000 ha in Sukaraja Resort, implemented by the military-with the local community.

Restoration on Gunung Leuser National Park area carried out in the framework of regional ecosystem restoration and community development. Restoration of GLNP area carried out in cooperation with other parties, namely the military as a follow up of a memorandum of understanding between the Ministry of Forestry with TNI Commander NK.06/menhut-v/2011 numbers and number kerma/7/iii/2011 March 24, 2011, the private sector (Pertamina) as well as with the NGOs including UNESCO, Orangutan Information Centre and the Leuser International Foundation. Wide GLNP area that has been restored to more than 10,000 ha.

Until the year 2013 has been realized a total planting area of 3.500 ha from rehabilitation plan covering an area of 3.500 ha (100%).

Treatment of invasive alien species plant: Mantangan (*Merremia peltata*) in Bukit Barisan Selatan National Park

The invasion of Mantangan (*Merremia peltata*) in Bukit Barisan Selatan National Park becomes problematic for a number of reasons and cause damage to most forest trees. This species has been common features in the open areas within the production forest. This species capable to move from plantation areas located surround the national park through machinery, equipments, or vehicle (transportation) that passing through the BBS boundary. Some has spread massively and become dominant in particular areas (Tambling district) and some have scattered in small areas (± 4 ha) across the BBS areas.

This species also has hampered the movement of tiger (*Panthera tigris sumatrae*) and thus it is considered as disturbing to the tiger home range and also cut the animal corridors. Besides, this species also damage the habitat of large mammals such as elephant, rhinoceros, tapir, deer, wild pigs and primates. Most importantly, *M. peltata* cause to the death of various woody or plant species from seedling up to trees and also terminated the regeneration process. Under dense meremia population, the microclimate becomes hotter and unsuitable for some plant and animals for living.

Several efforts have been made to control and eradicate the spread of Mantangan in BBSNP, either carried out by the institution with government funding or in collaboration with other interested parties. This initiative is commonly done if the invasive species has already widely spread and degraded the habitat as well as threatening the native species.

During 2005-2006, BBS has collaborated with PT. Adhiniaga Kreasinusa by empowering local community to eradicate mantangan. The project was designed to carry out program to eradicate mantangan using physical treatment by cutting the roots, and cut the stem using brush cutter or pulling out this species manually. Motorized clearing saw and chainsaw were also used in the area that was densely

covered by mantangan especially those covering the dead tress. Local community was paid by the company based on the size of areas that they can be cleared within a week. The company has a permit to manage 45,000 ha of areas out of 250,000 ha areas that administratively managed under BBS national park.



Picture: Merremia peltata cover in BB

Progress to control and eradicate Mantangan in BBSNP during 2013 are below:

1. Collaboration Project between Bukit Barisan Selatan National Park and The Forest Research and Development Agency's (FORDA) Ministry of Forestry. This agency activities aim to provide a scientific basis for MoF policies, as well as managing forest resources sustainably. One of the mandates of FORDA is to undertake research in forest conservation and rehabilitation, including IAS management.

Name of Project: Removing Barriers to Invasive Species Management in Production and Protection Forest in SE Asea – Indonesia Program (GEF Trust Fund Project Number 0515).

Purpose: Build synergy between FORDA and management of national park to the effectiveness and sustainability of the management and control of invasive plant species.

Scope:

- a. Management planning and control of invasive plant species both macro and technical
- b. Develop and design a permanent plots to discover science and technology management and control of invasive plant species.
- c. Application techniques and experimental materials
- d. Increased public awareness of the impact of the presence of invasive alien plant species

Source of funding:

- a. FORDA's Annual budget
- b. Gef (Global Environment Facility) /Trust Fund Project Number 0515 (through UNEP)

Progress in 2013:

- a. Capacity building of the restoration, the introduction of the use of herbicides, monitoring and evaluation plots
- b. Develop permanent plot /pilot project plot for control and eradicate of mantangan covering area 16.200 M2 in Pemerihan Resort, Bengkuntat region, Semaka district.
- c. Training of field officers about herbicide application
- d. Making documentary film/radio advertising about alie species
- e. Conducting awareness to student around national park.

2. YABI – TFCA Sumatera

YABI, WCS, and YPIKA are joining to create a consortium that receives funding from TFCA project in handling invasive plant species.

Progress in 2013: YABI and park authority has established invasive plant treatment plot area of 50 ha with mechanical and chemical methods.

Strategic Environmental Assessment (SEA)

According to its decision no 37 COM 7A.14, WHC also welcomes the announcement that a Strategic Environmental Assessment (SEA) of the road network in the Bukit Barisan Mountain Range proceed in 2013 and as mentioned in our Conservation State 2012, The Ministry of Forestry cq. Directorate General of Forest Protection and Nature Conservation in collaboration with UNESCO - Jakarta office, developed a proposal submitted to several international donor agencies for rising funding.

Currently, UNESO has been submitted the proposal – with a title “Building a Resilient Tropical Rainforest Heritage of Sumatra towards Climate Change Mitigation and Biodiversity Conservation” by January 2014. This project aims to enhance the integrity of the TRHS and protect it from further threats. UNESCO will support the Government of Indonesia to carry out a Strategic Environmental Assessment (SEA) of the cumulative effects of all road development plans in the Bukit Barisan Mountain area, where the TRHS area is located. The SEA will identify transport options for the region that do not adversely impact the property's Outstanding Universal Value, including improved maintenance of existing legal roads. The result of SEA will be submitted to the World Heritage Centre as the inputs for TRHS management and strategy for its removal from the In Danger list.

Globally, this project is crucial to the World Heritage Convention to give example on how to confront the recurrent problem of improving access and communication for local communities without disrupting key condition of ecosystems, species survival, or having to go against the law. This project is a part of reconcile the development needs with the protection of such internationally designated protection areas. It

may serve in the future as a base model for the intervention of protected area management. The process can be introduced as lessons learnt and replicated as best practices to the other World Heritage sites facing the same challenge.

IUCN Reactive Monitoring Mission

As mentioned in the World Heritage Committee Decision³⁷ COM 74.14 point g, the state party is requested to invite an IUCN reactive monitoring mission in order to conclude through consultation with the relevant institutions, including the World Heritage Centre, the desired state of conservation for the removal of the property from the list of World Heritage in Danger, the Corrective Measure and The Emergency Action Plan and provide an agreed version of these documents to the World Heritage Centre by 1 December 2013.

The IUCN Reactive Monitoring Mission has been held on 24 – 30 October 2013 in Jakarta. The team consists of Mr. Remco Van Merm from the IUCN Centre and Mr. Scott Perkin from IUCN Asia Regional - Bangkok. The purpose of this visit related to the World Natural Heritage area TRHS and implemented to assist the preparation of the desired state of conservation for the removal of the property from the list of World Heritage in Danger (DSOCR), corrective measures, and emergency action plan.

The agenda during the mission are below:

1. Day 1: Entry Briefing at the Coordinating Ministry for People's Welfare. Entry Briefing performed as an introductory meeting between IUCN team with the relevant ministries and agencies as well as NGOs, facilitated by the Chairman of the Working Group of Ministry as a World Natural Heritage.
2. Day 2: Discussion Meeting for Documents DSOCR and Corrective Measure at Hotel Ibis - Jakarta. The discussion meeting was facilitated by the Ministry of Forestry and attended by relevant ministries and institutions. In this discussion the meeting produced Final Draft DSOCR
3. Day 3: meeting with several NGOs such as YABI, YLI, KEHATI and WWF. The meeting discussed the current issues regarding the condition of biodiversity in the TRHS area which became part NGO activity.
4. Day 4: Corrective Measure and Action Plan Meeting Discussion. The discussion meeting was facilitated by the Ministry of Forestry and attended by relevant ministries and institutions. In this discussion the meeting produced the Draft Final Corrective Measure and Action Plan.
5. Day 5: Finalization Action Plan and meet on behalf DG of Forest Protection and Nature Conservation and Director of Conservation Area at the Ministry of Forestry in Manggala Wanabakti.
6. Day 6: Exit briefing facilitated by the Indonesian National Commission for UNESCO (KNIU) Ministry of Education and Culture with participants from all relevant ministries and institutions and is led by Deputy V of Ministry.

During the meeting/workshop, all participants expressed their concern and activities they took so far to protect and conserve the property. Participants also gave inputs and examined whether the state party is able to fulfill the proposed indicators. Some issue attracted intensive discussion amongst participants, such as the indicator that there are no new road developments, road development proposals, or changes/adjustments to existing roads.

Desired State of Conservation for Removal framework (DSOCR)

Overall, final draft DSOCR were held with various stakeholders agreed with 7 (seven) indicators below :

1. Forest cover.

It is agreed about the remaining area of forest in the property is maintained at least at its current level. There is no further loss of primary forest cover and no net loss of secondary forest cover in the property, as assessed against 2011 baseline data.

2. Population trend data for key species of fauna.

The populations of four key species (Sumatran Elephant, Tiger, Rhino and Orangutan) in the property show a sustained positive trend in occupancy data, in addition to the following property-wide population growth rates:

- For Sumatran Elephant: 3% total growth by 2017, measured against the 2007 baseline;
- For Sumatran Rhino: at least 3% annual growth rate by 2020 at the latest;
- For Sumatran Tiger: 100% total growth by 2022, measured against the 2010 baseline.

3. Road development.

The State Party has agreed that there are no new road developments or road development proposals within the property. In addition, any changes/adjustments to existing roads (including widening and paving) within the property or in adjacent areas can only take place if it is demonstrated that they will not negatively impact on the Outstanding Universal Value of the property.

4. Mining.

There are no mining concessions or mining exploration permits overlapping with the property. Mines in adjacent areas where mining could have negative impacts on the property's OUV are subject to appropriate mitigation and other management measures to limit those impacts to a minimum. Illegal small-scale mines inside the property are closed and are being rehabilitated.

5. Boundary demarcation.

The entire boundary of the property is adequately and accurately demarcated on the ground, at all three component national parks.

6. Law Enforcement.

The property's law enforcement agencies (park authorities) are spending at least 50% of each month on patrol, and implementing strategic patrol plans that respond to identified priorities. Patrols are managed using MIST/SMART and MIST/SMART data are provided regularly to all stakeholders.

The number of prosecutions and resulting convictions as a proportion of arrests is significantly increased in relation to the 2013 baseline.

7. Management of the wider landscape.

The National Strategic Area for the Gunung Leuser area regulates development and sustains critical habitat for key species (particularly tiger, rhino, elephant and orangutan) in the Leuser Ecosystem. Wildlife corridors connecting these areas with each other and the property are also maintained.

TRHS Corrective Measures

Overall, final draft Corrective Measures were held with various stakeholders agreed with 10 (ten) measures below :

1. Significantly enhance law enforcement capacity by developing and implementing a strategic plan for the control of illegal activities, as a collaborative effort involving national park authorities, the Natural Resources Conservation Agency, NGOs, local police forces, local government and the prosecutor's office. The strategic plan should include measures to:
 - a. provide law enforcement agencies with adequate resources to expand their activities;
 - b. ensure that reports of illegal activities are quickly and efficiently responded to, and that transgressors are tried on the basis of conservation law (in addition to criminal law);
 - c. identify and prosecute syndicates, networks and businesses involved in illegal activities, in cooperation with the relevant authorities for the eradication of forest crime and corruption;
2. Strengthen property-wide monitoring of key species, including Sumatran Elephant, Tiger, Rhino and Orangutan, by:
 - a. enhancing collaboration between Government, NGOs, and universities;
 - b. agreeing on a common methodological framework for monitoring each species;
 - c. expanding monitoring efforts to address geographical gaps in monitoring activities;
 - d. synchronizing data analyses for all key species to facilitate progress reporting;

3. Strengthen species recovery efforts by implementing habitat improvement and ecosystem restoration programmes, as required, including the control of invasive species;
4. Maintain the policy that prohibits the construction of new roads in national parks, and conduct a Strategic Environmental Assessment of the road network in the entire Bukit Barisan Mountain Range, in order to identify transport options and technologies for the region that do not adversely impact on the property's Outstanding Universal Value;
5. Ensure that rigorous Environmental Impact Assessments are carried out for all proposed developments within the property (eg. road improvement projects) and in its vicinity (eg. mining projects), to ensure that these do not have a negative impact on the Outstanding Universal Value of the property;
6. Close and rehabilitate all mines within the property, investigate the existence of any mining concessions and exploration permits that overlap with the property, and revoke any overlapping concessions and/or permits that are identified;
7. In consultation with relevant stakeholders, including local communities, clarify in law the boundaries of each component national park of the property, and complete the demarcation of these boundaries on the ground;
8. Ensure that all provinces, districts and sub-districts that overlap with the property recognize its World Heritage status and avoid the designation of development zones within its boundaries;
9. Ensure that the World Heritage Working Group under the Coordinating Ministry of People Welfare is taking an active role in promoting strong coordination between different ministries in the protection and management of the property;
10. Ensure that the National Strategic Areas process establishes buffer zones around each national park in the property and identifies and protects critical wildlife habitats outside the property.