

WWF's Contribution to Supporting Forest Conservation in Sabah and Beyond

Dr Henry Chan, Dr Rebecca Jumin, Dr Faisal Mohd Noor, Dr Cheryl Cheah, Max Donysius, Dr Glyn Davies, Dr Jason Hon, Cynthia Chin, Donna Simon, Diana Anthony

WWF-Malaysia

Abstract

Malaysia's forests are critical for combating biodiversity loss and the climate crisis. For the past few decades, they have faced ongoing threats from unsustainable logging, deforestation, and agricultural expansion. At the 1992 Rio Earth Summit, Malaysia committed to maintaining at least 50% of its total landmass as forest cover. This commitment is enshrined in the National Forestry Policy 2021.

Today, more than half of Malaysia remains forested, amounting to 18.2 million hectares. Of this, Sabah and Sarawak account for 12.5 million hectares, representing 68.4% of Malaysia's remaining forest cover. The state policies of Sabah and Sarawak are to maintain forest cover at 50% and 57%, respectively, of their total landmass. In Peninsular Malaysia, the forest cover is 43.4% of its landmass, and there is a policy to increase it to 50%.

The National Policy on Biological Diversity targets 20% of the country's land surface and inland waters to be conserved as protected areas or managed using other effective area-based conservation measures by 2025. Sabah has a policy to fully protect 30% of its natural forests and is on track to meet this goal with its current 27%. In addition to these policies on forest protection, reducing deforestation can be enhanced by making certification mandatory in the forestry and palm oil sectors - through 'no new deforestation' dates, after which newly cleared areas are ineligible for certification.

Building on these and more progressive policies initiated by the Malaysian government, WWF-Malaysia embraces a ten-year strategy spanning 2021-2030 to develop solutions that contribute towards solving global issues. This includes strategies on forest conservation with three major aspirations: i) Half of Malaysia has natural forests that have legal protection; ii) One million hectares restored as forest habitats; and iii) All timber, palm oil, and rubber certified as produced sustainably.

In Sabah, WWF-Malaysia adopts the Living Landscapes Approach (LLA) to attain these aspirations. LLA provides an integrated landscape management system that promotes balanced biodiversity conservation and sustainable development through three pillars - Protect, Produce, and Restore. The outcome is a consensus-built District Plan legislated by law. On the ground implementation, LLA aims to: i) protect intact forests, wildlife, and water catchment; ii) restore habitats for

ecological connectivity and riparian reserves; and iii) promote certified sustainable production systems, such as sustainable palm oil production and agroforestry. Through this integrated approach, WWF facilitates collaboration between governments, local communities, and private enterprises to maintain forest ecosystems while enhancing livelihoods. This collaborative effort is supported by multinational corporations including HSBC, Unilever, Beiersdorf, and Evonik, and promoted through multi-country programmes such as the Asia Sustainable Palm Oil Link (ASPOL) programme.

Keywords: Forest, wildlife, water catchment, restoration, corridor, sustainable production, certification, Living Landscapes Approach, Protect, Produce and Restore, international cooperation and partnerships

WWF's Contribution to Supporting Forest Conservation in Sabah and Beyond

Introduction

Forests are among the most crucial ecosystems on Earth, acting as a haven for biodiversity and providing ecosystem services such as carbon storage and water resources. Malaysia's forests are central to national and global efforts to combat the climate crisis and biodiversity loss. Pressure over the past decades from unsustainable land-use practices such as logging and agricultural expansion has put our forests at risk. As a consequence, our forests have shrunk in size and many of our forest complexes are isolated from each other. However, we do want to acknowledge that our government, at both federal and state levels, has taken initiatives to stabilize the condition and put in place policies to maintain and improve our forests. Recognizing this overall effort, this paper looks into our works in Sabah, one of Malaysia's most biologically diverse states that plays a key role in forest conservation efforts.

This paper provides an overview of the broader context of WWF-Malaysia's overall forest conservation strategies and how they integrate with international sustainability targets. It then explores the contributions of WWF-Malaysia, focusing on the Living Landscapes Approach (LLA) in Sabah to promote forest protection, restoration, and conservation.

Malaysia's Forest Conservation Policy

Our work is centred around Malaysia's commitment to forest conservation. At the 1992 Rio Earth Summit, Malaysia committed to maintaining at least 50% of its total landmass as forest cover. This commitment is enshrined in the National Forestry Policy 2021.

Today, more than half of Malaysia is still forested, amounting to 18.2 million hectares or some 54 to 55% depending on the methods of calculation used and the assumptions made. Of this, Sabah and Sarawak account for 12.5 million hectares representing 68.4% of Malaysia's remaining forest cover. The state policies of Sabah and Sarawak are to maintain forest cover at 50% and 57%, respectively of their total landmass. In Peninsular Malaysia, the forest cover is 43.4% of its landmass, and there is a new policy to increase it to 50% per the National Physical Plan IV by 2040. When this policy is successfully implemented, we will have an additional 900,000 hectares of forest cover in Malaysia.

Table I shows our preliminary compilation of the forest cover from various sources in accordance with legislated forests in the three regions of Peninsular Malaysia, Sabah, and Sarawak, showing a total of 13 million hectares at 39.8% of Malaysia's total landmass.

Legislated Forest Type in Sabah*	Forest Reserve Area Size (ha)
Class I Protection Forest Reserve	1,473,471.26
Class II Commercial Forest Reserve	1,586,578.95
Class III Domestic Forest Reserve	4,634.00
Class IV Amenity Forest Reserve	11,402.77
Class V Mangrove Forest Reserve	234,543.84
Class VI Virgin Jungle Forest Reserve	124,757.90
Class VII Wildlife Reserve	139,699.85
Wildlife Conservation Area	2,854.00
Wildlife Sanctuary	26,103.00
National Park	245,172.00
Total:	3,849,217.57
Legislated Forest Type in Sarawak**	Forest Reserve Area Size (Ha)
Permanent Forest Estate	
Protected Forest (Class 1)	3,415,993
Communal Forest Reserve (Class III)	5688
Forest Reserve (Class IV)	541,267
State land / Government Reserve	2165
Totally Protected Area	
Wildlife Sanctuary (Class V)	225,791.40
National Park (Class V)	645,254.00
Nature reserve (Class V)	3478.13
Total	3,865,830.02
Legislated Forest Type in Peninsular Malaysia***	Forest Reserve Area Size (Ha)
Forest Reserve (2018)	4,729,263.50
Protected Area (Terrestrial)	1,832,678.67
Total (see note below)****	5,381,663.64
Total Legislated Forest in Malaysia	13,096,711.23

Table I: Forest Reserve Area Size According to Categories of Legislated Forest Types in Sabah, Sarawak and Peninsular Malaysia, 2024

Sources:

*Map of Forest Reserve & Other Forest Lands In Sabah, Sabah Forestry Department, 2024.

**Compilation of PFE Information (2020), FDS Report. Sarawak Forestry Corporation (Gazetted TPA as at 2023).

***Forest Reserve (Forestry Department of Peninsular Malaysia,2018).

**** In Peninsular Malaysia, some Totally Protected Areas remain under the Forest Reserves status. For that reason, the total number of 5.38 million hectares is an actual calculation of the legislated forest.

The new National Policy on Biological Diversity 2022-2030 has Target 8 specifying that 20% of the country's land surface and inland waters be conserved as protected areas or managed using other effective area-based conservation measures (OECM) by 2030.

In Sabah, the policy is for 30% of its landmass to be fully protected as natural forests by 2025, and with the current 27% coverage, the state is on track to meet this goal. Further to this, the state government has made certified sustainable production mandatory in both the forestry and palm oil sectors. Through this mandate, newly deforested areas created after a certain timeline are ineligible for certification. This government's adoption of certification has put Sabah ahead in terms of global development related to deforestation such as the European Union Regulation on Deforestation. This creates a competitive advantage for the commodity sector in Sabah, especially the palm oil sector. Surely, certification schemes are effective tools to advance sustainability and monitor compliance.

WWF-Malaysia's Conservation Strategy on Forests

Building on these progressive policies initiated by the Malaysian government at the federal and state levels, WWF-Malaysia developed a ten-year strategy spanning 2021 to 2030.

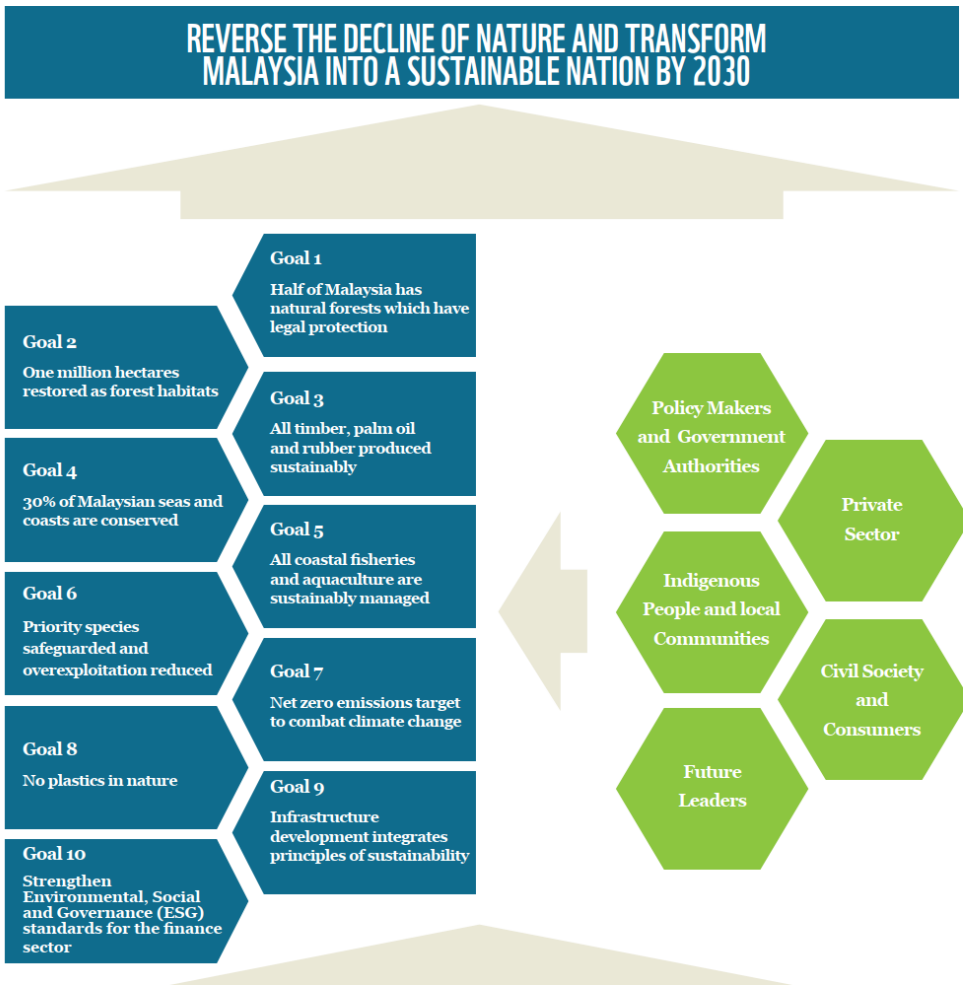


Diagram I: WWF-Malaysia 2021-2030 Strategy at a glance

As shown in Diagram I, the top box is our vision statement, “Reverse the loss of nature and transform Malaysia into a sustainable nation by 2030.” This vision is defined by ten goals, as represented by the ten blue boxes on the left. These goals aim at developing solutions, using a whole-of-society approach with various stakeholders shown on the green boxes on the right, for Malaysia as a nation to contribute towards solving issues at local, state, national, and global levels. Goals related to forest conservation are right at the top of our strategy, namely:

1. Protecting Natural Forests: Ensuring half of Malaysia has natural forests which have legal protection;
2. Restoring Degraded Forests: Restoring one million hectares of forest habitat;
3. Sustainable Production: Ensuring that timber, palm oil, and rubber are produced sustainably.

Underpinning these goals is Goal No. 6 on ensuring priority wildlife species are thriving in their large natural habitats. Overall, achieving these goals will be WWF-Malaysia's contribution to future development in which humans live in harmony with nature.

With this, we would like to focus our presentation on Sabah, illustrating in some depth how we approach the issues of environmental degradation at the landscape level. At the onset, we would like to appreciate our collaboration and partnership with stakeholders at all levels: the state government and various agencies, private companies, local communities, and fellow NGOs in seeking common goals for the benefit of all Sabahans. An important note is that in Sabah, our Sabahan friends include wildlife such as Bornean orangutans and Bornean elephants as fellow citizens. Indeed the rest of Malaysia should adopt this inclusive philosophy of extending citizenship to our species living in the wild.

The Living Landscapes Approach in Sabah

In Sabah, WWF-Malaysia's work is framed within the state's policies and aspirations; for example, Sabah's policies on 50% of its landmass covered by forest, and 30% of the same landmass under total protection. In addition, Sabah's aspiration is for 100% of its palm oil to be certified under both the Roundtable on Sustainable Palm Oil (RSPO) and the Malaysian Sustainable Palm Oil (MSPO) standards, using the Jurisdictional Approach. This aspiration, launched by the state government in 2015, provides us the impetus to elevate our work in Sabah into global significance.

This work of global significance, recognized by the WWF Network, is called the Living Landscapes Approach (LLA). LLA is an integrated management system that balances biodiversity conservation with sustainable development (see Diagram II).

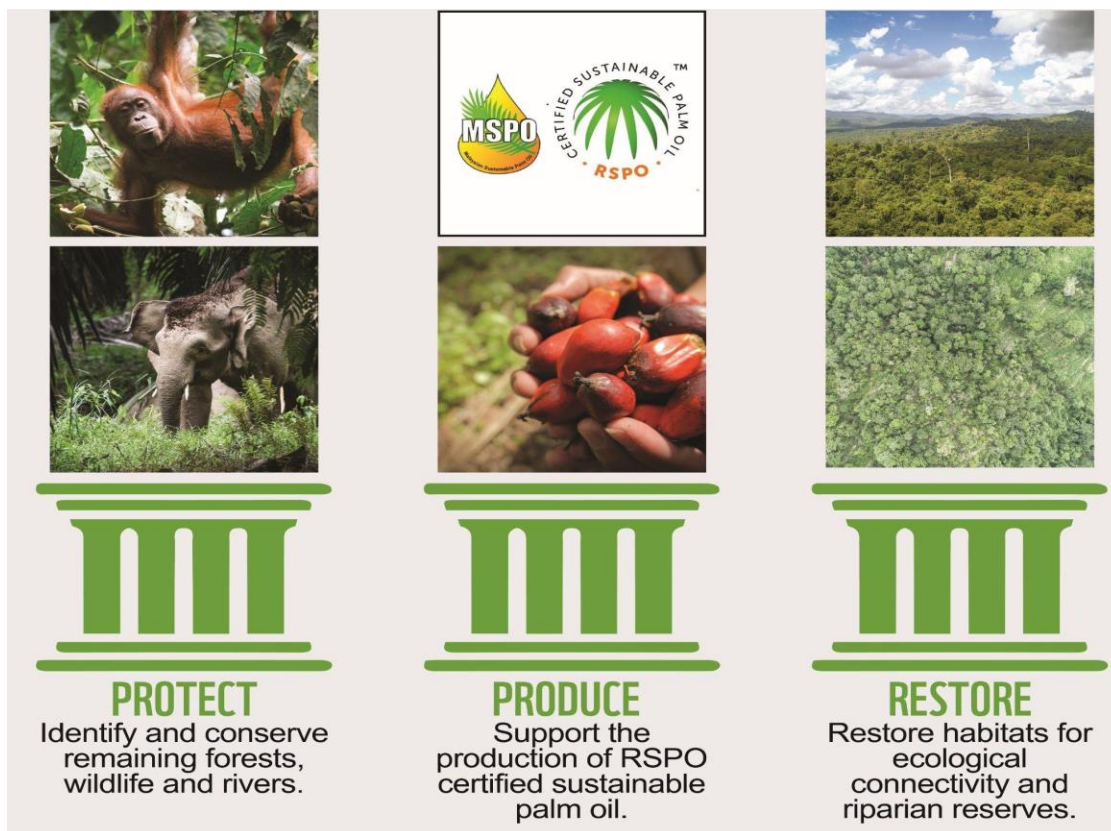


Diagram II: The Living Landscapes Approach underpinned by the Protect, Produce and Restore Pillars

LLA is built around three key pillars - Protect, Produce, and Restore:

- Under the Protect Pillar: WWF focuses on protecting intact forests, wildlife, and water catchments. This includes initiatives to protect High Conservation Value (HCV) and High Carbon Stock (HCS) forests; achieve global recognition of effective management of protected areas through the IUCN Green List; protect rare, threatened, and endangered species, including the Bornean orangutan, Bornean elephant, and banteng. Substantively, these protection efforts also help mitigate the impacts of deforestation and climate change by conserving carbon-rich areas.
- Under the Produce Pillar: we work with the palm oil sector on adopting sustainable production systems. We collaborate with smallholders and medium-sized growers, as well as larger plantation companies to shift towards sustainable practices such as certified palm oil production. Certification schemes ensure that products are sourced responsibly, minimizing environmental impacts. Where agroforestry is feasible and desirable, we work with the interested parties to plant various tree crops within their palm oil growing area.
- Under the Restore Pillar: Our work focuses on restoring degraded forest areas for biodiversity conservation. Where the forests are fragmented and ecological

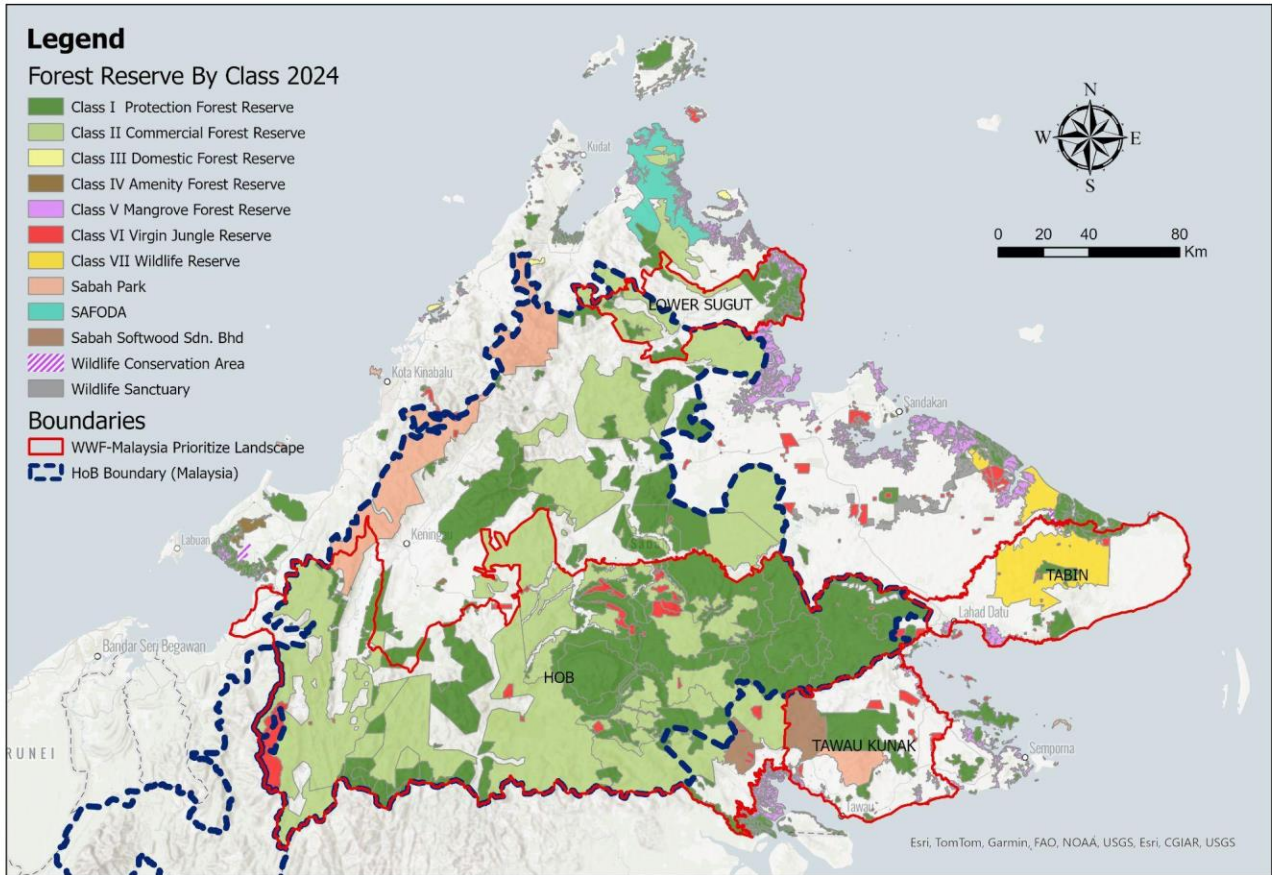
connectivity is important, we work with plantation companies to set land aside to be restored as wildlife corridors to facilitate wildlife movement between the once-isolated forests.

The various categories of information derived from the Living Landscapes Approach will be fed into the District Plan coordinated by the Town and Regional Planning Department (that in Peninsular Malaysia is called PLANMalaysia). Once gazetted by the state's legislative council, the District Plan is the final document that specifies sustainable land use in the districts. Through this legislative approach, we hope to see healthy forests and rivers, viable wildlife populations, effective wildlife corridors, and sustainable palm oil and rubber production that are resilient to climate change, all of which benefit people and nature and will be consolidated into one comprehensive land use plan.

WWF's Priority Landscapes in Sabah

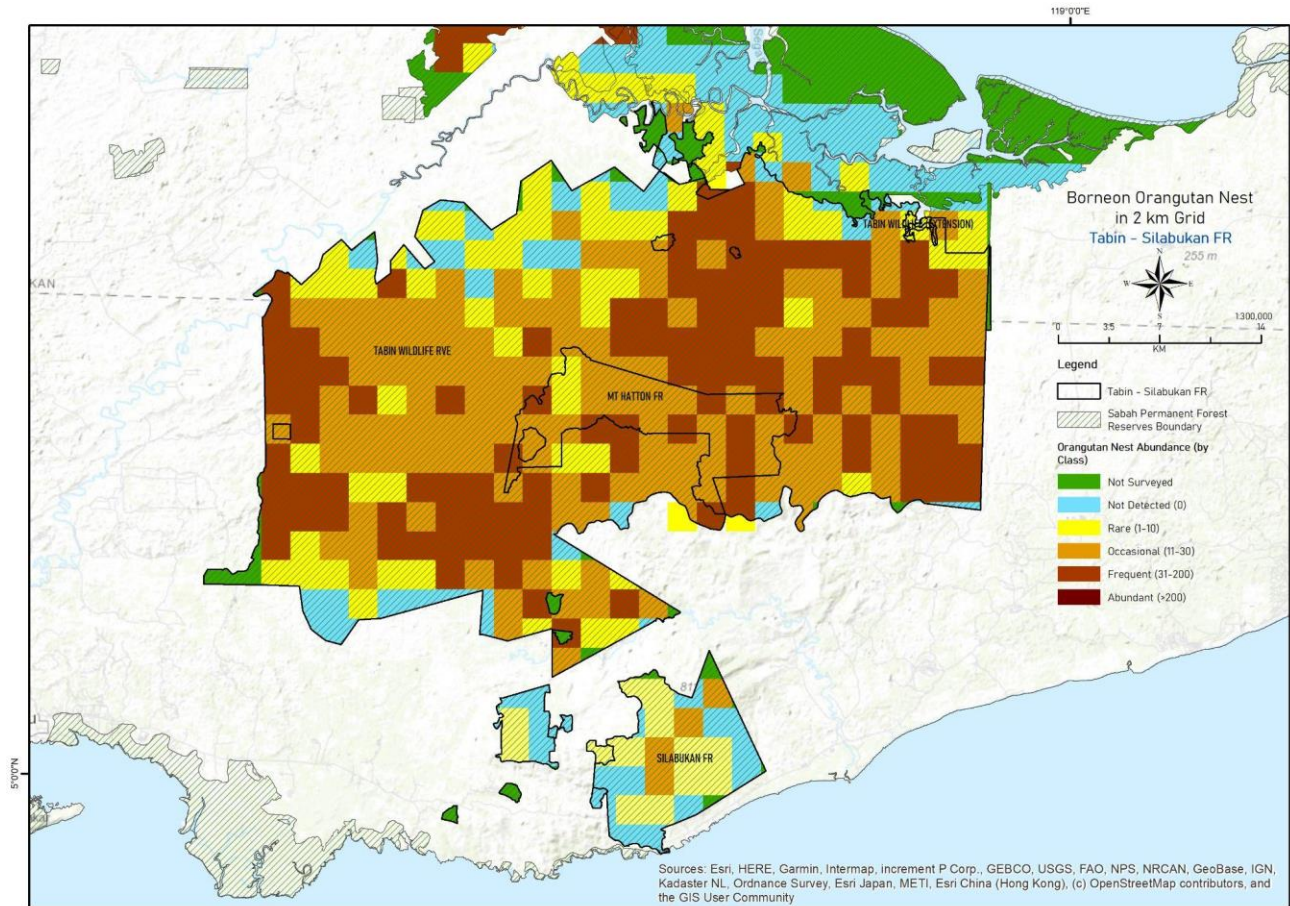
Since 2020, WWF-Malaysia has collaborated with partners to implement LLA in priority landscapes in the Tawau-Kunak districts, Tabin in the Lahad Datu District, and Lower Sugut in the Beluran District. Focusing more on the Protect Pillar, we work at the districts within the Heart of Borneo area which encompasses mainly the central forests of Sabah, as shown in Map I below.

Each of these landscapes has specific boundaries based on ecological criteria while closely following respective district administrative boundaries. The ecological criteria include forest ecosystems, water catchment areas, and wildlife habitat ranges.



Map I: WWF-Malaysia Priority Landscapes in the Context of the Heart of Borneo, Forest Reserves by Class and Other Forestry Land Uses, 2024

As Map I shows, a crucial element of our Living Landscapes Approach at the Heart of Borneo, Tawau-Kunak, Tabin, and Lower Sugut, are protected areas, wildlife reserves, and forest reserves forming the core conservation areas of where we work. With reference to the Tabin landscape in the east of Sabah, we will provide an overview of how LLA using orangutan conservation strategy shapes our work.



Map II: Tabin Wildlife Reserve and Silabukan Forest Reserve: Orangutan Nest Abundance by Class

Since 2014, WWF has surveyed and monitored the critically endangered Bornean orangutans throughout Sabah using helicopter surveys. Map II shows orangutan nest abundance in the Tabin landscape, with the legends ranging from No Detection, shown in blue, to four classes of nest abundance.

The 2017 survey estimated 1200 orangutans in the Tabin Wildlife Reserve (WR), and 50 in the much smaller Silabukan Forest Reserve (Simon et al., 2019), with the legend showing yellow and light brown. With the two blocks of Silabukan Forest Reserve (FR) existing as fragmented patches of forest, the small orangutan population is completely isolated - exposing them to the pressure of inbreeding and competition over space. However, in view of climate change, Silabukan FR is an important climate refuge for orangutans in the future.

The orangutan conservation strategy is obvious, connecting the Silabukan population to the bigger Tabin population to ensure gene flow and facilitate climate change adaptation. With reference to the Living Landscapes Approach, the need to protect orangutans leads to the need to establish a wildlife corridor connecting Silabukan FR to the Tabin WR.

As the space separating the two forest reserves belongs to the oil palm plantations of Sawit Kinabalu Sdn Bhd and Kuala Lumpur Kepong Bhd (KLK), we use the Restore Pillar to engage with the palm oil companies to consider setting land aside as wildlife corridors. The outcome is depicted in Map III which shows the Bagahak Ecological Corridor at Ladang Bagahak 1 owned by Sawit Kinabalu, using a river that flows from Silabukan FR at the south to Tabin WR to the north. Another wildlife corridor is in the Tawau-Kunak Landscape, measuring 14 km long with 1,006 hectares of Sabah Softwoods Berhad land that connects the Ulu Kalumpang Forest Reserve and Tawau Hills Park to the Central Forest of Sabah.



Map III: Bagahak Ecological Corridor

Our restoration work for orangutan conservation is built upon our experience in the Bukit Biton FR. Once a degraded forest covered by creepers and shrubs, we restored almost 2,400 hectares, beginning in 2008, with fast-growing trees and fruit trees (Mansourian, 2020). In 2013, orangutans were seen using restored areas, showing a positive sign as to the effectiveness of the restoration. Ever since, more mother and baby orangutans have been observed using the restored habitat, indicating the successful restoration project for orangutans in Bukit Piton (see Figure I).



Figure I: A mother and baby orangutan in Bukit Piton FR using planted trees in August 2024 ©WWF-Malaysia/Mazidi Abd Ghani

Our Produce Pillar not only engages with large oil palm plantation companies, but we also promote responsible palm oil production by working closely with smallholders and medium-sized growers. With the view of supporting them to achieve RSPO standards, we first support them to be MSPO certified. The overall goal is to ensure palm oil is produced in ways that minimize environmental harm, apart from encouraging them to plant trees along river banks as riparian reserves (which eventually act as ecological corridors connecting fragmented forests). At the state level, we support the statewide adoption of 100% RSPO certification through a collaborative system defined by RSPO as the Jurisdictional Approach. This integrated approach with key stakeholders in the palm oil industry not only addresses the environmental challenges posed by deforestation but also fosters long-term sustainability within Sabah's palm oil industry.

Collaboration and Partnership

Collaboration and partnership is a key element of success for our Living Landscapes Approach. At the state level, under the framework of the Jurisdictional Certification Steering Committee (JCSC) co-chaired by the Sabah Forestry Department and the Natural Resource Office, and its various Technical Working Groups, WWF-Malaysia collaborates with key stakeholders from the government agencies (e.g. Sabah Forestry Department, Sabah Wildlife Department, Sabah Parks, Sabah Town and Regional Planning Department and Local Authorities); representatives from the private sector and other NGOs into developing solutions on issues faced by the palm oil industry and its stakeholders. On the ground, we work with plantation companies such as Sawit Kinabalu, Sabah Softwoods Berhad, KKK, Hap Seng, Wilmar, and Sime Darby-Guthrie to collectively address conservation issues at the level of the Living Landscapes. For palm oil smallholders and mid-sized

growers, we support collective actions by facilitating group certifications and connecting them directly with international buyers seeking responsible, certified palm oil producers. We partner with civil society organizations such as Forever Sabah, PACOS Trust, and BORA to implement various conservation action plans. These range from conducting R&D on orangutan fruit trees, and restoring wildlife corridors and pastures for banteng and elephants, to gaining Free, Prior, and Informed Consent from the local communities on activities that involve them.

WWF-Malaysia's forest conservation work in Sabah has also been supported by partnerships with multinational corporations such as HSBC, Unilever, Beiersdorf, and Evonik. These companies are involved in various initiatives, including the Asia Sustainable Palm Oil Link (ASPOL) programme, which promotes using sustainably sourced palm oil across Asia. This collaboration between the corporate sector and conservation organizations is essential for scaling up efforts to promote sustainability in the palm oil sector, which was once a major driver of deforestation in Sabah and beyond.

In addition to corporate partnerships, WWF-Malaysia works closely with local communities to promote inclusivity and alternative livelihoods. The underlying goal is that through alternative economic activities such as ecotourism and sustainable agriculture, local communities, such as the Kg. Teburi community of Tabin landscape, smallholders of the Ulu Kalumpang Agriculture Scheme, and Kg. Balaron of Nabawan District in the Heart of Borneo landscape can benefit economically while playing an active role in forest conservation.

Challenges and Opportunities

Despite the progress made, WWF-Malaysia faces several challenges in its conservation work. The expansion of agricultural land, particularly for palm oil and rubber, remains a significant threat to forest ecosystems and to ensuring viable populations of biodiversity. Illegal logging and poaching also continue to undermine conservation efforts, particularly in remote forest areas that are difficult to monitor. While certification schemes have improved sustainability in the forestry and palm oil sectors, enforcement in remote areas remains an ongoing challenge.

Technological innovations, such as satellite monitoring and drone technology, and adopting artificial intelligence offer new tools for providing more accurate data for conservation planning as well as tracking deforestation and illegal activities on a real-time basis including emergent trends. As a global trading nation, we need to position Malaysia in the global supply chain for sustainably sourced products that can drive further progress towards adopting sustainable practices in industries such as palm oil and timber.

WWF's work in Sabah and Malaysia is part of a broader global movement towards more sustainable forest management practices. Our organization's Living Landscapes Approach

provides a model for integrating conservation with sustainable development. Moving forward, this model can potentially expand to other regions in Malaysia and globally.

On this, the Sabah's Living Landscapes Approach is being promoted as one example of a global initiative to protect, conserve, and restore the largest remaining forests in the Amazon, Congo, and Southeast Asia. Called the "Strategic Framework for Key Tropical Forest Regions," we are looking at systemic changes where international conventions such as the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement, the UN Sustainable Development Goals, and the Global Biodiversity Framework of the Convention on Biological Diversity (CBD) can be achieved. In meeting as comprehensively as possible the numerous global targets in accordance with the specifics of the local conditions, we seek five outcomes:

1. At least 30% of key ecosystems conserved
2. Zero deforestation and conversion
3. Restoration of 30% of degraded ecosystems
4. Improved management and sustainable use of landscapes
5. Zero loss of species

At WWF-Malaysia, the Living Landscapes Approach, with its three pillars—Protect, Produce, and Restore—exemplifies what can and should be done in specific geopolitical contexts to achieve the outcomes we've committed to.

Conclusion

WWF-Malaysia has played a pivotal role in supporting forest conservation in Sabah and across Malaysia. Through its ten-year strategy and implementation of the Living Landscapes Approach, WWF has made significant strides in protecting forests, restoring degraded lands, and promoting sustainable production systems.

Collaboration between governments, corporations, and local communities has been essential for the success of these initiatives. WWF's efforts with partners should be seen as a whole-of-society approach in supporting our government at the federal and state levels to achieve sustainable forest management. As Malaysia continues to develop, balancing economic growth with environmental conservation will be key to ensuring the long-term sustainability of its forests.

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