



Bumitama Agri Ltd
10 Anson Road #11-19
International Plaza, Singapore 079903
Tel : +65 6222 1332
Fax : +65 6222 1336

NEWS RELEASE

* BBCP UPDATES – CONSERVATION AND BIODIVERSITY *

Jakarta, 18 July 2018 – In 2017, Bumitama Agri Ltd. commissioned two assessments to map the density and distribution of orangutans and the state of its habitat in the set-aside areas of the Bumitama Biodiversity and Community Project (“BBCP”) together with Yayasan Inisiasi Alam Rehabilitasi Indonesia (“YIARI”). The analysis of the collected data offers us a better understanding for the type of landscape we are working in and provides us with a base data for future tracking and monitoring. We will review and implement the recommendations provided by our partners in stages based on the project priorities.

The extract of the two reports as attached below.



For further information, please email:

Christina Lim

Email: clim@bumitama-agri.com

Lim Sian Choo

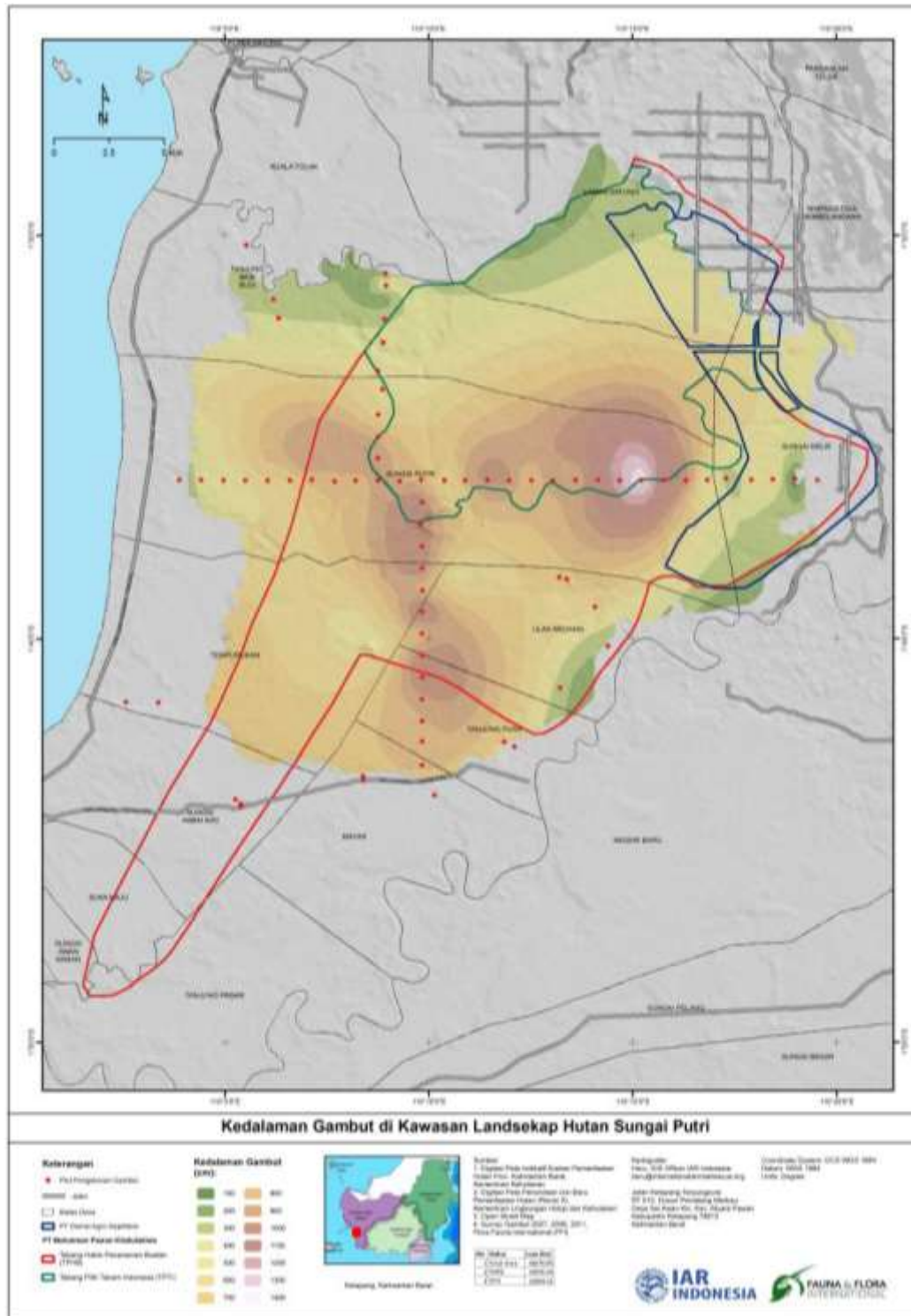
Email: lim.sian.choo@bumitama-agri.com

Glenn Ho

Email: glenn.ho@bumitama-agri.com

SUMMARY OF ASSESSMENTS CONDUCTED BY YIARI IN PT GMS AND PT DAS

In 2017, Bumitama conducted series of studies in partnership with Yayasan Inisiasi Alam Rehabilitasi Indonesia (YIARI), aimed at determining the density and distribution of orangutans in the PT Damai Agro Sejahtera (PT DAS) and PT Gemilang Makmur Subur (PT GMS) as well as the botanical diversity, forest condition and habitat suitability for orangutans in the proposed corridor region of PT GMS. The following text is the summary of the reports prepared by the YIARI team.



Sungai Putri Forest Block with PT DAS overlaid with peat map from Fauna and Flora International 2011 survey

The concessions of PT GMS and PT DAS are located in the Ketapang regency surrounding and overlapping with the Sungai Putri Landscape, a 55,000 ha landscape; 39,562 ha of which is still covered in good quality forest. A population survey of orangutans conducted in 2013 by YIARI and Borneo Nature Foundation (BNF) indicates that a population of around 900-1,250 individual orangutans live in the Sungai Putri landscape, at densities of between 1.64 individuals per square kilometre and 2.27 per square kilometre (as published in Utami - Atmoko et al, 2017). This is the largest orangutan population in the Ketapang district, and the third largest in West Kalimantan Province, after Gunung Palung and Betung Kerihun National Parks.

Furthermore, these concessions encompass a suitable area for a natural corridor between Sungai Putri and Gunung Palung - Gunung Tarak landscape, which together form part of the broader wild orangutan meta-population, representing one of the most significant populations in Kalimantan and an incredibly important landscape for the future of the species. Protecting the whole of Sungai Putri Forest Block is of the utmost importance, including the region inside the PT DAS concession where most of the concession has been identified as deep peat. This is essential in order to maintain a large, viable, genetically diverse population of orangutans. It is also vital to protect the forest cover here because of the inter-connected nature of peat-swamp forest. If one part of the peat-dome is disturbed, burnt, cleared or drained this will have knock-on effects throughout the entire forest, because the hydrological balance of the entire peat-swamp ecosystem will be affected.

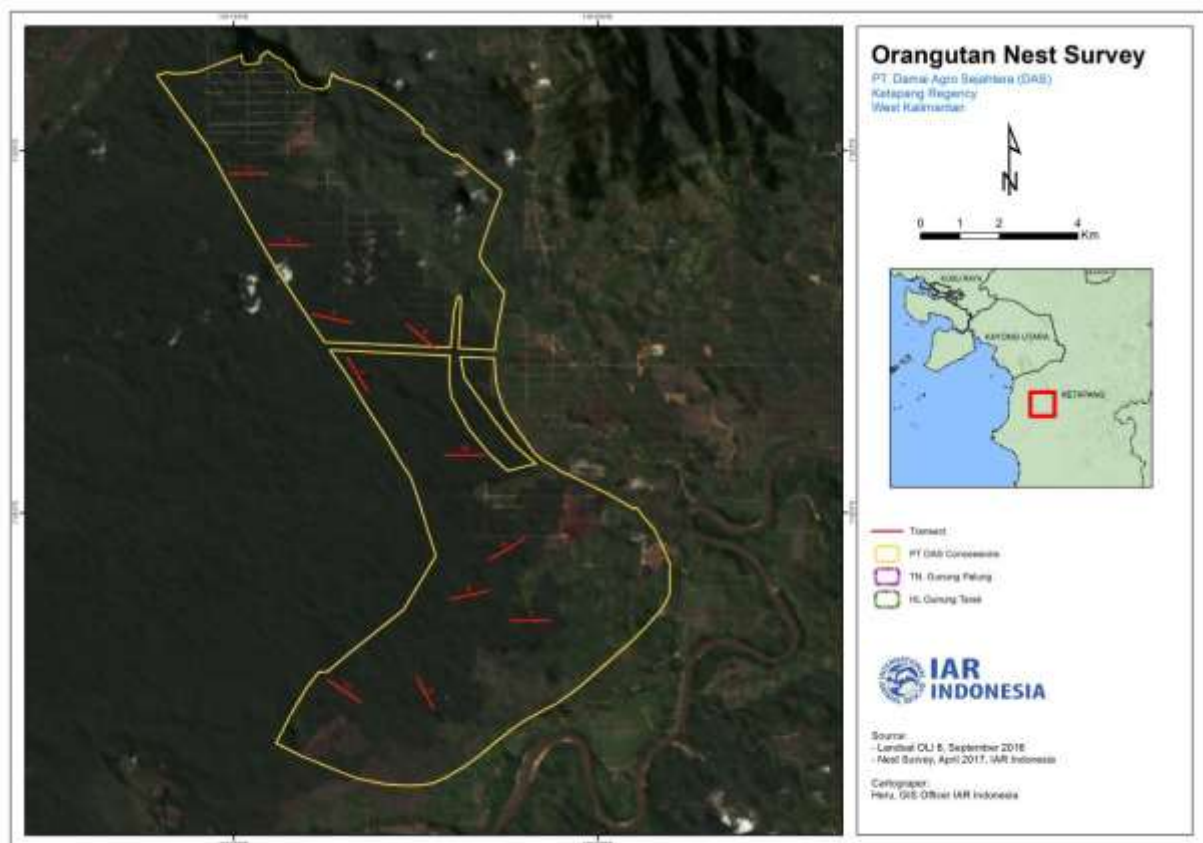
Habitat degradation and evidence of logging was recorded throughout the survey area (in all transects). In a meeting with Bumitama on the 30th of August 2017, Bumitama explained that all clearing and canal construction was prior to their acquisition on the 20th of December 2016. Since then, according to Bumitama, there were no activities on the ground. If logging is stopped and the forest is allowed to recover and regenerate naturally then orangutan numbers will rise.



Orangutan nests found in PT DAS

PT Damai Agro Sejahtera (PT DAS)

A rapid survey in the PT DAS concession was undertaken during April and May 2017 by an expert survey team. A total 9 km of transect was surveyed using a standardised nest survey method and 197 orangutan nests were found. Orangutan nests were found on every survey transect, indicating that orangutans are distributed evenly throughout the entire concession and in all remaining forest areas.



Locations of Orangutan Survey Transects within PT DAS

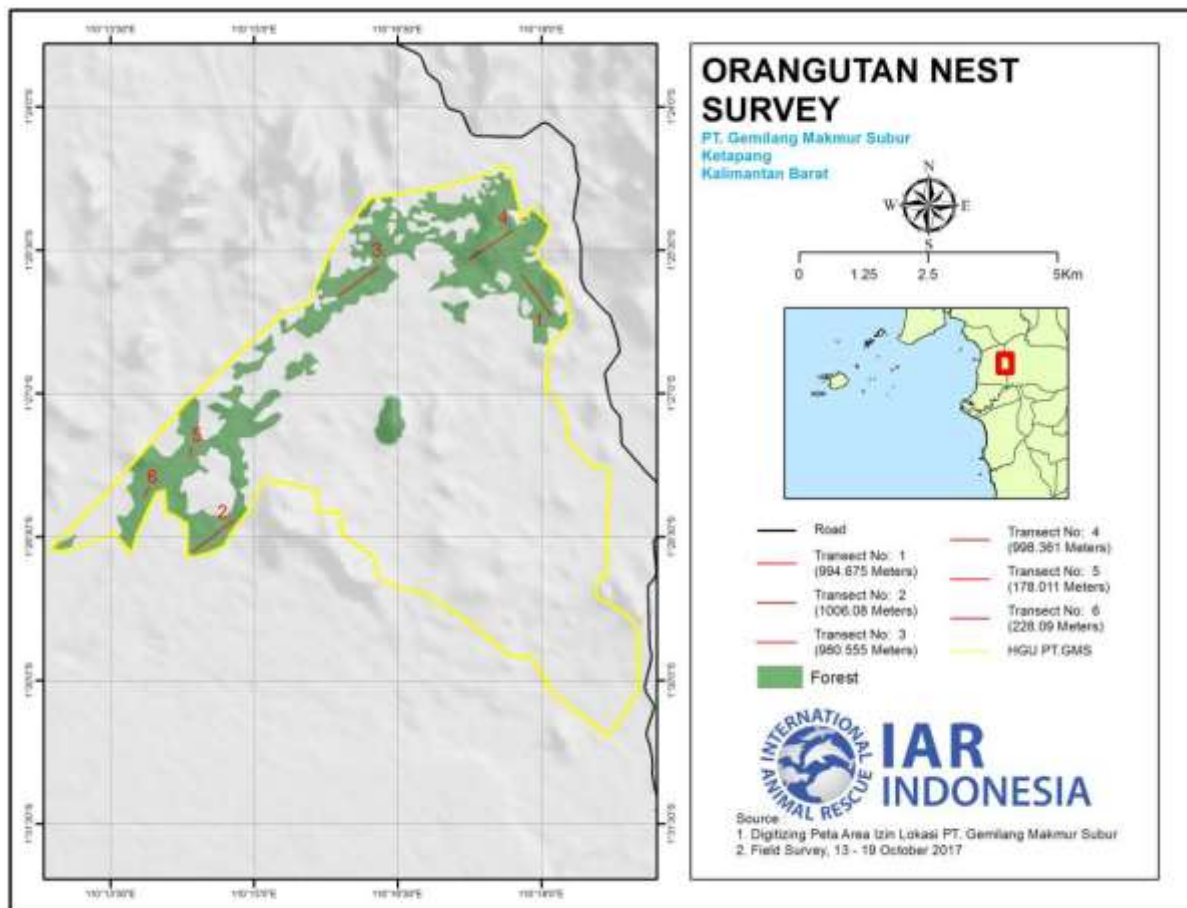
The orangutan density estimate resulting from this survey is as expected for peat-swamp forest habitat in West Kalimantan, and indicates a large, healthy population. Previous surveys by YIARI and BNF in the west of this forest in 2012, in the Sungai Putri and Sungai Tolak regions, resulted in a density estimate of 1.52 - 2.27 individuals per square kilometre; and this 2017 estimate in the east of the forest is very similar to this, 1.54 - 2.29 individuals per square kilometre. This is further evidence that the Sungai Putri Forest Block is very important for orangutan conservation, and reinforces the previous population estimate for the whole forest of 836 – 1,247 individuals.

PT DAS supports a substantial number of orangutans. According to the HCV report written by Aksenta in May 2017 for PT DAS; 52% of the total concession area of 9,436 hectares is forested and supports 76 (± 11) to 112 (± 17) orangutans based on this survey result, with the higher estimate the most likely figure. This is approximately one-tenth (9%) of the entire Sungai Putri population.

PT Gemilang Makmur Subur (PT GMS)

Bumitama Gunajaya Agro (BGA) is committed to the production of sustainable palm oil, which requires minimising adverse environmental and social impacts from its operations. PT GMS as one of its subsidiaries has designated forest areas in its concession as areas of High Conservation Value (HCV) within which occurs many endangered and protected species of fauna and flora, including the Bornean orangutan (*Pongo pygmaeus*).

PT GMS and the adjacent plantation PT Kayung Agro Lestari (PT KAL), owned by Austindo Nusantara Jaya, are also situated between Sungai Putri and Gunung Palung National Park, and these plantations present a barrier to natural dispersal and connectivity between these two main orangutan populations. If orangutans are to be preserved in the area and able to disperse to other populations, it is essential that these forest areas are connected.



Locations of Orangutan Survey Transects within PT GMS

The density and distribution of orangutans in PT GMS was surveyed during October 2017. Straight-line transects established in HCV areas were surveyed by an expert survey team using a standardised nest survey method and 36 orangutan nests were encountered. A high density of 2.53 individual orangutans per square kilometre is estimated in the western forest that connected to Sungai Putri forest. Elsewhere the forest has been heavily disturbed, and fewer nests were found. An orangutan density of 0.64 individuals per square kilometre was estimated in the north. This corresponds to a potential orangutan population of 6 (+/-2) individuals within the remaining HCV areas.

Of greater importance is the potential of these forests to act as a corridor between Sungai Putri and Gunung Tarak. If the entire HCV and HCVMA area was reforested and reconnected, the entire 1,089 ha could support up to 25 individuals, and connect the 900-1,250 orangutans in Sungai Putri with the 326-482 individuals in Gunung Tarak. Re-connecting the two populations will allow for transfer of genetic materials, thus preserving the populations' integrity and prevent inbreeding.

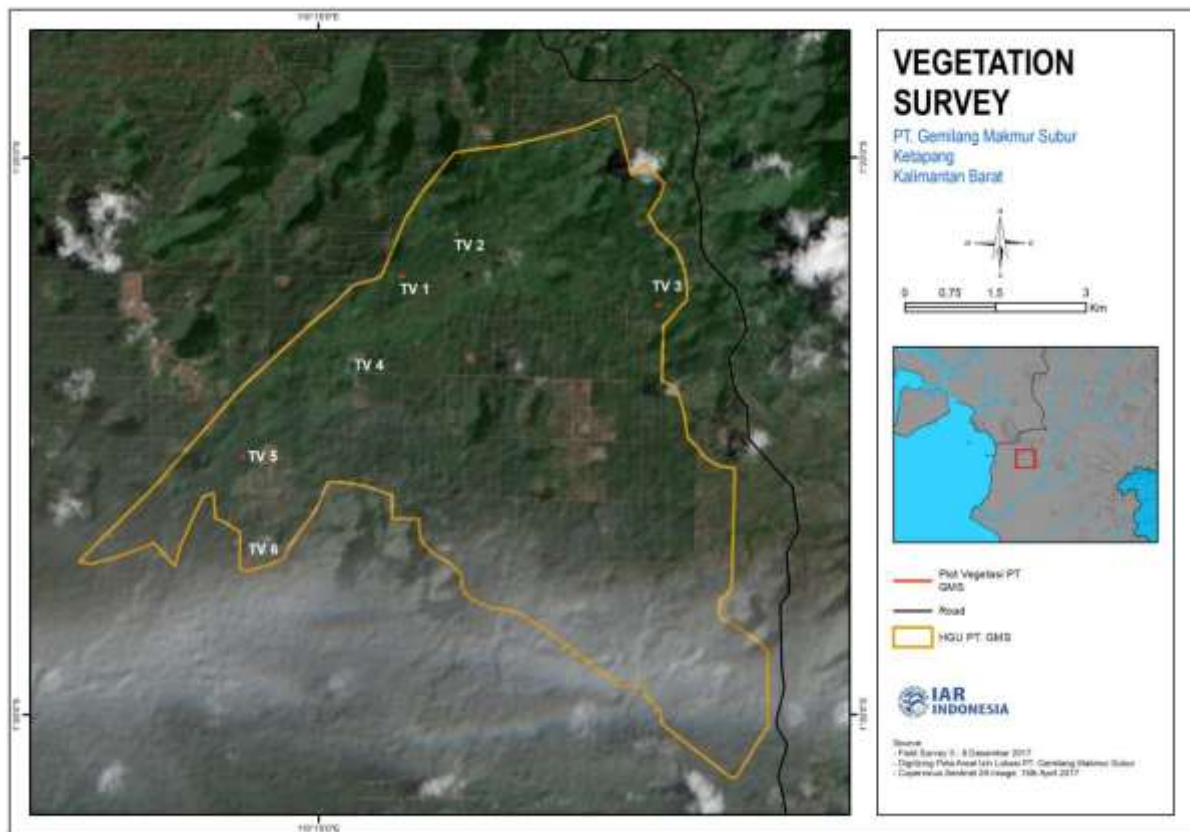
In order to begin connecting these fragments, it is essential to ensure the forest block in the North is connected to Gunung Tarak, and the forest block in the South is connected to the Sungai Putri landscape. There is currently little separating these fragments, however bridges across roads and rivers are necessary to ensure connectivity in the short term. Longer term solutions to connect these habitats are essential, and the corridor proposed by Bumitama will be a vital lifeline for the protection of these orangutan populations.

Forest corridors can take a long time (>20 years) to become effective, therefore it is imperative that all of the risks and potential obstacles are identified and considered beforehand, to ensure the success of this project. It is also important to remember that although here we focus on the orangutan population, this corridor will also serve many other animal species, therefore a wide variety of plant

species are necessary to ensure a sustainable and intact ecosystem is created in the corridor. (Gregory et al, 2014, Prayogo et al, 2014, Lackman - Ancrenaz et al, no date, Beier and Gregory, 2012).

PT GMS VEGETATION SURVEY

A rapid survey to determine the botanical diversity, forest condition and habitat suitability for orangutans in the proposed corridor region of PT GMS was undertaken during a period of 5 days in December 2017 by an expert survey team from YIARI.



Locations of vegetation plots surveyed in PT GMS

The surveyed forest is of very good condition, with many large trees, high biomass values and many species, which provide fruit eaten by orangutans. In other areas, the survey teams identified large areas of secondary forest dominated by rotan and other secondary vegetation, a consequence of heavy logging in the past. This is a natural forest with a dominance of climax species and forest clearance should not be permitted here. There is a high diversity and abundance of orangutan food trees, and this floral diversity combined with a steady year-round fruiting pattern is what makes this habitat suitable for orangutans. A stable food supply for orangutans is typical of peat-swamp forests and this is a reason that this habitat type is so important for orangutan conservation (Husson *et al.*, 2009).

This is of course the same area that the orangutans range within, and thus demonstrates that the remaining forest is suitable for orangutans. Maintaining the quality of these forest areas by preventing illegal logging and allowing regeneration of young trees will ensure the survival of the remaining orangutans in the concessions. Furthermore, connecting these good quality patches with each other by restoring degraded and secondary forest in between them, will allow an effective corridor between Sungai Putri and Gunung Tarak.

Ninety percent of the trees identified during vegetation surveys in PT GMS are known orangutan feeding taxa, supporting that this is suitable habitat for orangutans. Good quality habitat in the west of PT GMS supports many orangutans, but elsewhere the habitat is disturbed and densities are low. Nevertheless these forest patches connect the two most important populations in the Gunung Palung - Sungai Putri landscape, and it is thus important to retain the forest fragments within GMS to ensure connectivity within this meta-populations. A forest corridor is proposed to connect the Sungai Putri forest with the Gunung Tarak reserve to the north. To do this requires a number of steps to be made:

- (i) maintain connectivity with Sungai Putri and between habitat blocks;
- (ii) prevent further degradation of existing forest areas and assist regeneration;
- (iii) reforest cleared areas to create the corridor;
- (iv) regular monitoring of forest cover and orangutan distribution; and
- (v) training and awareness for staff and local residents about orangutans and how to protect and manage them in order to prevent conflict.

THREATS

In 2017, YIARI obtained information about a mining concession permit in the area overlapping the PT KAL and PT GMS corridor project. This is one of the most serious threats for the development of this corridor. Further effort is needed to lobby the government at regency and provincial levels to avoid any land clearing or development on the forested areas or on the areas designated as a corridor by PT KAL and PT GMS. Failing to do that will threaten the long-term viability of this project.

RECOMMENDATIONS

Based on the outcomes of the studies conducted in both PT GMS and PT DAS, it advised that the connectivity between the forest blocks and surrounding landscapes is maintained and enhanced and any further land clearing is avoided, especially on peatland, where damaged areas are restored and good management practices are applied. The biodiversity of the set-aside areas should be regularly monitored by a trained patrolling team, which would also approach any illegal loggers operating in the area with a proposal of alternative livelihood programmes. The multi-stakeholder project launched by BGA (Bumitama Biodiversity and Community Project – BBCP) should continue, with further involvements of YIARI especially with focus on development of a conservation working plan and SOPs for human-orangutan conflict mitigation which would then be socialised to BGA staff and local communities.