2021
Project Implementation Review (PIR)

Sumatra Tiger Landscape

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A.   Basic Data

Project Information	
UNDP PIMS ID	5363
GEF ID	4892
Title	Transforming effectiveness of biodiversity conservation in priority Sumatran landscapes
Country(ies)	Indonesia, Indonesia
UNDP-NCE Technical Team	Ecosystems and Biodiversity
Management Arrangements	NIM
Project Implementing Partner	Government
Joint Agencies	*(not set or not applicable)*
Project Type	Full Size
Implementation Status	5th PIR
GEF Fiscal Year	FY21
Trust Fund	GEF Trust Fund

Project Description
Sumatra is the sixth largest island in the world, characterized by the Bukit Barisan mountain range and globally significant tropical montane, sub montane, lowland, fresh water and peat swamp forests as well as mangroves and rivers. The island's fauna includes 201 mammal and 580 bird species, with endemic and critically endangered species such as the Sumatran orangutan and Sumatran rhinoceros, and subspecies such as the Sumatran elephant. The Sumatran tiger Panthera tigris sumatrae is Indonesia's last remaining tiger subspecies with an estimated population of 400-500 adults. Its conservation areas include 13 Important Bird Areas, two Ramsar sites (Berbak and Sembilang National Parks) and the UNESCO WHC Tropical Rainforest Heritage of Sumatra sites (the National Parks of Gunung Leuser, Kerinci Seblat and Bukit Barisan Selatan). The current project will cover all five of these globally significant sites and surrounding landscapes. Across Sumatra, the principal threat to biodiversity is habitat loss and forest degradation, with forest cover shrinking from 25.3m hectares in 1985 to 12.8m hectares in 2009, with clearance driven by commercial oil palm and timber fibre plantations, followed by subsistence agriculture, while the main driver of forest degradation has been commercial logging. In addition, the wildlife trade is a significant pressure on species, with an estimated fifty Sumatran tigers poached annually between 1998 and 2002. The main barriers to achieving this vision are weak natural resource governance and limited protected area management capacity, poor inter-agency coordination for wildlife and forest conservation outside of the PAs, and inadequate financial planning and management for protected areas. The long-term solution offered by the project for securing Sumatra's forests, wildlife and ecosystem services lies in consolidating a network of effectively managed and adequately funded protected areas (PAs) that are supported by complementary actions in the adjacent forests and with multiple stakeholders to achieve sustainably managed landscapes. This will require both multi-agency partnerships across multiple provinces and sufficient incentives for communities to reduce forest encroachment and illegal hunting of protected species. The objective of the project is to enhance biodiversity conservation in priority landscapes in Sumatra through adoption of good management practices in protected areas and adjacent production landscapes, using tiger recovery as a key indicator of success. This will be accomplished through supporting implementation of the National Tiger Recovery Plan, which sets out the key elements to protect forests and wildlife in Sumatra. The project aims to address a range of institutional, governance and financial issues that prevent the project objective from being achieved. In doing so, it will create a model biodiversity management system that is operational across the target landscapes, can be scaled-up across Sumatra, and strengthen the national PA system. The Ministry of Environment and Forestry will lead project implementation in partnership with UNDP, FFI, WCS, ZSL and Forum Harimau Kita.

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Other Partners	*(not set or not applicable)*

B.   Overall Ratings

Overall DO Rating	Satisfactory
Overall IP Rating	Satisfactory
Overall Risk Rating	Low

C.   Development Objective Progress

It is mandatory for all reported progress to be substantiated by evidence. Please upload evidence files for each objective/outcome via the DO PROGRESS section in the online PIR platform. If there is no evidence to upload, the Project Manager is required to provide an explanation.

Description

Objective
To enhance biodiversity conservation in priority landscapes in Sumatra through adoption of best management practices in protected areas and adjacent production landscapes, using tiger recovery as a key indicator of success

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2020	Cumulative progress since project start
Sumatran tiger density: Increase in Sumatran tiger density* by >10% in core area in 4 target landscapes** *Density = number of adult individual tigers/100km2 (± 95% CIs) **4 landscapes that contain 5 NPs. Kampar is not included	Landscape | Density Baseline Estimate (2013) Leuser Ecosystem | 0.52 (0.27-0.99) Kerinci Seblat | 1.13 (0.64-2.00) Bukit Barisan Selatan | n/a [1.56 (1.2-3.2)$] Berbak-Sembilang | 1.02 (0.50-1.51) Average score for 4 landscapes | 1.06	*(not set or not applicable)*	Increase in Sumatran tiger density by >10% in core area in 4 target landscapes Landscape | Density Target Estimate (PY5) Leuser Ecosystem | 0.57 Kerinci Seblat | 1.24 Bukit Barisan Selatan | 1.72 Berbak-Sembilang | 1.12 Average score for 4 landscapes | 1.17	Overall in this reporting period, Sumatran Tiger Project is still using the tiger density figures reported in 2019 PIR (mid-term data) as project is in the process acquiring and analyzing latest camera trap data used to determine EOP tiger density achievements. Leuser Ecosystem | 0.59 (0.33 – 1.07) (EOP: 0.57) Kerinci Seblat | 0.73 (0.41 - 1.31) (EOP: 1.24) Bukit Barisan Selatan | 2.8 (1.7 - 4.4) (EOP: 1.72) Berbak | 1.54 (0.89 – 2.35) (EOP: 1.12) Sembilang | 0.74 (0.59-2.12) (EOP: 0.81) Average score for 4 landscapes (Sembilang data is excluded) is: 1.41 /100 km2. Therefore, based on the above information, project is firmed to achieve increased tiger density targets in all landscapes until the end of project's period. (EOP: 1.17). The final tiger density data will be reported next year (2021) that will become the basis of project's EOP achievements for this main indicator. However, project will also detail the processes of acquiring the final/end of project	The tiger density figure is considered on track. Given the site variances and the complexity of tiger population dynamic, presenting one quantitative figure alone to represent progress may lead to misleading understanding. Hence, the situation and evidence is explained below. The overall estimated figure in this reporting period is still below the EOP Target and shows a decreasing trend as compared to the earlier period. Figures are varied between sites. However the EOP target for each sites are all achieved within the confidence interval of the estimation -- which indicates high population dynamics yet a stable population (Evidence: Evidence 2 - Tiger Density Analysis Report by Expert; Evidence 38 - Iding PhD_Tiger Density Analysis; Evidence 1 - Tiger Density Re-Analysis in 4 Landscapes) TIGER DENSITY FIGURE (individual tigers/100km2) *all figures (baseline, yearly figure, and EOP) are re-calculated and standardized (as of June 2021). Average score for the four landscapes:

				tiger density data and the process in each landscape could be found below: Gunung Leuser National Park Sumatran Tiger Project will perform tiger monitoring activities this year. The result of this year's survey will determine tiger population density trends in GLNP, especially in Langkat - Bendahara. A joint team from Sumatran Tiger Project and GLNP had installed camera traps to suspect tiger population in GLNP at predetermined locations between mid-January and mid-April. The active period of the cameras is about 90 days. Six (6) survey teams involved in these monitoring processes. Each team consist of one GLNP staff, two Sumatran Tiger Project staff and five local assistants. (Evidence No.1 - WCS PIR Report 2020 page 3-4) The camera trap monitoring design for tigers in Langkat-Bendahara followed 2017 camera trap monitoring design in 84 grids of 3 x 3 km plot with a study area of 756 km2. Tiger monitoring teams completed the camera traps between fourth week of June and first week of August 2020 and the data entry was scheduled between second week of August and early September. The teams will conduct data analysis between September and mid-October 2020. It is hoped that the result of camera trap data analysis could be obtained at the end of October 2020. Kerinci Seblat National Park Camera trap surveys to measure tiger density in this landscape, were initially planned to begin in May 2020. However, the surveys were postponed due to Covid-19 pandemic.	Baseline: 1.06 Latest available data (2019/2020) with single & multi session methods: 0.87 EOP Target: 1.17 1. Gunung Leuser National Park Single Session Method (2013) 0.38 (CI: 0.13-1.12) (2017) 1.45 (CI: 0.65-3.27) (2020) 0.49 (CI: 0.18-1.32) (100% achieved) EOP Target (Single Session): 0.418 Multi Session Method (2013) 0.53 (CI: 0.21 - 1.30) (2017) 0.80 (CI: 0.35 - 1.82) (2020) 0.29 (CI: 0.12 - 0.68) EOP Target (Multi Session): 0.583 2. Berbak Sembilang National Park Single Session Method (2015) 0.88 (CI: 0.40-1.96) (2018) 1.26 (CI: 0.68-2.33) (2020) 0.63 (CI: 0.29-1.38) EOP Target (Single Session): 0.968 Multi Session Method (2015) 0.82 (CI: 0.37 - 1.82) (2018) 0.90 (CI: 0.49 - 1.68) (2020) 0.73 (CI: 0.35 - 1.54) EOP Target (Multi Session): 0.902 3. Kerinci Seblat National Park Single Session Method (2014) 1.04 (CI: 0.58-1.86) (2017) 0.94 (CI: 0.54-1.62)

				These activities will most likely resume from June to September 2020. The final result of tiger density and tiger population assessments in the KSNP core areas will be presented in the final project report. From the previous analysis, the tiger density value decreased from 1.04 (0.58 - 1.86) tiger / 100 km2 in 2014 to 0.73 (0.41 - 1.31) tiger / 100 km2 in 2018. This decreasing value of tiger density in KSNP is consistently seen from the results of analysis in the last 2 years. (Evidence No.2 - FFI PIR Report 2020 page 2) The highest density value was recorded in 2015 = 1.11 (0.53 - 2.33) tigers /100 km2. The number of tiger individuals analyzed in 2015 was only 7 individuals (the same as in 2016) compared to 11 tiger individuals in 2018 and the highest was 13 tiger individuals in 2017. The range of confidence level (CI-Credible interval) in 2015 was the greatest, while 2018 had the most precise CI value compared to other years. More widespread and uniformly distribution of cameras and shorter survey periods became the reasons why 2018 confidence values (CI-Credible interval) were still the best values (most precised). Northern part of the KSNP core area recorded more tiger individuals than the central and southern parts. Some of the reasons are - the central and southern areas exhibit mountain forest habitat with relatively steep topography and relatively higher hunting threats (sling/tiger snares). The hunting rates were very high from 2014 to mid-2015 and reduced dramatically between the end of 2015 and mid 2017.	(2018) 0.64 (CI: 0.36-1.16) (2020) 0.82 (CI: 0.49-1.37) EOP Target (Single Session): 1.144 Multi Session Method (2014) 0.85 (CI: 0.49-1.49) (2017) 0.84 (CI: 0.49-1.44) (2018) 0.68 (CI: 0.38-1.21) (2020) 0.91 (CI: 0.55-1.50) EOP Target (Multi Session): 0.935 4. Bukit Barisan Selatan National Park Single Session Method (2015) 2.3 (CI: 1.27 - 4.16) (2019) 1.53 (CI: 0.83 - 2.83) EOP Target (Single Session): 2.53 Multi Session Method (2015) 1.87 (CI: 1.07 - 3.28) (2019) 1.53 (CI: 0.83 - 2.81) EOP Target (Multi Session): 2.057 The tiger density estimation is conducted by each respective national park authority and assisted by different capable NGOs in each sites. During the course of implementation, project learned that different variables, parameters, and estimation method and modelling technique will yield different figures which are incomparable and may lead to incorrect interpretation. Therefore, in early June 2021, MoEF and project led the process of re-calculating the tiger density figures in all sites. The aim was to ensure that the method and models to estimate the baseline was indeed exactly

Increasing patrol intensity has successfully reduced the number of illegal wildlife hunting and tiger threats (snares) in core area (Evidence 2 - FFI PIR Report 2020 page 16). One of the hunting kingpins was captured and jailed in early 2016, however the active tiger snares have been re-discovered since the end of 2017 in new locations.

Berbak Sembilang National Park.

Previously, Sumatran Tiger Project performed tiger population monitoring with camera traps in 2018 at Berbak Monitoring Site. A total of 50 camera traps were installed in pairs covering sampling areas of 442.97 km2 and a total active day of 3,724.93 days.

The monitoring processes captured 148 independent photos of Sumatran tiger from Berbak consisting of 10 adult tigers and 2 tiger cubs. The adult individuals were 5 males and 5 females, while photographs of tiger cubs identified 1 male and 1 female. There were 5 new adults individuals (4 males and 1 female) caught on camera in this monitoring period and 5 others in the previous survey (1 male and 4 females).

In total, 10 individuals were detected in Berbak monitoring site. However, to meet closed population assumption, only 9 individuals were calculated on the 90 days survey in 66 occasions, in 19 camera trap stations from 50 stations installed. (Evidence 4 - ZSL PIR Report 2020 page 2)

Results of Modeling Analysis of Tiger Density with the SECR package in the R program produced an estimate of tiger density in Berbak at 1.46 ind / 100 km2 (± 0.0463) with 95% CI 0.79-2.7 in / 100 km2.

the same to those used in each reporting figure, and across all landscapes. Detail technical explanation on the scientific approach can be found in Evidence 1 - Tiger Density Re-Analysis in 4 Landscapes.

The tiger density figure as currently presented above in the three landscapes may become a concern, as it shown decreasing trend, given that it is the main project's main indicator and also more general in terms of its conservation status. However, this figure should be carefully and comprehensively interpreted and understood. The complexity, multi-interconnectedness and the random nature and error involves in any wildlife-related conservation works are some factors to be better understood.

Whilst the single figure for tiger density for all the three National Parks has not achieved the EOP target figure, these figures are all still within the current Confidence Interval (CI) of the tiger density figure in the respective sites. This indicates that the tiger population in the core zones of Kerinci Seblat, Berbak-Sembilang and Bukit Barisan Selatan is actually in a stable condition. The population density figures used as baselines in the three landscapes are also within the confidence interval range.

This, according to analysis conducted by several tiger conservation expert independently ((Evidence: Evidence 2 - Tiger Density Analysis Report by Expert; Evidence 38 - Iding PhD_Tiger Density Analysis), demonstrated that the tiger population dynamics might have changed (e.g. tiger mobility range change due to

The result of tiger monitoring in Berbak showed that in 2018 there was an increase in tiger density of 43.1% from 2010 survey and an increase of 21.6% from 2015 survey (Evidence 4 - ZSL PIR Report 2020 page 3). However, the increasing value of tiger density in Berbak must be addressed carefully seeing the range of confident intervals that were still too wide. From the result, at least we could state that tiger population in Berbak is relatively stable and the population is still growing. This was confirmed by the findings of tiger cubs and new tiger individuals.

In 2020, tiger population monitoring activities at Berbak monitoring site were again implemented between January-July 2020 period by installing trap cameras at 52 stations. Until the third week of June 2020, Sumatran Tiger Project's team had uninstalled cameras in 32 camera trap stations and the initial result of camera trap analysis found tigers in 15 camera trap stations. (Evidence 4 - ZSL PIR Report 2020 page 7).

Camera trap uninstalling activities will continue in July 2020 to retrieve camera traps in other 20 stations. Camera trap data entry has begun using CTAP (Camera Trap Analysis Package) device. It is hoped that the data entry activity from all camera traps could be completed by the end of July 2020 and data analysis will begin in early August 2020.

Bukit Barisan Selatan National Park

After performing Sumatran tiger reconnaissance survey in December 2018, Sumatran Tiger Project had been installing new camera traps between May and July 2019 in resorts of Sukaraja Atas, Pemerihan, Ngambur, Biha and Suoh. Trapping cameras

expanded core area as has been previously defined), which has therefore cause the decreasing figure. Therefore, the reports highlighted the message that interpreting tiger conservation status should not be done by observing one figure at one particular time alone -- as this can lead to incomprehensive interpretation.

It was further highlighted that the decline in tiger populations is part of the normal long-term population dynamic. This condition can be influenced by several factors including: the level of hunting threat in the area, changes in prey animal populations, differences in the performance of camera traps, or the natural dynamics of tiger populations.

The following is further brief explanation for each sites.

1.Gunung Leuser National Park (GLNP):

Analysis on the estimated values shows that the tiger population in GLNP is quite dynamic where tiger density increased drastically in the range of 2013 to 2017 and decreased in the range of 2017-2020.

Comparison between the baseline in 2013 and the final value in 2020 for single session analysis shows an increase in density of 28.94%.
(Evidence 3 - WCS Tiger Density Report for PIR 2021)

Meanwhile, the comparison between the baseline and the last estimated value shows a decrease by 45.28%.

The results of performing both, single and multi-session estimation methods, for

				were placed in 65 grids measuring 3x3 km each at the same location as 2015 survey where it succeeded capturing Sumatran tiger individuals. There were also several shifting locations as previous points made them impossible to set camera traps. (Evidence 1 - WCS PIR Report 2020 page 5-6) Project's team uninstalled the trapping cameras from October to November 2019. No trapping cameras were damaged by illegal actors entering the BBSNP area. The team collected a total of 130 memory cards from BBSNP IPZ (Core Areas). Starting December 9, 2019, Sumatran Tiger Project team and staff of Bukit Barisan National Park began the process of camera data input at BBSNP office. As of June 2020, all camera trap photos (100%) had been identified with a total of 122,540 photos (6,531 independent animal photos were included). From these photos, the team identified 48 species consisted of 3 reptile species, 9 bird species, and 36 species of mammals. Estimation analysis was conducted using a single session scheme with the assumption of a closed population by modeling the relationship between the three variables (kovariat): parameters of animal movement (g0 and σ), gender (h2) and animal behavior (b). Based on the best model (model with the lowest AICc value), the initial estimation of tiger density in BBSNP IPZ was 2.65 individuals per 100 km2 (95% CI = 1.06 - 6.67) and the estimated tiger abundance was 25 individuals (95% CI = 14 - 67). This estimation when compared with the results of	dataset in different years shows a similar and consistent trend. The decrease in the figure of tiger density is estimated to be the result of the home range changes some tiger individuals. This shift can be related to possible deer occupancy, territorial changes in the core area, and low rainfall (Evidence 3 - WCS Tiger Density Report for PIR 2021) 2. Berbak Sembilang National Park: In 2015-2017 there was a drastic increase in density, and it decreased again in 2020. The comparison between the baseline in 2015 and the final value in 2020 with a single session analysis showed a decrease in population density of 28.40%. While the comparison of multi-session analysis from 2015 and 2020 found that the tiger population density decreased by 10.97%. (Evidence 1 - Tiger Density Re-Analysis in 4 Landscapes) 3. Kerinci Seblat National Park: Amongst the four landscapes, this is the only site where increase in tiger density has shown from the estimation. Several factors are identified as potentially contributed to the increasing number of tigers captured on camera traps. One of them is the reduced poaching activities around the core area that is represented by the decreasing numbers of snare records from year to year. Likewise, the number of missing cameras has also decreased. Poachers or people who enter Kerinci Seblat National Park without permission, may intentionally damage, dismantle or steal the camera traps to reduce the risk of their being identified.

				the 2015 survey showed a large enough confidence interval overlapping so that it could be concluded that there was no change in tiger population in the IPZ BBSNP between 2015 and 2019. Since the results are preliminary, further analysis is still needed to obtain stronger results. A more detailed explanation of the estimation analysis is explained in section 2.3.2. this report. Opting Multi-session Method From the last discussion between Sumatran Tiger Project and partners, there were suggestions for changing tiger density measurement method from single session to multi-session. Opinion from tiger experts mentioned that single session method is less accurate and does not represent the actual data of tiger density. Baseline data measurement did use a single session method due to limited knowledge at that time. (Evidence 5 - PIR Meeting Notes on Tiger Density) Other species monitoring In addition to Sumatran Tiger population monitoring, the camera trap surveys were also intended to monitor other species. This data could be used in habitat sustainability analysis by comparing tiger population and preys. One example is Sumatran Tiger Project's monitoring activities in Berbak Sembilang. The camera traps that surveyed two monitoring sites in 2019 recorded 36 species consisting of 28 species of mammals, 7	Based on camera trapping results in 2020, the sex ratio between male and female tiger was 1:2.5. This number is considered good compared with the previous survey periods (2014 – 2016) in which the number of male tigers captured was always higher than females. Subsequently, over the next three survey periods (2017, 2018-2019, 2020), the number of females detected was always higher than males, with an increasing sex ratio value. Based on tiger monitoring results in the core area on 2020, the number of female individuals was much higher compared to the males. This demographic structure is considered good for the tiger population sustainability in this area (Evidence 4 - FFI Report for PIR 2021). 4. Bukit Barisan Selatan National Park: The tiger density figure in this site shows a decrease, both from single-session and multi-session analysis. During the Tiger Density FGD, it was recommended to use the estimated value based on a single session scheme under the consideration that the number of sampling occasions on each grid is more evenly distributed. From this analysis, it can be determined that the result of the estimated tiger density in the IPZ BBSNP in 2019, which is 1.53 individuals/100 km2 (95% CI = 0.82 – 2.87) is lower than the 2015 estimate, which is 2.8 individuals/ 100 km2 (1.7 – 4.4), however the confidence intervals overlap.

				species of birds and 1 species of reptiles. (Evidence 6 - ZSL Report Deliverable 9) Data obtained from Sumatran tiger and other species monitoring activities in all project landscapes will supply information to SMART RBM Dashboard that has been used in KSDAE's information system. (Evidence 7 - Display of SMART RBM Dashboard). Sumatran Wide Tiger Survey Government of Indonesia through Ministry of Environment and Forestry (KLHK) has targeted doubling the number of Sumatran tigers by 2022 - a target set in 2010-2022 National Tiger Recovery Program (NTRP). KLHK together with partners has conducted regular and systematic monitoring through Sumatra Wide Tiger Survey (SWTS) as an effort to monitor the effectiveness of Sumatran tiger conservation to achieve the target. The first SWTS implemented between 2007 and 2009 revealed that 72% of the survey area was still inhabited by Sumatran tigers. The first SWTS has also become the main reference in preparation of several strategic Sumatran tiger conservation documents, both nationally and internationally. KLHK and its partners conducted second SWTS 10 years since the first SWTS to evaluate the effectiveness of ongoing Sumatran tiger conservation efforts. Hariyo T. Wibisono, SWTS Implementation Coordinator stated, "SWTS 2018-2019 is the largest wildlife survey activity in the world, both in terms of partnerships, area coverage, and human resources involved. A total of 74	This condition can be influenced by several factors that can lead to a decline in tiger populations as part of the dynamics in the long term. These factors are the level of hunting threat in the area, changes in prey animal populations, differences in camera trap performance, or the natural dynamics of tiger populations (Evidence 3 - WCS Tiger Density Report for PIR 2021). Given the importance of the correct interpretation of the tiger density estimate, in the next stage, project along with national tiger experts and multi stakeholder tiger national forum will further elaborate on the best estimate of tiger density to be used as reference. Additionally, the lessons learned, opportunity and challenges of using tiger density as an indicator to monitor tiger conservation status will be drawn and use to educate relevant stakeholders and wider public, to allow for correct and comprehensive understanding.

				survey teams (354 team members) from 30 institutions were deployed to carry out surveys in 23 tiger areas covering 12.9 million hectares, of which 6.4 million hectares were habitat surveyed in the first SWTS.	
				Collaboration between project, FHK and several partner institutions has produced occupancy survey guide that will be used in Sumatra Wide Tiger Survey (SWTS). This occupancy survey guide is the reference for each party conducting an occupancy survey that contains a sampling protocol, a sampling method data in the field and database management (database).	
				15 KLHK technical implementing units (UPT), more than 10 KPHs, 21 national and international NGOs, two universities, two companies, and 13 donor agencies have joined to support SWTS activities including Sumatran Tiger Project (Evidence 8 - SWTS Power Points Report)	
				Project in coordination with North Sumatra Natural Resource Conservation Center (BKSDA Sumut) and Gunung Leuser National Park supported SWTS training between 1-7 July 2019 at Rudang Hotel Berastaagi and Siranggas Wildlife Reserve. Pakpak Bharat attended by 39 participants.	
				Head of the Gunung Leuser National Park Center (BBTNGL), Ir. Jefry Susyafrianto, MM, in his opening remark asked all participants to follow the SWTS training seriously, including attending its field practice, because those who were trained will later become the core team in Sumatran tiger occupancy survey activities in North Sumatra. Technical resource persons from Forum HarimauKita, SINTAS Indonesia Foundation and WCS-IP	

				also supported the event. (Evidence 9 - SWTS Training Report by PIU GLNP).	

The progress of the objective/outcome can be described as:	On track
Evidence uploaded:	YES

Outcome 1
Increased effectiveness of key protected area management institutions

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2020	Cumulative progress since project start
1.1. Capacity Development Score Improved institutional capacity of the 5 target protected area authorities for management as indicated by the Capacity Development Scorecard	Protected Area | Capacity Development Baseline Score (2014) Gunung Leuser NP | 69% Kerinci Seblat NP | 72% Bukit Barisan Selatan NP | 71% Berbak NP | 69% Sembilang NP | 69%	*(not set or not applicable)*	Improved institutional capacity of the 5 target protected area authorities for management as indicated by the Capacity Development Scorecard Protected Area | Capacity Development Target Score (PY5) Gunung Leuser NP | 83% Kerinci Seblat NP | 85% Bukit Barisan Selatan NP | 81% Berbak NP | 83% Sembilang NP | 83%	CD score card assessments for 2020 - to measure the overall impact of capacity building interventions – are yet tobe conducted in all landscapes. These assessments are scheduled at the end of 2020, therefore there no update for the indicator in this reporting period. However, it was agreed from previous CD Score Card workshops on the importance of increasing staff capacity in managing data and information, strengthening human-wildlife conflict mitigation, and identifying biodiversity and key animal species in order to strengthen individuals, institutions, and systems towards more effective conservation and wildlife managements. All of those training sessions have built capacity of stakeholders in 5 areas and provided a platform for collaboration between parties. The majority of training contributes to more than 1 area of capacity building. Below is the explanation of capacity changes: Area 1 - The ability of the technical implementation unit/UPT to draw up a management plan in accordance with the objectives and mandate of management	The overall CDSC's progress is considered on track, with progess towards the end project target level at 95.1% overall in all targeted sites.(note: one site has exceeded the target -- here calculated as 100% achieved) All National Parks (NP) have shown some progress as compared to the baseline, however, only one NP which has achieved the EOP target for CDSC, namely Berbak Sembilang National Park. All the other three have shown progress of different level. Based on assessment conducted by the end of 2020, Kerinci Seblat and Bukit Barisan Selatan National Parks are lack of two and five percentage points from the EOP target, respectively. Meanwhile, based on assessment in 2019, Gunung Leuser National Park is still behind by nine percentage points from the EOP target. Partly due to COVID situation as well as coordination challenges on the sites (i.e: different priorities of, the upcoming assessment for Gunung Leuser is scheduled to be conducted by August 2021.

				Gunung Leuser National Park Strengthening management capacity in conservation areas is one of the strong impacts of Sumatran Tiger Project that was evidenced by the increased capacity in the planning areas. In this reporting period Sumatran Tiger Project facilitated 62 training sessions and workshops at GLNP between July 2019 and June 2020. The training sessions involved 50 GLNP staff, 16 Aceh Provincial KPH Scope staff, 2 Batang Gadis National Park staff, 26 North Sumatra BBKSDA staff, 2 UPT Tahura Bukit Barisan staff, 114 law enforcement officials and 4 partners' staff working at GLNP. (Evidence 1 - WCS PIR Report 2020 page 9 and Evidence 13 - WCS Deliverable 6 GLNP) One important training session facilitated by Sumatran Tiger Project was SMART mentoring and training sessions attended by 8 SMART-Patrol data operators in GLNP in 2019 (on March, April, June, July, August, and October) to strengthen their ability to manage data from SMART-Patrol results. These training sessions have enabled all section, sectors, and NP operators in GLNP to query data, make data summary (tables, graphs and maps), and compile reports from SMART Patrol activities. If mapped against the results of the capacity assessment recommendations for GLNP using the CD Score Card in 2019, the above training sessions contribute to aspects of increasing "Basic knowledge of conservation area management and laws / policies on wildlife protection and conservation areas" Kerinci Seblat NP	Gunung Leuser National Park: 2019: 74% (89% achieved from EOP Target score) 2021: to be updated in August 2021 EOP Target : 83% Kerinci Seblat National Park: 2019: 70%. 2020: 83% (97.6% achieved achieved from EOP Target score) 2021: to be updated before September 2021 EOP Target: 85% Bukit Bukit Barisan Selatan National Park: 2019: 68% 2020: 79% 2021: 76% (93.8% achieved from EOP Target score) EOP Target : 81% Berbak Sembilang National Park: 2019: 74% 2020: 87.5% (100% achieved) EOP Target: 83% Based on a comprehensive gap capacity assessment in all the project sites, project has since 2018 undertaken remedy steps, amongst other, by working with local organization called Indonesian Center for Environmental Information (Pusat Informasi Lingkungan Indonesia, PILI) to carry out trainings which specifically targeting the critical capacity development area (soft skills and leadership capacities) – complementing the technical-related capacities. This has been then further translated into various activities in project sites led by National Park Authority and assisted by NGOs accordingly. Below is further site-specific brief discussion on CDSC.

				Sumatran Tiger Project created impacts in area 1 by providing advanced SMART data management and analysis training for SMART administrators in KSNP in August 2019 attended by 18 people (16 men, 2 women) who were SMART administrators from the section, sector and KSNP office as well as admin representatives from KSNP partners. The result of this training, SMART data from partners and activities at regional level could be collected and managed directly by SMART Administrators at KSNP Office. All of the data has regularly been analyzed and passed on to national level (Evidence 43 - UNDP CD Scorecard - Kerinci Seblat). SMART data from KSNP (as of March 2020) is one of the most comprehensive and updated data being used at national level. These data collections supported various needs both at local and national park level, for example. preparation of long term management plan (RPJP) already using SMART data (Evidence 2 - FFI PIR Report 2020 page 5) Staff at KSNP could also collect independent traffic data used in Environmental Impact Assessment (EIA) report to mitigate lethal effects of road infrastructure in national park which refers to World Heritage Advice Note: Environmental Assessment on 18 November 2013 for every road that has been built without a Strategic Environmental Assessment (SEA) - (Evidence 2 - FFI PIR Report 2020 page 7). Berbak and Sembilang NP	1. Bukit Barisan Selatan National Park The 2021 CDSC assessment had resulted a score of 73 (76%), a decrease compared to the results of the 2020 assessment of 79 (79%). Of the 32 assessment indicators, 4 indicators have decreased, 1 indicator has increased, and 27 indicators with unchanged values (Evidence 5 - Final BBS CDSC Assessment 2021). After the assessment, all parties are committed to supporting/implementing the action plan that has been prepared. The monitoring and evaluation team will monitor the action plans that have been prepared periodically at least once every 6 months and submit the results of monitoring and evaluation to the Head of the TNBBS Center. Notwithstanding the three percentage point decrease, the overall process of CDSC since the beginning of the project has resulted in a pool of lessones learned knowledge which will be useful for future reflection, on site basis as well as nationally. This includes the importance of provising specific guidance and more clear narrative explanation to the CDSC template, in order to minimize the risk of multi-interpretation and increase the consistency of assessment by different assesors/evaluators. Additionally, progress and achievement on this area have been observed beyond the quantification assessment made from the tools, which can potentially indicate and contribute to sustaining project's result. This includes amongst other: a more

| | | | | Sumatran Tiger Project facilitated data mining & situation room training in protected area management in Jambi, between February 5-6 2020, attended by 24 staff managing Berbak and Sembilang National Park areas. (Evidence 4 - ZSL PIR Report 2020 page 11)

1. Data Mining: Participants practiced the concepts, purposes and objectives of data mining by studying cases, performing effective communication using effective questions so that they could obtain data according to their needs.

2. Berbak Sembilang Information System: Participants were introduced to SIBELANG which is an information system developed specifically for Berbak and Sembilang National Park and all of its features and how to use them, how to input data into the system.

The above training was a follow-up training aimed at providing knowledge and understanding of data mining and its utilization in planning and national park management. Participants were also trained how to manage SIBELANG and how to make decisions based on field data and knowledge in SIBELANG.

Bukit Barisan Selatan NP

In this reporting period, project organized 26 training sessions and workshops in BBSNP attended by 82 BBSNP staff, 3 Bengkulu BKSDA staff, 5 BTN Way Kambas staff, 3 South Sumatra BTN staff, 4 KPH staff in Lampung Province, 16 staff in Bengkulu Province, 10 law enforcement officers, and 27 partner staff working in BBSNP area. | independence patrol team and 'trainee become trainer' for SMART Patrol. (Evidence 3 - WCS Report for PIR 2021)

2. Gunung Leuser National Park

CD Score Card will be updated in August 2021

3. Kerinci Seblat National Park

Kerinci Seblat National Park organized two CD Score Card (CDSC) assessments - facilitated by the project - in 2018 and 2020 with the results of 70% and 83.3% respectively (Evidence 6 - Final Kerinci Seblat CDSC Assesment 2020).

One factor that contributed to the low baseline and mid-project assessment scores (in 2018) lies in the indicator of the capacity of "The UPT's ability to develop a management plan in accordance with management objectives and mandates".

During the first assessment process, documents related to the RPJP (Long Term Management Plan) and RPJPn (Short Term Management Plan) had yet existed and the existing documents were considered invalid (there was no document ratification), so that in some components (issues), the assessment, the values obtained were low and some of them appear as 0 (range of each value is 0 – 3).

Meanwhile, in 2020 assessment process, documents related to the management plan are in the process of being ratified, so all participants agree that Kerinci Seblat National Park already had a clear management plan, thereby increasing the assessment score significantly on several |

Sumatran Tiger Project also facilitated several SMART training sessions attended by 24 BBSNP data operators in 2019 (on March, April, June, July, August, and October) to strengthen their ability to manage data from the SMART-Patrol results.

The result (outcome) of the training sessions: all section, sectors, and NP operators in BBSNP have been able to query data, make data summary (tables, graphs and maps), and compile reports on the results of SMART Patrol activities.

Sumatran Tiger Project also supported GIS training in BBSNP attended by 23 BBSNP staff (13 people from the scope of BPTN II Liwa and 10 people from BPTN I Semaka) in July 2019. The training saw at least 4 BBSNP staff from Field I (served in 2 resorts and 2 SPTN) and 7 people from Field II (who served in 5 resorts and 2 SPTN) had been able to use ArcGIS to create thematic maps to meet the needs of each field and section.

If mapped against capacity assessment recommendations for BBSNP using the CD Score Card in 2018, the above training sessions contribute to aspects of increasing "Basic knowledge of conservation area management and laws / policies on wildlife protection and conservation areas" specifically related to strategy point 1. (Evidence 1 - WCS PIR Report 2020 page 10 and Evidence 41 - UNDP CD Scorecard - Bukit Barisan Selatan)

Area 2 - Ability to implement policies, laws, strategies and programs.

Specific to this capacity building area, Sumatran Tiger Project supported the ongoing "Integrated Training of Law

components, from 0 to 2 and or 3 (Evidence 4 - FFI Report for PIR 2021).

In the next stage, project plan to undertake 2021 CDSC assessment, to be able to reflect the latest progress in this site.

4. Berbak Sembilang National Park

In the last assessment facilitated by the project in 2020, the overall CD scorecard has increased from 74% (2018) to 87.5% in (2020) -- EOP target has been achieved.

The increasing score was affiliated with UPT's increasing ability to develop management plans in accordance with management objectives and mandates from 8 to 9 points between the 2018 assessment and the final assessment in 2020

Second ability that was significantly increased was ability to implement policies, laws, strategies and programs from 23 points in 2018 to 37 points in 2020.

Third ability of Technical Implementation Unit (UPT) to engage and build consensus among the parties had also increased from 10 points in 2018 to 14 points in 2020

Berbak Sembilang National Park's ability to mobilize information and knowledge increased from 6 points in 2018 to 9 points in 2020 and the last UPT's capacity that had increased was the capacity of UPT to monitor, evaluate, report and learn increased from 10 points in 2018 to 14 points in 2020 (Evidence 7 - Final Berbak Sembilang CDSC Assessment 2020).

| | | | | Enforcement Officials in Handling Wildlife Crimes. Project also facilitated at least 4 capacity building activities for Law Enforcement in Dealing with Wildlife Crimes in GLNP and BBSNP. (Evidence 1 - WCS PIR Report 2020 page 19)

The project has also been supporting development of training modules for Law Enforcement Officials since 2018. Sumatran Tiger Project is in the process of developing three modules / guidelines to help deal with protected wildlife crime cases.

The first module, the closed investigation module is now almost completed. Sumatran Tiger Project has also discussed with training department in KLHK for the adoption of this investigation module. Other two modules/guidelines are correlated to operation of i2 software and digital forensics are currently in finalization process. (Evidence 1 - WCS PIR Report 2020 page 20)

Area 3 - Ability to engage and build consensus among the parties

In this area, Sumatran Tiger Project helped national parks to strengthening capacity of national park staff to mitigate human and wildlife conflicts. Sumatran Tiger Project facilitated training sessions at GLNP and BBSNP to mitigating human and wildlife conflicts between July 2019 and March 2020.

The training sessions discussed:
1) Wildlife ecology and behavior (tigers and elephants)
2) Conflict between humans and wildlife
3) Regulations related to efforts to respond and mitigate conflicts between humans and wildlife | |

| | | | | 4) Conflict response and mitigation techniques in conflicts between humans and wildlife
5) Flow of coordination in conflict response and mitigation activities during humans and wildlife conflicts
6) Build a communication network between veterinarians and community groups in making efforts to respond and mitigate conflicts between humans and wildlife

The other impact of engaging and building consensus among parties is project and other stakeholders' ability to successfully develop 20 village KMS Mitigation Task Groups (Satgas Desa) in Gunung Leuser and BBS landscape since 2016.

Changes in community in Sumatra, especially around the GLNP and BBNNP areas, in responding and mitigating human and wildlife conflicts are imminent. Since mid-2019, communities were able to create proper initial response and mitigation efforts to human and wildlife conflicts.

Villages that already have these capabilities include: Batu Napal village, Darussalam, Panton Luas, Seumanah Jaya in GLNP, as well as Pesanguan, Margomulyo, Tulung Asahan, Lubuk Lagan, in BBSNP (Evidence 1 - WCS PIR Report 2020 page 18).

Area 4 - The ability to move information and knowledge

Increasing awareness of the importance of data and information from management activities has led UPT TNGL to build a Management Information System called UDIK (Conservation Data and Information Unit). This is the impact of series of activities and training sessions as well as intensive | |

				communication to improve data utilization in project's landscape. (Evidence 1 - WCS PIR Report 2020 page 26) Sumatran Tiger Project also facilitated Advanced SMART Training (Data Analysis) at ZSL office between September 4-6, 2019 attended by eight BSNP staff who were in charge of SMART operations in the BSNP Section Office and BSNP Head Office. The training aimed at increasing BSNP SMART operators's capacity to manage data obtained by BSNP patrolling teams. Four training components were included in this advance training sessions. They are: 1. Data validation: Participants were trained to use the Quality Assurance function on SMART device (either manually or automatically) to check the accuracy and quality of the data source before data is entered or used. SMART quality assurance could clean up bad data, especially coordinate spatial data (way points and tracks). 2. Data verification: Participants were trained to identify accuracy of data after data migration. SMART, does not have special features to verify data accuracy. Data verification must be done manually for each patrol data by comparing data with photos or other data sources. 3. Data analysis (query and summary): In this component, participants were introduced to various data analysis functions provided on SMART device depending on level and type of information needed by BSNP. Meanwhile, SMART could provide an overall picture of the vulnerability of an area and patrol efforts.	

SMART could also provide detailed information of each type of threat or spatial distribution of detected threats.

4. Arranging patrol strategies: In this component, participants were trained in interpreting the results of statistical, spatial and non-spatial data analysis to plan better patrol strategies in the future. Using SMART data on patrol results conducted in 2018 and 2019, participants were encouraged to develop a patrol strategy for next year.

At the end of the training session, participants were asked to fill out a questionnaire to assess the results of the training to measure participant's level of knowledge and understanding of the subjects. Participants were also presented with various case studies, and for each case study, participants were expected to provide analysis using SMART data (Evidence 42 - UNDP CD Scorecard - Berbak Sembilang).

The training reported an average record of 91.6% of correct answers at the end of the training. The results of the training showed that the training has effectively achieved its goal of enhancing the skills of SMART operators to handle patrol data with the aim of providing quality data and information needed for better planning in future conservation and protection efforts.

CTAP trap camera database training

Camera trap data processing is often slow due to overwhelming and tiring data processing, resulting in incomplete analysis and delayed reporting. The absence of a centralized data storage system and inefficient data processing contribute to the problem.

				Sumatran Tiger Project has developed a camera trap data management package (Camera Trap Analysis Package/CTAP) to resolve the issues. The package could produce output according to standard format. Introductory training of camera trap data management for BSNP staff was implemented between 9-11 September 2019 at the Jambi ZSL office. 6 BSNP staff attended this CTAP training. Project evaluated before and after training to assess training results. The pre-test results showed an average of 36% of participants answered the questions correctly. Post-test results showed the value increased by an average of 64.5%. The score has increased dramatically but yet to reach the desired target of above 75% (Evidence 4 - ZSL PIR Report 2020 page 8-9). Area 5 - The capacity to monitor, evaluate, report and learn In the context of strengthening staff capacity to monitor protected Key Species, Sumatran Tiger Project facilitated 4 training sessions for GLNP staff and 4 training sessions for BBSNP staff. These training sessions are also attended by other UPTs and universities in Sumatra between July 2019 and June 2020. Mapped against 2018 CD Score Card assessment recommendations of GLNP and BBSNP, these training sessions have contributed to aspects of "survey methods and key species monitoring" that were specifically linked to strategy points No. 1 (1), 5 (2), and 4 (25,26,27) and "Biodiversity data management" related to strategy points 1 (1), 4 (25, 26, 27), and 5 (2).	

After the training, participants' were able to implement tiger and horn bill survey techniques. Their training scores increased from 52.33% to 71% for the tiger survey and 35.52% to 79.67% for the horn bill survey. Participants' ability to identify horn bill species also increased significantly from 20.59% to 73.53%. (Evidence 1 - WCS PIR Report 2020 page 11-12)

Project also conducted Sumatran tiger monitoring training for officers in scope of PTN I Jambi Region in March 2020, attended by 25 participants (24 males, 1 female). This training activity is part of intensive Sumatran Tiger Project technical assistance to KSNP Office.

After the training, staff in KS National Park had been able to independently monitor Sumatran tiger population at different monitoring block from the already existing project monitoring block at the core area in KSNP since 2019. Participants were able to independently arrange and install camera traps in new block with assistance from Sumatran Tiger Project. (Evidence 2 - FFI PIR Report 2020 page 7)

Soft Skills Training

To follow up the result of project's training need assessment in 2017, that analysed skill gap of NP staff, project initiated to develop series of training including soft skill for NP staff. The soft skill straining is important to help national park staff socially engage relevant stakeholders to achieve park management objectives.

This soft skill training also complemented other training sessions conducted to improve

				area capacity 1, 2, 4 and 5 (Area 1 - The ability of the UPT to draw up a management plan in accordance with the objectives and mandate of management; Area 2 - Ability to implement policies, laws, strategies and programs; Area 4 - The ability to move information and knowledge; Area 5 - The capacity to monitor, evaluate, report and learn.). The soft skill training improved staff capacity in Area 3, namely - The ability to engage and build consensus among the parties. Topics of the training sessions were based on Minister of Environment and Forestry Regulation No. P.44 - 2017 that encourages cooperation in institutional strengthening and nature conservation partnerships in the management of nature reserves and nature conservation areas. National park management is not free from conflict of interest in performing its functions in protection, preservation, and utilization of biodiversity in their area as national parks are also located next to other land use areas. From this point, the minister's policy sees collaborative management as solution for a joint activity of stakeholders, built on shared interests for increasing effectiveness of conservation area management. The cooperation in strengthening institutional management includes awareness training and community institutional strengthening training, The project facilitated 12 training series with four themes specifically tailored for the needs of national park managers attended by 102 participants in all project's landscapes.	

				In Gunung Leuser National Park, Sumatran Tiger Project facilitated turtle conservation training attended by 16 participants: 10 national park staff, 5 community representatives, and 1 person from a national park partner. Project also organized training on community-based ecotourism management in Kerinci Seblat National Park. The training was attended by 39 participants: 24 national park staff, 14 community representatives, and 1 person from the national park partner. Conflict resolution as the topic of Sumatran Tiger's training in Berbak Sembilang National Park was attended by 18 participants: 10 national park staff and 8 community representatives. While in Bukit Barisan Selatan National Park, project hosted training on community-based ecosystem restoration that was attended by 29 participants: 18 national park staff, 8 community representatives, and 3 people from national park partners. The result of these training sessions: Sumatran Tiger Project is deemed successful at increasing staff knowledge in four national parks by an average of 47% (Evidence 10 - PILI Lessons Learned from Soft skill Training and Evidence 14 - Sumatran Tiger Project Capacity Development Analysis) Leadership Training Another follow up action of training need assessment in 2017, Sumatran Tiger Project facilitated a leadership training program in this reporting period. This training differs to other training that deals with increasing skill or technical capacity of national park staff. This	

training program is intended to improve leadership among protected area managers at project's landscapes and its surrounding landscapes. (Evidence 11 - UID Booklet Sustainability Transformation)

Since managing protected area is not dealing only with biodiversity and ecology, but also with a numerous problem in social, economy, and so on, this leadership training program was developed to involve other parties, including private sectors and civil societies. Therefore, project named the program as tri-sector leadership program, targeted to improve their leadership and self-awareness capacity to carry out systemic transformation in Indonesia's natural resource management.

Project aimed at creating and growing local and national network of leaders in conservation areas and natural resources management to support each other, to learn and to collaborate to bring up various systemic innovations in management of conservation areas and Indonesia's natural resources which are oriented towards justice, sustainability and local wisdom.

Due to Covid-19 pandemic, the training programs scheduled in 3 series from March – Sept 2020 were postponed. Project facilitated series of webinar on Tri-Sector Leadership Training as a light version of the training program on Tuesday, May 27, 2020. A total of 70 participants from Directorate General of KSDAE-MoEF, NGOs, local government and civil society attended the event. Director General of KSDAE, Wiratno was the main speaker (Evidence 15 - UID Webinar Flyer and Evidence 16 - UID Webinar Report).

Outcomes in Capacity Development

| | | | | The outcomes of the above training sessions and workshops conducted by Sumatran Tiger Project in all project's landscapes in four national parks are imminent.

Sumatran Tiger Project has helped GLNP Office/TNGL UPT to rationalize resorts by reducing from 34 resorts to 25 resorts on the basis of processed and collected SMART data and information. Also in GLNP, three patrol teams have been able to perform a series of data collection and preparation of reports independently. These are the impacts of forest patrol training and mentoring activities at resort level.

The other impact, structure of a patrol team members had also changed since 2018. Currently members of the patrol team are entirely from GLNP although patrol logistic is still supported by partners (Evidence 1 - WCS PIR Report 2020 page 16).

In GLNP, one GLNP staff has become a resource person in SMART RBM in-house training at North Sumatra BBKSDA (BBKSDA-SU) between 28-29 February 2020. The in-house training session was attended by 26 BBKSDA-SU staff and 2 staff from UPT Tahura Bukit Barisan. The staff provided material and shared lessons learned on SMART-RBM-Patrol implementation in their respective area to colleagues from other UPTs.

In Berbak and Sembilang National Park, there are two staff members of Berbak and Sembilang National Park who have been able to provide training for staff in other conservation areas. This is also the impact of training and assistance to improve the capacity of SMART data collection and | |

| | | | | analysis (Evidence 12 - PIR Meeting Notes on Capacity Development).

Sumatran Tiger Project and 2 Bukit Barisan Selatan NP staff also served as resource persons in second RBM SMART Training in Ujung Kulon National Park (UKNP) between 2-5 October 2019. This training session provided material and hands-on application of SMART-RBM to UKNP staff and partners at UKNP, shared interesting lessons learned when conducting SMART patrols and processing the result of SMART Patrol (Evidence 1 - WCS PIR Report 2020 page 16).

After the training, there was a consensus that result of UKNP patrol will be inputted into the RBM SMART system in the future to match the MoEF mandate of managing patrol results. The involvement of 2 BBSNP staff as resource persons showed increasing BBSNP staff capacity in strengthening SMART tools and implementing SMART-Patrol at BBSNP area.

BBSNP Data Operators have also shared their knowledge as a resource persons in another workshop and assessment of patrolling tools at Ujung Kulon National Park Office in West Java between August 13-14, 2019.

After the training, participants agreed upon BBSNP trainers' recommendations for Ujung Kulon National Park Office to implement SMART-RBM-based patrols as part of the efforts in strengthening management of the national park area. | |
| 1.2. SMART-RBM Threat Encounter Reports | Protected Area \| SMART Baseline (2013) | *(not set or not applicable)* | Reduction of tiger-related threats by >10% in each of | Following is progress of threat encounter value for each landscape: | Progess towards the end project target level at 100% overall in all targeted sites. |

Reduction of tiger-related threats by >10% in each of the 5 target PAs indicated by a reduction in the number of illegal activities as shown in SMART-RBM monthly patrolling reports* *Encounter rate: average number of tiger and prey snare traps removed/100km of forest patrol	Gunung Leuser NP | 43.0 Kerinci Seblat NP | 44.0 Bukit Barisan Selatan NP | 2.0 Berbak NP | 0.22 Sembilang NP | 0.00# # No snare traps were encountered in 2013, and a new baseline will be explored.		the 5 target PAs indicated by a reduction in the number of illegal activities as shown in SMART-RBM monthly patrolling reports Protected Area | SMART Target (PY5) Gunung Leuser NP | 39.0 Kerinci Seblat NP | 39.0 Bukit Barisan Selatan NP | 1.0 Berbak NP | 0.00 Sembilang NP | 0.00	National Pak | Baseline | 2019| 2020 | EOP Gunung Leuser NP | 8.3 | 11.64| 8.98 |EOP: 7.5 Kerinci Seblat NP | 11.4 | 12.23 | 7.52 | EOP: 10.3 Berbak NP | 0 | 3.93 | 5.64 |EOP: NA Sembilang NP | 0 | 4.17 | 5.47 | EOP: NA Bukit Barisan Selatan NP | 1.2 | 0.35 | 0.63 | EOP: 1.1 Based on above figure, there are variety of achievements in each landscape. Two of five national parks: Gunung Leuser and Kerinci Seblat; showed decreasing threats encounter rate, although in these landscapes, patrol efforts during this reporting period increased compared to previous period (see next output indicators). In other three national parks, even when project could maintain achievement in foot patrol efforts, there were significant increase of threats found during forest patrolling periods. The following reasons affect the findings of increased threat: First, project performs routine evaluation in the patrol planning. Second, intensity of patrols is increased in areas prone to hunting so that the patrol is more effective in detecting threats. Third, the number of snare locations in this reporting period was less than previous one. However, in previous reporting period, prey snares were found at random locations, where sometime only one snare found in each finding point. In this reporting period, the prey snares were found in a group. Patrolling team found several prey snares in one location, so that the number of snare units found was greater	The tiger-related threats has been overall reduced by an estimated of 72.2% in the 5 targeted regions (of four administered National Parks) indicated by a reduction in the number of illegal activities (see evidence/explanation in the subsequent paragraphs below). Gunung Leuser, Kerinci Seblat and Bukit Barisan Selatan NPs have shown reduction in threat and has achieved (surpassed) the EOP target. Berbak Sembilang has yet to achieve the reduction target as expected by EOP, however by a relatively low gap.The random pattern of the snares and other trap located provides an alarm to the unpredictable nature of the threat, although the patrol has been intensified. The dynamics of social and economic pressure in the surrounding area might contribute to this dynamic. Below is the updated threat encounter figure for each landscape (threat/100 km2): (Evidence 33 - WCS Threat Encounter Report; Evidence 4 - FFI Report for PIR 2021; Evidence 34 - SMART Patrol Recap BSNP) Gunung Leuser National Park 2013: 8.3 (baseline) 2019: 11.64 2020: 8.98 2021: 0.38 (decreased by 95% from the baseline) EOP Target: 7.47 Kerinci Seblat National Park 2013: 11.4 (baseline) 2019: 12.23 2020: 7.52 2021: 5.3 (decreased by 53.5% from the baseline)

				at one location. Below is the threat encounter rate report in each national park: Gunung Leuser National Park Sumatran Tiger Project operated 4 patrol teams in this reporting period that successfully eliminated 1 tiger snare and 58 snares for prey animals (Evidence 1 - WCS PIR Report 2020 page 65-66). Comparing to previous report, patrolling teams recorded decreasing findings of work tools, transportation, road access, illegal animal hunting, area use, and number of perpetrators entering the area illegally. (Evidence 1 - WCS PIR Report 2020 page 67-68). This shows the impact of resort-based patrol activities that have successfully reduced threats in the core area (Stabat region) over the last three years. However, statistical tests are still needed to ensure the significance of this decline. The intensity of patrols still also needs to be maintained, including the provision of supports to implement patrols after GEF Tiger project period. Kerinci Seblat NP Patrolling activities conducted between July 2019 and April 2020 found: 75 tiger snares (8 active and 67 inactive), 235 snares for tiger's prey in core areas and occupancy survey areas in northern part of national park. (Evidence 2 - FFI PIR Report 2020 page 10). Increasing number of patrol efforts may result in decreasing threats encounter in national park landscape. Patrolling team also found other illegal activities that include destruction and	EOP Target: 10.26 Berbak Sembilang National Park -Berbak Region 2013: N/A 2019: 3.93 2020: 5.64 2021: 0.9 (decreased by 77% from the baseline in 2019) EOP Target: 0 -Sembilang Region 2013: N/A 2019: 4.17 2020: 5.47 2021: 0.023 (decreased by 99.5% from the baseline in 2019) EOP Target: 0 Bukit Barisan Selatan National Park 2013: 1.2 (baseline) 2019: 0.35 2020: 0.63 2021: 0.77 (decreased by 36% from the baseline) EOP Target: 1.08 Note: following result of Project Board Meeting in 2017 (Evidence 33 - Project Board_s MoM 2017), the calculation of threat encounter has been technically adjusted to ensure better interpretation of the threat to tiger conservation. Hence, the baseline and EOP value has been adjusted accordingly. In general, increased patrol efforts have successfully reduced threats in the core area in several National Parks/NPs (Indicator 1.2). However, there is no consistent linear relationship between the frequency of patrols and the threat encounter at all times and in all sites.

conversion of forests and tiger habitat, encroachment, illegal logging and other illegal activities within the national park such as collection of non timber forest products and illegal fishing.

There are 85 deforestation sites, 164 illegal logging locations, bird snares and bird hunting camps in 241 locations, 8 findings of bird hunting using air guns, 10 findings of NTFP collection, and 27 findings of fishing locations also found by patrolling teams around national park area.

Berbak & Sembilang NP

In general, Berbak and Sembilang National Park are threatened by animal hunting and illegal logging. Patrolling team in this reporting period did not specifically find tiger related threats in the area. However, patrol team found 25 and 23 of snares/traps for other wildlife at Berbak and Sembilang respectively.

Other type of threat found during forest patrol were: illegal logging (33); illegal fishing (10); forest and land fires (6) at Berbak NP. Whilst in Sembilang NP, the patrolling teams found illegal logging (19) ; illegal fishing (9); and forest and land fires (1) - (Evidence 4 - ZSL PIR Report 2020 page 17-18)

Bukit Barisan Selatan National Park

In this reporting period, project operated 4 patrol teams that have successfully eliminated 15 tiger snares and 4 snares for prey animals.

However, the threats encounter rate is increasing compared to previous reporting period to 0.63 snares/100 km.

Whilst there are general trends of reduced threat encounter with increased patrol's frequency (as expected), this is not uniformly and consistently applied at different locations and different period, suggesting that there are many other determining factors outside the patrol itself.

Project reports shows that types of threat were varied between sites – even within one National Park. For example, in Gunung Leuser illegal snare and traps are the major threat, whilst in Bukit Barisan Selatan National Park, forest encroachment and illegal harvesting of NTFP becomes the major threat to habitat protection. It was also reported that whilst some threat has certain predictable pattern (for example, during fasting/Ramadan month and close to Idul Fitri), however others are simply random and unpredictable. For example, the location of the traps being installed by poachers. Therefore, continuous SMART-based patrol remains key to remedy and minimize these threats.

Detailed information for each landscape is described below:

1. Gunung Leuser National Park

The finding of snares has decreased in the last 4 years. From the data above, it can be seen that the contribution of patrols carried out consistently from 2017 to mid-2021 has contributed to reduction in the number of snares found in GLNP, especially in the Stabat area in the last 4 years. The presence of the UPT patrol team supported by GEF Tiger through WCS-IP shows that the state exists to protect and manage conservation areas as

				Types of violations that remain high within IPZ area are illegal access into NP area by perpetrators and illegal harvesting of NTFPs. These violations should become a priority for handling so the threats could be suppressed in the future.	well as possible, as mandated in Law 41/1999 and Law 5/1990.
					2. Kerinci Seblat National Park
				Management Plan and Annual Work Plan	Field teams found and dismantled four active snares between July and October 2020. The number had decreased considerably compared to the same period in 2019 which found 13 active snares. In addition, during this reporting period the patrol teams did not find any active nylon trap but successfully found 23 inactive nylon trap and also dismantled four active bird traps. Overall, wildlife snare/trap findings were considered lower compared to the same period on the previous year.
				Gunung Leuser National Park in this reporting period had discussed draft of long-term management plan involving various stakeholders. Several meetings were conducted to discuss the integration of biosphere reserve management in GLNP's long term planning. The draft was planned to be submitted to Directorate General of Ecosystem and Natural Resources Conservation, however Covid-19 pandemic has postponed several pubic consultations thus delayed the finalization of this long term management plan.	
					The poaching patterns and targets might have changed. The changes might relate to the decreasing of wildlife demand and increasing challenges to perform illegal wildlife trade and distribution due to Covid-19 pandemic. The poachers may no longer focused on snare or trap instalment, instead they now hunt birds using homemade weapons and traditional bird traps. Poachers might also deploy several traps for side income only.
				The same reasons for the delayed long term management plan finalization also occurred in Kerinci Seblat National Park.	
				Sembilang National Park was in the process of revising and preparing the 2020-2029 Long-Term Management Plan (RPJP) in 2019. The preparation of the plan was based on ground condition needs and adjustments to applicable policies related to planning.	Changes in poaching pattern could also be attributed to the impact of successful operations by field team/patrolling teams to dismantle the snares. Consequently, it is possible that the poachers assumed the snares or trap installations were no longer effectives and therefore opt to use other methods and hunting targets.
				Sumatran Tiger Project facilitated three Focus Group Discussions (FGD) with stakeholders to support development of Sembilang National Park RPJP in addition to several drafting team meetings in BSNP Office. Project also supported development of BSNP RPJPn (Short Term Management Plan) for 2020 fiscal year between 9-10 October 2019, attended by TNBS and partners namely ZSL,	It is indeed noticeable that since the project started in 2017, sling snares were hardly detected close together in one location and only found at one or two specific points.

				GEF-UNDP Tiger Project, KIBASS, PILI, YAPEKA, SINARMAS Forestry (PT SHP, PT.RHM and PT.TPJ), PT Bukit Asam and PT. Raja Palma. (Evidence 4 - ZSL PIR Report 2020 page 15-16). BBSNP The project supported the development of BBSNP management strategies during second semester of 2019 by facilitating BBSNP in preparing RPJPn (Short Term Management Plan/Annual Work Plan (Evidence 1 - WCS PIR Report 2020 page 47-49).	The patrol team (MHSKS) only found one snare located near the location where an inactive bird trap was found. The patrol teams also found other illegal activities such as forest encroachment when they took the camera trap on August 2020. Land use change and deforestation were also identified during the patrols. These threats including 78 cases of encroachment, 40 cases illegal logging, 3 cases non-timber forest product extraction, and 9 cases illegal mining. 3. Berbak Sembilang National Park In Berbak Sembilang National Park, threats found in this landscape include illegal logging, canal building, road construction and fishing. Patrol activities which were carried out from January to June 2021 detected temporary trail which might be used by bird poachers. The patrol team also found remnants of bait in the form of palm kernels that were discarded by members of the fishing group in places where the seeds could grow. It is feared that this palm ore can become an invasive plant. The patrol team also found several types of plants, animals and animal signs - including signs of an adult Sumatran tiger and its cubs. To follow up on the findings above, it is necessary to carry out continuous security patrols and organize meetings/gathering where the National Parks Extension officers can share the prevailing regulation and policy related to community empowerment in the surrounding area.

					4. Bukit Barisan Selatan National Park Hunting is a direct threat to forest biodiversity. Routine patrols are therefore carried out to eliminate these threats. Some of the detected snares are destroyed at location, and some others are collected for the purpose of documentation and analysis --- as the basis to formulate a well-informed strategy for animal and habitat protections. During this reporting period, patrols carried out by 7 patrol teams in the period July 2020 – June 2021 in the Intensive Protection Zone (IPZ) of Bukit Barisan Selatan NP – , recorded a total of 70 snares consisting of 16 large slings, 6 small slings, and 20 nylon snares. . This figure is slightly higher than the 2017-2018, 2018-2019, and 2020-2021 periods, which were 53, 55, and 61 snares, respectively. Patrol efforts between 2016 and 2020 showed an increase and succeeded in reducing the threat level in the form of area use, road access, work tools, and bird traps. However, in the period from July 2020 to 2021, there is still an increase in snares. The snares found by 7 patrols in this period were higher than those found in previous years. This situation might be related to the COVID-19 pandemic situation. Based on information provided by t SMART Patrol and Conflict Mitigation (WRU) team, there were indications that many people from outside the village had lost their jobs or businesses in the places where they were wandering. Therefore they might have

					opted to carry out some extractive activities within the National Parks area. However, more accurate data is needed to validate this assumption. The finding of snares per 100 km of patrol found in this reporting period shows an increasing trend. In this period, the number of snares / km was 0.77 snares / 100km, 59% higher than the findings in the 2019-2020 period and 73%% higher than the 2017-2018 period, which reached 0.57 snares/100 km. Given the strong indication of the efficiency of SMART Patrol in minimizing the threat, project will ensure that the patrol will be well incorporated into the exit strategy. The position and authority of MoEF as this project's owner is considered as an asset to ensure this aspect to be sustained if not enhanced in the future.
1.3. Law Enforcement Patrol Effort Increase in law enforcement patrol effort (km walked per year) by >10% in each of the 5 target PAs as shown in SMART-RBM monthly patrolling reports	Protected Area | Forest Patrol Baseline (2013) Gunung Leuser NP | 237 Kerinci Seblat NP | 1722 Bukit Barisan Selatan NP | 1023 Berbak NP | 464 Sembilang NP | 320	*(not set or not applicable)*	Increase in law enforcement patrol effort (km walked per year) by >10% in each of the 5 target PAs as shown in SMART-RBM monthly patrolling reports Protected Area | Forest Patrol Target (PY5) Gunung Leuser NP | 261 Kerinci Seblat NP | 1895 Bukit Barisan Selatan NP | 1126	Sumatran Tiger Project had supported patrolling in 4 National Parks with achievement of patrols effort (km) as follow: National Park | Patrol effort 2019 | Patrol effort 2020 | EOP target Gunung Leuser National Park | 1,169.7 | 968.38 | EOP: 712 Kerinci Seblat National Park | 2,280 | 4,117 | EOP: 2,140 Berbak National Park | 331.9 | 443.45 | EOP: 511 Sembilang National Park| 646.6 | 420.74 | EOP: 352 km Bukit Bukit Barisan Selatan National Park | 1,138 | 3,085.75 | EOP: 1.126	This progress indicator is considered as on track, with progess towards the end project target level at 84% (overall in five regions of four administered National Parks). Three National Parks have fully exceeded the EOP target for km walking patrol, namely Gunung Leuser, Kerinci Seblat, and Bukit Barisan Selata, which have shown increase by 417%, 42% and 235% from the baseline, respectively. (see evidence/explanation in the subsequent paragraphs below). As per latest data by June 2021, the km walking patrol in Berbak Sembilang National Park (in both regions, Berbak & Sembilang) under project's support in this reporting period is below the EOP target.

| | | | | Berbak NP \| 511 Sembilang NP \| 352 | In general, four of five national parks have convincingly achieved forest patrolling targets. Gunung Leuser NP; Kerinci Seblat NP and Bukit Barisan Selatan NP maintained their achievement in last two years by conducting forest patrolling above their EOP targets.

Sembilang NP in this reporting period had managed to achieve EOP target after foot patrolling conducted by BSNP teams in Sembilang landscape reached 420.74 km, way above the EOP target of 352 km (Evidence 44 - Berbak Sembilang Combined Patrol Report).

Only Berbak NP has not yet met the EOP target set in project preparation. However the foot patrolling achievement in Berbak landscape has also increased compared to foot patrolling efforts in previous reporting period.

Environment and physical barriers in Berbak National Park may prevent the national park to achieve the designated targets, since the park exhibits wetland ecosystem that limits foot patrolling efforts only in certain routes or areas.

Even though it was difficult to conduct patrol by foot, other law enforcement patrol efforts had also been conducted in Berbak Sembilang National Park using other means of transport, such as boat and motor bike.

Below is the patrolling achievements in each landscape:

Gunung Leuser National Park

Sumatran Tiger Project in this reporting period supported SMART-based patrol | This situation can be explained from two aspects: 1) considering the field/geographical condition of Berbak & Sembilang landscape which is dominated by wetland area, most patrol in this national parks has been heavily conducted by boat – instead of walk -- therefore it is not being reported here; 2) during period July 2020-June 2021 it was reported that most patrol activities has been conducted by National Park Authorities by using resources other than project resources. Therefore, the actual patrol performance is not reported as part of project's contribution. Whilst this seems as an unachieved target, it actually shows the increased capacity of National Parks to undertake patrol with their own resources.

Achievements of patrols efforts for each site (in: km walked):

1. Gunung Leuser National Park
2013: 237 (baseline)
2019: 1,169.7
2020: 968.38
2021: 1224,95 (100% achieved - increased by around 417% from the baseline)
EOP Target: 712

2. Kerinci Seblat National Park
2013: 1722 (baseline)
2019: 2,280
2020: 4,117
2021: 2,445 (100% achieved -- increased by around 42% from the baseline)
EOP Target: 2,140

3. Berbak Sembilang National Park
- Berbak Region
2013: 464 (baseline)
2019: 331.9
2020: 443.45 |

				activities in Gunung Leuser National Park focusing on 10 resorts in BPTN Region III Stabat as tiger core area.	2021: 99.6* (20% achieved -- decreased by around 4% from the baseline) EOP Target: 511
				Patrolling activities were implemented by 6 patrol teams. The composition of each team consisted of 2 ranger/forest police (PolHut), 4 community rangers and 1 project's staff. Of the 4 patrol teams, there is 1 independent patrolling team at SPTN V Bohorok without any involvement of project's staff participating in the team.	-Sembilang Region 2013: 320 (baseline) 2019: 646.6 2020: 420.74 (100% achieved -- increased by around 31.5% from the baseline) 2021: N/A (all patrol conducted with resources other than from project) EOP Target: 352
				In this reporting period between July 2019 - June 2020, 6 SMART-Patrol teams performed 56 patrol trips for 538 days. The patrol recorded a total of 2,285.69 km including 968.38 km of foot patrols covering an area of 84,800 ha with an average number of patrol days of 51.15 patrol days per person per month	4. Bukit Barisan Selatan National Park 2013: 1023 (baseline) 2019: 1,138 2020: 3,085.75 2021: 3429,26 (100% achieved - increased by around 235% from the baseline) EOP Target: 1.126
				The patrolling efforts in Gunung Leuser NP were slightly decreased compared to previous year. However, the decreasing km patrolled is due to more advance threats analysis compared to previous patrolling period. In conclusion, patrolling efforts were conducted more efficiently based on previous patrolling findings, data and information (Evidence 1 - WCS PIR Report 2020 page 73)	Below is the site-specific brief discussion: 1. Gunung Leuser National Park (GLNP) In GLNP, SMART patrol activities are carried out by 4 patrol teams at BPTN Region III Stabat - GLNP. BPTN Region III Stabat consists of 2 National Park Management Sections (SPTN), namely SPTN Region V Bohorok and SPTN Region VI Besitang.
				Another positive result from patrolling interventions in GLNP is national park staff could independently improved and designed patrol routes based on information taken from SMART RBM system. Kerinci Seblat National Park In this reporting period between July 2019- March 2020, patrolling efforts in Kerinci Seblat National Park increased significantly.	Each SPTN has 2 patrol teams with each team consisting of 7 personnel. The team composition consists of 2 Forestry Police (PolHut) or other forest security forces (TPHL) armed with firearms, 4 contract/community Personnels and 1 WCS staff.

Implementation of Sumatra Wide Tiger occupancy surveys contributed to this achievement. Both of these patrolling and survey activities implemented the SMART system. The result, a total of 136 SMART-based patrols inside and around the KSNP area performed with a total distance of 4,117 km. This effort was reached through 138 frequencies of patrol in 760 days (Evidence 2 - FFI PIR Report 2020 page 11 and Evidence 45 - Kerinci Seblat PIU Patrol Report).

The above jungle patrols and occupancy surveys successfully recorded in total 536 total indications of tiger presence. Increasing patrol efforts is positively linked to increasing number of tiger presence findings in KSNP area. The increasingly high km patrol efforts in the last 3 years also consistently linked to increasing number of snares findings. Patrolling teams found 13 active tiger snares in 2019 compared to 5 active snares in 2017 and 3 active snares in 2018. (Evidence 2 - FFI PIR Report 2020 page 15)

Berbak and Sembilang NP

In this reporting period, the patrolling teams in Berbak region conducted 28 patrol efforts in 126 patrol days, reaching the total walking distance of
443.45 km. While in Sembilang region, the teams performed 24 patrol activities in 92 patrol days, reaching the walking distance of 420.74 km.

From the above data, patrol activities in Sembilang has reached EOP target of 352 km while Berbak landscape has increased its foot patrolling nearing the EOP target of 511 km.

Of the 4 patrol teams, 1 patrol team at SPTN V Bohorok (Stabat) independently conducts patrols without support from the NGO.

Previously in the period July 2019 – June 2020, 56 patrol activities in the Stabat area for 538 days in total by 4 SMART-Patrol teams and reached a total of 2285.69 km including 968.38 km of foot patrols covering an area of 84,000 Ha.

Between July 2020 – June 2021, 4 SMART Patrol teams performed 53 patrol activities for 591 days in total and reached a total of 4,016.94 km including 1,073.9 km of foot patrols covering an area of 48,662, 5 ha

2. Kerinci Seblat National Park

The intensity of patrols (including occupancy surveys) in 2020 decreased compared to 2019. The decline was partly due to the Covid-19 pandemic -- the PHSKS team was forced to adjust their patrol activities. During the patrol, illegal activities like hunting and other threats (encroachment, illegal logging, illegal mining) and the numbers of these illegal activities were stil detected.

As a respond to that, Tiger Protection and Conservation Unit (TPCU) and Tiger Monitoring Team (MHSKS) performed a total of 70 patrols between November 2020 and April 2021 in Kerinci Seblat National Park (KSNP) and its surrounding buffer areas.

These patrols covered a total of 1,799 km patrol tracks in 381 days where 55 patrols (1,251 km within 301 days) conducted by the TPCU team and 15 patrols (548 km

				However, the teams also performing forest patrolling using other means of transports: by boat that reached 704.93 km in Berbak and 2477.32 km in Sembilang area and by car that reached 478.39 km in Berbak and 327.58 km in Sembilang area (Evidence 4 - ZSL PIR Report 2020 page 21-22 and Evidence 44 - Berbak Sembilang Combined Patrol Report). Bukit Barisan Selatan NP In this reporting period between June 2019 and June 2020, Sumatran Tiger Project's patrolling teams conducted 150 patrol trips for a total of 839 days. The patrolling efforts in BBSNP reached an overall mileage of 4,195.6 km including 3,085.75 km of foot patrols and covered an area of more than 142,800 ha ((Evidence 1 - WCS PIR Report 2020 page 77-78 and Evidence 46 - Bukit Barisan Selatan PIU Patrol Report). Increasing patrol efforts in Bukit Barisan Selatan NP in this reporting period showed positive impacts of MoU between MoEF and project's partner (Evidence 1 - WCS PIR Report 2020 page 77-78).	within 80 days) conducted by the MHSKS team. The patrol activities were mainly focused on KSNP protection activities that included destroying trap and from other threats and also monitoring the tiger presences by observing its marks, scratches in the core areas. In addition to collecting tiger-related data, the MHSKS teams also recorded wildlife signs as well as other threats and taking action towards illegal findings such as by destroying snares so that these activities had also contributed to tiger and habitat protection. In addition, the data collected by the MHSKS and the TPCU teams were fed into SMART program and combined together to be throughly analyzed. Since the project started, The TPCU and MHSKS had conducted about 713 SMART patrols and tiger monitoring or survey activities within the KSNP landscape. They have covered almost all KSNP areas with more than 15,992 km patrol by foot and not less than 3,403 days in the field. However, these patrols were mainly focused on the center area of the national park, particularly in Jambi and Bengkulu Provinces, so the intensity of field activities was considerably higher in this area. During this reporting period (Nov 2020 – Apr 2021), a total of 268 of tiger signs were recorded (included tiger roars, pug marks, feces, and scratch marks). The average of tiger encounter frequency was 9.84 per 100 km (SE ±1.44) km.

| | | | | | 3. Berbak Sembilang National Park

In this reporting period the project has carried out patrols at four resorts in Berbak region and at two resorts in Sembilang region. Since last year, the specific NGO support for project implementation in Berbak Sembilang National Park has no longer in place, so that patrol activities were directly coordinated by the Regional Project Office with the capacitated National Park patrol team.

In Berbak area, the project funded six patrolling activities with total walking patrol distance of 99.6 km or failing to reach the target set at the end of the project period. The project also carried out patrols using motorized boats for 108.3 km, boats for 5.3 km and motorbikes for 232.2 km. The total distance of the patrols taken using all modes of transportation reached 446.35 km.

Meanwhile in the Sembilang area, the project carried out two patrols in two resorts with a total distance of 726.1 km, all using speed boats so that the target for walking patrols at the end of the project period was not achieved.

4. Bukit Barisan Selatan (BBS) National Park

In this reporting period 145 patrol trips for a total of 916 patrol days were conducted. The patrols in BBSNP reach a total range of 5,710,3 km including 3,429.2 km on foot patrols and cover almost the entire IPZ area of 140,000 ha. Previously, there were as many as 145 patrol trips for a total of 804 days in BBS IPZ area between 2019-2020 period. The patrols at BBS National |

| | | | | | Park reach a total mileage of 4,147.8 km including 2,779.55 km on foot patrols and cover an area of 142,800 ha.

There has been a significant increase in patrol efforts in BBS NP where the total patrol trips, number of days, and kilometer range of foot patrols continued to increase in the four previous reporting periods. In the 2017 – 2018 period, the total number of trips on foot patrol at IPZ was only 64 trips, increasing to 93 trips in 2018 – 2019 and 145 trips in the period 2019 – 2020.

These efforts show an increase in patrol trips by 104.7% in the last 4 years. In the 2018 – 2019 period, there was a decrease in total trips, number of days, km of foot patrols, and patrol area coverage due to the adjustment of patrol strategies that focused on security at the perimeter / boundary of the BBSNP area.

In addition to prevent illegal actors from entering the area, this strategy is also implemented to follow up on the recommendations of the WHC - TRHS Mission to BBS to collect data on the condition of the boundaries of the BBS area.

During 2020-2021 period, there was also a decrease in the number of trips to 131 trips due to the effects of the Covid 19 pandemic which resulted in delays in patrol activities in the early second half of 2020. However, the daily average patrol trips actually increased from 5.4 days / trips in 2018-2019 to 5.5 in 2019-2020 and 7 days / trip in the period July 2020 – June 2021.

The average patrol days in this period was 26% and 28.5% higher than the previous |

					period (2019-2020 and 2018-2019). The figure above shows the consistency and improvement of patrol efforts in IPZ – BBSNP as targeted by this project.
1.4. Forest Degradation Rates Forest degradation* rates in core areas in 5 target protected areas reduced to *Forest degradation is defined as forest located inside a PA's core area that has completely become non-forest but retains its PA status.	Deforestation rate baseline to be calculated in PY1.	*(not set or not applicable)*	Forest degradation* rates in core areas in 5 target protected areas reduced to	Using the same analytical methods: utilizing remote sensing imagery data and field observation data based on the results of SMART-based patrols, Sumatran Tiger Project would like to report updated monitoring results from the period 2000-2019. The new analysis showed that there has been a decrease in the rate of forest loss and forest cover loss in several - not all - project's landscapes between 2018 - 2019. The results of forest degradation rate analysis in core areas in 5 project's landscapes are: Gunung Leuser NP 0% Kerinci Seblat NP Detail 0.03% Berbak NP 0.21% Sembilang NP 0.30% Bukit Barisan Selatan NP 0,01% Below is the detailed information in each landscape: Gunung Leuser National Park Between second Quarter of 2019 and 1st quarter of 2020, Sumatran Tiger Project conducted a study to measure the rate of forest cover change in Area III of Stabat - TNGL for period of 2000-2019. This study was performed to update the previous studies that have been carried out for the period of 2000-2017. The forest cover monitoring results showed that over the last two decades, the Stabat region experienced a loss of forest cover of	The progress is 100% achieved its target level. All targeted National Parks have achieved The latest figures of forest degradation rate are: 1. Gunung Leuser NP: 0.01% 2. Kerinci Seblat NP: 0.008% 3. Berbak Sembilang NP - Berbak Region:0.21% * - Sembilang Region: 0.30% * 4. Bukit Barisan Selatan NP: 0.01% (Evidence 8 - WCS Deforestation Report for PIR 2021; Evidence 9 - ZSL Deforestation Report 2020; Evidence 4 - FFI Report for PIR 2021) In addition to this encouraging indication in general, project has learned that there has been variance intra and/or inter sites with regard to progress with deforestation status. The new analysis showed that there has been a decrease in the rate of forest loss and forest cover loss in several - not all - project's landscapes between 2018 – 2019. The analysis was using the same analytical methods: utilizing remote sensing imagery data and field observation data based on the results of SMART-based patrols. For example, in Stabat area of Gunung Leuser landscape, the highest deforestation rate occurred in 2004-2008 period (deforestation was 1,101.48 ha or

				4,437.43 ha or around 2.22% - from 199,705.38 ha in 2000 to 195,267.95 ha in 2019. Between 2000 - 2019, the annual deforestation rate in Stabat region showed fluctuations and in period of 2018-2019 in Stabat area there was a reforestation as indicated by a negative deforestation rate of -3.46% between 2018-2019. The highest deforestation rate occurred in 2004-2008 period (deforestation was 1,101.48 ha or 1.30% and deforestation rate was 650.32 ha / year or 0.326% / year). While the lowest rate occurred in the period 2018-2019 where reforestation occurred at 3.47 ha or (-) 0.002% / year (Evidence 1 - WCS PIR Report 2020 page 82-85). . Kerinci Seblat National Park The historical calculation of forest loss in core areas of KSNP showed the forest loss continued to increase between 2015 and 2018. However, starting in 2019, forest loss began to decrease. Core areas of KSNP recorded forest loss of 0.069% in 2016, increasing to 0.110% in 2017 and ending up to 0.137% in 2018. In 2019, forest loss had began to decrease by 0.127%. The annual deforestation rate between 2001 and 2019 was 0.028% or 26,515 Ha. Between 2001-2019 forest loss in core areas of KSNP reaching 482.04 Ha or 0.501% of the total core areas. However, in the same period there was also forest regeneration or natural reforestation of 0.00495% of total core area or 4.77 Ha.	1.30% and deforestation rate was 650.32 ha / year or 0.326% / year). While the lowest rate occurred in the period 2018-2019 where reforestation occurred at 3.47 ha or (-) 0.002% / year (WCS PIR Report 2020: 82-85). Other locations also saw regeneration efforts taking places at the same time with forest loss taking places due to agricultural expansion and road development, such as in Kerinci Seblat landscape. The current figure of forest degradation rate in the project area is a function of the success of reforestation efforts which has contributed to increase of forest cover and the continuing threat to forest area due to natural disasters and development-related expansion which has reduced the forest cover. The relatively encouraging figure on forest degradation rate is indeed in line with those reported recently at national level, which shows 75% decrease of deforestation rate in Indonesian forest area during 2019-2020. This figure is attributed to logging moratorium and reforestation efforts nationally and locally. Below is further site-specific information for each national parks: 1. Gunung Leuser National Park In GLNP, deforestation generally occurs due to the increase in dryland agriculture (dry land farming class and dry land mixed bush farming), especially those occurring at the boundaries or edges of the area. Deforestation in the interior of the area mainly occurs at an altitude of 500-1000 meters above sea level. Deforestation in this area is thought to be due to natural factors such as slope or natural expansion

Historical deforestation analysis in KSNP showed three districts: Merangin, Kerinci and South Solok districts still dominating the forest loss at boundaries of KSNP areas.
Agricultural expansion and road development that cut through national park areas are the main driver of deforestation in KSNP. For example, road development that connects Tanjung Kasri and Renah Kemumu in Merangin, also letter W road crossing Kerinci Regency and South Solok regency.

Sumatran Tiger Project is also using drone technology to monitor deforestation at two locations, Kayu Aro area - near the location of Mount Kerinci hiking trail - and Lempur area - close to Lake Kaca. These two regions are located in Kerinci Seblat National Park and there are many indications of forest cover changes to agricultural land in these areas.

Berbak Sembilang National Park

Monitoring forest cover in BSNP has been conducted for 4 years from 2015 to 2018. Project used 2015-2016 deforestation baseline of 6.23% in Tiger Core Berbak Area (TCA Berbak) and 11.61% in Tiger Core Sembilang (TCA) Sembilang.

The average annual value of deforestation in TCA Berbak is 2.79% and in TCA Sembilang is 4.54%. Deforestation rates in the 2017-2018 period at TCA Berbak and TCA Sembilang amounted to 2.66% of the baseline. From these data, the project has yet reached the target to reducing the rate of deforestation by less than 1% from the baseline (Evidence 4 - ZSL PIR Report 2020 page 26).

Bukit Barisan Selatan National Park

of the bush. During this period, in GLNP there was an increase in the area of dry land agriculture by 13,016 ha or around 606% compared to 2000.

In the first semester of 2020, BBTNGL and WCS-IP have conducted a study to measure the rate of change in forest cover in the Field III Stabat - GLNP area for the period 2000-2019.

This study is to update the previous study for the period 2000 – 2017. The monitoring results show that during these two decades, the Stabat area experienced a loss of forest cover of 4,437 ha or about 2.22% from the previous 199,705 ha in 2000 to 195,262 ha in 2000. 2019.

During the period 2000–2019, the annual deforestation rate of the Stabat area showed fluctuations where the highest deforestation rate occurred in the period 2004-2008 (deforestation of 2,601 ha and deforestation rate of 650 ha/year or 0.33%/year). Meanwhile, the lowest rate occurred in the 2015-2017 period where deforestation was 2.3 ha or 0.001%/year.

In the last period, 2017-2019, BPTN III Wil. Stabat is deforesting at a rate of 11.9/year or 0.01%/year. The percentage of deforestation in this period is still below

At the resort level, this report shows Sekoci Lepan experienced the highest deforestation (2,782 ha) during the period 2000 – 2019 and also the average deforestation rate reached 0.60% per year compared to other resorts.

The lowest deforestation and deforestation rates were recorded at Tangkahan Resort

Between second quarter of 2019 and 1st quarter of 2020, Sumatran Tiger Project conducted a study to measure the rate of forest cover change in IPZ-BBS NP area for the period of 2000-2019. This study was to update the previous studies in the period of 2000-2017. Monitoring results showed that over the past two decades, the IPZ region experienced loss in forest covers of 862.609 ha - or around 0.9% from 95.900.36 ha in 2000 to 95,037.67 ha in 2019.

Compared to period of 2000-2005, the extent of forest cover lost in the subsequent periods showed a very drastic decline.

The highest deforestation occurred during the period of 2000-2005 and in period of 2005-2011. Furthermore, in 2011-2015 period, project found reforestation of 150.40 ha (-0.16%). Analysis from the 3 study periods: between 2015-2017, 2017-2018, until 2018-2019, deforestation was quite stable (less than 10 ha or 0.01% in each period).

Another aspect that needs attention in the context of deforestation in BBSNP is the increasing threat of invasive types, mantangan (Meremia peltata), especially in the southern part of the BBS national park. Mantangan is morphologically similar to a potato plant. It has young brown purplish shoots, with leaf diameters reaching 40cm and yellow flowers.

Mantangan spreads massively in three TNBBS resorts namely Tampang, Way Haru and Way Nipah which are located in southernmost region of BBSNP with a sloping topography and an average elevation of around 250 meters above sea level.

and Bukit Lawang Resort which recorded a total loss of forest cover of 110 ha and 144 ha, respectively, with an average deforestation rate of 0.02%/year.

The results of monitoring during this period also identified the occurrence of forest cover restoration/reforestation identified with negative deforestation values and deforestation rates in the 2017 – 2019 period in two resorts in Stabat, namely Marike Resort (-6 ha), and Sei Betung Resort (-24 ha). .

In eight resorts in Stabat, during the 2015–2019 period there was a decrease in deforestation and deforestation rates compared to the period 2000-2015. When comparing the values in the 2015-2017 and 2017-2019 periods, the increase occurred in Bekancan, Bohorok, and Tangkahan Resorts (Evidence 8 - WCS Deforestation Report for PIR 2021).

2. Kerinci Seblat National Park

Forest loss in Kerinci Seblat National Park showed a decrease in period between 2018 and 2019 compared to period of 2017-2016. In 2018, Kerinci Seblat National Park experienced forest loss by 0.35 percent or 5,012.19 hectares, and in 2019 the figure decreased to 0.29 percent or 4,222.8 hectares. While between 2016 and 2017, forest loss had increased from 0.59 percent (9,390.42 hectares) to 0.69 percent (11,012.4 hectares).

The opening of roads that divide some areas of the national park has facilitated illegal entries to national park areas to perform illegal activities like for example, encroachments. They could be seen

The most widespread invasion occurred at Tampang Resort, reaching 4,751 ha, followed by Way Haru around 3,496 ha and the least was Way Nipah which was around 75 ha.

Until 2019, an area of 8,322 ha of BBSNP has been infested by this invasive species with growth reaching 20% annually.

As the expansion of mantangan in BBSNP has proven to be massive, Sumatran Tiger Project supported activities to reduce the expansion of this invasive species. One effort is by processing mantangan for compost fertilizer. Project in this effort also supported laboratory testing to make sure the fertilizer product meets the Indonesian National Standard (SNI). Project also facilitated communities especially women groups to produce handicraft from this invasive species.

Project tested to feed the product to livestock. The result, mantangan could increase animal weight by 100%. Long term testing is still needed to see the health effects of feeding mantangan to communities' livestock (Evidence 35 - Eradication of Invasive Species Mantangan).

Efforts to reduce deforestation

Sumatran Tiger Project is increasing forest patrol in all project's landscapes that corresponds positively in reducing deforestation threats in national park areas.

However forest patrolling only is not enough to halt deforestation. Law enforcement and reforestation or ecosystem restoration activities also contributed to reducing deforestation trend in project's landscapes.

around the connecting road Tanjung Kasri – Renah Kemumu (101.157° E, -2.468° S), Merangin Regency. Likewise, in 'LetterW' road section (101.132° E, -1.661° S) on the crossroad of Kerinci and Solok Selatan District. The clearing of the forest in 'Letter W' road section "was facilitated" by the fact that the road body is basically inside the national park area.

More effective and the wider scope of patrol activities has contributed to curbing the forest loss between 2018 and 2019. The loss forest loss has decreased when compared to previous period in 2017 where patrolling coverages were relatively limited. The more effective patrolling activities also contributed to decrease of illegal logging activities in the national park area. The result was also reduced average deforestation rate for the following year (Evidence 4 - FFI Report for PIR 2021).

3. Berbak Sembilang National Park

In the current reporting period, the project did not carry out any deforestation measurement and analysis activities. Deforestation data still uses data submitted by partners in the PIR period last year (*) where deforestation in BSNP was reported to have increased and had yet reached the final project target.

Monitoring forest cover in BSNP has been conducted for 4 years from 2015 to 2018. Project used 2015-2016 deforestation baseline of 6.23% in Tiger Core Berbak Area (TCA Berbak) and 11.61% in Tiger Core Sembilang (TCA) Sembilang.

The average annual value of deforestation in TCA Berbak is 2.79% and in TCA

GLNP has successfully reduced deforestation in national park area by strengthening law enforcement. GLNP assisted by Sumatran Tiger Project team, had successfully processed 35 illegal logging cases between 2015-2019, of which 19 cases were executed. The highest sentence received by the perpetrators was a prison sentence of 28 months and a fine of Rp1 billion with wood evidence as much as 5981 m3. This law enforcement effort contributes to reduction of illegal deforestation actors in Stabat (Evidence 1 - WCS PIR Report 2020 page 94).

Sumatran Tiger Project also initiated ecosystem restoration project in coordination with other GEF-UNDP Project namely Market Transformation Through Design and Implementation of Appropriate Mitigation Actions in The Energy Sector (MTRE3) in KSNP, in 51.24 ha areas that have been occupied by the community. The degraded land located around Renah Kasah Village Kayu Aro District Kerinci Regency, Jambi Province was used for agricultural field where people planting commodities like chili, tobacco and cinnamon .

Sumatran Tiger Project engaged Walestra, a local NGO to help empower the community and conduct ecosystem restoration processes. Project aims at restoring Sumatran Tiger habitat that has been converted into agricultural land and plantation. The efforts to restore the ecosystem of the KSNP area around the village of Renah Kasah also also support upstream restoration of KSNP catchment area. Sustainable catchment area is needed to guarantee water supply for construction of a PLTMH (Hydro Power Plant) in the Renah Kasah Village (Evidence 17 - Walestra Report

Sembilang is 4.54%. Deforestation rates in the 2017-2018 period at TCA Berbak and TCA Sembilang amounted to 2.66% of the baseline. From these data, the project has yet reached the target to reducing the rate of deforestation by less than 1% from the baseline (Evidence 9 - ZSL Deforestation Report 2020).

4. Bukit Barisan Selatan National Park

In BBSNP, the majority of deforestation occurs due to community clearing of forest into dry land agricultural areas -especially in the northern part of BBS, as well as the expansion of shrubs including mantangan in the southern part. While in the interior of the area, deforestation occurs due to natural factors such as slopes and extreme rainfall. The monitoring report has been documented in the form of a book which was prepared jointly by UPT and WCS-IP.

During the period 2000 – 2019, the annual deforestation rate in the IPZ-TNBBS area showed a drastic decline between the period 2000-2005, 2005-2011 to the period 2011-2015. However, it experienced a slight increase in the 2015-2017 period. Furthermore, during the two study periods, namely between the 2015-2017 and 2017-2019 periods, the deforestation rate was quite stable (less than 10 ha/year or 0.01%/year) in each period.

The deforestation rate also experienced a negative value or indicated a process of forest cover restoration in the 2011-2015 period. Furthermore, in the next two periods, namely between 2015-2017 and 2017-2019 the monitoring results showed a fairly stable deforestation rate (less than 10 ha / year or 0.01% / year in each period).

				and Evidence 18 - Walestra Report - Nursery Development).	The percentage of deforestation in this period is still below
				Project also initiated 170 ha ecosystem restoration in Aunan Sepakat part of Gunung Leuser National Park area using conservation partnership mechanism between national park and communities and facilitated by Leuser Conservation Forum. The current development, the NGO has conducted socialization to communities and built tree nurseries in the area. (Evidence 19 - FKL Report).	From the results of the analysis of satellite images shown in Figure 34, during the period 2000-2019, the threat of deforestation in the IPZ-TNBBS area occurred in every resort, except for the Balik Bukit resort. Active encroachment can be identified by looking at recent deforestation in the 2015-2019 range. During this period, land clearing for dry land farming areas in Pemerihan, Ngambur, Biha, and Suoh was seen. Meanwhile, in the other 4 resorts, namely Way Nipah, Sukaraja Atas, Balik Bukit and Balai Kencana in the same period, no new land/forest clearing was detected.
				Other successful effort is from BBSNP to reduce deforestation in the area. Sumatran Tiger Project and BBS NP in this reporting period processed four cases of illegal logging between 2015-2019, one of them has been executed. The perpetrators were given sentences of 36 months imprisonment and a fine of Rp500 million. These efforts also contributed to the reduction in illegal actors which resulted in deforestation in the IPZ - BBSNP area.	At the resort level, Suoh Resort experienced the highest deforestation (4,353 ha) during the period 2000 – 2019 and also the average deforestation rate of 0.99% per year compared to other resorts. This is probably due to the high level of land clearing for dry land plantations by the community. High rates of deforestation are also shown in the Way Nipah resort, where during the period 2000 – 2019 2,263 ha have been lost or forest cover loss has occurred with an average of 0.82%/year.
				Contribution toward Desired State of Conservation for the removal of property from the list of World Heritage in Danger (DSOCR) Since the designation of GLNP as a World Heritage Site in Danger in 2011, Indonesian government and World Heritage Committee have made plans to remove GLNP from Desired State of Conservation for the removal of property from the list of World Heritage in Danger (DSOCR). Corrective measures were being monitored and implemented according to action plan that has been prepared for a period of five years.	The lowest deforestation and deforestation rates were recorded at the Sukaraja Atas resort which also recorded the restoration of extensive forest cover lost. In Upper Sukaraja, deforestation over the past two decades was recorded – 478 ha at an average of -0.21% / year. The negative value shown by Sukaraja Atas indicates the restoration of forest cover during the study period (Evidence 8 - WCS Deforestation Report for PIR 2021).
				Sumatran Tiger Project provided technical assistance to KLHK in order to respond to	

				Corrective Measures conducted by GLNP. Sumatran Tiger Project prepared BBSNP forest and forest cover map in 2019 for BBSNP. The map output will be combined with the result of the forest cover and forests analysis in 2018 (Evidence 20 - DSOCR State of Conservation page 10).	
1.5. Management Effectiveness (METT Score) Improved management effectiveness of 5 target protected areas* covering 3,185,359 ha, indicated by the increase in the METT assessment *Note – this only includes the legally gazetted National Parks, not the surrounding production landscapes	Protected Area | METT Baseline Score (2014) Gunung Leuser NP | 63% Kerinci Seblat NP | 64% Bukit Barisan Selatan NP | 69% Berbak NP | 53% Sembilang NP | 59%	*(not set or not applicable)*	Improved management effectiveness of 5 target protected areas* covering 3,185,359 ha, indicated by the increase in the METT assessment Protected Area | METT Target Score (PY5) Gunung Leuser NP | 76% Kerinci Seblat NP | 76% Bukit Barisan Selatan NP | 77% Berbak NP | 75% Sembilang NP | 75%	METT scores in four landscapes are: National Park | 2014 | 2016 | 2017 | 2018 | 2019 | EOP target Gunung Leuser National Park | 63% | 67% | 71% | 71% | 70% | 76% Kerinci Seblat National Park | 64% | 62% 68% | 68% | 72% | 76% Berbak National Park | 53% | 60% 70% | 77% | 78% | 75% Sembilang National Park | 59% | 62% 66% | 75% | 76% | 75% Bukit Barisan Selatan National Park | 69% | 68% | 74% | 74% | 77% | 77% The scores remain the same from 2019, and will be updated in 2021. So far, project is assured to achieve EOP target for this indicator. Three of five landscapes, namely Berbak; Sembilang; and Bukit Barisan Selatan, have already passing the EOP targets. Meanwhile, METT scores for the rest of two landscapes are closing to EOP targets (Evidence 38 - METT Tracking Tools for Protected Areas). In summary, project's efforts to improve management effectiveness could be seen in this chart ((Evidence 21 - METT Improvement Table). Project implemented more than 20 thematic activities to respond to at least 17 of 30 question in METT. All of those activities worked on all elements in Protected Area Management Effectiveness, namely in	This progress indicator is considered on track, with 98.4% target has been overall achieved. As per latest available data, the METT Score in the five targeted regions (of four administered National Parks) have overall increased by 24.8%. (see evidence/explanation in the subsequent paragraphs below). Three of the four NPs , namely Berbak Sembilang, Kerinci Seblat and Bukit Barisan Selatan, have already achieved their EOP targets. METT assessment score is increasing in Bukit Barisan National Park and Berbak landscapes, exceeding their EOP target. Meanwhile, METT score for Gunung Leuser has not achieve its EOP target – by 6 percentage points . The updated METT assessment has yet to be conducted for Gunung Leuser National Park. This is scheduled to be conducted by September 2021. With the management and action plan is finalized/underway for this National Park, it is anticipated that increase should be made to the earlier METT score. Latest annual METT scores in the targeted National Parks (NPs): Gunung Leuser NP 2014: 63% 2016: 67% 2017: 71%

				Context; Planning; Input; Process; Output; and Outcomes. Since the objective of the project is improving institutional capacity, project has intervened more on aspects of Planning; Input; and Process, through revising management plan; strengthening protection system, training staff; monitoring biodiversity; creating budgeting and sustainable financing and engaging stakeholders. The details of all project's interventions could be found in activities developed in each project's component. Input for National Policy on Management Effectiveness As mentioned in previous report, project worked closely with MoEF through METT Task Force. METT Task Force consists of different stakeholders from university; MoEF staff; NGOs and projects. The team was established as part of MoEF policies in improving management effectiveness of conservation areas between 2014-2019. Facilitated by Sumatran Tiger Project, METT Task Force prepared recommendation in form of a policy brief at the end of 2019 to support new government policy for period of 2020-2024. The policy brief was produced based on the results of METT evaluation and learning workshop at the end of 2019. The document has been submitted by drafting team to Director General of Conservation of Natural Resources and Ecosystems, Wiratno. The document highlights the importance of sustainable monitoring and evaluation system in conservation area management. The	2018: 71% 2019: 70% (92% achieved -- increased by 10% from the baseline) EOP target: 76% Kerinci Seblat NP 2014: 64% 2016: 62% 2017: 68% 2018: 68% 2019: 72% 2021: 79% (100% achieved -- increased by 23% from the baseline) EOP target: 76% Berbak Sembilang -Berbak Region: 2014: 53% 2016: 60% 2017: 70% 2018: 77% 2019: 78% 2020: 78% (100% achieved- increased by 47% from the baseline) EOP target: 75% -Sembilang Region: 2014: 59% 2016: 62% 2017: 66% 2018: 75% 2019: 76% 2020: 75% (100% achieved - increased by 27% from the baseline) EOP target: 75% Bukit Barisan Selatan NP 2014: 69% 2016: 68% 2017: 74% 2018: 74% 2019: 77%

				Director General positively welcomed the policy brief and hoped that the evaluation approach could continue to be improved (Evidence 22 - Link at Sumatran Tiger Website: https://sumatrantiger.id/id/2020/03/09/catatan-hasil-evaluasi-efektivitas-pengelolaan-kawasan-konservasi-di-indonesia). The lessons learned from METT implementation study at national level are as follows; 1. Assessing effectiveness of management in conservation areas is needed as part of management cycle to find out the extent of management status and identify the need for improvement. 2. Evaluation results can improve planning, data and information management in process of managing conservation areas. 3. Provision of data and information, relevant documents are needed in evaluation process as evidence of the resulting changes. 4. The openness of the assessment process involving internal and external parties is increasing, as part of learning process (learning organization) by accommodating perspectives and input, as well as opening wider communication and collaboration spaces. 5. METT implementation triggers better understanding of the conditions, management status, and goals of conservation area management. Sumatran Tiger Conservation Strategy and Action Plan At last, Sumatran Tiger Conservation Strategy and Action Plan (SRAK) has been completed until the final draft. Project supported SRAK public consultations to integrate multi sector	2020: 81% (100% achieved - increased by 17% from the baseline) EOP target: 77% Regardless the quantitative METT score figure to date, the METT evaluation report underlined that the process of METT assessment has succeeded in increasing the understanding of managers and stakeholders about the area under their management or territory. As highlighted in many project reports, this also triggers the process of 'breaking the wall' which has long separated PA managers and other stakeholders. Hence, communication, trust and mutual understanding has been nurtured since then to allow for more effective PA management (Evidence 10 - METT Analysis). Below is the site-specific discussions: 1. Gunung Leuser National Park METT assessment has not been conducted during 2020-2021 in this national park. Instead, the activity has been focused on on the socialization and completion of the Long Term Management Plan (RPJP) document and the construction of the Conservation Data and Information Unit (UDIK). The METT assessment will be carried out in July 2021 and will be reported in the Project Final Report. Previously, the process of assessing the effectiveness of the management of Gunung Leuser National Park (METT) was carried out on October 30-31 2019. The assessment process was carried out by dividing participants into three groups based on the area of their Management

development policies and priorities in the finalization of SRAK.

Biodiversity conservation, specifically Sumatran tiger conservation has also become one of the important elements in 2019-2020 RPJMN developed by BAPPENAS. Bappenas is also closely working with project in developing sustainable financing component.

Rationalization of forest landscape by updating inventory of Indonesia's biodiversity is becoming one of Indonesia's top development priorities in the next 5 years.

The goal is to protect and conserve biodiversity inside and outside forest landscapes or conservation areas for the next generations. (Evidence 23 - Bappenas Presentation at SRAK).

Another sector that is also closely related with development of SRAK is infrastructure sector. Starting in 2014, the government had actively promoted infrastructure development and connectivity in the Sumatra regions as the island is one of government targets for infrastructure development through construction of trans-Sumatran toll road that will connect Aceh and Lampung Provinces.

Considering of the impacts of these activities in conservation, Ministry of PUPR was deliberately invited to join SRAK discussion to integrate their respective infrastructure development objectives in SRAK (Evidence 24 - PUPR Presentation at SRAK).

As a result project found some positive evidences in Sumatra infrastructure development plan. The most prominent evidence at this time was the initiative by PUPR to add elephants crossings in toll

Sector, after which the results of each group discussion were discussed together to agree on the overall value GLNP area.

From the results of the assessment, the total METT score increased from 67 to 72 with the percentage of METT scores still remaining at 71%. If you look at the results of the assessment, TNGL has consistently for the last five years not prepared a Short Term Management Plan (RPJPn) as a derivative of the Long Term Management Plan (RPJP). The RPJPn should also be prepared as part of the evaluation of the level of output that has been carried out within a one year period.

The effectiveness of GLNP area management can be assessed as increasing if we look at the increase in the METT value of GLNP in 2017 and 2019 compared to 2015, namely 70, 71, and 2015 respectively. However, when compared to the project target, the achievement of the METT score in 2019 has not yet reached the value of 76 as the project target in 2020 (Evidence 11 - WCS METT Report for PIR 2021).

2. Kerinci Seblat National Park

Kerinci Seblat National Park is the only landscape to carry out a METT assessment in 2021. The result from 2021 assessment of six criteria assessed, the context and outcome criteria consistently received the highest scores, namely 100% and 78% respectively in the four assessment processes that have been carried out (2017-2021). The planning and process criteria gradually increased from the 2017 to 2021 assessments, although these two criteria had decreased in the

				construction in Riau region. This is also part of Indonesia's commitments in managing The Rainforest Heritage of Sumatra (TRHS). Special policy is developed by PUPR in Sumatran toll road construction related to TRHS (Evidence 24 - PUPR Presentation at SRAK). However, Covid-19 pandemic has postponed discussions at the Ministry of Environment and Forestry to formally legalize the SRAK up until now.	2018 assessment (planning) and the process criteria decreased in 2019, but overall they increased from 52% and 55% respectively in 2017 then to 67% and 74% in 2021 (Evidence 14 - METT TNKS 2021). 3. Berbak Sembilang National Park The METT assessment for the Berbak region resulted in a score of 78% in the 2020 assessment - the same as the previous period's score - but already exceeded the project's final METT score target of 75%. Meanwhile, the METT assessment results for Sembilang reached 75% in 2020 or decreased by 1 percentage point compared to the previous period in 2019 (76%) but had reached the end of the project period of 75%. A number of recommendations emerged in this METT assessment. Coordination, communication, cooperation, intensification, prioritization, capacity building and education are the main elements in increasing management effectiveness. Each landscape has its own challenges and these have been well identified through the METT assessment process (Evidence 12 - METT TN Sembilang 2020 and Evidence 13 - METT TN Berbak 2020). 4. Bukit Barisan Selatan National Park The METT 2020 scoring score is 81%, an increase compared to the 2019 score, 77%. Previously, an assessment of the effectiveness of the management of the Bukit Barisan Selatan National Park was carried out on 11-13 November 2019. From the results of the assessment, the total METT score in 2019 was 83,

| | | | | | however, the results of the verification carried out by the Directorate of Conservation Areas on the results of the METT assessment of 346 conservation areas in Indonesia corrected the final result of the METT 2019 BBSNP assessment to 77.

The results were determined through the Decree of the Director General of Natural Resources and Ecosystem Conservation no SK.111/KSDAE/KK/KSA.1/5/2020 on 11 May 2020 concerning the Determination of Effectiveness Values for Management of Nature Reserves, Nature Conservation Areas, and Hunting Parks. year 2019.

Synchronization of planning with the involvement of stakeholders is seen as an important added value in the aspects of planning and implementation, as well as further involvement of the UPT itself in planning at the district level which is regionally a buffer zone in the management of national park areas.

There are 4 regencies that surround the TNBBS area, namely Tanggamus, West Coast, West Lampung, and Kaur. In terms of context, BBSNP has a perfect score (100%) with legal status being its strength.

The planning section has a fairly high score of 90% with the stronger availability of management policies related to zoning. This progress is part of the regional regulatory indicators.

Management aspects related to management planning are also getting stronger. BBSNP has defined and set measurable targets from its plans. Thus the purpose of the area becomes clearer. |
| --- | --- | --- | --- | --- | --- |

					The preparation of the short-term management plan (RPJPn) is also a lever to increase the value of the management plan indicators. Externally, according to the views of the parties, land and water use planning is also increasingly supporting the existence of BBSNP. Meanwhile, one thing that is of concern and gives a low score for BBSNP is indicator number 5, where the shape of the area is inadequate as a habitat for large mammals that have a wide home range, for example 12 Sumatran elephants which from 2017 to 2019 have a higher home range (Evidence 11 - WCS METT Report for PIR 2021).

The progress of the objective/outcome can be described as:	**On track**
Evidence uploaded:	**YES**

Outcome 2
Intersectoral coordination systems are developed for priority landscapes

Description of Indicator	Baseline Level	Midterm target level	End of project target level	Level at 30 June 2020	Cumulative progress since project start
2.1. Number of Wildlife Crime Cases Submitted for Prosecution Number of wildlife crime cases submitted for prosecution from operations conducted at island level as a result of intersectoral collaboration increases by >25%	Landscape | Number of cases submitted Baseline (2013) Gunung Leuser | 3 Kerinci Seblat | 3 Bukit Barisan Selatan NP | 1 Berbak-Sembilang | 0 Kampar | 0	*(not set or not applicable)*	Annual number of cases submitted Target Score (PY5) = 9 Number of wildlife crime cases submitted for prosecution from operations conducted at island level as a result of intersectoral collaboration increases by >25%	Number of Wildlife Crime Cases Submitted for Prosecution National Park | Baseline | 2017 | 2018 | 2019 | 2020 Gunung Leuser | 3 | 1 | 5 | 7 | 7 Kerinci Seblat | 3 | 9 | 14 | 3 | 1 Berbak-Sembilang | 0 | 2 | 4 | 3 |2 Bukit Barisan Selatan NP | 1 | 2 | 2 | 2 | 3 Based on the data analysis since project implementation, Sumatran Tiger Project had achieved end of project's target for this	Progess towards the end project target level at 100% in all targeted sites. The indicator progress for intersectoral collaboration has been fully achieved in this reporting period (exceeding the EOP Target). The total number of wildlife crime cases submitted for Prosecution (island-wide total) in 2021 is 22 cases submitted. This is more than two fold of the number set as the EOP target (9 cases). (see evidence/explanation in the subsequent paragraphs below). 1. Gunung Leuser National Park

				output. Annual number of cases submitted for prosecution in this reporting period is 13 cases passing EOP target of 9 cases/year. Detail progress for each landscape could be found below. Gunung Leuser National Park In this landscape, project had submitted 42 cases between May 2017 and June 2020 or in average 14 cases annually for prosecutions. Project had also developed informant network supported by 47 people and 17 other information sources in Java Island due to the nature of interconnected illegal wildlife trade to other regions. Sumatran Tiger Project verified data from these information networks and then submitted the information to the authorities, where 90% of the information submitted was processed by law enforcement officials. Sumatran Tiger Project also continued to map illegal Sumatran tiger trade network and conduct further analysis using i2 software (Evidence 1 - WCS PIR Report 2020 page 122). From the mapping, the project found 301 illegal tiger trading entities (an increase of almost 50% from previous year) that spread across 15 provinces in Indonesia. The project also found actors of international tiger trade syndicates (from China, Hong Kong and Malaysia). These illegal tiger trade syndicates directly communicate with local networks in Indonesia. They - international syndicates - have certain preferences for tiger commodities, as i.e. they only accept tiger fangs with sizes above 8 cm	2013 : 3 (baseline) 2017 : 1 2018 : 5 2019 : 7 2020 : 7 2021 : 2 2. Kerinci Seblat National Park 2013 : 3 (baseline) 2017 : 9 2018 : 14 2019 : 3 2020 : 1 2021 : 14 3. Berbak Sembilang National Park 2013 : 0 (baseline) 2017 : 2 2018 : 4 2019 : 3 2020 : 2 4. Bukit Barisan Selatan National Park 2013 : 1 (baseline) 2017 : 2 2018 : 2 2019 : 2 2020 : 3 2021 : 6 Evidence: ... In all targeted landscapes, facilitated by NGO partner, project has been able to develop and operationalize partnership in effort to combat illegal wildlife trade (IWT). This partnership comprises various law-enforcement agencies at local level, such as the provincial police authority (POLDA), judge, attorney, etc. In addition to the formal partnership with these institutions, project has developed a more 'informal' informant network at local level,

(an average of 9 cm) and tiger bones. Of the 301 perpetrators, 236 have been arrested by law enforcement officials. 129 people have received criminal sanctions (54%), 35 people have been given administrative sanctions (confiscation of animals), 21 have been named as witnesses in courts, five have been on people's Most Wanted List (DPO), and the cases against two people have been terminated as the perpetrators die.

Kerinci Seblat National Park

During this reporting period, local informant network collected 105 investigative information for follow-up actions based on criteria or status of the information.

There are 2 cases that have been revealed, namely illegal trade of Sumatran tiger and 1 case of forest encroachment (Evidence 2 - FFI PIR Report 2020 page 37).

One case of illegal tiger trade with 2 suspects has been sentenced to 1 year 10 months imprisonment plus a fine of Rp50,000,000 subsidiary 3 months and 2 year imprisonment sentence plus Rp50,000,000 fine subsidiary of 3 months. Another tiger trading case is still on trial process.One encroachment case received a high sentence of 3 years in prison and a fine of Rp500,000,000 plus 1 month subsidiary.

Berbak Sembilang National Park

Between July 2019 and May 2020 there were 9 (nine) new information that had been collected and acted upon. From these information, 3 (three) information lead to law enforcement process by police, in collaboration with BKSDA and Directorate General of PHLHK. However, only 2 (two)

established and operationalized provincial and inter-landscape network in combatting IWT. Trainings have been provided to increase the capacity and awareness of the law enforcement agencies and community's informant towards wildlife crime issues. Altogether, with enhanced and more effective coordination formally and informally, all these project interventions since 2016 have resulted in the increased number of wildlife cases submitted for prosecution in all project sites – which in total has exceeded the EOP target for this output.

In addition to increased number of prosecuted cases (which has helped to create a deterrent effect), project has been able to support the release of animals rescued from IWT activities back to their natural habitat, in several locations. Another important contribution of the project is the internalization of the standardized modules used for training in handling wildlife crimes. Additionally, project has successfully supported the tracing of the IWT international syndicates through international network. As a result, project has been able to identify more specific information on the 'demand' side of the IWT to inform a more effective strategy and decision making on this topic.

Below is a more detail site-specific progress.

1. Gunung Leuser National Park

During this reporting period (July 2020 - June 2021), WCS-IP provided technical support to BBTNGL, BKSDA Aceh, Gakkum, and the Aceh and North Sumatra police through the delivery of information

			cases successfully brought to court, while 1 (one) other case had yet being processed as the perpetrators are still at large (Evidence 4 - ZSL PIR Report 2020 page 31-32). Until May 2020, Sumatran Tiger Project also still managed 4 (four) community informant networks located in Tanjung Jabung Timur, Jambi City, Muaro Jambi Regency and Musi Banyuasin Regency in South Sumatra Province. These informant networks were trained by Sumatran Tiger Project regarding: 1. Laws and regulations related to wildlife crime, 2. Methods of gathering information and evidence at the field, 3. Covert methods and covert investigations. These informant networks are mobile networks and could respond to information related to wildlife. Information is usually obtained on the outskirts of villages, especially from traders or from people who conducted activities at fields. However, there are 12 villages adjacent to Berbak and Sembilang National Parks, which have becoming priority targets for investigation by informant networks. At present, the teams work in Muaro Jambi and Tanjung Jabung Timur on the Berbak side and Musi Banyuasin Regency on the Sembilang side. Returning animal evidence to its habitat Sumatran Tiger Project and Jambi BKSDA worked together handling illegal wildlife trade that lead to seizure of 450 bridal honey birds (Leptocoma sperata) in January 8, 2020. The project encouraged BKSDA to release the birds into their natural habitat on January 12, 2020 in East Coast Mangrove Forest	related to the circulation of protected animals and illegal logging through expertise support, assistance to law enforcement agencies. legal expertise, and online collection of information. The frequency of collecting information in the field has been reduced due to the establishment of large-scale regional restrictions and the implementation of health protocols in an effort to prevent the transmission of COVID-19. However, this condition does not become a major obstacle in communicating with the government and trying to continue to provide support as requested. During this period the team recorded 24 accounts on social media that offered Sumatran tiger body parts. The number of units listed is calculated from the maximum number of commodity units offered by each account in the April 2020 – February 2021 period to prevent repeated calculations of the same commodity. In addition, we also recorded sales of calling and smoking pipes which allegedly came from elephant tusks (14 units), one baby leopard, eight kuwuk cats, four Sumatran rhino teeth and one pangolin. During this period, law enforcement officers conducted four arrest operations related to the illegal circulation of protected TSL and an investigation related to one tiger conflict case. The total sentence in the reporting period was 287 months (24 years) in prison and a fine of 2,425,000,000 rupiah (2.4 billion rupiah). The TSL cases came from the provinces of Aceh and North Sumatra.

Reserve, Tanjung Jabung Timur Regency, Jambi Province.

Sumatran Tiger Project and Jambi BKSDA also released 1,217 birds of various species on April 6, 2020 after these birds were confiscated the day before. These birds were released in Sungai Buluh Peat Protection Forest, Tanjung Jabung Barat Regency, Jambi Province (Evidence 4 - ZSL PIR Report 2020 page 32).

Bukit Barisan Selatan National Park

In this reporting period (June 2019 - March 2020) Sumatran Tiger Project has brought 7 out of 10 illegal wildlife trade (IWT) cases (70%) to court in GLNP and BBS NP landscapes.

11 of 22 perpetrators (50% of the total suspects) have been prosecuted and convicted. The total sentences given to perpetrators in this period was reaching Rp100,000,000 with a 119-month prison sentences.

In July 2019, Sumatran Tiger Project and ILEU YABI in the BBSNP Rapid Reaction Team supported collaboration between Gakkum Region III Palembang and Lampung Regional Police in handling the elephant ivory trade case.

Sumatran Tiger Project supported law enforcement officials by providing information that led to the arrest of three suspected perpetrators.

Sumatran Tiger Project also supported case monitoring in Tanjung Karang District Court for three months. Two perpetrators were convicted in court and sentenced to 12

More detail information on this can be found in Evidence 15 - WCS Wildlife Cases Report for PIR 2021.

2. Kerinci Seblat National Park (KSNP).

Below are several update of situation in KSNP in this reporting period. More detail information can be found in Evidence 4 - FFI Report for PIR 2021.

- A total of 17 warning letters were given to the encroachers by the team while on patrol between July-October 2020.

- The joint team consisting of KSNP personnel, West Sumatra Natural Resources Conservation Center (BKSDA) and West Pasaman Police and TPCU arrested three perpetrators related to the illegal trade of 22 kg pangolins in West Pasaman, West Sumatra on July 30, 2020 (case in the trial process at the West Pasaman District Court). The final verdict against each of the defendants is imprisonment for 4 months and a fine of Rp 5.000.000 (five million rupiah) subsidiary to 1 month imprisonment.

- There were 3 (three) prosecutors who were active in handling cases of crimes against wildlife after the Training on Handling Protected Animal Crimes for Public Prosecutors in Bengkulu Province on March 26, 2019. A total of 6 cases were handled.

- There are 48 records of investigation results and information collection recorded by Tiger Protection Conservation Unit (TPCU) personnel related to forestry crimes including poaching, wildlife trafficking and area encroachment during

months in prison & Rp10,000,000 fine, while 1 other perpetrator was still in investigation process (Evidence 1 - WCS PIR Report 2020 page 115).

From the beginning of the project in 2017 until 2020, Sumatran Tiger Project had built information networks that operate in BBS NP landscape supported by 42 people.

Law Enforcement Training

In this reporting period Sumatran Tiger Project also supported Integrated Training of Law Enforcement Officials in Handling Wildlife Crimes. These training sessions will contribute to recommendations related to "Technical Basic Law Enforcement" aspects.

Project facilitated at least 4 capacity building activities for Law Enforcement in Dealing with Wildlife Crimes in GLNP and BBSNP. The project has also been supporting development of training modules for Law Enforcement Officials since 2018. Sumatran Tiger Project is in the process of developing three modules/guidelines to help deal with protected wildlife crime cases. The first module, the closed investigation module is now almost completed. Sumatran Tiger Project has also discussed with training department in MoEF for adoption of investigation module. Other two modules/guidelines related to operation of i2 software and digital forensics are currently in finalization process (Evidence 1 - WCS PIR Report 2020 page 19-20).

the reported period. The majority of cases are hunting and trafficking of pangolins and tigers.

3. Berbak-Sembilang National Park

In April 2021, project carried out the socialization of Wildlife Hunting in Pancuran Hamlet, Muara Merang Village.

This activity aims to increase and refresh public awareness about the legal risks and ecological impacts of wildlife hunting.

The targeted village for this activity was strategically selected, as this was identified as one of targeted spot for hunting of wild animals, particularly the Sumatran Tiger. The village is located in the surrounding of Benuh Ulu Resort, Section III, of the National Park.

This activity resulted in the signing of a memorandum of understanding between Berbak Sembilang National Park authority and the Pancuran hamlet community regarding the protection of wild animals in the TNBS area (Evidence 16 - PIU TNBS Q1 Report 2021).

4. Bukit Barisan Selatan National Park

During this reporting period, the project supported the Government of Indonesia (BBS National Park Police ,BBS Rapid Response Team, Law Enforcement Agency of MoEF in Sumatra, Bengkulu - SKW III Lampung, West Lampung Police, Bakauheni KSKP, and Bakauheni Harbor Agricultural Quarantine Center) in efforts to prevent and handle smuggling/ illegal circulation of TSL and forestry crimes in

					which the Government arrested six suspected perpetrators in four TSL cases. The details is provided in Evidence 15 - WCS Wildlife Cases Report for PIR 2021. Additionally, project partners and the Jakarta Animal Aid Network (JAAN) supports the Bakauheni KSKP, quarantine, and Lampung police in eight port patrol activities at Bakauheni port. Of the 15 smuggling cases, the patrol team at the port found 483 protected birds and 16,921 unprotected birds smuggled via public buses. In addition to providing assistance in the patrol process, WCS as project partner for BBS National Park also supports the identification of birds and their release into the wild. . The legal assistance and expertise provided to the government during this period has resulted in convictions for perpetrators of illegal trafficking of protected animals and perpetrators of illegal logging. A maximum sentence of 21 months in prison and a fine of IDR 500,000,000 has been set for the two perpetrators who carried out illegal logging. Meanwhile, two perpetrators of the illegal distribution of elephant ivory were sentenced to 9 months in prison and fined IDR 2,000,000.
2.2. Number of Agency Staff participating in Pilot Projects At least 25 staff of the Ministry of Forestry, Provincial/District level authorities and/or regional development planning authorities (e.g. Bappeda and	0 people involved	*(not set or not applicable)*	At least 25 staff of the Ministry of Forestry, Provincial/District level authorities and/or regional development	Sumatran Tiger Project has facilitated 128 staff of the Ministry of Environment and Forestry, Provincial/District level authorities and/or regional development planning authorities (e.g. Bappeda and Public Works) to participate in process of piloting five innovative forest/biodiversity projects.	Progess towards the end project target level at 100%. In this reporting period, the target for this indicator has been fully achieved. The total number of agency staff facilitated and participated in the innovative projects

Public Works) participate in the process of piloting five innovative forest/biodiversity projects.			planning authorities (e.g. Bappeda and Public Works) participate in the process of piloting five innovative forest/biodiversity projects.	The number comes from implementation of innovative forest and wildlife management in four project's landscapes namely in Gunung Leuser National Park, Kerinci Seblat National Park, Berbak Sembilang National Park and Bukit Barisan Selatan National Park. Self-Reliance HWC Mitigation Initiative (MDM) The first innovative forest and wildlife management could be found in Gunung Leuser National Park and Bukit Barisan National Park. Project initiated Self-Reliance HWC Mitigation Initiative to deal with human and wildlife conflicts. MDM is a structural approach so that the community is able to manage conflicts with wildlife at an early stage. The Self-Reliance HWC Mitigation Initiative is deemed to be more sustainable as the villages use their own resources (human and financial resources) and - after receiving training from Sumatran Tiger Project - could handle human and wildlife conflicts independently. This becomes innovative solution compares to other human wildlife conflict solutions for example by forming conflict mitigation teams in provincial and district level where the teams were highly dependent to short term financial and personnel supports from projects. Communities living in village are in front row of human and wildlife mitigation as they could become victims at the same time becoming solution to prevent human and animal casualties. In this case, by initiating Self-Reliance HWC Mitigation, it will have	in this reporting period (580 staff) has significantly surpassed the EOP Target (25 staff), and increased by more than four fold from the earlier reporting period (128 staff). In this reporting period 580 staffs of the Ministry of Environment and Forestry, Provincial/District level authorities and/or regional development planning authorities (e.g. Bappeda and Public Works) has participated in process of piloting five innovative forest/biodiversity projects, in the four targeted landscapes. Under Output 2.2, project has been able to deliver some Innovative forest and wildlife management interventions in target landscapes as planned within the Project Document. Further, this innovation has been well documented into several knowledge products, socialized and reviewed for replication and upscaling. Encouragingly, some of the innovations have actually been replicated and strongly endorsed by the respective provincial authority. For example, the Self-Reliance Human Wildlife Conflict (HWC) Mitigation Initiative (Masyarakat Desa Mandiri/MDM) initiated in Gunung Leuser and Bukit Barisan Selatan National Park. This initiative is considered to be more sustainable as the villages use their own resources (human and financial resources) to handle human and wildlife conflicts independently from the early stage, in which the skills are obtained from various training supported by the Sumatran Tiger Project. Some of the model villages have been able to help and transfer their skills to their neighboring villages. Not only the trained communities have helped conflict handlings in the

significant impacts on conservation of biodiversity in project's landscapes. This Self-Reliance HWC Mitigation Initiative aimed at becoming part of project's exit strategies and long term solution to human and wildlife conflicts.

The MDM was built with seven criteria, namely:
(1) complete village data and information,
(2) community group capacity,
(3) group institutions,
(4) rules or group SoPs,
(5) integration of village planning,
(6) resource mobilization, and
(7) ability to share.

The MDM initiative started in mid-2015 in conjunction with the implementation of the duties and functions of the WRU team. These interventions empowered communities to independently handle HWCs based on evidence-based mitigation protocols developed by the project. A total of 69 staff from MoEF, local governments participated in this initiative (Evidence 1 - WCS PIR Report 2020 page 131).

The initiative received positive feedback from provincial government in Lampung where the government is trying to replicate this innovative solution to other villages that have experienced human and wildlife conflicts. The plan is being discussed in provincial level and aimed at using village funding that is part of current Indonesian government policies. Sumatran Tiger Project also facilitated MDM Workshop that produced Margomulyo Declaration signed in November 25, 2019 that unites 16 village in Province of Lampung, Bengkulu and Aceh in one human and wildlife mitigation network of Sumatra (Evidence 25 - MDM Booklet).

adjacent villages, but also, they have inspired them to initiate the MDM model. Margomulyo village in Lampung Province has even inspired the provincial authority to make commitment in replicating the MDM model to five other HWC-prone villages in Lampung, under collaboration and coordination with BBS National Park Authority and other adjacent National Park Authorities. To support the operationalization of the planned MDM, village funding which is part of the prevailing government policies will be utilized.

The MDM model is considered to be an innovative solution which can complement effort from other human wildlife conflict mitigations effort. It offers more sustainability advantages due to its more 'independent and self-sufficient' nature, as compared for example the conflict mitigation teams in provincial and district level, where the operationalization of the teams is highly dependent on financial and personnel supports either from project or other government or NGO's resources.

In order to build and manage the resulting knowledge and lessons learned to further inspire replication and upscaling, the process has been well documented into several knowledge products.

Below is further site-specific information:

1. Bukit Barisan Selatan (BBS) and Gunung Leuser (GL) National Park

The project in this reporting period continues to provide assistance to villages involved in the Independent Village Community (MDM) program in two

Soundscape Biodiversity Monitoring

Another innovative intervention was introduced in Kerinci Seblat National Park. Sumatran Tiger Project monitored biodiversity using sound meter as part of road access mitigation in national park area. This also becoming the platform to develop Smart Green Infrastructure as road access is one of important issues in Indonesian government's responses to remove Kerinci Seblat National Park and Gunung Leuser National Park from the List of World Heritage in Danger or DSOCR.

Sumatran Tiger Project supported Smart Green Infrastructure workshop in TNKS landscape in July 2019 in Jambi. 38 participants from national parks, local and central governments attended the event.

Smart Green Infrastructure data was retrieved using a sound meter between December 5-23 2019 on national road linking Sungai Penuh and Tapan cities, Pesisir Selatan Regency, West Sumatra Province. This activity was the second activity after the first activity carried out on September 8-13, 2018, by installing sound devices to monitor the effects of the road and traffics to the existing biodiversity(for example bird and vegetation) in the area (Evidence 27 - FFI SGI Report).

The result of this monitoring effort was used in Indonesian government's response to DSOCR 2020 (Evidence 20 - DSOCR State of Conservation page 13) as the monitoring result meets IUCN monitoring criteria as used in the assessment of WHS in Lorentz NP.

Village Forest Development in Kerinci Seblat Landscape

landscapes, namely Gunung Leuser National Park and Bukit Barisan Selatan National Park.

This mentoring process also involves UPT staff and local governments in the development and strengthening of MDM villages. The UPTs that are closely involved are the Aceh BKSDA and Gunung Leuser National Park Center in Aceh and North Sumatra Provinces, as well as the Bukit Barisan Selatan National Park and Bengkulu BKSDA Centers, as well as Way National Park Centers in Bengkulu and Lampung Provinces.

As many as 26 Aceh BKSDA staff, 9 BBTNGL staff, 2 North Sumatra BBKSDA staff, 11 BBTNBBS staff, 6 Bengkulu BKSDA staff and 13 provincial and district government staff in Lampung and Bengkulu played a role in the MDM mentoring process.

The project is also developing the Bukit Barisan Selatan Sustainable Commodity Partnership (BBS KEKAL) which is an innovative partnership to protect the forests of the Bukit Barisan Selatan National Park (TNBBS) and supports the BBSNP Agency to address the rate of land cover change and support farmers' livelihoods across the Bukit Barisan Selatan landscape .

KEKAL BBS involves stakeholders including local and national governments, coffee companies, communities, non-governmental organizations, and the BBSNP Center facilitated by the Sumatran Tiger Project.

BBS KEKAL seeks to increase the productivity, profitability and resilience of

				Village forest development has been carried out in recent years around the Kerinci Seblat National Park. This initiative is part of a social forestry scheme that strengthens cultural aspects in forest management, and is linked to carbon environmental services as part of community incentives. This scheme was carried out several years ago by FFI around the Kerinci Seblat National Park area. In 2019, this initiative will continue to expand the villages that are assisted and proposed to obtain legality in social forestry. An additional 11 village forests in 2019 are proposed with a total area of 16,124 ha. Good management of the village forest will be a fortress for the protection of the national park area that borders the village forest (Evidence 26 - FFI Presentation Village Forest page 39). Field School for Farmers This pilot project was developed based on a Threat and Social Impact Assessment conducted by ZSL in 2017 in Berbak Sembilang Landscape. Pematang Raman Village is one of the villages with a high risk of forest destruction and deforestation resulting from illegal logging, forest encroachment for agricultural land and also poaching. This has a major impact on the survival of the Sumatran tiger population and other protected wildlife. By implementing this initiative, project expects there will be a reducing forest degradation and deforestation rate in Berbak Sembilang Landscape (BSL) through more sustainable and environmentally-friendly means of livelihood is critically needed (Evidence 28 - ZSL Deliverable Report 7) Based on further discussions with farmer groups in the area, there are 2 main problems	coffee cultivation while reducing the pressure on forest cover change facing the Bukit Barisan Selatan National Park by supporting farmers to switch to producing deforestation-free coffee in priority locations around BBSNP boundaries. KEKAL BBS facilitated 8 pilot villages covering 4 villages in West Lampung Regency (SKB II Ujung Rembun, Pancur Mas, Suka Banjar and Tawan Suka Mulya) and 4 villages in Pesisir Barat Regency (Rata Agung, Penengahan, Lemong and Pemancar). Until the end of 2020, BBS KEKAL has trained farmers in these 8 villages through Good Agricultural Practices (GAP) for deforestation-free coffee production and strengthening farmer groups. As of December 2020, BBS KEKAL has provided training for a total of 417 farmers with details, 215 farmers in the pilot village around the Pugung Tampak resort and 202 farmers in the pilot village around the Lumbok resort. Since 2017, the Sumatran Tiger Project has also facilitated the holding of Round Table Discussions on sustainable coffee in the BBS landscape. The roundtable discussions served as a platform for stakeholders to formulate and implement various strategies and activities to address coffee cultivation-driven deforestation in the Bukit Barisan Selatan National Park (TNBBS) and support improving the livelihoods of farmers in the landscape (Evidence 17 - WCS Pilot Project Report for PIR 2021). 2. Kerinci Seblat National Park

| | | | | in cocoa farming in Pematang Raman, namely productivity and access to markets.

Project developed "sekolah lapang" or field school method by creating a comfortable learning environment, to increase farmers' capacity and knowledge in cocoa cultivation. Farmers will also use their new knowledge to choose a better location for their cacao seedlings.

The project supported farmer groups to set up production houses consisting of processing units (fermentation tanks), drying houses / green houses and warehouses. Construction of production house completed in December 2018. Six farmers from Sumber Rezeki Farmers Group were appointed to manage the production house and coordinate the sale of cocoa beans in the market.

This pilot agroforestry project has proven to be successful in achieving its intended goal – i.e. introducing innovative but simple eco-friendly cultivation techniques to improve local farmers' production without further compromising forest land or forest resources in the surrounding areas.

Looking at the results of the pilot project, the BAPPEDA representative stated the government's commitment to: (i) Develop cacao development program with Muaro Jambi as the center of Jambi's cacao production; and (ii) Allocate fund to replicate similar sustainable livelihood models in other villages.

The farmers involved in this agroforestry project also received Sumatran tiger conservation education to increase public awareness to participate in efforts to conserve Sumatran tigers in the Berbak Sembilang | Project facilitated monitoring training for officers in the Jambi Region I National Park Management Division was held on March 16, 2020 at the PTN I Jambi Sector Office in Bangko with a total of 25 participants, consisting of 24 men and 1 woman. Apart from being a medium for capacity building for field officers, this activity also aims to formulate an initial plan for a series of tiger population monitoring survey activities such as inventory and equipment preparation, officers to be involved, implementation time, specific location and division of tasks and implementers in carrying out the installation and dismantle of camera trap.

Training on crime scene management and strengthening law capacity and competency of the investigators on forest and wildlife crimes had been conducted on 26-27 October 2020 in Sungai Penuh – Kerinci, Jambi Province. This training was attended by 28 participants (all males) consisted of forest police and PPNS from KNSP National Park, SKW I BKSDA Jambi, KPHP Kerinci as well as representatives from community rangers from PHSKS and MHSKS. This training was divided into classroom and practical sessions.

The practical or simulation session was carried out around Sungai Penuh Resort Office-KSNP at Bukit Tapan area. All participants were assisted and guided step by step by the trainers on how to manage the crime scene with various types of forest crimes which in accordance with the applicable procedures. |

landscape. As part of the project indicator, there are 1 staff from the Berbak Sembilang National Park Office and 1 person from BAPPEDA, Muaro Jambi Regency were involved in this activity Evidence 4 - ZSL PIR Report 2020 page 37).

Bukit Barisan Selatan Sustainable Commodity Partnership BBS KEKAL

BBS KEKAL as landscape level partnership is intended to address deforestation caused by coffee cultivation activities by increasing the livelihoods of coffee farmers in BBS landscape on land outside the national park area. The program was developed through the collaboration of various stakeholders who understand that only through active collaboration to support farmers in vulnerable locations around forest borders can we find viable and sustainable solutions to tackle deforestation.

By mid-2019, Sumatran Tiger Project had selected eight BBS KEKAL pilot villages. Four villages around the Pugung Tampak Resort (Desa Rata Agung, Penengah, Lemong and Transmitters in Pesisir Barat Regency) and four villages in the Lumbok Resort (SKB II Ujung Rembun Village, Pancur Mas, Suka Banjar, Tawan Suka Mulya in West Lampung Regency). The selection of pilot villages was based on consideration of historical deforestation rates due to coffee cultivation high enough to threaten the integrity of BBSNP, as well as high community dependence on coffee as their main source of income. There are 19 staff from BBSNP and local governments involved in this innovative project (Evidence 1 - WCS PIR Report 2020 page 145-146).

More detail information is provided in Evidence 4 - FFI Report for PIR 2021.

3. Berbak Sembilang National Park

Following up other project's initiatives that had been reported in the previous PIR, in this reporting period the Sumatran Tiger Project facilitated the establishment of Independent Fire Mitigation Village in Berbak Sembilang National Park. The first initiative in Rantau Rasau Village has successfully produced village regulation cementing the initiative (Evidence 18 - Village DMK Regulation - Rantau Rasau)

The second intiative to form Independent Fire Mitigation Village was conducted in Sungai Cemara from 22-26 March 2021. This activity not only aimed at preventing, reducing the potential for forest and land fires in the TNBS area and its surroundings but also increasing community participation in fire-prone areas/villages around the TNBS area in independently mitigating fire disasters.

The location of this activity is in Sungai Cemara Village, Kab. East Tanjung Jabung. The village is a buffer village for the Air Hitam Laut Region III Section.

The activity was attended by 43 participants including TNBS Hall Staff, members of the Saddu Police, Koramil 419-04 Nipah Panjang, Dalkarhut Brigade TNBS, Village Apparatus and Community Leaders and the Sungai Cemara village community

The results of the activities include; the formation of the Fire Care Community group in Sungai Cemara Village and its

				BBS KEKAL facilitates farmer groups (Kelompok Tani/KT) in pilot villages, provided that the KT has demonstrated an initial commitment to actively join the BBS KEKAL program, including an agreement that KT members will seek to implement good coffee cultivation practices to increase their coffee production sustainably and farmers will not open new land or trade the land that has been opened in BBSNP. KEKAL BBS also strengthens institutional capacity and facilitates the formation of KTs in villages that do not yet have a KT, including facilitating the KT registration process at the Agricultural Extension Office at the district level. Currently BBS KEKAL is facilitating 35 farmer groups consisting of 17 KT in Lumbok Resort and 18 KT in Pugung Tampak Resort (Evidence 29 - BBS Newsletter - KEKAL).	management as outlined in the minutes of formation (Evidence 16 - PIU TNBS Q1 Report 2021).
2.3. Tiger, Prey and Forest Habitat Monitoring System Standardised tiger, prey and forest habitat monitoring system developed and operationalized for 5 target protected areas and their surrounding landscapes.	0 systems in place	*(not set or not applicable)*	Standardised tiger, prey and forest habitat monitoring system developed and operationalized for 5 target protected areas and their surrounding landscapes.	The standard monitoring system developed by Sumatran Tiger Project in each landscape is generally divided into 2 large groups: 1. Standard monitoring system using camera traps where the outputs are: a. Tiger density data Sumatran Tiger Project performs Tiger density monitoring process - in average - every 2 years in each landscape. Number of monitoring site depends on landscape condition in each landscape, for example in Gunung Leuser National Park and Kerinci Seblat National Park, of each has two (2) monitoring sites, while in Berbak Sembilang and Bukit Barisan Selatan National Park, of each has only one monitoring site. Kerinci Seblat National Park and Gunung Leuser National Park recieved funding from	Progess towards the end project target level at 100%. For this indicator, project has fully achieved the EOP target: standardized tiger, prey and forest habitat monitoring system has been developed and operationalized for the targeted landscapes and their surroundings. Therefore, under Output 2.3, project has made progress in terms of delivering "Management decision-making informed through wildlife and forest monitoring using a standardised scientific survey protocol". Project supported Ministry of Environment and Forestry (DG KSDAE) in providing standardised tiger, prey and forest habitat though Decree of DG KSDAE No P.11/KSDAE/Set/Kum.1/11/2017 in 2017.

				other donors/projects to fund activities in the other monitoring point. b. Individual Tiger Data Sumatran Tiger Project also uses camera trap monitoring system to identify individual tiger using camera trap photos obtained both during and before the project period. These photos were combined with other available photos found in national park information system obtained from other institutions/projects. The camera trap monitoring system also recorded distribution of other animals/prey animals used in line with the tiger density and other surveys. 2. Standard monitoring system for forest cover using satellite imagery analysis, that produces information of forest cover changes (deforestation and reforestation as informed in the Output 1.1) The results of camera trap monitoring activities for individual tigers and other animals could be found below: Gunung Leuser National Park Until June 2020, the results of camera trap analysis for all camera trap data between 2010 and 2020 are as follows: Total individual tigers identified during ± 10 years (2010-2020) monitoring in East Leuser, West Leuser, and other areas are 67 individuals (21 males; 29 females; 17 unknown). It is important to take notes that these 67 individual tigers are not the exact number of tigers in GLNP. They are the number of tigers that have been identified and entered into the ExtractCompare database. Kerinci Seblat National Park	Two monitoring standards have been set: 1) using camera trap to monitor tiger density and individual tiger population; and 2) using satellite imagery analysis to monitor forest cover and forest degradation. Output 2.3 therefore is key to informing outputs under Component 1 and the tiger density figure as the umbrella indicator for this project. In addition to that, project also assists the Indonesian government in conducting research activities with partners and students that are beneficial for the conservation of key animals in the land conservation area where the project works; and Under this indicator, below is some site-specific progress: 1. Gunung Leuser NP -- Camera-Trap Survey The Sumatran tiger survey and hornbill survey were carried out in the Langkat-Bendahara area within Gunung Leuser National Park area. Monitoring results managed to get 891 photos of Sumatran tigers with 28 independent photos. The identification results show that the species most recorded by trapping cameras in the order of the most frequently recorded are: deer (Muntiacus muntjac), ape (Macaca nemestrina), another type of deer (Rusa unicolor), pig (Sus scrofa), wild goat (Capricornis sumatraensis) and Sumatran tiger (Panthera tigris) - respectively.

A total of 4,797 camera trap days were captured from all active cameras in the field, with the average of each active camera being 55.1 days and the average distance between cameras was 2.5 km. A total of 17,498 photos were collected with 3,371 independent animal photos / events per 30 minutes. 46 species have been identified, including some potential prey of tiger listed in table 1. Relative abundance index values (RAI) are calculated to view abundance index of tiger and their prey (Jenks, et. Al, 2011) in this region.

The results from relative abundance index showed bearded pigs are the most abundance species recorded by the camera, more than half of all wildlife photos are come from this species. This is due to the migration of bearded pigs during the survey period.

Although physically not much different from ordinary wild boar, there are no specific records and information that says beard pigs are potential prey for Sumatran Tigers. However, the results from camera traps, showed that previously known potential prey are still mostly found around the KSNP core area. For example; muntjak deer, pig tailed macaque and wild boar have high relative abundance index. In addition, other potential prey such as deer, mouse-deer, Sumatran serow, and great argus are also well distributed around this area.

This indicates that in addition to still having good habitat, the availability of prey for the tiger population around the core area of KSNP are also relatively abundant.

If accumulated in total, 37 individual tigers have been successfully identified from five

The identification results detected 6 tigers, 3 males and 3 females. Of the 6 individuals detected, 3 individuals (2 females and 1 male) were recorded in the 2017-2018 survey and 3 were new individuals. The resulting analysis shows that no individual tigers recorded in this year's survey have ever been recorded at the Gunung Leuser National Park/tiger boundary interacting with humans.

Since 2016, WCS-IP has been assisting the BBTNGL management to tidy up camera trapping data from various activities. The data from this camera trap, sourced from various activities, provisional results are as follows:

The total number of individuals identified during more than 10 years (2010-2021) of monitoring in East Leuser, West Leuser, and other areas was 81 individuals.
Total individuals recorded by sex: 27 males; 37 females; 18 unknown (gender not identified)

Total individuals recorded by location:

- East Leuser : 33 individuals (12 males, 16 females, 5 unknowns)
- West Leuser : 40 individuals (14 males, 17 females, 9 unknowns)
- Other areas: 8 individuals (1 male, 4 female, 3 unknown)

2. Bukit Barisan Selatan (BBS) NP Camera Trap Survey

Until June 2020, the WCS-IP team as well as PEH and Polhut Balai Besar TNBBS conducted collaborative identification of photos from camera trapping surveys.

				different surveys since 2014. (Evidence No. - FFI Report Deliverable 6)
				
				Berbak Sembilang National Park
				
				Based on recapitulation data in Berbak and Sembilang National Park between 2008-2019 the project recorded 36 tiger individuals consist of 16 females, 19 males and 1 unknown (Evidence 4 - ZSL PIR Report 2020 page 4).
				
				Bukit Barisan Selatan National Park
				
				Up until May 2020, the results of tiger photo identifications recorded by camera trap survey between 2010 and 2018 are as follows:
				
				There are 425 tiger photos in the Extract Compare database. A total of 120 photos were not extracted as some of them were photos from the same event or blurry photos. These tiger pictures were collected from tens of thousand pictures in camera trap database (Evidence 1 - WCS PIR Report 2020 page 167)
				
				Based on the photo library, 106 individual tigers were identified (43 females, 16 males, 47 unknown sex). It should be noted that 106 individual tigers are not the number of tigers in BBSNP. They are the number of individual tigers recorded in BBSNP tiger photo database.
				
				Sumatran Tiger ATLAS (AUM)
				
				Sumatran Tiger Project in this reporting period had successfully completed comprehensive information about Sumatran tiger (Panthera tigris sumatrae) in a book entitled "AUM - The Atlas of Indonesian
					Identication result shows:
					
					  12 individual tigers based on the right side of the body:
					oAdult age class: 5 males, 7 females
					oAdolescent and infant age classes: none
					  13 individuals based on the left side of the body:
					oAdult age class: 5 males, 7 females, 1 unknown gender
					oAdolescent and infant age classes: none
					
					Eleven individuals can be identified on both sides of the body and consist of 4 males and 7 females. In this survey, three tiger individuals were found which were also detected in the 2015 survey at IPZ BBSNP, but no individuals were also found in the 2018 survey in North BBSNP.
					
					3. Kerinci Seblat National Park (KSNP)
					
					The KSNP core area covers about 828 Km2 has various habitat types from lowland forest, hill forest, and to the mountain forest. In 2020, tiger's population monitoring and data analysis were performed between June and September 2020. A pairs of camera trap will be installed in the core area in 98 camera stations/grid cells which sized of 3x3 km2 each.
					
					The MHSKS team had carried out a series of tiger occupancy surveys in the KSNP and its surrounding forests between February – July 2020, in 89 grid cells sized 17 x 17 Km each. Most of the grid cells were located inside the KSNP area, while the rest are non-conservation areas under the FMU management authority such as production forest and protected forest.

				Tigers". The need for comprehensive Sumatran tiger information, the Tiger Atlas, also mentioned in project document. The book does not only contain maps, but is added with various information from historical-cultural contexts; the current state of Sumatran tigers; their extinction threat; conservation efforts and other initiatives that have been developed to save the endangered sub-species. The historical and cultural section provide readers with an overview of the relationship between humans and tigers in different regions, and how humans placed tigers in their society's beliefs from time to time. The book also tells the extinction stories of Bali and Javan tigers that were presented as a message to reinforce the importance of preserving the only tiger sub-species in Indonesia. Several factors that have threatened survival of tigers were described in the book's sub-section. Starting from the story of land use changes in forest management, leading to habitat depletion; increasing illegal wildlife hunting and trafficking; and human-tiger conflict. All of those factors have a significant impacts on the decline in tiger populations in the wild. However, the book not only tells pessimistic points of view, it also illustrates the hard works by Indonesia in maintaining the presence of the king of the jungle in his place of life. Long and winding efforts by several institutions to save Sumatran tiger were briefly and concisely explained in this book. Starting from Leuser Conservation Forum	From 2,689 Km surveyed areas, the team have recorded a total of 5,230 findings that consist of 4,145 wildlife signs and 1,085 were threats to wildlife and its habitat. A total of 587 findings of wildlife signs consisted of tigers' pug marks, scats, scratches on the ground, and trees. These tiger signs were recorded from 76 out of 89 grid cells. The naïve occupancy from this survey was 0.85, calculated from the number of grid cells that have tiger signs divided by the total number of grid cells surveyed.

				(FKL); Saving and Conservation of Sumatran Tiger (PKHS); Wildlife Conservation Society (WCS); Fauna and Flora International (FFI); Zoological Society of London (ZSL); and WWF Indonesia Foundation. The books also presented technical initiatives to save Sumatran tigers, ranging from efforts to survey the overall occupancy in Sumatra namely Sumatran Wide Tiger Survey (SWTS); conservation efforts in concession areas; integration between village development and conservation initiatives; maintaining tiger health; mitigating human-wildlife conflicts; fighting and destroying wildlife threats (snares); measuring population density and Sumatran tiger ex-situ conservation efforts. All of these experiences were shared by experts or activists involved in Sumatran tiger conservation in Indonesia. They came from government institutions, universities, non-governmental organizations and private sectors. (Evidence 30 - AUM English Version).	
2.4. Human-Tiger Conflict Report Assessments / Responses >95% of human-tiger conflict reports are correctly assessed and/or responded in accordance with PHKA mitigation protocol P48, by Project Year 3.	Variable response rates amongst landscapes. Problem tiger reports are not systematically logged and tracked preventing the development of accurate baselines.	*(not set or not applicable)*	>95% of human-tiger conflict reports are correctly assessed and/or responded in accordance with PHKA mitigation protocol P48, by Project Year 3.	Protected area | No human-tiger conflict handled | other Human wildlife conflict handled Gunung Leuser | 55 | 73 Kerinci Seblat | 7 | 6 Berbak-Sembilang | 2 | 0 Bukit Barisan Selatan NP | 13 | 20 In this reporting period, project is confident that all human-tiger conflict incidents in all project landscapes and surrounding areas were responded properly to meet P.48	Progess towards the end project target level at 100%. In this reporting period, project is confident that all human-tiger conflict incidents in all project landscapes and surrounding areas were responded properly to meet P.48 protocol. Based on data reported from sites, all human and wildlife conflicts have been responded properly and therefore, project has achieved its end of project target for this indicator. (see evidence/explanation in the subsequent paragraphs below).

				protocol. From these data, all human and wildlife conflicts have been responded properly and the project has achieved its end of project target. Within last years there were increasing HTC incidents in tiger landscapes in Sumatra, resulting in several human and tiger victims. However, number of casualties in project landscape is limited due to proper human and wildlife conflict handling. Project has responsibilities to replicate the human and wildlife conflicts mitigation approaches to other landscapes to minimize negative impacts of human and tiger conflict in other landscapes. Below are specific human and wildlife conflict mitigation and adaptation activities implemented in each landscape: Gunung Leuser National Park Human and wildlife conflicts were responded based on reports from residents and the results of village patrols, especially in human and wildlife conflict-prone villages by promoting responsive and preventive attitudes. All (100%) of human and wildlife conflict reports in GLNP in this reporting period could be responded by Sumatran Tiger Project team. A recent publication entitled "Unraveling the complexity of human–tiger conflicts in the Leuser Ecosystem, Sumatra," published on March, 2020 in Animal Conservation Journal, by M.I. Lubis et all., mentioned, the Leuser Ecosystem is the largest contiguous forest habitat for the critically endangered Sumatran	Protected area | Number human-tiger conflict handled | Other Human wildlife conflict handled Gunung Leuser NP | 26 | 4 Kerinci Seblat NP | 7 | 0 Berbak-Sembilang NP | 1 | 0 Bukit Barisan Selatan NP | 6 | 43 Under Output 2.4, with project intervention it is expected that the Human-tiger conflicts will be effectively managed in the targeted landscapes. The activities under this output have very much followed the flow as set within the project document. It started with the review and socialization of the HTC mitigation protocol. As per 30 June 2018, human tiger conflict mitigation teams have been formed in all landscapes. Those team are responsible to manage human tiger conflict, as well as other wildlife conflicts in the respective landscape. Since then, the team has responded to various human wildlife conflicts which arisen in the respective landscape. The trend of the conflict is relatively decreasing/ stabilized in the three landscapes (Kerinci Seblat, Berbak Sembilang, Bukit Barisan Selatan). Meanwhile, in Gunung Leuser landscape the number of reported conflicts is relatively high. Recent study in 2020 by Lubis et al (Evidence .....) found that the extensive forest edge in Gunung Leuser landscape is abutted by farming communities and that spatial variation in human–tiger conflict (HTC) would be a function of habitat conversion, livestock abundance, and poaching of tiger and its wild prey. This shows the strong

tiger. Its extensive forest edge is abutted by farming communities and we predict that spatial variation in human–tiger conflict (HTC) would be a function of habitat conversion, livestock abundance, and poaching of tiger and its wild prey.In this report researchers investigated potential drivers of conflict, as well as other biophysical factors, best explain the observed patterns, researchers used resource selection function (RSF) technique to develop a predictive spatially explicit model of HTC.

Analysis from 148 conflict incidences recorded from 2008 to 2018 across the Leuser Ecosystem, the areas that were closer to villages and with lower occurrence of wild prey were most susceptible to tiger attacks. The team of researchers found from 18 districts monitored, 6 stood out for having disproportionately high levels of HTC.

Researchers recommend that these areas be prioritized with increased support from conflict mitiga_x0002_tion teams to prevent further injuries to people, livestock or tigers; district governments address one underlying cause of HTC by supporting improved animal husbandry practices, such as tiger-proof livestock pen construction; and, an increase in ranger patrol effort to recover wild prey populations.

This type of priority setting approach has wide application for better determining the required management response to reduce conflicts between people and large carnivores in both tropical
and temporal landscapes. (Evidence 31 - Lubis Paper)

Sumatran Tiger Project together with UPT GLNP, BBSNP, BKSDA Aceh, North Sumatra

interconnectedness of this output with Component 1 and output 2.3.

Additionally, whilst increasing Human Tiger Conflict (HTC) incidents in tiger landscapes in Sumatra has been recorded in the past three years, the number of casualties in project landscape has been very limited due to a better and proper human and wildlife conflict handling.

Below is further site-specific information:

1. Gunung Leuser National Park

In this reporting period between July 2020 and June 2021, Gunung Leuser National Park and North Sumatra BKSDA with the support from Sumatran Tiger Project in the Leuser landscape (Langkat, North Sumatra) successfully responded to all (100%) information on conflicts between humans and animals received by the team. There were 26 incidents of Human Tiger Conflict, 2 incidents of Human Elephant Conflict, and 2 incidents of Human Orangutan Conflict.

25 livestock becoming victims in these incidents where 2 elephants also killed. Compared to the previous period (2019 – 2020), the number of Human Tiger Conflicts, Human Elephant Conflicts, and Human Orangutan Conflicts in the 2020-2021 period has decreased compared to events between July 2019 and June 2020, where the number of incidents of Tiger Human Conflict reached 55 incidents, human Elephant Conflict as many as 30 incidents, Human Orangutan Conflict reached 30 incidents (Evidence 19 - WCS HWC Report for PIR 2021).

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				BBKSDA, and Bengkulu BKSDA actively carried out priority setting in management response to reduce human and wildlife conflicts. For example, the project conducted socialization using various methods so that processes of conflict handling could be safe for humans and wildlife. Between July 2019 - June 2020, Sumatran Tiger Project had responded to 128 human and wildlife conflict incidents in 111 villages in Leuser landscape (Evidence 1 - WCS PIR Report 2020 page 176). Project recorded 55 human and tiger conflict (KMH), 30 human and elephant conflicts (KMG), 34 human and orangutan conflicts (KMO) and 3 human and bear conflicts (KMB) in Leuser landscape (Langkat and North Sumatra). These human and wildlife conflicts between 2019 - June 2020 had caused casualties with 30 livestock dead and 8 injured. The number of KMH and KMO in Leuser landscape has increased, while KMG has decreased when compared to the same period for 2017-2018 and 2018-2019 (Evidence 1 - WCS PIR Report 2020 page 177). Kerinci Seblat National Park A total of 13 conflict incidents consisting of 7 human-tiger conflicts and 6 human-bear conflicts were recorded and handled by Sumatran Tiger Project team (PHS-KS and MHS-KS) between July 2019 and March 2020. Human-bear conflict had one moderate category of conflict and five low category of conflict. While human-tiger conflict has two moderate category of conflicts and five low category of conflicts .	2. Berbak Sembilang National Park In this reporting period, project responded to one human and tiger conflict in Berbak Sembilang National Park area. The conflict started on June, 2020 but the conflict handlings prolonged until September 2020. The detail of the conflict is reported within Evidence 20 - Berbak Sembilang HTC Report. 3. Kerinci Seblat National Park Kerinci Seblat National Park landscape is located in four provinces: Jambi, Bengkulu, West Sumatra and South Sumatra. A comprehensive HWC mitigation strategy is needed to handle human and wildlife conflicts in the area. One effort is by building HWC coordination teams that involved relevant stakeholders from all government agencies and institutions. Jambi and Bengkulu have issued governor's decrees regarding the coordination team for human and wildlife conflict mitigation (Bengkulu Governor Decree No. 022 of 2014 concerning the coordination team and task force for handling human and wildlife conflicts in Bengkulu province and Jambi Governor's Decree number 297 / KEP.GUB / DISHUT-3/2018 concerning the Coordination Team and Task Force for Man and Wildlife Conflict Management in Jambi Province). These governor's decrees were based on Minister of Forestry Regulation Number: P.48 / Menhut-II / 2008 as amended by the Minister of Forestry Regulation Number: P.53 / Menhut-II / 2014 concerning Guidelines for Humans and Wildlife Conflict Management.

The team will verify every report that enters the call center or the task force team, and check the location of the incident (for example: searching for traces of animals, scratches or used food), install camera traps (as needed), eviction/exclusion, provide counseling and assist community to share a sense of security in the community. During this reporting period, no high-risk conflicts - resulting in human casualties and injury - were recorded.

In general, conflict management activities were carried out by PHS-KS & MHS-KS units in collaboration with Forestry Police officers and TNKS Resort officials, SPTN Region I, Kerinci KPHP, Region I Section BKSDA Jambi and involving the local community.

Berbak Sembilang NP

In this reporting period, Sumatran Tiger Project responded to two human and tiger conflicts in Jambi Province. The first case occurred in a plantation area in Jebus Village, Kumpeh Sub-district, Muaro Jambi District on September 17, 2019. Several plantation workers saw the moving tigers and reported to Jambi BKSDA call center. The WCRT (Wildlife Conflict Resolution Team) of 3 people departed for the area on September 17, 2019, but they were unable to find tiger footprints due to smoke from forest fires which made it difficult for the team to patrol the area (Evidence 4 - ZSL PIR Report 2020 page 47-48).

The team also monitored village areas at several points for five days, but there were no signs of tigers. The WCRT team appealed to the villagers to avoid activities in the vicinity of the forest at dusk until morning and protect

Human wildlife conflict mitigation started with community reports to officers/mitigation team. From January to December 2020, there were 6 incidents of HWC reported and responded.

Speed of conflict responses depend on the distance between the conflict area and the closest conflict mitigation team. During Covid-19 pandemic, members of conflict mitigation team implemented health protocol to prevent the spread of COVID-19 virus by maintaining a safe distance and using personal protective equipment.

The detail of the conflict is reported within Evidence 4 - FFI Report for PIR 2021

4. Bukit Barisan Selatan National Park

In this reporting period, a team from Bukit Barisan Selatan National Park and Bengkulu BKSDA supported by Sumatran Tiger Project had responded 100% to all information about humans and animals conflicts received by the team.

There were 6 incidents of Human Tiger Conflict, 33 incidents of Human Elephant Conflict, and 10 incidents of Bear Human Conflict. From a number of these incidents, the conflict resulted in the death of 32 cattle and 2 elephants died.

Compared to the previous period (2019 – 2020), the number of Human and Tiger Conflicts has decreased, while the number of Human and Elephant Conflicts, and Human and Bear Conflicts had increased in the 2020-2021 period compared to previous events between July 2019 – June 2020, where the number of Human and

				their animals with non-electric fences or put them in closed enclosures.	Tiger conflicts had reached 13 incidents, with 17 incidents of Human and Elephant Conflicts and 3 Human and Bear Conflicts. Livestock depredation had also increased from 7 livestock in the 2019-2020 period to 32 in the 2020-2021 period (Evidence 19 - WCS HWC Report for PIR 2021).
				The second case occurred in Sungai Cemara village, Sadu sub-district, Tanjung Jabung Timur on October 16, 2019. Villagers saw the presence of tigers on the border between their village and the Berbak and Sembilang National Parks. Villagers then report to Berbak and Sembilang National Park and Jambi BKSDA through WhatsApp. The WCRT team consisting of 5 people together with staff of Berbak and Sembilang National Parks totaling 3 people conducted an inspection at reported location on October 19, 2019. The team found some tiger footprints, but because the area was close to the national park, the team only conducted patrol and advise villagers to avoid activities at night until the sun rises.	
				Handling of human and wildlife conflict in Berbak Sembilang National Park also gained support from Governor of Jambi who ratified the Governor's Decree to extend the mandate of the Human Conflict Mitigation Coordination Team with Wild Animals and the Human Conflict Management Task Force with Wildlife for the following year. The previous Governor of Jambi Decree No.399 / Kep.Gub / Dishut-3.3 /2019 - which provided a mandate for coordination team and task force for overcoming human and wildlife conflict - was updated with the latest decree No. 178 / Kep.Gub / Dishut-3.3 / 2020.	
				Sumatran Tiger Project also supported implementation of Governor of South Sumatra Decree No. 233 / KPTS / DISHUT / 2018 concerning the Formation of Coordination team and task force for human and wildlife conflict management in South Sumatra Province. The decree was ratified in 2018 and	

needs to be updated because it is only valid for one year. Sumatran Tiger Project collaborated with South Sumatra BKSDA held a human and wildlife conflict workshop in city of Palembang on 10 and 11 February 2020 to process the renewal (Evidence 4 - ZSL PIR Report 2020 page 48-49).

Bukit Barisan Selatan NP

Between July 2019 - June 2020, Sumatran Tiger Project had responded to 35 incidents in 45 villages in the BBS landscape (Evidence 1 - WCS PIR Report 2020 page 176). In BBS landscape, specifically to human and tiger conflicts (KMH) reached 13 events, KMG 17 events, and KMB 3 events. Human and wildife conflicts casualties in BBSNP reaching 7 livestock dead.

Sumatran Tiger Project also introduced anti-tiger enclosure or Tiger Proof Enclosure (TPE) to communities to protect their livestock (cattle, goats and buffalo) as an effective and sustainable human and wildlife conflict mitigation effort. In addition to TPE, the community also participating in developing conflict mitigation tools that are innovative, inexpensive and easy to operate.

Tiger Proof Enclosure (TPE) is built with certain standards to protect livestock from wildlife (tigers, bears etc). TPE development started in 2008 by WRU WCS-IP in Leuser landscape and BBS-BBRS landscape. In the Leuser landscape, from 2008 to mid-2020, 291 TPEs have been built in total, while 218 TPEs have been built in 2008 from BBS (Evidence 1 - WCS PIR Report 2020 page 182).

Monitoring BBSNP achievements in DSOCR commitments, Sumatran Tiger Project also

| | | | | supported patrolling information for area protection and mitigation of human and wildlife conflicts in BBSNP, preparation of demarcation map in BBSNP area, forest cover analysis in 209, zoning revision socialization and eradication of invasive species mantangan to complete the DSOCR monitoring data (Evidence 20 - DSOCR State of Conservation and Evidence 1 - WCS PIR Report 2020 page 98). | |

The progress of the objective/outcome can be described as:	**Achieved**				
Evidence uploaded:	**YES**				

Outcome 3 **Sustainable financing for biodiversity management in priority landscapes**					
Description of Indicator	**Baseline Level**	**Midterm target level**	**End of project target level**	**Level at 30 June 2020**	**Cumulative progress since project start**
3.1. Financing Plans Five new financing plans in place for selected target PAs by the project end and budgets increased by 10%.	0 financing plans in place, and 2014 budget baselines are from the NPs and partnering CSOs.	*(not set or not applicable)*	Five new financing plans in place for selected target PAs by the project end and budgets increased by 10%.	In 2019, the Ministry of PPN / Bappenas completed a business plan / funding road map for the Kerinci Seblat National Park TNKS. The Ministry of PPN / Bappenas will update the road map / business plan this year by focusing on funding gap aspects, developing strategies for financing gaps, and developing sustainable institutional protocols. Until May 2020, the funding gap analysis had been completed. The formulation of strategies for financing includes: (1) utilization of DIPA and non-DIPA grants (including CSR), (2) use of conservation area concession mechanisms in the form of compensation, and (3) strengthening multi-party partnerships in the form of activity commitments. (Evidence 32 - Bappenas Report page 2) Meanwhile, preparation of funding road map / business plan for other National Parks namely Gunung Leuser (TNGL), Bukit Barisan Selatan National Park (TNBBS), Sembilang National Park (TNS), Berbak National Park (TNB) has been delayed. The process started	Progess towards the end project target level at 100% for the targeted indicator.. In this reporting period, the indicator progress has been considered achieved:: 1) financing plans for all targeted national parks had been finalized; and 2) the target of increasing the budget by 10% at the targeted national parks has been realized. The budget for the five national parks increased by 38% (without partners) and 55.6% (with partners) in 2020 compared to 2015.(evidence/explanation in the subsequent paragraphs below). In February 2021, the Ministry of National Development Planning/Bappenas as the leader for this component reported that by the end of 2020, business plans for all targeted national parks had been finalized. No funding roadmap/business plan document was available before project intervention.

				in February this year due to several factors including COVID-19 pandemic that limits physical gatherings and journeys to project's landscapes Evidence 32 - Bappenas Report page 3).	Sustainable funding options and strategies are provided in the business plan which is then submitted to the NP authority to further determine and select the provided options to meet the funding needs for the respective NP.
				Prior to project intervention, each project priority landscape did not have a road map for funding / business plans. The preparation of a road map / business plan in each national park is useful to: (1) understand the existing conditions of costs and funding as well as the gaps in each landscape, (2) understand the effectiveness of the use of costs that have been implemented so far, and (3) identify alternative sources of funding available to support sustainable management in the area.	This business plan is expected to become an integral part of the management plan. At the national level, the developed business plan has been served as a model for the Ministry of National Development Planning/Bappenas in mainstreaming conservation area issues into the priorities of the Government Work Plan (RKP) and Medium Term National Development Planning (RPJMN). It is therefore expected that as a result, the government budget for conservation can be increased by more than 10% in several priority project locations.
				Beneficiaries of this road map include the Ministry of PPN / Bappenas, Directorate General of the KSDAE and National Park entity in Ministry of Environment and Forestry, partners from each priority landscape, and academics / researchers.	
				Increased Funding	Bappenas has indeed reported that the target of increasing the budget by 10% has been achieved. The budget for the five national parks increased by 38% (without partners) and 55.6% (with partners) in 2020 compared to 2015.
				From the funding road map, budget increase in the TIGER landscape was seen from three scenarios: (1) funding sources only from RM (rupiah murni/domestic revenue) and PNBP (Pendapatan Negara Bukan Pajak/Non-Tax Revenue), (2) funding sources from RM, PNBP, and HLN (Hibah Luar Negeri/Foreign Grant) through the UPT DIPA, and (3) funding sources from RM, PNBP, HLN through the UPT DIPA (Technical Implementation Unit's Budget Implementation List), HLN does not go through the UPT DIPA, and PKS (Perjanjian Kerja Sama/Cooperation Agreement).	(Evidence 21 - Bappenas Report for PIR 2021) At the landscape level, the preparation of a roadmap/business plan has been useful to support formulating of a more effective planning and budgeting by being able to : (1) understand the existing conditions of costs and funding and the gaps in each landscape, (2) understand the effectiveness of the use of costs that have been implemented so far, and (3) identify alternative funding sources available to support sustainable

				For Scenario 1, the funding source is only from RM and PNBP, an increase in the budget in 2019 compared to 2015 amounted to 0.41% for GLNP, 15.61% for BBSNP, 1.74% for KSNP and 10.15% for BSNP. In all TIGER project landscape, the increase was 5.67% (Evidence No.). Scenario 2, funding sources from RM, PNBP, and HLN through the UPT DIPA, the budget increase in 2019 compared to 2015 found only in KSNP which was 45.94% due to the existence of Forest Program II-KfW Project which began in 2017. From this point, the increase in all TIGER landscape was 18.28%. Scenario 3, funding sources from RM, PNBP, HLN through DIPA UPT, HLN not through DIPA UPT, and PKS, an increase in the budget in 2019 compared to 2015 amounted to 38.73% GLNP, 17.57% BBSNP, 77 ,11% KSNP, and 12.73% BSNP. The increase in overall TIGER project landscape was 39.97% Evidence 32 - Bappenas Report page 4). In 2019, the use of government budgets sourced from RM and PNBP is focused on (1) patterning and structuring management of community-based conservation areas, (2) collaborative management of conservation forests with communities around conservation areas, (3) protection and security based on shared protections community, (4) recovery of degraded conservation areas, (5) increase in the percentage of populations of endangered species, (6) ecotourism development, and (7) community-based wildlife (wild plants and animals/TSL) rescue operations. Tiger Project's Contributions Analysis of TIGER project contribution to annual allocation of conservation area funding	management of the area (Evidence 30 - 3.1 Potrait of PA Financing in Sumatera). The increase in the budget in the TIGER landscape is seen from three scenarios: (1) funding sources only from Pure Rupiah (RM) and Non-Tax State Revenue (PNBP), (2) funding sources from RM, PNBP, and Foreign Grants (HLN), and (3) funding sources from RM, PNBP, HLN, and Cooperation Agreements (PKS). For Scenario 1, the source of funding is only RM and PNBP, there is an increase in the budget in 2020 compared to 2015 which is 47.3% BBTNGL, 38.73% BBTNBBS, 42.12% BBTNKS, 15.31% BTNBS. At the overall landscape level of the TIGER project, the increase was 38.82%. Scenario 2, funding sources from RM, PNBP, and HLN, the budget increase in 2020 compared to 2015 only occurs in BBTNKS which is 84.16% with the Forest Program II-KfW Project which started in 2017. Meanwhile, there is no there are changes in other UPT. At the overall landscape level of the TIGER project, the increase was 50.81%. Scenario 3, funding sources from RM, PNBP, HLN, and PKS, there is an increase in the budget in 2020 compared to 2015 which is 34.51% BBTNGL, 35.11% BBTNBBS, 132.49% BBTNKS, 16.32% BTNBS . At the overall landscape level of the TIGER project, the increase was 55.62%. Below is site-specific information related to the business plan:

				in project's five priority locations is focused on budget through Ministry of Environment and Forestry's DIPA especially KSDAE Directorate General for five years, 2015 - 2019. Ministry of PPN / Bappenas as the Implementing Agency for Component 3 of TIGER Project, had been conducted various studies and activities since 2017 to see the urgency of alternative funding for conservation areas. Studies and activities regarding funding for management of conservation areas are a foothold for the Ministry of PPN / Bappenas in spawning new policies for financing conservation area management. From the results of project implementation, including learning from the preparation of business plans/funding roadmaps, the Ministry of PPN / Bappenas has raised various funding mechanisms and strategies to national policy level both in the 2015-2019 RPJMN and in the 2020-2024 RPJMN, namely: (1) preparation RPJMN 2020-2024 coordinated by Bappenas, (2) assistance to Directorate General of Natural Resources and Ecosystem Conservation, Ministry of Environment and Forestry in accessing funding through the mechanism of State Sharia Securities (SBSN), (3) assistance to Directorate General of Natural Resources and Ecosystem Conservation, The Ministry of Environment and Forestry in preparing annual work and financing plans, (4) increasing staff capacity in terms of planning and budgeting for management of conservation areas and (5) carrying out various forum / workshop / seminar activities to build sustainable funding mechanisms for the management of	1. Kerinci Seblat National Park (KSNP) Business Plan (Evidence: (1) Report on the Preparation of a Business Plan in Kerinci Seblat National Park and Identification of Alternative Funding Sources, (2) Report on the Model of Scheme and Institutional Funding for Sustainable Carbon Trading (Evidence 29 - 3.1 Carbon Trading Based Financing Scheme in Kerinci Seblat NP) Based on a study by the Ministry of National Development Planning/Bappenas, the estimated gap in KSNP funding is IDR 56 billion. KSNP has the potential to close this gap through carbon trading with the REDD+ incentive scheme, by applying a landscape approach to the Kerinci Seblat ecosystem. To that end, a study was conducted on the potential for forest carbon, institutional schemes, as well as an analysis of the feasibility of sustainable funding in the form of trust funds that can be developed to support carbon trading in KSNP and also its buffer areas (KPH Kerinci in Jambi Province and KPH Rawas in South Sumatra Province). The results of the analysis of other profitability and feasibility parameters, namely NPV and profitability index, show good results. The receipt of carbon sales in the 5th year has enabled KSNP and its supporting areas to be independent in continuing the carbon trading business, as well as financing the rehabilitation and restoration of degraded land (Evidence 22 - 3.1 Business Plan Kerinci Seblat NP). 2. Gunung Leuser National Park (Evidence: Draft Business Plan for Gunung Leuser National Park)

				conservation areas. (Evidence 32 - Bappenas Report page 7) Bappenas is actively encouraging the use of SBSN instruments so that it can finance the development of ecotourism infrastructure and wildlife breeding in conservation areas. The Ministry of PPN / Bappenas has also raised the issue of ecotourism development and protection of endangered animals into national priority projects so as to get increased budget allocations for both issues. This is indicated by the many outputs of National Park Management activities that become national priority outputs. The impact of the policy push by the Ministry of PPN / Bappenas can be seen through the increased budget allocation in five project sites.	The total cost of managing the Gunung Leuser National Park area (GLNP) in 2019 was IDR 50.12 billion, sourced from the government's contribution through the GLNP with a value of IDR 31.74 billion (61%), and the remaining 39% worth IDR 19.379 billion came from 11 partners. Currently, the source of funds for resort activities comes from the GLNP authority budget (51%) and partners (49%). Based on the results of the assessment, resort-based management in the minimum scenario requires a budget of Rp. 23.147 billion, while for the ideal scenario it requires Rp. 28.206 billion. To meet the minimum scenario, Gunung Leuser National Park requires an additional Rp. 9.5 billion per year, while to fulfill the ideal scenario, an additional Rp. 14.6 billion per year is required. This shortfall can be met from the projected budget of Gunung Leuser NP and the contributions of partners. To fill the gap, strategies that can be taken are increasing the government budget, prioritizing the budget, optimizing tourism and strengthening cooperation with partners. Further detail is provided in Evidence 23 - 3.1 Business Plan Gunung Leuser NP. 3. Bukit Barisan Selatan National Park (Evidence: Draft Business Plan for Bukit Barisan Selatan National Park) The total cost of managing the Bukit Barisan Selatan TN area in 2019 was IDR 28.97 billion, sourced from the government contribution through BBTN Bukit Barisan Selatan with a value of IDR 24.97 billion (84%), and the remaining 16% worth IDR

					4.6 billion came from 7 partners. . Personnel costs are the dominant cost, accounting for 60% of the total cost. In terms of function, area protection gets the largest portion, namely 32%. The total cost for resort-based management (as many as 17 resorts) is IDR 7.86 billion. Based on the results of the assessment, resort-based management in the minimum scenario requires a budget of Rp. 16.1 billion, while for the ideal scenario it requires Rp. 20.3 billion. To meet the minimum scenario, Bukit Barisan Selatan National Park requires an additional Rp9.6 billion per year, while to fulfill the ideal scenario, an additional Rp13.8 billion per year is required. Funding from the government is expected to remain the main funding source for Bukit Barisan Selatan National Park to cover the funding shortfall. It is expected that every year the government's budget will increase by 10%. In addition, several strategies are proposed to close the gap are through: increasing government budget allocations, prioritizing funding for resort-based management, strengthening collaboration with partners, increasing the role of the private sector in management as is jas been done in Tambing Wildlife Nature Conservation (TWNC) areas, increasing conservation partnerships, and utilizing environmental services (Evidence 24 - 3.1 Business Plan Bukit Barisan Selatan NP).

					4. Berbak – Sembilang National Park (Evidence: Draft Business Plan for Bukit Berbak – Sembilang National Park) The total cost of managing the Berbak – Sembilang TN area in 2019 was IDR 21.2 billion, sourced from government contributions through the Berbak Sembilang National Park with a value of IDR 16.9 billion (80%), and the remaining 20% worth IDR 4.3 billion came from 7 partners. Personnel costs are the dominant cost, accounting for 60% of the total cost. In terms of activities, protection activities are the dominant activity, accounting for 41% of the total cost. The total cost for resort-based management is IDR 5.3 billion, and all of it comes from the BTN Berbak Sembilang budget. Based on the results of the assessment, resort-based management in the minimum scenario requires a budget of Rp. 10 billion, while for the ideal scenario it requires Rp. 15.68 billion. To fulfill the minimum scenario, Berbak – Sembilang National Park requires additional funds of IDR 4.7 billion per year, while to fulfill the ideal scenario, additional funds of IDR 10.3 billion per year are required. To fill this gap, several strategies are proposed, including: increasing the allocation of government funding, prioritizing funding for resort-based management, compensating for carbon environmental services, strengthening collaboration with partners and continuing to explore the possibility of funding from other sources (Evidence 25 - 3.1 Business Plan Berbak Sembilang NP).

| 3.2. Sustainable Financing Plans for Production Areas involving PPPs
Two sustainable financing plans produced for production area/s through business and biodiversity mechanisms (PES, private sector endowment and corporate social responsibility schemes and biodiversity offsetting) involving public-private partnerships (PPPs). | 0 plans in place. | *(not set or not applicable)* | Two sustainable financing plans produced for production area/s through business and biodiversity mechanisms (PES, private sector endowment and corporate social responsibility schemes and biodiversity offsetting) involving public-private partnerships (PPPs). | The Ministry of PPN / Bappenas is developing a strategy to integrate Kerinci Seblat National Park (TNKS) program with its buffer zones managed by Forest Management Unit (KPH), the community, and the private sector, especially concession holders in production forests.

The integration of development and conservation programs combined with cooperation between KSNP, FMU, surrounding communities, and the private sector will become an innovative solution in reducing pressure on KSNP while supporting the implementation of programs in production and protected forest areas bordering the TNKS area (Evidence 32 - Bappenas Report page 14).

This strategy will be accompanied by the scenario of establishing a Trust Fund for the rehabilitation of KSNP area and its buffer zones through carbon credit scheme generated by KSNP. To date, opportunities have been identified for the integration of private parties that contribute / support conservation both within the area they manage and in closest conservation area, such as PDAM Tirta Sakti Kerinci, PT Linggau Bisa, and PT Sipef Biodiversity Indonesia's ecosystem restoration concession. Arsari Djoyohadikusumo Foundation and PT Tidar Kerinci Agung also contributed to the rehabilitation of Sumatran tigers. Other potential production areas that support biodiversity around TNKS are APRIL Group and Sinar Mas Group Evidence 32 - Bappenas Report page 16).

The strategy of integrating the TNKS program with its buffer zones will be very useful both for Central Government (KLHK and KSNP), Regional Governments (Provincial Forestry | The progress for this indicator is considered as on track.

Two sustainable financing plans have been developed and consulted with relevant stakeholders and currently on the final stage of finalization by Bappenas.

In early 2021, the Ministry of National Development Planning/Bappenas as the leader for component 3 reported that it has succeeded in promoting State Sharia Bond, called Surat Berharga Syariah Negara (SBSN) as a financing mechanism in Sumatra Island landscape. It highlights the success of Batang Gadis National Park in receiving financial support through SBSN -- which therefore hints a potential for other National Parks, including the project's targeted National Parks, to benefit from the SBSN mechanism.

In addition to reducing the financing gap in the management of conservation areas, SBSN has an important value in supporting conservation areas. SBSN can improve the quality of the infrastructure built and increase the benefits of the area for the community around the area, for example in supporting the development of natural tourism activities. SBSN can also be an entry point in initiating cooperation with other sectors to support the function of infrastructure development, for example by opening access roads to conservation areas that have tourism potential by taking into account the principles of sustainable development.

The National Park area, where the project are located, is a nationally important area that protects important biodiversity, hence it has potential to benefit from SBSN in |

				Service, KPH), and management unit in production forest area in restructuring activities carried out at the landscape level as efforts to protect ecosystems and biodiversity within the KSNP and surrounding areas. The scenario of establishing a Trust Fund in TNKS landscape will be a breakthrough for both the central and regional governments in creating a sustainable funding forum at the landscape level, as well as a model for replication in other regions. This program integration strategy between conservation areas and their buffer zones will have a short-term impact to fill funding gaps in management of conservation areas, and will have a long-term impact on the realization of multi-stakeholder sustainable funding.	their infrastructure development as these areas are included in the priority corridor. Bappenas further reported that based on study and review conducted for Output 3.2, it identifies that the PPP financing scheme through Cooperation Agreement and Conservation Concession has been identified as the feasible ones. The involvement of the private sector has an important role for sustainable funding in conservation areas. It also recommends PPP model of Tambling Wildlife Nature Conservation in BBSNP to be replicated and upscaled in the future. Using this scheme, the private sector can manage part of the national park. The aim is to conserve tiger habitat and develop ecotourism. In the five priority landscapes of the TIGER project, the practices of the Cooperation Agreements and Conservation Concessions have been identified. Further information on SBSN PPP, and how this potentially applied to the targeted national parks can be found in Evidence 26 - 3.2 PA Financing through SBSN and Grants and Evidence 27 - 3.2 PPP for Sustainable Financing in PA. In some landscapes, PPP schemes are also existed outside but in the fringe of the protected areas. Although the available data on the practice in the targetd landscapes is still limited, the available information indicates that the PPP scheme through the Cooperation Agreement and Conservation Concession mechanism provides financial support for the implementation of conservation efforts in

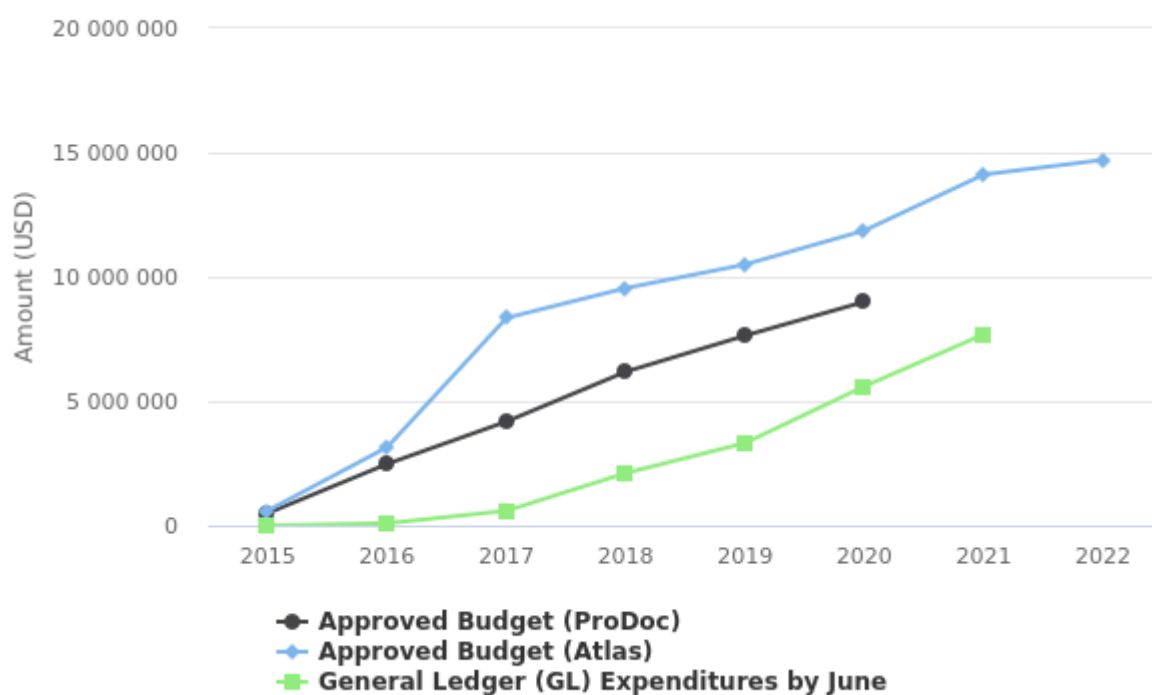|					
					national parks (Evidence 28 - 3.2 PA Financing through Cooperation, Concession, Carbon). To be able to optimize the PPP scheme in conservation areas, it is necessary to transform conservation area managers into Public Service Boards in order to open up opportunities for managers to obtain funding sources from various sources and optimize the potential of areas that are managed more productively and take advantage of management benefits for conservation area conservation and livelihood sustainability for the local community.
3.3. Financial Sustainability Scorecard Increase by >25% for each of the three component scores in the Financial Sustainability Scorecard for the sub-system of Sumatra's protected areas* *10 National Parks (Batang Gadis, Berbak, Bukit Barisan Selatan, Bukit Duabelas, Bukit Tiga Puluh, Gunung Leuser, Kerinci Seblat, Sembilang, Tesso Nilo and Way Kambas)	Component | Financial Sustainability Scorecard score (%) Baseline (2014) 1. Legal, regulatory and institutional frameworks | 42% 2. Business planning and tools for cost-effective management | 24% 3. Tools for revenue generation | 35%	*(not set or not applicable)*	Increase by >25% for each of the three component scores in the Financial Sustainability Scorecard for the sub-system of Sumatra's protected areas Component | Financial Sustainability Scorecard score (%) Baseline (2014) 1. Legal, regulatory and institutional frameworks | 53% 2. Business planning and tools	There are 3 (three) main components reviewed in the Financial Sustainability Score Card, namely (1) regulatory and institutional frameworks, (2) business models to support effective management, and (3) revenue generating schemes. Before the project intervention, the value of the Financial Sustainability Score Card was 42% for Component 1, 35% for Component 2, and 24% for Component 3 (Evidence 32 - Bappenas Report page 18 and Evidence 37 - Financial Scorecard Analysis). With project's intervention, the targets determined at the end of the project was that each component's assessment increased by more than 25% for conservation areas in Sumatra. Based on the 2014 baseline, the projected final year evaluation target is 53% for component 1, 30% for component 2, and 44% for component 3.	The progress status for the indicator is considered as 100% achieved. The three components of the Financial Sustainability Score Card has overall increased by 88%. Therefore, the targeted increase by > 25% have been fully achieved (Evidence 31 - 3.3 Financial Sustainability Scorecard Midterm Assessment). Below is the breakdown of the increase for each component score: 1. Legal, regulatory and institutional frameworks Baseline: 42% 2021: 58% (increased by 38% from the baseline) EOP Target | 53% 2. Business planning and tools for cost-effective management

| | | | for cost- effective management | 30% 3. Tools for revenue generation | 44% | During the course of the project, Ministry of PPN / Bappenas has compiled studies related to regulations and policies needed to enable revenue streams to conservation areas from non-government funding sources.

In 2020, the Ministry of PPN / Bappenas will further study the regulatory framework and institutional framework for the adoption of BPDLH (Badan Pengelola Dana Lingkungan Hidup/ Indonesia Environmental Trust Fund) and BLU (Badan Layanan Umum/Public Service Agency) development options for sustainable funding in conservation areas.

Through this 3.3 output, the Ministry of PPN / Bappenas is pushing for policy changes at the national level to support an increase in the value of the financial sustainability score card.

Some of the efforts that have been achieved are: (1) elevating the discourse of integration of sustainable funding options for conservation areas, including the establishment of a BLU for national parks, (2) mainstreaming conservation issues into national priorities that have implications for increasing the allocation of conservation area funding, and (3) encouraging the use of planning and funding systems in mainstreaming conservation issues. (Evidence 32 - Bappenas Report page 18)

Utilization of the planning and budgeting system that was encouraged during the past three years is Planning and Information Performance Collaboration Information System (KRISNA) which is managed jointly between Ministry of PPN / Bappenas, Ministry of Finance, and Ministry of PAN RB. The existence of the KRISNA information system enables information disclosure in planning | Baseline: 24% 2021: 64% (increased by 167% from the baseline) EOP Target: 30%

3. Tools for revenue generation Baseline: 35% 2021: 56% (increased by 60% from the baseline) EOP Target | 44%

During the course of the project, the Ministry of National Development Planning/Bappenas prepares studies related to the regulations and policies needed to enable the flow of income to conservation areas from non-government funding sources. The Ministry of National Development Planning/Bappenas has also reviewed the regulatory framework and institutional framework for the option to adopt the development of BPDJLH and BLU for sustainable funding in conservation areas (Evidence 32 - 3.3 Grand Design Transformasi BTN BLU).

Through output 3.3, the Ministry of National Development Planning/Bappenas encourages policy changes at the national level to support increasing the value of the financial sustainability scorecard.

The utilization of the planning and budgeting system that has been encouraged over the last three years is the Collaborative Information System for Planning and Budget Performance Information (KRISNA) which is managed jointly between the Ministry of National Development Planning/Bappenas, Ministry of Finance, and Ministry of PAN RB. The existence of the KRISNA information |

				and budgeting, good documentation during the planning and implementation of activities, and monitoring and evaluation of performance and budget information for each ministry/institution. It is important to note that, for governments, development of business plans / road maps as initiated by Bappenas under Sumatran Tiger Project can also be the basis for long, medium and short term planning and budgeting. For partners, the business plan / road map becomes a reference in synchronizing and integrating programs and activities. For academics / researchers, the business plan / road map drawn up becomes a reference in calculating the effectiveness of funding of conservation areas as well as a model for replication of the preparation of similar documents in other locations. At the landscape level, the impact that can be felt by UPT is the existence of references in developing more effective planning and budgeting plans by taking into account the gap analysis and potential funding sources from multi-parties. At the national level, the business plan that has been prepared has become a model for the Ministry of PPN / Bappenas in mainstreaming the issue of conservation areas into RKP and RPJMN priorities. As a result, in 2019, it is possible for an increase in government budget of more than 10% in several priority project locations. In mid-2019, the Ministry of PPN / Bappenas and the LHK Ministry had conducted a self-assessment of the financial sustainability	system allows disclosure of information in planning and budgeting, good documentation during the planning and implementation process of activities, and monitoring and evaluation of performance and budget information for each K/L. Even though it has achieved the expected target at the end of the project year, there are still elements and sub-elements that require further government commitment and support from partners to improve the conservation area funding system in the future. Detail explanation of Institutional Studies to Reduce Barriers to Sustainable Funding can be found in (Evidence 33 - 3.3 Sustainable Financing Governance through BLU).

| | | | | scorecard. The assessment results show achievement of 56% for component 1, 49% for component 2, and 48% for component 3. Therefore, each component evaluation has increased by more than 25% as expected targets.

Beneficiaries of the Financial Sustainability Score Card assessment include the Ministry of PPN / Bappenas, the Ministry of Environment and Forestry, Development Partners (especially UNDP), and partners managing conservation areas.

With this Financial Sustainable Score Card assessment, both the government, development partners and managing partners (NGOs) can identify and record essential aspects of the conservation area funding system in Indonesia.

Even though it has achieved the expected target by the end of the project year, there are still elements and sub-elements that require government commitment and further support from partners to improve the conservation area funding system going forward. | |
|---|---|---|---|---|---|
| **The progress of the objective/outcome can be described as:** | **On track** | | | | |
| **Evidence uploaded:** | **YES** | | | | |

D.   Implementation Progress

Cumulative Disbursements

Cumulative GL delivery against total approved amount (in prodoc):	85.45%
Cumulative GL delivery against expected delivery as of this year:	85.45%
Cumulative disbursement as of 30 June:	7,690,209

Key Financing Amounts	
PPG Amount	100,000
GEF Grant Amount	9,000,000
Co-financing	53,450,000

Key Project Dates	
PIF Approval Date	Jun 7, 2012
CEO Endorsement Date	Feb 4, 2015
Project Document Signature Date (project start date):	Feb 24, 2016
Date of Inception Workshop	Feb 28, 2017
First Disbursement Date	Mar 14, 2016
Expected Date of Mid-term Review	Dec 31, 2019
Actual Date of Mid-term Review	Aug 1, 2019
Expected Date of Terminal Evaluation	Nov 22, 2021
Original Planned Closing Date	Feb 22, 2022
Revised Planned Closing Date	*(not set or not applicable)*

Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2020 to 1 July 2021)
2020-10-27

A) It is mandatory for the **CO Programme Officer** and **NCE RTA** to each provide an IP rating. See related guidance further below.

B) The **Project Manager** must provide comments on any milestone delays after reviewing the Key Project Dates table.

C) The **NCE RTA** and **CO Programme Officer** must provide comments on specific measures to manage the project's implementation performance

D) The **CO Programme Officer** must also complete the co-financing table below.

Project Manager: Please provide comments on delays this reporting period in achieving any of the following key project milestones outlined in the above 'Key Project Dates' table. Include comments on COVID-19 related challenges, delays and impact. If there are no delays, please indicated 'not applicable'.

Covid-19 pandemic has changed the way the project conducted its activities, reducing physical contacts that in some cases hindered the effectiveness to coordinate to perform the project's relevant outputs. The project has delayed several planned activities due to the Covid-19 pandemic. The outbreak has also increased pressures to conservation areas as communities experiencing economic shortcomings especially in their land and natural resources-based economic activities. The pressures may affect the project's output, level of threats, and tiger density in the project's landscapes.

Additionally, some project activities, (including but not limited to: FGDs, training, meetings, community engagement) are forced to be suspended due to restrictions during COVID-19 restriction periods, such as the FGD meeting to update the CDSC and METT. Therefore, the overall expected conservation impact of this project might be affected as well.

The project will continue its support to conducting patrol activities, however, given the lack of national budget to cover the planned series of patrol, the patrol will be more prioritized to the most critical area. While patrol might not be able to be conducted fully as planned in the National Park, the project and the NP authority will also make the most of the informant network to tackle illegal activities occurring on the site. As much as possible, the planned project activities will be conducted through an online platform, including small meetings using Covid19 protocol, discussions forum, series of education webinars regarding tiger conservation, report launching, etc.

After one year since the pandemic, the project and its partner have been able to adapt to the new arrangement of managing the project, with adjustment and innovation in various aspects of project management, while ensuring overall project deliverables.

Whilst the COVID-19 risk remains, the project has shown its progressive capabilities to adapt with it at national and local levels. Furthermore, on the site level, the project's approach has actually contributed not only in adapting, but also in mitigating the risk of other zoonotic outbreaks, inter alia through the project's activity related to effort in reducing Human-Wildlife Conflict (HWC). This has been achieved through project activities, including the installment of Tiger Proof Enclosure (TPE), strengthening the capacity of local communities to handle HWC, establish local HWC mitigation team, training national park staff related to HWC, building a robust communication network in the targeted landscapes for a timely communication and reporting skills.

CO Programme Officer: Please include specific measures to manage the project's implementation performance

In this reporting period, the project Implementing Partner, PMU team, and NGOs' partners have adjusted the strategy to execute the planned project interventions. Most of the offline meetings have been changed to virtual meetings without significantly reduced the expected results. The good thing is the optimization of the budget utilization. It is well noted there was a limitation on the duration of virtual meetings and internet connection issues when inviting participants from the project sites. However, the project can be implemented well. It is reflected on cumulative financial delivery which reached 85% of the total allocated grant. With a solid plan and teamwork, the project optimists to utilize more than 95% until the end of the project period.

In addition, the project also collaborated with local partners to ensure safeguard activities within the core Sumatran tiger habitat can be maintained. This strategy has also reduced the need to conduct travel/field visits from the national government and partners in line with the efforts to avoid virus transmission. The long period of working from home is beyond everyone's expectations as well as the project team. However, this is still a challenge for the project team to ensure quality delivery of the annual work plan to meet the overall project objective and remaining targets with available resources. Changing the PMU team personnels in the last year of project implementation required IP's concern and Project Board members' direction to keep the project performance high.

NCE RTA: Please include specific measures to manage the project's implementation performance.
(not set or not applicable)

E.   Project Governance

The **CO Programme Officer** must complete this entire section:
- Enter dates of all Project Board/Steering Committee meetings during the reporting period
- Upload minutes from each Project Board/Steering Committee meeting using the FILE LIBRARY button in the top right of the PIR
- Answer all questions below

1) Is the Project Board/Steering Committee functioning effectively?
Yes
If no, please explain.
(not set or not applicable)
RTA comments (optional)
(not set or not applicable)
2) Have there been any changes to the implementation modality during this reporting period (i.e. from full NIM to assisted NIM, or NIM to DIM, etc.)?
No
If yes, please explain
(not set or not applicable)
RTA comments (optional)
(not set or not applicable)
Dates of Project Steering Committee/Board Meetings during reporting period (1 July 2020 to 30 June 2021). Please also upload all meeting minutes using the FILE LIBRARY button.
2020-10-27

F.   Ratings and Overall Assessments

Role	2021 Development Objective Progress Rating	2021 Implementation Progress Rating
UNDP-NCE Technical Adviser	*(not set or not applicable)*	*(not set or not applicable)*
UNDP Country Office Programme Officer	Satisfactory	Satisfactory

Role	2021 Overall Assessment
UNDP-NCE Technical Adviser	*(not set or not applicable)*
UNDP Country Office Programme Officer	In this reporting period, the project is given a satisfactory rate. The project is consistent in delivering contributions to address key drivers of biodiversity loss and capacities gaps to effectively managed priority landscapes of highly endangered species in Sumatera. A combination of the Government institution that has the mandate to lead biodiversity conservation and endangered species management, and leading NGO partners are good practices to respond to complexities of the barriers removing on the targeted sites. In addition, the UNDP team is consistent to provide technical expertise and linking to other partners for project results visibilities, and leveraging the achievement of the outcomes. The cumulative project outputs demonstrated a positive direction in transforming the management of the protected areas. Through the adoption of the Spatial Monitoring and Reporting Tool (SMART) - Resort-Based Management (RBM) and establishment of the data center management, called situation room, has increased work behavior performance particularly the national parks management authorities. It has helped them in better development of annual planning and budgeting. Without project intervention, the changes in the working culture of the National Park Authorities towards a more transparent, reliable and accountable manner might not happen at the current pace. The rooted business-as-usual practices may still exist without project's trigger. Even more encouraging is the fact that this has triggered changes in other Protected Areas beyond the project's intervention area. The positive changes have started to spread elsewhere. The project has shed the light and showcased the importance and benefit of using and integrate SMART tools and system into management of conservation area, and demonstrate that, with a good will and commitment, it is actually something feasible. Project has showcased that, even when implemented in the most basic level, it can still provide yet another steppingstone to a better and more efficient PA management. Strength of the project also lies in the internalization of the process which spells out, inter alia, through the establishment of information unit and system at site level, namely: UDIK (Gunung Leuser NP) and SIBELANG (Berbak Sembilang NP), which contributes to sustainability of the outcome. These initiatives show an increased awareness towards the importance to invest in a robust monitoring and evaluation system to support effective conservation effort. Broader experiences of the NGOs' partners are also contributed to strengthening the capacities of local partners and community engagement in managing the threats to the endangered species. It is no doubt that the Government partners have strong leadership and ownership for successful project implementation and generate legacy for the achievement of the national SDGs ' targets. Based on the provided evidence, the project has achieved most of its expected outputs and target indicators with varied progress between sites. As per latest data for this reporting period, the increase in tiger density as the umbrella indicator of the project's performance has been achieved in one landscape (Gunung Leuser National Park). Other landscapes have lower than EOP target for tiger density figure, however they are still within the range of the confidence interval, which indicates high population dynamics, but a stable one. Given the importance of correct understanding and interpretation

of tiger density figure, not only for this project, but for the national conservation aims, this project has initiated and facilitated study and several discussions with key stakeholder on the subject. The study and discussions forum brings to table, amongst other, reputable tiger conservation experts which has long worked on the subject, academia, researcher, government authority, and conservation practitioners. The result of the study and discussions can be considered as an eye-opener for many stakeholders and provide new insight on how to correctly and scientifically used and interpreted the tiger density figure.

It is acknowledged there is recent study and expert review highlighted the importance of understanding tiger population dynamics overtime, rather than focusing on single annual figure alone. Therefore, while the decreasing tiger density figure in this reporting period is certainly a concern to be followed up, so long as all other protection and integrated measures are maintained (i.e: the SMART Patrol and Monitoring and all other related activities), this tiger density figure alone should not be superficially translated into a failure of the existing efforts. It rather should be used as yet another alarm or reminder that the threat to tiger's conservation remains and very dynamics, therefore continuous if not even increased effort should be put in place.

When referring to all project quantitative indicators across the three components, most of the end of project (EOP) target indicators have been achieved, with different progress and success level in each site, as shown in the reported indicators figure. Some underachieved indicators remain on the right track to making further progress and expected to achieve the EOP target.

On site level intervention to improve management effectiveness of Protected Area, in Component 1, project has fully achieved targets indicator related to: threat encounters rate and deforestation rate. Performance for component is anticipated to be increased once the CD score card and METT score is updated and finalized for Gunung Leuser National Park. Currently the progress for CDSC and METT is at 95.1% and 98.4% respectively, overall, in all sites. All target indicator in Component 2 on intersectoral coordination has been fully achieved. Component 3 on sustainable financing has fully delivered its EOP target indicator, however further progress is still expected to be materialized on this component before end of project.

The project also has well-mainstreamed gender equality in the project activities and able to incorporate it in relevant outputs and reporting. The project has made various effort to advance with gender equality, despite all the challenges related to the prevailing societal and norms value, particularly those related to conservation work. Through activities on site level, project has been able to nurture women's champion in conservation, for example in Kerinci Seblat National Park. This has been done by providing access to resources, information, knowledge, and creating opportunity for the women to channel their skills in building collaboration for conservation. It is encouraging to see tangible output of this capacity building, where women have been the key actors in developing collaboration agreement for conservation on sites. Nonetheless, there are still a lot of rooms for improvement with regard to gender aspect. This include stronger and continuous enforcement of gender specific project guidelines particularly for local NGO working at sites, collection of strategic gender-aggregated data and other gender-sensitive documentation throughout project implementation.

Regardless the quantitative performance indicator as presented to date, the process of some major project interventions (i.e: assessment of METT score, Capacity Development Score Card, and implementation of SMART-RBM Patrol) has succeeded in increasing the understanding of managers and stakeholders about the area under their management or territory. Not only at sites level, but also nationally, this project has succeeded in inducing open in-depth discussion on the appropriateness of METT assessment for Indonesian

	context, and therefore renewing all parties' commitment to utilizing METT with more awareness and by using critical knowledge.
	Within the remaining time of project implementation and continuing with the pandemic situation, the project will need to explore available innovations and adapted strategies to move from delivering good practices to creating best practices in sustaining the good performance of project intervention in national park´s governance, capacity building, technology transfer, management effectiveness and make more cases for protected areas financial sustainability.
Project Manager/Coordinator	This is the fifth project PIR . The project can consistently prove the achievements obtained and be associated with existing outputs. In this reporting period, the project gives a satisfactory rating with several reasons as follow:
	• The project is consistently able to maintain the achievements of the output indicators, some of which are annual, such as patrol effort; conflict mitigation; case handling. Not something that is easy to do with positive achievements on a regular basis and more than 4 years in a row, long time affect the consistency of efforts to achieve targets.
	In addition to consistency in routine achievements, for achievements where the target is to increase or decrease, the pattern that has been achieved leads to the expected final target, for example for threat reduction targets based on patrol results that have been seen in more than half of the target landscape. Gradually the decline in threats to biodiversity can be seen from the indicators achieved in the last four years from the Leuser, Kerinci Seblat, and Bukit Barisan Selatan landscapes. Likewise in increasing the effectiveness of the area through METT, which has increased in all national parks, even 3 of them have exceeded the expected target.
	• The project has succeeded in achieving the EOP target on several output indicators, namely the output indicator 1.4 all targeted National Parks have achieved
	• Other outputs that are developed in nature have gradually led to the expected targets, such as the development of forest and wildlife monitoring systems; decrease in deforestation rates, and developing sustainable finance mechanisms. So, the project believes these targets will be achieved by the end of 2021.
	• Although many positive achievements have been made, the project realizes that there are still some things that can be improved. For example, increasing the capacity of institutions that are still in process and need time to implement the strategies drawn up; the achievement of targets in component 3 which is indeed late in the implementation process, as well as the process of developing innovative forest and wildlife management in Gunung Leuser NP and BBSNP which indeed still requires time until success can be seen. In addition, the project is also aware of the reduction in tiger density at the TNKS and TNBS sites in the last 2 years, although threatening to be suppressed, a reduction in tiger density is still being observed.
	The project has delayed several planned activities due to the Covid-19 pandemic. The outbreak has also increased pressures to conservation areas as communities experiencing economic shortcomings especially in their land and natural resources-based economic activities. The pressures may affect the project's output, level of threats, and tiger density in the project's landscapes.
	The project has acknowledged financial delivery is less than expected. The main reason is due to delays in reporting by the project's partners and from the PIUs at the landscapes level. Reporting bureaucracy and the Covid-19 pandemic also contributed to delays in report finalization. The delays in

	reporting have subsequently delayed the project's payments for activities that have been conducted by the project's partners. The project encourages the participation of women to be more significant and prominent in conservation efforts implemented in the project's landscapes. For example in Gunung Leuser National Park, the project supported the strengthening of women's groups in conservation efforts in the village of Sei Serdang, Langkat. The project formed Animal Care Group in the village, that encourages the role of women in conservation, including supporting efforts to mitigate human and animal conflicts through the development of alternative economies.
GEF Operational Focal point	*(not set or not applicable)*
Project Implementing Partner	The Sumatran Tiger project has been running for 5 years and this year is the last year of the project. In the midst of the Covid 19 pandemic, activities to support the achievement of the target of increasing the Sumatran tiger population continue to run with new adaptations. Working on 4 main landscapes on the island of Sumatra, many activities have been carried out to support the achievement of targets, including monitoring Sumatran tigers using camera traps, forest protection patrols using SMART patrols, law enforcement efforts through support for case resolution, and capacity building for officers and efforts to handle tiger conflicts. and humans. The results of the activities that have been achieved by the Sumatran Tiger Project related to handling human and tiger conflicts include the local government's commitment to supporting the resolution of Human-Wildlife Conflict incidents by issuing a Governor's Decree related to the Conflict Management Team in Riau and Lampung Provinces. Other implementable actions to reduce conflict are through monitoring prey animals, building animal cages against tiger attacks, building Conflict Independent Villages (Desa Mandiri Konflik), and efforts to expand the habitat of tigers and their prey animals through the handling of invasive alien species "mantangan" in Bukit Barisan Selatan NP. Efforts to increase the Sumatran tiger population in the 4 priority landscapes are also supported by eradicating traps operations carried out in the Sumatran tiger habitat. As has been done by 4 patrol teams in BBSNP who managed to collect 19 snares consisting of 15 snares for tigers and 4 snares for other animals. In addition, the installation of camera traps is not only to monitor the presence of Sumatran tigers but also other types of animals that show biodiversity in the tiger landscape. The project has also supported the release of Sumatran tigers to Gunung Leuser National Park by helicopter, and this has greatly helped the Ministry of Environment and Forestry in efforts to save and increase the Sumatran tiger population. Entering the last year of project implementation, the activities that have been carried out and have shown results in conserving the Sumatran tiger can continue through the implementation of sustainable financing documents in the 4 landscapes and can be one of the exit strategies after this project ends.
Other Partners	*(not set or not applicable)*

G. Gender

Progress in Advancing Gender Equality and Women's Empowerment

This information is used in the UNDP NCE Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning. The **Project Manager and/or Project Gender Officer** must complete this section with support from the UNDP Country Office.

1) Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.
Gender Analysis Tiger-_Bahasa_.doc
Gender Analysis and Action Plan: Evidence 35 - Gender Analysis and Action Plan.docx **Gender Analysis and Action Plan:** Gender Analysis Tiger-_Bahasa_.doc
Atlas Gender Marker Rating
GEN2: gender equality as significant objective
2) Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):
Contributing to closing gender gaps in access to and control over resources: Yes
Improving the participation and decision-making of women in natural resource governance: Yes
Targeting socio-economic benefits and services for women: Yes
Not applicable: No
3) Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women. **Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.**
The project's intervention to gender aspect can be assessed by observing changes in terms of access, participation, control, and benefit. Despite challenges in the field due to existing norms and value related to gender and conservation activities, project intervention through time has provided yet another pathway to gender equality. One of which is by providing showcasing women's hidden and underappreciated role/potential in conservation through providing access to information, resources and opportunity to perform their capacity. This is done through an integrated gender mainstreaming into project activities, by exploring opportunities from local context rather than simply relying on a fixed strategy. This is actually in line with recent CIFOR publication on gender (https://www.cifor.org/knowledge/publication/7909), which highlight that effort to improve gender equality, should not be translated into 'gender mainstreaming' activities alone – as this will result in unclear benefit. Rather, "it involves taking advantage of opportunities that emerge in various institutional arenas such as policy and law-making and implementation, government administration, customary or community-based tenure governance, or forest restoration at the landscape scale". Hence, this project's approach has been extremely relevant to the current gender work, both, scientifically as well as practically. Project's work of advancing gender has been tailored to adjust, respect, and taking the best opportunity available in each project sites.

For example, in Kerinci Seblat National Park, project training activities have showcased the significance of women's 'hidden' role and potential in conservation, specifically in building collaboration for conservation. As a result of these trainings, a report developed by project's partner (Pusat Informasi Lingkungan Indonesia/PILI Foundation) have documented several woman champions, who have successfully built partnership and collaboration with local stakeholder to progress with conservation effort. By making the most of their informal network, but also go beyond that, these woman champions have been able to formalize the partnership into a formal agreement – which increase the sustainability of the collaborations and at the same time building the confidence of the women to take more initiative in conservation effort (Evidence 35 - PILI Lessons Learned from Soft skill Training). The soft skills gained from the training has been identified as key to building succesfull coordination and collaboration for conservation (Component 2 of the project:: Intersectoral Coordination System).

This demonstrates that project's investment in capacity development has been manifested into tangible outcome overtime, more specifically it has also benefited in advancing gender equality.

In addition to that, in Gunung Leuser National Park, project supported the initiative of women's group in the are by providing the strengthening capacity of this women's groups to support conservation efforts in the village of Sei Serdang. Here, project also facilitated the establishment of Animal Care Group in the village. This group becomes the means for women to play more active roles in conservation, one of which by supporting efforts to mitigate human and animal conflicts through the development of alternative economies (related to output 2.2, component 2 -- human wildlife conflict).

Project has also encouraged and nurtured women's active participation in conservation activities by enabling them to take an active part in forest restoration effort, through increasing their knowledge and skills in the area. The project is working with Leuser Conservation Forum, a local NGO, facilitating this women group with training and capacity building to promote green and natural farming to control pest and hence increase agricultural productivity that will affect their livelihood (related to output 2.2, component 2 -- human wildlife conflict)..

Other forest restoration activities were also implemented in Kerinci Seblat National Park by engaging with local NGO called Walestra, and Women's Group for Environmental Awareness (KPPL - Kelompok Perempuan Peduli Lingkungan) to prepare nursery of tree saplings for forest restoration in the area. The activities specifically engaged women in maintaining seedling center to supply forest restoration activities in the area (related to Component 1, Output 1.4 -- deforestation rate).

As discussed within Gender Analysis Review (Evidence 36 - Gender Analysis and Action Plan 2018), local value and norm in the targeted sites are strongly patriarchy, particularly with regard to some conservation activities. Despite challenges and by still respecting local values, project has been able to provide the channel and demonstrate that women can also take active roles in conservation effort if opportunity and resources are provided or made accessible to them (Evidence 37 - Gender Analysis 2021).

4) Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.

Various project's effort to advance gender equality and women's empowerment has enhanced project outcomes in at least two ways. First of all, engaging and providing women with opportunity and resources to actively participate in conservation effort in their surrounding area has increased sustainability of project's outcome – i.e. when project ended. Empowering women with conservation knowledge and specifically building their confidence to actively contribute to conservation effort can be considered as a long-term investment to nurture echophilia (the sense of closeness and appreciation to nature) for the younger generation – as in general women spend more time with the children when compared to the men. Earlier experience has shown that women can be a strong asset in educating the younger generation on the importance of forest conservation and to live in harmony with the nature. Therefore, active participation and involvement of women, for example in preparing seedlings for forest restoration activities as reported above, provide indirect yet actual channel of connection between them and the forest in their surroundings, as they now take part in

effort to maintain and restore the forest. In a bigger picture and in a longer term, this has the potential to contribute to halting deforestation rate and thus protecting wildlife habitat (i.e project's outcome).

Secondly, advancing gender in project's intervention provides connection and bridge to the real development challenges faced in the targeted sites. Many research and earlier works have shown that conservation effort which merely focusing their work to technical conservation works will not be effective. It is widely understood that community buy-in, including from women, is critical to effective conservation initiatives.

Therefore, the key is in finding the right balance between conservation goals and development challenges. Incorporating gender aspects in this project by, inter alia, understanding the different needs and potential role of man and women provides a better clue to a more effective management of Protected Area in this project. For example, project's outcome related to providing alternative livelihood to reduce Human Wildilfe Conflict (HWC) and other illegal activities. Given that women have different sense and skill, and tend to be 'more quiet' than men due to the prevailing societal value, specifically targeting them through women's group create opportunity to uncover their potential, need, knowledge and interest. As a result, the types of alternative livelihood can be tailored to cater their actual need – hence, they would be more willing to participate, take part and at the end benefit from the interventions – while at the same time, enhancing project's expected outcome.

H.   Risk Management

A) Review of Risks outlined in Risk Register and PIMS+ risk tab

CO Programme Officer: Before updating the PIR, the Country Office must update the project's Atlas Risk Register in line with UNDP's enterprise risk management policy.
- The CO's update to the Risk Register should involve updating the state (action needed; treatment status; treatment activity description) of each risk, as appropriate.
- Please include COVID-related risks, where relevant.
- Please ensure all risks in the project's current SESP are also in the Risk Register.

Once the above is done, the CO Programme Officer and RTA should then jointly review and discuss the project risks reported in the Risk Register and the project's risk tab in PIMS+.

The overall risk rating identified in the project's risk tab in PIMS+ will be reported to the GEF Secretariat.

NCE RTA: Please provide an assessment of project risk management (including risks reported in Risk Register and risks included in the project's risk tab in PIMS+) undertaken in the reporting period and summarize the key risk management measures to be taken in the coming year. This text will be pulled into the risk management action plan in this project's risk tab in PIMS+.
(not set or not applicable)

B) Social and Environmental Standards (Safeguards) Risks

Project Manager and/or Project Safeguards Officer: Please answer the 5 questions in this section with support from the UNDP Country Office
CO Programme Officer: Please review the responses to ensure they are reflected in the project's Risk Register
NCE RTA: Please review the responses and discuss with the CO, as necessary. Reflect on any specific challenges in your assessment on project risk management (above).

For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.
If the project has updated its SESP during implementation, then please upload that file below.

Evidence 2 - Project_s Risks Log.docx

SESP: Annex 5 ESSP Summary _updated.docx
SESP: Evidence 2 - Project_s Risks Log.docx
1) Have any new social and/or environmental risks been identified during the reporting period?
Yes
If any new social and/or environmental risks have been identified during the reporting period please describe the new risk(s) and the response to it.
Due to COVID-19 outbreak, there has been a national budget reallocation of all lines of Ministries, including the MoEF to support the national effort to combat COVID-19. Covid-19 pandemic has also changed the way the project conducted its activities, reducing physical contacts that in some cases hindered the effectiveness to coordinate to perform the project's relevant outputs. The impacts: The budget reallocation of MoEF might affect the project output related to a bigger expected impact on habitat protection. MoEF's budget which has been initially earmarked for patrol's activity might have been reduced. As a result, patrol frequency and coverage will be reduced. The situation is worsened by the closing of the border between province/districts, which makes patrol activity becomes inefficient, and lead to poachers and other illegal activities becomes uncontrolled.

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Additionally, some other project activities, (including but not limited to: training, meetings, community engagement) are forced to be suspended due to restrictions during COVID-19 emergency period. Therefore, the overall expected conservation impact of this project might be affected as well.

Project's countermeasures:

The project will continue its support to conducting patrol activities, however, given the lack of national budget to cover the planned series of patrol, the patrol will be more prioritized to the most critical area. While patrol might not be able to be conducted fully as planned in the National Park, the project and the NP authority will also make the most of the informant network to tackle illegal activities occurring on the site. As much as possible, the planned project activities will be conducted through an online platform, including meetings, discussions forum, series of education webinars regarding tiger conservation, book launching etc.

Status Updates in 2021:

After one year since the pandemic, the project and its partner have been able to adapt to the new arrangement of managing the project, with adjustment and innovation in various aspects of project management, while ensuring overall project deliverables.

Whilst the COVID-19 risk remains, the project has shown its progressive capabilities to adapt with it at national and local levels. Furthermore, on the site level, the project's approach has actually contributed not only in adapting, but also in mitigating the risk of other zoonotic outbreaks, inter alia through the project's activity related to effort in reducing Human-Wildlife Conflict (HWC). This has been achieved through project activities, including the installment of Tiger Proof Enclosure (TPE), strengthening the capacity of local communities to handle HWC, establish local HWC mitigation team, training national park staff related to HWC, building a robust communication network in the targeted landscapes for a timely communication and reporting skills.

2) Have any existing social and/or environmental risks become more severe and/or has the project's SESP categorization changed during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.

No

If any existing social and/or environmental risks have become more severe and/or if the project's SESP categorization has changed during implementation please describe the change(s) and the response to it.

(not set or not applicable)

3) Have any social and environmental assessments and/or management plans been prepared or updated, and/or has the SESP been updated in the reporting period, as required? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.

No

If yes, please upload the document(s) above using the FILE LIBRARY button. If no, please explain when the required documents will be prepared.

(not set or not applicable)

4) Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period?

No

If yes, please describe the complaint(s) or grievance(s) in detail including the status, significance, who was involved and what action was taken.

N/A

5) Is the preparation and./or implementation of the project's safeguards management plan(s) on track, including monitoring?

Yes

If no, please explain:

(not set or not applicable)

I.   Knowledge Management & Communications

The **Project Manager** must complete the three questions below.

1) Please provide progress on the implementation of the project's Knowledge Management approach approved at CEO Endorsement/Approval. If there is no KM approach/strategy, please comment on how the project is capturing and disseminating best practices and lessons learned.

This text will be posted to the GEF Portal.

Communication and campaign initiatives in this reporting period started with Global Tiger Day Celebration in July 29, 2020 in project's landscapes. In Gunung Leuser National Park, Project Implementation Unit worked with relevant stakeholders (GLNP Authority, Students from North Sumatera University/USU, Tiger Heart Medan, Office of Environment and Forestry, BKSDA Sumatra Utara) supported GTD 2020 campaigns by distributing posters, leaflets and stickers promoting Sumatran tiger conservation in the landscape.

Project also supported Global Tiger Day commemoration in Bukit Barisan Selatan National Park by sharing activities with BBS NP authority, WCS-IP, YABI, PILI and Repong Indonesia. The team performed collective clean up action at Sanggi Bengkunat Cross Road and hosted Coffee Morning Live talk show on Global Tiger Day 2020 to increase awareness of Lampung communities on Sumatran Tiger Conservation in the area.

At national level, Project Management Unit in this reporting period initiated a nation-wide campaign to increase awareness of the importance of protecting endangered species in Indonesia. The campaign also marked World Wildlife Day Celebration on March 3, 2020. PMU hosted mask design campaign to support Global WWD campaign under theme "Forests and Livelihoods: Sustaining People and Planet".

In general, project has implemented all of project's communication strategy by building awareness on the importance of Sumatran Tiger conservation, increasing stakeholders' advocacy capacity, building communication networks in four landscapes and lobbying for certain policies using global, national, provincial and local initiatives.

For example in Gunung Leuser National Park, Project Implementation Unit also trained communities in Bekancan Resort on social media strategies to promote their ecotourism initiative in the area that has been supported by the project.

This activity was carried out between 26-27 August 2020 at Pamah Simelir Farmhouse, Telagah Village, Bekancan Resort, which was attended by 22 participants & the implementing team, consisting of 14 men and 8 women. This training was facilitated directly by 2 resource persons managing social media from Gunung Leuser National Park Center.

The project supported the preparation of Bekancan Resort Tourism Profile. This activity was carried out to document tourism activities that were initiated by the local community in the buffer village of Gunung Leuser National Park, Bekancan Resort.

The purpose of this activity is to promote the natural tourism potential of the Bekancan Resort TNGL buffer village, as a strategy for protecting the area and wildlife habitat as well as documenting community strengthening activities in developing tourism potential which has been supported by the Sumatran Tiger project.

Communication Initiatives in Kerinci Seblat National Park

The project also carried out a similar initiative in Kerinci Seblat National Park through the production of a video entitled: "Nagari Sako, from illegal logging to nature conservation-based tourism around Kerinci Seblat National Park".

Nagari Sungai Gambir Sako Tapan, District of Ranah Ampek Hulu Tapan, Pesisir Selatan Regency is one of the villages in West Sumatra Province which is located directly adjacent to TNKS. The local

government and the people of Nagari Sungai Gambir Sako Tapan intend to make their village a "tourism village" that prioritizes aspects of nature conservation. The clear flow of the Sako River from within the TNKS area is then used by tourism actors (communities/individuals) to become a natural tourist attraction.

The TNKS Center as the manager of the national park has a mission related to the development of the potential use of environmental services such as ecotourism, especially for villages that support the national park area. Previously it was known that the level of illegal logging from within the TNKS area around Nagari Sungai Gambir Sako Tapan was relatively high. Along with the development of local natural tourism objects that are mushrooming in Nagari Sungai Gambir Sako Tapan, the level of illegal logging in this village has also decreased.

Kerinci Sebat National Park and partners will continue assisting and empowering communities to support Nagari Sungai Gambir Sako as a "tourism village" that prioritizes aspects of nature conservation. The tourism potential in the Nagari is increasingly known, thanks to promotional supports of the natural tourism object in Nagari Sungai Gambir Sako Tapan, so welfare of the people who live bordering the TNKS area could also be improved. This video also tells a series of support by Tiger project and KSNP to Nagari Sungai Gambir Sako Tapan.

The project also carried out public awareness through broadcasting Public Service Advertisements (ILM) and organizing talk shows on Radio Andalas 99.0 FM Kerinci on 30 April 2021 and 25 May 2021. A total of 10 types of PSAs with topics of conservation of the TNKS area for about 2 minutes are broadcast with a broadcast frequency of 20 times a day (including prime time), since January 25, 2021.

The topic of the April talk show was the role of the village in efforts to preserve the TNKS forest, with the presenter being the Acting Officer. Head of Masgo Village and PIU of the Tiger project. Resource persons from the Kerinci District Community and Village Empowerment Service did not attend this activity without prior confirmation.

The talk show topic in May was the role of villages and communities in efforts to preserve the TNKS forest, with resource persons attending the Section Head of PTN I Kerinci – BBTNKS, Acting. Head of Masgo Village, Head of KTH Danau Belibis, Giri Mulyo Village, Kec. Kayu Aro Barat, and the Tiger project PIU. The June 2021 talkshow could not be held so it was rescheduled to be held in early July 2021.

Radio listeners simply responded to this talk show activity by sending questions about TNKS via SMS, chatting on social media and contacting by telephone. The talk show not only has increasing the understanding of radio listeners, most of whom are cultivators, but also beneficial for resource persons to be able to coordinate and synergize with each other in efforts to conserve TNKS forests.

Masgo Village, Gunung Raya District, Kerinci Regency is one of the villages in Kerinci Regency that issues Village Regulations (Perdes) related to TNKS forest conservation. The village regulation is considered important to be disseminated and even can be an example for other villages around TNKS.

The Danau Belibis Forest Farmers Group (KTH) is one of the community groups in Giri Mulyo Village, Kayu Aro Barat District, Kerinci Regency which - through a conservation partnership with the national park manager (Balai Besar TNKS) - performed ecosystem restoration planting activities, by planting in KSNP green lines and boundaries. The group also performed independent forest patrols around the TNKS forest. This talk show inspired radio listeners that KTH could also play a role in conserving the TNKS forest.

Knowledge Management

Sumatran Tiger Project in this reporting period also supported printing of 100 Sumatran Tiger Catalog Books in Gunung Leuser National Park. This book provides information about Sumatran tigers in the GLNP and surrounding areas that BBTNGL and its partners have collected through camera traps and direct identification of tigers victims involved in tiger conflicts from 2012 to 2020.

The purpose of this activity is to document (print) information about Sumatran tigers in Gunung Leuser National Park that is already available from the results of camera trap studies so far supported by the project, as a reference for identifying Sumatran Tigers around the TNGL area and preparing publication media to complete Sumatran tiger data and information in Gunung Leuser National Park.

This activity was actually a follow up from Kerinci Seblat National Park's initiative that has been reported in the previous PIR to develop Sumatran Tiger Catalog. Two other landscapes (Bukit Barisan Selatan National Park and Berbak Sembilang National Park) are following the action and the results will be reported in project's final report.

Sumatran Tiger Project entered its final year this year. The project is trying to continuously raise awareness about the importance of Sumatran tiger conservation and the success of the project through campaigns on social media networks. The project's social media network has proven effective in broader awareness campaigns by reaching more than 500,000 people on a generic basis (with almost zero budgets). Supporting these campaigns, project needs to develop contents in short video format with themes and information taken from various publications that have been printed by the project so far. The project already has videos and photos that can be used to create inspiring short videos (under 3 minutes videos).

Project's communication officer has proposed 10 topics of inspirational videos as follow:

1. A short video on characteristics of the Sumatran tiger and its role in protecting the ecosystem.
2. A short video on the plight of tigers in Indonesia telling stories about the extinction of the Javanese and Balinese tigers and the fate of the remaining tigers, the Sumatran tiger today.
3. A short video on threats to the sustainability of the Sumatran tiger (conflict, snares, habitat destruction) and the condition of the remaining tiger landscape.
4. A short video on conservation actions performed by Tiger Project. This theme explains what interventions the project implements in 4 landscapes in a simple way.
5. A short video on Gender Aspects in the Tiger Project. The theme describes the gender approach across various project outputs across 4 landscapes.
6. A short video on RBM SMART Patrol in Tiger Landscape
7. A short video on Sumatran Tiger Population Monitoring Strategy.
8. A short video on Training for Law Enforcement on Wildlife-Related Crimes
9. A short video on KSDAE Sit room as a legacy of the Sumatran Tiger Project. Illustration form,
10. A short video on Sustainable Financing in the Project Landscape.

From ten proposed short videos, Project Management Unit in this reporting period has completed four videos that could be download at this link:
https://drive.google.com/drive/folders/128KGFAD7wm08Rzeyw-Dzj-ndHXSBeQuV?usp=sharing.
Only three of four videos have received approval for publication from National Project Director.

In landscape level, project's partners also develop lessons learned from project's implementation, for example in Berbak Sembilang National Park, project worked with national television to produce documentary video on project's interventions and aired the content in the respective media. All documentation of project's communication products will be uploaded in this section.

CEO Endorsement Request: PIMS5363 Sumatra CEO Doc Final for Submission_18Dec2014_update table F.doc

2) Please provide URLs specific to this project in the relevant field below. Please categorize the URLs appropriately (for example: project websites, social media sites, media coverage, etc.)

(This field is pre-filled from the 2020 PIR. Please edit, as needed).

Project's website: https://sumatrantiger.id/en/
Facebook: https://web.facebook.com/SumatranTigerID/
Twitter: https://twitter.com/SumatranTigerID
Instagram: https://www.instagram.com/sumatrantiger_id/

YouTube: https://www.youtube.com/channel/UCid_2KRFVAjGZKS7KGro-gg/featured
All media coverages could be found at this link: https://sumatrantiger.id/en/liputan-media/
List of media coverages:

- Aksi Mengeluarkan Taman Nasional Kerinci Seblat dari Daftar Terancam Warisan Dunia
- Pendekatan Budaya Salah Satu Upaya Selamatkan Harimau Sumatra
- Pendekatan Budaya Bisa Selamatkan Populasi Harimau
- Pendekatan Budaya untuk Selamatkan Harimau Sumatra
- Pamah Simelir - Primadona Baru Wisata Alam Sumut
- Upaya Mengajak Masyarakat untuk Mandiri Menangkal Konflik Manusia dengan Satwa Liar
- Kisah Masyarakat yang Hidup Berdampingan dengan Harimau
- Mengenai Simbah dan Mitos Terkait dalam Bingkai Budaya Jawa
- Hidup Berdampingan, Pelestarian Harimau Sumatra Menjadi Tugas Bersama
- Menjaga Bengteng Terakhir Harimau Sumatra di Bukit Barisan Selatan
- Tradisi Bayar Bangun Nenek dan Mitigasi Konflik Manusia dengan Harimau
- Hidup Berdampingan dengan Harimau Berbekal Fondasi Kearifan Lokal
- Menumbuhkan Kesadaran Mitigasi Konflik Manusia dengan Harimau
- Konflik Antara Manusia dengan Harimau: Siapa Menyerang Siapa?
- Tiga Ayam Hitam dan Ayam Kuning bagi Si Kasat Mata dalam Tradisi Kerinci
- Perlindungan Sekaligus Basis Pengelolaan Hutan
- Patroli SMART Potensial Menjadi Basis Pengelolaan Taman Nasional
- Balai Besar TNKS Berhasil Tangkap Pelaku Perburuan Harimau Sumatera
- Inilah Wajah Pelaku Utama Perdagangan Kulit Harimau Sumatera
- Tim Patroli BTNKS Amankan Kulit dan Tulang Harimau
- Balai Besar TNKS Berhasil Tangkap Pelaku Perburuan Harimau Sumatera
- Tiga Pelaku, 2 Lembar Kulit Harimau Diamankan Tim Patroli BTNKS
- Senpi Rakitan, 2 Unit Gergaji Mesin Ditemukan di Kawasan Hutan TNKS
- Tim Patroli TNKS Kembali Berprestasi
- Tim TNKS Ringkus Dua Tersangka Perdagangan Harimau Sumatera
- Populasi Harimau di Indonesia Naik Tapi Tetap Perlu Perhatian
- Pelatihan Integrasi Pengelolaan Ekowisata Berbasis Perlinduangan Pemanfaat Lestari di Sekitar Kawasan TN Gunung Leuser
- Bersemangat, Pelatihan Patroli Berbasis SMART di Aceh Selatan
- Dari Pembalak Hutan Menjadi Pelindung
- Harimau Sumatera di Hutan Aceh di Ambang Kepunahan
- Kepala BKSDA: Harimau Sumatera Terancam Punah di Aceh
- Bersatu Melawan Kejahatan – Partners Against Crime
- Tiger Heart Peringati Global Tiger Day di Tanggamus
- Pemkab Pesisir Barat Dukung Konservasi Harimau
- Aksi Hari Harimau Sedunia di Kabupaten Tanggamus
- Satreskrim Polres Aceh Selatan Gagalkan Penjualan Kulit Harimau
- World Tiger Day Will Be Celebrated in Medan
- Aum Sendu Harimau Sumatera Menyambangi Bandung
- Selamatko Lemaong Sumatera Nyindang Bela Kebanggaan Kita
- Global Tiger Day Kepala BBKSDA Sumut Ikut Aksi Mural
- Dukungan Pengelolaan Kawasan Taman Nasional Berbak
- Mengembalikan Marwah Si Raja Hutan
- Guarding a handful of Paradise – UNDP Indonesia
- Tingkatkan Pemahaman Tentang Harimau Sumatera, TNBBS dan Sumatran Tiger Project Gelar Pelatihan
- Sumatran Tiger Adakan Pelatihan Penyelamatan Harimau
- Sumatran Tiger Gelar Pelatihan Advokasi Konservasi Harimau Sumatera
- Populasi Raja Hutan Sumatera Kritis
- Harimau Sumatera Terancam Punah, TNBBS Adakan Pelatihan Advokasi
- Media Campaign dalam Peliputan Lingkungan Hidup
- Pemprov Lampung Ikut Jaga Harimau Sumatera dari Kepunahan
- Pelatihan Advokasi Mendorong Upaya Konservasi Harimau Sumatera
- Pemprov Dorong Upaya Konservasi Harimau Sumatera
- Kunci Kelestarian Harimau Sumatera, Masyarakat harus Paham Informasi Harimau
- Populasi Harimau Sumatera Butuh Perhatian

Tak Ingin Harimau Sumatera Ikuti Kepunahan Harimau Bali dan Jawa, Ini Langkah Pemprov Lampung
Kampanyekan Konservasi Harimau Sumatera, Sumatran Tiger Gandeng Media di Lampung
Pemprov Lampung Ikutserta Dalam Pelatihan Advokasi Konservasi Harimau Sumatra
Konflik Tertinggi Terhadap Harimau Sumatera, Provinsi Bengkulu Nomor 2 di Sumatera
Advokasi Konservasi Harimau Sumatera
Anggapan Harimau Musuh Manusia Harus Diubah
Sumatran Tiger Secara Resmi Masuk dalam Daftar Mitra KSDAE
Lokakarya Nasional RBM, Negara Harus Hadir di Lapangan
Harimau Sumatra Berfungsi Menjaga Keseimbangan Ekosistem
Gubernur Lampung Bentuk Satgas Konflik Antara Manusia dan Satwa Liar
Gubernur Lampung bentuk Satgas Penanggulangan Konflik Antara Manusia dan Satwa Liar
Warga Lima Desa Kelola Zona Rehabilitasi
30 Hektar Kawasan TNGL Jadi Zona Rehabilitasi
Warga Penyangga Sepakat Lestarikan Taman Nasional Gunung Leuser
UNDP dan Pemprov Bahas Penanganan Konflik Satwa dan Manusia
Sumatran Tiger dan Dishut Bahas Solusi Konflik Satwa Liar
The Heroes of Sumatran Tiger
Peningkatan Kapasitas SDM Balai TN Berbak Sembilang dengan SMART
Dit Reskrimsus Polda Aceh Tanda Tangani MoU Kerjasama Dengan BBTNGL
Foto – Jambi Rayakan Global Tiger Day
Jelang Global Tiger Day Aktivis Satwa Kampanyekan Buru Pemburu Liar
Jambi Harus Siaga Perburuan Harimau Sumatera
Global Tiger Day 29 Juli: Perberat Hukuman Pelaku Perdagangan Harimau Sumatera
Indonesia Celebrates Global Tiger Day 2017
Harimau Sumatera Terancam Punah
Peringatan Global Tiger Day di Median Dimeriahkan Berbagai Kegiatan
Foto: Global Tiger Day di Medan
Ketika Harimau Jalan-Jalan di Global Tiger Day
Global Tiger Day in Indonesia
Aksi Teatrikal di Tiger Day Ajak Masyarakat Jaga Harimau dari Kepunahan
Petugas TNKS dan Polisi Ringkus Pedagang Kulit Harimau di Bengkulu
Mereka yang Bergandeng Tangan Selamatkan Harimau Sumatera
Menteri Kehutanan Resmikan Kemah Konservasi 2017
Kemah Konservasi Ini Tujuannya
Lampung Gelar Kemah Konservasi
Kemah Konservasi KLHK 2017
Smart Patrol Untuk Selamatkan Harimau Sumatera Yang Tersisa
Tim Gabungan Gagalkan Perburuan Harimau
Patroli Sapu Jerat Perlambat Kepunahan Harimau Sumatera
Pulihkan Populasi Harimau Sumatera KLHK Terima Hibah US$9 Juta
Cooperative Efforts to Save The Sumatran Tiger
Perlunya Mengawal Fatwa MUI Tentang Haramnya Berburu Harimau
GEF Hibahkan 9 Juta Dolar untuk Pulihkan Harimau Sumatera
KLHK Gandeng UNDP Pulihkan Harimau Sumatera
Pemulihan Harimau Sumatera GEF Hibahkan 9 Juta Dolar AS
Populasi Harimau Terjaga Kawasan Hutan Lestari
Dana Hibah 9 Juta Dolar untuk Pulihkan Harimau Sumatera
Lama Diincar, Jaringan Pemburu Harimau Sumatera di Bengkulu Dibekuk

3) In the PIR platform, please upload any supporting files, including the project's Communications Strategy, photos, videos, stories and other communication/knowledge materials.

Ev 21 Sumatran Tiger Communication Strategy.pdf

J. Stakeholder Engagement

Project Manager: Please provide an update on engagement with stakeholders (government, civil society, NGOs, indigenous peoples, private sector, etc.) as outlined in the project's Stakeholder Engagement Plan. This informaton is used by the GEF and UNDP for reporting and is therefore very important.

- Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval.
- Upload all available documentation of the project's stakeholder engagement, including surveys, FPIC reports and others using the FILE LIBRARY button in the upper right corner of the PIR.
- If the project's Stakeholder Engagement Plan has been updated during the reporting period, please upload that file using the FILE LIBRARY button above.

The CO Programme Officer and NCE RTA must review this section.

This text will appear in the GEF Portal.

(A) Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description in the Stakeholder Engagement Plan or equivalent documentation submitted at CEO Endorsement/Approval.   **(B) Upload all available documentation of the project's stakeholder engagement, including surveys, FPIC reports and others using the FILE LIBRARY button in the upper right corner of the PIR.**   **(C) If the project's Stakeholder Engagement Plan has been updated during the reporting period, please upload that file using the FILE LIBRARY button above.**
As listed within the Project Document (Part IV: Stakeholder Involvement Plan), the project continues to maintain its main engagement with NGO partners WCS, FFI, ZSL, and Forum Harimau Kita (FHK) to deliver project outputs/interventions at the site level by working under coordination and collaboration with National Park Authorities at targeted project sites and at the national level. Additionally, in this reporting period project has engaged local NGO, Forum Konservasi Leuser (FKL), to conduct ecosystem restoration in the project's landscapes in Kerinci Seblat National Park and Gunung Leuser National Park. The project also worked with PILI Foundation to deliver soft skill training in four project landscapes. The training activities were designed based on the landscape/national park's specific needs. Leadership training for Park Managers with the trainer from UID (Unity in Diversity) has been initiated as well. The advance training will be conducted from the end of July to mid-November 2021.   One of the challenges in this reporting period is the termination of collaboration with ZSL due to inevitable circumstances and pressures faced by the organization, which has forced the project to end its contract in December 2020. Consequently, since then, implementation support for Berbak and Sembilang NP landscape has been reduced. The Project Implementation Unit (PIU) as the regional project office remains the key entity for coordination and management of the project in the Berbak Sembilang landscape. However, most of the key and critical project activities milestones have been implemented and delivered with ZSL support. Various capacity development activities and knowledge building throughout project implementation, including in undertaking SMART Patrol, have been invested within the National Park system and resources. Follow-up or any unfinished activities which have been previously initiated by ZSL will be continued and coordinated directly by the PIU, Berbak Sembilang National Park Authority, and the PMU.   In general, the stakeholder engagement plan has been well materialized and incorporated throughout various project activities in different landscapes as well as nationally, particularly through activities under component 2, which specifically aims at building intersectoral coordination systems. The successful engagement is indicated through the full achievement of the target indicator under component 2 -- which showcases yet again that improved engagement and coordination has contributed to progressing with effort to combat illegal activities to support conservation efforts.
CEO Endorsement Request: PIMS5363 Sumatra CEO Doc Final for Submission_18Dec2014_update table F.doc

Stakeholder engagement plan (Annex): *not available*

K.   Annex - Ratings Definitions

Development Objective Progress Ratings Definitions

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

Implementation Progress Ratings Definitions

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.