2025 ANNUAL REPORT

SABAH FORESTRY DEPARTMENT



Logo Rationale

Three Sabah maps: Represent the forests as a natural heritage and the backbone of Sabah's economy, for the past, present and future generations.

Roof and fence structure: Symbolises the total commitment of the Forestry Department as the custodian of the forests, which subscribes fully to the principles of sustainable forest management.

Circle and golden line: Symbolises the importance of the forest ecosystem integrity for the protection of the environment and biodiversity

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Cover: *Adonidia dransfieldii*, an endemic palm species of Sabah, was formally described as a new species in 2015 and was listed as Critically Endangered on the IUCN Red List in 2020. In August 2025, the Sabah Forestry Department successfully rediscovered the population originally recorded 27 years earlier in the Lemaas Forest Reserve. The survey documented 153 individuals, confirming the continued survival of this extremely rare endemic palm and providing valuable information to support its long-term conservation. (Taken by the late Ubaldus Majawal)

Opposite page: Rufous-backed Dwarf Kingfisher (*Ceyx rufidorsa)*. A brilliant jewel of the forest, often seen perched quietly beside water sources in RDC, where its vivid colours delight both birdwatchers and photographers alike.
(© Andy Chock)

2025 ANNUAL REPORT



Sabah Forestry Department



Sabah Forestry Department Headquarters, Sandakan

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Locked Bag 68
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Sabah Forestry Department Annual Report 2025

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- Totally Protected Areas (TPA)
- Sabah Timber Legality Assurance System Plus (TLAS+)
- Forest Carbon Activities
- FOLUR
- BORA - Preventing Biological Extinctions Will Not Happen By Protection And Conservation Alone
- Bornean Sun Bear Conservation Centre
- PANTHERA

250
Research & Development

306
Publications, Presentations & Reports in 2025

1 OUR VISION

Towards the realization of sustainable forest management

2 OUR MISSION

To effectively and efficiently plan and implement the management of the State's forest resources in accordance with the principles of sustainable forest management

3 STRATEGIES

4 OUR OBJECTIVES

1. To ensure that the management and development of Sabah's forest reserves are in accordance with the principles of sustainable forest management;
2. To optimize the utilization of forest resources in order to sustain socio-economic benefits to the State;
3. To ensure that the development of the forest industry corresponds with the long term productive capacity of the state's forest resources;
4. To ensure sufficient trained manpower and expertise to implement sustainable forest management efficiently and professionally;
5. To intensify the R & D program and efforts toward the development and implementation of sustainable forest management;
6. To conserve sufficient natural forest areas for the protection and maintenance of the environment, water resources, soils, and biodiversity;
7. To promote the rehabilitation of natural forests and the establishment of forest plantations;
8. To enhance enforcement strategies to safeguard the forest resources;
9. To increase public awareness on the importance of forests and sustainable forest management; and
10. To ensure that sufficient financial resources, technology, and logistical supports are available for the implementation of sustainable forest management.



FOREWORD

First and foremost, I would like to thank my predecessor, Datuk Frederick Kugan, for the significant achievements in the implementation of sustainable forest management practices in Sabah throughout 2025. I took over as the Chief Conservator of Forests on 25 February 2026.

Many milestones and programmes were accomplished in 2025. The Pin Supu Forest Reserve (FR) in Kinabatangan has been officially recognised as the first terrestrial IUCN Green List of Protected and Conserved Area in Malaysia, a prestigious global recognition awarded by the International Union for Conservation of Nature (IUCN) for excellence in conservation and protected area management. To date, the State's forest cover is maintained at 63%, which is the highest of the three regions in Malaysia, and we are achieving the 30% of the Totally Protected Areas (TPAs) through the gazettement soon. All these are in line with the State's efforts in addressing issues related to climate change, realizing the UN Sustainable Development Goals agenda.

In legislation, the Forest (Amendment) Enactment 2025 was passed to regulate forest-based carbon activities and establish a framework for carbon trading. Forest-based carbon activities in forest reserves, state land, and titled land will be licensed under agreed terms and conditions that protect the state's interests. Additionally, Sabah has recently passed the Climate Change and Carbon Governance Enactment 2025, positioning the state as a leader in environmental conservation and resilience against climate change. In 2025, the Sabah Timber Legality Assurance System (TLAS) was upgraded to Sabah TLAS+, which was launched recently. The e-Removal Pass System of the department was launched in December, in line with the EUDR international standard. The forest revenue collected in 2025 is RM164.7 million, despite the challenging world economy and trade.

The department has organised many seminars, workshops, events, dialogues and training throughout 2025, including the International Conference on the Green Heart of Borneo on 22-23 October, with the theme 'Advancing Climate Resilience, Conservation and Sustainable Livelihood'. The State level International Day of Forests was held on 24 April at UMS, with the theme 'Forests and Food'. The Majlis Apresiasi Perhutanan (MAPT) 2025 was successfully organized and was officiated by the State Secretary, representing the Right Honourable Chief Minister. Throughout the 5-year Greening Malaysia—100 million Tree Planting Campaign (2021-2025), nearly 27 million trees were planted (67% of the targeted 40 million trees for Sabah). The statewide Forestry Speech and Quiz Competition was organised among the secondary schools in Sabah to enhance awareness on the importance of forests to the younger generation. The PROTECT Team won the marching competition twice this year (and many times in previous years), during the National Day and TYT's birthday parades. It is enlightening to know that the Sabah Forestry Department has been accorded the Special Award for the Best Human Resource Management in 2025 along with Best 5-Star Rating for Human Resource Information System (SM2) by the State's Public Service Department, and Best Record Management by Sabah State Archives. The department was also awarded the first runner-up for the Independent Web Innovator Award by the State Ministry of Science, Technology and Innovation.

The year 2025 also marked the inception of some of the major activities (inaugural workshop and project board meeting) of the Integrated Landscape Management for Sustainable Food

Systems, Land Use and Restoration Project in Sabah (FOLUR). The development projects under the 12th Malaysia Plan (2021-2025) were successfully implemented accordingly, with 99% and 99.8% on expenditure for state and federal development projects respectively, over the five-year period. A total of 30 state-funded projects and 30 federal-funded projects were undertaken.

On forest protection and enforcement, various existing initiatives were implemented and enhanced. These include aerial survey via drones, honorary forest rangers, forest checking stations, partnership and training with government agencies, private sector, NGOs and local communities, as well as amendment of the relevant forest laws.

In research, 113 publications and scientific reports were produced in 2025. There were over 50 research collaborations with local and international agencies. More than 40 research-related activities by the Forest Research Centre and some 107 EE programmes by the Rainforest Discovery Centre were undertaken in 2025. The Sabah Forestry Institute (FORiNS) continues to excel in forestry capacity building, with 38 individuals graduated from the forestry courses in 2025.

Thank you to all of you for a very productive year 2025. Together, we can bring the department forward and excel in sustainable forest management for the benefit and well–being of the people of Sabah.

Thank you. Hutan Sabah Maju Jaya!



Datuk Zulkifli Suara
Chief Conservator of Forests



NEWS IN PICTURES

FEBRUARY

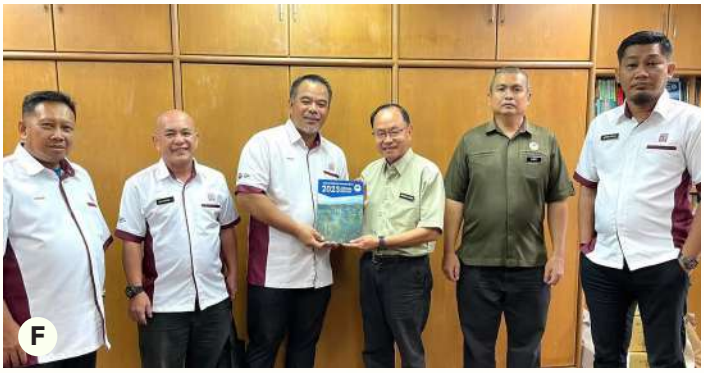

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A. 6 Feb: Working visit by YB Datuk Frankie Poon Ming Fung to Sandakan Rainforest Park.

B. 7 Feb: FORiNS received a visit from the National Anti-Drug Agency Sandakan Branch.

C. 7 Feb: Tree planting activity conducted with Sepilok Junior Rangers at the Rainforest Discovery Centre.

D. 15 Feb: SFD participated in the Workshop on Reforestation with Native Tropical Rainforest Trees organised by Yayasan Sabah, Swedish University of Agricultural Sciences, and IKEA.

E. 20 Feb: SFD officers attended the Sabah Chief Minister's Majlis Amanat Tahun Baharu 2025

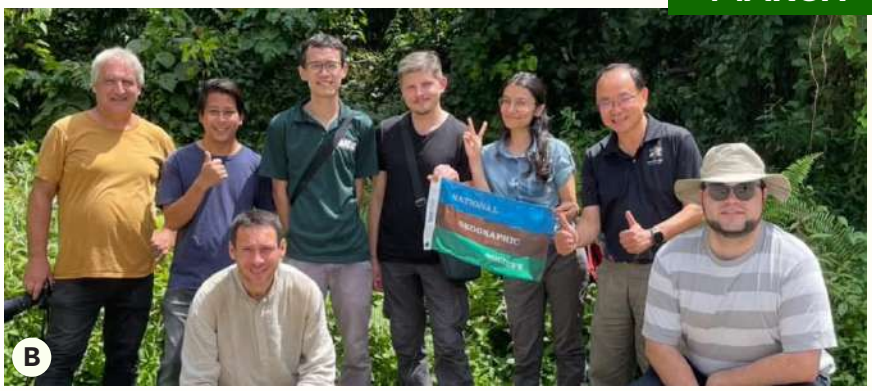
F. 25 Feb: The Malaysian Timber Industry Board and Kota Kinabalu Polytechnic visited the FRC Xylarium.

G. 26 Feb: SFD reviewed the progress of the Laran Forest Seed Garden at Sungai Pin.

H. 27 Feb: SFD officers attended the Majlis Amanat delivered by the Honourable State Secretary in Kota Kinabalu.

MARCH







A. 14 Mar: Courtesy visit received from the Chief Executive Officer of the Malaysia Forest Fund.
B. 19 Mar: New species of bush cricket from Sabah was formally described by researchers from Singapore and France, in collaboration with Sabah Forestry Department.
C. 19–20 Mar: Inception Workshop for the Integrated Landscape Management for Sustainable Food Systems, Land Use and Restoration Project in Sabah.

APRIL













A. 4 Apr: The Rotary Club of Kota Kinabalu visited the Forest Research Centre and Rainforest Discovery Centre.
B. 7 Apr: SFD and Sawit Kinabalu Group announced a collaboration on the Forest Seed Garden Initiative at Sungai Pin Conservation Area.
C. 9 Apr: Courtesy Visit by the Sabah Parks.
D. 11 Apr: Workshop conducted to update the Guidelines on Technical Specifications and Price Ranges for Works and Services Related to Forest Restoration and Silvicultural Activities.
E. 26 Apr: The Minister of Communications and representatives from the Malaysian Communications and Multimedia Commission (MCMC) visited Sepilok.
F. 28–29 Apr: Staff attended the Records Management and Post-Disaster Records Preservation Course organised by the Sabah State Archives Department.

MAY



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A. 2 May: SFD conducted a courtesy visit to YDH Datuk Jauteh Dikun, Commissioner of Police, Sabah.
B. 9 May: Presenting the SFD Annual Report 2024 to the State Secretary of Sabah.
C. 9 May: Forestry Appreciation Awards Ceremony held to recognise outstanding contributions to the forestry sector.
D. 15 May: Community outreach programme for the Sabah REDD+ Project held in Lahad Datu.
E. 19 May: Courtesy visit by the Country Director of the Wildlife Conservation Society Malaysia Programme.

JUNE


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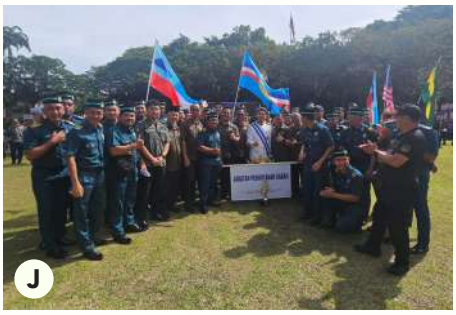
A. 10 Jun: Handover meeting for the Development and Upgrading Project of the FRC Sepilok Residential Complex.
B. 11–12 Jun: SFD Participated in the Malaysia Palm Oil Expo (MAPEX).
C. 12 Jun: Courtesy Visit by the Sabah Convention Bureau to SFD.
D. 13 Jun: Courtesy Visit by the Sandakan Heritage Trail Committee.
E. 16–19 Jun: Malaysia Greening Week Programme in conjunction with the 100 million Tree Planting Campaign at the school district level in Tawau.
F. 17–19 Jun: Frontline enforcement training to combat forest crimes.

JUNE















G. 18 Jun: Visit to Kampung Gana, Kota Marudu by FOLUR delegates from various countries as part of the FOLUR Restoration Technical Workshop.
H. 19 Jun: Public Awareness Campaign on the Importance of Forest Restoration and Conservation at SK Pekan Pensiangan.
I. 20 Jun: Courtesy Visit by the Forestry Department of Peninsular Malaysia.
J. 22 Jun: SFD crowned champion in the official uniformed department category during the 74th official birthday celebration of the Sabah State Governor.
K. 24 Jun: Inauguration of the Langom Research Station, Danum Valley Conservation Area, Ulu Segama Forest Reserve, Lahad Datu.
L. 25 Jun: SFD educational visit to the Kundasang Town Sewage Treatment Plant.
M. 28–29 Jun: SFD participated in the National-Level World Forestry Day Celebration in Shah Alam.

JULY









A. 2 Jul: Courtesy visit by the Sabah State Water Department.
B. 3–4 Jul: SFD explores strategic collaboration with MySA on Statewide Forest Monitoring and Land Cover Mapping.
C. 7 Jul: Courtesy Visit by the Sandakan Prison Department to the Chief Conservator of Forests.
D. 16 Jul: Official Launch of the Kelawat Forest Reserve Conservation Area Management Plan Book and Joint Forest Management Publication.

JULY


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E. 16 Jul: Site Visit to the PPM Agropolitan Area in Gana.
F. 16–18 Jul: Working Visit to the District Forestry Offices in the Kudat Region.
G. 17 Jul: Site Visit to the Gerak Saga Sdn. Bhd. Plantation Area.
H. 18 Jul: Official Opening Ceremony of the Kudat Regional Multipurpose Hall.
I. 23–24 Jul: Workshop on Understanding the Agarwood Industry in Tawau.
J. 24 Jul: World Environment Day Celebration at the Sungai Pin Conservation Area.
K. 25–26 Jul: Official Working Visit to the Sugut Sustainable Forest Management (SFM) Project Area.
L. 26 Jul: Community Engagement and Tree Planting Programme with SMK Trusan Sugut.
M. 30 Jul: Technical Benchmarking and Recognition meeting between SFD and the Department of Irrigation and Drainage Malaysia.
N. 30 Jul: SFD received a courtesy visit from the Director of Mondo AB Films Sdn Bhd.

AUGUST





















A. **5 Aug:** The Secretariat of the Sabah Climate Change Action Council, in collaboration with the Ministry of Natural Resources and Environmental Sustainability and the Japan International Cooperation Agency, hosted a workshop on Fluorinated Gas Emissions.
B. **5–6 Aug:** SFD participated and exhibited at the 2025 Scientific Conference on Forest Biological Diversity.
C. **6–7 Aug:** SFD organized a Workshop on the Development of Bird Hide Guidelines for Forest Reserves.
D. **12 Aug:** Representatives from the Department of Veterans' Affairs, Australia, paid a visit to the SFD.
E. **12–13 Aug:** The Deputy Chief Conservator of Forests (Operations) conducted a working visit to the Tahas Tininting Ironwood Forest Park Ecotourism Centre in Pensiangan.
F. **14 Aug:** Datuk CCF conducted a working visit to the Pusat Informasi Rumbia in Kuala Penyu, Beaufort District.
G. **15 Aug:** A courtesy meeting was held between British High Commissioner to Malaysia and the SFD's Deputy Chief Conservator of Forests (Planning & Management).
H. **15 Aug:** The Sandakan Day Memorial Service was held at the Sandakan Memorial Park, located within the Sibuga Forest Reserve.
I. **20 Aug:** The Australian High Commissioner paid a visit to the Rainforest Discovery Centre.
J. **22 Aug:** A meeting was held on the implementation of the Ecosystem Conservation Fee in Kota Kinabalu.

AUGUST


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K. 26 Aug: A MoU Signing and Exchange Ceremony was held with Botanickel Sdn Bhd at Kg Pahu Pinawantai.
L. 28 Aug: The Tambunan District Forestry Office, together with the KPA Division, participated in an exhibition during the Yayasan Sabah Bersama Rakyat Roadshow Programme.
M. 31 Aug: The Sabah Forestry Department (SFD) emerged as the champion in the parade competition held in conjunction with the Sabah National Day Celebration 2025.

SEPTEMBER


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A. 2–4 Sept: Course on the development of tourism packages, pricing strategies, and digital marketing for forest recreation products in the Keningau region.
B. 3 Sept: Imbak Canyon Wildlife and Resource Survey Seminar.
C. 8 Sept: Presentation of certificate: Mount Wullersdorf–Ulu Kalumpang has been certified under the Ecosystem Restoration Field Verification Standard by Preferred by Nature.
D. 10 Sept: Sandakania 26 was just published and the hardcopy was handed over to Datuk Frederick Kugan, Chief Conservator of Forests.
E. 11 Sept: Datuk CCF conducted a working visit to SFMLA 19B, KTS Plantation Sdn Bhd.
F. 12 Sept: Datuk CCF conducted a working visit to the Imbak Canyon Studies Centre and attended the groundbreaking ceremony for the project to upgrade facilities at Imbak Waterfall.
G. 24 Sept: Forestry participated in the 5th International Symposium on the Conservation & Management of Wetlands.
H. 30 Sept: Datuk CCF spoke at the 3rd ASEAN Blue Economy Forum.

OCTOBER


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A. **1-2 Oct:** Capacity building workshop on sub national Greenhouse Gas (GHG) Inventory Fundamentals.
B. **2 Oct:** Green Sustainability Programme: Ecology and the Importance of silviculture of fig trees.
C. **7–8 Oct:** Forest Insect Diversity Workshop.
D. **7 Oct:** Courtesy Visit by Jabatan Perlindungan Hidupan Liar dan Taman Negara (PERHILITAN) to SFD.
E. **8 Oct:** Datuk CCF was invited to the “Sini ada cerita SPM TV 1” to talk about “Sabah Hijau: Pengurusan Hutan Lestari”.
F. **9–10 Oct:** Engagement session with the Ministry of Finance of Sabah and a working visit to the Trusan Sugut Forest Reserve, Beluran.
G. **14 Oct:** Workshop on Soil Health In Forestry, held at FRC, Sepilok.
H. **15 Oct:** Datuk CCF’s visit to District Forestry Office, Nabawan.
I. **15 Oct:** Educational visit by SMK Sandakan II to FORiNS, Telupid.
J. **16 Oct:** Awareness Programme for School Community through the Planting of Wildlife Important Tree Species at FRC, Sepilok.

OCTOBER


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K. 16 Oct: SFD working visit to District Forestry Office in Tibow.
L. 16 Oct: SFD working visit to Jawala plantation Industries Sdn. Bhd.
M. 21 Oct: Exhibition in conjunction with the International Conference on Borneo's Green Heart: Advancing Climate Resilience, Conservation and Sustainable Livelihoods.
N. 29 Sep–7 Oct: Lawatan Pembangunan Kapasiti IUCN Green List.

NOVEMBER


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A. 1 Nov: 100 Million Tree Planting Programme in conjunction with the Malaysian Greening Campaign, led by the Land Revenue Office in collaboration with SFD at Tawau
B. 3-5 Nov: SFD's Participation in the Planning Meeting for the Malaysian Social Forestry Strategic Plan 2026–2030.
C. 5 Nov: Workshop on Research Achievements and Progress between SFD and Sawit Kinabalu Group (CBU).
D. 7 Nov: Datuk CCF invited as the panel speaker for Keynote I at the AI Summit 2025 in KK.
E. 19 Nov: Launch of the Townhall Programme on Terrestrial Protected Area Management.

NOVEMBER


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F. 20 Nov: SFD participated in the Nature for Nurture Programme at the KK Court Complex.
G. 23 Nov: The KPA Division, together with the Tawau District Forestry Office, participated in the Tropical Rainforest Run 2025 Exhibition at Taman Bukit Tawau.
H. 24 Nov: Visit by Datuk CCF to Sawit Kinabalu Green Sdn Bhd, the Batu Puteh Kinabatangan Tourism Cooperative (KOPEL), and the Kinabatangan District Forestry Office.
I. 25 Nov: Briefing session on the preparation of Cabinet papers and information papers by the Cabinet and Policy Division, Chief Minister's Department.
J. 25 Nov: Meeting with Face the Future, the implementer of the INFAPRO Project, at USM.
K. 28 Nov: Visit by Datuk CCF to Sungai Kapur Recreational Centre – Utan Rainforest Lodge, POIC Lahad Datu, and the Lahad Datu District Forestry Office.

DECEMBER



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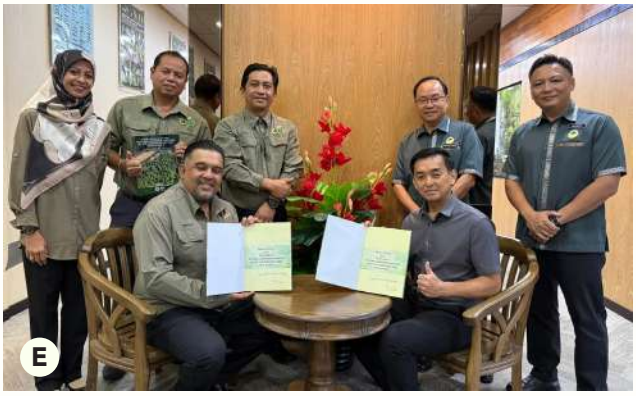


C

A. 1 Dec: SFD's Anti-Corruption Committee Meeting No. 3/2025.
B. 2 Dec: Mini Workshop on the Development of Forest Reference Level in Sabah
C. 3 Dec: KIPMAPS Roadshow (Community Engagement Information Kit in Forestry, Sabah) – Kota Kinabalu Forestry Region

DECEMBER













D. 4-6 Dec: Study Visit and Knowledge Sharing Session by Sarawak Forestry Corporation (SFC) to Pin Supu Forest Reserve.
E. 5 Dec: Handover of Proceedings of the Bengkel Ekspedisi Saintifik Sg. Pin Conservation Area Siri 2 from SFD to Sawit Kinabalu.
F. 6 Dec: SFD's Family Day "Kasih Keluarga, Jiwa Madani".
G. 9 Dec: Launch of New Books on Candidate Plus Trees by Sabah Forestry Department.
H. 14-15 Dec: Official Working Visit by the Environment and Natural Resources Division, Ministry of Economy (BEASSA).
I. 15 Dec: Outreach Programme "Sabah REDD+ Project" under the Community Forestry Project Fund (PPM) for Sandakan Region.



© Eyen Khoo

Gracefully clinging to trees as epiphytes, the dressed Trichotosia (*Trichotosia vestita*) orchids are native to Southeast Asia and western Malesia. Visitors can admire these delicate blooms in the RDC's Orchid Garden.

ORGANISATION CHART
SABAH FORESTRY DEPARTMENT

CHIEF CONSERVATOR OF FORESTS

DEPUTY CHIEF CONSERVATOR OF FORESTS (OPERATION)

- SENIOR ASSISTANT CHIEF CONSERVATOR OF FORESTS (OPERATION)
- DIVISION: FOREST RESOURCE MANAGEMENT
- DIVISION: SUSTAINABLE FOREST MANAGEMENT
- DIVISION: FOREST INDUSTRIES & TRADE
- DIVISION: INVESTIGATION, ENFORCEMENT & PROSECUTION

DEPUTY CHIEF CONSERVATOR OF FORESTS (RESEARCH & DEVELOPMENT)

- FOREST RESEARCH CENTRE
- PROGRAMME: FOREST ECOSYSTEM MANAGEMENT
- PROGRAMME: FOREST BIODIVERSITY & CONSERVATION
- PROGRAMME: FOREST PLANTATION
- PROGRAMME: FOREST PRODUCE & PRODUCT
- PROGRAMME: FOREST SOCIO-ECONOMICS
- RAINFOREST DISCOVERY CENTRE

DEPUTY CHIEF CONSERVATOR OF FORESTS (PLANNING & MANAGEMENT)

- SENIOR ASSISTANT CHIEF CONSERVATOR OF FORESTS (PLANNING & MANAGEMENT)
- DIVISION: FOREST SECTOR PLANNING
- DIVISION: DEVELOPMENT & GENERAL SERVICES
- DIVISION: HUMAN RESOURCE MANAGEMENT
- DIVISION: FINANCE & BUDGET
- DIVISION: QUALITY MANAGEMENT & TRAINING
- DIVISION: COMMUNICATION & PUBLIC RELATIONS
- FORESTRY INSTITUTE OF SABAH

REGIONAL FORESTRY OFFICE

TAWAU | SANDAKAN | KENINGAU | KUDAT | KOTA KINABALU

DISTRICT FORESTRY OFFICE

TAWAU	SANDAKAN	KENINGAU	KUDAT	KOTA KINABALU
SERUDONG	BELURAN	TENOM	KOTA MARUDU	BEAUFORT
KALABAKAN	TELUPID	TAMBUNAN	PITAS	SIPITANG
KUNAK	TONGOD	SOOK	KOTA BELUD	RANAU
SEMPORNA	DERAMAKOT	NABAWAN		
LAHAD DATU	KINABATANGAN	TIBOW		
ULU SEGAMA-MALUA				

HUMAN RESOURCE MANAGEMENT

1. Forestry Headquarters

Name	Post
Chief Conservator of Forests' Office	
Datuk Frederick Kugan	Chief Conservator of Forests
Norasyikin binti Ab Karim	Legal Officer
Deputy Chief Conservator of Forests (Planning & Management) Office	
Indra Purwandita bin Herry Sunjoto	Deputy Chief Conservator of Forests (Planning & Management)
Peter Maurice Lidadun	Senior Assistant Chief Conservator of Forests (Planning & Management) (until 31 Mar 2025)
Fong Pek Yee	Conservator of Forests
Deputy Chief Conservator of Forests (Operation) Office	
Zulkifli bin Suara	Deputy Chief Conservator of Forests (Operation)
Ismailey bin Ismail	Senior Assistant Chief Conservator of Forests (Operation)
Forest Sector Planning Division	
Rosila Anthony Johnwyn	Research Officer (Head of Division)
Siti Zubaidah S. Abdullah	Research Officer [Deputy Head of Division (Policy, Legislation, & Sectoral Development)]
Yap Sue Sem	Conservator of Forests [Deputy Head of Division (Joint Venture Projects & International Affairs)]
Abdul Hamid bin Muhamad Ali	Research Officer [Deputy Head of Division (Forest Economy)]
Kristo Henry William	Conservator of Forests
Joseph Pirin	Assistant Conservator of Forests
Mohamad Hafizan Addli bin Lamin	Assistant Conservator of Forests
Wan Habib Othman bin Wan Shazali	Assistant Conservator of Forests
Muhammad Hazrin bin Harris	Assistant Conservator of Forests
Sustainable Forest Management Division	
Daim bin Balingi	Conservator of Forests (Head of Division)
Alisky @ Ricky bin Martin	Conservator of Forests [Deputy Head of Division (Forest Plantation)]
Hamidah binti Bujing	Conservator of Forests [Deputy Head of Division (Forest Management)]
Jafin A. Bakar	Conservator of Forests
Sitti Khadizah binti Abd Kadir	Conservator of Forests
Heidi Henry William	Conservator of Forests
Robert Martin Mijol	Research Officer
Amelia Cynthia Bosi	Assistant Conservator of Forests
Farrah Salvena binti Savaln	Assistant Conservator of Forests
Charlene Billy	Assistant Conservator of Forests
Mohd Daniel Aiman bin Mutasil	Assistant Conservator of Forests
Kasman bin Kasbi	Assistant Conservator of Forests
Daphne Robert	Assistant Research Officer
Investigation, Enforcement and Prosecution Division	
Peter Jack Osmond	Conservator of Forests (Head of Division)
Donatus Loisang	Conservator of Forests (Deputy Head of Division)
Muhamad Izzuddin bin Idris	Assistant Conservator of Forests
Abdul Raahem bin Sabi	Assistant Conservator of Forests

Name	Post
Forest Resource Management Division	
Azman bin Said	Conservator of Forests (Head of Division)
Valeria Linggok	Conservator of Forests [Deputy Head of Division (Technical)]
Desmond Foo Kim See	Conservator of Forests [Deputy Head of Division (Operation)]
Abtah bin Deri	Conservator of Forests (until 25 June 2025)
Nili @ Nelly binti Undih	Conservator of Forests
Norman Shah bin Sabari	Geospatial Engineer
Alexander Phan	Assistant Conservator of Forests
Richard bin Madanan	Assistant Conservator of Forests
Dayang Hanisah binti Maidin	Assistant Conservator of Forests
Mohd Akram bin Mansur	Assistant Conservator of Forests
Shafie bin Abu	Assistant Research Officer
Azam Shah bin Harris	Engineering Assistant
Herdarius Gaidim @ Darius	Engineering Assistant
Sudirman bin Zainal	Engineering Assistant
Malihana Ason	Engineering Assistant
Petronella binti Amin	Engineering Assistant
Mohd Husein bin Hasan	Engineering Assistant
Jeanicheal Biling	Engineering Assistant
Sitti Fatima binti Abul Barakath	Engineering Assistant
Forest Industries and Trade Division	
Bernard Valentine	Conservator of Forests (Head of Division)
Chiu Shian Shian	Forest Economist
Jauris binti Salegin	Conservator of Forests
Yong Kim Lan	Assistant Conservator of Forests
Mohd Zulkiflee bin Abdullah	Assistant Conservator of Forests
Siti Nurshafirah binti Harun	Assistant Conservator of Forests
Human Resource Management Division	
Julitta binti Julhani	Administrative Officer (Head of Division)
Idora binti Imran	Administrative Officer (Deputy Head of Division) (until 24 August 2025)
Rovina Intung	Administrative Officer
Nur Atifah binti Hammade	Administrative Officer
Sahidah binti Landa	Assistant Administrative Officer
Paulina binti Francis	Assistant Administrative Officer
Zuriah binti Awang	Assistant Administrative Officer
Finance and Budget Division	
Dg. Juridah binti Ag. Kasip	Accountant (Head of Division)
Azmin bin Bekrin	Accountant (Deputy Head of Division)
Mohd Adzam bin Nordin	Assistant Accountant
Surayah binti Sudin	Assistant Accountant (until 24 September 2025)
Maslindah binti Abdul Rahim	Assistant Accountant
Mohd Azmil bin Mustapa	Assistant Accountant
Dymphna Bedi	Assistant Accountant
Tang Nyuk Khai	Assistant Administrative Officer

Name	Post
Development & General Services Division	
Sofiean bin Mohd Saibi	Conservator of Forests (Head of Division)
Nadia binti Abdul Jalil	Engineer (Deputy Head of Division)
Idris bin Md. Jair	Engineering Assistant
Mazlan bin Dullah	Engineering Assistant
Bilma binti Ismail	Assistant Conservator of Forests
Easter Hendreta Francis Jubilee	Assistant Librarian
Communication and Public Relations Division	
Karim bin Abdul Saman @ Abd Samad	Conservator of Forests (Head of Division)
Siti Masturah binti Norbeh	Research Officer (Deputy Head of Division)
Ezli Kuang @ Kuang Yu bin Hj. Tujoh	Assistant Conservator of Forests
Quality Management and Training Division	
Roslan bin Lalete	Conservator of Forests (Head of Division)
Azizah binti Landa	Assistant Administrative Officer (Deputy Head of Division)
Debra Daniel	Assistant Conservator of Forests

2. Forest Research Centre, Sepilok

Name	Post
Dr. Arthur Chung Yaw Chyang	Deputy Chief Conservator of Forests (Research & Development) & Head of Forest Research Centre
Dr. Joseph Tangah	Deputy Head of Forest Research Centre (Administration & Development)
Dr. Reuben Nilus	Deputy Head of Forest Research Centre (Research & Publication)
Forest Ecosystem Management Programme	
Julsun @ Joseph bin Sikui	Research Officer (Programme Leader)
Esther Dyi Ka Mei	Research Officer (Head of Soil Science Section)
Noor Azmizah binti Andaman	Assistant Research Officer (Head of Hydrology unit)
Sarah J Mianus	Research Officer (Head of Ecosystem Monitoring Section)
Forest Biodiversity and Conservation Programme	
John Baptist Sugau	Research Officer (Programme Leader) (until 23 June 2025)
Dr. Joan Teresa Pereira	Research Officer (Programme Leader) (from 24 June 2025)
Suzana binti Sabran	Research Officer (Head of Systematic Botany Section)
Pg Mohd Sahlan bin Salam	Research Officer (Head of Wildlife Research Section)
Andi Maryani binti Mustapeng	Research Officer
Jonathan Jimmey Lucas	Research Officer
Alviana binti Damit	Assistant Research Officer
Forest Plantation Section	
Maria Ajik	Research Officer (Programme Leader)
Chong Fung Yun	Research Officer (Head of Seed Section)
Khoo Eyen	Research Officer (Head of Biotechnology Section)
Viviannye binti Paul	Research Officer (Head of Pathology Section)
Kuina binti Kimjus @ Nursyakina Abdullah	Research Officer (Head of Tree Improvement Section)
Veronica binti Samion Guanih	Research Officer (Head of Plantation Section)
Richard Joseph Majapun	Research Officer
Pang Kat Nyen Kelvin	Research Officer
Forest Produce and Product Programme	
Zamrie bin Imiyabir	Research Officer (Programme Leader)
Jarry K. Lajanga	Research Officer (Head of Wood Science & Wood Utilization Section)
Rolando bin Robert @ Robat	Research Officer (Head of Chemistry Section)

Name	Post
Forest Socio-Economics Programme	
Elne Betrece Johnlee	Research Officer (Programme Leader/Head of Social Science Section)
Rainforest Discovery Centre (RDC)	
Bernadette @ Elizabeth D. Joeman	Research Officer (Head of Environment Education Programme)
Arni Natalia binti Arpa	Research Officer (Head of Environmental Education Unit)
Fifilyana binti Abdul Karim	Assistant Research Officer
Special Units	
Dympna Blasius	Assistant Administrative Officer (Head of Administration Section)
John Enggir	Assistant Accountant
Pung Vui Lee	Research Assistant (Head of ICT Unit)
Petronella binti Dasim	Librarian Assistant (Head of Library)

3. Forestry Institute of Sabah

Name	Post
Muhammad Razali bin Mohammad	Conservator of Forests (Principal)
Fedelis bin Tangkim	Conservator of Forests (Lecturer)
Sarail bin Majamin	Assistant Conservator of Forests
Jaimah binti Hassim	Assistant Conservator of Forests
Teckonia D. Mudi	Assistant Conservator of Forests
Saidatul Syaifah binti Salleh	Assistant Conservator of Forests
Jambery Siong	Assistant Conservator of Forests

4. Regional Forestry Office

Name	Post
Sandakan	
Janius bin Ebin	Conservator of Forests (Regional Forestry Officer)
Hj. Julkifle bin Hj. Abu Bakar	Assistant Conservator of Forests
Wellter Jaini	Assistant Conservator of Forests
Tawau	
Mohd Arapa bin Lamuda	Conservator of Forests (Regional Forestry Officer)
Noordin bin Musa	Assistant Conservator of Forests
Jeanetry James	Assistant Conservator of Forests
Mohamad Zarrin bin Jafri	Assistant Accountant
Keningau	
Jaime bin Gampawi	Conservator of Forests (Regional Forestry Officer)
Magandi bin Junaid	Conservator of Forests
Ismail bin Aluwisos	Assistant Conservator of Forests
Mazlan bin Mohd Azman	Assistant Conservator of Forests
Mohd Ramzi Mohd Yussof	Assistant Accountant
Kota Kinabalu	
Hj. Mohd Nasir bin Ag Suman	Conservator of Forests (Regional Forestry Officer)
Magandi bin Junaid	Assistant Conservator of Forests
Azlan bin Pardin	Assistant Accountant
Kudat	
Nesesius Nasir	Conservator of Forests (Regional Forestry Officer)
Zainuden @ Rudy bin Jimbun	Assistant Conservator of Forests
Eldef Mosuin @ Yosuin	Assistant Accountant

5. District Forestry Office

Name	Post
Sandakan	
Rosli bin Siki	Conservator of Forests (District Forestry Officer)
Hj. Asran bin Asah @ Asa	Assistant Conservator of Forests
Raymund Wong	Assistant Conservator of Forests
Zaini bin Jeinab	Assistant Conservator of Forests
Ruslan bin Hj. Ismail	Assistant Conservator of Forests (until 5 September 2025)
Rome bin Asmad	Assistant Conservator of Forests
Tongod	
Abdul Jamal bin Ibrahim	Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Mohd Azmi bin Mohd Yazid @ Pajit	Conservator of Forests (District Forestry Officer) (from 3 February 2025)
James Torimo	Assistant Conservator of Forests
Mohd Afif bin Mohd Affandy	Assistant Conservator of Forests
Awang Ku Omar Ali bin Manggong	Assistant Conservator of Forests
Beluran	
Ag Mohd Adzrul bin Ag Ahmad	Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Abdul Jamal bin Ibrahim	Conservator of Forests (District Forestry Officer) (from 3 February 2025)
Markus bin Salutan	Assistant Conservator of Forests
Sh Mohamad Roslie bin Sh Ameeril	Assistant Conservator of Forests
Bulkiah bin Sherif Hassan	Assistant Conservator of Forests (until 31 May 2025)
Moses Matuin	Assistant Conservator of Forests
Ahmad bin Kabulai	Assistant Conservator of Forests
Telupid	
Elrimieo Emin	Conservator of Forests (District Forestry Officer)
Wislee bin Francis @ Jubilee	Assistant Conservator of Forests
Mohd Faizal bin Basirin	Assistant Conservator of Forests
Deramakot	
Johnny bin Kissing @ John	Conservator of Forests (District Forestry Officer)
Azny bin Ahmad	Assistant Conservator of Forests
Edward bin Thomas	Assistant Conservator of Forests
Jaimi Mujit	Assistant Conservator of Forests
Bonaventure Dominic Tuati	Assistant Conservator of Forests
Abdul Hamid bin Abd Rajim	Engineering Assistant
Kinabatangan	
Jamain bin Alias	Assistant Conservator of Forests (District Forestry Officer)
Janiu bin Gangon	Assistant Conservator of Forests
Markus bin Salutan	Assistant Conservator of Forests
Sidin bin Barau	Assistant Conservator of Forests (until 13 July 2025)
Yusri bin Boong	Assistant Conservator of Forests
Tawau	
Kee Nooridayu binti Mohd Ayub	Conservator of Forests (District Forestry Officer)
Taib bin Arjani	Assistant Conservator of Forests
Nobaida @ Norhaida binti Sinar	Assistant Conservator of Forests
Kunak	
Adrian bin Rawlenes	Conservator of Forests (District Forestry Officer)
Suriansa bin A. Kadir	Assistant Conservator of Forests (until 7 July 2025)
Nur Hafizah binti Ramlan	Assistant Conservator of Forests
Lahad Datu	
Osman bin H Bangkong @ Ahmad	Conservator of Forests (District Forestry Officer)
Geungnong bin Ah Jing	Assistant Conservator of Forests
Suzali bin Abdul Ben	Assistant Conservator of Forests
Veraline John	Assistant Conservator of Forests

Name	Post
Semporna	
Abdul Hamid bin Muhamad Ali	Conservator of Forests (District Forestry Officer) (until 22 June 2025)
Muhammad Asri bin Muhammad Shitin	Assistant Conservator of Forests (District Forestry Officer) (from 4 August 2025)
Mohd. Fadzil bin Patman	Assistant Conservator of Forests
Kalabakan	
Mohd Azmi bin Mohd Yazid @ Pajit	Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Awangku Effendy Pg Mahmud	Conservator of Forests (District Forestry Officer) (from 3 February 2025)
Ag Ku Mohd Ridzwan Pg Abd Razak	Assistant Conservator of Forests
Rosdin bin Abd Rahman	Assistant Conservator of Forests
Varenus V Untomon	Assistant Conservator of Forests
Serudong	
Awangku Effendy Pg Mahmud	Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Ag Mohd Adzrul bin Ag Ahmad	Conservator of Forests (District Forestry Officer) (from 3 February 2025)
Johnny @ Shiro Laminggu @ Inggu	Assistant Conservator of Forests
Jory bin Julhani	Assistant Conservator of Forests
Mohd Sharulizwan bin Kumban	Assistant Conservator of Forests
Ulu Segama-Malua	
Jackly bin Ambrose @ Borilit	Conservator of Forests (District Forestry Officer)
Jevani bin Sahak	Research Officer
Rayner Bili	Research Officer
Kudat	
Rustum bin Mison	Assistant Conservator of Forests (District Forestry Officer)
Saikol bin Aya	Assistant Conservator of Forests
Pitas	
Norahmad bin Jumain	Conservator of Forests (District Forestry Officer)
Fadzil D Moksin Jr	Assistant Conservator of Forests
Jaludin bin Urubit	Assistant Conservator of Forests
Martha @ Hana binti Manji	Assistant Conservator of Forests
Kota Belud	
Zuridah @ Norfarizan Jeragan	Conservator of Forests (District Forestry Officer) (until 22 June 2025)
Unus bin Ampang	Assistant Conservator of Forests (District Forestry Officer) (from 23 June 2025)
Kota Marudu	
Idris bin Mustan	Conservator of Forests (District Forestry Officer)
Asiah binti Rasiman	Assistant Conservator of Forests
Beatrice binti Joseph	Assistant Conservator of Forests
Jairon bin Jakiwa	Assistant Conservator of Forests
Kota Kinabalu	
Ag. Ismail bin Ag Tuah	Conservator of Forests (District Forestry Officer) (until 24 June 2025)
Zuridah @ Norfarizan Jeragan	Conservator of Forests (District Forestry Officer) (from 25 June 2025)
Rudziah bin Abd. Ghani	Assistant Conservator of Forests (until 19 December 2025)
De-Almeida Galima Yukong	Assistant Conservator of Forests
Helda binti Parut	Assistant Conservator of Forests
Sylvester @ Boy Michael	Assistant Conservator of Forests
Ivy P. Motuyang	Assistant Administrative Officer
Beaufort	
Christopher A. Matunjau	Conservator of Forests (District Forestry Officer) (until 17 December 2025)
Noorazah binti Mohamad	Assistant Conservator of Forests (District Forestry Officer) (from 18 December 2025)
Vallentine @ Valletine Sebastian	Assistant Conservator of Forests

Name	Post
Sipitang	
Andrew Monis	Assistant Conservator of Forests (District Forestry Officer)
Supriyana bin Makkana	Assistant Conservator of Forests
Albinus bin Thomas	Assistant Conservator of Forests
Ranau	
Suib bin Basri	Conservator of Forests (District Forestry Officer)
Alexander bin Geivasius	Assistant Conservator of Forests
Rosmin bin Suhod	Assistant Conservator of Forests
Dainold bin Yudat	Assistant Conservator of Forests
Keningau	
Narbert bin Nasly	Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Hj. Afifuddin @ Salleh Daud bin Jadin	Conservator of Forests (District Forestry Officer) (from 3 February 2025)
Clarice Vitalis Liun Alliun	Assistant Conservator of Forests
David Diosing	Assistant Conservator of Forests
Marjjah binti Othman	Assistant Conservator of Forests
Mohammad Asraf bin Mahmud	Assistant Conservator of Forests
Jude bin Petrus Kassim	Assistant Conservator of Forests
Donny bin Jailis	Assistant Conservator of Forests
Fazianah binti Ajamain	Assistant Conservator of Forests
Harry bin Jika	Engineering Assistant (until 17 May 2025)
Nabawan	
Edmund William	Conservator of Forests (District Forestry Officer)
Vitalis Isidore Malangkig	Assistant Conservator of Forests
Deiras Join @ Juin	Assistant Conservator of Forests
Rhymie bin Abd Rahman	Assistant Conservator of Forests
Tenom	
Harry F. Ikok	Assistant Conservator of Forests (District Forestry Officer)
Harun bin Daloh	Assistant Conservator of Forests
Juliani bin Kulumpang	Assistant Conservator of Forests
Joachim J. Japil	Assistant Conservator of Forests (until 14 August 2025)
Richard Lazaga	Assistant Conservator of Forests
Tambunan	
Hj. Afifuddin @ Salleh Daud bin Jadin	Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Bonaventure Oliver Boyou	Assistant Conservator of Forests (District Forestry Officer) (from 3 February 2025)
Rili bin Joseph @ Hamdan Faridz	Assistant Conservator of Forests
Mohd Faizam bin Basirin	Assistant Conservator of Forests
Sylverinus M. Murin	Assistant Conservator of Forests
Sook	
Bonaventure Oliver Boyou	Assistant Conservator of Forests (District Forestry Officer) (until 2 February 2025)
Narbert bin Nasly	Conservator of Forests (District Forestry Officer) (from 3 February 2025)
Sylvasius bin Abel Simon Kuntad	Assistant Conservator of Forests
Sunanto bin Saibu	Assistant Conservator of Forests
Victor bin Gadius	Assistant Conservator of Forests
Esebius bin Aegidius	Assistant Conservator of Forests
Tibow	
Mohd Zainur Rijal bin Yusof	Conservator of Forests (District Forestry Officer)
Alexius bin Pius	Assistant Conservator of Forests
Mitus Nuin @ Nuing	Assistant Conservator of Forests

ESTABLISHMENT PROFILE

1. Staffing Structure

Grade/Post	Permanent	Temporary
(A) Management & Professional		
VU6 Chief Conservator of Forests, Public Sector Super Scale B		1
VU7 Chief Conservator of Forests, Public Sector Super Scale C	1 (acting)	
VU7 Conservator of Forests, Public Sector Super Scale C		1 (acting)
G14 Deputy Chief Conservator of Forests (Conservator of Forests)	2	
G14 Conservator of Forests	0	
G13 Conservator of Forests	2	
G12 Conservator of Forests	13	1 (acting)
G10 Conservator of Forests	21	
G9 Conservator of Forests	12 + 12 (acting)	
Q14 Deputy Chief Conservator of Forests	1	
Q14 Research Officer	10	
Q13 Research Officer	1	
Q12 Research Officer	4	
Q10 Research Officer	2	
Q9 Research Officer	7	8 + 1 (acting)
W12 Accountant	1 (acting)	
W10 Accountant	1	
W9 Accountant	1	
N12 Administrative Officer	1	
N9 Administrative Officer	2 + 2 (acting)	
J12 Engineer		1 (acting)
J10 Engineer	1	
J9 Geospatial Engineer	1	
E12 Forest Economist	0	
E10 Forest Economist	1	
E9 Forest Economist	1 (acting)	
Total:	**101**	**13**
(B) Supporting Staff		
G7 Assistant Conservator of Forests	21	
G6 Assistant Conservator of Forests	16	
G5 Assistant Conservator of Forests	82	
Q6 Assistant Research Officer	1	
Q5 Assistant Research Officer	4	
W6 Accounting Officer	4	
W5 Accounting Officer	6 + 2 (acting)	
J7 Engineering Assistant	2	
J5 Engineering Assistant	7	
J5 Assistant Cartographer	3	
N6 Assistant Administrative Officer	1	
N5 Assistant Administrative Officer	4	
N5 Personal Assistant / Secretary	0	
S5 Librarian	1	
Total:	**154**	**-**

Grade/Post	Permanent	Temporary
(C) Supporting Staff		
G3 Forest Ranger	4	
G2 Forest Ranger	22	
G1 Forest Ranger	40	
G1 Forester	317	
Q3 Research Assistant	3	
Q2 Research Assistant	26	
Q1 Research Assistant	30	13
J3 Tracers	3	
J2 Tracers	0	
J1 Tracers	7	2
S2 Librarian Assistant	1	
S1 Librarian Assistant	1	
B2 Photographer	1	
B1 Designer	1	
W3 Accounting Assistant	1	
W2 Accounting Assistant	4	
W1 Accounting Assistant	10	4
N2 Personal Assistant / Secretary	5 + 1 (acting)	
N1 Personal Assistant / Secretary	2	
N3 Administrative Assistant (Clerical/Operational)	19	
N2 Administrative Assistant (Clerical/Operational)	54	
N1 Administrative Assistant (Clerical/Operational)	28	8
A2 Boatman	15	
A1 Boatman	19	
H2 Craftsman	1	
H1 Craftsman	12	
H1 General Service Assistant	318	
KP1 Security Guard	4	
Total:	**949**	**27**
(D) Supporting Staff		
R3 Driver	1	
R4 General Worker	1	
R1 General Worker	1	
Total:	**3**	

2. Promotion

No	Name	From the Post of	To the Post of	Date of Appointment
1	Zainuden @ Rudy bin Jimbun	G6 Assistant Conservator of Forests	G7 Assistant Conservator of Forests Grade	1 January 2025
2	Ibno Hajal bin Othman	G1 Forest Ranger	G2 Forest Ranger Grade	12 March 2025
3	Mark Lennon G. Majawat	G1 Forest Ranger	G2 Forest Ranger	12 March 2025
4	Mohd Aidy bin Wahid	Q1 Research Assistant	Q2 Research Assistant	27 March 2025
5	Hazlyine bin Jali	G1 Forest Ranger	G2 Forest Ranger	17 April 2025
6	Muzri bin Majalin	G1 Forest Ranger	G2 Forest Ranger	17 April 2025
7	Noraidilroyani binti Juslin	N1 Assistant Administrative Officer	N2 Assistant Administrative Officer	24 April 2025
8	Elrimieo Emin	G5 Assistant Conservator of Forests	G9 Conservator of Forests	30 April 2025
9	Jauris binti Salegin	G6 Assistant Conservator of Forests	G9 Conservator of Forests	30 April 2025
10	Kristo Henry William	G5 Assistant Conservator of Forests	G9 Conservator of Forests	30 April 2025
11	Dymphna Bedi	H1 General Service Assistant	W5 Accounting Assistant	2 May 2025
12	Noorazah binti Mohamad	G5 Assistant Conservator of Forests	G9 Conservator of Forests	3 June 2025
13	Mohd Safri bin Merami	G1 Forest Ranger	G2 Forest Ranger	17 June 2025
14	Ismailey bin Ismail	G12 Conservator of Forests	G13 Conservator of Forests	24 June 2025
15	Bernadette @ Elizabeth D. Joeman	Q10 Research Officer	Q12 Research Officer	28 August 2025
16	Roddey bin Ariffin	G2 Forest Ranger	G3 Forest Ranger	28 August 2025
17	Siti Zubaidah S. Abdullah	Q10 Research Officer	Q12 Research Officer	28 August 2025
18	Ivy P Motuyang	N5 Personal Assistant / Secretary	N6 Personal Assistant / Secretary	29 August 2025
19	Tang Nyuk Khai	N3 Assistant Administrative Officer	N5 Assistant Administrative Officer	4 September 2025
20	Harun bin Daloh	G5 Assistant Conservator of Forests	G6 Assistant Conservator of Forests	19 November 2025
21	Richard bin Madanan	G5 Assistant Conservator of Forests	G6 Assistant Conservator of Forests	19 November 2025

3. New Appointment

No	Name	Post	Date of Appointment
1	Dina Azilah binti Palamani	W1 Accounting Assistant	7 January 2025
2	Felicia Del Rosario	W1 Accounting Assistant	14 January 2025
3	Jainal bin Ashigal	N1 Administrative Assistant (Clerical/ Operational)	31 January 2025
4	Nurul Hamizah binti Maspah	N1 Administrative Assistant (Clerical/ Operational)	27 January 2025
5	Sidqihafiy bin Sadan	W1 Accounting Assistant	13 January 2025
6	Mohd Azharry bin Azman	N1 Administrative Assistant (Clerical/ Operational)	13 March 2025
7	Adam bin Matnor	H1 General Service Assistant	18 July 2025
8	Adrian Damsha bin Sufri	Q1 Research Assistant	31 July 2025
9	Ahmad Sallehin bin Mohd Sarbini	G1 Forester	21 July 2025

No	Name	Post	Date of Appointment
10	Alfred Bisuk	G1 Forester	25 July 2025
11	Bizron bin Brono	H1 General Service Assistant	22 July 2025
12	Clarissa Manuil	H1 General Service Assistant	31 July 2025
13	Dan Joseph	H1 General Service Assistant	29 July 2025
14	Dianne Grace Ladislaus Joseph	G1 Forester	30 July 2025
15	Fedinand Cuthbert	G1 Forester	31 July 2025
16	Fipyelin Samuil	G1 Forester	28 July 2025
17	Ian Achilleus	G1 Forester	30 July 2025
18	Jessica Jane Jamoni	H1 General Service Assistant	28 July 2025
19	Joel J. Sibin	H1 General Service Assistant	24 July 2025
20	Jonathan Jimmey Lucas	Q9 Research Officer	1 July 2025
21	Madonna Emma Maidil	Q1 Research Assistant	29 July 2025
22	Martina Markus	G1 Forester	23 July 2025
23	Mimi Nur Adreena binti Suhailly	J1 Tracers	31 July 2025
24	Mohd Syafiiqbal bin Jaffary	H1 General Service Assistant	23 July 2025
25	Mohd Tarmizi bin Baharun	H1 General Service Assistant	23 July 2025
26	Mohd Zarul bin Damit	G1 Forester	23 July 2025
27	Mohd. Muaz Shyauqi bin Zul Abidin	G1 Forester	30 July 2025
28	Muhammad Muiz bin Uslee	H1 General Service Assistant	25 July 2025
29	Pidilia Marimin	G1 Forester	31 July 2025
30	Sarah J Mianus	Q9 Research Officer	1 July 2025
31	Sharifah Nur Shafiqah binti Habib Sukur	G1 Forester	30 July 2025
32	Siti Nur Ain binti Mohamad Said	B1 Designer	16 July 2025
33	Veron Castel Marimin	G1 Forester	31 July 2025
34	Adrienne G Logiji Geoffrey	Q1 Research Assistant	7 August 2025
35	Alex De Jellson Juis	G1 Forest Ranger	1 August 2025
36	Amelia Abel Ondingi	H1 General Service Assistant	11 August 2025
37	Amirah binti Ramli	H1 General Service Assistant	4 August 2025
38	Anis Syazana Suhaili	Q1 Research Assistant	20 August 2025
39	Ardianshah bin Amirudin	Q1 Research Assistant	5 August 2025
40	Arsensen Lazurus	H1 General Service Assistant	26 August 2025
41	Danna Ho Ping Ting	H1 General Service Assistant	1 August 2025
42	Eldy Mohd. Adland bin Leef @ Anwar	Q1 Research Assistant	5 August 2025
43	Ezrah Sidol	H1 General Service Assistant	4 August 2025
44	Faizal bin Nurullah	Q1 Research Assistant	20 August 2025
45	Flement bin Janain	Q1 Research Assistant	1 August 2025
46	Flores Cuthbert	H1 General Service Assistant	4 August 2025
47	Floriecia binti Francis	H1 General Service Assistant	4 August 2025
48	Jean Keith Mc Claude	H1 General Service Assistant	18 August 2025
49	Johan John	G1 Forest Ranger	1 August 2025
50	Livia George	H1 General Service Assistant	20 August 2025
51	Maicer Mainsal	G1 Forester	1 August 2025
52	Marlcohm Melto Polo	H1 General Service Assistant	25 August 2025
53	Marty Marianus	G1 Forester	4 August 2025
54	Mohammad Azwan bin Abdul Musad	H1 General Service Assistant	1 August 2025
55	Mohammad Fazdli bin Faisal	H1 General Service Assistant	4 August 2025

No	Name	Post	Date of Appointment
56	Muhammad Hakeem bin Amaram	J1 Tracers	5 August 2025
57	Nooranisah binti Johan Kong	Q1 Research Assistant	27 August 2025
58	Norezyani binti Jungkim @ Lukim	H1 General Service Assistant	4 August 2025
59	Nurul Asyiqin binti Hafanan	Q9 Research Officer	21 August 2025
60	Randy Cornelleo Robert	G1 Forest Ranger	7 August 2025
61	Rolland Noel Nicholas	G1 Forester	14 August 2025
62	Rory Christyhazel Raimy	Q1 Research Assistant	12 August 2025
63	Ahmad Shammirul Hakim bin Abdul Halim	J1 Tracers	4 September 2025
64	Andy Paul Dasim	H1 General Service Assistant	2 September 2025
65	Arnol Julius	G1 Forest Ranger	2 September 2025
66	Brandon Caine bin Mail @ Firid	Q1 Research Assistant	2 September 2025
67	Francis Robert Joiwin Jr	J1 Tracers	3 September 2025
68	Hanessa Harold Sinpong	Q1 Research Assistant	3 September 2025
69	Joe Evander Jalius	H1 General Service Assistant	2 September 2025
70	Melvin Chu Chi Ken	J1 Tracers	9 September 2025
71	Mohamad Aliff bin Perman	Q1 Research Assistant	8 September 2025
72	Mohammad Aminuddin bin Mohd Shukur	Q1 Research Assistant	2 September 2025
73	Muhamad Suzri bin Jahimin	G1 Forest Ranger	2 September 2025
74	Rhynold Rimin	J1 Tracers	8 September 2025
75	Rick Aron Dinsim	J1 Tracers	2 September 2025
76	Rickco Justin	H1 General Service Assistant	2 September 2025
77	Rothman Rinyen Ak Peter	H1 General Service Assistant	3 September 2025
78	Trunks Slvern Join	H1 General Service Assistant	2 September 2025
79	Mohamad Irfan Danial bin Mohin	J1 Tracers	17 October 2025
80	Fernie Flendra Lyianna Mourine	H1 General Service Assistant	10 November 2025

4. Resignation

No	Name	Post	Effective Date
1	Norlaila binti Zainil	H1 General Service Assistant	11 August 2025
2	Dzulraimee bin Kassim	H1 General Service Assistant	30 September 2025
3	Wenthan bin Sanin	G1 Forester	31 October 2025

“Good leadership is not about authority alone — it’s about example, integrity, and bringing out the best in every team member.”

Compulsory Retirements in 2025

Name, Post, Station, Period of Service



Mohamad Saini bin Kiju

Forester Grade G1
Beluran District Forestry Office
03.07.2003 - 01.01.2025



Limah binti Jaludin

General Service Assistant Grade H1
Forest Research Centre, Sepilok
12.03.1984 - 07.01.2025



Osman bin Ismail

Forest Ranger Grade G2
Sipitang District Forestry Office
24.09.1990 - 11.01.2025



Verny Tobing

General Service Assistant Grade H1
Keningau District Forestry Office
05.03.1987 - 14.01.2025



Kassim bin Belongku

General Service Assistant Grade H1
Forest Research Centre, Sepilok
17.07.1986 - 21.01.2025



Asidi bin Rubin

General Service Assistant Grade H1
Sandakan District Forestry Office
02.05.1985 - 23.01.2025



Paul Leo Lohuji

Research Officer Grade Q14
Forest Resource Management Division
02.09.1988 - 28.01.2025



Nordin Ahmad bin Moksin

Boatman Grade A2
Development & General Services Division
21.01.1992 - 04.02.2025



Makran bin Normin

Administrative Assistant (Clerical/ Operational) Grade N2
Sandakan Regional Forestry Office
24.01.1983 - 04.02.2025



Sahari bin Sakah

Forest Ranger Grade G2
Sandakan District Forestry Office
02.02.1982 - 05.02.2025



Panandis bin Bilog @ Francis

Forester Grade G1
Keningau District Forestry Office
12.03.1984 - 08.02.2025



Joseph Monjuil

General Worker Grade H1
Forest Research Centre, Sepilok
01.10.1982 - 09.02.2025



Ruslan bin Ayai

Forest Ranger Grade G2
Pitas District Forestry Office
24.03.1984 - 08.03.2025



Ali bin Asnawi

Boatman Grade A2
Kinabatangan District Forestry Office
13.12.1982 - 14.03.2025



Benjamin bin Kilung

General Service Assistant Grade H1
Forest Research Centre, Sepilok
01.02.1983 - 31.03.2025



Lainah binti Barumbun

General Service Assistant Grade H1
Ranau District Forestry Office
01.02.2008 - 10.04.2025



Ng Chui Hun

Accounting Assistant Grade W3
Finance & Budget Division
14.02.1986 - 25.04.2025



Subturin binti Lampongan

Forester Grade G1
Forest Research Centre, Sepilok
06.12.1986 - 01.05.2025



Ag Manggong bin Yahya

Forester Grade G1
Sipitang District Forestry Office
09.03.1984 - 11.05.2025



Amatdia Anak Nyambong

General Service Assistant Grade H1
Kinabatangan District Forestry Office
07.09.1995 - 18.05.2025



Jumiting @ Jumidin bin Sauyang

Forester Grade G1
Beluran District Forestry Office
06.01.1996 - 03.06.2025



Dius bin Kiking

General Service Assistant Grade H1
Kalabakan District Forestry Office
08.03.1983 - 15.06.2025



Likib bin Tanjung

General Service Assistant Grade H1
Kota Kinabalu District Forestry Office
04.05.1983 - 02.04.2025



Ali @ Balenang bin Brahim

Forester Grade G1
Kinabatangan District Forestry Office
07.11.1989 - 11.04.2025



Ramlan bin Atak

Forester Grade G1
Sandakan District Forestry Office
04.02.1982 - 25.04.2025



Rokiah binti Ismail

General Service Assistant Grade H1
Development & General Services Division
13.02.1988 - 03.05.2025



Sulaiman bin Asmat @ Ting

Administrative Assistant (Clerical/ Operational) Grade N1
Development & General Services Division
01.02.2002 - 13.05.2025



Harry bin Jika

Engineer Assistant Grade J5
Keningau District Forestry Office
23.09.1983 - 18.05.2025



Richard bin Sangkim

General Service Assistant Grade H1
Serudong District Forestry Office
11.10.1995 - 07.06.2025



Lusi @ Richard Ansis

Forester Grade G1
Kota Kinabalu District Forestry Office
28.05.1990 - 17.06.2025



Saffri bin Sutir

General Service Assistant Grade H1
Finance & Budget Division
11.08.2008 - 17.06.2025



Ag. Ismail bin Ag Tuah

Conservator of Forests Grade G10
Kota Kinabalu District Forestry Office
01.01.1989 - 25.06.2025



Maclean Bosumil

General Service Assistant Grade H1
Forest Research Centre, Sepilok
18.03.1982 - 02.07.2025



Amran @ Azlansyah bin Asli

Craftsman Grade H2
Development & General Services Division
17.10.1994 - 09.07.2025



Sidin bin Barau

Assistant Conservator of Forests Grade G5
Kinabatangan District Forestry Office
09.08.1985 - 14.07.2025



Osman bin Saibul

General Service Assistant Grade H1
Communication & Public Relations Division
01.07.1988 - 01.08.2025



Rudini bin Dapuwi

General Service Assistant Grade H1
Forestry Institute of Sabah
18.02.1998 - 18.08.2025



Junaidi bin Udut

Forest Ranger Grade G2
Nabawan District Forestry Office
09.03.1984 - 27.08.2025



John Baptist Sugau

Research Officer Grade Q14
Forest Research Centre, Sepilok
02.05.1995 - 24.06.2025



Abtah bin Deri

Conservator of Forests Grade G10
Forest Resource Management Division
09.06.1990 - 26.06.2025



Suriansa bin A Kadir

Assistant Conservator of Forests Grade G6
Kunak District Forestry Office
01.12.1988 - 08.07.2025



Joeana binti Johanni

Administrative Assistant (Clerical/ Operational) Grade N2
Sandakan District Forestry Office
12.02.1987 - 13.07.2025



Zon bin Tarinsuk

General Service Assistant Grade H1
Tongod District Forestry Office
16.03.1984 - 25.07.2025



Joachim J. Japil

Assistant Conservator of Forests G5
Tenom District Forestry Office
15.09.1987 - 15.08.2025



Jali bin Ahmad

General Service Assistant Grade H1
Kota Kinabalu Regional Forestry Office
02.05.1997 - 25.08.2025



Chee Kim Yin

Administrative Assistant (Clerical/ Operational) Grade N2
Kudat District Forestry Office
01.06.1990 - 29.08.2025



Ruslan bin Ismail

Assistant Conservator of Forest Grade G5
Sandakan District Forestry Office
29.06.1988 - 05.09.2025



Baraham bin Buhari

General Service Assistant Grade H1
Forest Research Centre, Sepilok
04.02.1982 - 15.09.2025



Lelianie @ Maria binti Laurentius

Administrative Assistant (Clerical/ Operational) Grade N1
Kota Kinabalu District Forestry
01.08.1985 - 02.10.2025



Baha bin Akag

Forester Grade G1
Pitas District Forestry Office
16.03.1984 - 18.10.2025



Mohd Sarbini bin Mohd Tahir

General Service Assistant Grade H1
Kalabakan District Forestry Office
01.02.1985 - 03.11.2025



Abdul Hassan bin Marhaban

Forester Grade G1
Kalabakan District Forestry Office
31.12.2001 - 18.11.2025



Norjain bin Matali

Forest Ranger Grade G2
Sook District Forestry Office
17.02.1986 - 02.12.2025



Rudziah binti Abd. Ghani

Assistant Conservator of Forests Grade G7
Kota Kinabalu District Forestry Office
04.07.1991 - 20.12.2025



Sabtu bin Omar

General Service Assistant Grade H1
Ulu Segama-Malua District Forestry Office
08.01.2007 - 11.09.2025



Mijol bin Alil

General Service Assistant Grade H1
Tenom District Forestry Office
08.03.1984 - 01.10.2025



Nordin bin Braim

Boatman Grade A1
Serudong District Forestry Office
07.03.1984 - 15.10.2025



Salbiah binti Mohammed

Administrative Assistant (Clerical/ Operational) Grade N2
Communication & Public Relations Division
15.08.1985 - 26.10.2025



Denis Cletus Amui

Forest Ranger Grade G1
Development & General Services Division
01.03.1984 - 10.11.2025



Akop @ Awang bin Kasim

General Service Assistant Grade H1
Beaufort District Forestry Office
01.02.1997 - 21.11.2025



Christopher A. Matunjau

Conservator of Forests Grade G10
Beaufort District Forestry Office
07.06.1988 - 18.12.2025

Early Retirement in 2025

Name, Post, Station, Period of Service



Peter Maurice Lidadun

Conservator of Forests Grade G14
Deputy Chief Forest Conservator
(Planning & Management) Office
18.04.1991 - 01.04.2025



Bulkiah bin Sherif Hassan

Assistant Conservator of Forests
Grade G5
Beluran District Forestry Office
01.07.1988 - 01.06.2025



Susan Patrick

Administrative Assistant (Clerical/
Operational) Grade N2
Forestry Institute of Sabah
28.05.1990 - 02.06.2025



Jafinan @ Jafrian bin Dadau

Forester Grade G1
Kinabatangan District Forestry
Office
11.01.1989 - 05.09.2025

Passed Away in Service in 2025

Name, Post, Station, Scheduled Service Period & Date of Passing



Mohd Yassin bin Zaidin
Seaman Grade A1
Sandakan District Forestry Office
Date of Appointment/Expected
Retirement: 23.03.1987 - 25.12.2026
Passed Away : 07.11.2025



Awang Yussop @ Madun bin Awang Ahmad
Seaman Grade A2
Sandakan District Forestry Office
Date of Appointment/Expected
Retirement: 02.05.1997 - 03.08.2032
Passed Away: 1.12.2025

ACTIVITIES OF HUMAN RESOURCE MANAGEMENT DIVISION

In steadfast fulfilment of its mandate and strategic responsibilities, the Human Resource Management Division successfully spearheaded and delivered a comprehensive array of impactful programmes throughout 2025, reinforcing the Department's commitment to excellence in human capital development and employee welfare.

RETIREMENT SEMINAR THE DEPARTMENTAL EMPLOYEES RETIRING IN 2026
Date : 6 November 2025
Venue : The Palace Ballroom, The Palace Hotel, Kota Kinabalu

Demonstrating its unwavering commitment to ensuring a smooth and dignified transition into post-service life, the Division organised a Retirement Seminar for officers scheduled to retire in 2026. The seminar was designed to enhance participants' understanding of retirement preparedness, financial planning, statutory benefits, tax implications, and post-retirement opportunities. It also provided a strategic platform for open dialogue, enabling employees to seek clarification and professional advice on matters pertaining to retirement procedures and entitlements. The programme featured distinguished speakers from key agencies, namely: (i) Mrs. Shal Faida binti Hamzah, Employees Provident Fund (EPF); (ii) Mr. Alexander Iskandar, Inland Revenue Board of Malaysia (LHDN); and (iii) Mrs. Siti Fairuz binti Mohd Saidi, Public Service Department Malaysia (JPA).






(L–R) Seminar speakers: Mrs. Shal Faida binti Hamzah (EPF), Mr. Alexander Iskandar (LHDN), and Mrs. Siti Fairuz binti Mohd Saidi (JPA).



United in appreciation — Retirement Seminar 2026 group photo.

A total of 56 employees scheduled for retirement in 2026 participated in the seminar. Notably, 2 officers had submitted applications for optional retirement in 2026, while 3 officers have opted for early retirement in 2025. The ceremony was officiated by the Chief Conservator of Forests, Datuk Frederick Kugan, whose presence underscored the Department's deep appreciation for the invaluable service and lifelong contributions of its officers.





(Right) Retiring officers receiving certificates and souvenirs presented by the Chief Conservator of Forests, Datuk Frederick Kugan.

APPRECIATION CEREMONY FOR DEPARTMENT RETIREES IN 2024 AND 2025

Date : 18 September 2025
Venue : Rainforest Hall, Forest Research Centre

In line with Circular PPANS Bil. 8/2023, the *Jasamu Dikenang* Ceremony was held to honour and celebrate retirees in 2024 and 2025 in recognition of their dedicated service and contributions to the Department. The ceremony also provided a meaningful platform for retirees to reconnect with former colleagues and engage with the Chief Conservator of Forests in a warm and appreciative atmosphere, during which a total of 133 retirees were honoured.







(L–R) Highlights from throughout the ceremony.

ANTI-CORRUPTION COMMITTEE MEETINGS

The Department Anti-Corruption Committee remains committed to continuously strengthening governance, integrity, and anti-corruption efforts within the Department. Particular emphasis is placed on identifying and addressing the root causes of administrative weaknesses within the Government and the Department. In 2025, a total of 3 committee meetings were conducted:

List of anti-corruption committee meetings.

Session	Date	Venue
Bil. 1/2025	21 February 2025	Kota Kinabalu District Forestry Office
Bil. 2/2025	11 July 2025	Tawau District Forestry Office
Bil. 3/2025	1 December 2025	Kota Kinabalu District Forestry Office



A focused discussion on anti-corruption and shared accountability.



Anti-Corruption Committee Meeting conducted at the Kota Kinabalu District Forestry Office.

COURSE ON STRENGTHENING INTEGRITY IN LEADERSHIP FOR OFFICERS OF THE SABAH FORESTRY DEPARTMENT

The Leadership Integrity Strengthening Course for officers of the Sabah Forestry Department was held on 4 November 2025 at the Conference Room, Kota Kinabalu District Forestry Office, with participation from 47 officers of Grades 5 to 14. The programme also featured a guest speaker, Mr. Mohd Asril bin Sharil from the Sabah State Integrity and Governance Division (BIGoNS). The objectives of the course are as follows:

- To strengthen the principles of transparency, accountability, efficiency, effectiveness, and ethics in public service delivery;
- To ensure leaders uphold entrusted responsibilities and perform duties with punctuality and commitment;
- To instil high moral values among officers to enhance management effectiveness in carrying out assigned tasks;
- To cultivate integrity as a core organisational culture to curb disciplinary issues, breaches of code of conduct, and unethical practices within the Department; and
- To empower officers in line with the Department's mission, vision, and strategic direction.





(L-R) Participants during the talk, and a group photo with BIGoNS's speaker, Mr. Mohd Asril bin Sharil.

INTEGRITY AND PPPANS 2008 PART V COURSE

Human Resource Management Division has organised the Integrity and PPPANS 2008 Part V Course on 29 July 2025 as part of its ongoing efforts to promote integrity, discipline, and good governance practices within the Department. The programme involved 40 newly appointed officers of Grade 5 and below, reflecting the Department's continuous commitment to developing a capable, ethical, and well-informed workforce from the early stage of service. The course was facilitated by distinguished speakers, Mr. Mohd Asril bin Sharil from Sabah State Integrity and Governance Division (BIGoNS), and Mrs. Zarith Sofia binti Ag. Mohd Hussin from the Sabah State Public Service Commission. The objectives of the course are as follows:

- To strengthen understanding of Part V – Conduct and Discipline under PPPANS 2008 as a key reference for public service governance;





(L-R) Mrs. Zarith Sofia binti Ag. Mohd Hussin, speaker from SPANS, and group photo with speaker from BIGoNS.

- To foster a strong sense of responsibility, accountability, and punctuality in carrying out duties;
- To instil high standards of moral and ethical values among officers in enhancing organisational performance;
- To embed integrity as a core organisational culture, thereby reducing disciplinary issues, misconduct, and breaches of work ethics within the Department; and
- To empower officers in alignment with the Department's mission, vision, and strategic direction towards excellence in public service delivery.

VARSHA INTEGRITY PROGRAMME IN CONJUNCTION WITH CHIEF MINISTER'S DEPARTMENT INTEGRITY WEEK 2025

The Varsha Integrity Programme was organised under the initiative of the Sabah State Government through the Sabah State Integrity and Governance Division (BIGoNS), in conjunction with the Chief Minister's Department Integrity Week 2025. The programme featured several activities involving the Sabah Forestry Department, aimed at strengthening integrity awareness and promoting a culture of good governance and anti-corruption practices among the public and civil servants.

Jerayawara Integrity Programme

The Jerayawara Integrity Programme was held on 14 June 2025 at Dataran Harbour Mall, Sandakan, focusing on fostering integrity awareness and anti-corruption values among both the community and civil servants. Jointly organised by the Sabah State Integrity and Governance Division (BIGoNS) and the Sandakan City Council (MPS), the programme featured exhibitions, interactive dialogues, and the recitation of the Integrity Pledge. The programme aimed to strengthen strategic collaboration between government agencies and the community in enhancing understanding of good governance, fostering a strong culture of integrity, and preventing corruption within the public sector. The Sabah Forestry Department also participated by showcasing its functions, vision, and mission in forest conservation, control, and management.

Integrity Symphony Choir Competition

Sabah Forestry Department participated in the Integrity Symphony Choir Competition held in conjunction with the Varsha Integrity 2025 programme on 29 September 2025 at the Auditorium Hall, Kinabalu Tower. The team received a Certificate of Participation, the performance delivered was marked by exceptional commitment, unity, and unwavering enthusiasm throughout the competition. The strong team spirit demonstrated by the participants reflected the Department's pride and dedication in delivering the songs *Integrity Sabah* and *Malaysia Madani* with sincerity and appreciation of integrity values. The participation served as a meaningful platform to foster camaraderie, strengthen esprit de corps, and further reinforce the Department's commitment to promoting integrity through creative and engaging approaches.







(Top to bottom) Mr. Walter Kenson, President MPS participating in the booth activities; Mr. Mohd Zamri bin Ag Damit from BIGoNS receiving a souvenir; and a group photo with representatives from BIGoNS and MPS Sandakan.





(L–R) Choir participants representing Sabah Forestry Department, and Mr. Indra Purwandita bin Herry Sunjoto, Deputy Chief Conservator of Forests (Planning & Management), receiving an appreciation plaque from the State Secretary, YB Datuk Seri Panglima Sr. Haji Safar bin Untong, JP.

MAJLIS BERSAMA JABATAN (MBJ)

The Majlis Bersama Jabatan serves as a key platform within the public service to facilitate two-way communication between management and employees. It provides an avenue for the discussion of issues, concerns, and suggestions aimed at improving staff welfare and enhancing organisational effectiveness. In accordance with the established regulations, a total of 3 MBJ meetings were conducted in 2025:

Session	Date	Venue
Bil. 1/2025	13 March 2025	Auditorium, Sabah Forestry Department Headquarters
Bil. 2/2025	7 July 2025	Auditorium, Sabah Forestry Department Headquarters
Bil. 3/2025	18 November 2025	Belian Room, Sabah Forestry Department Headquarters



MBJ meeting held at Auditorium, Sabah Forestry Department Headquarters.

SABAH FORESTRY DEPARTMENT FAMILY DAY 2025

Sabah Forestry Department Family Day 2025, themed *Kasih Keluarga, Jiwa Madani*, was held on 6 December 2025 at the Sandakan Sports Complex. The programme was officiated by the Chief Conservator of Forests. The event was coordinated by the Human Resource Management Division in collaboration with FORESS and P'WAJAH, with an estimated participation of 500 officers, staff, and family members. The programme was aligned with the State Secretary's Circular designating November as Family Month, which encourages government agencies to organise family-oriented activities to strengthen family bonds and promote work-life balance among civil servants.



Kicking off the Sabah Forestry Department Family Day 2025, and highlights of activities during the family day.

EXCELLENT SERVICE AWARD

Human Resource Management Division serves as the Secretariat for the Department's Human Resources Development Panel, which is responsible for identifying recipients of the annual Excellent Service Award in recognition of outstanding performance and contributions to the Department and the State. A total of 60 recipients were selected based on their excellent performance in 2024. The award presentation ceremony was held on 9 May 2025 at the Sabah International Convention Centre (SICC), Kota Kinabalu. The list of recipients is as follows:

No.	Name	Stations	Scheme	Grade
1	John Baptist Sugau	FRC	Q	14
2	Paul Leo Lohuji	FRM	Q	14
3	Rosila Anthony Johnwyn	FSP	Q	14
4	Peter Maurice Lidadun	SACCF(PM)	G	13
5	Julitta binti Julhani	P	N	12
6	Janius bin Ebin	PPW Sandakan	G	12
7	Karim bin Abdul Saman @ Abd Samad	KPA	G	12
8	Jarry K. Lajanga	FRC	Q	12
9	Abtah bin Deri	FRM	G	10
10	Awangku Effendy Pg Mahmud	PPD Serudong	G	10

No.	Name	Stations	Scheme	Grade
11	Osman bin H Bangkong @ Ahmad	PPD Lahad Datu	G	10
12	Azizah binti Landa	PKL	N	9
13	Alexander bin Geivasius	PPD Ranau	G	6
14	Asiah binti Rasiman	PPD Kota Marudu	G	6
15	Suriansa bin A Kadir	PPD Kunak	G	6
16	John Enggir	FRC	W	6
17	Andrew Monis	PPD Sipitang	G	5
18	Elrimieo Emin	PPD Telupid	G	5
19	Kristo Henry William	FSP	G	5
20	Mazlan bin Mohd Azman	PPW Keningau	G	5

No.	Name	Stations	Scheme	Grade
21	Sidin bin Barau	PPD Kinabatangan	G	5
22	Veraline John	PPD Lahad Datu	G	5
23	Paulina binti Francis	CCF Office	N	5
24	Sudirman bin Zainal	FRM	J	5
25	Hiyati binti Sukur @ Hayati	FRC	N	3
26	Justine Dunggi @ Halimah	FRC	N	3
27	Hjh Joeana binti Johanni	PPD Sandakan	N	2
28	Nanidah binti Raman	P	N	2
29	Rosdiah @ Rosalia binti Gimputu	PPD Telupid	N	2
30	Chan Kar Fui	DC(O) Office	N	2
31	Ha Thsui Zien	DC(PM) Office	N	2
32	Nigel Edward Dato Balanjiu	KPA	B	2
33	Gwendoline binti Daiman	PPW Kudat	W	2
34	Amran @ Azlansyah bin Asli	PPA	H	2
35	Dayang Fazrinah binti Awg Damit	FRC	Q	1
36	Rh David Shagun	PPD Kalabakan	G	1
37	Roddin bin Dilim	PPD Deramakot	G	1
38	Bigwaison Rudini	PPD Kudat	G	1
39	Dandy Kassim	PPD Tenom	G	1

No.	Name	Stations	Scheme	Grade
40	M. Azhar bin Ismail	PPD Tawau	G	1
41	Mohd Nizam bin Ruslan	PPD Tibow	G	1
42	Linah binti Alim	P	N	1
43	Leona Jestia Nicholas	CCF Office	N	1
44	Nur Zaiton binti Abd. Hamed	PPD USM	N	1
45	Hjh Murtiffa binti Ismail	FIT	H	1
46	Roslinde Len Jampan	PPD Beluran	H	1
47	Sharmine binti Maikol	PPD Kota Belud	H	1
48	Siti Nazirah binti Md Talib	PPW Kota Kinabalu	H	1
49	Saffri bin Sutir	KEW	H	1
50	Mohd Nazri bin Abd Rahman	SFM	H	1
51	Abdul Hakim bin Hassan	FRM	H	1
52	Jumin @ Jumlih bin Sait	SPP	H	1
53	Felix Vun Apin	PPD Kota Kinabalu	H	1
54	Likib bin Tanjung	PPD Kota Kinabalu	H	1
55	Akop @ Awang bin Kasim	PPD Beaufort	H	1
56	Musa bin Pengawai	PPD Nabawan	H	1
57	Rudini bin Dapuwi	FORiNS	H	1
58	Dius Basil	PPD Tambunan	R	1
59	Suhoime bin Nasran	PPA	A	1
60	Hanry bin Arang	DC(O) Office	H	1





Group photo featuring the APC team (left) and the 60 recipients of the Excellent Service Award 2024 - (above), presented during MAPT 2025.

TRAINING AND WORKSHOP

eRawatan System Pilot Workshop

On 2 October 2025, representatives from the Department participated in the eRawatan System Pilot Workshop organised by the Sabah State Public Service Department (JPANS) at Kinabalu Tower, Kota Kinabalu. The Sabah Forestry Department was among the selected pilot agencies for the initial implementation of the system, alongside the Department of Agriculture, Public Works Department, Ports and Harbours Department, Sabah Islamic Religious Affairs Department as well as Lands and Surveys Department. The workshop aimed to provide exposure to the system's functionalities and to identify areas for improvement prior to full-scale implementation. A technical briefing and hands-on training session were conducted to enhance participants' understanding and practical application of the system.




JPAN SABAH
JABATAN PERKHIDMATAN AWAM NEGERI SABAH

Sijil Penghargaan

DENGAN SUKACITANYA
MERAKAMKAN SETINGGI-TINGGI PENGHARGAAN
KEPADA

JABATAN PERHUTANAN SABAH

SEBAGAI
JABATAN PERINTIS SISTEM ERAWATAN
PADA
02 OKTOBER 2025

DATUK ZAINUDIN BIN AMAN
KETUA PENGARAH PERKHIDMATAN AWAM NEGERI
JABATAN PERKHIDMATAN AWAM NEGERI

(L–R) The Sabah Forestry Department was presented with a certificate as one of the selected pilot agencies for the eRawatan system implementation.

Taklimat Prosedur Permohonan Insentif Percutian (i-Cuti)

Insentif Percutian (*i-Cuti*) is an initiative introduced by the State Government as an incentive and token of appreciation for serving officers with 20 years or more of service. The briefing was conducted during the Retirement Seminar held on 6 November 2025 at The Palace Hotel, Kota Kinabalu. It was primarily targeted at Department officers scheduled to retire in 2026.





(L–R) Mrs. Nur Atifah Hammade from the Human Resource Management Division sharing insights on the i-Cuti incentive, followed by a group photo with briefing participants.

DEPARTMENTAL RECORDS MANAGEMENT

Sabah Forestry Department, through the Human Resource Management Division and administered by the Departmental Records Officer (PRJ), is responsible for the management of departmental records in accordance with established records governance requirements. On 16 December 2025, the Department was awarded the Best Records Management Award for 2025 by The Sabah State Archives (ARKIB) in recognition of its effective implementation of records management practices.

Records Governance Committee Meeting

The Records Governance Committee comprises representatives from (i) Departmental Records Management, Sabah Forestry Department; (ii) Sabah State Archives; (iii) Sabah Internal Audit Department; and the Sabah State Treasurer's Department. The Committee convenes meetings to review and process applications for the disposal of public records from various offices, as follows:

Session	Offices Involved	Date	Venue
Bil. 1/2025	• Keningau Regional Forestry Office • Tenom District Forestry Office • Ranau District Forestry Office	18 July 2025	Kota Kinabalu Mukim Office
Bil. 2/2025	• Forest Resource Management Division • Finance & Budget Division	30 October 2025	Seraya Meeting Room, Sabah Forestry Department Headquarters





(L-R) Records Governance Committee Meeting held at Seraya Meeting Room, Sabah Forestry Department Headquarters.

Records Inspection Audit

On 25 February 2025, the Sabah State Archives conducted a records inspection audit at the Forest Research Centre, Sabah Forestry Department. The audit evaluated compliance with housekeeping standards and functional records management practices, covering both active and inactive records.

Records Management Course

On 28–29 April 2025, the Human Resource Management Division organised a Records Management and Post-Disaster Records Preservation Course at Gadung Hall, Sabah State Archives, Kota Kinabalu. The programme was attended by 39 officers and staff. The course objectives were to:

- Enhance understanding of semi-active records management;
- Ensure retention of active records in compliance with the records disposal schedule;
- Strengthen staff skills in systematic records appraisal;
- Provide exposure to management of disaster-affected records;
- Improve understanding of government records preservation requirements; and
- Enhance preparedness in records disaster recovery practices.





(L–R) Group photo of participants during the Records Management Course.

Departmental Records Management Project

The Records Management Project was strategically coordinated by the Departmental Records Officer under the Human Resource Management Division and implemented through the Records Evaluation Committee in collaboration with relevant regional and district offices. The project focused on the systematic review, evaluation, and segregation of records that had exceeded their retention periods and were eligible for disposal, subject to approval in accordance with established procedures, subject to endorsement by the Sabah State Archives, Sabah Internal Audit Department, and the Sabah State Treasurer's Department. The initiative reflects the Department's continued commitment to strengthening records governance, ensuring compliance, and enhancing the efficiency and integrity of records management practices.

No.	Offices Involved	Date	Venue
1	Chief Conservator of Forests Office	14–17 April 2025	Agency Records Unit, Headquarters
2	Finance & Budget Division	19–23 May 2025	Agency Records Unit, Headquarters
3	Forest Research Centre	20–22 August 2025	Forest Research Centre
4	Quality Management & Training Division	25–27 November 2025	Agency Records Unit, Headquarters




(L–R) Photos taken during the Records Management Project.

Disposal of Public Records

On 25 February 2025, the disposal of public records from the Human Resource Management Division, Forest Resource Management Division, and Finance and Budget Division was carried out at Sinora Sdn. Bhd. Sawmill, Sandakan. The exercise was conducted in strict compliance with established procedures and upon receipt of approval from the Sabah State Archives, Sabah Internal Audit Department, and the Sabah State Treasurer's Department, ensuring proper governance and accountability in records management.




Disposal of public records at Sinora Sdn. Bhd. Sawmill, Sandakan.

AWARDS

Outstanding Human Resource Management Award Year 2025

Sabah Forestry Department was recognized for its excellence in human resource management upon receiving the Special Award for Outstanding Human Resource Management 2025. This achievement was affirmed during a prestigious 5-Star Rating Award Ceremony, which acknowledged the department's dedicated efforts in fostering a sustainability-driven community, organizing outreach roadshow programmes, and strengthening staff competency and capacity development initiatives.





Representating the Chief Conservator of Forests, Mr. Zulkfili Suara, Deputy Chief Conservator of Forests (Operation) together with Mrs. Julitta Julhani, Head of Human Resource Management Division received the Outstanding Human Resource Management Award 2025.

Human Resource Information System (SM2) Rating Award Year 2025

The Sabah Forestry Department was awarded a 5-star rating for the Human Resource Information System (SM2) in the Cluster 1 Category (Departments with 1,000 or more employees). This recognition is based on the consistent updates and accuracy of the SM2 data.

Both awards were presented by YB Datuk Seri Panglima Sr. Haji Safar bin Untong, JP, Secretary of the State Government of Sabah accompanied by YBhg. Datuk Zainudin bin Aman, Director General of Sabah State Public Service Department, during the Star Rating Award Ceremony for the Human Resource Information System (SM2) on 5 December 2025 at The Magellan Sutera Resort, Kota Kinabalu.





Datuk Frederick Kugan, Chief Conservator of Forests, with the award plaques honoring the department's excellence.

Excellence in Records Management Award 2025

Sabah Forestry Department was recognized for its excellence in records management through the receipt of the Best Records Management Award 2025. This achievement reflects the department's commitment to maintaining efficient, systematic, and well-organized record-keeping practices in support of transparency, accountability, and effective public service delivery. The award was presented by Director of the Sabah State Archives Department, Mrs. Shirley Sion, during the meeting of the State Records Officers Committee of Sabah (JPRJPKNS) Series 2/2025, which was held on 16 December 2025.





The Department's Records Officer, Mrs. Julitta Julhani, receiving the award presented by Director of the Sabah State Archives Department.



© Eyen Khoo

Known for its distinctive rounded, flask-shaped "carpet pitchers" that grow across the forest floor rather than hanging from vines, *Nepenthes ampullaria* can be admired in the RDC's Nepenthes Garden.

QUALITY MANAGEMENT, TRAINING & INNOVATION

1. QUALITY MANAGEMENT SYSTEM (QMS)

The Sabah Forestry Department has successfully fulfilled the requirements of the ISO 9001:2015 Quality Management Systems (QMS) in relation to customer service delivery and organizational performances. The management focuses on 5 elements of quality, namely (i) Achievement of the 7 Quality Principles, (ii) Achievement of the Quality Policy, (iii) Achievement of Quality Objectives, (iv) Customer Satisfaction and (v) Customer Complaints. The evaluation was based on feedback received from all 8 certified locations namely Deramakot, Beluran, Botany Section Forest Research Centre Sepilok, Kalabakan, Sabah Forest Institute, Sandakan Rainforest Centre, FLEGT Unit and Enforcement Division.

i. ACHIEVEMENT OF QUALITY PRINCIPLES

The achievement of the 7 principles of SFD QMS Department is shown in Chart 1. Overall performance was very satisfactory, however continuous improvement is recommended to ensure consistency in work processes.

ii. ACHIEVEMENT OF QUALITY POLICY

Chart 2 displays the level of performance of the quality policy achievement.

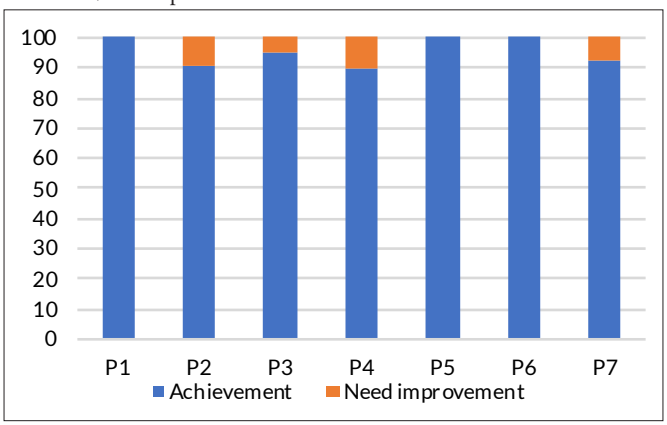
iii. ACHIEVEMENT OF QUALITY OBJECTIVE

Chart 3 displays the level of performance of the quality objective achievement.

CUSTOMER SATISFACTIONS

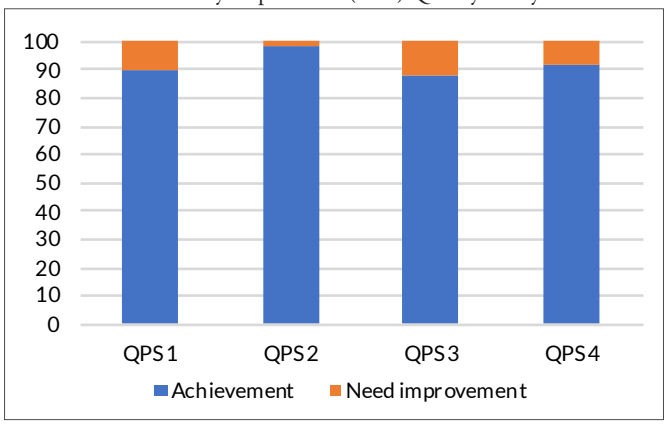
Customer feedback is evaluated based on the Customer Satisfaction Survey. There were five (5) criteria for evaluations towards the realization of department vision, mission and objectives outlined in its strategic thrust such as (1) 'services', (2) 'forestry department's staff', (3) 'offices', (4) 'communication & public relations', and (5) 'customer services'. Chart 4 shows the performance of customer satisfactions for 2025.

Chart 1: 7 Principle Achievements



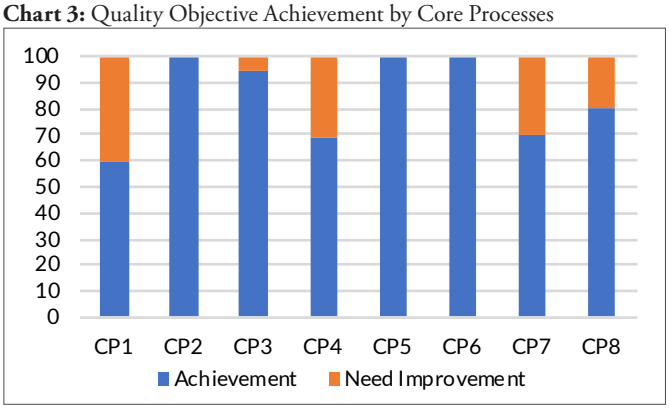
NOTE: P – Principle | **P1** – Customer Focus | **P2** – Leadership | **P3** – Engagement of People| **P4** – Process Approach | **P5** – Improvement | **P6** – Evidence Based Decision Making | **P7** – Relationship Management

Chart 2: Sabah Forestry Department (SFD) Quality Policy Achievement



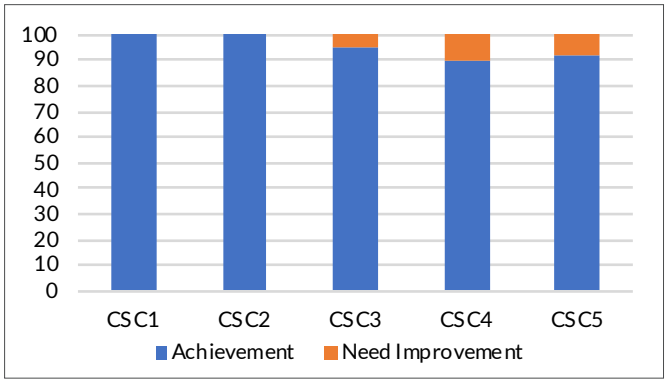
NOTE: QPS – Quality Principle Statement | **QPS1** – Manage and administer the State forest resources in a sustainable (manner) | **QPS2** – Meet customer needs in professional and ethical manner | **QPS3** – Ensure that the requirements of international standards are followed in the achievement of quality objectives and review periodically to ensure continuous improvement and effectiveness of the quality management system, and; | **QPS4** – To instill and foster understanding on the organization's quality policy to staff of the department.

Chart 3: Quality Objective Achievement by Core Processes



NOTE: CP – Core Processes | **CP1** – Reduced Impact Logging | **CP2** – Timber Royalty Process | **CP3** – Herbarium Specimen | **CP4** – Occupation Permit | **CP5** – Investigation Paper | **CP6** – Forest Ranger Forestry Certification Course | **CP7** – Management of Sandakan Rainforest Park Visitor | **CP8** – Sabah TLAS CC

Chart 4 : SFD Customers Satisfaction Year 2025.



NOTE: CSC – Customer Satisfaction Criteria | **CSC1** –services | **CSC2** – forestry department's staff | **CSC3** – offices | **CSC4** – communication & public relationships | **CSC5** – customer services

iv. CUSTOMER COMPLAINTS/ ENQUIRY

The number of customer complaints received in 2025 is as listed in the Table 1. These customer complaints include forest-related offences such as, license violations, encroachment on forest reserves and illegal logging, and complaints related to department services and administration. The Enforcement and Prosecution Investigation Division is responsible for investigating all complaints received and taking further action on valid complaints.

Table 1: Customer's Complaints in 2025.

Month	Complaint	True	False	No IP	Investigation paper
Jan	2	1	1	0	0
Feb	0	0	0	0	0
Mar	2	2	0	0	0
Apr	0	0	0	0	0
May	1	1	0	0	0
Jun	1	1	0	0	0
Jul	1	1	0	1	1
Aug	1	1	0	0	0
Sep	2	2	0	2	2
Oct	1	0	1	0	0
Nov	1	1	0	0	0
Dec	0	0	0	0	0
Total	12	10	2	3	3

NOTE1: IP – Investigation paper

Snapshots of Annual Internal Audit ISO9001:2015 by Internal Audit Team



Snapshots of Annual Internal Audit ISO9001:2015 by Internal Audit Team





Snapshots of Annual Internal Audit ISO9001:2015 by External Audit (BVC)







OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT SYSTEM

The Sabah Forestry Department Occupational Safety and Health Management System was first implemented in 2007 and became fully effective in 2010. The implementation of this management system is divided into three levels, namely the Occupational Safety and Health Committee at the district forestry level, the Occupational Safety and Health Committee at the regional forestry level, and the Occupational Safety and Health Committee at the headquarters (main) level.

The main focus of this committee is to ensure that the Department's Occupational Safety and Health policy, as well as its Occupational Safety and Health objectives, are implemented, complied with, and practised. Management focuses on three elements of OSH, namely: (1) incident reports, (2) training, and (3) monitoring programmes.

i. Incident Reports

Table 2: Incident Reports in 2025.

Month	Incident	Fatality	Major Injury	Injury	Property Damage	Near Miss
Jan	2	1	1	0	0	0
Feb	0	0	0	0	0	0
Mar	1	0	0	0	0	1
Apr	3	0	0	0	0	3
May	1	0	0	0	0	1
Jun	0	0	0	0	0	0
Jul	0	0	0	0	0	0
Aug	0	0	0	0	0	0
Sep	3	0	0	0	0	3
Oct	1	0	0	0	0	1
Nov	0	0	0	0	0	0
Dec	1	1	0	0	0	0
Total	**12**	**2**	**1**	**0**	**0**	**9**





Accident that occured in RDC.

ii. Safety & Health Training

In 2025, three training sessions related to Occupational Safety and Health (OSH) were conducted both outside the Department's premises and at the National Institute for Occupational Safety and Health premises. Safety training and awareness are vital for ensuring a safe and efficient workplace. Continuous training enables employees to stay updated on the latest procedures, identify potential risks, and implement accident prevention techniques more effectively. Additionally, safety awareness programmes foster a positive work culture, contributing to a reduction in accident rates at the Sabah Forestry Department premises.

Table 3: List of OSH Training Courses in 2025.

No	Course / Workshop	Venue	Date	No of Participants
1	Roadshow on Timber Transportation Safety Keningau Regional Level Series 1, Year 2025	PKS, KGU	17 Jul	50
2	Occupational Safety and Health for Forest Industry – Awareness	NIOSH, SDK	04 Nov	31
3	Effective Safety and Health Committee -Awareness	NIOSH, SDK	05-06 Nov	31

NOTE: PKS, KGU – Pusat Kraftangan Sabah, Keningau | NIOSH, SDK – National Institute of Occupational Safety and Health, Sandakan.







OSH Workshop

A. Keningau District-Level Log Transportation Safety Roadshow Programme, Series 1, 2025.
B. OSH Forestry.
C. Group photo OSH Committee.

iii. Monitoring Programme

In 2025, the Occupational Safety and Health Committee of the Sabah Forestry Department conducted intensified monitoring at selected Pusat Sejadi areas, namely Pusat Sejadi Madai Baturong, Kunak; Pusat Sejadi Kem Cinta Alam, Pitas; and Pusat Sejadi Hutan Simpan Kawang, Papar.

The monitoring aimed to evaluate the effectiveness of the Standard Operating Procedures (SOPs) implemented at these sites, as well as to provide professional advisory services and recommendations for improvement. This initiative was designed to ensure a safe environment for both visitors and employees, in full compliance with occupational safety and health requirements.





(L) OSH Field Visit – Pusat Sejadi Madai Baturong, Kunak. (R) OSH Field Visit – Pusat Sejadi Hutan Simpan Kawang, Papar.

THE SABAH FORESTRY DEPARTMENT OCCUPATIONAL SAFETY & HEALTH COMMITTEE

The Occupational Safety and Health Committee will convene three times annually, specifically in the first, second, and third quarters. These meetings are essential for discussing matters related to the management of occupational safety and health across the Department's offices, field operations and established centres.

The Committee aims to address emerging issues, review safety protocols, and ensure compliance with relevant regulations, thereby promoting a safe working environment for all employees.







(L-R) Occupational Safety & Health Committee (OSHC) Meeting Bil.1/2025, 28 April 2025, Kota Marudu Forestry District Office: Technical Working Group, Standard Operating Procedures of Nature Centre, 9th October 2025, Kota Kinabalu Forestry District Office; Occupational Safety & Health Committee (OSHC) Meeting Bil.2/2025, 8th October 2025, Kota Kinabalu Forestry District Office.

2. TRAINING

In 2025, a total of 1,363 officers and staff attended courses organised by the SFD, the Institut Latihan Sektor Awam Negeri Sabah (INSAN), and other relevant agencies.

A total of 61 courses were successfully conducted by the Sabah Forestry Department. Meanwhile, 9 courses were organised by the Institut Latihan Sektor Awam Negeri Sabah (INSAN). In addition, 33 courses were conducted by other government departments, private sector organizations, and related agencies.

These courses were conducted to further strengthen the knowledge, technical skills, and professional competencies of officers and staff, thereby improving service delivery, operational efficiency, and overall organizational performance.

In 2025, SFD fully utilized E-Laps System for course applications and approvals. The W-Laps records are important in identifying the total number of officers and staff who have attended courses and determining the total number of courses conducted each year.

Table 1: Courses/ Workshop/ Seminars/Conferences organised by Sabah Forestry Department in 2025.

No.	Courses/Workshops/Seminars/Conferences	Venue	Date	Number of Participants
	Finance & Budget Division			
1	Kursus Kewangan Bahagian Belanjawan & Kewangan JPS Siri 1	Conference Hall Pejabat Perhutanan Daerah Kota Kinabalu	03 - 04 Feb	10
2	Kursus Kewangan Bahagian Belanjawan & Kewangan JPS Siri 2	Bilik Mesyuarat Pejabat Perhutanan Daerah Kota Marudu	06 - 07 Feb	2
3	Kursus Kewangan Bahagian Belanjawan & Kewangan JPS Siri 3	Perkasa Hotel Tenom	12 - 13 Feb	6
4	Kursus Kewangan Bahagian Belanjawan & Kewangan JPS Siri 4	Bilik Mesyuarat Pejabat Perhutanan Daerah Tawau	17 - 18 Feb	9
5	Kursus Kewangan Bahagian Belanjawan & Kewangan JPS Siri 5	Auditorium Ibu Pejabat	25 - 26 Feb	15
6	Kursus Kewangan Bahagian Belanjawan & Kewangan JPS Siri 6	Rainforest Discovery Center (RDC)	18 – 20 Mar	13
	Forest Industry & Trade Division			
7	Kursus Memproses Pembaharuan Lesen Kilang, Sijil Kontraktor Pengilang, Sijil Pendaftaran Sebagai Pengeksport, Pengimport, Pembekal Produk Kayu Dan Jeti	Bilik Persidangan, Pejabat Perhutanan Daerah Kota Kinabalu	22 May	15
8	Bengkel Penggunaan Sistem E-Removal Pass Tahun 2025 (Wilayah Sandakan, Kota Kinabalu Dan Kudat)	Dewan Mini Teater, Pejabat Perhutanan Daerah Kota Kinabalu	23-24 Jul	44
9	Bengkel Penggunaan Sistem E-Removal Pass Tahun 2025 (Wilayah Tawau Dan Keningau)	Sabah International Convention Centre (SICC), Kota Kinabalu	29 Jul	16
10	Kursus Pengukuhan Kefahaman Prosedur /Proses Kerja Berkaitan Eksport Dan Import Produk Kayu di Sabah Yang Melibatkan Jabatan Kastam Diraja Malaysia Dan Jabatan Pertanian		30 Jul	10
11	Kursus Pengukuhan Kefahaman Prosedur /Proses Kerja Berkaitan Eksport Dan Import Produk Kayu di Sabah Yang Melibatkan Jabatan Kastam Diraja Malaysia Dan Jabatan Pertanian	Pejabat Perhutanan Daerah, Kota Kinabalu	12 – 13 Aug	6
12	Bengkel Kefahaman Industri Tanaman Kayu Gaharu di Sabah Di Bawah Akta CITES 2008 (Akta 686)	Dewan Gaharu, Pejabat Perhutanan Daerah Tawau	09 - 10 Oct	10

No.	Courses/Workshops/Seminars/Conferences	Venue	Date	Number of Participants
	Forest Resource Management Division			
13	Kursus Pengendalian Alat Penerima GPS	Institut Perhutanan Sabah (FORiNS), Telupid	17 – 19 Jun	23
14	Latihan Penggunaan Aplikasi Field Map & Survey 123	Dewan Golf Club, Keningau	6 Aug	45
15	Bengkel Kemasukan Data Aplikasi Sumber Hutan Negeri Sabah (Geoforest Fasa II)	Dewan Jati, Ibu Pejabat Jabatan Perhutanan Sabah	04 – 05 Aug	26
16	Kursus Penandaan Pokok Tuaian Menggunakan ArcGIS 123 & Kursus Keselamatan Dan Kesihatan Pekerja	Dewan Golf Club, Keningau	6 Aug	45
17	Latihan Penggunaan Dron dan Peraturan-Peraturan Am CAAM Bagi Tahun 2025	Institut Perhutanan Sabah (FORiNS), Telupid	25 – 28 Aug	32
18	Latihan Penggunaan Aplikasi EMAPS	Bilik Mesyuarat Kebun Cina, Sandakan, Sabah	18 Nov	35
	Quality Management & Training Division			
19	Program Transformasi Minda (PTM) Siri 1/2025	Atas Talian	10 – 14 Feb	37
20	Kursus Bimbingan Peraturan-Peraturan Negeri Sabah (PPPANS) 2008 dan Perakaunan Kerajaan Siri 1/2025	Atas Talian	26 – 27 Feb	6
21	Program Transformasi Minda (PTM) Siri 2/2025	Atas Talian	19 – 23 May	25
22	Program Roadshow Keselamatan Pengangkutan Balak Wilayah Keningau	Pusat Kraftangan, Keningau	17 Jul	30
23	Program Kursus Pengurusan ISO 9001:2015 Jabatan Perhutanan Sabah	Mini Theatre, Pejabat Perhutanan Daerah, Kota Kinabalu	24 – 25 Sept	81
24	Kursus 'Occupational Safety and Health for Forest Industry and Effective Safety and Health Committee – Awareness'	Bilik Seminar Tosorob, Cawangan Niosh Sandakan, Sabah	4 – 6 Nov	13
25	Kursus Sesi Penerangan Tahun 2025	Rainforest Hall, RDC	17 – 21 Nov	111
	Investigation, Enforcement & Prosecution Division			
26	Latihan Hands-On Penyediaan (LPR) Bagi Pegawai Dan Pasukan Rondaan Daerah Dan Wilayah	Pejabat Perhutanan Wilayah Tawau	19 – 21 Mar	6
27	Latihan Hands-On Penyediaan (LPR) Bagi Pegawai Dan Pasukan Rondaan Daerah Dan Wilayah	Pejabat Perhutanan Wilayah Sandakan	24 – 25 Mar	4
28	Latihan Hands-On Penyediaan (LPR) Bagi Pegawai Dan Pasukan Rondaan Daerah Dan Wilayah	Pejabat Perhutanan Wilayah Kota Kinabalu	26 – 28 Mar	1
29	Latihan Hands-On Penyediaan (LPR) Bagi Pegawai Dan Pasukan Rondaan Daerah Dan Wilayah	Pejabat Perhutanan Wilayah Kudat	07 – 08 Mar	21
30	Latihan Hands-On Penyediaan (LPR) Bagi Pegawai Dan Pasukan Rondaan Daerah Dan Wilayah	Pejabat Perhutanan Wilayah Keningau	09 - 11 Mar	7
31	Kursus Sosialisasi dan Latihan SOP untuk Penguatkuasaan dan Penyiasatan	Pitta Room, Rainforest Discovery Centre	17 – 19 June	30
32	Latihan Pengendalian Senjata Api Dan Latihan Menembak Untuk Pegawai Penguatkuasa Jabatan Perhutanan Sabah	Lapang Sasar Jabatan Perhutanan, Hs Labuk, Batu 14 Sandakan	25 Jun	2
	Human Resource Management Division			
33	Kursus Pengurusan Rekod Dan Pemuliharaan Rekod Selepas Bencana	Dewan Gadung, Jabatan Arkib Negeri Sabah, Kota Kinabalu	28 – 29 Apr	27
34	Kursus Integriti dan PPPANS 2008 Bahagian V Jabatan Perhutanan Sabah	Bilik Persidangan, Pejabat Perhutanan Daerah Kota Kinabalu	29 Jul	30
35	Kursus Pemantapan Integriti Dalam Kepimpinan Bagi Pegawai Jabatan Perhutanan Sabah	Pejabat Perhutanan Daerah Kota Kinabalu, Sabah	04 – 06 Nov	6
	Forest Sector Planning Division			
36	Kursus Pembangunan Pakej Pelancongan, Strategi Harga Dan Pemasaran Digital Produk Rekreasi Hutan Bagi Wilayah Perhutanan Keningau	Cecil Homestay, Nabawan	02 – 04 Sept	1
37	Bengkel Asas Perdagangan Karbon (Siri 1)	Wilayah Sandakan & Tawau	10 Sept	32
38	Bengkel Asas Perdagangan Karbon (Siri 2)	Wilayah Kota Kinabalu & Kudat	24 Sept	19
		Wilayah Keningau	14 Oct	16
39	Capacity Building Workshop on Sub-National Greenhouse Gases (GHG) Inventory Fundamentals	Sepilok Room, Level 5, Sabah International Convention Centre (SICC), Kota Kinabalu, Sabah	01 – 03 Oct	54
40	International Conference on Borneo's Green Heart: Advancing Climate Resilience, Conservation and Sustainable Livelihoods	Sabah International Convention Centre (SICC), Kota Kinabalu, Sabah	22 – 23 Oct	31
41	Sesi Taklimat Penyediaan Kertas Kabinet dan Kertas Makluman Anjuran Bersama Jabatan Perhutanan Sabah dan Bahagian Kabinet dan Dasar, Jabatan Ketua Menteri	Bilik Seminar, Pejabat Perhutanan Wilayah Sandakan, Rainforest Park (Kebun Cina), Sandakan	25 Nov	1
42	Bengkel Mini Mengenai Pembangunan Forest Reference Level (FRL) Di Sabah	Pitta Room, Rainforest Discovery Centre (RDC), Sepilok, Sandakan, Sabah	2 Dec	1

No.	Courses/Workshops/Seminars/Conferences	Venue	Date	Number of Participants
	Sustainable Forest Management Division			
43	Kursus Pencegahan Dan Pengawalan Kebakaran Hutan Pelesen SFMLA	Sawit, Kinabalu	Feb	25
44	Bengkel Pemerkasaan Penguatkuasaan Syarat-Syarat SFMLA	Conference Hall, Pejabat Perhutanan Daerah Kota Kinabalu	25 Feb	40
45	Latihan Memperkukuhkan Amalan Pengurusan Data Untuk Senarai Hijau IUCN (IUCN Green List)	Dewan Persidangan, Pejabat Perhutanan Derah Kota Kinabalu, Lokawi, Sabah	28 – 30 Oct	40
	General Services & Development Division			
46	Kursus Tatacara Pengurusan Aset Alih dan Sistem Aset Alih Kerajaan (S2A) Jabatan Perhutanan Sabah Siri 1/2025	Dewan Mini ULPK, Kementerian Kewangan Negeri Sabah	21 Apr	18
47	Kursus Tatacara Pengurusan Aset Alih dan Sistem Aset Alih Kerajaan (S2A) Jabatan Perhutanan Sabah Siri 2/2025		28 Apr	21
48	Kursus Tatacara Pengurusan Aset Alih dan Sistem Aset Alih Kerajaan (S2A) Jabatan Perhutanan Sabah Siri 3/2025		30 Apr	16
49	Kursus Tatacara Pengurusan Aset Alih dan Sistem Aset Alih Kerajaan (S2A) Jabatan Perhutanan Sabah Siri 4/2025		05 May	15
50	Kursus Tatacara Pengurusan Aset Alih dan Sistem Aset Alih Kerajaan (S2A) Jabatan Perhutanan Sabah Siri 5/2025		06 May	15
51	Kursus Tatacara Pengurusan Aset Alih dan Sistem Aset Alih Kerajaan (S2A) Jabatan Perhutanan Sabah Siri 6/2025		07 May	13
	Forest Research Centre (FRC)			
52	Kursus Asas Pengecaman Kayu	Bilik Mesyuarat Selangan Batu, Pusat Penyelidikan Perhutanan	03 – 05 Jun	15
53	Bengkel Ekspedisi Saintifik Sg. Pin Conservation Area (SPNCA) Siri 2 Tahun 2025	Rainforest Discovery Centre, Sepilok	30 Jun	7
54	Kursus Pengenalan Dan Pengecaman Tumbuhan	Pusat Penyelidikan Perhutanan, Sepilok	12 – 14 Aug	23
55	Program Kelestarian Hijau: Ekologi dan Kepentingan Silvikultur Pokok Ara	Rainforest Discovery Centre Hall, Sandakan	02 Oct	37
56	Bengkel Diversiti Serangga Hutan	Wildcat Room, Rainforest Discovery Centre (RDC), Sandakan	07 – 08 Oct	30
57	Workshop on Soil Health in Forestry	Wildcat Room, Rainforest Discovery Centre (RDC), Sandakan	14 Oct	12
	Sabah Forest Institute			
58	Kursus Sijil Perhutanan Renjer Hutan	Institut Perhutanan Sabah, (FORiNS), Telupid	Ongoing	
59	Kursus Ulangkaji Core Trainer Sabah Log Grading Rules		14 Apr	08
60	Kursus Operator Mesin Ril Siri 1/2025		28 Jul – 08 Aug	19
61	Kursus Asas Sabah Log Grading Rules (SLGR)		15 – 17 Apr	40
	Overall Total			**1,363**

Table 2: Courses/Workshop/Seminars/Conferences organised by INSAN in 2025.

No.	Courses/Workshops/Seminars/Conferences	Venue	Date	Number of Participants
1	Kursus Pengurusan Fail Dan Sistem Rekod Efektif 1/2025	Bilik Kuliah Insan, Blok A, Tingkat 5, Wisma Muis, Kota Kinabalu	05 – 06 Feb	7
2	Kursus Bimbingan Arahan Keselamatan Siri 1/2025	Atas Talian	13 – 14 Feb	2
3	Artifical Intelligence	Institut Latihan Sektor Awam (INSAN), Kota Kinabalu	17 – 18 Feb	1
4	Kursus Bimbingan Undang-Undang Umum 1 Siri 1/2025	Atas Talian	03 – 06 Mar	2
5	Design Like a Pro Using Canva	Makmal Teknologi Maklumat, INSAN, Kota Kinabalu	21 – 22 Apr	1
6	Kursus Mastering Lookup Functions in Microsoft Excel	Makmal Teknologi Maklumat INSAN	28 – 29 Apr	1
7	Kursus Pengurusan Perolehan Siri 1	Institut Latihan Sektor Awam (INSAN), Kota Kinabalu	13 – 14 Aug	2
8	Kursus Pengurusan Aset Alih Kerajaan dan Stor Siri 1/2025	Dewan Kuliah, INSAN, Kota Kinabalu	17 – 18 Sept	4
9	Program Seminar Hijaukan Bumi dan Kesedaran Alam Sekitar	Kampus INSAN, Keningau	26 Sept	5
	Overall Total			**25**

Table 3: Courses/Workshop/Seminars/Conferences organised by other government departments, private sector organizations, and other related agencies in 2025.

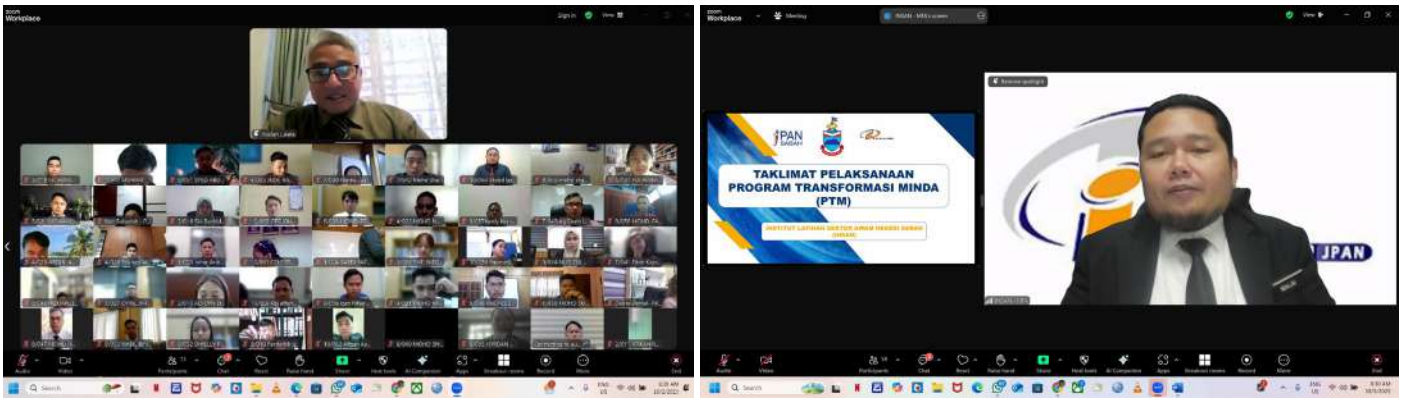
No.	Courses/Workshops/Seminars/Conferences	Venue	Date	Number of Participants
	Jabatan Perkhidmatan Awam Negeri Sabah (JPANS)			
1	Pembangunan Dasar Latihan dan Pelan Operasi Latihan Perkhidmatan Awam Negeri Sabah	Hotel Le Meridien, Kota Kinabalu	04 February	1
2	Kursus "Neuro Linguistic Programming" (NLP) - Komunikasi & Seni Kepengikutan	Hotel 7 Suria, Kota Kinabalu	14 – 15 April	1
3	Program Cultivating Emotional Resilience and Grit for the Workplace	Shangri-la Tanjung Aru Resort, Kota Kinabalu	09 – 10 June	1
4	52nd Artdo International Conference 2025	E & O Hotel Penang, Pulau Pinang	27 – 29 July	1
5	Seminar on Leadership and High-Performance Organization	Shangri-La Tanjung Aru Resort, Kota Kinabalu	07 October	1
6	Konvensyen Perkhidmatan Awam Negeri Sabah Tahun 2025	Sabah International Convention Centre (SICC), Kota Kinabalu	11 November	20
	Jabatan Bendahari Negeri Sabah (JBN)			
7	Bengkel Sistem E-Resit Ver.2	Dewan Auditorium Tingkat 8, Ibu Pejabat Perpustakaan Negeri Sabah	23 June	2
8	Bengkel Perakaunan Akruan Zon Kota Kinabalu Siri II 2025	Hotel Hilton, Kota Kinabalu	09 – 12 July	3
9	Kursus Kakitangan Baharu Gred W1/N1 JBNS 2025	Ibis Styles Hotel Inanam, Kota Kinabalu	22 – 24 July	3
10	Kursus Kemahiran Bagi Gred 1 Jawatan Jabatan (Departmental Post) Bagi Peperiksaan Perkhidmatan Bagi Pembantu Tadbir (Kewangan) Kod 240301B Jabatan Bendahari Negeri Sabah		26 – 28 August	1
11	Kursus Bengkel Forensik Perakaunan Jabatan Bendahari Negeri Sabah	Hotel Le Meridien, Kota Kinabalu	08 – 10 September	1
	Jabatan Ketua Menteri (JKM)			
12	4th International Conference on Management and Communication - Kolaborasi UUM & Kerajaan Negeri Sabah	Horizon Hotel, Kota Kinabalu	04 – 06 February	1
13	Forum Ekonomi Biru Asean Ke-3 Sempena Kepengerusian Asean-Malaysia 2025	Sabah International Convention Centre (SICC), Kota Kinabalu	29 September	1
	Jabatan Pembangunan Sumber Manusia (JPSM)			
14	Persidangan Ekspedisi Saintifik Kepelbagaian Biologi Hutan Tahun 2025	Raia Hotel & Convention Centre, Kuala Terengganu	04 – 06 August	2
	Jabatan Peguam Besar Negeri (JPBN)			
15	Kursus Persediaan Pegawai Undang-Undang dan Pegawai Kerajaan Negeri Dalam Penggubalan Undang-Undang	Shangri-la Tanjung Aru Resort, Kota Kinabalu	17 – 21 August	1
	Jabatan Perlindungan Alam Sekitar (JPAS)			
16	Latihan Penggunaan Bahan Pendidikan Alam Sekitar Bagi Kajian Penyediaan Bahan Pendidikan Dan Laporan Amalan Terbaik Pelaksanaan Dasar Pendidikan Alam Sekitar	Level 1 Ballroom, Asaya Hotel	21 April	1
	Jabatan Komputer Kerajaan Negeri Sabah			
17	Kursus Pengenalan Sistem Aplikasi Generik JPKN 2025 Peringkat Wilayah Pedalaman Atas	Bilik Gerakan Jabatan Pertanian Keningau, Tingkat 1 Bangunan Urus Setia Daerah Keningau	16 July	6
	IPTA – Universiti Malaysia Sabah (UMS)			
18	ITBC-2025: Program "Maesa (Primulaceae) Identification Workshop"	Seminar Room 2 & 3, Institute for Tropical Biology and Conservation (ITBC), Universiti Malaysia Sabah	02 October	1
	Institut Pendidikan TVET MARA			
19	Kursus Method Validation & Verification Procedure and Quality System Compliance (MVVQS)	Shangri-la Tanjung Aru Resort, Kota Kinabalu	21 – 22 April	5
20	Workshop on Statistical Methods for Data Analysis (SMDA)		08 – 09 July	3
21	Workshop on Scheduled Waste Analysis and Characterization (SWAC)		11 – 12 August	2
	Private			
22	IUCN Green List Malaysia Day: Commitment to Achievement - Navigating the Green List	Horizon Hotel, Kota Kinabalu, Sabah	19- 20 May	5
23	Intermediate Level Workshop on Wildlife Data Analysis Under Bayesian with JAGS	Conference Room, WWF-Malaysia (Sabah Office)	19 – 23 May	1
24	11th International Congress on Education in Botanic Gardens (ICEBG)	Seoul, Korea	09 – 13 June	2
25	Conference on Serpentine Ecology	Kyoto, Jepun	13 – 17 June	2

No.	Courses/Workshops/Seminars/Conferences	Venue	Date	Number of Participants
	Others			
26	Bengkel Climate Change Institutional Assessment (CCIA) Dan Climate Change and Development Report (CCDR)	Zenith Hotel, Wilayah Persekutuan Putrajaya, Malaysia	18 February	1
27	Prosedur Permohonan Reman Jenayah Alam Sekitar	Dewan Persidangan, Tingkat 2, Kompleks Mahkamah Kota Kinabalu Sabah	20 – 21 February	5
28	Kursus Conservation / Restoration of Herbarium Specimens & Kursus Penggunaan Pangkalan Data	Bangunan Herbarium, Taman Botani Pulau Pinang	05 – 08 May	5
29	Kursus Sukarelawan Penjagaan Kesihatan Asas (SPKA) dan Saringan Kesihatan KOSPEN Bagi Pejabat Perhutanan Deramakot	Wisma Siliu-liu, Pejabat Perhutanan Daerah Deramakot	13 – 16 May	11
30	Bengkel Pembangunan Draf Pelan Tindakan Gender (Gender Action Plan - Gap) Berkaitan Perubahan Iklim	Double Tree by Hilton, Wilayah Persekutuan Putrajaya, Malaysia	13 June	1
31	Kursus Teknologi Kemasiapan Perabot	Wood Industry Skills Development Centre, Kota Kinabalu	08 – 10 July	4
32	Bengkel Persediaan Delegasi Malaysia ke CITES 20th Meeting of The Conference of The Parties (COP20) Samarkand, Uzbekistan	Bilik Mesyuarat Bahagian Pengurusan Alam Sekitar, Putrajaya	14 October	1
33	Seminar Biodiversiti FRIM 2025	The Everly Putrajaya, Putrajaya	4 – 5 November	3
	Overall Total (Others)			**89**

TRAINING ORGANISED BY THE QUALITY MANAGEMENT AND TRAINING DIVISION

The Division successfully implemented two series of the Program Transformasi Minda in collaboration with the Institut Latihan Sektor Awam Negeri Sabah (INSAN). The programme was designed to provide participants with a comprehensive understanding of the Department's General Orders, rules and administrative regulations, thereby ensuring compliance and strengthening governance practices within the organisation.

In addition, the Division conducted Sesi Penerangan aimed at introducing the Department's core functions, roles, and organisational structure to newly appointed officers and staff. These sessions were intended to facilitate smoother integration, enhance institutional awareness, and promote effective service delivery.



(L) Program Transformasi Minda Series 1 (Online): 10-14 Feb 2025. (R) Program Transformasi Minda Series 2 (Online): 19-23 Feb 2025.



(L-R) Sesi Penerangan Jabatan Perhutanan Sabah - 17-21 Nov 2025.

3. DIGITAL & INNOVATION





(L) Digital@Sabah at Sabah International Convention Centre (SICC) -13 November 2025 (R) Workshop on Compliance with the Cyber Security Act 2025 at 7 Suria Hotel – 26 November 2025.





(L) Meeting on the e-Incident SFD – 9 June 2025. (R) Meeting on the Development of Digital Forestry for the SFD Website – 26 June 2025.







(L–R) Checking LAN cables at PPA Division – 22 January 2025; Checking CCTV cables and equipment at Nursery HQ – 24 January 2025; and Procurement of toner / ink from ICT Quotation 2025 – 16 June 2025.





(L) Meeting with System Development Division of JPKNS – 24 October 2025. (R) SFD received 1st Runner-up in the Independent Web Innovator category at the Sabah Government Website Competition 2025 – 7 October 2025.





(L) Site visit to DFO Lahad Datu – 31 July 2025 (R) Mesyuarat Jawatankuasa Pelaksanaan & Pemantauan Projek at RDC Sepilok – 21 July 2025.





(L) Online discussion on Timber Legality Assurance System (TLAS) Development – 20 February 2025 (R) LED Panel setup and maintenance at Dewan Jati HQ – 25 February 2025.






(L–R) ArcGIS training at Keningau Golf Club – 6 August 2025; Graphics simulation for website content by Nigel Balanju – 18 April 2025; and Checking STARLINK parabolic antenna at DFO Tongod – 17 April 2025.





(L–R) Site visit to Hutan Lipur Kawang – 12 June 2025; Site visit to Unit FIT at Sepanggar Port – 11 June 2025; and Site visit at Rafflesia Information Center, Tambunan – 13 June 2025.



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Kesusu (*Artocarpus limpato*). Its fruit is a syncarp, a structure formed when multiple flowers merge into a single fruiting body. Within it, unfertilized flowers remain small and green, while fertilized ones develop into protruding segments, creating its distinctive irregular shape.

FORESTRY INSTITUTE OF SABAH


A class session in progress at the institute.

INTRODUCTION

In July 2025, Institut Perhutanan Sabah (IPS) was officially rebranded as FORiNS (Forestry Institute of Sabah). Since the rebranding, the acronym FORiNS has been used in all official communications and documentation. The institute has further enhanced its impact through the successful implementation of key programs and strategic engagements. Notable highlights from the year included the Orientation Session 2025/2026 for the *Kursus Sijil Perhutanan Renjer Hutan* (KSPRH), the FORiNS Award Ceremony and System Launch, active participation in exhibitions, a strategic visit to the HRD Corp Kota Kinabalu Branch, and an official visit from the Chief Conservator of Forests (CCF). These initiatives demonstrate FORiNS's ongoing commitment to excellence in forestry training, institutional advancement, and robust stakeholder collaboration.

ACTIVITIES & ENGAGEMENT OF KSPRH STUDENTS SESSION 2025/2026

A. Orientation Programme for the 2025/2026 Student Intake (13–22 January)

An Orientation Programme for 40 successful candidates (8 SFD staff and 32 non-SFD trainees) of the *Kursus Sijil Perhutanan Renjer Hutan* (KSPRH) was held at FORiNS Telupid. The main objective was to familiarise them with the learning environment at FORiNS, introduce them to the administrative staff and officers, and foster a spirit of cooperation among the students before they begin their two-year learning session. Throughout the programme, participants took part in a range of activities, including team-building exercises (LDK), a pledge-reading ceremony, communal clean-up activities aimed at maintaining the cleanliness and upkeep of the FORiNS buildings and student dormitories, recreational activities such as sports, Tabata, and aerobics sessions, as well as a series of briefings on curriculum and co-curricular matters pertaining to the programme.

B. Learning session

FORiNS integrates classroom learning with hands-on field experience, focusing on sustainable forest management. Key subjects include Forest Mensuration, Forest Law, Dendrology, Silviculture, and other forestry-related disciplines.

Student performance is evaluated through continuous assessments, final examinations, and participation in institutional activities.

- **Forest Camp 1 (5–29 May 2025)**

Forest Camp 1 was conducted as part of the practical course component. Students visited several District Forestry Offices, including those in Kota Belud, Kota Marudu, Ranau, Kota Kinabalu, Beaufort, and Sipitang. The camp offered exposure to real forestry operations and professional responsibilities.


A total of 40 successful candidates were selected for the 2025 intake.

Activities included an industrial visit to Lohan Sawmill in Ranau for log processing and measurement practice, tree planting at Tinompok and Mesalong Forest Reserves (FR), maintenance work at Hampuan FR, and community activities at Taviu and Kawang Forest Reserves.

Students participated in practical Dendrology sessions focused on tree identification, firebreak maintenance at Mesapol FR, trail clearing at Ulu Kukut FR, and learning about peat swamp forest ecosystems at Klias Forest Reserve. Additionally, study visits were made to the Limatech and Bidasari factories in Kimanis, Papar, to explore downstream wood processing, and to Sabah Tea and the Tagal site in Kg. Nalapak, Ranau, to learn about nature-based tourism.

Overall, Forest Camp 1 offered valuable insights into forestry operations, conservation practices, and industry development.

- **Outdoor Learning Program**

– *Wilayah* Tawau (3-7 Nov 2025)

Outdoor learning programmes offer FORiNS students valuable real-world experiences that enhance their knowledge and values, preparing them for future challenges. A five-day outdoor learning programme was held in Tawau to broaden the students' perspectives and boost their confidence.

– Sepilok Forest Research Centre – (25 Nov 2025)

The programme aimed to enhance technical knowledge in nursery management and forest ecosystem management. Students were briefed on forest plantation programmes and nursery management, followed by demonstrations on seedling media preparation, shading techniques and transplanting processes. The afternoon session focused on forest ecosystem management and included interactive discussions with researchers and facilitators. The programme strengthened collaboration between FORiNS and the Sepilok FRC while improving the quality of forestry training.

– Sports

FORiNS also organised sports activities to keep students physically healthy and active, ensuring a balanced emphasis on both fitness and learning throughout their course.



Students playing badminton for an active and healthy lifestyle.





Forest Camp 1 activities.



Wilayah Tawau Outdoor Learning Programme.



Technical knowledge in nursery management and forest ecosystem management was shared at the Sepilok Forest Research Centre.

EVENTS ORGANISED BY FORiNS

A. Convocation Day for *Sijil bagi Kursus Sijil Perhutanan Pengawas Hutan* (KSPPH) Sesi 2024 & *Kursus Kenaikan Khas Pangkat ke Gred 29 Siri 4* (KPG29) with the Launching of FORiNS System (24 Jul 2025)

The event took place at RDC Hall in Sepilok and was officiated by the Chief Conservator of Forests, Datuk Frederick Kugan. During the ceremony, 19 students from the KSPPH 2024 Session and 19 from KPG29 were recognized. The Best Student Award was presented to Encik Faizul During. Additionally, students from the KSPRH 2025/2026 session performed a pantomime, adding a lively touch to the event.

During the ceremony, the Chief Conservator launched the FORiNS System, a digital platform aimed at simplifying student registration, data management, and overall information handling at FORiNS.

B. *Hari Raya Aidilfitri* Celebration 2025 (07 Apr 2025)

FORiNS celebrated Hari Raya Aidilfitri in collaboration with the District Information Department of Telupid. The event brought together staff, students, and alumni, including former staff member, Mr. Kamir Palahi and his family. The programme featured a *doa* recitation, a welcoming speech by the principal, a festive meal, and a student pantomime competition. This celebration fostered stronger relationships among staff and students while promoting teamwork and creativity.

C. Family Day 2025 (22 Dec 2025)

The FORiNS Family Day 2025, themed "Denim," took place at the FORiNS Atrium. Activities included tele-match games, Zumba sessions, singing performances, lucky draws, and a communal meal. The event aimed to strengthen teamwork and foster closer relationships among staff and their families. A total of 47 family members attended the event.







(L–R) En. Faizul During (Best Student Award recipient); launching of Sistem FORiNS; and pantomime by KSPRH 2025/2026 students.



Group photo of KSPPH 2024 with Datuk Frederick Kugan.



KPG29 group photo.



FORiNS celebrated Hari Raya Aidilfitri.





Family Day Event – Cutting of the cake ceremony by all the Warga FORiNS and Zumba Sessions.







(Top) Retirement of Pn. Susan Patrick (1990 – 2025; 35 years) and Pn. Siti Nur Anisah Peter Abdullah (2022 – 2025; 4 years) and (above) En. Rudini Dapuwi (1998 – 2025; 27 years).

D. Farewell & Retirement Ceremony

In 2025, FORiNS bid farewell to three staff members who had served with excellence and dedication. A small ceremony was held to honour their contributions as they retired.

E. Anti-Drug Awareness Programme (7 Feb 2025)

An Anti-Drug Awareness Programme was conducted in collaboration with the National Anti-Drug Agency (AADK).

The programme aimed to raise awareness about the dangers of drug abuse among trainees and staff. Activities included an awareness talk and urine screening as preventive measures.

A total of 39 trainees and 11 staff members participated in the screening, with all screening results reported as negative.



Registration of urine screening.

PROGRAMMES OUTSIDE FORiNS

A. Participation in S.T.A.R.S. Carnival 2025 at SK Ulu Sapi (22 Aug 2025) & SMK Balaban Jaya for *Hari Kerjaya* 2025 (24 Sept 2025)

On 22nd August 2025, FORiNS participated in the S.T.A.R.S Carnival organised by SK Ulu Sapi Telupid and the Starfish Malaysia Foundation, sharing information on forestry and conservation with the community. On 24th September 2025, FORiNS also took part in the Career Day at SMK Balaban Jaya to introduce forestry education and career options to students.



Presentation of an appreciation gift to the Principal of SMK Balaban Jaya.

B. Visit to HRD Corp Kota Kinabalu (14 Apr 2025)

A delegation from FORiNS visited the HRD Corp Kota Kinabalu Branch to discuss the procedures and requirements for becoming an accredited training provider. This initiative seeks to expand training opportunities and enhance the institute's ability to deliver professional forestry training.



Group photo with the HRD Corp.

C. Technical Benchmarking Meetings on Programme Accreditation between FORiNS and *Bahagian Latihan Perhutanan* (BLP), *Jabatan Perhutanan Semenanjung Malaysia* (30 Jun – 3 Jul 2025)

A series of three technical meetings focused on Training Programme Benchmarking and Recognition were held at different locations to align forestry training programmes and prepare for accreditation by the Malaysian Qualifications Agency (MQA). The meetings took place as follows:

- 30 June 2025 at *Institut Latihan Perhutanan Kepong* (FORTRAIN)
- 1 July 2025 at the Malaysian Qualifications Agency (MQA), Cyberjaya
- 3 July 2025 at *Pusat Latihan Perhutanan Terengganu* (PLPT)

The discussions focused on creating comprehensive and well-organized accreditation documents, enhancing competency-based training programmes, and incorporating best practices from *Institut Latihan Perhutanan Kepong* (FORTRAIN) and *Pusat Latihan Perhutanan Terengganu* (PLPT). Meetings addressed curriculum implementation, monitoring learning outcomes, and managing both trainers and trainees. These initiatives aim to enhance the quality and national recognition of forestry training programmes in Sabah. The delegation from the SFD comprised 12 officers, led by Mr. Roslan Lalete, Head of the Management and Training Division, and included Mr. Mohammad Abu Bakar from the *Pejabat Setiausaha Hasil Bumi Sabah.*





Picture with the FORTRAIN group and site visit to PLPT.

FORiNS ENGAGEMENT(S)

A. Visitation by the Chief Conservator of Forests (12 Sept 2025)

A delegation led by the Chief Conservator of Forests made a brief visit to FORiNS as part of an official tour of the Forestry District Offices in the Sandakan Region. Before continuing to the Tongod District Forestry Office, the delegation enjoyed breakfast at Dewan Lembayung, FORiNS.



Datuk Frederick Kugan greeting all the FORiNS staff during his visit.

B. Visit by Faculty of Tropical Forestry (FPT) UMS, Kota Kinabalu (23 May 2025)

A study tour involving lecturers and students from Universiti Malaysia Sabah took place as part of the Education Programme. The tour involved 73 students and four lecturers, aimed to give students greater exposure to the education and training programmes at FORiNS. The delegation received a briefing from the principal.



The principal delivered a briefing to the faculty students.

C. Visit by the Secretary of Natural Resources (31 Oct 2025)

YBhg. Datuk Sernam Singh, the Secretary of Natural Resources, officially visited FORiNS to gain insights into its role in forestry training and capacity building. Accompanying him were the Deputy Secretary of Natural Resources, officers from JPANS, the Sandakan Regional Forestry Officer, senior officers, and other delegates. The visit included friendly football and volleyball matches, followed by an official dinner. FORiNS appreciates the visit, which is anticipated to enhance collaboration with relevant agencies in advancing forestry training and capacity-building efforts.



Scene from YBhg. Datuk Sernam Singh visit.



Internal Audit Team (IAT) with Mdm. Helda Parut pictured together.

ISO 9001:2015 Audit by Bureau Veritas (BV)

The Internal Audit Team (IAT), led by Mdm. Helda Parut, conducted an on-site audit of FORiNS, from 28 - 30 April, 2025. Thus, a re-certification audit by the external auditor, Bureau Veritas (BV) was carried out virtually on August 4, 2025. The focus of the ISO surveillance audit was to verify FORiNS's compliance with ISO 9001:2015 standards.

COMMUNAL CLEAN-UP AND VALUES-BASED ACTIVITIES

A. Communal clean-up

The trainees regularly undertake clean-up and maintenance activities within the institute area, including the hostel, administration building, surau, hall, futsal court, and other recreational facilities. This is to ensure a clean, safe, and conducive environment. The purpose of these efforts is to maintain a clean and well-kept environment at FORiNS while promoting a sense of responsibility, teamwork, and cooperation among the trainees.

B. Surau Activities

The Muslim staff and students actively participating in religious and community activities conducted at the surau. Several events took place, including gotong royong, reading Surah Yassin every Friday night, and preparing Moreh for all the pilgrims. These activities also fostered a strong rapport within the FORiNS community.



Students taking part in a community cleanup activity.



Surau activity.







Registration and orientation week for the new intake students.

PUBLICITY & AWARENESS

COMMUNICATION, EDUCATION AND PUBLIC AWARENESS (CEPA)

The Sabah Forestry Department has implemented various programs and activities focused on environmental awareness, as well as spreading information to all layers of society to build a community that prioritizes forest and environmental sustainability. Communication and Public Relations Division has carried out SFD Publicity and awareness activities concurrent with the Communication, Education and Public Awareness (CEPA), 100 million trees planting campaign 2024-2025, activities to ensure the successful statewide implementation of the programme. Throughout the year 2025, there were 30 public awareness programs implemented by the Communication and Public Relations Division, covering international, national, state, regional, and district levels which involve several target groups including IPTA/IPTS, schools, communities and government and non-government agencies (NGOs).

The Communication, Education and Public Awareness (CEPA) Programme 2025 was successfully conducted in five regions across Sabah, namely Sandakan, Kudat, Kota Kinabalu, Keningau, and Tawau. The programme involved various schools, with the objective of enhancing environmental awareness and promoting the importance of forest conservation and sustainable forest management.

Throughout the programme, participants engaged in a variety of interactive activities, including environmental quizzes, crossword challenges, as well as group presentations centred on forest sustainability and biodiversity conservation.

These activities encouraged active learning, critical thinking, teamwork, and creativity among students while strengthening their understanding of forestry-related issues the CEPA Programme served as an effective platform for environmental education and public engagement. It also strengthened collaboration between the Sabah Forestry Department, educational institutions, local communities, and relevant stakeholders in supporting the shared mission of preserving Sabah's forest resources for future generations.











MALAYSIA GREENING PROGRAMME: 100 MILLION TREE PLANTING CAMPAIGN

The Malaysia Greening Programme: 100 Million Tree Planting Campaign was successfully implemented across various districts in Sabah throughout 2025, including Beluran, Kota Marudu, Kota Belud, Tawau, Pensiangan, Lahad Datu, Sandakan, Nabawan, Beaufort, and Membakut. The programme involved schools, local communities, government agencies, private sector, and non-governmental organizations with the objective of increasing national forest cover, addressing climate change, and preserving biodiversity.

Throughout the programme, participants engaged in a wide range of activities, including tree planting, environmental awareness talks, conservation campaigns, educational quizzes, and community outreach programmes. The programme also served as an effective platform for environmental education and community engagement while strengthening collaboration between Sabah Forestry Department with strategic partners.

A total of 137 million trees were planted nationwide between 2021 and 2025 under the 100 Million Tree Planting Campaign of the Malaysia Greening Programme.

EXHIBITION IN CONJUNCTION WITH THE INTERNATIONAL DAY OF FORESTS STATE-LEVEL CELEBRATION SABAH 2025 (FOREST AND FOOD)

This exhibition was held at Universiti Malaysia Sabah, Kota Kinabalu, Sabah, in conjunction with the International Day of Forests State-Level Celebration Sabah 2025, themed “Forest and Food”. It was organised through a collaboration between Jabatan Perhutanan Sabah and Universiti Malaysia Sabah.

The exhibition aimed to raise awareness of the importance of forests in supporting food security, biodiversity conservation, and environmental sustainability. As part of the three-day celebration, visitors participated in various educational and recreational activities. A key highlight of the event was the planting of 200 tree seedlings at the Sfera, Universiti Malaysia Sabah demonstrating a collective commitment to forest conservation and sustainable development.









FORESTRY QUIZ AND SPEECH CONTEST 2025

Forestry Quiz and Speech Competition is one of the activities under the Communication, Education, and Public Awareness (CEPA). The objective of this competition is to convey messages and expand the network of information to the public, particularly students, about the importance of preserving our forests. It also aims to cultivate critical and rational thinking among students and educators when addressing current forestry-related issues.

In 2025, Sabah Forestry Department implement Forestry Quiz and Speech Contest in two different levels: the Regional Level and the State Level. Five (5) regional level competition has been held in Kudat, Kota Kinabalu,Keningau,Tawau and Sandakan Regional Level. The winners from the five regional level competition were invited to the state level competition held at the Sabah International Convention Centre on the 14 October 2025. The event was officiated by Datuk Frederick Kugan, the Chief Conservator of Forests.

The Forestry Quiz and Speech Contest is held annually and serves as a platform for information sharing on forest management statewide.

The finalists for both categories are as follows:

1. 2025 Forestry Speech Competition Finalists (State Level).

Region	Contestant	School
Sandakan	Fiona Wong Jing Ting	SMJK Tiong Hua, Sandakan
Kota Kinabalu	Nurellyyatul Mawaddah	SMK Pengiran Omar II, Sipitang
Kudat	Nur Mazlinawannie Rusli	SMK St Peter, Kudat
Keningau	Farshah Binti Vincent	SMKA Keningau
Tawau	Mohammad Hidayah Hidayat	SMK Datuk Hj. Panglima Jakarullah, Semporna

2. 2025 Forestry Quiz Competition Finalists (State Level).

Region	Contestant	School
Sandakan	1. Faqueeny Auryne Paimol 2. Lisni Elisa Darius 3. Janice Rhys Jakson	SMK Pamol, Beluran
Kota Kinabalu	1. Keegan Wong Wei Yeung 2. Ka Jin Xuan 3. Izabelle Ivan	SM St. Michael, Penampang
Kudat	1. Mohamad Herdiaman Gusman 2. Lovely Eva Cris Jafren 3. Eleazar Topurau	SMK Pinggan-Pinggan, Pitas
Keningau	1. Jackstriano Jakrie 2. Elder Ezegeul Esang 3. Freziela Lisarie Binti Yuslee	SMK Kemabong, Tenom
Tawau	1. Mohd Firdaus Erwin 2. Muhammad Lutfir Rahman Ramli 3. Siti Aishya Binti Arnaib	SMK Kunak













The results of the 2025 Forestry Quiz and Speech Contest State Level are as follows:

1. Forestry Speech Contest State Level (Individual Contest).

Contestant	School
Winner: Nur Mazlinawannie Rusli	SMK St Peter, Kudat
Runner Up: Mohamad Hidayah Bin Hidayat	SMK Datuk Haji Panglima Jakarullah, Semporna
Third Prize: Farshah Binti Vincent	SMK Agama, Keningau
Fourth Prize: Fiona Wong Jing Ting	SMJK Tiong Hua, Sandakan
Fifth Prize: Nurellyyatul Mawaddah	SMK Pengiran Omar II, Sipitang

2. Forestry Quiz Contest State Level (Team Contest).

Contestant	School
Winners: 1. Mohamad Herdiaman Gusman 2. Lovely Eva Cris Jafren 3. Eleazar Topurau	SMK Pinggan-Pinggan, Pitas
Runner-Up: 1. Faqueeny Auryne Paimol 2. Lisni Elisa Darius 3. Janice Rhys Jakson	SMK Pamol, Beluran
Third Prize: 1. Mohd Firdaus Erwin 2. Muhammad Lutfir Rahman Ramli 3. Siti Aishya Binti Arnaib	SMK Kunak, Kunak
Fourth Prize: 1. Jackstriano Jakrie 2. Elder Ezegeul Esang 3. Freziela Lisarie Binti Yuslee	SMK Kemabong, Tenom
Fifth Prize: 1. Keegan Wong Wei Yeung 2. Ka Jin Xuan 3. Izabelle Ivan	SM St. Michael, Penampang

List of Communication, Education and Public Awareness (CEPA) activities in 2025.

No.	Activities	Venue	Date	Target Group
1.	Kempen penghijauan Malaysia bersama pelajar SK Sg Balat Kinabatangan	SK Sg Balat Kinabatangan	9-11 January 2025	Schools
2.	Program Inisiatif Penghijauan Lestari Aspirasi Negara (I -P.L.A.N.T) Taman Terindah	Hutan Paya Gambut Klias Beaufort	16 January 2025	Government agencies and Non Governmental Organization (NGO)
3.	Program Kesedaran Alam Sekitar anjuran Pejabat Perhutanan Daerah Kota Marudu	Pejabat Perhutanan Daerah Kota Marudu	25 February 2025	Schools, communities and NGO
4.	Program Kesedaran Awam bersama SK Ulu Kukut, Kota Belud	SK Ulu Kukut, Kota Belud	22 April 2025	Schools
5.	Karnival Sambutan Hari Hutan Antarabangsa Peringkat Negeri Sabah Tahun 2025	Kakitangan Jabatan Perhutanan Sabah, Universiti Malaysia Sabah dan orang awam terlibat dalam karnival sepanjang 3 hari	24-26 April 2025	Government agencies, NGO, schools, communities and general public
6.	3-Day Youth Camp on Climate Change	Rainforest Discovery Centre, Sandakan	2 May 2025	Government agencies, NGO, schools, communities and general public
7.	Program Outreach Projek Sabah REDD Plus di Daerah Lahad Datu	Hutan Simpan Silam, Lahad Datu	15 May 2025	Government agencies, NGO, communities and general public
8.	Kempen kesedaran awam sempena program Kepimpinan Pelajar di Sandakan Rainforest Park (SRP)	Sandakan Rainforest Park, Sandakan	15 June 2025	Schools
9.	Program Penghijauan Malaysia Sempena Kempen Penanaman 100 Juta Pokok Peringkat Sekolah Daerah Tawau	SK Batu Payung, SMK Balung, SK Batu 22 dan SK Ulu Kalabakan	16-19 June 2025	Schools
10.	Kempen Kesedaran Awam Mengenai Kepentingan Pemulihan dan Pemuliharaan Hutan	Sk.Pekan Pensiangan K9, Pensiangan.	19 June 2025	Schools, communities and NGO
11.	Program Penanaman pokok Hutan Simpan Silabukan Lahad Datu	Hutan Simpan Silabukan Lahad Datu	19 June 2025	Government agencies, private sector, NGO and communities
12.	Program penanaman anak pokok bersama Ladang KLK Sdn Bhd	Ladang KL Kepong Sdn Bhd, Tawau	20 June 2025	Private sector
13.	Sambutan Hari Alam Sekitar Sedunia anjuran Sawit Kinabalu di Pusat Konservasi Sg. Pin Kinabatangan	Pusat Konservasi Sg. Pin Kinabatangan	24 July 2025	Government agencies, private sector, NGO, schools, communities and general public
14.	Program Penghijauan Malaysia: Kempen Penanaman 100 juta pokok	SMK Trusan Sugut	26 July 2025	Schools, communities and NGO
15.	Program Penghijauan Malaysia, Kempen Penanaman 100 juta pokok	Pusat Eko Pelancongan Tahas Tininting Ironwood Forest Park, Pensiangan, Nabawan	14 August 2025	Private sector, NGO, communities and general public
16.	Program Kesedaran Awam	Pusat Informasi Sehenti Klias (OSIC), Kompleks Perhutanan Kimanis.	23 August 2025	Private sector, NGO, schools, communities and general public
17.	Aktiviti penanaman pokok bersama Felda Global Ventures	Lahad Datu Sabah	22 August 2025	Government agencies, Private sector, NGO, schools, communities and general public
18.	Program Kesedaran Awam bersama sekolah di Wilayah Kudat	Pejabat Perhutanan Kota Marudu	25 August 2025	Schools
19.	Program Kesedaran Awam bersama sekolah di Wilayah Kota Kinabalu	Pejabat Perhutanan Lok Kawi, Kota Kinabalu	29 August 2025	Schools
20.	Program Kesedaran Awam bersama sekolah di Wilayah Keningau	Hotel Perkasa, Keningau	2 September 2025	Schools
21.	Program Kesedaran Awam bersama sekolah di Wilayah Tawau	LA Hotel, Tawau	3 September 2025	Schools
22.	Program Kesedaran Awam bersama sekolah di Wilayah Sandakan	Hotel Pavillion, Sandakan	6 September 2025	Schools
23.	Program penanaman pokok sempena kempen penanaman 100 juta pokok	SK Lungmanis, Sandakan.	11 September 2025	Schools, NGO
24.	Program Penanaman pokok bersama KTS Plantation Sdn Bhd	HS Segaliud Lokan	11 September 2025	Private sector, NGO
25.	Pameran sempena Program Hijaukan Bumi & Kesedaran Alam Sekitar	Kampus Insan Keningau	26 September 2025	Government Sector
26.	Program Penanaman Pokok Penghijauan Malaysia	Pusat Rekreasi Hutan Balaron Navului Pantingaisan, Pensiangan, Nabawan.	16 October 2025	Communities
27.	Program 1 Pokok 1 Harapan bersama Sabah Energy Corporation Sdn Bhd (SEC)	Hutan Simpan Ulu Kukut Kota Belud	17 October 2025	Private sector and communities
28.	Program Penanaman 100 Juta Pokok Sempena Kempen Penghijauan Malaysia	Tawai Rainforest Camp (TRC), Telupid	1 November 2025	Government sector, private sector and schools
29.	Karnival Alam Kita	Dewan Terbuka Membakut	1 November 2025	Government sector, private sector and schools and public
30.	Program “Nature for Nurture” bersempena dengan Kempen “November Goes Green 2025”	Mahkamah Besar Kota Kinabalu	20 November 2025	Government agencies, private sector, NGO, and general public

SABAH MAJU JAYA (SMJ) INITIATIVES 2025

The Sabah Maju Jaya (SMJ) Initiatives represents the overarching development framework of the Sabah State Government, designed to guide the state's progress towards sustainable growth and inclusive prosperity. Introduced as a structured roadmap, SMJ outlines the strategic direction for Sabah's development through phased implementation, beginning with SMJ 1.0 (2021–2025) and continuing with SMJ 2.0 (2026–2030). The initiative serves as a comprehensive policy framework that aligns government programmes, projects, and investments with the state's long-term development objectives. At its core, the SMJ Initiative focuses on three primary pillars.

Firstly, it emphasizes economic development, including the strengthening of key sectors such as agriculture, industry, and tourism to enhance productivity and competitiveness. Secondly, it prioritizes human capital development and public wellbeing, aiming to improve the quality of life of Sabahans through education, healthcare, and social support systems. Thirdly, it underscores the importance of infrastructure development and environmental sustainability, ensuring that growth is supported by resilient infrastructure while preserving natural resources for future generations. Since 2024, the committee has been chaired by Tn. Indra H. Sunjoto, DC(PM) and Communication & Public Relations Division as secretariat. For 2025, the Sabah Forestry Department committed itself to implement 13 initiatives;

List of SMJ Initiatives of Sabah Forestry Department 2025.

No.	Initiatives	Elements/ Enablers of SMJ	Targets	Process Holder and Achievement	Sustainable Development Goals (SDG)
1	To implement public awareness programmes on the importance of forests by setting several target groups including IPTA/IPTS, schools, communities and government and non-government agencies (NGOs)	Green Infrastructure and Sustainability Networks	30 awareness programmes	Communication & Public Relations 100% (30 Programmes)	**SDG4: Quality Education** Public perceptions
2	To gazette 200,000 hectares of protected areas to achieve the target of 2.2 million hectares of Totally Protected Areas (TPA), or 30% of the total land area of the State of Sabah, by 2025.	Green Infrastructure and Sustainability Networks	10,000 hectares to be identified	Forest Sector Planning Division 70%	**SDG15: Life on Land** The area of protected areas throughout the state of Sabah will increase to 30% of the total area of the state by 2025.
3	To target 400,000 hectares of forest plantation in Sabah by 2035 for the supply of sustainable timber with the development of 6,000 hectares in 2025	Green Infrastructure and Sustainability Networks	6,000 hectares to be planted	Sustainable Forest Management Division) 50% (3,085 hectares)	**SDG9: Industry, Innovation and Infrastructure** Forest quality and productivity.
4	To rehabilitate at least 450,000 hectares of degraded forest in Sabah by 2030, with silvicultural treatment of 5,000 hectares in 2025.	Green Infrastructure and Sustainability Networks	5,000 hectares to be	Sustainable Forest Management Division 100% (8,523 hectares)	**SDG9: Industry, Innovation and Infrastructure** Forest quality and productivity.
5	To rehabilitate 1,000 hectares of degraded forest in Sabah, with implementing enrichment planting in 2025.	Green Infrastructure and Sustainability Networks	1,000 hectares to be planted	Sustainable Forest Management Division 100% (2,099 hectares)	**SDG9: Industry, Innovation and Infrastructure** Forest quality and productivity.
6	To rehabilitate at least 650 hectares of mangrove forest in Sabah by 2030 with planting 50 hectares of mangrove trees in 2025.	Green Infrastructure and Sustainability Networks	50 hectares to be planted	Forest Resources Management Division 100% (50 hectares)	**SDG9: Industry, Innovation and Infrastructure** Forest quality and productivity
7	To achieve forestry revenue of RM145 million in 2025.	Enablers 1: Fiscal Sustainability	RM145 million	Forest Industries and Trade Division 100% (RM154,794,794.48)	**SDG9: Industry, Innovation and Infrastructure** Total forest revenue collection of RM145 Million per year.

No.	Initiatives	Elements/ Enablers of SMJ	Targets	Process Holder and Achievement	Sustainable Development Goals (SDG)
8	To update the data of five (5) Totally Protected Area (TPA) Forest Reserve conservation areas in 2025 to support the development of the Conservation Areas Information and Monitoring System (CAIMS) for twenty-five (25) conservation areas across three classes of Totally Protected Area (TPA) Forest Reserves by 2025.	Enablers 5: Digital Government based on Technology and Innovation	A system to be updated	Forest Research Centre 100%	**SDG9: Industry, Innovation and Infrastructure** Information system development and digitization.
9	To certify one (1) Sustainable Forest Management (SFM) project under the International Union for Conservation of Nature (IUCN) Green List.	Green Infrastructure and Sustainability Networks	A project to be certified	Sustainable Forest Management Division 100%	**SDG15: Life on Land**
10	To develop a Greenhouse Gas (GHG) Emissions Inventory System for the State of Sabah	Green Infrastructure and Sustainability Networks	A system to be developed	Forest Sector Planning Division Project has been handed over to Sabah Climate Registry and Inventory Centre, SaCRIC,SUHB	**SDG9: Industry, Innovation and Infrastructure** Information system development and digitization.
11	To develop a Forestry Industry Product Transfer System	Enablers 5: Digital Government based on Technology and Innovation	A system to be completed	Forest Industries and Trade Division 100%	**SDG9: Industry, Innovation and Infrastructure** Information system development and digitization.
12	To digitize the administration of forest resources data in the state of Sabah.	Enablers 5: Digital Government based on Technology and Innovation	A system to be completed	Forest Resource Management Division 100%	**SDG9: Industry, Innovation and Infrastructure** Information system development and digitization.
13	To develop a Forest Ecosystem Monitoring Model to support forestry research in Sabah	Green Infrastructure and Sustainability Networks	An ecosystem monitoring service model has been developed and established	Forest Research Centre 100%	**SDG9: Industry, Innovation and Infrastructure** Information system development and digitization.

"SMJ 2.0 is more than a development plan. It reflects the government's commitment to leading change in a rapidly evolving world driven by artificial intelligence, the digital economy, cross-border trade and global competition."

— Datuk Seri Panglima Hajiji Noor, Chief Minister of Sabah, on the launch of the SMJ 2.0 roadmap.

ENFORCEMENT, INVESTIGATION & PROSECUTION

Reported Cases of Forestry Offences

Throughout 2025, the Enforcement, Investigation and Prosecution (EIP) Division, in close coordination with Enforcement Officers from the Regional and District Forestry Offices (PPW and DFO), intensified enforcement operations and strengthened investigative initiatives of enforcement operations and investigative initiatives (Table 1).

Following a steady upward trend between 2022 and 2024, the number of reported cases declined to 63 in 2025 (Table 1). This represents a decrease of nine cases compared to the preceding year. Overall, the 2025 total cases remained substantially lower than the five-year peak of 82 cases recorded in 2021. Of these, 40 cases required the preparation of Investigation Papers (IPs), while the remainder were categorised as general offences. All IPs were thoroughly reviewed by the Division prior to submission to the Chief Conservator of Forests (CCF) for further advice and instructions.

Convictions in 2025

In 2025, a total of 20 individuals were arrested. Of these, 15 were successfully prosecuted and convicted by the Senior Federal Counsel (SFC) Sabah. Three individuals were not prosecuted but were instead were dealt with through compounds or fines, while 2 cases remained under investigation.

Table 1: Total number of reported cases of forestry offences from 2021 to 2025.

Enforcement Team	Year				
	2021	2022	2023	2024	2025
FD EIP Division, DFO, PPW, Operations unit/ Director Office	81	47	62	72	63
Anti Illegal Logging Unit – Chief Minister Department	1	1	0	0	0
Total	**82**	**48**	**62**	**72**	**63**

Table 2: Number and status of individuals arrested for forestry offences from 2021 to 2025.

Verdict	Year				
	2021	2022	2023	2024	2025
Convicted By Court	20	9	14	15	15
Released By Court Or Not Charged	16	16	8	17	3
Absent From Court Or Absconded	0	0	0	0	0
Pending Court Decision Or Still Under Investigation	1	1	0	0	2
Total Persons Arrested	**37**	**26**	**22**	**32**	**20**



A boat frame constructed from sawn and other processed timber was discovered within the Timbun Mata Forest Reserve, Semporna District.

Seizure of Machineries, Equipment and Tools

As with the number of cases, the total number of equipment seized and items forfeited or auctioned off in 2025 declined compared with the previous year. The enforcement team confiscated 22 units of machinery, vehicles, equipment, and tools suspected of being used in committing forestry offences. Of the 22 seized items, 11 units were either forfeited or auctioned off (Table 3), while the remaining items were pending court decisions, had been released, or remained under custody.

Table 3: Total number of forestry equipments, vehicles and other items seized, forfeited or auctioned from 2021 to 2025.

Year	Total number of items	
	Seized	Forfeited
2021	343	315
2022	31	15
2023	106	95
2024	75	50
2025	22	11



> *Strict enforcement is not cruelty—it is accountability. Without it, every chainsaw in an illegal logging operation becomes a verdict against our forests, our climate, and our future. Enforce the law like the trees have no voice but ours.*

Log and Timber Seizures

In 2025, a total of 2,651 pieces of timber (total volume of 1,458.55 m^3) were seized, comprising 1,313 pieces of round logs (1,232.14 m^3) and 1,338 pieces of converted timber (226.41 m^3) (Table 4). This total figure excludes minor forest products such as poles and rattan.

Table 4: Logs and converted timber seized (excluding minor forest products) from 2021 to 2025.

Year	Log		Converted Timber	
	Pieces	Volume m^3	Pieces	Volume m^3
2021	4,081	31,750.86	2,077	107.21
2022	4,234	32,933.86	3,230	125
2023	181	323.98	520	14.74
2024	1,236	2,008.82	1,927	122.68
2025	1,313	1,232.14	1,338	226.41

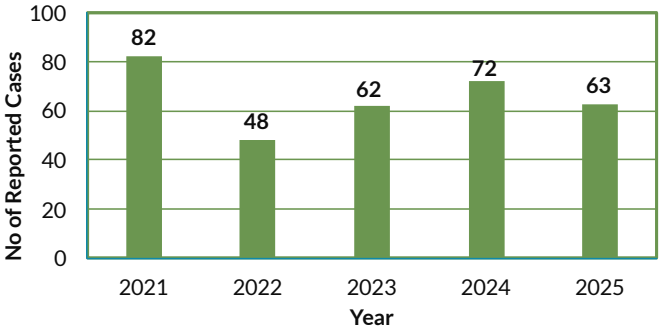


Chart 1: Total number of reported cases of forestry offences (2021–2025).

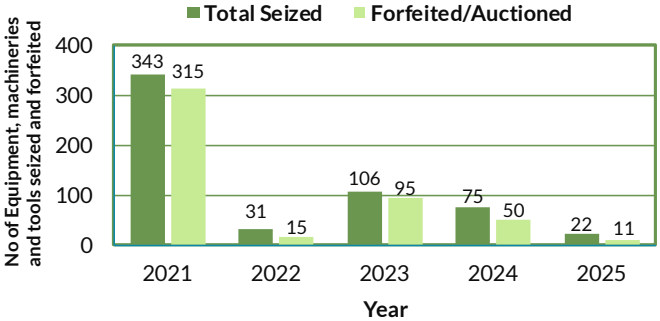


Chart 2: Number of equipment, machinery and tools seized and forfeited (2021–2025).

Revenue from Auctioned Goods

In 2025, a total of 692.46 m^3 of round logs valued at RM55,770.06 including logs seized in the previous year, were disposed of through tender and auction. Between 2021 and 2025, the cumulative revenue generated from the sale of confiscated logs and equipment amounted to RM548,987.25.

Table 5: Value of goods auctioned from 2021 to 2025.

Year	Volume of Logs (m^3) *	Value (RM)	No. of Equipment	Value (RM)
2021	983.87	104,290.22	3	10,000
2022	1,006.84	135,923.40	-	-
2023	217.97	39,318.00	1	2,000
2024	1,028.30	109,350.57	4	2,850
2025	692.46	55,770.06	11	89,485
Total	**3,929.44**	**444,652.25**	**19**	**104,335**

Collection of Fines and Penalties

Table 6 summarises the total fines and penalties collected for the period 2021 to 2025. In 2025, a total of RM112,948.38 was collected from cases involving general offences and prosecutions.

Table 6: Total fines and penalties collected from 2021 to 2025.

Year	Total collected (RM)
2021	119,373.00
2022	90,751.83
2023	198,000.00
2024	57,279.20
2025	112,948.38

Nature of Offences

Offences are categorised into seven classifications under the Forest Enactment 1968. In 2025, a total of 63 offences were recorded (Table 7). Several cases involved more than one type of offence.

Table 7: Nature of offences and the number of cases recorded in 2025.

Nature of offences (Sections in the Forest Enactment 1968)	Number of cases
Illegal Felling in Forest Reserves (Section 20)	12
Illegal Felling in Stateland (Section 23)	1
Illegal Possession [Section 30(1)(g)]	7
Royalty Evasion [Section 30A(b)]	0
Illegal Entry of Forest Reserve [Section 20(1)(c)(i)]	3
Illegal Cultivation in FR [Section(1)(b)(iii)]	1
Others (Breach of License Conditions)	39

The distribution of offences in 2025 is presented in Chart 3. The recorded cases comprised illegal possession (7 cases, 11%), illegal felling within Forest Reserves (12 cases, 19%), illegal felling on State land (1 case, 1.5%), illegal entry into forest reserves (3 cases, 5%), and illegal cultivation within forest reserves (1 case, 1.5%). No cases involving royalty evasion were reported during the year. In addition, 39 cases (62%) were classified as technical offences, including breaches of licence conditions, non-compliance with prescribed procedures, and non-compliance with the CCF circulars.



Heavy machinery seized for breach of licence conditions within the Tongod District.

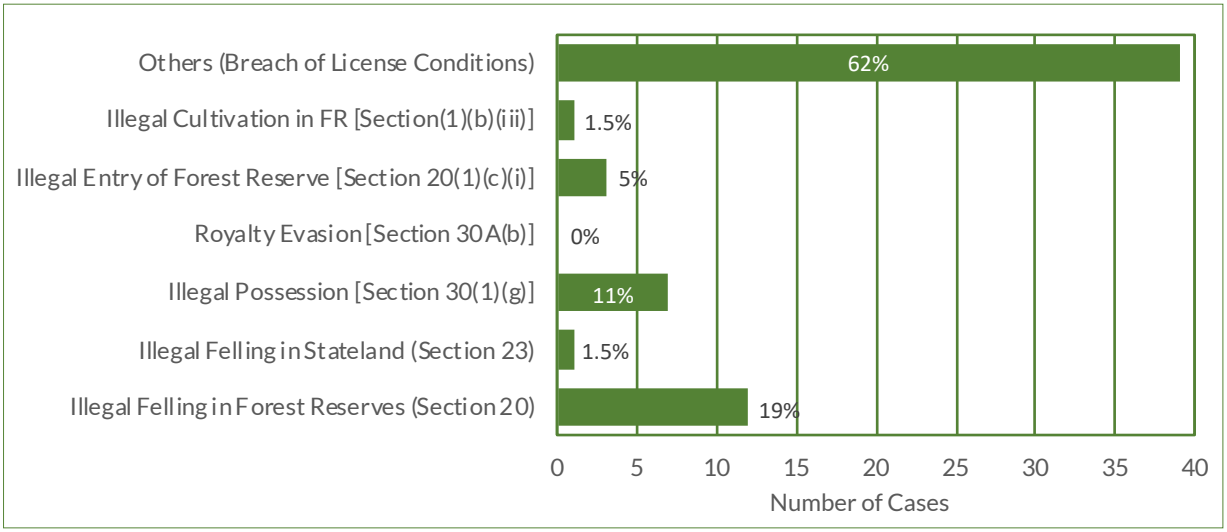


Chart 3: Nature of Offence

Capacity Building

The division conducted a series of courses, training sessions and workshops in 2025 (Table 8).

Table 8: List of courses, workshops and trainings.

Courses and Workshops	Venue	Date (No. of Days)
"Basic PROTECT Training" for new trainees of the Sabah Forestry Institute (FORiNS).	Institut Perhutanan Sabah, Telupid	15 - 22 Jan (7 days)
"Honorary Forest Ranger Course under Section 3A (Forest Enactment 1968)" for SAFODA staff.	Hotel Raia, Kota Kinabalu	14 – 16 May (3 days)
"Socialisation and SOP Training Course for Enforcement and Investigation" for Forest Rangers and Forestry Officers.	Bilik Pitta, RDC, Sepilok	17 -19 Jun (3 days)
Official launching of the "Sabah Forestry Department Shooting Range, Sandakan", and "Firearms Training" for enforcement officers and personnel holding authorised licenses to use Departmental C&U Firearms.	Lapang Sasar Jabatan Perhutanan Sabah, Batu 14, Sandakan	25 Jun (1 day)
"Honorary Forest Ranger Course under Section 3A (Forest Enactment 1968)" for the Tabin–Silabukan Zone.	Dewan Serbaguna, Perhutanan Daerah Lahad Datu	26 – 28 Jul (3 days)
"Environmental Awareness Campaign" at PNBT Station, Bukit Pohumpung, Kg. Biau, Papar.	Stesen PNBT, Bukit Pohumpung, Kg. Biau, Papar	27 Sept (1 day)

Courses/Trainings/Workshops in Pictures



Basic PROTECT Training for New Trainees of the Sabah Forestry Institute

(Left) Mr. Ismailey Ismail, Assistant Chief Commander of Protect delivering his lecture on Remote First Aid. (Right) Trainees building a raft from scratch for river crossing, as part of a survival and team-building activity.





Honorary Forest Ranger Course under Section 3A (Forest Enactment 1968) for SAFODA Staff.
(Left) Mr. Janius @ Jurimin Ebin, Regional Forestry Officer of Sandakan, delivering a lecture on raid procedures in accordance with the Forest Enactment 1968. (Right) Participants engaging in group discussion activities during the Honorary Forest Rangers Course.





Socialisation and SOP Training Course for Enforcement and Investigation.
(Left) Group photo of officers and rangers during Socialisation and SOP Training Course. (Right) Mr. Peter Jack, Head of Enforcement, Investigation and Prosecution Division delivering a lecture on Enforcement and Investigation task.





Official Launch of the Sabah Forestry Department Shooting Range and Firearms Training for Enforcement Officers and Personnel Holding Authorised Licences to Use Departmental C&U Firearms.
(Left) Chief Conservator of Forests, Datuk Frederick Kugan signing the official launch plaque for the new shooting range facility at Batu 14, Sandakan. (Right) Enforcement officers and personnel holding authorised licences undergoing firearms training.





Honorary Forest Ranger Course under Section 3A (Forest Enactment 1968) for the Tabin–Silabukan Zone.
(Left) Group photo for the Honorary Forest Ranger Course after the course at the multipurpose hall of the Sabah Forestry Department in Lahad Datu. (Right) Mr. Awangku Effendy, District Forestry Officer of Kalabakan, delivered his lecture on the introduction to the use of fire-fighting equipment during the Honorary Forest Ranger Course.





Environmental Awareness Campaign at PNBT Station, Bukit Pohumpung, Kg. Biau, Papar.
(Left) Datuk Juil Nuatim (third from left), who officiated the campaign, together with Forestry Department officers and participants after the tree-planting activity. (Right) Participants sang the national anthem before commencing the campaign activities.

Conclusions

Despite strengthened enforcement efforts by the Department, forest-related offences continue to pose a challenge to sustainable forest management in Sabah, although a reduction of nine cases was recorded compared to 2024. In its commitment to safeguarding the State's forest resources, the Department has maintained close collaboration with key enforcement agencies, including the General Operations Force (PGA), the Sabah Wildlife Department, and non-governmental organisations such as the World Wildlife Fund (WWF), in conducting joint operations to deter illegal activities in Forest Reserves. Moving forward, the EIP Division will remain steadfast in its commitment to conserving forest resources and protecting Sabah's natural heritage for future generations. Through strategic partnerships and sustained vigilance, the Division will continue to play a vital role in upholding the integrity and sustainable management of Sabah's forests.

"Illegal logging is not just a theft of trees, but a theft of livelihoods, a theft of biodiversity, and a theft of the future. Enforcement must be relentless."

— Wangari Maathai (paraphrased from various speeches;
the Nobel laureate and environmental activist spoke often on
illegal logging and enforcement in Kenya

DEVELOPMENT & GENERAL SERVICES

The year 2025 marked the final year of the implementation of development projects under the 12th Malaysia Plan (RMKe12). These projects were aimed at ensuring alignment with the vision, mission, and objectives of sustainable national development, while also enhancing public well-being. Concurrently, the implementation of these projects aligns with the vision, mission, and forestry policies of the Sabah Forestry Department.

In this final phase of the RMKe12, the PPA division has undertaken various initiatives and measures to ensure that development projects are implemented smoothly and completed according to schedule. Despite encountering various issues and challenges, these have been managed and addressed as effectively as possible to ensure the successful completion of the projects.

Throughout the RMKe12 period, the Sabah Forestry Department received a total allocation of RM245,023,314.00, compared to RM192,360,465.00 received during the Eleventh Malaysia Plan (RMKe11). This represents an increase of RM52,662,849.00, or 27.38% over the allocation received under the RMKe11. Of the total allocation, RM140,458,520.00 was funded by the Federal Government, while RM104,564,794.00 was funded by the Sabah State Government. During this period, 30 projects were financed under the Federal Government and 32 projects under the Sabah State Government. A summary is shown in Table 1.

Table 1: Summary of Development Project Performance under the 12th Malaysia Plan. (Funded by the Federal Government and Sabah State Government).

Year	Source of Allocation					
	Federal			State		
	Allocation Received (RM)	Expenditure (RM)	%	Allocation Received (RM)	Expenditure (RM)	%
2021	29,279,670.00	29,068,520.55	99.28%	18,110,010.00	18,028,055.50	99.55%
2022	28,761,230.00	28,760,690.58	100.00%	20,193,200.00	19,918,241.30	98.64%
2023	34,979,030.00	34,971,171.93	99.98%	19,516,020.00	19,318,048.97	98.99%
2024	21,525,300.00	21,423,167.75	99.53%	21,903,976.00	21,515,141.01	98.22%
2025	25,913,290.00	25,912,791.56	100.00%	24,841,588.00	24,824,968.08	99.93%
Total	140,458,520.00	140,136,342.37	99.77%	104,564,794.00	103,604,454.86	99.08%
Number of Projects = 30 Projects (24 Completed / 6 Continued under the 13th Malaysia Plan (RMKe13)				Number of Projects = 32 Projects (30 Completed / 1 Project Received Token Allocation / 1 Project Continued under the 13th Malaysia Plan (RMKe13)		

DEVELOPMENT PROJECT PERFORMANCE

1. Development Budget in 2025

In 2025, a total of 25 development projects were funded by the Sabah State Government, while 17 projects were financed by the Federal Government (Table 2).

Table 2: Summary of Development Project Performance in 2025.

Source of Funding	No. of Active Projects in 2025	Allocation Received	Expenditure	Percentage (%)
Federal	17	25,913,290.00	25,912,791.56	100.00
State	25	24,841,588.00	24,824,968.08	99.93
Total	42	50,754,878.00	50,737,759.64	99.97

2. Financial & Physical Performance Summary in 2025

The total expenditure for development projects funded by the Federal Government in 2025 amounted to RM25.91 million, representing 100.00% utilisation of the approved allocation. Out of the 17 projects implemented, 11 were fully completed according to schedule. Meanwhile, a total expenditure of RM24.82 million, or 99.93% of the total State Government allocation of RM24.84 million, was recorded.

i. Federal Funding

In 2025, a total of 17 projects with an approved allocation of RM25.91 million were implemented. Of this amount, RM25.91 million, representing 100.00% of the approved allocation, was successfully utilised.

Table 3: Summary of Development Projects funded by the Federal Government in 2025.

No.	Project Code	Project Title	Allocation (RM)	Expenditure		Notes
				(RM)	(%)	
1	P23 10200 012 0001	Development of Forest Conservation, Extension and Education in the Sepilok Forest Reserve (Phase II)	4,109,880.00	4,109,849.13	100	• Project to continue in 2026
2	P23 10200 013 0001	Upgrading the Eco-Tourism Recreational Facilities in Sepagaya Forest Reserve, Lahad Datu, Sabah	1,800,480.00	1,800,478.94	100	Project Completed
3	P23 10300 006 0001	Fire Prevention Project and the Strengthening of the Forest Fire Control System in Sabah (Phase II)	1,275,090.00	1,275,090.00	100	Project Completed
4	P23 10400 009 0001	Development of Sabah State Forest Resources Database and Geospatial Technology	270,700.00	270,700.00	100	Project Completed
5	P23 10400 011 0001	Operations and Strengthening the Safety of Sabah State Forest Reserve Through the Use of Earth Observation Satellites	980,000.00	980,000.00	100	• Project to continue in 2026
6	P23 10800 004 0001	Project Development and Sustainable Management of Klias Peninsular Peat Land (Phase II)	936,200.00	936,143.08	99.99	Project Completed
7	P23 10801 011 0001	Promoting Tree Planting by Smallholders and Local Communities as an Important Source of Timber for the Timber Industry	104,300.00	104,269.75	99.97	Project Completed
8	P23 10801 012 0001	Strengthening the Forest Ecosystem Monitoring Services to Support the Development of Green Strategies in Sabah	707,900.00	707,809.75	99.99	Project Completed
9	P23 10801 013 0001	Research and Development Bio-Prospects for Fungi, Wild Ginger and Medicinal and Aromatic Plants (TUB) in the Danum Valley Conservation Area, Maliau Basin, Imbak Canyon and Forest Conservation Area in Sabah	675,400.00	675,400.00	100	Project Completed
10	P23 10801 014 0001	Upgrading of Infrastructure and Scientific Collection of Forest Biodiversity and Conservation in Sabah	2,145,000.00	2,145,000.00	100	• Project to continue in 2026
11	P23 10801 015 0001	Enhancement Programme for Seed Production and Productivity through Intensive Selection of 'Candidate Plus Tree' (CPT)	432,000.00	431,979.93	100	Project Completed
12	P23 10801 016 0001	Biometric Land Use Development and Forest Conservation Programme in Sabah	2,956,500.00	2,956,416.18	100	• Project to continue in 2026
13	P23 10801 017 0001	Ecosystem Conservation Programme In The Triangular Area of Lokan Peneplains Complex, Sabah	2,145,000.00	2,144,930.49	100	• Project to continue in 2026
14	P23 10803 022 0001	Strengthen Controls in Fully Protected Areas (TPA) to Ensure the Security of Sabah's Forest Resources	82,640.00	82,639.99	100	Project Completed
15	P23 10803 023 0001	Mangrove Forest Reserve Management Project in Selected Locations in Sabah	1,276,010.00	1,276,006.12	100	Project Completed
16	P23 10803 024 0001	Forest Restoration at Sandakan Forestry Region Forest Reserve Sabah	3,906,500.00	3,906,500.00	100	• Project to continue in 2026
17	P23 10804 002 0001	Sabah Heart of Borneo (Phase II)	2,109,690.00	2,109,578.20	100	Project Completed
		Total	**25,913,290.00**	**25,912,791.56**	**100**	

A comparison of the financial performance of the Sabah Forestry Department with other departments/agencies under NRES in 2025 is shown in Table 4. The national average achievement recorded was 95.21%.

Table 4: Summary of Departments or Agencies under NRES according to their Expenditure Performance.

No.	Departments or Agencies Under NRES	No. of Projects	Allocation (RM)	Revised Allocation (RM)	Expenditure (RM)	(%)	Unspent Balance (RM)
1	FRIM	18	28,400,000.00	29,710,100.00	29,710,100.00	100.00	0.00
2	PGN	1	2,476,000.00	2,128,700.00	2,128,693.26	100.00	6.74
3	JKPTG	4	131,550,000.00	139,328,527.00	139,327,901.63	100.00	625.37
4	JP SABAH	17	21,543,800.00	25,913,290.00	25,912,791.56	100.00	498.44
5	BPBP	10	6,121,000.00	8,770,900.00	8,770,644.40	100.00	255.60
6	JUPEM	13	147,430,000.00	140,140,033.00	140,128,989.12	99.99	11,043.88
7	JPSM	30	56,433,900.00	43,534,918.00	43,530,715.62	99.99	4,202.38
8	PERHILITAN	50	88,823,300.00	63,274,547.00	63,262,733.21	99.98	11,813.79
9	BMG	1	233,000.00	200,000.00	199,938.52	99.97	61.48
10	JMG	38	62,170,200.00	50,864,112.00	50,803,182.49	99.88	60,929.51
11	INSTUN	8	8,952,600.00	7,089,620.00	7,071,644.36	99.75	17,975.64
12	JAS	18	84,300,000.00	77,226,100.00	76,856,470.77	99.52	369,629.23
13	MET	17	191,979,100.00	26,781,415.00	26,540,143.76	99.10	241,271.24
14	JH SARAWAK	15	19,785,700.00	18,163,700.00	17,953,981.09	98.85	209,718.91
15	JBK	2	832,100.00	702,100.00	685,886.20	97.69	16,213.80
16	BPI	11	9,079,200.00	8,737,448.00	8,161,218.53	93.41	576,229.47
17	BPAS	1	0.00	0.00	0.00	0.00	0.00
	Total	**254**	**860,109,900.00**	**642,565,510.00**	**641,045,034.52**	**99.76**	**1,520,475.48**

Apart from direct development allocations from the Ministry of Natural Resources and Environmental Sustainability (NRES), the Sabah Forestry Department also received allocations from Forestry Department Peninsular Malaysia (JPSM), the Department of Environment (DOE) and the Biodiversity Division of NRES. Details are shown in Table 5.

Table 5: Summary of Financial and Physical Performance (Federal) as of 31 December 2025 (Federal Funding from NRES and Other Agencies).

No	Sources	Allocation Received (RM)	Expenditure (RM)	Balance (RM)	Physical Remarks			
					SS	IJ	DP	Total
1	NRES- (BP)	25,913,290.00	25,912,791.56 (100%)	498.44 (0.00%)	11	6	-	17
2	NRES - (JPSM) *Penanaman Pokok Bagi Kempen Penanaman 100 Juta Pokok*	1,220,000.00	1,220,000.00 (100%)	0.00 (0%)	1	-	-	1
3	NRES - (JPSM) *Kajian Penananman Pokok Bakau dan Spesies-Spesies Yang Sesuai di Pesisiran Pantai Negara*	149,996.00	149,996.00 (100%)	0.00 (0%)	1	-	-	1
4	NRES - (JAS) *Pembinaan dan Menaiktaraf Infrastuktur Bagi Mencegah Kebakaran Tanah Gambut Untuk Mengatasi Jerebu*	58,680.00	58,680.00 (100%)	0.00 (0%)	1	-	-	1
	Grand Total	**27,341,966.00**	**27,341,467.56 (100%)**	**498.44 (0%)**	**14**	**6**	**-**	**20**

ii. State Funding

In 2025, a total of 25 projects were implemented with an allocation of RM24.84 million. Of this amount, RM24.84 million, representing 100.00% of the allocation, was successfully utilised. In terms of physical performance, all projects were implemented according to schedule. The overall performance for 2025 is shown in Table 6.

Table 6: Summary of Development Projects Funded by the Sabah State Government in 2025.

No	Project Code	Project Title	Allocation	Expenditure		Notes
			(RM)	(RM)	(%)	
1	D11 0200 0002	Sustainable Forest Management at Deramakot Forest Reserve	7,531,140.00	7,531,139.75	100.00	Project Completed
2	D11 0200 0004	Sustainable Development and Management Planning of Tangkulap-Pinangah Forest Reserve	1,813,680.00	1,805,966.61	99.57	Project Completed
3	D11 0200 0005	Forest Recreation Destination Development Project in Kunak District	200,000.00	199,999.70	100.00	Project Completed
4	D11 0200 0006	Tabin Forest Reserve and Silabukan Forest Reserve Biodiversity Development and Management Project	529,585.00	529,458.34	99.98	Project Completed
5	D11 0200 0007	Sustainable Forest Management Project, Ulu Segama-Malua	2,880,170.00	2,878,816.64	99.95	Project Completed
6	D11 0200 0008	Sustainable Forest Management Project, Ulu Kalumpang	2,000,000.00	1,999,960.24	100.00	Project Completed
7	D11 0200 0009	Rehabilitation Program of Burnt Areas at Trus Madi Forest Reserve	1,402,290.00	1,402,289.61	100.00	Project Completed
8	D11 0200 0010	Upgrading Skills and Digital Information on Sabah State Forest Resources	200,000.00	200,000.00	100.00	Project Completed
9	D11 0200 0012	Empowering and Strengthening the Forestry Department's Special Enforcement Team (SFD Protect) to Protect Sabah's Natural Treasures (Flora & Fauna)	253,990.00	253,952.00	99.99	Project Completed
10	D11 0200 0013	Upgrading and Strengthening Forest Fire Control Capabilities in Sabah	371,690.00	371,690.00	100.00	Project Completed
11	D11 0200 0014	Development of Arboretum for Collection of Living Plants for Species of Interest in Sepilok, Sandakan, Sabah	340,010.00	340,009.46	100.00	Project Completed
12	D11 0200 0016	Eco-Tourism Development Project With The Involvement of Tourism Cooperative, Mukim Batu Puteh, KOPEL in Pin Supu Forest Reserve, Kinabatangan	77,046.00	77,043.48	100.00	Project Completed
13	D11 0200 0017	Pulau Berhala Forest Reserve Eco Tourism Development and Management Project, Sandakan	27,140.00	27,140.00	100	Project Completed
14	D11 0200 0019	Development of "Kem Cinta Alam" as an Eco-Tourism Project in Paitan Forest Reserve	10.00	0.00	0.00	• Project completed in 2024 and only received a token allocation of RM10 in 2025.
15	D11 0200 0020	Sustainable Forest Management at Northern Mt. Rara, Kalabakan	455,028.00	447,756.46	98.40	Project Completed
16	D11 0200 0029	ICT Infrastructure Development in Support of the Application System on e-export licence and e-factory licence of timber industry and the extension of Forestry Information in Sabah	812,110.00	812,109.87	100.00	Project Completed
17	D11 0200 0030	Sustainable Forest Management Project of Timimbang and Botitian Forest Reserve, Beluran	800,000.00	800,000.00	100.00	Project Completed
18	D11 0200 0033	Restoration and Conservation of Trusan Sugut Forest Reserve	700,000.00	700,000.00	100.00	Project Completed
19	D11 0200 0034	Sustainable Forest Management Project, Sook Lake Forest Reserve	897,674.00	897,618.00	99.99	Project Completed
20	D11 0200 0035	Eco-Tourism Facilities Development Project at Nuluhon Forest Reserve FMU 10 Tambunan	800,000.00	800,000.00	100.00	Project Completed

No	Project Code	Project Title	Allocation (RM)	Expenditure (RM)	Expenditure (%)	Notes
21	D11 0200 0040	Sustainable Forest Management Project for Forests Reserve in FMU17B and 17D (SFM PINTAR Project) at Tongod and Telupid Forestry District	239,195.00	239,194.38	100.00	Project Completed
22	D11 0200 0041	Sustainable Forest Management Project at Pensiangan Forest Reserve (FMU12)	129,820.00	129,814.50	100.00	Project Completed
23	D11 0200 0042	The Upgrading Works of the Infrastructure at the Sabah Forestry Institute, Telupid	430,000.00	430,000.00	100.00	Project Completed
24	D11 0200 0043	Development Project For Upgrading Of Housing Complex and Infrastructure at Forest Research Centre (FRC), Sepilok (Phase II)	1,627,010.00	1,627,009.04	100.00	Project Completed
25	D11 0200 0044	Construction of the Digital Building For The Forest Resource Division, Sabah Forestry Department	324,000.00	324,000.00	100.00	• Project to continue in 2026
		Total	**24,841,588.00**	**24,824,968.08**	**99.93**	

The Department ranked 3rd among the 14 Departments/Agencies under the Chief Minister's Department (Refer to Table 7).

Table 7: Summary of Departments/Agencies under the Chief Minister's Department Based on their 2025 Expenditure Performance.

No	Department/Agencies under JKM	Allocation (RM)	Expenditure (RM)	Expenditure (%)
1	Lembaga Kemajuan Tanah Negeri Sabah (SAFODA)	6,947,000.00	6,947,000.00	100
2	Lembaga Kemajuan Perhutanan Negeri Sabah (LKTNS/ SLDB)	3,500,000.00	3,500,000.00	100
3	Sabah Forestry Department	24,841,588.00	24,824,968.08	99.93
4	Unit Perancang Ekonomi Negeri	3,766,210.00	3,756,907.38	99.75
5	Bahagian Pengurusan dan Kewangan	98,472,606.22	96,878,542.75	98.38
6	Dewan Bandaraya Kota Kinabalu	23,678,915.00	23,259,955.00	98.23
7	Jabatan Tanah dan Ukur	66,008,180.78	64,400,055.16	97.57
8	Pusat Biodiversiti Sabah (SaBC)	200,040.00	190,095.77	95.03
9	Jabatan Perkhidmatan Awam Negeri Sabah	4,733,800.00	3,339,520.16	70.55
10	Jabatan Hal Ehwal Agama Islam Negeri Sabah (JHEAINS)	10,292,013.00	7,176,804.79	69.73
11	Majlis Perbandaran Sandakan (MPS)	7,887,339.00	4,999,379.45	63.38
12	Jabatan Arkib Negeri Sabah	0.00	0.00	0.00
13	Yayasan Sabah	10.00	0.00	0.00
14	Jabatan Kerja Raya (JKR)	10.00	0.00	0.00
	Total	**250,327,702.00**	**239,274,118.54**	**95.58**

3. Applications for Development Projects under the 13th Malaysia Plan Funded by the Federal Government

A total of 5 projects were approved by the Federal Government with a total approved cost of RM15,940,000.00, of which RM2,448,000.00 was approved under Rolling Plan 1 (RP1). Meanwhile, for existing projects, the approved cost under the 13th Malaysia Plan (RMKe13) amounted to RM54,851,600.00, with a total of RM13,005,900.00 approved under RP1.

Table 8: Summary of Development Budget Approved under the 13th Malaysia Plan by the Federal Government

No	Project Title	Approved Cost in RMKe13	2026 Allocation (Approved) Rolling Plan 1
A)	**EXISTING PROJECT**		
1	Development of Forest Conservation, Extension and Education in the Sepilok Forest Reserve (Phase II)	7,925,000	2,640,500
2	Operations and strengthening the safety of Sabah State Forest Reserve Throungh the Use of Earth Observation Satellite	4,165,000	250,400
3	Upgrading of Infrastructure and Scientific Collections of Forest Biodiversity and Conservation in Sabah	5,740,000	1,065,000
4	Biometric Land Use Development and Forest Conservation Programme in Sabah	15,004,600	4,220,000

No	Project Title	Approved Cost in RMKe13	2026 Allocation (Approved) Rolling Plan 1
5	Ecosystem Conservation Programme in The Triangular Area of Lokan Peneplains Complex, Sabah	7,057,000	1,428,000
6	Forest Restoration at Sandakan Forestry Region Forest Reserve Sabah	14,960,000	3,402,000
	Total Existing Project	**54,851,600**	**13,005,900**
B)	**NEW PROJECT**		
1	Study on the Strengthening of the Heart of Borneo Sabah Initiative	1,600,000	500,000
2	Strengthening and Implementation of the Sabah State Mangrove Action Plan	8,000,000	1,000,000
3	Project on Strengthening Sabah State Climate Change Actions Towards the Long-Term Low Carbon Emissions Development Strategy 2030 for the Forestry Sector	3,000,000	308,000
4	Ramsar Site Nomination	500,000	220,000
5	Project on Strengthening Forest Fire Prevention and Control in the West Coast and Interior Divisions of Sabah	2,840,000	420,000
	Total New Project	**15,940,000**	**2,448,000**
	Grand Total	**70,791,600**	**15,453,900**

4. Applications for Development Projects under the 13th Malaysia Plan Funded by the State Government

A total of 29 projects were approved by the Sabah State Government, with an approved cost of RM119,400,010.00. The approved ceiling allocation under the 13th Malaysia Plan (RMKe13) amounted to RM118,750,010.00, while the approved allocation for 2026 is RM17,851,000.00.

Meanwhile, for existing projects, the approved cost and ceiling under the 13th Malaysia Plan (RMKe13) amounted to RM4,700,000.00, with an approved allocation of RM1,000,000.00 for 2026.

Table 9: Summary of Development Budget Approved under the 13th Malaysia Plan by the State Government

No	Project Title	Approved Cost in RMKe13	Approved Ceiling in RMKe13	2026 Allocation (Approved)
A)	**EXISTING PROJECT**			
1	Construction of Digital Building For The Forest Resources Divisions, Sabah Forestry Department	4,700,000	4,700,000	1,000,000
	Total Existing Project	**4,700,000**	**4,700,000**	**1,000,000**
B)	**NEW PROJECT**			
1	Sustainable Forest Management Project for the Deramakot Forest Reserve	25,158,000.00	25,158,000.00	6,000,000.00
2	Project on the Management of the Ulu Segama–Malua Forest Landscape Conservation Area, Lahad Datu	9,782,500.00	9,782,500.00	1,500,000.00
3	Project on the Management of the Tangkulap–Sg. Talibu Forest Landscape Conservation Area, Tongod	2,997,800.00	2,997,800.00	750,000.00
4	Project on the Management of the Ulu Kalumpang–Wullersdorf Forest Landscape Conservation Area, Kunak	4,620,000.00	4,620,000.00	1,000,000.00
5	Project on the Management of the Tabin–Silabukan Forest Landscape Conservation Area, Lahad Datu	2,775,000.00	2,775,000.00	400,000.00
6	Project on the Management of the Lumaku Forest Landscape Conservation Area, Tenom	5,155,000.00	5,155,000.00	1,250,000.00
7	Project on the Management of the Sugut Forest Landscape Conservation Area, Beluran	8,614,700.00	8,614,700.00	2,000,000.00
8	Project on the Management of the Timimbang–Botitian Forest Landscape Conservation Area, Beluran	2,780,000.00	2,780,000.00	600,000.00
9	Project on the Management of the Nuluhon–Trusmadi Forest Landscape Conservation Area, Keningau	2,250,000.00	2,250,000.00	200,000.00
10	Project on the Management of the Smart Forest Landscape Conservation Area (Tongod and Telupid)	4,060,000.00	4,060,000.00	1,250,000.00
11	Project on the Management of the Northern Gunung Rara Forest Landscape Conservation Area, Kalabakan	5,305,000.00	5,305,000.00	900,000.00
12	Project on the Management of the Pensiangan Forest Landscape Conservation Area, Nabawan	4,858,000.00	4,858,000.00	700,000.00

No	Project Title	Approved Cost in RMKe13	Approved Ceiling in RMKe13	2026 Allocation (Approved)
13	Construction of a New Office Building and Staff Quarters for the Tongod District Forestry Office	6,245,000.00	6,245,000.00	500,000.00
14	Forestry Sector Training Facility Development Project at the Sabah Forestry Institute, Telupid, Sabah Forestry Department	4,840,000.00	4,840,000.00	1,000,000.00
15	Construction of a Staff Housing Complex for the Sook District Forestry Office	1,430,000.00	1,430,000.00	130,000.00
16	Staff Housing for the Kalabakan District Forestry Office, Tawau	3,795,000.00	3,145,000.00	345,000.00
17	Integrated Infrastructure Development of the Forest Research Centre Sepilok Complex, Sandakan, Sabah	2,250,000.00	2,250,000.00	250,000.00
18	Design and Construction of High-Performance Forest Roads to Enhance Logging Operations and Forest Management Efficiency in the Deramakot Forest Reserve	10,000,000.00	10,000,000.00	1,000,000.00
19	Study on the Impact of Sustainable Forest Management (SFM) Implementation in Sabah	2,340,000.00	2,340,000.00	21,000.00
20	Study and Development of a Biodiversity Credit Policy in Sabah for Sustainable Forest Conservation and Economic Growth	1,000,000.00	1,000,000.00	20,000.00
21	Project on the Review of the Sabah Forest Landscape Restoration Plan	650,000.00	650,000.00	50,000.00
22	Study on the Effectiveness of Plantation Management and Royalty Collection Methods from Agroforestry Licensed Areas	600,000.00	600,000.00	35,000.00
23	Digital Transformation and Empowerment of the Timber Industry in Sabah through Infrastructure, Systems and Training	3,000,000.00	3,000,000.00	250,000.00
24	Upgrading Skills and Digital Technology for Sabah State Forest Resource Information	580,000.00	580,000.00	200,000.00
25	Community Empowerment Programme for Communities Located Near Forest Reserves in Sabah	10.00	10.00	0.00
26	Project on Strengthening Local Community Participation in Forest Recreation Development Programmes in Selected Forestry Regions	1,800,000.00	1,800,000.00	400,000.00
27	Conservation of Strategic Plant Species in the Germplasm Collection at the Forest Research Centre Sepilok, Sandakan, Sabah	650,000.00	650,000.00	100,000.00
28	Strengthening and Enhancing Forest Fire Control Capacity in Sabah	1,000,000.00	1,000,000.00	200,000.00
29	Biodiversity, Environment and Natural Resources Protection Programme (Flora and Fauna) and Forest Crime Prevention in Sabah	864,000.00	864,000.00	500,000.00
	Total New Project	**119,400,010**	**118,750,010**	**17,851,000**
	Grand Total	**124,100,010**	**123,450,010**	**22,551,000**







MyProjek System Training Workshop, Putrajaya, 6 February 2025.





Budget Defense with NRES in Kuching, 21 February 2025.





Visit by the Ministry of Economy on 15 December 2025.



Working Visit by the Secretary of the NRES Development Division to the Development Project at the Research Station within the Danum Valley Conservation Area, Lahad Datu on 24 June 2025.

VEHICLE MAINTENANCE

In 2025, the Sabah Forestry Department operated a total of 359 vehicles throughout the state, with more than half of the fleet consists of vehicles that are over 10 years old. Approximately 80% of these vehicles are utilised for field operations by the District Forestry Offices and the Sepilok Forest Research Centre, while the remaining 20% are assigned to the Headquarters and the Sabah Forestry Institute (FORiNS Telupid).

Vehicles stationed at the Forestry Headquarters, FORiNS Telupid, the Sandakan Regional Forestry Office and the Keningau Regional Forestry Office are maintained by the Vehicle Workshop Unit under the PPA Division. Meanwhile, vehicles at other locations are maintained through the e-Move System managed by JKR.

As operating expenditure allocations from the Sabah State Government are no longer provided for the procurement of new vehicles, the Department now relies on Federal and State Development allocations for vehicle replacement and acquisition. In 2025, a total of 18 new vehicles were procured (refer to Table 10).

Table 10: Number of Vehicles Purchased in 2025.

No.	Vehicle No.	Vehicle Model	Service Location
1	SD1789Y	Toyota Hilux Double Cab	PPA Division
2	SJM2235	Toyota Hilux Double Cab	FRC Sepilok
3	SJN650	Toyota Hilux Double Cab	FRC Sepilok
4	SJN658	Toyota Hilux Double Cab	RFC Sepilok
5	SJN670	Toyota Hilux Double Cab	FRC Sepilok
6	SJN653	Toyota Hilux Double Cab	Serudong DFO
7	SJN7164	Toyota Hilux Double Cab	Kota Kinabalu DFO
8	SJN7167	Toyota Hilux Double Cab	Sipitang DFO
9	SJN7169	Toyota Hilux Double Cab	Beaufort DFO
10	SJN7178	Toyota Hilux Double Cab	Tibow DFO
11	SJN7180	Toyota Hilux Double Cab	Kota Kinabalu RFO
12	SJN7182	Toyota Hilux Double Cab	Ranau DFO
13	SJN7183	Toyota Hilux Double Cab	Kunak DFO
14	SJN7184	Toyota Hilux Double Cab	Pitas DFO
15	SJN7185	Toyota Hilux Double Cab	Kudat DFO
16	SJN7186	Toyota Hilux Double Cab	Kudat RFO
17	SJN9863	Toyota Hilux Double Cab	Ulu Segama Malua DFO
18	SJN9871	Toyota Hilux Double Cab	Ulu Segama Malua DFO



Among the vehicles purchased in 2025

i. Generators

The PPA Division prioritises electricity supply requirements for five (5) Forestry District Offices: Tongod, Tambunan, Tibow, Kalabakan, and Serudong. These five Forestry District Offices are not connected to the SESB electricity grid and therefore rely entirely on generators for power supply. Due to intensive usage and the ageing condition of the generators, operation and maintenance costs have become increasingly high.

ii. Fuel Usage for 2025

A comparison of fuel consumption across five (5) major forestry regions, Forestry Headquarters, the Forest Research Centre Sepilok and FORiNS, Telupid is presented in Tables 11 and 12. The accuracy of the fuel usage data recorded by the PPA Division is highly dependent on the timely and accurate submission of information by the respective forestry offices.

Table 11: Summary of Diesel Usage by Forestry Offices for the last 6 years, 2020 - 2025.

Responsible Forestry Offices (PTJ)	Year (2020 - 2025)						Average Diesel (Litres) Consumption per year
	2020	2021	2022	2023	2024	2025	
SFD Headquarters	83,654	96,140	116,086	125,597	157,493	95,175.08	112,358
Tawau RFO	406,624	405,698	351,654	478,076	492,031	293,236.72	404,553
Sandakan RFO	398,502	405,642	369,030	375,287	453,310	405,661.17	401,239
Kudat RFO	44,906	46,941	27,804	52,390	55,435	21,869.60	41,558
Kota Kinabalu RFO	40,701	35,345	34,681	50,628	52,911	40,337.24	42,434
Keningau RFO	142,411	147,434	121,767	134,553	130,407	126,210.24	133,797
FRC Sepilok, Sandakan	35,735	47,039	70,239	58,424	72,104	61,704.78	57,541
FORiNS, Telupid	8,497	9,177	11,388	9,177	11,387	12,031.34	10,276
Total	**1,161,030**	**1,193,416**	**1,102,649**	**1,284,132**	**1,425,078**	**1,056,226.17**	**1,203,755**

Note: FRC: Forest Research Centre, DFO: District Forestry Office, RFO: Regional Forestry Office

Table 12: Summary of Petrol Usage by Forestry Offices for the last 6 years, 2020 - 2025.

Responsible Forestry Offices (PTJ)	Year (2020 - 2025)						Average Petrol (Litres) Consumption per year
	2020	2021	2022	2023	2024	2025	
SFD Headquarters	27,950	12,400	14,380	13,980	12,725	11,533	15,495
Tawau RFO	65,204	59,929	41,390	72,825	73,054	69,239	63,607
Sandakan RFO	157,896	193,769	190,690	112,480	110,670	155,714	153,537
Kudat RFO	24,486	27,622	34,936	27,524	29,724	23,200	27,915
Kota Kinabalu RFO	6,118	5,960	9,782	14,719	16,417	7,811	10,135
Keningau RFO	1,606	2,438	1,685	1,478	794.83	1,335	1,556
FRC Sepilok, Sandakan	13,150	11,865	11,865	7,626	9,565	10,754	10,804
FORiNS, Telupid	-	-	-	-	-	-	-
Total	**296,410**	**313,983**	**304,728**	**250,632**	**252,950**	**279,586**	**283,048**

Note: FRC: Forest Research Centre, DFO: District Forestry Office, RFO: Regional Forestry Office

NURSERY UNIT

The Nursery Unit at the Sabah Forestry Headquarters plays an important role in forest conservation and restoration efforts. It supports reforestation programmes, ecosystem restoration, as well as biodiversity preservation to sustain forests for present and future generations.

Throughout 2025, the Nursery Unit has carried out various activities that have had a positive impact on forest conservation and the landscaping of the Sabah Forestry Headquarters area. Ongoing efforts in maintenance, restoration, and infrastructure development in this area will continue to be strengthened and ensure environmental sustainability for future generations.



The nursery at the Sabah Forestry Headquarters is under the supervision of the nursery unit



Maintenance of plants around the Sabah Forestry Headquarters area.



Decoration of plants for the closing ceremony of the Forest Sports event at the Sandakan Rainforest Park.

FOREST REVENUE & EXPENDITURE

In 2025, the Finance and Budget Division remains committed to support the Department's requirements in budgeting, accounting, and overseeing Forest Revenue and Expenditure. The total revenue for 2025 amounted to RM161,121,865.37, reflecting a 6.16% decrease compared to 2024. The majority of total revenue, 97.90%, was derived from royalties on round logs.

The Sabah Forestry Department received allocations of its Annual Recurrent Expenditure from the State Government through the Ministry of Finance. The funding for Development Expenditure was sourced from allocations by the State Government through the Chief Minister's Department and by the Federal Government through the Ministry of Natural Resources and Environmental Sustainability.

In 2025, Sabah Forestry Department spent RM112,474,696.52, which accounts for 95.95% of the RM117,219,557.00 allocated for Annual Recurrent Expenditure, representing approximately 69.81% of the total revenue.

For the Development Fund, the Department received an allocation of RM24,841,588.00 from the Chief Minister's Department and incurred expenditure amounting to RM24,824,968.21, representing 99.93% of the allocated fund. Additionally, the Department received RM54,625,252.00 from the Federal Government and spent RM54,624,255.12, representing 99.99% of the allocated amount.

Table 1: Forest Revenue

Head/Sub-Head	Item	Amount (RM)
S00 120 150801 000000 71401	Royalty and fees on forest produce	127,265,371.78
S00 120 150801 000000 71402	Royalty on export of processed timber	4,378,256.54
S00 120 150801 000000 71501	Premium on round logs	10,522,637.00
S00 120 150801 000000 72102	Timber Scaling, Grading, Inspection, Marketing & Other Services	1,061,041.77
S00 120 150801 000000 72106	Vehicle and logging equipment fees & processing fees	1,642,013.00
S00 120 150801 000000 72107	Fees for issuance and renewal of licences and permits	6,038,776.25
S00 120 150801 000000 77107	Other timber produce	7,781,309.03
S00 120 150801 000000 77115	Forest recreation	2,432,460.00
	Total	**161,121,865.37**



The Forest Revenue & Expenditure Division of Sabah Forestry Department is proud to have been named the recipient of the Excellent Record Management Award 2025. Congratulations!

Table 2 : Expenditure for 2025 According to Allocation Head S16 120 150801.

Activity	Program	Allocation (RM)	Expenditure (RM)	Allocation Balance (RM)
	STATE SUPPLY EXPENDITURE			
010000	**GENERAL ADMINISTRATION & RESOURCES MANAGEMENT**			
010100	Staff Emolument Administration	68,438,654.42	65,184,561.69	3,254,092.73
010200	Human Resource Administration	16,781,468.00	16,729,822.29	51,645.71
010300	General Office Administration	2,970,010.00	2,840,114.16	129,895.84
010400	Labour	1,300,000.00	1,038,989.95	261,010.05
010500	Uniform and Clothing	203,000.00	203,000.00	0.00
010600	Human Resource Development	436,510.00	436,459.01	50.99
010700	Security Services	1,302,308.58	1,171,903.38	130,405.20
010800	Strengthening Integrity	20,000.00	19,814.25	185.75
	Sub-Total	**91,451,951.00**	**87,624,664.73**	**3,827,286.27**
020000	**MAINTENANCE**			
020100	Maintenance of Forest Roads	800,000.00	786,642.75	13,357.25
020200	Maintenance and Operation of Motor Boats	1,110,000.00	864,967.47	245,032.53
020300	Maintenance of Plant and Vehicle	4,950,000.00	4,925,745.36	24,254.64
020400	Maintenance and Repair of Office Machines	450,010.00	443,155.11	6,854.89
020500	Maintenance of Buildings	2,085,000.00	2,073,049.75	11,950.25
020600	Maintenance & Replacement of Surveys, Draughting & Field Equipment	150,010.00	150,000.00	10.00
	Sub-Total	**9,545,020.00**	**9,243,560.44**	**301,459.56**
030000	**EXTENSION & EDUCATION**			
030100	Administration of Sabah Forestry Institute	1,270,780.00	1,260,331.81	10,448.19
030200	Operation of Extension & Education Service	170,000.00	169,997.17	2.83
030300	Operation of Audio-Visual Equipment Centre	15,000.00	14,998.00	2.00
030400	Environmental Education Programme	61,000.00	60,730.15	269.85
	Sub-Total	**1,516,780.00**	**1,506,057.13**	**10,722.87**
040000	**RESEARCH & DEVELOPMENT**			
040100	Research & Development	33,000.00	28,967.08	4,032.92
040200	Research & Development of Natural Forest Sector	747,500.00	746,469.80	1,030.20
040300	Research & Development of Forest Plantation Sector	623,000.00	619,956.52	3,043.48
040400	Research & Development of Forest Products Sector	221,010.00	220,335.14	674.86
040500	Research & Development Technical Service Sector	564,500.00	557,737.74	6,762.26
040600	Biodiversity Centre	325,000.00	314,118.14	10,881.86
040700	Forestry Ethnobotany	40,520.00	39,788.20	731.80
040800	Flora & Fauna Research	36,000.00	35,728.00	272.00
	Sub-Total	**2,590,530.00**	**2,563,100.62**	**27,429.38**
050000	**DEVELOPMENT & FOREST RESTORATION**			
050100	Chartered Flights	900,000.00	879,130.90	20,869.10
050200	Advertisement	40,000.00	24,145.47	15,854.53
050300	World Forestry Day Celebration	40,000.00	39,956.00	44.00
050400	Promotion of Forest Products	30,000.00	29,998.35	1.65
050500	Privatisation of Forest Services	2,500.00	2,500.00	0.00
050600	Return of Tax Deduction	2,000,000.00	1,984,671.61	15,328.39
050700	Urban Forestry & Forest Recreational Development	395,000.00	319,569.78	75,430.22
050800	Forest Development	2,154,456.00	2,111,899.53	42,556.47
050900	Satelite Images, Aerial Photographs and Processing	190,000.00	189,991.04	8.96
051000	Forest Management Database	150,000.00	149,779.60	220.40
051100	Greenhouse Gas Monitoring	2,374,300.00	2,262,898.85	111,401.15
	Sub-Total	**8,276,256.00**	**7,994,541.13**	**281,714.87**

Activity	Program	Allocation (RM)	Expenditure (RM)	Allocation Balance (RM)
060000	SPECIAL EXPENDITURE			
060100	Office Furniture, Machine & Equipment/Publication	244,000.00	242,166.00	1,834.00
060200	Purchase of Research, Survey & Workshop Equipment	20,000.00	19,849.65	150.35
060300	Purchase of Launches, Boats and Outboard Engines	150,000.00	150,000.00	0.00
060400	Expenses in Connection with ISO	130,010.00	129,999.35	10.65
060500	Agro Forestry Management	690,000.00	439,214.16	250,785.84
060600	Forest Services	1,300,000.00	1,257,425.91	42,574.09
060700	Expenses Related To 'Occupational Safety & Health' (OSH)	35,000.00	35,000.00	0.00
060800	Monitor and Control of Forest Fires	355,000.00	354,886.00	114.00
060900	Management of 'Pusat Sejadi' (Recreational Sites)	440,000.00	439,636.00	364.00
061000	Management of Mangrove Areas and Seashore	250,000.00	249,682.50	317.50
061100	ICT Support	170,010.00	169,998.00	12.00
061200	Enforcement and Protection of Forest Resources	55,000.00	54,914.90	85.10
	Sub-Total	**3,839,020.00**	**3,542,772.47**	**296,247.53**
	TOTAL	**117,219,557.00**	**112,474,696.52**	**4,744,860.48**
D11 000200	**STATE DEVELOPMENT EXPENDITURE**			
00020001 00000	Deramakot Forest Reserve Sustainable Forest Management Project	7,531,140.00	7,531,139.75	0.25
00040001 00000	Sustainable Development and Management Planning of Tangkulap-Pinangah Forest Reserve	1,813,680.00	1,805,966.61	7,713.39
00050001 00000	Forest Recreation Destination Development Project in Kunak Forestry District	200,000.00	199,999.70	0.30
00060001 00000	Tabin Forest Reserve and Silabukan Forest Reserve Biodiversity Development and Management Project	529,585.00	529,458.34	126.66
00070001 00000	Ulu Segama-Malua Forest Reserve Sustainable Forest Management Project	2,880,170.00	2,878,816.64	1,353.36
00080001 00000	Ulu Kalumpang Forest Reserve Sustainable Forest Management Project	2,000,000.00	1,999,960.24	39.76
00090001 00000	Burned Forest Restoration Program in Trus Madi Tambunan Forest Reserve	1,402,290.00	1,402,289.61	0.39
00100001 00000	Upgrading the Skills and Digital Technology of Sabah Forest Resources Information	200,000.00	200,000.00	0.00
00110001 00000	Development of an Integrated Landscape Management System in Four Districts in the Heart of Borneo Area in Sabah	0.00	0.00	0.00
00120001 00000	Empowering and Strengthening the Special Enforcement Team of the Forestry Department (SFD Protect) to Protect the Natural Treasures (Flora and Fauna) of Sabah State	253,990.00	253,952.00	38.00
00130001 00000	Upgrading and Strengthening Forest Fire Control Capabilities in Sabah	371,690.00	371,690.00	0.00
00140001 00000	Development of Arboretum for Collection of Living Plants for Species of Interest in Sepilok, Sandakan Sabah	340,010.00	340,009.46	0.54
00160001 00000	Eco-Tourism Development Project with the Involvement of the Batu Puteh Mukim Tourism Cooperative, KOPEL in the Pin Supu Forest Reserve, Kinabatangan	77,046.00	77,043.48	2.52
00170001 00000	Eco-Tourism Development Project and Forest Reserve Management on Pulau Berhala, Sandakan	27,140.00	27,140.00	0.00
00180001 00000	Strategic Plan for Silam Coastal Conservation Area (SCCA), Lahad Datu	0.00	0.00	0.00
00190001 00000	Nature Love Camp Development Project in Paitan Forest Reserve as Eco-Tourism	10.00	0.00	10.00
00200001 00000	Sustainable Forest Management Project in the North of Mount Rara, Kalabakan	455,028.00	447,756.46	7,271.54
00290001 00000	Development of ICT Infrastructure in Supporting the Export E-License Application System and Timber Industry E-License and Development of Forestry Information in Sabah	812,110.00	812,110.00	0.00

Activity	Program	Allocation (RM)	Expenditure (RM)	Allocation Balance (RM)
00300001 00000	Sustainable Forest Management Project Timimbang Forest Reserve and Botition Forest Reserve, Beluran	800,000.00	800,000.00	0.00
00320001 00000	Development Project to Upgrade Housing Complex and Basic Infrastructure of Forestry Research Centre (PPP), Sepilok	0.00	0.00	0.00
00330001 00000	Sugut Forest Reserve Restoration and Conservation Project	700,000.00	700,000.00	0.00
00340001 00000	Sustainable Forest Reserve Management Project for Sook Lake Forest Reserve, Sook	897,674.00	897,618.00	56.00
00350001 00000	Eco-Tourism Infrastructure Development Project in the Nuluhon Trusmadi FMU 10 Forest Reserve Area, Tambunan	800,000.00	800,000.00	0.00
00360001 00000	Development of a Canopy Walkway to Improve the Quality of Dissemination, Development and Forest Education at the Rainforest Discovery Center (RDC)	0.00	0.00	0.00
00370001 00000	Assessment of the Contribution of Permanent Forest Reserves and Related Industries to the Economy of Sabah State	0.00	0.00	0.00
00380001 00000	Sabah Forestry Department Archives Building Reconstruction Project, Sandakan	0.00	0.00	0.00
00390001 00000	Development and Upgrading of Marine Infrastructure Facilities, Sabah Forestry Department (Phase II)	0.00	0.00	0.00
00400001 00000	Sustainable Forest Reserve Management Project for Forest Reserves in FMU17B and 17D Areas (SMART SFM Project) Tongod and Telupid Forestry Districts	239,195.00	239,194.38	0.62
00410001 00000	Sustainable Forest Management Project for Pensiangan Class 1 Forest Reserve (FMU 12)	129,820.00	129,814.50	5.50
00420001 00000	Infrastructure Upgrade Works at Sabah Forestry Institute, Telupid	430,000.00	430,000.00	0.00
00430001 00000	Development Project to Upgrade the Housing Complex and Basic Infrastructure of the Forestry Research Centre (PPP), Sepilok (Phase 2)	1,627,010.00	1,627,009.04	0.96
00440001 00000	Construction of Digital Building of the Forest Resources Division of the Sabah State Forestry Department	324,000.00	324,000.00	0.00
TOTAL		**24,841,588.00**	**24,824,968.21**	**16,619.79**
P23	**FEDERAL DEVELOPMENT EXPENDITURE**			
P23 08600 4044 031	Tree Planting for the 100 Million Tree Planting Campaign	1,220,000.00	1,220,000.00	0.00
P23 08601 1404 034	Research on Planting Mangrove Tree and Suitable Species on the National Coastal Coast	149,996.00	149,996.00	0.00
P23 07200 1911 001	Development of a Program for Prevention and Monitoring of Land Fire in Gambut and Other Areas at Risk of Fire to Overcome Hazard	27,341,966.00	27,341,467.56	498.44
P23 10200 0120 001	Development of Forest Conservation, Development, Extension and Education in the Sepilok Forest Reserve (Phase II)	4,109,880.00	4,109,849.13	30.87
P23 10200 0130 001	Upgrading Eco-Tourism Recreational Facilities in Simpan Sepagaya Forest, Lahad Datu, Sabah	1,800,480.00	1,800,478.94	1.06
P23 10300 0060 001	Forest Fire Prevention and Control System Strengthening Project (Phase II)	1,275,090.00	1,275,090.00	0.00
P23 10400 0090 001	Sabah State Forest Resources Database and Geospatial Technology Development Project	270,700.00	270,700.00	0.00
P23 10400 0110 001	Enforcement of Operations and Strengthening of Sabah State Forest Security Through the Use of Earth Observation Satellite Data (Earth Observation Satellite)	980,000.00	980,000.00	0.00
P23 10800 0040 001	Klias Peninsula Peat Area Development and Management Project (Phase II)	936,200.00	936,143.08	56.92
P23 10801 0110 001	Encouraging Tree Planting by Small Planters and Local Communities as an Important Wood Source for the Timber Industry	104,300.00	104,269.75	30.25
P23 10801 0120 001	Strengthening Forest Ecosystem Services Monitoring to Support the Development of Green Strategies in Sabah	707,900.00	707,809.75	90.25

Activity	Program	Allocation (RM)	Expenditure (RM)	Allocation Balance (RM)
P23 10801 0130 001	Bio-Prospects For Research And Development Of Fungi, Wild Ginger And Medicinal And Aromatic Plants (Tub) In The Danum Valley, Maliau Basin, Imbak Canyon And Forest Conservation Areas In Sabah	675,400.00	675,400.00	0.00
P23 10801 0140 001	Project To Upgrade Infrastructure And Scientific Collections For Forest Biodiversity And Conservation In Sabah	2,145,000.00	2,145,000.00	0.00
P23 10801 0150 001	Program For Increasing Production And Productivity Of Seed Supply Through Intensive Selection Of "Candidate Plus Tree" (CPT)	432,000.00	431,979.93	20.07
P23 10801 0160 001	Biometric Development Program For Land Use And Forest Conservation In Sabah	2,956,500.00	2,956,416.18	83.82
P23 10801 0170 001	Ecosystem Conservation Program In The Triangle Area Of The Lokan Peneplains Complex, Sabah	2,145,000.00	2,144,930.49	69.51
P23 10803 0220 001	Totally Protected Area (TPA) Strengthening Works in the Field to Ensure the Safety of Forest Resources in Sabah State	82,640.00	82,639.99	0.01
P23 10803 0230 001	Mangrove Preservation Forest Management Project in Selected Locations in Sabah	1,276,010.00	1,276,006.12	3.88
P23 10803 0240 001	Forest Restoration Project in the Forest Reserve Area, Sandakan Forestry Region, Sabah	3,906,500.00	3,906,500.00	0.00
P23 10804 0020 001	Heart of Borneo Sabah State (Phase II)	2,109,690.00	2,109,578.20	111.80
	TOTAL	**54,625,252.00**	**54,624,255.12**	**996.88**

Table 3: Forest Revenue from 2001 to 2025 (25 years).

Year	Royalty (RM)	Others (RM)	Total (RM)
2001	202,585,038.25	39,024,395.50	241,609,433.75
2002	188,045,479.13	85,366,508.73	273,411,987.86
2003	262,363,614.30	73,862,722.40	336,226,336.70
2004	274,813,970.74	109,564,505.99	384,378,476.73
2005	370,900,384.52	94,724,389.35	465,624,773.87
2006	388,691,889.75	116,468,314.95	505,160,204.70
2007	461,909,339.00	89,021,171.42	550,930,510.42
2008	341,369,489.52	105,168,098.01	446,537,587.53
2009	256,791,374.54	73,061,574.10	345,032,829.42
2010	236,566,235.04	60,571,076.41	297,137,311.45
2011	149,591,209.91	53,252,455.34	202,843,665.25
2012	134,394,362.66	42,136,615.65	176,530,978.31
2013	149,009,674.16	32,585,129.36	181,594,803.52
2014	140,075,564.38	45,478,035.70	185,553,600.08
2015	134,034,593.11	55,362,938.97	189,397,532.98
2016	180,835,059.93	44,592,788.39	225,427,848.32
2017	161,725,285.13	39,272,260.20	200,997,545.33
2018	152,196,261.10	42,912,620.26	195,108,881.36
2019	126,804,070.84	22,080,438.44	155,428,412.34
2020	94,485,585.15	18,037,972.17	112,523,557.32
2021	149,992,958.91	20,421,788.59	170,414,747.50
2022	166,746,302.41	14,958,533.97	181,704,836.38
2023	126,418,962.43	28,901,925.06	155,320,887.49
2024	139,779,113.47	31,262,834.73	171,041,948.20
2025	**131,643,628.32**	**29,478,237.05**	**161,121,865.37**

Table 4: Forest Revenue over State Revenue from 2001 to 2025 (25 years).

Year	Forest Revenue (RM)	State Revenue (RM)	Forest Revenue over State Revenue (%)
2001	241,609,433.75	1,199,385,374.23	20.14
2002	273,411,987.86	1,499,630,608.76	18.23
2003	336,226,336.70	1,879,619,102.48	17.88
2004	384,378,476.73	1,785,791,466.00	21.52
2005	465,624,773.87	1,778,199,765.23	26.18
2006	505,160,204.70	2,260,939,835.83	22.34
2007	550,930,510.42	2,779,104,315.45	19.82
2008	446,537,587.53	3,341,310,613.80	13.36
2009	345,032,829.42	3,049,875,788.00	11.31
2010	297,137,311.45	4,201,122,080.61	7.07
2011	202,843,665.25	4,368,479,936.71	4.64
2012	176,530,978.31	4,363,372,338.87	4.05
2013	181,594,803.52	4,343,611,439.19	4.18
2014	185,553,600.08	4,541,531,514.84	4.09
2015	189,397,532.98	3,513,554,855.53	5.39
2016	225,427,848.32	3,442,612,049.65	6.55
2017	200,997,545.33	3,887,050,674.71	5.17
2018	195,108,881.36	4,158,855,666.94	4.69
2019	155,428,412.34	4,264,325,295.49	3.64
2020	112,523,557.32	3,591,342,846.87	3.13
2021	170,414,747.50	5,449,977,601.54	3.13
2022	181,704,836.38	6,960,590,582.89	3.00
2023	155,320,887.49	6,973,000,000.00	2.23
2024	171,041,948.20	6,842,000,000.00	2.50
2025	**161,121,865.37**	**6,759,145,665.72**	**2.38**

Table 5: Forest Expenditure & Revenue from 2001 to 2025 (25 years).

Year	Forest Expenditure (RM)	Forest Revenue (RM)	Expenditure over Forest Revenue (%)
2001	60,079,185.70	241,609,433.75	24.87
2002	56,574,198.83	273,411,987.86	20.69
2003	58,997,018.29	336,226,336.70	17.54
2004	57,382,600.82	384,378,476.73	14.92
2005	65,177,306.99	465,624,773.87	13.99
2006	76,295,192.96	505,160,204.70	15.10
2007	78,123,273.54	550,930,510.42	14.18
2008	94,071,710.04	446,537,587.53	21.07
2009	94,941,337.01	345,032,829.42	36.34
2010	94,095,856.23	297,137,311.45	31.66
2011	91,870,081.70	202,843,665.25	45.29
2012	87,187,639.29	176,530,978.31	49.39
2013	101,801,922.41	181,594,803.52	56.06
2014	108,581,300.18	185,553,600.08	58.52
2015	102,532,382.89	189,397,532.98	54.14
2016	101,611,074.61	225,427,848.32	45.07
2017	104,610,648.48	200,997,545.33	52.05
2018	100,191,657.16	195,108,881.36	51.35
2019	97,457,114.70	155,428,412.34	62.7
2020	93,584,756.34	112,523,557.32	83.2
2021	92,122,684.25	170,414,747.50	54.06
2022	93,691,447.56	181,704,836.38	52.00
2023	99,000,340.19	155,320,887.49	63.73
2024	105,198,269.56	171,041,948.20	61.50
2025	**112,125,833.79**	**161,121,865.37**	**69.59**

ACTIVITIES OF THE FINANCE & BUDGET DIVISION IN 2025











A. Engagement Session with the Sabah State Ministry of Finance on 9 October 2025.
B. Penyerahan Pengurusan Pembayaran Perbelanjaan Pembangunan (D11) bagi Pejabat Perhutanan Daerah Deramakot kepada PTJ Kewangan Wilayah Sandakan.
C. Lembaga Pemeriksaan Tahunan (LPT) bagi Terimaan Tahun 2025.
D. Coordination Meeting on E-POL System Issues, Deramakot District Forest Office, Sabah Forestry Department, on 24 October 2025.
E. Briefing on the Coordination of Salary Increase (SSPA) Phase 2, Sabah State Treasury Department, on 30 December 2025.



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A delicate bloom of a majestic riverine dipterocarp, Keruing neram (*Dipterocarpus oblongifolius*) thrives along forest rivers on rocky soils.

FOREST INDUSTRIES & TRADE

In 2025, Sabah's forestry and timber industry continued to operate in a challenging environment, with noticeable changes in production, trade and market demand. Log production from natural forests declined during the year, in line with ongoing efforts to promote more sustainable forest management. At the same time, plantation forestry showed encouraging growth and gradually became a more important source of raw materials for the industry.

Across the wood processing sector, most major products recorded lower output compared to the previous year, largely due to softer global demand. However, some segments such as wood pellets remained relatively stable, supported by continued interest in renewable energy sources. The performance of non-timber forest products was mixed, depending on the type of product and area of production.

In terms of trade, the overall value of forest product exports declined, although key markets such as the United States, Japan and Taiwan continued to play an important role. On the import side, there was a clear shift in trends, particularly with the sharp increase in plywood imports to meet the needs of local industries, including manufacturing and construction.

Overall, the industry continues to be supported by a well-established network of millers, exporters, importers and suppliers. Both domestic and foreign investment remain important in sustaining the sector, while various training programmes and regulatory efforts carried out during the year helped to strengthen compliance and improve coordination within the industry.

Overall, 2025 was a period of adjustment for Sabah's timber industry as it faced market pressures, but at the same time moving steadily towards more sustainable and resilient practices for the future.



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PRODUCTION OF LOGS

In 2025, log production from natural forests declined to 0.84 million cubic metres, compared to 1.05 million cubic metres in the previous year, representing a decrease of 20%. Forest reserves remained the primary source, contributing 84% of the total production, followed by alienated land (10%) and stateland (6%). In terms of licensing categories, Sustainable Forest Management Licence Agreements (SFMLA) or Long-Term Licence Agreements (LTL) accounted for 80% of total log production, while Form I Licences contributed 13% and Form IIB Licences made up the remaining 7%.

Plantation log production recorded a decline in 2025, with total production falling by 17.64% to 262,833.63 cubic metres compared to 319,111.00 cubic metres in 2024. The majority of the plantation logs originated from alienated land (88.7%), with the remaining 11.30% sourced from forest reserves. Among SFMLA holders, Maxland Timber Sdn Bhd was the leading contributor, accounting for 6% of the total plantation log production. The principal plantation timber producers were Acacia Forest Industries Sdn Bhd (46.5%) and Sabah Softwoods Bhd (29%).

PRODUCTION OF TIMBER PRODUCTS AND THE WOOD-BASED INDUSTRY

In 2025, Sabah's timber industry faced several challenges, with most wood processing sectors recording declines compared to the previous year. Among major forest products, veneer experienced the sharpest decline, dropping by 33.1%, followed by sawn timber (18.2%) and plywood (10.2%). Downstream products, particularly briquettes and sawdust charcoal products, recorded a substantial decrease of 69.4%, falling to 1,691 metric tonnes. However, wood pellets registered a significant growth of 266.3%, reaching 46,305.00 metric tonnes. This increase was supported by sustained global demand for biomass fuel as a renewable energy source.

PRODUCTION OF NON-TIMBER FOREST PRODUCE

Production of non-timber forest products showed mixed performance in 2025. Charcoal production declined to 115,700 kg compared to 133,350 kg in 2024. Mangrove pole production decreased by 32.9% to 3,900 running metres, with production confined to the Kudat District. Nibong production totalled 3,400 running metres, while rattan production reached 8,000 cubic metres, primarily in the Beaufort and Kudat Districts. However, comprehensive data on other non-timber forest products, such as bamboo and wild honey were not available.

TIMBER INDUSTRY OF SABAH IN 2025

Sabah's forestry sector remained active in 2025, with 113 registered millers operating under the jurisdiction of the Sabah Forestry Department. These mills, which are involved in sawn timber production, plywood manufacturing, moulding, finger joint production, chips and other products, formed the backbone of the region's wood-based industry. The industry is further supported by a broad network of 173 exporters, 71 importers, 169 suppliers, and 35 jetties, all contributing to a well-established timber trade ecosystem.

EQUITY AND INVESTMENT IN SABAH'S WOOD-BASED INDUSTRY FOR 2025

As of 2025, the cumulative equity and investment in Sabah's wood-based industry amounted to RM2.31 billion, comprising RM0.92 billion in equity and RM1.39 billion in investments. These figures represent the accumulated equity and investment values recorded over the years up to the end of 2025, rather than investments made during 2025 alone.

Malaysian (Bumiputra) participation accounted for RM8.2 million in equity and RM763.8 million in mill investments, bringing the cumulative total to approximately RM772.0 million. Meanwhile, foreign investors contributed RM281.4 million in equity and RM622.3 million in investments, resulting in a cumulative foreign equity and investment value of approximately RM903.7 million.

Among the districts, Tawau recorded the highest cumulative foreign equity and investment, with RM109.0 million in equity and RM308.9 million in mill investments. This was followed by Keningau, with RM87.4 million in equity and RM123.5 million in investments. Foreign equity and investments were also recorded in Sandakan (RM64.2 million in equity and RM113.3 million in investments), Kota Kinabalu (RM20.5 million and RM74.9 million), and Kudat (RM0.26 million and RM1.58 million).

Foreign investors from Taiwan, China, Hong Kong, Singapore, South Korea, Japan, Indonesia, Netherlands, Brunei, and Germany continued to play an important role in Sabah's wood-based industry. Their long-term capital participation has strengthened the industry's global competitiveness and contributed significantly to the state's economic development.

EXPORT OF FOREST PRODUCTS

In 2025, Sabah's forest product exports recorded a contraction, declining by 17.3% to RM0.94 billion compared to RM1.13 billion in 2024. The downturn was reflected across nearly all major product categories, primarily due to weaker global demand and market adjustments. Plywood remained the leading export commodity, contributing RM530 million or 57% of total export value, followed by sawn timber (RM218 million) and veneer (RM29 million).

Among plantation log exporters, Acacia Forest Industries Sdn Bhd, located in the Kudat District, was the largest contributor with RM31 million in total exports, primarily to Indonesia and Sarawak. This was followed by Sabah Softwoods Berhad (RM18 million) and Boonrich Sdn Bhd (RM3.5 million).

In terms of export destinations, the United States emerged as the largest market, accounting for 19.71% of total timber export earnings, followed by Japan (17.86%) and Taiwan (10.76%). The contribution of EU countries remained insignificant, accounting for only 1.55% of total timber export earnings in 2025.

IMPORTS

In 2025, imports of sawn timber/large square and veneer, utilized as inputs for local processing mills, declined to 6,609.48 cubic metres from 15,433.33 cubic metres in 2024. Sawn timber comprised approximately 75% of total imports in this segment, while veneer accounted for 25%.

The most defining trend in 2025 was the continued and accelerated surge in imported plywood. Volumes increased by a substantial 38.0% compared to 2024, reaching a record high of 85,269.72 m^3. This growth was primarily driven by sustained demand from the solar panel industry at the Kota Kinabalu Industrial Park (KKIP), which relies on low-cost imported plywood for manufacturing protective packaging. The construction sector's preference for affordable imported plywood for formwork also remained a key contributing factor.

Recognizing the escalating seriousness of this situation, the Sabah Forestry Department intensified its efforts to develop a comprehensive management framework for imported plywood. In 2025, the department intensified its monitoring and stakeholder engagement efforts to fully understand the market dynamics and the concerns of local manufacturers.

TIMBER ROYALTY AND OTHER FEES

No revisions were made to royalty rates during the reporting year, thus maintaining the rates introduced on 1 January, 2022.

TIMBER PRODUCTION AND TRADE STATISTICS

Comprehensive timber trade statistics and agro-forestry production data for 2025 are provided in Tables 1 to 19.

Table 1: Log Production Land Category 2025 (Natural Forest).

Type of Land	Volume (M^3)	% of Total Production
Forest Reserves	705,193.02	83.91
Alienated Land	84,766.33	10.09
State Land	50,433.23	6.00
Total	**840,392.58**	**100.00**

Table 2: Log Production Distribution by Region & District 2025 (Natural Forest).

Region	District	Production (M^3)
Keningau Region	Nabawan	82,860.63
	Sook	62,129.52
	Tambunan	4,968.89
	Tibow	75,258.52
Keningau Total		**225,217.56**
Kota Kinabalu Region	Beaufort	387.12
	Ranau	2,305.16
	Sipitang	5,999.55
Kota Kinabalu Total		**8,691.83**
Kudat Region	Kota Marudu	30,283.30
	Pitas	24,656.59
Kudat Total		**54,939.89**
Sandakan Region	Beluran	51,821.33
	Deramakot	18,151.93
	Kinabatangan	32,871.25
	Sandakan	15,382.81
	Telupid	12,091.42
	Tongod	29,760.26
Sandakan Total		**160,079.00**
Tawau Region	Kalabakan	126,627.87
	Kunak	1,281.74
	Lahad Datu	634.82
	Semporna	-
	Serudong	262,386.05
	Tawau	533.82
Tawau Total		**391,464.30**
	Grand Total	**840,392.58**


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Table 3: Production Of Plantation Logs By Company in 2025.

Company	Forest Reserves(M^3)	Stateland (M^3)	Alienated Land (M^3)	Total (M^3)
1. SFMLA				
• Asian Forestry Company (Sabah) Sdn Bhd	5,954.69	-	-	5,954.69
• Benta Wawasan Sdn Bhd	1,112.03	-	-	1,112.03
• Jawala Plantation Industries Sdn Bhd	1,017.26	-	-	1,017.26
• Lebih Hasil Sdn Bhd	212.40	-	-	212.40
• Maxland Timber Sdn Bhd	16,398.16	-	-	16,398.16
• KM Hybrid Plantation Sdn Bhd	4,409.67	-	-	4,409.67
• KTS Plantation Sdn Bhd	25.86	-	-	25.86
• Sapulut Forest Development Sdn Bhd	653.69	-	-	653.69
Total SFMLA	**29,783.76**	**-**	**-**	**29,783.76**
2. Other Agencies & Small Holder				
• Acacia Forest Industries Sdn Bhd	-	-	122,285.95	122,285.95
• Sabah Softwood Bhd	-	-	75,981.71	75,981.71
• Boonrich Sdn Bhd	-	-	3,784.06	3,784.06
• Other Smallholders	-	-	**30.998.18**	**30,998.15**
Total Other Agencies & Smallholders	**-**	**-**	**233,049.87**	**233,049.87**
Grand Total	**29,783.76**	**-**	**233,049.87**	**262,833.63**

*This table includes recorded data on plantation logs production by licensed smallholders (AL) for local processing.

Table 4: Log Exported, Distribution by Region & District 2025 (Plantation Logs).

Region	District	Production (M^3)
Keningau Region	Keningau	88.63
	Nabawan	-
	Sook	4,409.67
	Tambunan	-
	Tibow	1,670.95
Keningau Total		**6,169.25**
Kota Kinabalu Region	Beaufort	-
	Ranau	-
	Sipitang	-
Kota Kinabalu Total		**-**
Kudat Region	Kota Marudu	-
	Pitas	128,240.64
Kudat Total		**128,240.64**
Sandakan Region	Beluran	-
	Deramakot	15,582.16
	Kinabatangan	458.24
	Sandakan	25.86
	Telupid	-
	Tongod	1,028.40
Sandakan Total		**17,094.66**
Tawau Region	Kalabakan	2,218.87
	Kunak	-
	Lahad Datu	4,022.57
	Semporna	92.13
	Serudong	-
	Tawau	74,874.87
Tawau Total		**81,208.44**
	Grand Total	**232,712.99**

Table 5: Comparative Total Production of Timber Products in 2024 & 2025.

Product	Unit	2024		2025		% change in Production 2024/2025
		Input (M	Output	Input	Output	
Sawn Timber	m^3	408,640.71	187,137.25	332,680.95	153,088.45	-18.19
Veneer	m^3	665,038.54	42,300.95	581,394.00	28,284.57	-33.13
Plywood	m^3		289,226.51		259,683.77	-10.21
Fancy Plywood	m^3		0.00		79.41	0.00
Blockboard	m^3		1,847.36		1,316.72	-28.72
Laminated Board	m^3		1,574.89		1,370.62	-12.97
Laminated Veneer Lumber (LVL)	m^3		1,802.26		1,562.63	-13.30
Moulding	m^3	33,375.96	23,869.54	30,046.33	20,902.17	-12.43
Chips	m^3	34,758.47	28,095.72	43,335.62	32,956.11	17.30
Treated Timber	m^3	24,282.72	24,282.72	24,291.99	24,291.99	0.04
Kiln Dried Timber	m^3	85,776.12	85,776.12	65,698.22	65,698.22	-23.41
Total	**m^3**	**1,251,872.52**	**685,913.32**	**1,077,447.11**	**589,234.66**	**-14.09**
Briquettes(Carbon Rod)/Sawdust Charcoal	m/t	8,215.76	5,534.70	4,911.33	1,691.30	-69.44
Wood Pellets	m/t	16,492.00	12,641.90	62,107.70	46,305.40	266.29
Total	**m/t**	**24,707.76**	**18,176.60**	**67,019.03**	**47,996.70**	**164.06**

Table 6: Production Of Timber Products By Region (2025).

Type of Product	Unit	Sandakan		Kota Kinabalu		Keningau		Tawau		Kudat		Total	
		Input	Output	Input	Output	Input	Output	Input	Output	Input	Output	Input	Output
Sawn Timber	m^3	42,000.80	17,981.37	24,625.64	11,021.73	87,399.91	42,441.32	174,861.12	80,280.25	3,793.48	1,363.78	332,680.95	153,088.45
Veneer	m^3	168,388.17	3,655.70	1,537.61	0.00	191,028.75	495.49	220,439.47	24,133.38	-	-	581,394	28,284.57
Plywood	m^3		93,304.26		0.00		95,617.77		70,761.74	-	-		259,683.77
Fancy Plywood	m^3		0.00		0.00		0.00		79.41	-	-		79.41
Blockboard	m^3		337.56		0.00		679.1		300.06	-	-		1,316.72
Laminated Board	m^3		295.79		1,074.83		0		0	-	-		1,370.62
Laminated Veneer Lumber (LVL)	m^3		0.00		0.00		818.14		744.49	-	-		1,562.63
Moulding	m^3	0.00	0.00	13,261.53	9,386.47	3,731.50	2,640.70	12,962.54	8,786.17	90.76	88.83	30,046.33	20,902.17
Chips	m^3	0.00	0.00	8,413.00	7,832.20	4,302.00	3,689.48	30,620.62	21,434.43	0.00	0.00	43,335.62	32,956.11
Treated Timber	m^3	0.00	0.00	4,066.81	4,066.81	12,994.79	12,994.79	6,121.13	6,121.13	1,109.26	1,109.26	24,291.99	24,291.99
Kiln Dried Timber	m^3	4,364.12	4,364.12	23,791.62	23,791.62	16,116.21	16,116.21	20,119.32	20,119.32	1,306.95	1,306.95	65,698.22	65,698.22
Total	**m^3**	**214,753.09**	**119,938.80**	**75,696.21**	**57,173.66**	**315,573.16**	**175,493.00**	**465,124.20**	**232,760.38**	**6,300.45**	**3,868.82**	**1,077,447.11**	**589,234.66**
Briquettes (Carbon Rod)/ Sawdust Charcoal	m/t	-	-	0.00	0.00	4,815.33	1,619.30	96.00	72.00	-	-	4,911.33	1,691.30
Wood Pellets	m/t	-	-	-	-	38,046.00	27,842.7	24,061.70	18,462.70	-	-	62,107.70	46,305.40
Total	**m/t**	**0.00**	**0.00**	**0.00**	**0.00**	**42,861.33**	**29,462.00**	**24,157.70**	**18,534.70**	**0.00**	**0.00**	**67,019.03**	**47,996.70**

Note : "0.00" : No Production
"-" : No Mill License

Table 7: Comparative Total Number Of Active and Inactive Mills According to Type of Activities (2024/2025).

Type of Activities	2025			2024			Increase/(decrease) in number of mill 2024/2025	
	Licenced	Active	Inactive	Licenced	Active	Inactive	Licenced	Active
Sawmill	93	57	36	95	62	33	-3	-5
V/P/PPY/BB/LB	34	19	15	36	20	16	-2	-1
Moulding	70	26	44	78	33	45	-8	-7
Chips	7	3	4	9	3	6	-2	0
Treated Timber	20	9	11	24	9	15	-4	0
Kiln Dried Timber	39	23	16	42	26	16	-3	-2
Briquettes (Carbon Rod)/ Sawdust Charcoal	4	2	2	4	2	2	0	0
Wood Pellets	5	4	1	6	2	4	-1	2
Densified Wood	1	0	1	1	0	1	0	0

V/P/PPY/BB/LB : Veneer, plywood, polyply, blockboard and laminated board.
Note : Some of the mills are integrated, hence producing more than one product.

Table 8: Maximum Input Capacity of Mills Utilizing Logs (2025).

Type of Mill	Installed Input Capacity (M^3)
Sawmill	0.6 Mil
Veneer/Plywood Mill	0.8 Mil
Chip Mill	0.1 Mil
Briquettes(Carbon Rod)/ Sawdust Charcoal	0.08 Mil
Wood Pellets	
Total	**1.58 Mil**

Table 9: Accumulated Investment And Equity Structure In The Wood Based Industry (2024/2025).

Country of Citizenship	Sabah (2024)				Sabah (2025)			
	Equity (RM)	%	Investment (RM)	%	Equity (RM)	%	Investment (RM)	%
Taiwan	838,708,862.00	86.76	319,028,714.45	50.77	153,523,031.00	54.56	318,172,878.96	51.13
Japan	36,000,000.00	3.72	147,645,440.00	23.50	36,000,000.00	12.79	141,045,440.00	22.67
Singapore	7,150,000.00	0.74	11,898,283.64	1.89	7,000,000.00	2.49	10,995,283.64	1.77
Korea	73,029,131.00	7.55	94,729,112.70	15.08	73,029,131.00	25.95	96,989,623.44	15.59
Germany	10,000,000.00	1.03	35,121,498.00	5.59	10,000,000.00	3.55	35,121,498.00	5.64
Indonesia	100.00	0.00	2.12	0.00	100.00	0.00	2.12	0.00
USA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	500,000.00	0.05	1,500,000.00	0.24	500,000.00	0.18	1,500,000.00	0.24
China	1,040,000.00	0.11	3,435,700.00	0.55	1,040,000.00	0.37	3,435,700.00	0.55
Brunei	300,000.00	0.03	15,000,000.00	2.39	300,000.00	0.11	15,000,000.00	2.41
Foreign Investment	**966,728,093.00**	**49.97**	**628,358,750.91**	**43.81**	**281,392,262.00**	**30.47**	**622,260,426.16**	**44.89**
Malaysian	**968,021,189.00**	**50.03**	**805,845,307.67**	**56.19**	**642,177,323.00**	**69.53**	**763,842,303.23**	**55.11**
Total	**1,934,749,282.00**	**100.00**	**1,434,204,058.58**	**100.00**	**923,569,585.00**	**100.00**	**1,386,102,729.39**	**100.00**

Table 10: Employment In The Wood-Based Industry In Sabah (2025).

Type of Mill	Bumiputra	Non-Bumiputra	Malaysian	Others	Total
Sawmill	468	340	808	746	**1,554**
V/P/PPY/BB/LB	902	207	1,109	2,408	**3,517**
Moulding	410	138	548	309	**857**
Chips	35	4	39	2	**41**
Treated Timber	10	2	12	12	**24**
Kiln Dried Timber	82	26	108	181	**289**
Briquettes(Carbon Rod)/Sawdust Charcoal	19	22	41	0	**41**
Wood Pellets	3	5	8	7	**15**
Total	**1,929**	**744**	**2,673**	**3,665**	**6,368**

Table 11: Production of Charcoal (2023-2025).

District	KG		
	2023	2024	2025
Sandakan	14,080	0	0
Tawau	70,700	133,350	115,700
Total	**84,780**	**133,350**	**115,700**

Table 12: Production of Mangrove Poles for Piling (2023-2025).

Region/ District	Running Metre		
	2023	2024	2025
Kudat	1,200	5,810	3,900
Total	**1,200**	**5,810**	**3,900**

Table 13: Total Number of Charcoal Factory Permits (2024/2025).

District	No. of Permits		Total Permits	Number of Kilns
	Active	Inactive		
Sandakan	4	0	4	16
Tawau	0	2	2	3
Total	**4**	**2**	**6**	**19**

Table 14: Timber Exports Based On Export Value By Main Markets (2025).

Table 14.1: Top 5 Destinations of Logs Export in 2025.

Country	Volume (M^3)	Value RM (FOB)	% of Total Exported Volume
India	21,305.12	17,702,647.11	49.08
Japan	10,328.19	8,636,649.36	23.79
China	5,194.86	6,129,989.20	11.97
Taiwan	4,168.98	3,649,943.14	9.60
South Korea	2,020.04	1,118,294.61	4.65
Other	390.65	349,036.91	0.90
Total Round Logs exported	**43,407.84 m^3**		

Table 14.2: Top 5 Destinations of Plantation Log Export in 2025.

Country	Volume (M^3)	Value RM (FOB)	% of Total Exported Volume
Indonesia	139,423.48	34,407,846.98	68.32
Sarawak	58,722.22	14,172,029.93	28.77
India	5,711.46	5,227,173.48	2.80
China	147.66	136,332.29	0.07
P. Malaysia	75.76	48,497.86	0.04
Total Plantation logs exported	**204,080.58 m^3**		

Table 14.3: Top 5 Destinations of Sawn Timber Export (Except Sawn Coconut) in 2025.

Country	Volume (M^3)	Value RM (FOB)	% of Total Exported Volume
Taiwan	30,394.20	70,396,786.84	30.61
China	23,347.28	34,626,440.48	23.51
South Africa	9,659.39	20,503,738.96	9.73
Japan	7,087.59	20,820,836.63	7.14
Philippines	6,225.07	11,571,859.97	6.27
Others	22,584.45	60,143,187.06	22.74
Total Sawn timber exported		**99,297.99 m^3**	

Table 14.4: Top 5 Destinations of Veneer Export in 2025.

Country	Volume (M^3)	Value RM (FOB)	% of Total Exported Volume
Taiwan	4,676.65	6,229,281.84	28.57
Sarawak	2,824.28	5,573,156.22	17.26
India	2,600.40	4,610,622.94	15.89
Japan	1,966.07	5,634,780.16	12.01
P. Malaysia	1,314.54	3,370,084.95	8.03
Others	2,985.55	3,297,363.18	18.24
Total Veneer exported		**16,367.49 m^3**	

Table 14.5: Top 5 Destinations of Plywood Export in 2025.

Country	Volume (M^3)	Value RM (FOB)	% of Total Exported Volume
United States	75,225.51	180,578,974.83	29.46
Japan	62,299.29	128,166,265.05	24.40
South Korea	27,616.79	52,429,272.95	10.82
P. Malaysia	16,032.22	33,575,142.12	6.28
Thailand	14,448.35	27,460,343.03	5.66
Others	59,711.60	108,935,845.69	23.39
Total Plywood exported		**255,333.76 m^3**	

Note* Table 14 reports are based on Sistem Jualan Hasil Perhutanan (SJHP) in 2025

Table 15: Main Timber Trading Partners (2025).

Country/Destination	Total RM (FOB)	%
United States	184,552,418.96	19.71
Japan	167,271,075.66	17.86
Taiwan	100,756,585.99	10.76
South Korea	81,320,243.40	8.68
Peninsular Malaysia	43,930,431.07	4.69
China	42,396,257.86	4.53
Indonesia	36,357,251.98	3.88
Thailand	29,312,361.02	3.13
Sarawak	26,745,364.25	2.86
Mexico	22,408,066.31	2.39
European Union (EU)	14,546,540.33	1.55
Others	186,869,193.50	19.95
Total	**936,465,790.33**	**100.00**

Table 16: Comparative Exports of Selected Timber Products (2024/2025).

Product	2025			2024			% change		
	Volume	Value RM (FOB)	A. Price (RM)	Volume	Value RM (FOB)	A. Price (RM)	Volume	Value RM (FOB)	A. Price (RM)
Round Logs (m^3)	43,407.8400	37,586,560.33	865.89	73,117.7900	67,528,089.52	923.55	-40.63	-44.34	-6.24
Plantation Logs (m^3)	204,080.5751	53,991,880.54	264.56	282,389.5216	67,256,194.51	238.17	-27.73	-19.72	11.08
Sawn Timber (m^3)	99,297.9943	218,062,849.94	2,196.04	111,923.5920	264,695,243.29	2,364.96	-11.28	-17.62	-7.14
Veneer (m^3)	16,367.4920	28,715,289.29	1,754.43	24,164.3248	44,360,094.10	1,835.77	-32.27	-35.27	-4.43
Plywood (m^3)	255,333.7591	531,145,843.67	2,080.20	285,154.0061	599,228,667.43	2,101.42	-10.46	-11.36	-1.01
Moulding (m^3)	768.0153	4,829,645.80	6,288.48	1,267.1153	9,262,539.95	7,309.94	-39.39	-47.86	-13.97
Blockboard (m^3)	1,291.9284	2,520,695.96	1,951.11	2,253.5858	7,265,590.75	3,224.01	-42.67	-65.31	-39.48
Laminated BC Board (m^3)	667.9916	1,326,871.18	1,986.36	307.2501	1,274,224.77	4,147.19	117.41	4.13	-52.10
Chips (m^3)	17,341.6300	5,440,138.04	313.70	30,826.0600	11,315,599.83	367.08	-43.74	-51.92	-14.54
Finger Joint Products (m^3)	4,458.8125	11,772,754.19	2,640.33	6,533.7622	20,437,040.64	3,127.91	-31.76	-42.40	-15.59

Table 17: Exports of Forest Products (2025).

No.	Product		Volume	RM FOB	U.Price
1	Round Logs	m^3	43,407.8400	37,586,560.33	865.89
2	Plantation Logs	m^3	204,080.5751	53,991,880.54	264.56
3	Rough Sawn Timber	m^3	47,446.0806	114,472,263.38	2,412.68
4	K/D Rough Sawn Timber	m^3	17,013.4595	38,964,765.92	2,290.23
5	S4S Sawn Timber	m^3	6,861.3246	21,061,083.45	3,069.54
6	E4E Sawn Timber	m^3	272.2915	999,340.65	3,670.11
7	Rubber Wood Sawn Timber	m^3	15,181.8500	15,321,405.45	1,009.19
8	S2S Rough Sawn	m^3	1,031.3825	3,950,448.23	3,830.25
9	K/D S2S Sawn Timber	m^3	202.2879	659,151.28	3,258.48
10	K/D S4S Sawn Timber	m^3	789.9915	2,262,346.67	2,863.76
11	E2E Sawn Timber	m^3	89.9485	685,012.64	7,615.61
12	Plantation Sawn Timber	m^3	735.5617	1,137,468.08	1,546.39
13	Sticks	m^3	7,428.6266	15,339,526.85	2,064.92
14	S4S Plantation Sawn Timber	m^3	34.3786	62,801.01	1,826.75
15	K/D Plantation Sawn Timber	m^3	2,210.8108	3,147,236.33	1,423.57
16	Plain/Ordinary Plywood	m^3	255,249.8813	530,091,822.98	2,076.76
17	High Value Added Plywood-Fancy	m^3	83.8778	1,054,020.69	12,566.15
18	Rotary Veneer	m^3	16,367.4920	28,715,289.29	1,754.41
19	Blockboard	m^3	1,291.9284	2,520,695.96	1,951.11
20	Laminated Bare Core Board	m^3	667.9916	1,326,871.18	1,986.36
21	Finger Joint Products	m^3	4,458.8125	11,772,754.19	2,640.33
22	Laminated Window/Door/Beam	m^3	227.5491	1,381,896.66	6,072.96
23	Laminated Veneer Lumber (LVL)	m^3	1,530.6772	3,712,429.37	2,425.35
24	Laminboard	m^3	1,431.5881	1,732,476.63	1,210.18
25	Wood Chips (Others)	m^3	17,341.6300	5,440,138.04	313.70
26	Wood Waste	m/t	4,156.7963	335,713.68	80.76
27	Moulding (Profile)	m^3	768.0153	4,829,645.80	6,288.48
28	Garden Furniture	m/t	1,108.0000	1,765,599.18	1,593.50
29	Prefabricated Buildg Of Wood	m^3	166.7686	1,468,394.86	8,804.98
30	Shingles	kg	59,229.0000	565,783.36	9.55
31	Window	m^3	22.4369	321,109.99	14,311.69
32	Doors	m^3	183.3456	1,594,686.92	8,697.71

No.	Product		Volume	RM FOB	U.Price
33	Aggregate 3-4" Oversize	m/t	9,500.0000	352,550.00	37.11
34	Aggregate 3/4(Graded)/20MM D.A	m/t	155,950.0000	5,133,325.00	32.92
35	Aggregate 3/8 Chipping	m/t	18,100.0000	461,465.00	25.50
36	1 ½ " Crusher Run	m/t	19,500.0000	478,140.00	24.52
37	Stone Dust	m/t	21,950.0000	610,092.50	27.79
38	Briquettes/Sawdust Charcoal	m/t	715.7600	1,367,758.77	1,910.92
39	Wood Pellets	m/t	39,912.2000	19,981,964.47	500.65
	Total			**936,655,915.33**	

Table: 18: Timber Imports to Sabah (2016-2025).

Year	Large Squares & Sawn Timber (m^3)	Veneer (m^3)	Plywood(m^3)	Logs (m^3)	Total (m^3)
2016	23,803.49	55,911.31	12,704.16	3,207.88	95,626.84
2017	18,070.67	58,275.31	9,744.81	-	86,090.79
2018	12,554.48	32,722.53	10,332.22	6,916.45	62,525.69
2019	17,441.91	41,781.66	13,065.08	7,656.33	79,944.97
2020	10,886.28	17,167.82	16,691.76	-	44,745.87
2021	7,391.27	3,086.00	36,860.64	411.61	47,749.52
2022	10,004.91	3,770.68	37,020.88	-	50,796.47
2023	6,739.34	5,117.49	41,553.70	-	53,410.53
2024	8,858.58	6,574.75	61,779.34	-	77,212.67
2025	**4,967.76**	**1,641.72**	**85,269.72**	**-**	**91,879.20**

Table 19: Timber Royalty 2025

(1) Export Royalty on Round Logs including Treated Poles.

Class	Species	Royalty (RM/M^3)		
		FR/NFM	ITP-FR/SL/AL	
A	Belian	400	Irrespective of size	400
B	Merbau/Merbau Lalat	330	Irrespective of size	330
C	• Selangan Batu • Pelawan-Pelawan • Kayu Malam	240	i ≥ 60cm ii 45-59cm (a) iii 30-44cm (a) iv 29cm and below (a)	240 204 168 96
D	• Kapur • Keruing • Agathis	200	i ≥ 60cm ii 45-59cm (a) iii 30-44cm (a) iv 29cm and below (a)	200 170 140 80
E	• Red Seraya • White Seraya • Yellow Seraya • Melapi • Kembang • Kembang Semangkok • Nyatoh • Oba Suluk • Pengiran	180	i ≥ 60cm ii 45-59cm (a) iii 30-44cm (a) iv 29cm and below (a)	180 153 126 72
F	Any other species not mentioned in class A,B,C,D,E,G & H	150	i ≥ 60cm ii 45-59cm (a) iii 30-44cm (a) iv 29cm and below (a)	150 128 105 60
G	Macaranga	20	Irrespective of size	20
			ITP-FR / SL	AL
H	Any plantation timber	Irrespective of size	30 / 30	10

NOTE:
FR: Forest Reserves **NFM**: Natural Forest Management **ITP**: Industrial Tree Plantation Clearance for Natural Logs
AL: Alienated Lands **SL**: State Land
(a) From alienated land, state land and industrial timber plantation approved within Forest Reserve

(2) Local Processing Royalty on Round Logs.

Diameter Class	Rate (RM/M³)			
	FR (NFM)	ITP-FR	SL	AL
1. Logs				
Belian	120	120	120	120
Merbau/Merbau Lalat	120	120	120	120
≥ 60 cm	95	95	95	95
45-59 cm (a)	-	80	80	80
30-44cm (a)	-	45	45	45
29 cm & below	-	35	35	35
Macaranga spp.	5	5	5	5
Log Residues For Natural Logs (Stump,Branches, Top End, Buttress) Note: Does not apply to Belian and Merbau	25	25	25	25
Any planted timber (Plantation species)	-	15	15	0
2. Converted Timber				
Belian	240	240	240	240
Merbau/Merbau Lalat	240	240	240	240
Others	190	190	190	190

NOTE:
FR: Forest Reserves **NFM**: Natural Forest Management **ITP**: Industrial Tree Plantation Clearance for Natural Logs
AL: Alienated Lands **SL**:State Land
(a) From alienated land, state land and industrial timber plantation approved within Forest Reserve

(3) Royalty for 'Confiscated log' /Auctioned timber.

i. Logs	RM 95/m³ irrespective of size, species and source
ii. Converted Timber	RM 190/m³ irrespective of size, species and source

(4) Processed Timber Export Royalty.

Type	Rate (RM/M³)
Belian Sawn Timber	120
Sawn timber of other species	10
All Plywood	10
All Veneer	10
All Mouldings/LVL	5
Woodchips (irrespective of source – Forest Reserve, State Land and Alienated Land)	2.50

(5) Inspection Fees and Certification Charges on Imported Timber.

Type	Rate (RM/M³)
Logs	10
Converted Timber	10
Sawn Timber	10
Veneer	10
Plywood	10

(6) Premium

Type	Premium rate RM/M³	
a) FR/NFM	**60cm and above only**	
1. Yayasan Sabah & Benta Wawasan	15	
	Macaranga: Exempted	
2. Other licenses **after 01 Feb 2002**	20	
	Macaranga: Exempted	
3. Other licenses **before 01 Feb 2002**	According to licenses conditions	
	Macaranga: Exempted	
4. SFMLA	30	
	Macaranga: Exempted	
b) ITP	**≥ 45cm**	**≤ 44cm**
1. Yayasan Sabah & Benta Wawasan	15 Macaranga: Exempted	0 Macaranga: Exempted
2. SFMLA	20 Macaranga: Exempted	5 Macaranga: Exempted
c) Stateland	20 Macaranga: Exempted	5 Macaranga: Exempted
d) FR/ITP (non YS/BW)	20	5
	Macaranga: Exempted	Macaranga: Exempted

SABAH ROUND LOGS EXPORTS 2025 (NATURAL FOREST)

For the year 2025, the Log Export Quota Coordination Committee approved a total export quota of 221,911.35 m³ for natural forest round logs, based on the Annual Working Plan (AWP) projections. This quota represents the maximum allowable volume allocated to eligible SFMLA licensees for export during the year, subject to compliance with export regulations and quota utilisation monitoring.

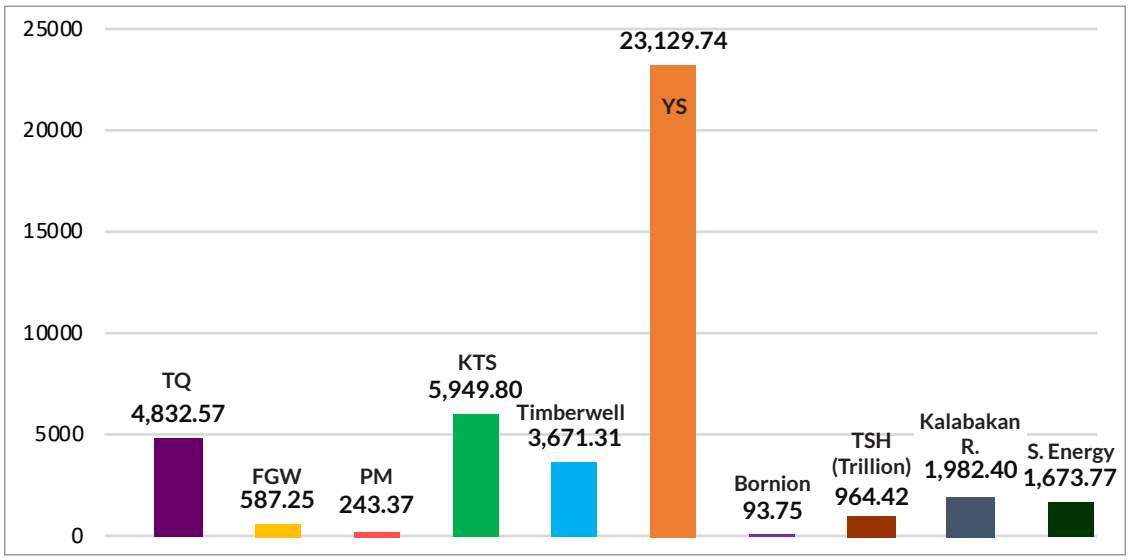
Out of the total approved quota, only 43,128.38 m³ of round logs were exported in 2025, equivalent to 19% utilisation of the allocated quota. This also represents approximately 7% of the total actual log production by the licensees for the year, indicating that the majority of natural forest log production continued to serve the domestic market.

The total export volume of 43,128.38 m³ recorded in 2025 shows a significant decrease of 34.55% compared to 65,899.15 m³ exported in 2024. The decline in export volume was mainly attributed to lower overall production and reduced demand from major importing countries.

In terms of revenue, export royalty collected in 2025 amounted to RM 9,377,857.35, representing a decline of 34.05% from RM 14,219,862.78 in 2024. Similarly, the FOB export value decreased by 38.00%, from RM 60,519,732.74 in 2024 to RM 37,517,869.38 in 2025. The reduction in royalty collection and export value directly corresponded with the lower export volume recorded during the year.

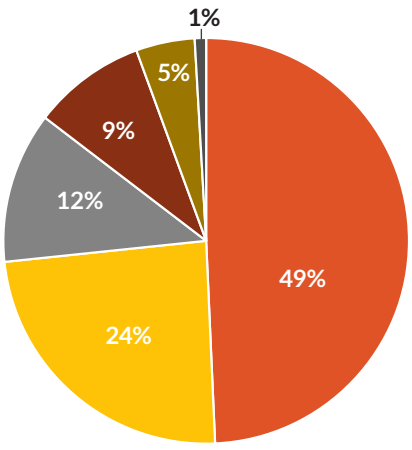
Yayasan Sabah recorded the highest export volume at 23,129.74 m³, contributing approximately 53.6% of total exports. This was followed by KTS Plantation Sdn Bhd with 5,949.80 m³ (13.8%) and Top Quantum Sdn Bhd with 4,832.57 m³ (11.2%). These three exporters collectively accounted for more than 78% of Sabah's total natural round log exports.

The demand for Sabah's natural round logs remained concentrated in several key markets. India continued to be the largest importer in 2025, importing 21,260.98 m³ (49% of total exports), followed by Japan with 10,370.26 m³ (24%) and China with 5,194.86 m³ (12%). Taiwan, the Philippines and Korea accounted for the remaining share.



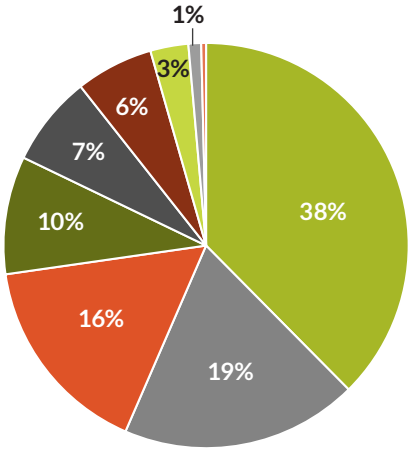
Total Volume	43,128.38 M³
Royalty Collected	RM 9,377,857.35
Export Value	RM 37,517,869.38

Fig. 2 : Graph of Exported Logs (m³) by SFMLA Licensee in 2025.



Market	Volume Of Round Logs Imported By The Country (M³)
India	21,260.98
Japan	10,370.26
China	5,194.86
Taiwan	3,891.59
Philippines	2,020.04
Korea	390.65
Total	43,128.38

Fig. 3 : Round Logs Export Market 2025



Spesies	Volume Exported
Seraya Group	16,205.61
Kapur	8,167.53
Selangan Batu	6,994.19
Mix Ot	4,059.70
Keruing	3,116.67
Belian	2,673.00
Agathis	1,308.95
Melapi	436.46
Merbau	166.27
Total	43,128.38

Fig. 4 : Graph of Exported Logs (m³) by SFMLA Licensee in 2025.

In terms of species composition, the Seraya Group remained the dominant export species, accounting for 38% of total export volume (16,205.61 m³), followed by Kapur 19% (8,167.53 m³) and Selangan Batu 16% (6,994.19 m³). Other exported species included Mix OT (10%), Keruing (7%), and Belian (6%). Demand for Belian and Selangan Batu recorded a notable decline compared to 2024.

The average unit export price in 2025 was recorded at RM 869.91 per m³, slightly lower than RM 918.37 per m³ in 2024, reflecting weaker international demand during the reporting year.

In conclusion, natural forest round log exports in 2025 recorded lower quota utilisation, export volume, royalty collection and FOB value compared to 2024. Nevertheless, India, Japan and China remained the major importing markets for Sabah round logs.

Round Logs Export 2024 vs. 2025.

Data Recorded	2024	2025
Total Permit Issued (LSC)	47	31
Total Volume Export (m³)	65,899.15 m³	43,128.38 m³
Royalty Export Collected (RM)	RM 14,219,862.78	RM 9,377,857.35
Export Value Fob (RM)	RM 60,519,732.74	RM 37,517,869.38

2025 ACTIVITIES

In 2025, the Industry and Forest Trade Division successfully implemented four (4) training programmes and workshops in line with its annual work plan. These programmes were aimed at strengthening officers' understanding of licensing procedures, export and import processes, and regulatory requirements related to forest-based industries in Sabah.

Mill Licensing and Registration Course

On 22 May 2025, a course on mill licensing procedures and the registration requirements for exporters, importers, suppliers and jetty operators was conducted at the Kota Kinabalu District Forestry Office.

The course aimed to enhance officers' understanding of the procedures for processing, issuing and renewing mill licences, as well as the requirements for registration under the Sabah Forestry Department. A total of 33 District Forestry Officers attended the session, which was delivered by officers from the Industry and Forest Trade Division.

The session was delivered by Encik Mohd Zulkifle Bin Abdullah and Puan Siti Nurshafirah Harun from the Industry and Forest Trade Division.



Participants of Mill Licensing and Registration Course at Kota Kinabalu District Forestry Office.

Agarwood Industry Workshop (CITES Act 2008)

Two workshops on the agarwood plantation industry under the CITES Act 2008 (Act 686) were conducted in 2025 to strengthen regulatory understanding and compliance within the industry.

The first workshop was held on 23 July 2025 at the Kota Kinabalu District Forestry Office and was attended by 44 participants comprising forestry officers, field staff and representatives from registered companies. The session was delivered by Encik Bernard Valentine, Head of the Industry and Forest Trade Division.

The second workshop was conducted on 9–10 October 2025 at the Tawau District Forestry Office, with 11 participants in attendance. The workshop was presented by Puan Jauris Salegin from the Industry and Forest Trade Division.

Both workshops provided guidance on application procedures for agarwood operators and clarified the legal requirements and enforcement provisions governing the industry in Sabah.



Agarwood Industry Workshop (CITES Act 2008).

Export and Import Procedures Course

On 12–13 August 2025, the Division organised a two-day course on export and import procedures for wood products in Sabah.

The course aimed to strengthen officers' understanding of operational workflows, compliance requirements and coordination with relevant agencies, including the Royal Malaysian Customs Department (Sabah) and the Department of Agriculture (Sabah). Topics included phytosanitary certification and regulatory procedures for timber trade. The programme was attended by 43 participants.

The invited speakers were Puan Darsy Sarinah Binti Abdul Rasak from the Royal Malaysian Customs Department, and Puan Jovita @ Nicola Joseph together with Encik Mohd Youssry Bin Ruslan from the Sabah Agriculture Department.

Overall, the programmes conducted in 2025 enhanced officers' knowledge, improved regulatory compliance, and strengthened coordination with industry stakeholders and relevant agencies. These initiatives reflect the Division's continued commitment to ensuring sustainable and well-regulated forest industry development in Sabah.





Export and Import Procedure Courses.

Launch of the Sabah Forestry Department e-Removal Pass System

Kota Kinabalu, 2 December 2025 – The Sabah Forestry Department successfully launched its new e-Removal Pass System at the Sabah International Convention Centre (SICC), Kota Kinabalu.

The event was officiated by the Chief Conservator of Forests, Datuk Frederick Kugan, and attended by approximately 150 participants representing government agencies, forestry stakeholders, timber industry players, and strategic partners. Among the organisations present were the State Treasury Department, Economic Planning Unit (UPEN), Pejabat Hasil Bumi (SUHB), Yayasan Sabah, Innoprise Capital Sdn. Bhd., MTIB Sabah, SAFODA, the Royal Malaysian Customs Department, the Jabatan Pengangkutan Jalan Sabah, and the Sabah Timber Industries Association (STIA).

The e-Removal Pass System is a digital platform developed to streamline the issuance and management of Removal Passes for the transportation of forest produce. The system enables online submission, processing, approval, and monitoring, replacing the previous manual procedures. The initiative reflects the Department's commitment to enhancing efficiency, transparency, and accountability in forest administration while improving the traceability of timber products in line with international market requirements, including the European Union Deforestation Regulation (EUDR).

As part of the programme, the Department also conducted a symbolic handover of laptops and tablet devices to Regional Forestry Officers, District Forestry Officers, and Heads of Regional Finance Units. The provision of these digital tools is aimed at supporting the effective implementation and administration of the e-Removal Pass System in the field, enabling officers to carry out verification, monitoring, and approval functions more efficiently. The initiative also strengthens the Department's digital readiness and ensures the smooth adoption of the system across all operational levels throughout Sabah.

The launch of the e-Removal Pass System marks a significant milestone in the Department's digital transformation journey and reinforces its commitment to modernising forestry operations, strengthening forest governance, and promoting sustainable forest management practices in Sabah.

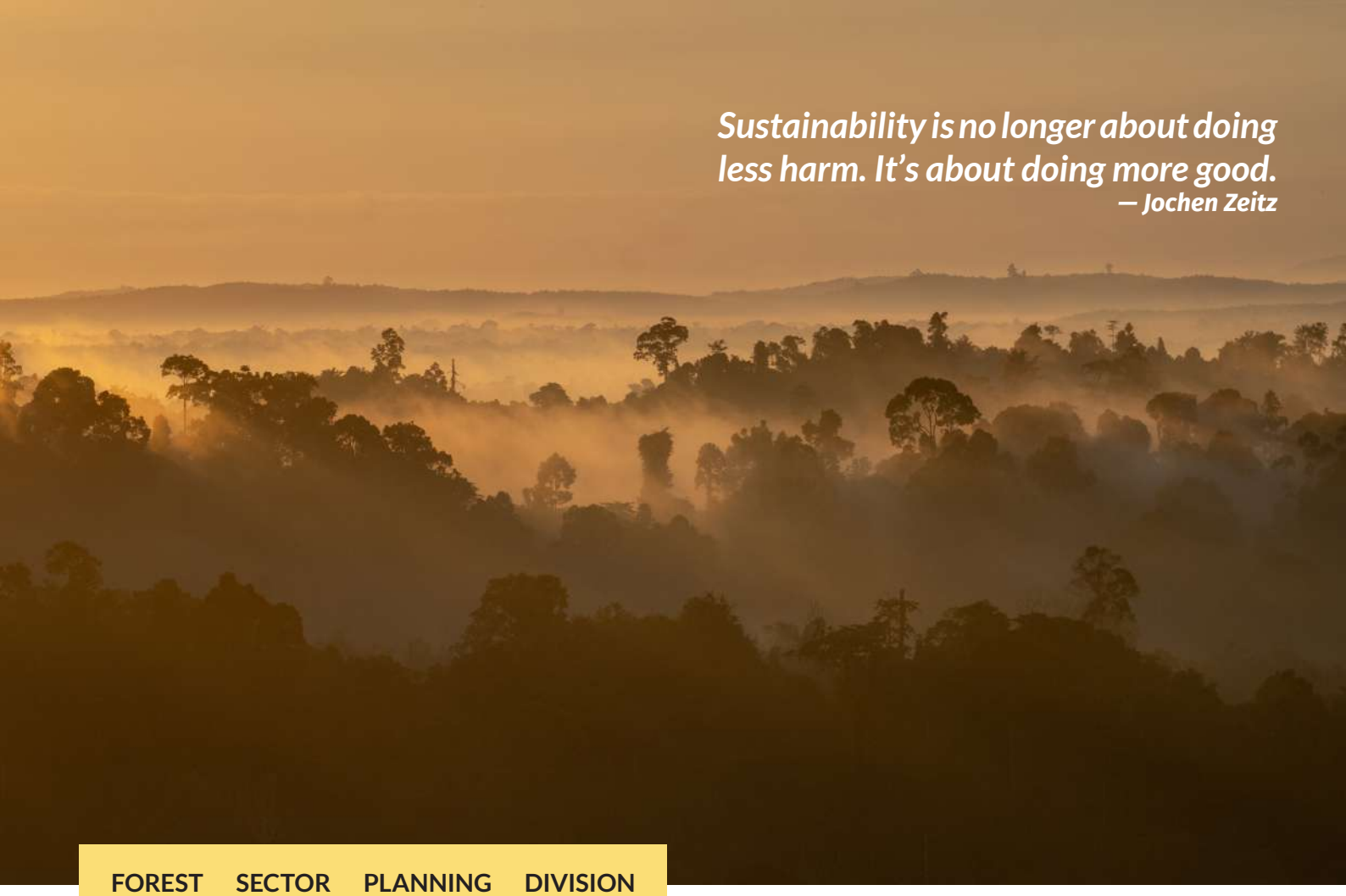




(L-R) The Chief Conservator of Forests arriving for the launching; Datuk Frederick Kugan; and Head of Forest Industries & Trade Division, Mr Bernard Valentine.



Snapshots of the launch of the Sabah Forestry Department's e-Removal Pass System.



Sustainability is no longer about doing less harm. It's about doing more good.
— Jochen Zeitz

FOREST SECTOR PLANNING DIVISION oversees matters related to forest sector planning and development as follows:

- **To plan and coordinate activities related to the drafting and implementation of policies and legislation related to forestry;**
- **To coordinate activities related to sectoral development in the Department;**
- **To coordinate, manage and act as the focal point in the Department for the state government, federal and international organizations in forestry matters;**
- **To establish, manage and coordinate activities related to local, regional and international cooperation and collaboration;**
- **To plan, coordinate and manage the ecotourism programmes in the Department; and**
- **To plan and coordinate the implementation of forestry projects related to climate change such as Carbon, REDD+, Payment for Ecosystem Services (PES) and Nature-based Climate Solutions (NBS).**

FOREST SECTOR PLANNING

1. POLICY AND LEGISLATION UNIT

A. CONSTITUTION OF NEW FOREST RESERVES, DEGAZETTEMENT & RECLASSIFICATION OF FOREST RESERVES

In 2025, the State Legislative Assembly (DUN) passed the Forest (Constitution of Forest Reserve and Amendment) (Amendment) 2025, marking a significant milestone in strengthening forest governance in Sabah. During the year, processes were undertaken to degazette 16,728.9 hectares of Forest Reserves and constitute 20 hectares of new Forest Reserves.

As a result, the total area of State Forest Reserves stood at 3,558,325.673 hectares, reflecting a marginal decrease of 0.47% compared to the previous total of 3,575,034.573 hectares.

Nevertheless, following the approval by the State Cabinet, the gazettement of protected areas under Section 5A of the Forest Enactment 1968, once implemented, is expected to increase the total coverage of Totally Protected Areas (TPA)



YB Datuk Haji Nizam bin Datuk Seri Panglima Haji Abu Bakar Titingan, Assistant Minister to the Chief Minister, delivering the Bill on the Forest (Constitution of Forest Reserve and Amendment) (Amendment) 2025 at the State Legislative Assembly (DUN) on 8 July 2025. (*Photo: Dewan Undangan Negeri Sabah*)

in Sabah to 2,227,731.64 hectares, or approximately 30.06% of Sabah's total landmass of 7.41 million hectares. This achievement would place Sabah as the State with the largest coverage of Totally Protected Areas (TPAs) in Malaysia.

i. Degazettement of Forest Reserves

In 2025, the State Government approved the degazettement of several Forest Reserve areas with a total area of 16,728.9 hectares, involving Forest Reserves of Class I (Protection), Class II (Commercial), Class IV (Amenity), Class V (Mangrove) and Class VI (Virgin Jungle Reserve). The excision of these Forest Reserve areas was primarily aimed for the State's socio-economic developments i.e., providing land for settlements and villages in the districts of Pitas, Tawau, Keningau, Sipitang, Tenom and Kalabakan.

These areas are to be subsequently gazetted as village reserves under the Land Ordinance (Sabah Cap. 68). Additionally, selected degazettement exercises were carried out to facilitate the establishment of the Immigration, Customs, Quarantine and Security (ICQS) Complex for international border control between Malaysia and Indonesia, following the relocation of Indonesia's capital to East Kalimantan. The degazettement was also necessitated because of the overlap between Forest Reserve boundaries and existing industrial land titles, including silica factory land in Kudat.

ii. Constitution of Forest Reserves

Table 1: Forest Reserves excised in 2025.

No	Forest Reserves (FR)	Class	Ha.
1.	Sungai Serudong	I	20
2.	Sungai Serudong		3
3.	Sungai Tiagau (Ext.)		162
4.	Tawau		1
5.	Trus Madi	II	55
6.	Sipitang		15,978
7.	SAFODA Kinarut	IV	320.9
8.	Kudat	V	3
9.	Bengkoka Peninsula		158
10.	Umas Umas	VI	28
Total Degazettement FR (Ha)			16,728.9 ha

In 2025, a proposed 20-hectare area at Sungai Serudong was identified for the constitution of a new Forest Reserve to replace part of the Sungai Serudong Class I Forest Reserve, which was excised for the establishment of the Serudong–Titik A.708 (Simanggaris) ICQS Complex. This land swap arrangement was intended to ensure the continuity of forest reserve coverage in the area.

The proposed Forest Reserve is in line with the Sabah Forest Policy 2018, which stipulates that any excised Forest Reserve shall be replaced with an area of comparable size and quality to prevent any net loss of Forest Reserve areas. The Sungai Serudong area is recognised for its environmental significance, particularly in supporting mangrove ecosystems and wildlife habitats, thereby reinforcing the State's commitment to forest conservation and sustainable forest management.

In the reporting year, the *Jawatankuasa Hutan Simpan Negeri Sabah*, which is responsible for evaluating and determining proposals for the constitution, degazettement and reclassification of Forest Reserves, convened on 28 February 2025. The meeting was chaired by YBhg. Datuk Sernam Singh, Secretary of Natural Resources, and co-chaired by YBhg. Datuk Frederick Kugan, the Chief Conservator of Forests, and Mr. Zulkifli Suara, Deputy Chief Conservator of Forests (Operation).

The meeting was attended by permanent members comprising officers from the Sabah Forestry Department (SFD) and the Lands and Surveys Department (L&SD). The Committee primarily focused on identifying suitable areas for designation as protected areas in support of Sabah's target to achieve 30% Totally Protected Areas (TPAs) coverage by 2025.

Table 2: Newly gazetted Forest Reserve.

No.	Forest Reserves (FR)	Class	Ha.
1.	Sungai Serudong	I	20
Total Degazettement FR (Ha)			20



The meeting of the *Jawatankuasa Hutan Simpan Negeri Sabah* held on the 28 February 2025.



The internal meeting of the *Jawatankuasa Hutan Simpan Sabah*.

The State Government proposed the gazettement of 215,941.63 hectares as Protected Areas (PAs) under Section 5A of the Forest Enactment 1968 to strengthen the protection of Sabah's critical forest landscapes. This includes enhancing habitat conservation, wildlife corridors within existing Forest Reserves, and safeguarding environmentally sensitive areas on selected State Land.

The initiative also reinforces the protection of clean water catchments approved by the Water Resources Council, which supports long term ecosystem functions and conserves key biodiversity, especially mangrove forests that buffer coastlines and sustain local fishing communities.

The primary goal is to increase Sabah's TPA coverage to 30% by 2025, consistent with the Sabah Forest Policy 2018, whereby an additional 211,000 hectares have been identified to achieve the objective.

Achieving this target demonstrates Sabah's commitment to maintaining at least 50% forest cover, ensuring adequate biodiversity protection, and sustaining essential ecosystem services. It also aligns with the State's climate commitments and contributes to Malaysia's Nationally Determined Contributions (NDCs) under the UNFCCC.

B. FOREST LEGISLATION

Forest Enactment (Amendment) 2025 on Forest Carbon Activities

In the reporting year, the amendment to the Forest Enactment (Amendment) 2025 on forest carbon activities was approved, further solidifying the State Government's commitment to strengthening forest protection, addressing global challenges, and safeguarding Sabah's rights over its forest resources. A major component of the amendment is the introduction of a clear legal framework to license, regulate and control carbon-related projects, including forest-based carbon trading within forest areas.

Although carbon has been recognised as forest produce in Sabah since 2013, the 2025 amendment ensures that all benefits and revenue from forest carbon initiatives remain under Sabah's jurisdiction, particularly in anticipation of future national climate legislation.

The amendment also strengthens forest governance by increasing penalties for serious offences such as forest fires and unauthorised logging, aligning Sabah's laws with the Forest Act (Amendment) 2022. Additional provisions empower the Chief Conservator of Forests (CCF) to close forest reserves when necessary, issue permits for restricted activities, and require Sustainable Forest Management (SFM) licence holders to pay annual forest rent, thereby enhancing regulatory oversight and supporting sustainable forest management while generating State revenue.

Overall, the Forest Enactment (Amendment) 2025 marks a significant step by the State in reinforcing forest protection, regulating emerging forest-based economic activities and supporting Sabah's long-term goals of conservation, revenue generation and sustainable development.



Courtesy Visit to Sabah State's Attorney-General Yang Arif Datuk Brenndon Keith Soh on 3rd February 2025.



Tn. Indra Purwandita H. Sunjoto, Deputy Chief Conservator of Forests (Planning and Management) representing the Chief Conservator of Forests to attend the Sabah State Assembly Sitting in December 2025, accompanied by Pn. Siti Zubaidah S. Abdullah and Mr. Mohd Hafizan Addli bin Lamin, Planning Officers at the FSP Division.



SFD Senior Officials at the Sabah State Assembly Sitting in April 2025.

C. ECOLOGICAL FISCAL TRANSFER FOR BIODIVERSITY CONSERVATION (EFT) FUND

The Ecological Fiscal Transfer for Biodiversity Conservation (EFT) fund was introduced by the Federal Government in 2019 to incentivise State Governments to conserve environmentally sensitive areas, especially protected areas and high biodiversity forest reserves. Additionally, the fund supports the gazettement of new Protected Areas to help meet national targets under the National Policy on Biological Diversity (NPBD) 2022–2030.

At the departmental level, the FSP Division serves as the Secretariat for coordinating EFT funds from the Ministry of Finance (MoF), including inter-agency coordination, project proposal consolidation, monitoring activities, as well as the preparation of financial and project performance reports. As part of capacity building and policy coordination, an EFT 2025 Town Hall session, organised by the Ministry of Natural Resources and Environmental Sustainability (MNRES), was held on 6 March 2025 in Kuala Lumpur, which was attended by Tuan Indra Purwandita H. Sunjoto, DC(PM), and Mr. Mohamad



The EFT Town Hall was officiated by YB Dato' Sri Huang Tiong Sii, Deputy Minister of Natural Resources and Environmental Sustainability (MNRES).



A Certificate of Appreciation was awarded to the Sabah State Government.

Hafizan Addli bin Lamin.

At the Town Hall session, the Sabah State Government was awarded a Certificate of Appreciation for the gazettement of 69,607 hectares of new Protected Areas for the period 2021–2023, reflecting Sabah's strong commitment towards achieving national biodiversity conservation targets.

Based on the EFT report for 2021–2023, about 350,000 hectares of new Protected Areas (PAs) were gazetted nationwide, with nearly 90,000 hectares terrestrial and over 250,000 hectares marine, demonstrating the effectiveness of EFT as a fiscal tool for conservation.

In 2025, a total of 24 projects under SFD were approved by the MoF Sabah, with a total allocation of RM5.5 million. The list of the 24 approved projects can be accessed via the QR Code.

Scan QR Code to view 24 projects approved by the MoF Sabah under Sabah Forestry Department.

D. TOWN HALL PROGRAMME ON THE MANAGEMENT OF TERRESTRIAL PROTECTED AREAS (TPAs)

An EFT-funded Town Hall Programme on the Management of Terrestrial Protected Areas (TPAs) in Sabah was successfully organised by the SFD on the 19th November 2025 at Citadines Waterfront Kota Kinabalu. The Programme was officiated by YBhg. Datuk Sernam Singh, Secretary of Natural Resources, reflecting the State Government's strong commitment to strengthen Protected Areas (TPAs) governance and biodiversity conservation in Sabah.

The Town Hall programme brought together representatives from key State ministries, relevant government departments, statutory bodies, and conservation partners, to discuss and review Sabah's progress and strategic direction in managing its Terrestrial Protected Areas. The Programme featured five (5) key presentations by the Sabah Forestry Department (SFD), Sabah Parks Board of Trustees (SP), Sabah Wildlife Department (SWD), Sabah Biodiversity Centre (SaBC), and



Presentation of a souvenir by YBhg. Datuk Frederick Kugan to YBhg. Datuk Sernam Singh, Secretary of the Sabah Natural Resources Office.



Group photography session with the presenters of the Town Hall Programme during the Closing Ceremony.



Opening Ceremony of the Programme officiated by YBhg. Datuk Sernam Singh, Secretary of the Sabah Natural Resources Office.

Sabah Environmental Trust (SET). These presentations provided updates on protected area management, conservation priorities, and ongoing initiatives in Sabah undertaken by the respective agencies.

Participants engaged in a structured group discussions covering three (3) main thematic areas, namely: (i) policy and legislative frameworks governing protected areas, including the Forest Enactment 1968, Wildlife Conservation Enactment 1997, Sabah Forest Policy 2018, Sabah Parks Enactment, and Sabah Biodiversity Enactment; (ii) scientific mapping and prioritization of conservation areas, including the application of geographic information systems (GIS), biodiversity assessments, carbon stock evaluation, and ecological connectivity; and (iii) socio-economic and community perspectives, focusing on Free, Prior and Informed Consent (FPIC), sustainable livelihoods, customary land considerations, and the role of Non-Governmental Organisations (NGOs).

Several key priorities were identified through the Programme, namely: strengthening coordination and harmonisation of policies and legislation related to protected areas; enhancing the integration of scientific data and spatial analysis to support conservation planning; reinforcing community participation in protected area management; and promoting stronger inter-agency collaboration. These outcomes will further strengthen Sabah's conservation commitments and global biodiversity targets under the Convention on Biological Diversity (CBD), particularly the goal of the Global Biodiversity Framework goal of protecting at least 30% of terrestrial and marine areas by 2030.

E. RESEARCH APPLICATIONS WITHIN FOREST RESERVES

In 2025, a total of 61 research applications within forest reserves were approved by the SFD, representing a slight decrease from the 72 applications approved in 2024. Of these, 26 applications were submitted by local researchers, while 35 were submitted by international researchers. The majority of the local applications (24) were submitted by higher education institutions, while two (2) were from Non-Governmental Organisations (NGOs).

Similarly, among international researchers, a total of 22 applications were from higher education institutions, while 13 applications were from NGOs. **Fig.1** shows the breakdown of the research applications approved by SFD.

In 2025, research studies conducted within forest reserves can be broadly categorized into five (5) thematic areas, namely: (1) Biodiversity Conservation, (2) Community Development, (3) Forest Ecology and Management, (4) Forest Policy and Economics, and (5) Wildlife Conservation. The research on Biodiversity Conservation emerged as the top priority with 30 approved studies whereby 16 by international researchers and 14 by local researchers. The distribution of the approved research studies based on the five thematic areas and by researcher is illustrated in **Fig. 2**.

The approved research applications were distributed across 22 districts in Sabah and among the forest reserve classes, as shown in Table 2. No research applications were recorded in the districts of Semporna, Serudong, Kudat, Kota Belud, Nabawan, and Tenom during the reporting year. Ulu Segama-Malua (USM) recorded the highest number of research applications (35), followed by Sandakan (30).

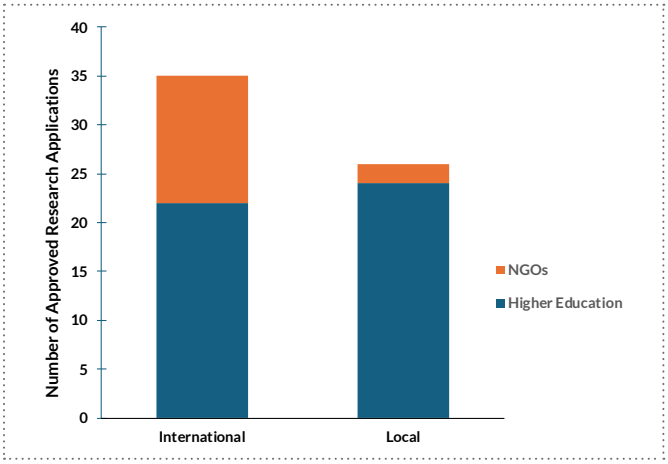


Fig. 1: Number of approved research according to local/international and higher education /NGOs /Government agencies.

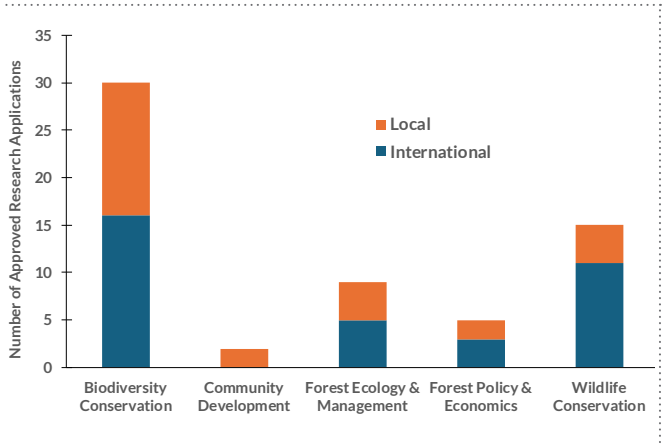


Fig. 2: Number of approved research according to the types of research and local/international.

Table 1: Definition of the five (5) research category.

No.	Category	Definition
1	Biodiversity conservation	Research focuses on the protection and preservation of the variety of life on Earth, including ecosystems, species, and genetic diversity. The main objective is to maintain the natural balance of the environment and prevent the extinction of species
2	Community Development	Research focuses on the social and economic development of communities that depend on forests for their livelihoods. The main objective is to promote sustainable forest management practices that benefit both the environment and the people who rely on it
3	Forest ecology and management	Research focuses on the study of forest ecosystems and their management. The main objective is to understand the ecological processes that occur in forests and to develop sustainable management practices that maintain the health and productivity of forest ecosystems
4	Forest policy and economics	Research focuses on the development of policies and economic models that promote sustainable forest management practices. The main objective is to develop policies that balance the economic benefits of forest resources with their ecological and social value.
5	Wildlife conservation	Research focuses on the protection and preservation of wildlife species that depend on forest ecosystems. The main objective is to maintain the natural balance of the environment and prevent the extinction of species.

Table 2 : Approved Research Applications by District and Forest Reserve Class.

District	Class						
	I	II	III	IV	V	VI	VII
Beaufort	2						
Beluran	6	3					
Deramakot	7	9				1	
Kalabakan	1	7					
Keningau	2						
Kinabatangan	6	2				10	
Kota Kinabalu	2					2	
Kota Marudu		2					
Kunak	4					5	
Lahad Datu	2					5	4
Pitas		3					
Ranau	5	4					
Sandakan		6				24	
Sipitang	3	1				4	
Sook						1	
Tambunan	3					1	
Tawau	3					1	
Telupid	9						
Tenom	3	2					
Tibow	2	3		1		1	
Tongod	2	1					
Ulu Segama-Malua	35						

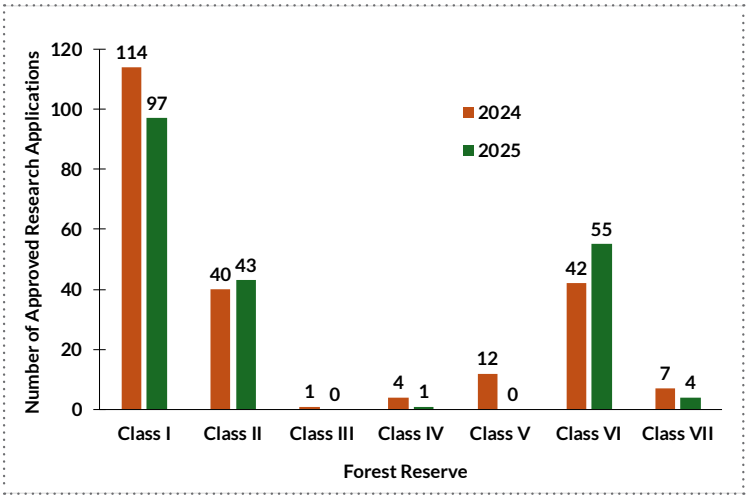


Fig. 3: Number of research conducted within forest reserve classes for 2024 and 2025.

Scan QR Code to view information regarding the approved research projects in 2025.

A comparison of research applications by forest reserve classes between 2024 and 2025, as shown in **Fig. 3**, indicated a decline in research projects conducted within Totally Protected Areas (TPAs) i.e., Class I, Class VI, and Class VII forest reserves. However, despite this decline, Class I forest reserves continued to record the highest number of research applications in 2025, with 97 applications, followed by Class VI with 55 applications and Class II with 43 applications. However, some research applications were conducted across several Forest Reserves. In 2025, no research applications were submitted within Class III (Domestic) and Class V (Mangroves) forest reserves.

2. INTERNATIONAL AND CORPORATE AFFAIRS

A. INTERNATIONAL CONFERENCE ON BORNEO'S GREEN HEART

In 2025, the International Conference on Borneo's Green Heart was held on the 22–23 October 2025 at Sabah International Convention Centre (SICC), with the theme "*Advancing Climate Resilience, Conservation and Sustainable Livelihoods*". This Conference celebrated the Heart of Borneo (HoB) — a visionary trilateral initiative that unites Brunei Darussalam, Indonesia, and Malaysia in conserving one of the world's most biologically diverse regions.

The Conference brought together over 600 local and international participants, reflecting strong regional and global commitment to Borneo's sustainability agenda. Officiated by YBhg. Datuk Norlijah Haji Danin on behalf of the Chief Minister of Sabah, the two-day event featured four (4)



keynote addresses and 17 distinguished speakers on climate change, biodiversity conservation, and sustainable resource management.

The Conference also witnessed the launching of three (3) key publications i.e.,Rehabilitation of Mangrove in Sabah Book, Sabah Forest Restoration Guidelines Book, and KIPMAPS (*Kit Informasi Penglibatan Masyarakat dalam Perhutanan Sabah*).

The Conference's Exhibition which was held from 21 - 23 October 2025, was launched by YBhg Datuk Sernam Singh, on behalf of the Sabah State Secretary. The Exhibition featured 22 exhibitors, including Sustainable Forest Management Licence Agreement (SFMLA) holders, state and federal agencies, and non-governmental organizations (NGOs) showcased their initiatives under the Heart of Borneo Initiative. The Exhibition aimed to inspire and engage the public on conservation and climate action in Sabah.

In the reporting year, several other international forestry initiatives included the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA), the Coral Triangle Initiative (CTI) and the Sosial Ekonomi Malaysia Indonesia (SOSEK MALINDO). Additionally, SFD also coordinates discussions on forestry-related matters within the Asia-Pacific Economic Cooperation (APEC), RAMSAR, the Convention on Climate Change (UNFCCC), the Convention on



The launching of (A) "Kit Informasi (Penglibatan Masyarakat Dalam Perhutanan Sabah) Book; (B) Sabah Forest Restoration Guidelines; and (C) Rehabilitation of Mangroves in Sabah.



Youth Forum



The Launching Ceremony of the Exhibition.



Welcoming Dinner

International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Tropical Timber Organization (ITTO) and the ASEAN Forestry Meeting.

In 2025, the Department participated in two (2) international meetings:

i. 27th Meeting of Asia-Pacific Economic Cooperation (APEC) Expert Group on Illegal Logging and Associated Trade (EGILAT) on 26–27 February 2025 in Gyeongju, Korea.

ii. 78th Meeting of the Standing Committee (CITES-SC78) on 3–8 February in Geneva, Switzerland attended by Mr. Bernard Valentine, Head of Forest Industry & Trade (FIT) Division.



Mr. Ismailey Ismail, Senior Assistant to the Chief Conservator of Forests (Operation) attended the 27th Meeting of Asia-Pacific Economic Cooperation (APEC) Expert Group on Illegal Logging and Associated Trade (EGILAT).



Mr. Bernard Valentine (3rd from right) Head of the Forest Industry & Trade (FIT) Division attended the 78th Meeting of the Standing Committee (CITES-SC78) on 3rd - 8th February in Geneva, Switzerland.

B. WORKING VISIT BY THE FORESTRY DEPARTMENT, MINISTRY OF PRIMARY RESOURCES, BRUNEI DARUSSALAM

The Forestry Department of Brunei Darussalam conducted a working visit to Sabah in November 2025. The working visit comprised of two (2) teams; Team A visited Deramakot Forest Reserve (7–9 November) to learn about Sabah's Sustainable Forest Management (SFM) practices and Team B visited Forest Research Centre (FRC) and Rainforest Discovery Centre (RDC) in Sepilok to learn about research, biodiversity work, and conservation education. The visit by the Forestry Department of Brunei, our strategic partner in the HoB Initiative, strengthened professional ties and reinforced regional collaboration in Sustainable Forest Management (SFM).









Forestry Department of Brunei Darussalam visits to DFR and FRC.

C. THE HEART OF BORNEO PROJECT PHASE II

The HoB Project Phase II, under the Twelfth Malaysia Plan (RMK-12) through the Ministry of Natural Resources and Environmental Sustainability (NRES) received RM2.109 million to support the implementation of the Heart of Borneo Initiative, which included scientific expeditions, awareness programmes and international conferences, community-inclusive initiatives, as well as infrastructure developments for protection and recreation.

i. Scientific Expeditions

In the reporting year, the Project supported scientific expeditions and social baseline surveys. These expeditions have provided the scientific foundation needed to guide conservation policies, protection of biodiversity, and support evidence-based decision-making under the HoB Initiative in Sabah.

The Department's Research Team conducted two (2) scientific expeditions, namely in Meliau Forest Reserve (FR), Beluran (21–26 April 2025); and Tangkulap FR & Timbah FR, Tongod (14–19 July 2025).

ii. Social Baseline Survey

The Project also supported the social baseline survey, conducted on the 1–12 October in 31 villages adjacent to Lumaku Forest Reserve, Tenom, as part of the revision of the Lumaku Forest Management Plan.

iii. CEPA Programme

The 3rd Youth Environmental Education (EE) Race, which was held on 7–12 July 2025 at the Rainforest Discovery Centre (RDC), brought together 42 teachers, officers, and environmental practitioners for field activities aligned with the pillars of the Sabah HoB Strategic Plan of Action (SPA) 2021–2030 pillars - sustainable resource management, ecotourism development, and capacity building. The EE Programme was a joint effort by SEEN and the Conservation Partners supporting the HoB Initiative.

The HoB Roadshow 2025, held on the 18 June in Tongod, successfully brought together 120 participants from 12 villages adjacent to Gunung Tinkar FR and Sungai Radapan FR, namely Kg. Imbak, Kg. Bangkulat, Kg. Keramuak Luar, Kg. Keramuak Dalam, Kg. Tenaga Baru, Kg.Kilugu, Kg. Bobotong, Kg. Semundoh, Kg. Sanan, Kg. Linayukan, Kg.Tongodon dan Kg. Sogo-Sogo. The engagement strengthened community awareness on forest conservation, biodiversity protection, and sustainable natural resource management, as part of the SFD's ongoing outreach initiatives.



Social Baseline Survey (SBS) for the preparation of Forest Management Plan for Lumaku Forest Reserve (Class I).



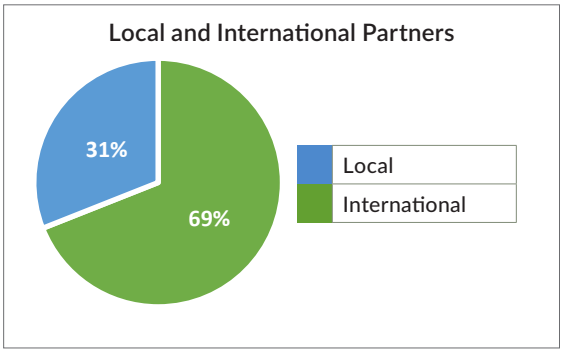
HOB Roadshow with 120 participants from 12 Villages held in Tongod.

3. PROJECT AND COLLABORATION UNIT

In the reporting year, the SFD, on behalf of the Sabah Government, entered into several collaborative partnerships as shown in Table 3. Since 2007, SFD has entered into 123 collaborations involving various forest-related activities, which generated contributions valued at approximately RM 131 million from both local and international partners. The scope of collaborative partnerships includes, among othersothers, includes forest restoration, capacity building, enforcement and protection, research and biodiversity conservation.

Table 3: Collaborative partnerships entered into by the State Government during the reporting year.

No	Organization	Scope of Collaboration	Duration
		Memorandum of Understanding (MoU)	
1	Botanickel Sabah Sdn. Bhd. (Botanickel)	Collaborative Research on Metal Accumulation in Ultramafic Flora in Sabah	5 years
2	Borneo Rhino Alliance Berhad (BORA)	To promote and strengthen cooperation between the Parties in the preservation and management of threatened forests within Tabin Wildlife Reserve, with particular focus on the protection and conservation of wildlife, in accordance to the Forest (Tabin Wildlife Conservation Area) Rules 2007.	3 years
3	Panthera Wild Cat Conservation Malaysia Sdn. Bhd. (Panthera Malaysia)	To improve the scientific understanding and protection of wild cat species in Tangkulap FR, Sg. Talibu FR, Sg. Pinangah FR, Deramakot FR, Northern Kuamut FR and Gn. Tinkar FR, which are under the purview of SFD.	3 years
4	The Wildlife Research Center (WRC), Kyoto University Japan	To examine the forest fragmentation and habitat quality for the preservation of the wildlife in Sabah, including the Sepilok-Kabili FR (Class VI) and the Lower Kinabatangan region (Class V).	5 years
		Novation Agreement	
5	Malaysian Palm Oil Council (MPOC) & Malaysian Palm Oil Green Conservation Foundation (MPOGCF)	To amend certain provisions of the Original Agreement titled "Agreement between The State Government of Sabah and Malaysian Palm Oil Council on the Forest Rehabilitation of Orangutan Habitat At Lower Kawag, Ulu Segama Forest Reserve", to reflect MPOGCF's legal structure, operational model, and implementation expectations, while preserving the overall objectives of the Project.	4 years
		Letter of Intent (LoI)	
6	Global Eco Rescue (GER)	To support a Feasibility Study Focused on Mangrove-Peatland Restoration & Conservation.	1 year



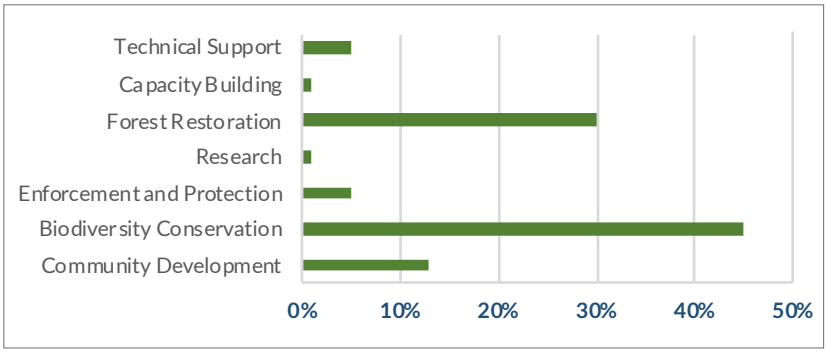


Fig. 4: Distribution of support received from various partners.

i. The Signing Ceremony of the Memoranda of Understanding Supporting Conservation Initiatives in Sabah during the 2025 International Conference of Borneo's Green Heart



The Deputy Sabah State Secretary, Datuk Norlijah Binti Haji Danin (middle), the Chief Conservator of Forests, Datuk Frederick Kugan (2nd from left), took a group photograph with all the MOU signatories.

ii. The Forest Rehabilitation of Orangutan Habitat at Lower Kawag, Ulu Segama Forest Reserve Project

In 2025, the transfer of rights, roles, duties and obligations of MPOC to MPOGCF was made official through the signing of a Novation Agreement. The signing of the Novation Agreement represents a symbolic act of partnership and mutual commitment, underscoring the renewed commitment of SFD and MPOGCF in advancing the implementation of the subsequent phases of the Project which started in 2021, when the Malaysian Palm Oil Green Conservation Foundation (MPOGCF) was established as the newly established foundation whose sole purpose is to support conservation initiatives and to reflect the oil palm industry's commitment in forest conservation.

The General Manager of MPOGCF, Mr. Hairulazim Mahmud, the Chief Conservator of Forests, Datuk Frederick Kugan and the Chief Executive Officer of MPOC, Ms. Belvinder Sron signed the Novation Agreement, witnessed by the Secretary General of the Ministry of Plantation & Commodities (KPK),







One key achievement of the Project was that SFD has been awarded the Ecosystem Restoration Field Verification Certificate by the Preferred by Nature (PbN) an internationally recognized Certification Body, in 2024.

Dato' Yusran Shah Mohd Yusof, the Deputy Chief Conservator of Forests (Planning and Management), Tn. Indra Purwandita H. Sunjoto and the General Manager of MPOC, Mr. Firdaus Tarmizi.

iii. World Expo 2025 Osaka Japan

The Sabah State Government, through the Sabah Forestry Department (SFD), reaffirmed its commitment to mangrove conservation by signing an MoU with the International Society for Mangrove Ecosystems (ISME) on 25 August 2025 during Sabah Week at World Expo 2025 Osaka. This marked a key milestone in strengthening international cooperation for sustainable forest and coastal ecosystem management.

The collaboration supports scientific research, with several studies published internationally, reinforcing Sabah's global standing in mangrove conservation. The MoU was signed by Datuk Frederick Kugan (SFD) and Prof. Shigeyuki Baba (ISME), witnessed by senior State officials and partners, reflecting strong institutional support for Sabah.

Sabah's participation in World Expo 2025 Osaka formed part of the State Government's broader strategy to promote Sabah's sustainability agenda on the global stage. In addition to the MoU signing, the Sabah Forestry Department showcased its conservation programmes and achievements at the Malaysia Pavilion's Thematic Corner throughout Sabah Week, held from 25–31 August 2025.





World Expo 2025 Osaka.

iv. Events Attended by Sabah Forestry Department in 2025 in support of Sabah 'Conservation Next' Agenda

- **Asean Sustainable Forestry Summit 2025**

Datuk Frederick Kugan, the Chief Conservator of Forests, participated as a Panel Speaker during the ASEAN Sustainable Forestry Summit 2025 on 29 July 2025.





(Left) Datuk Frederick shared on Sustainable Forest Management (SFM), climate change mitigation strategies and the "Conservation-Next" approach at the ASEAN Sustainable Forestry Summit 2025. (Right) Datuk Frederick, the Chief Conservator of Forests standing alongside the other Panel Speakers and Session Moderator (Photos credit: KSI Strategic Institute for Asia Pacific).

- **Tumimung - The Art of Digital Storytelling**

Datuk Frederick Kugan participated as Panel Speaker during the Tumimung – the Art of Digital Storytelling on 26 September 2025, where he emphasised that although "digital storytelling" is the latest trend in today's world, it is crucial to ensure that the stories told are factually correct. In his concluding remarks, he mentioned that all levels of society must play their respective roles in protecting and conserving the forests, as preserving the forests for the future generation should be a joint responsibility.



Datuk Frederick Kugan, the Chief Conservator of Forests, standing alongside the other Panel Speakers, Datuk Dr. Maklarin Lakim, the Director of Sabah Parks (second from right), Mdm. Nurain Ampuan Acheh, the Head of Conservation & Corporate Education of the Sabah Wildlife Department and Ms. Jessica Francis, the Session Moderator at the Tumimung Conference. (Photo credit: Sabah Tourism Board).

- **3rd Asean Blue Economy Forum**

Datuk Frederick Kugan participated as Panel Speaker during the Third Asean Blue Economy Forum on 30 September 2025 whereby he spoke about the crucial roles of the mangrove forests, the Sabah Mangrove Action Plan (SMAP), the on-going restoration and conservation efforts and SFD's holistic way forward, namely the "Conservation-Next" approach.

Additionally, SFD also participated in the exhibition of the said Forum, starting from 29 September to 1 October 2025, whereby information about Sabah mangroves were showcased.



Datuk Frederick Kugan participated as a Panel Speaker at the 3rd ASEAN Blue Economy Forum, speaking on the crucial role of mangrove forests and the Sabah Mangrove Action Plan (SMAP)

- **AI Summit 2025 – Rethinking Business Sustainability In The Age Of Artificial Intelligence (AI)**

Datuk Frederick Kugan participated as Panel Speaker for Keynote I: AI the Next Normal: Sustainability as the Blueprint for Global Competitiveness on 7 November 2025; whereby he highlighted that Sabah's economy has long been sustained by timber; however, Sabah is transitioning from an economy of extraction to an economy of intelligence. Datuk Frederick noted that human input remains crucial in tailoring AI algorithm to ensure accuracy, which is essential when moving from broad estimates to precise, data-generated decisions.



Datuk Frederick Kugan took part as a Panel Speaker at the AI Summit 2025, together with a delegation from the Sabah Forestry Department.

- **Anugerah Rakan Konservasi (ARK)**

As a token of appreciation, SFD started the tradition of awarding the Anugerah Rakan Konservasi (ARK) in 2021 to recognise collaboration partnerships in advancing the conservation agenda in Sabah. To date, SFD has awarded forty-six (46) ARK Awards to deserving recipients.



Group photo of the Datuk Frederick Kugan (6th from left), the Deputy Chief Conservator of Forests (Planning and Management), Tn. Indra Purwandita H. Sunjoto (5th from left) and the Head of the Forest Sector Planning Division, Mdm. Rosila Anthony (7th from left) with the seven (7) ARK Awards recipients during the Forestry Appreciation Night 2025 at the Sabah International Convention Centre (SICC), Kota Kinabalu, on 09 May 2025.

4. FOREST ECONOMY

A. COMMUNITY DEVELOPMENT PROGRAMME

i. Monitoring of Community Development Projects

In the reporting year, two (2) series of monitoring visits were conducted for the ongoing Community Development Projects, namely: hydroponic vegetable cultivation in Kampung Dumbun and Kampung Pulutan, Sook; quail farming in Kampung Rosob; and livestock manure fertiliser production in Kampung Ranggal, Pitas.

The communities of Kampung Dumbun and Kampung Pulutan reported that their accumulated income ranged from RM500 to RM2,000 from their vegetable cultivation. Meanwhile, the community of Kampung Ranggal has also begun marketing fertiliser, which generated an average monthly income of approximately RM500.

As support to the community, SFD also conducted maintenance on the hydroponic building and enhanced livestock manure-based production activities.





Hydroponic vegetable cultivation and quail farming in Kampung Rosob, Pitas.





Livestock Fertilizers Production Project in Kampung Ranggal, Pitas and Consultation session with the community.

ii. Community Development Projects Near Forest Reserves

In 2025, a Projek Pembangunan Masyarakat (PPM) funded Project was initiated in 2025 and will run until 2027, targeting at least four (4) villages adjacent to forest reserves in Nabawan, Lahad Datu, and Ulu Segama–Malua. A coordination meeting with the relevant District Forest Officers (DFOs) was held to discuss the Project activities to be carried out in their respective districts. Field implementation is scheduled to commence in 2026.





Field Engagement and Discussion on the Implementation of Community Development Projects entitled "Program Pembangunan Kapasiti Komuniti Berhampiran dengan Hutan Simpan melalui Aktiviti-Aktiviti Perhutanan Komuniti".

iii. Yayasan PETRONAS Planting for Tomorrow at Kungkular Forest Reserve, Tenom, Sabah.

In 2025, the Project successfully completed the planting of 74,000 trees (185 ha) at degraded area of Kungkular Forest Reserve, Tenom. Among the tree species planted were Durian, Rambutan, Terap, Petai, Seraya, Urat Mata, Seraya Daun Mas, Selangan Batu, Keruing, and Kapur. The Project will continue maintaining the planted trees until 2028.

The Project also conducted two (2) training courses for communities involved under the Community Development Component of the Project, in collaboration with the Department of Agriculture Tenom Sabah. A total of 20 community members from Kg. Kungkular and Kg. Nanturaan participated in the Hydroponic Technology Basic Course Training. Meanwhile, 40 community members from Kg. Kungkular, Kg. Nanturaan, Kg. Lohot and Kg. Sosopon participated in the Basic Banana Chip Processing Course.



Introduction to Hydroponic Technology Basic Course by Department of Agriculture (DoA) Tenom and hands-on training on banana chip processing.



Site visit to a successful hydroponic vegetable farming project in tenom district as part of the *Program Pengenalan Asas Teknologi Hidroponik*.

On 30 July 2025, the Project conducted a site visit to SynBorneo Sustainable Farm in Lahad Datu to assess its suitability as an agroforestry model for the communities involved with the Project. If successful, the syntropic farming concept has the potential to contribute to sustainable livelihood development within the community.

In 2025, as part of the carbon monitoring activities, the Project conducted biomass assessment of the planted trees under the Project. The FRC Team conducted several site visits which included field activities such as GPS location marking of entry points and tagging and measuring of the planted trees in Kungkular FR.



(Left) The Research Team from Forest Research Centre, Sepilok. (Right) Measuring and tagging the planted trees in Kungkular FR for growth assessment.

B. FOREST BASED RECREATION

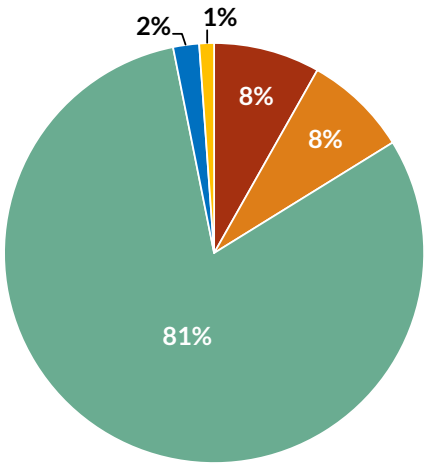
The year 2025 marked a significant milestone for forest-based recreation, with revenue collection reaching its highest point in the past decade. The SFD recorded a 36% increase in revenue, totaling RM 3,949,691.00. This growth was driven by a 26% rise in visitor numbers, with a total of 190,299 visitor arrivals across all forest recreation sites.

In 2025, eight (8) key development and upgrading projects supported by the 12th Malaysia Plan (RMK-12), Ecological Fiscal Transfer for Biodiversity Conservation (EFT), and the Forest Community Fund, with a total approved allocation of approximately RM 3.95 million. Scan the QR Code below for details of the project sites.

Scan QR Code to view detail list of the project sites.

Additionally, RM 440,000 was secured under the annual recurrent allocation, S16-Tourism Management (Nature Centre). These funds were fully allocated towards the maintenance and enhancement of twenty-two (22) sites, and for other approved purposes, as shown in the figure below.

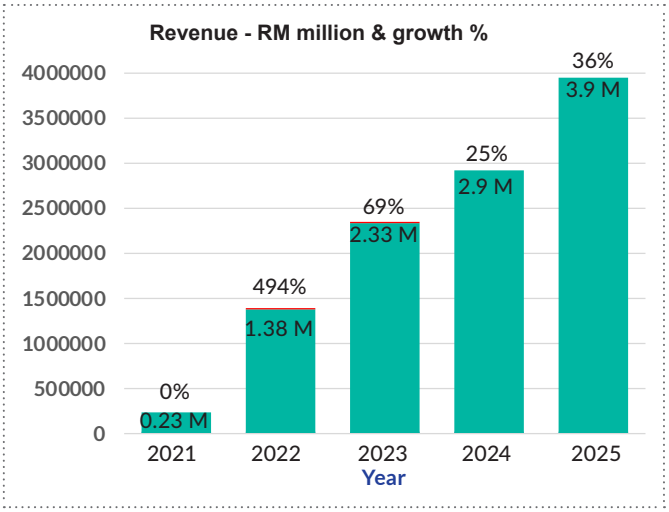
Distribution of Expenditure in 2025



Promotional (signboards, certificate, photo booths & etc)	RM36,000.00
Program (consultation, training, workshop & launching)	RM35,200.00
Maintenance & upgrading works	RM355,000.00
Management (meeting, site inspection, design)	RM8,800.00
Purchase of sanitary equipment & liquid	RM5,000.00

i. Visitor Arrivals and Revenue Generation at Forest Recreation Sites





The complete list of the visitor arrivals and revenue collected from forest recreation sites is accessible via the QR Codes. In 2025, the Department continued to accept new and renewal applications. Please scan the QR code at the bottom of this page for more details.

Scan QR Code for Breakdown of Visitor Arrivals and Revenue Collected

As of 2025, SFD manages 55 active forest-based recreation sites. 5 Top Sites	5 Top Sites with communities' involvement	5 Top Activities
1. Rainforest Discovery Centre (RDC) 2. Deramakot FR 3. Rafflesia Information Centre (RIC) 4. Sg. Kapur FR 5. Mt. Trusmadi, Tambunan	1. Rafflesia Information Centre 2. Mt. Trusmadi, Tambunan 3. Pin Supu FR - KOPEL 4. Tawai Waterfall 5. Tinagat FR	1. Hiking 2. Wildlife observation 3. Family/group retreat program 4. Picnic 5. Environmental Education

ii. Filming Applications in Forest Reserve

In 2025, SFD approved a total of fourteen (14) filming applications within Sabah's forest reserves, as the detailed below:

- **Total Revenue**: Filming applications generated RM 47,139.00.
- **Reinvestment**: This revenue contributes directly to ongoing conservation and forest management efforts.
- **International Profile**: Five (5) international productions, including high-profile projects from Japan and global documentary producers, further underscored Sabah's status as a premier location for natural history film making.

The 2025 filming projects were primarily categorized under three core pillars:

1. **Wildlife Documentation**: Specialized features focusing on endemic species, most notably the Bornean sun bear;
2. **Conservation Advocacy**: Media projects led by organisations such as WWF Malaysia to document Sabah's habitat restoration and protection efforts; and
3. **Tourism Promotion**: Collaborations with the Sabah Tourism Board to generate high-quality visual assets for "Premium Nature Tourism"

The complete list of filming applications and breakdown of the visitor arrivals and revenue collected based on the forest recreations sites is accessible via the QR code below:

Scan QR Code for List Of Filming Application.

On 16 October 2025, three (3) new forest recreation sites were officially established, providing platforms for local communities to develop and sustainably manage their tourism products. These sites were visited by the Chief Conservator of Forests and was officially designated as a premier attraction within Sabah's Heart of Borneo area.





(Left) Ceremonial fish release by the Deputy of Chief Conservator of Forests (Planning and Management) at the nearby river. (Right) The Nabawan Forest Trail, Bukit Pekan Nabawan, is managed in partnership with *Koperasi Pelancongan Komuniti Batu Punggul Nabawan Berhad*.



Batu Punggul Forest Reserve



In 2025, SFD hosted a Workshop on Developing Bird Hide Guidelines on 6 -7 August 2025, to further strengthen Sabah's position as a premier birding destination. The Workshop engaged with about 50 stakeholders—including forestry officers, tour guides, and conservationists—to establish safety and environmental standards for bird hide infrastructure across Sabah.

iii. Capacity Building Related to Forest Recreation Activities

In 2025, SFD conducted four (4) training programmes to strengthen safety and business management skills among staff and local communities. These initiatives included first aid and emergency response training, alongside a specialised course on tourism packaging, pricing, and digital marketing for forest recreation products. The two (2) sessions of the *Tourism Packaging, Pricing Strategies, and Digital Marketing of Forest Recreation Products Course* were held on 11 –13 June at RDC Sepilok, Sandakan, and 2–4 September at Cecil Homestay, Nabawan, each involving 35 participants comprising SFD staff and community members living adjacent to Forest Reserves.



The second training session involved staff from Keningau Forestry Region and local communities from Kg. Balaron, Kg. Tatuluan and Kg. Salinatan, held on 2-4 September 2025.



Training session by the Sabah Tourism Board (STB).



Group photo of participants during the second course held at Cecil Homestay, Nabawan.



The first training session held at the Rainforest Discovery Centre (RDC), Sepilok, on 11-13 June 2025.

A Basic Course on First Aid, Safety, and Rescue was held from 12–14 August at Kem Cinta Alam, Pitas, involving 50 participants, to strengthen emergency response and safety management for on site activities.

The 2025 Malim Trusmadi (Mountain Guide) Course was held from 30 September to 5 October at PPD KK and Nuluhon Trus Mad FR, Tambunan, involving 70 FMU19 guides and staff. The course enhanced guiding competency, risk assessment, and first aid skills required for Malim Trusmadi registration. The course was funded under the RMK12 State Project and by Habitat Foundation.





(Left) Participants of the First Aid, Safety and Rescue Course at Kem Cinta Alam, Pitas. (Right) Participants underwent rescue simulations and victim recovery training at Malim Trusmadi (Mountain Guide) Course.



Participants of 2025 Malim Trusmadi (Mountain Guide) Course.

5. CLIMATE CHANGE UNIT & GHG UNIT

In 2025, SFD, as the permanent secretariat of the Sabah Climate Change Action Council (SCAC), coordinated the 5th SCAC meeting, chaired by the YB Sabah State Secretary, on the 6 March 2025 to discuss issues related to Sabah's climate change agenda. In July 2025, the Sabah State Legislative Assembly passed the Sabah Climate Change and Carbon Governance Enactment 2025, marking a major step in strengthening the State's legal and institutional framework for climate action and carbon regulation.

The Sabah Climate Change and Carbon Governance Enactment 2025 marked a significant milestone in establishing a comprehensive framework for managing carbon rights, ensuring secure State ownership of carbon assets. The Enactment established the Sabah Climate Registry and Inventory Centre (SaCRIC), and the Sabah Climate Fund to promote green investment



Group photo during the State Legislative Assembly session in July 2025, where the Sabah Climate Change and Carbon Governance Enactment 2025 was passed.

and protect indigenous rights. This legislation strengthens Sabah's position as a regional leader in climate resilience and sustainable forest management

The Enactment establishes the Sabah Climate Action Council (SCAC) as the State's highest climate policy body, supported by a Director responsible for administering and regulating carbon activities and GHG emissions. All carbon rights are vested in the State Government, ensuring that benefits and revenues from carbon-related activities remain under Sabah's authority. The law adopts a whole-of-government approach and aligns State initiatives with national and international climate frameworks.

It also safeguards indigenous and local community rights by requiring consultation and benefit sharing for carbon activities on native customary land. Mandatory GHG emissions reporting is introduced to support evidence-based climate policy, building on Sabah's first State GHG Inventory (2024), which identified Sabah as a net carbon sink contributing an estimated 36% of Malaysia's total carbon absorption.

The Enactment's ten Parts provide for institutional arrangements, carbon registries, climate financing, community engagement, regulation of carbon activities and credits, emissions reporting and enforcement. Together, they establish a clear and authoritative system for climate and carbon governance, enhancing Sabah's resilience, protecting State sovereignty and supporting sustainable development.

A. CLIMATE CHANGE RELATED PROGRAMME AND ACTIVITIES IN 2025

In 2025, SFD as the Secretariat of the SCAC, served as the focal point in providing technical inputs and policy clarifications on forestry-related matters.

No.	Key Activities	Date
1	Engagement with the SCAC Secretariat on the "*Kajian Analisa Jurang Undang-Undang berkaitan Bidang Kuasa Tanah, Petroleum dan Gas serta Perdagangan Karbon di antara Persekutuan Malaysia, Sabah dan Sarawak*" by Ministry of Economy with UITM as consultant;	16 Jan 2025
2	National Climate Change Bill (Rang Undang-Undang Perubahan Iklim Negara) (RUUPIN)	Jan– Oct 2025
3	National Carbon Market Policy (Dasar Pasaran Karbon Kebangsaan) (DPKK)	Jan – Oct 2025
4	Sub-national Climate Change Institutional Assessment (CCIA) engagements by World Bank CCIA Team	Jan – Nov 2025
5	Partnership for Market Implementation (PMI) by World Bank and Ministry of Finance	Jan – Jun 2025
6	Sabah Methane Convening	28 Feb 2025
7	Discussion on the Development of a Marginal Abatement Cost (MAC) Curve under the *Dasar Pasaran Karbon Kebangsaan* (DPKK) with the Energy Commission of Sabah (ECoS) and Sabah Forestry Department (SFD)	21 Mar 2025
8	Bengkel Pembangunan Draf Gender Action Plan (GAP)	13 Jun 2025
9	Workshop on Guidelines and Program Subsidiaries for Forest Carbon Offset (FCO)	23 Jun 2025
10	Sabah Oil, Gas & Energy Conference & Exhibition (SOGCE) 2025	03 – 04 Jul 2025
11	Sabah Renewable Energy Rural Electrification (Sabah RE2) Convergence 2025	28 Jul 2025
12	Finalisation of Malaysia's Third Series of Nationally Determined Contributions (NDC 3.0)	12 – 14 Aug 2025
13	Follow-up Engagement between NRES and Sabah State Government representatives on the Development of the Forest Reference Emission Level (FREL)/ Forest Reference Level (FRL)	21 Aug 2025
14	Federal-State engagement on the Tropical Forest Finance Facility (TFFF)	08 Sept 2025
15	Technical Working Group (TWG) Inception Workshop on Malaysia National Adaptation Plan (MyNAP)	02 Oct 2025
16	Seminar on Climate Change by Forever Sabah	03 – 07 Nov 2025
17	MPOB International Palm Oil Congress and Exhibition (PIPOC) 2025	18 – 20 Nov 2025
18	*Mesyuarat Jawatankuasa Pemandu Penilaian Khas (Sementara) Peralihan Projek-Projek Daripada Clean Development Mechanism (CDM) Ke Paris Agreement Crediting Mechanism (PACM)*	21 Nov 2025



Sabah Renewable Energy Rural Electrification (Sabah RE2) Convergence 2025.



Discussion session during the Sabah RE2 Convergence 2025.

i. Seminar on Climate Change

A five-day Seminar on Climate Change was held from 3 – 7 November 2025 in collaboration with Forever Sabah. The programme was attended by officers from the GHG Unit and FRC and facilitated by Dr. Colin Maycock and his team. The seminar focused on strengthening participants' foundational knowledge and technical capacity in addressing climate change, including global and regional climate risk assessment, as well as the application of downscaled Global Climate Models for Sabah-specific impact analysis.



Group Photo during the five days seminar held at Livingston Hotel, Sandakan.

ii. Climate Change Roadshow Programme 2025

In 2025, SFD conducted three Climate Change Roadshow Programme sessions covering the Sandakan, Tawau, Kota Kinabalu, Kudat, and Keningau between September and October 2025. All sessions were moderated by Mr. Indra Purwandita H. Sunjoto, Deputy Chief Conservator of Forests (Planning & Management), in SFD's capacity as Secretariat to the Sabah Climate Change Action Council (SCAC).

The Programme aimed to:

- raise awareness among SFD officers on climate change impacts and scientific facts;
- share fundamental climate change concepts;
- provide a platform for knowledge sharing, dialogue, and participation in local climate initiatives; and
- promote behavioural change toward more environmentally responsible actions.

Key topics covered included global, national, and state climate commitments; the role of SCAC; greenhouse gases; nature-based solutions and forest based carbon projects; and relevant legal provisions under the Forest Enactment 1968 (Amendment 2025) and the Sabah Climate Change & Carbon Governance Enactment 2025.



Climate Change Roadshow Program 2025 Series 01/2025 for Sandakan and Tawau Region.



Climate Change Roadshow Program 2025 Series 02/2025 for Kota Kinabalu and Kudat Region.



Climate Change Roadshow Program 2025 Series 03/2025 for Keningau Region.

iii. Sabah REDD-Plus Outreach Program 2025 under Community Forestry Project Fund (PPM)

The Sabah REDD Plus Outreach Program 2025, funded under the Community Forestry Project Fund (PPM), was conducted twice in 2025 as a continuation of three previous outreach sessions held from 2022–2024. The two outreach sessions were held on 15 May 2025 in Lahad Datu for the Tawau Region, and on 15 December in Telupid for the Sandakan Region.

The Programme aimed to share lessons learned from the Sabah EU REDD Plus Project (2013–2021) which was implemented in the three (3) pilot sites, namely: Kinabalu Ecolinc, the Kinabatangan River Corridor, and Kampung Gana, Kota Marudu.

The Tawau Region session was attended by representatives from multiple government agencies and local communities, including those from villages around Lahad Datu, with a total attendance of 55 participants.

The Sandakan Region session, officiated by Regional Forestry Officer Mr. Jurimin Ebin, involved agencies from the Telupid and Tongod districts, as well as SFM Pintar community representatives. The Programme, which gathered 80 participants, also featured an introduction to the MY-FOLUR Project.

iv. Project under Rancangan Malaysia Ke-13 (RMKe-13)

In 2025, the project entitled "Projek Memperkasa Tindakan Perubahan Iklim Negeri Sabah Ke Arah Pembangunan Rendah Karbon Jangka Masa Panjang 2030" was approved by the Kementerian Ekonomi (KE) in November 2025 with a total budget of RM3,000,000.00.

The three-year project (2026-2028) comprised two (2) scope as follows :

SCOPE 1: *Perkhidmatan Juruperunding bagi Kajian Kesan Perubahan Iklim dan Penyesuaian/Adaptasi bagi Sektor Ekonomi Strategik di Negeri Sabah;*

SCOPE 2: *Perkhidmatan Juruperunding bagi Mewujudkan dan Melaksanakan Sistem Daftar Karbon Sabah.*

No.	Key Activities	Date
1	Internal meeting to discuss on the project proposals for RP1 RMKe-13 (2026-2030)	13 Jan 2025
2	Presentation Session and Budget Screening with MNRES for Rolling Plan (RP1) RMKe-13 2026 at Damai Resort, Kuching, Sarawak.	21 Feb 2025
3	Presentation Session and Budget Screening with Ministry of Economy for Rolling Plan (RP1) RMKe-13 2026 at Putrajaya.	13 May 2025
4	Approval of the project proposal for RP1 RMKe-13	Nov 2025



Sabah REDD-Plus Outreach Program Tawau Region.


Sabah REDD-Plus Outreach Program Sandakan Region.

6. MULTI-STAKEHOLDER COLLABORATIONS

A. SUSTAINABLE MANAGEMENT AND DEVELOPMENT OF THE KLIAS PENINSULA PEATLAND

i. The Sustainable Management and Development of Klias Peninsula Peatland Project – Phase II (RMK-12)

Under the 12th Malaysia Plan (RMK-12), a total allocation of RM3,500,000.00 was approved for the implementation of this Project.

- **Development of Forest Management Plan (FMP)**

In 2025, the development of the Forest Management plan (FMP) for Padas Damit FR involved a scientific expedition, pre SBS, data analysis, engagement (SLU) sessions with nearby communities, and the FMP writing. The CAMPs for Nabahan FR, CAMP for Bukau Api-Api FR and the FMP Padas Damit FR were endorsed by the Chief Conservator of Forests.



A. Scientific Expedition for Nabahan and Bukau Api-Api FR in 2024. **B**. Progress update meeting on the formulation of the Forest Management Plan (FMP) for Padas Damit FR held at Menggaris Room, SFD Headquarters, Sandakan in 2025. **C**. Submission of CAMP and FMP reports by the Technical teams to YBhg. Datuk Frederick Kugan, Chief Conservator of Forests. **D**. SLU (Management engagement session) with relevant agencies, NGO, Stakeholders and communities in Nabahan, Bukau Api-Api and Padas Damit Forest Reserve.

- **Forest Rehabilitation in Degraded Area – Binsuluk Forest Reserve (FR):**

In 2025, maintenance activities at Binsuluk Forest Reserve continued for the existing 137.5 hectares, with an additional 40 hectares incorporated into the maintenance programme. In Klias Forest Reserve, 15 hectares were also maintained. Furthermore, restoration works covering an additional 50 hectares were initiated in Klias Forest Reserve during the year.

Over the five-year implementation period, the forest rehabilitation programme has cumulatively covered approximately 257.5 hectares of maintenance and restoration activities, reflecting sustained efforts to restore degraded peatland forest ecosystems and enhance long-term ecological resilience.

- **Maintenance Works of the Klias Peat Swamp Forest Field Centre (KPFFC) and Bukau Api-Api Field Outpost**

A series of maintenance and upgrading works were successfully completed at the Klias Peat Swamp Forest Field Centre (KPFFC) and Bukau Api-Api Field Outpost to enhance operational efficiency, visitor safety, and forest-based recreation facilities.

Forest fire prevention efforts have been consistently implemented through annual maintenance of fire breaks, water retention ponds, and line transects across key forest reserves.

In 2025, hydrological line transect maintenance works were carried out in Bukau Api-Api Forest Reserve to ensure continued effective monitoring and support fire prevention measures.



Restoration Area (50 ha) in Klias FR

- **Forest Fire Prevention**

Forest fire prevention efforts have been consistently implemented through annual maintenance of fire breaks, water retention ponds, and line transects across key forest reserves. In 2025, hydrological line transect maintenance works were carried out in Bukau Api-Api Forest Reserve to ensure continued monitoring effectiveness and support fire prevention measures.

- **Communication, Education and Public Awareness (CEPA)**

Public Awareness Campaign and Introduction of One-Stop Information Centre (OSIC) on Peatland landscape related matters was launched on the 14 August 2025 by YBhg. Datuk Frederick Kugan, Chief Conservator of Forests. The CEPA programme highlighted the role of OSIC as an information hub for peatland areas and reinforced awareness on peatland fire prevention and conservation. The launch was attended by 146 participants including students from a nearby school in Kimanis.





ii. Sustainable Management of Peatland Ecosystem in Malaysia (SMPEM)

In 2025, the Project strengthened multi-agency collaboration through targeted CEPA programs and technical workshops that deepened stakeholder engagement and improved knowledge sharing on sustainable peatland management. Governance mechanisms were actively upheld, with the Technical Working Group and the State Steering Committee was convened to review progress, enhance coordination, and provide strategic direction.

The SMPEM Project Management Unit Meeting No. 2/2025 was successfully held, enabling constructive dialogue and alignment of implementation priorities among partners. A technical work visit to Sarawak further enhanced capacity-building efforts, offering practical insights into sustainable peatland-based agriculture through observations of the sago cultivation trial at CRAUN Research and the Sarawak Native Development Board. To strengthen long-term planning, a consultant was appointed to develop the State Action Plan for Peatlands (SAPP) and the Integrated Management Plan (IMP), reinforcing the State's commitment to robust and sustainable peatland management frameworks.

iii. Tabin Wildlife Reserve & Silabukan Forest Reserve (TWR & SFR)

a. Forest Protection

In the reporting year, the Sabah Forestry Department carried out ground surveillance eight (8) times per month and conducted aerial surveys twice a year. SFD also undertook the removal of oil palm plants detected encroaching into the Silabukan Forest Reserve. Additionally, boundary signboards were installed in areas identified as being at high risk for encroachment, while illegal structures found within the forest reserve were demolished.



Cutting down of encroaching oil palm plants.



Demolition of illegal structures.

b. Honorary Forest Ranger

The Honorary Forest Ranger Training was conducted from 26 – 28 August 2025 in collaboration with the Investigation, Enforcement and Prosecution (SPP) Division. The Programme involved 35 participants from stakeholder groups and local communities within and adjacent to the Tabin Wildlife Forest Reserve and the Silabukan Forest Reserve.



c. Forest Fire Training

A Forest Fire Response Training Programme was held from 16 – 19 December 2025 in collaboration with the Sustainable Forest Management (SFM) Division, involving 41 participants from nearby communities and oil palm industry stakeholders adjacent to the Tabin Wildlife Reserve and Silabukan Forest Reserve.



Forest Fire Training session.

d. Forest Community

In 2025, the first series of forest community engagement sessions was held in Kampung Dagat, which borders the Tabin Wildlife Reserve, with the local community participation in the management of the reserve. The activities were conducted on 14 -16 April 2025 formed part of the requirements for IUCN Green List certification.





e. Community Consultation conducted by SFD and LEAP

From 20 to 23 August 2025, SFD conducted another community consultation as a follow-up to the programme previously held in April in Kampung Dagat, aimed at gathering additional required information. SFD was assisted by the Land Empowerment Animals People (LEAP) which is actively engaged with the local communities.



f. Handling of Invasive Species

Invasive species management activities focused on monitoring the effectiveness of the biological control beetle released to manage *Salvinia molesta* in the artificial pond by the Rhino Forest Fund (RFF). However, no significant effects were observed during the monitoring conducted in August 2025. Instead, RFF carried out manual removal of *Salvinia molesta* in October 2025.

g. Mitigating Human-Wildlife Conflicts

In 2025, various measures were undertaken to mitigate human–wildlife conflicts, SFD collaborated with the Sabah Wildlife Department (SWD) and other key stakeholders, namely BORA, WWF-Malaysia, and the Bornean Sun Bear Conservation Centre (BSBCC), within the Tabin Wildlife Conservation Area, drawing on the respective expertise of each organisation.

h. Forest Restoration & Maintenance

In 2025, restoration efforts within the Tabin Wildlife Conservation Area were undertaken by several agencies, namely: (i) SFD restored 12 hectares in Sg. Ireton Block 3 and conducted maintenance work on 15 hectares in Block 2; (ii) WWF-Malaysia restored 47 hectares across the Bagahak Ecological Corridor and Silabukan Kecil and further implemented silvicultural treatments over an additional 135 hectares; and (iii) the Rhino Forest Fund (RFF) restored 6 hectares and conducted silvicultural work on 2 hectares in Silabukan Besar; and additionally maintaining 25 hectares within the Tabin–Kulamba landscape and 20 hectares in Silabukan Besar.

i. Safety Training

A safety training session was conducted on 18th August 2025 in collaboration with the Lahad Datu Fire and Rescue Station as a proactive measure to address potential workplace accidents. The programme was attended by 40 participants comprising field staff and stakeholders from areas adjacent to the Tabin Wildlife Conservation Area.

iv. Development and Management of Pin Supu Forest Reserve, Kinabatangan

a. IUCN Green List Certification

In 2025, PSFR was recognised as the first terrestrial site in Malaysia to be included in the IUCN Green List site. The site nomination process, which commenced in 2021, was successfully recognised on 18 May 2025, granting the IUCN for Green List status for a period of five years. This site will undergo a mid-term evaluation in 2028 and site re-evaluation in 2030.



PSFR Team, WWF & EAGL for the IUCN Green List Forest certification.



PSFR Team with EAGL for the IUCN Green List field evaluation process (Peak Limestone).

b. Zone Management & Forest Protection

In March 2025, boundary demarcation was completed along 15 km of the PSFR boundary adjacent to the village to prevent encroachment in the PSFR; additionally, stakeholders also participated in the boundary patrols. In September, river patrols were also conducted in collaboration with the Sawit Kinabalu Conservation Unit.



PSFR team members during aerial surveillance patrols.



Aerial view of Tungog Lake, PSFR Block A.



Installation of yellow plates for forest reserve areas at PSFR.

c. Biodiversity Conservation

In the reporting year, biodiversity conservation efforts focused on three (3) key areas, namely forest rehabilitation, wildlife management, and research and development.



Tourists participated in forest restoration activities together with village communities led by KOPEL.



(Left) Restoration activities at Tungog Lake to control invasive species *Salvinia molesta* using semi-mechanical techniques. (Right) Water Quality monitoring activities conducted by KOPEL every three months to obtain readings from all selected locations.



Installation of camera traps at PSFR. This activity is carried out in 5 permanent plots.

d. Management of High Conservation Value Forest (HCVF)

The management of High Conservation Value Forest (HCVF) in Pin Supu FR is based on an integrated, landscape-based approach that balances biodiversity conservation, ecosystem services, and community participation within the framework of Sustainable Forest Management (SFM).



HCV signs at Tungog Lake for visitors.

e. Other Programme and Activities In PSFR

Several government agencies visited PSFR during the reporting year, including Jabatan Perhutanan Semenanjung Malaysia (JPSM), Jabatan Hutan Sarawak (FDS), and Taman Negara (Tengku Hassanal) to gain insights into SFM implementation and the IUCN Green List site.



Memorable photos from Kinabatangan PPD staff together with the YBhg Datuk CCF & P'WAJAH Association working visit delegation.



Delegation from Jabatan Perhutanan Semenanjung Malaysia.



Delegation from the Sarawak Forestry Department.

v. Forest Rehabilitation of Orangutan Habitat at Lower Kawag, Ulu Segama Forest Reserve Project

The Forest Rehabilitation of Orangutan Habitat at Lower Kawag, Ulu Segama Forest Reserve is a 10-year project. Despite being severely degraded by past forest fire incidents and conventional timber harvesting practices in the 1980s and 1990s, the Lower Kawag, Ulu Segama Forest Reserve remains a vital habitat for orangutans.

The Project was incepted in 2019 with the aim to restore and protect degraded orangutan habitats, following an agreement that was signed between the Sabah Government (Sabah Forestry Department, SFD) and the Malaysian Palm Oil Council (MPOC). In 2021, the Malaysia Palm Oil Green Conservation Foundation (MPOGCF) joined the Project as the newly established foundation dedicated to supporting conservation initiatives and reflecting the oil palm industry's commitment to forest conservation.

In 2025, the transfer of rights, roles, duties and obligations of MPOC to MPOGCF was made official through the signing of a Novation Agreement. The signing of the Novation Agreement represents a symbolic act of partnership and mutual commitment, underscoring the SFD and MPOGCF's renewed dedication to advancing the implementation of the subsequent phases of the Project.

Apart from promoting sustainable and resilient landscapes for a better and healthier planet, this Project also emphasises improving local communities' livelihoods. The Project encourages the involvement of local communities in forest restoration efforts, whereby a Memorandum of Understanding (MoU) was signed between the Sabah Forestry Department, the MPOGCF and the Tampenau Community Nursery for the supply of seedlings in support of the Forest Rehabilitation of Orangutan Habitat at Lower Kawag, Ulu Segama Forest Reserve Project.

By the end of 2025, the Tampenau Community Nursery had supplied approximately 90,000 seedlings of various species to the Project. The Ecosystem Restoration Field Verification Certificate by the Preferred by Nature (PbN).





A comprehensive field audit was conducted to evaluate the ecological, economic, and social performance of restoration efforts in Compartment 153 (200 hectares) at Lower Kawag, Ulu Segama Malua FR on 3 – 5 September 2024 and 11–12 November 2025.



Tampenau Community Nursery .

vi. Integrated Landscape Management For Sustainable Food Systems, Land Use And Restoration (MY-FOLUR) Project.

a. MY-FOLUR Project Team Orientation at Sabah Hotel on 24 – 26 September 2025:

The MY-FOLUR Team onboarding programme was conducted from 24–26 September 2025, organised by the Sabah Forestry Department (SFD) as the Implementing Partner with technical support from UNDP Malaysia. The programme brought together key SFD resource persons to facilitate a structured and comprehensive introduction to the Project Management Unit (PMU) team.



Group Photo during the orientation session.

b. MY-FOLUR Project Booth at the International Conference on Borneo's Green Heart: "Advancing Climate Resilience, Conservation and Sustainable Livelihoods"

As part of the Project's visibility, the MY-FOLUR Project Management Unit (PMU) participated in the exhibition of the International Conference on Borneo's Green Heart: "Advancing Climate Resilience, Conservation and Sustainable Livelihoods on 22–23 October 2025 at the SICC, Kota Kinabalu.



The MY-FOLUR PMU Team at the International Conference on Borneo's Green Heart 2025.



Dr. Gerald Jetony, the Project's Chief Technical Advisor, briefing YBhg. Datuk Sernam Singh and YBhg. Datuk Frederick Kugan during the MY-FOLUR booth visit.

c. 1st MY-FOLUR Project Board Meeting

The MY-FOLUR Project Team convened its inaugural Project Board (PB) Meeting at the Natural Resources Office, Menara Kinabalu, marking an important governance milestone. The MY-FOLUR team, led by the National Project Director and Project Manager, briefed members on the Project's objectives, progress, and implementation plans, while seeking endorsement of the Project Board's Terms of Reference (TOR).

The Project Board members comprised representatives from the State Attorney General's Chambers, State Economic Planning Unit, the Ministry of Agriculture, Fisheries and Food Industry, Ministry of Finance, Ministry of Local Government and Housing, the Ministry of Rural Development, the Ministry of Tourism, Culture and Environment, the Sabah Forestry Department, and UNDP.

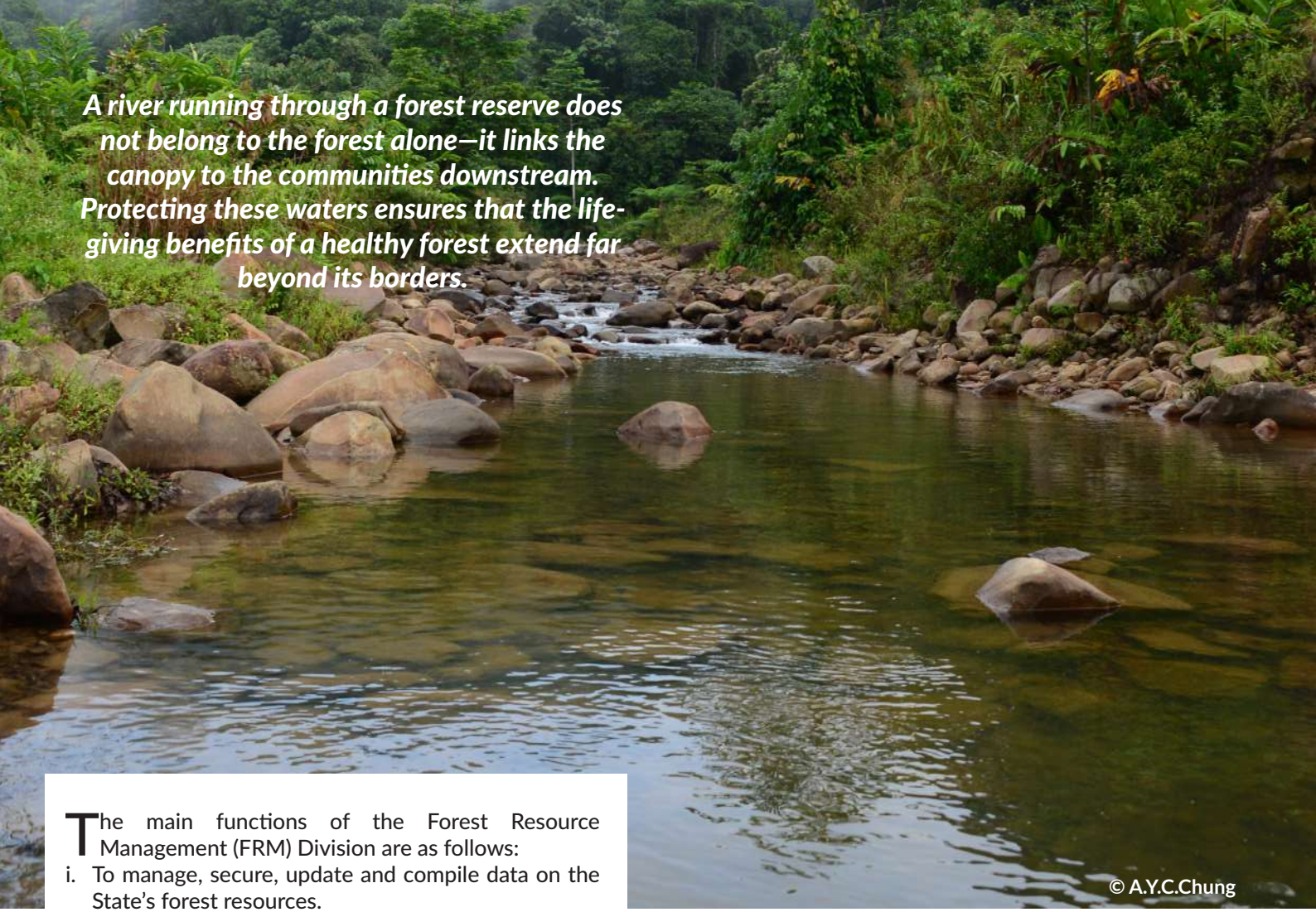


The inaugural MY-FOLUR Project Board Meeting was chaired by YBhg. Datuk Sernam Singh, Secretary of Natural Resources, Sabah.



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Nepenthes rafflesiana, a striking carnivorous pitcher plant displayed in the RDC's Nepenthes Garden, admired for its elegant form and remarkable diversity of pitcher shapes and colours.



A river running through a forest reserve does not belong to the forest alone—it links the canopy to the communities downstream. Protecting these waters ensures that the life-giving benefits of a healthy forest extend far beyond its borders.

© A.Y.C.Chung

FOREST RESOURCE MANAGEMENT

The main functions of the Forest Resource Management (FRM) Division are as follows:

i. To manage, secure, update and compile data on the State's forest resources.
ii. To publish maps related to the State's forest resources.
iii. To update and report on the extent of the State's forest cover.
iv. To process logging licenses, permits, harvesting plans, planting plans, and to approve Reduced Impact Logging (RIL) certificates.

Aside from the core functions of the Division, several development projects had been undertaken through 2025. These include conducting the digitisation and development of a forest resource database system.

The Forest Resource Management Division is headed by a Divisional Head and assisted by two deputy heads, two sectional leads, with a total of nine technical unit leads:

i. Mapping and Geospatial Section
   a. Database System Management Unit
   b. Geographical Information System (GIS) Unit
   c. Cartography and Remote Sensing Unit
   d. Inventory Unit

ii. Forest Operations Management and Monitoring Section
   a. License Unit
   b. Forest Harvesting Unit
   c. Occupation Permit Unit
   d. Survey and Aerial Surveillance Unit

iii. Administration Unit (directly under the Head of Division).

FOREST RESOURCES

i. Forest Cover

For this Annual Report, Sabah's forest cover information is based on the Forest Cover (FC) assessment for the 2023–2024 period, which was officially finalised and published in 2025. Forest cover assessments in Sabah are conducted at two-year interval to ensure data accuracy, consistency, and comprehensive spatial validation. Accordingly, the 2023–2024 FC dataset represents the most recent, verified, and authoritative source of information available at the time of reporting and is therefore adopted for the 2025 reporting year, in line with standard forestry and land-use reporting practices.

Based on the latest assessment, Sabah's total forested area increased slightly from 4,606,474.82 hectares in 2021–2022 to 4,633,464.95 hectares in 2023–2024, representing a net gain of approximately 26,990 hectares. In terms of overall land coverage, forest cover rose from 62.16% to 62.52% of Sabah's total landmass of 7,410,024 hectares, indicating a positive change of 0.36 percentage points and reflecting overall stability in forest extent.

Inland forests remain the dominant forest type and recorded an increase from 3,901,322.55 hectares to 3,918,362.89 hectares, with Mangrove Forests and Peat Swamp Forests remained largely

stable, with only marginal reductions observed. Plantation and Agroforestry areas, however, expanded from 286,522.70 hectares to 296,942.86 hectares, reflecting improved land-use classification and managed land expansion rather than extensive conversion of natural forests.

From a land status perspective, Forest Reserves continue to account for the largest share of forested land, with slight increases recorded, while areas under Sabah Parks and wildlife protection categories remained unchanged. Overall, the findings indicate that Sabah's forest resources have been effectively maintained, supported by ongoing conservation efforts, sustainable forest management, and improved spatial data management.

Forest Reserves

The classification of Forest Reserves by class indicates a slight net reduction in total gazetted forest reserve area from 3,575,035 hectares in 2024 to 3,558,326 hectares in 2025, representing a decrease of approximately 16,709 hectares (–0.47%). This reduction is primarily attributed to adjustments within Class II (Commercial Forest), which declined from 1,586,579 hectares to 1,570,546 hectares.

Class I (Protection Forest) remained largely stable, with only a marginal reduction, while Class III (Domestic Forest) showed no change. Minor decreases were also observed in Class IV (Amenity Forest), Class V (Mangrove Forest), and Class VI (Virgin Jungle Reserve). Class VII (Wildlife Reserve) remained unchanged.

In 2025, a new Forest Reserve, Sg. Serudong (Extension) Class I, covering 20 hectares, was gazetted, reflecting continued efforts to strengthen forest protection and refine forest boundary management. Although small in scale, this addition demonstrates ongoing commitment to forest conservation and systematic updating of gazetted forest reserves. Overall, the changes observed reflect administrative refinements and land status adjustments, rather than significant loss of protected forest areas. (See Fig. 1 and Table 2).

Table 1: Extent of Forested Area in Sabah in 2023–2024.

No	Forest Cover	Area (Ha)
	Forest Reserves and other Forest Lands	
1.	Forest Reserves	3,575,035
2.	Sabah Parks	245,172
3.	Wildlife Sanctuary	26,103
4.	Wildlife Conservation Area	2,854
	Sub-Total	**3,849,164**
	Stateland and Alienated Land	
5.	Stateland, Sabah Softwood Sdn. Bhd. & SAFODA	784,301
	Total	**4,633,465**

Table 2: Forest Reserves in Sabah (2025).

No	Forest Reserve	Area (Ha)
1.	Class I – Protection Forest Reserve	1,473,251
2.	Class II – Commercial Forest Reserve	1,570,546
3.	Class III – Domestic Forest Reserve	4,634
4.	Class IV – Amenity Forest Reserve	11,082
5.	Class V – Mangrove Forest Reserve	234,383
6.	Class VI – Virgin Jungle Reserve	124,730
7.	Class VII – Wildlife Reserve	139,700
	Total	**3,558,326**

Forest Function and Description

The classification of forest reserves is made in accordance with section 5 of the Forest Enactment 1968, specific functions of each forest reserve class are as listed in Table 4.

Table 4: Classification of Sabah's Forest Reserves.

Class	Type of Forest Reserve	Forest Function
Class I	Protection Forest	Maintenance of forest essential on climatic or physical grounds.
Class II	Commercial Forest	For the supply of timber and other produce to meet the general demands of trade.
Class III	Domestic Forest	For the supply of timber and other produce for local consumption.
Class IV	Amenity Forest	For local amenity and arboretum work.
Class V	Mangrove Forest	For the supply of mangrove timber or other produce to meet the general demands of trade and for eco-tourism activities.
Class VI	Virgin Jungle	For forest research purpose.
Class VII	Wildlife Reserve	For protection of wildlife.

> ***A forest reserve is a debt we owe to the future. Guarding its borders and nurturing its health is the ultimate expression of human stewardship—proving we have the wisdom to protect what we cannot replace.***

Table 3: Comparative Classification of Forest Reserves by Class for 2020 until 2025.

Class	Type of Forest Reserve	Approximate Area (Ha)					
		2020	2021	2022	2023	2024	2025
Class I	Protection Forest	1,421,717	1,421,717	1,421,717	1,473,417	1,473,417	1,473,251
Class II	Commercial Forest	1,655,483	1,655,483	1,655,483	1,586,579	1,586,579	1,570,546
Class III	Domestic Forest	4,634	4,634	4,634	4,634	4,634	4,634
Class IV	Amenity Forest	11,403	11,403	11,403	11,403	11,403	11,082
Class V	Mangrove Forest	234,680	234,680	234,680	234,544	234,544	234,383
Class VI	Virgin Jungle Reserve	107,048	107,048	107,048	124,758	124,758	124,730
Class VII	Wildlife Reserves	139,503	139,503	139,503	139,700	139,700	139,700
Grand Total		**3,574,468**	**3,574,468**	**3,574,468**	**3,575,035**	**3,575,035**	**3,558,326**

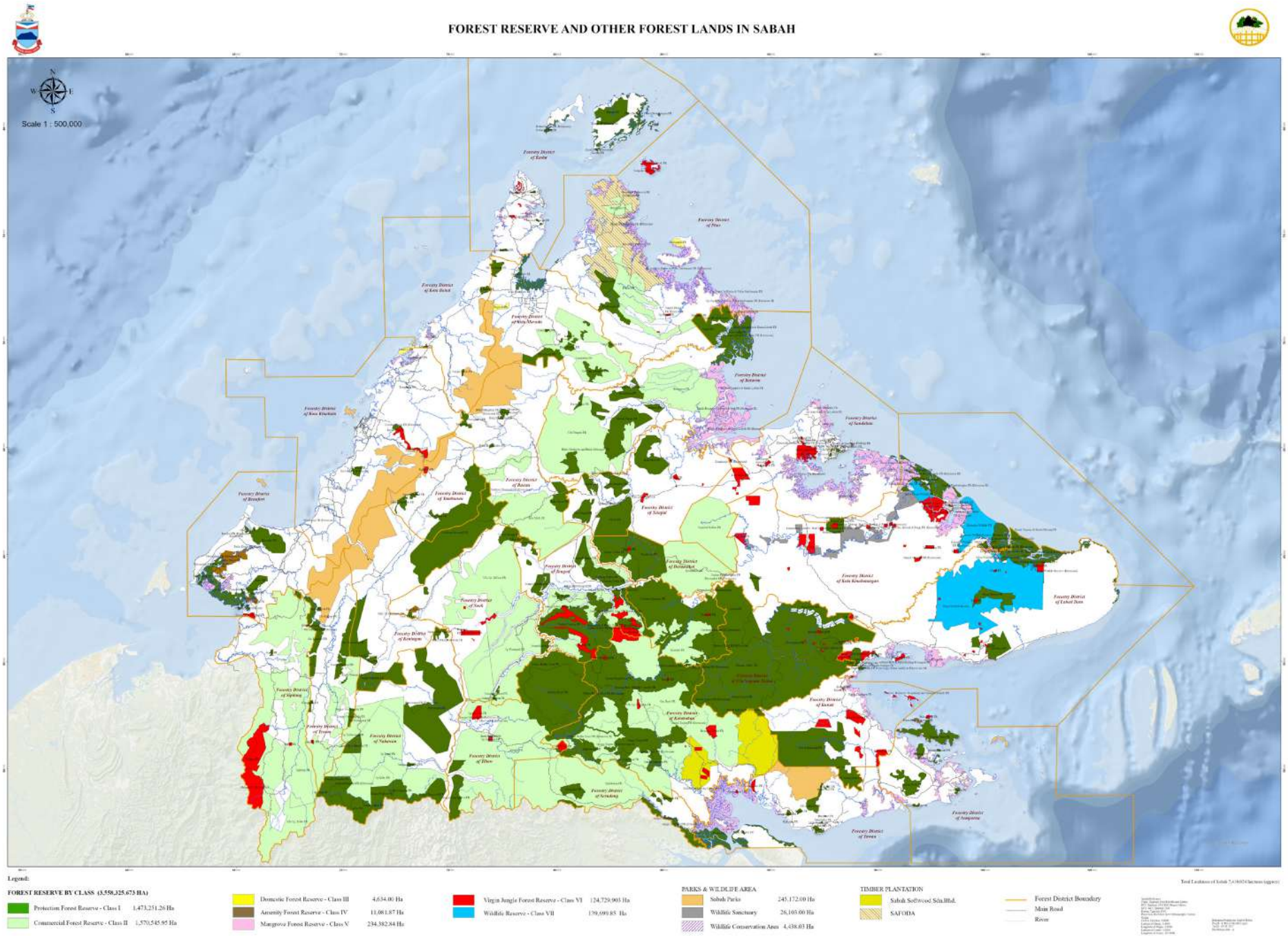


Fig. 1: Map of Forest Reserves and Other Forest Lands in Sabah, 2025.

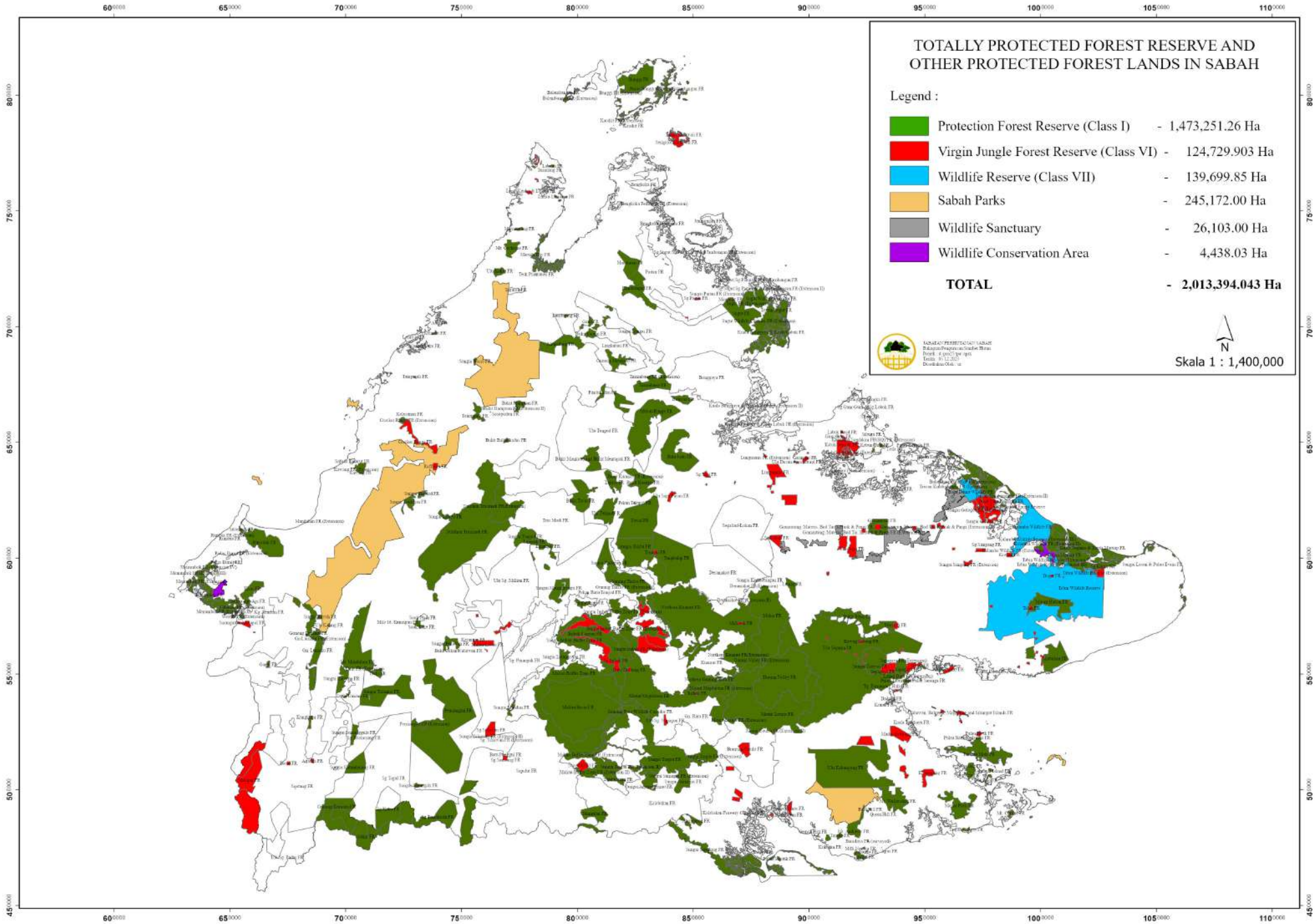


Fig. 2: Protected Areas in Sabah, 2025.

Totally Protected Areas

The total area of Totally Protected Areas (TPA) in Sabah increased slightly from 2,012,004 hectares in 2024 to 2,013,394 hectares in 2025. Most land categories remained stable, with minor reductions in Class I – Protection Forest (1,473,417 ha to 1,473,251 ha) and Class VI – Virgin Jungle (124,758 ha to 124,730 ha). The area under Wildlife Conservation Area increased from 2,854 ha to 4,438 ha; this adjustment is based on survey plan information provided by Jabatan Tanah dan Ukur Sabah and does not represent an official update from the Sabah Wildlife Department.

Table 5: Totally Protected Areas under State Enactments.

Forest Functions	Descriptions	Area (ha)
Protection	Class I Forest Reserve	1,473,251
Virgin Jungle	Class VI Forest Reserve	124,730
Wildlife Reserve	Class VII Forest Reserve	139,700
	Total	**1,737,681**

Table 6: Totally Protected Areas Under State's Respective Legislation

Type of Protected Area	Descriptions	Area (ha)
Sabah Parks	Under the Respective Legislation	245,172
Wildlife Sanctuary	Under the Respective Legislation	26,103
Wildlife Conservation area	Under the Respective Legislation	4,438
	Total	**275,713**

> ***Totally protected areas are the parts of a forest reserve that must be protected. To leave these zones untouched is not neglect; it is the most active form of long-term conservation.***

GEOSPATIAL

Under the 12th Malaysia Plan, a development budget was approved by the Federal Government to fund the "Development of a Database and Geospatial Technology of Forest Resources, Sabah". The main objective of the fund is to develop and enhance the use of geospatial data in managing the forest resources of the State. Through the project, the Sabah Forestry Department aims to improve its data quality, the standardization of data, as well as the procurement of the necessary hardware and software. A major output of the project is to eventually make such spatial data available to all forest administrative districts in Sabah.

Mapping

The activities of the Mapping Unit are supported by both the Geographical Information System (GIS) and the Remote Sensing units. The Unit provides the department maps for management and operational (enforcement and monitoring) purposes. The Unit also maintains records related to the gazettement of forest reserves and historical records related to licensing and logging operations in the state. The Unit is also tasked with the preparation of maps for the purpose of gazetting new Forest Reserves, as well as the excision and reclassification of Forest Reserves.

GIS

The Geographic Information System (GIS) Unit provides a supporting role in the department in acquiring, developing and maintaining its geospatial database related to the forest resources in the State. The Unit works closely with both the Mapping Unit and the Remote Sensing Unit of the FRM Division to provide spatial information to district forest offices, government agencies, and other stakeholders of the department.

Remote Sensing

In 2025, the production of Satellite Image Maps (SIMs) remained the primary output of the Remote Sensing Unit. These maps were requested internally for forest resource monitoring and the development of Forest Management Plans. They were generated to depict current forest conditions, including overall forest health and distribution, to assist in the restoration of degraded forest stocks. Satellite Image Maps (SIMs) produced for forest resource monitoring purposes are shown in Fig. 3 and Fig. 4.



Fig. 3: SIM for forest monitoring of Lahad Datu Forest Reserve - (Class V).



Fig. 4: SIM for restoration at Sungai Lasun & Pulau Evans Forest Reserve - (Class I).

Forest Stratification

Forest stratification is the process of interpreting and classifying remotely sensed data based on the biophysical characteristics of a forest stand. In 2025, the division produced a forest stand quality thematic map for Forest Management Plans. This map aided in the assessment of stand volume and logging feasibility, which is required prior to the issuance of licences on state lands.

The standard categories used were Stratum I (Very Good Forest), Stratum II (Good Forest), Stratum III (Moderate Forest), and Stratum IV (Poor Forest). The preliminary stratification was then verified through aerial surveys, ground data, historical records, and additional GIS layers to produce a more reliable final map. An example of this stratification map is provided in Fig. 5.

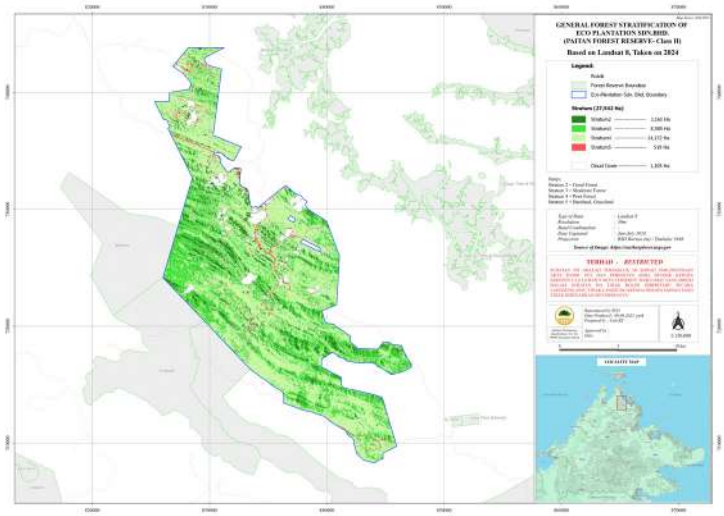


Fig. 5: Forest Stratification Map of Paitan Forest Reserve - (Class II).

FOREST RESOURCES

Licences

a. Form I Licences

In 2025, 2 Form I licenses were issued in Sabah (Table 7). The licenses covered about 1,633.67 hectares on state lands (Table 8).

b. Form IIB Licences

In 2025, 131 Form IIB licenses were issued by the Sabah Forestry Department (Table 9). The highest number of Form IIB licenses was issued within the Forestry District of Telupid (Table 10).

Table 9: List of Form IIB Licences issued in 2025 by forest produce.

No.	District	No. of Licence
1	Round Logs	72
2	Planted Tree	39
3	Nibung	4
4	Bakau	11
5	Kayu Terubah	5
	Total	**131**

Table 10: List of Form IIB Licences (round logs) issued in 2025 by forest district.

No.	District	No. of Licence	No. of Logs	Volume (m^3)
1	Kota Marudu	1	247	565.65
2	Sandakan	2	27	22.36
3	Telupid	10	8,962	12,087.80
4	Kinabatangan	8	4,528	6,147.36
5	Tongod	3	1,197	2,175.35
6	Sipitang	3	1,111	2,179.40
7	Beaufort	1	271	387.12
8	Ranau	6	843	1,451.57
9	Sook	5	1,110	2,473.60
10	Nabawan	1	86	209.56
11	Tambunan	7	4,332	4,115.65
12	Kalabakan	8	1,661	948.43
13	Lahad Datu	4	996	1,031.67
14	Kunak	7	4,779	1,265.77
15	Tawau	4	2,611	386.38
16	Serudong	1	734	892.70
17	Tibow	1	98	195.22
	Total	**72**	**33,593**	**36,535.59**

***Note:** Excluded planted logs, nibung, bakau and kayu terubah.

Table 11: Summary of Form IIB Licences issued from 2021 to 2025.

Year	2021	2022	2023	2024	2025
No. of Form IIB Licences Approved	95	114	91	66	72
No. of Logs	55,100	66,802	40,054	22,584	33,593
Total Volume (m^3)	72,184.53	104,807.14	66,432.26	28,195.79	36,535.59

***Note:** Excluded planted logs, nibung, bakau and kayu terubah.

Coupe Permit

In 2025, a total of 23 coupe permits were issued by the Sabah Forestry Department for various management activities (Table 12). These coupes covered an area of approximately 30,974.80 hectares within Commercial Forest Reserve (Class II).

The number of coupe permits issued for 2025 was slightly higher than previous year. The approved area of 30,974.80 hectares for harvesting in the year 2025 was lower than that of 2024 (45,032.43 hectares).

Table 7: List of Form 1 Licenses issued in 2025.

No	District	Licensee	Licence No	Area (ha)	Land Status	Date Issued	Expiry Date
1	Nabawan	Keunggulan Balak Sdn Bhd	JP(NNN)005/2024(F1)	896.22	State Land	11 Nov 2025	26 Aug 2027
2	Nabawan	Wawasan Jayajuta Sdn Bhd	JP(NNN)004/2024(F1)	737.45	State Land	15 Jul 2025	15 Aug 2027

Table 8: The summary of Form 1 Licences issued from 2020 until 2025.

Year	2020	2021	2022	2023	2024	2025
No. of Form I Licences Issued	4	5	3	11	6	2
Total Area (Ha)	3,767	9,455	1,488	11,990	20,469.93	1,633.67

Table 12: List of coupe permit issued in 2025 by forest district.

No.	District	Total Coupe Issued	Area (Ha)
1	Kinabatangan	2	2,483.15
2	Beluran	2	870.06
3	Kalabakan	5	9,189.96
4	Tibow	7	1,643.84
5	Kota Marudu	3	1,070.09
6	Pitas	1	6,675.67
7	Tongod	2	8,776.13
8	Sook	1	265.90
	Total	23	30,974.80

Table 13: No. of coupe permit for various forest management purposes.

Forest Management Purpose	No. of Coupe Permit
NFM/ RIL	14
Industrial Tree Plantation (ITP)	6
OPP	3
Total	**23**

Reduced Impact Logging (RIL) Practices In Sabah

a. Comprehensive Harvesting Plan (CHP)

39 compartments covering a total area of 12,038.29 hectares had Comprehensive Harvesting Plan (CHPs) approved in 2025 (Table 14). This was an increase of 22.31% in terms of area compared to last year. As with previous years, Rakyat Berjaya Sdn. Bhd., a subsidiary of the Sabah Foundation held the largest share with 26 approved CHPs, covering some 7,077.89 hectares, which was equivalent to 58.79% of the total area approved for RIL harvesting. The newly approved harvest compartments for Rakyat Berjaya Sdn. Bhd., particularly within the Sg. Pinangah Forest Reserve, were the primary contributors to the overall increase in approved areas, representing a 13.69% growth this year. Other licensee with approved area for RIL operation namely KTS Plantation Sdn. Bhd., Sapulut Forest Development Sdn. Bhd., Bornion Timber Sdn. Bhd. and TSH Resources Sdn. Bhd., including Sabah Forestry Department own management (13 CHP amounting to 4,960.40 hectares).

Keningau region with highest number of CHPs approved (19) this year, covering 4,811.74 hectares, followed by Sandakan region with 12 CHPs (3,975.60 hectares) and Tawau region with only 8 CHPs (3,250.95 hectares) (Table 15).

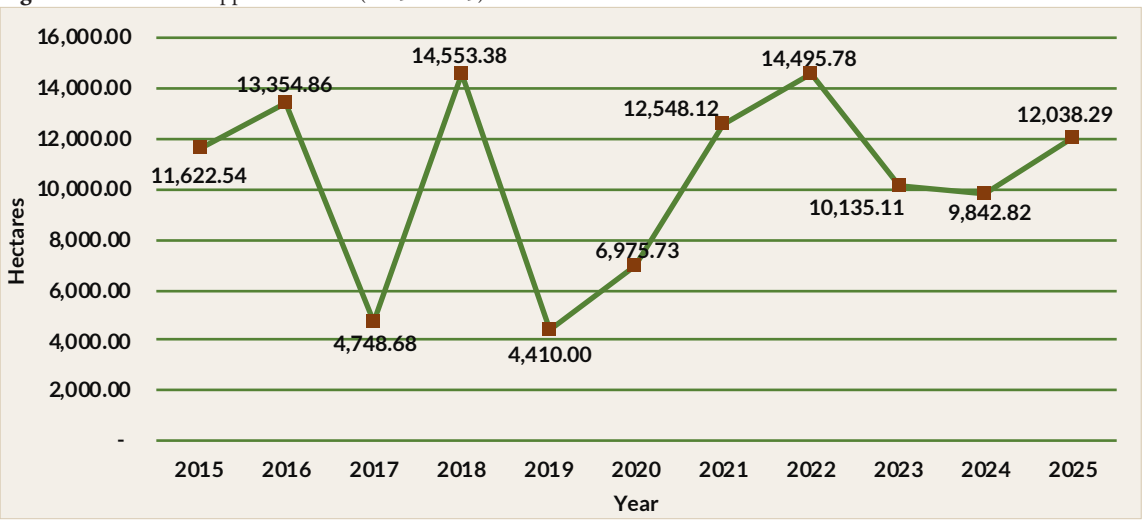
Table 14: Comprehensive Harvesting Plan (CHP) approval by Licensee in 2025.

Licencee	Forestry District	Forest Reserve	No. of CHP	Area (ha)
Rakyat Berjaya Sdn. Bhd.	Nabawan	Sg. Pinangah	7	1,438.82
	Serudong	Kalabakan	6	2,948.09
	Kinabatangan	Kuamut	5	644.679
	Sook	Sg. Pinangah	4	1,087.80
	Tongod	Sg. Pinangah	2	655.64
	Kalabakan	Gn. Rara	2	302.86
Sapulut Forest Development Sdn. Bhd.	Tibow	Sapulut	7	1,988.98
TSH Resources Sdn. Bhd.	Beluran	Ulu Tungud	2	881.79
KTS Plantation Sdn. Bhd.	Sandakan	Segaliud Lokan	2	1,459.49
Bornion Timber Sdn. Bhd.	Sook	Sapulut	1	296.14
Sabah Forestry Department	Sandakan	Deramakot	1	334.00
	Total		39	12,038.29

Table 15: Comprehensive Harvesting Plan (CHP) Approval by Region/District in 2025.

Region	Forestry District	No. of CHP	Area (ha)
Keningau	Nabawan	7	1,438.82
	Sook	5	1,383.94
	Tibow	7	1,988.98
	Sub total	**19**	**4,811.74**
Sandakan	Beluran	2	881.79
	Kinabatangan	5	644.68
	Sandakan	2	1,459.49
	Tongod	2	655.64
	Deramakot	1	334.00
	Sub total	**12**	**3,975.60**
Tawau	Kalabakan	2	302.86
	Serudong	6	2,948.09
	Sub total	**8**	**3,250.95**
	Grand Total	**39**	**12,038.29**

Fig. 6 : Total Area of Approved CHP (2015 - 2025).



The list of contractors registered by the Sabah Forestry Department to conduct Reduced Impact Logging (RIL) and preparation of Compartment Harvesting Plans (CHP) in 2025.

Table 16: List of Contractors Registered in 2025.

No.	Contractor Name	Validity
	RIL Logging Contractor	
1	Empayar Kejora Sdn Bhd	04.06.2025 - 03.06.2026
2	Majujuta Mewah Sdn Bhd	08.08.2025 - 07.08.2026
3	Mewah Hartamas Sdn Bhd	10.04.2025 - 09.04.2026
4	Simgaya Enterprise Sdn Bhd	10.07.2025 - 09.07.2026
5	Enj Maju Sdn Bhd	14.08.2025 - 13.08.2026
6	Hasrat Gagah Sdn Bhd	17.09.2025 - 16.09.2026
7	Ssk Contractor	18.03.2025 - 17.03.2026
8	Pelana Bumi Sdn Bhd	20.04.2025 - 19.04.2026
9	Tetap Jadi Sdn Bhd	20.06.2025 - 19.06.2026
10	Trillion Quality Sdn Bhd	21.05.2025 - 20.05.2026
11	Lancar Niaga Sdn Bhd	21.11.2025 - 20.11.2026
12	Hormat Jadi Sdn Bhd	22.11.2025 - 21.11.2026
13	Kinsasynergy Sdn Bhd	23.11.2025 - 22.11.2026
14	Eko Jutamas Sdn Bhd	24.07.2025 - 27.02.2026
15	Bornion Timber Sdn. Bhd.	26.06.2025 - 25.06.2026
16	Damai Wijaya Sdn Bhd	26.06.2025 - 25.06.2026
	CHP Contractor	
1	Rakan Rimba Sdn Bhd	02.04.2025 - 01.04.2026
2	D.Bren Rin Enterprise	05.05.2025 - 04.05.2026
3	Target Enterprise	12.03.2025 - 11.03.2026
4	Rimbunan Enterprise	15.12.2025 -14.12.2026
5	Trillion Quality Sdn Bhd	17.05.2025 - 16.05.2026
6	Teknikal Servis	20.06.2025 - 19.06.2026
7	Teknikal Ukur Borneo Enterprise	20.07.2025 - 19.07.2026
8	Teknikal Ukur Sabah	22.07.2025 - 21.07.2026
9	Tropical Rainforest Solutions	28.02.2025 - 27.02.2026

Occupational Permit (OP)

As with previous years, Sabah Forestry Department continues to manage the issuance of Occupation Permits in the Forest Reserve. The permit allows for activities within Forest Reserves under Section 20 of the Forest Enactment 1968. The validity of each permit and charge varies depending on the type of activities carried out.

A total of 1,597 Occupation Permits (OP) were recorded in Sabah in 2025, covering approximately 10,685.80 hectares. The following breakdown of the total number and area of permits by each District Forestry Office. As indicated in Table 17, Kalabakan District has the highest number of OPs with a total of 328 permits, followed by Beluran (170), Sook (152), Sandakan (146), and other forest districts in descending order.

Table 17: Number and extent of valid Occupation Permits in each District Forestry Office, 2025.

No.	District	Active OP	Total Area (Ha.)
1	Kalabakan	328	1,408.79
2	Kunak	41	179.48
3	Lahad Datu	34	102.91
4	Semporna	36	168.18
5	Serudong	41	315.87
6	Tawau	67	224.38
7	Ulu Segama Malua	15	107.085
8	Beaufort	6	33.303
9	Kota Belud	18	96.40
10	Kota Kinabalu	17	68.56
11	Kota Marudu	75	223.41
12	Kudat	21	21.75
13	Pitas	56	388.29
14	Ranau	38	231.88
15	Sipitang	28	2,360.181
16	Keningau	18	153.83
17	Nabawan	15	124.64
18	Sook	152	351.17
19	Tambunan	3	20.88
20	Tenom	39	405.70
21	Tibow	92	224.97
22	Beluran	170	821.13
23	Deramakot	34	203.74
24	Kinabatangan	18	192.21
25	Sandakan	146	548.47
26	Telupid	33	162.94
27	Tongod	56	245.65
	Total	**1,597**	**10,685.80**

Table 18: Comparison of active permits in year 2024 and 2025.

No.	District	2024	2025
1	Kalabakan	318	328
2	Kunak	35	41
3	Lahad Datu	34	34
4	Semporna	32	36
5	Serudong	36	41
6	Tawau	60	67
7	Ulu Segama Malua	13	15
8	Beaufort	6	6
9	Kota Belud	15	18
10	Kota Kinabalu	16	17
11	Kota Marudu	70	75
12	Kudat	19	21
13	Pitas	46	56
14	Ranau	15	38
15	Sipitang	16	28
16	Keningau	13	18
17	Nabawan	10	15
18	Sook	138	152
19	Tambunan	2	3
20	Tenom	20	39
21	Tibow	73	92
22	Beluran	164	170
23	Deramakot	21	34
24	Kinabatangan	8	18
25	Sandakan	130	146
26	Telupid	29	33
27	Tongod	43	56
	Total	**1,382**	**1,597**

Forest Surveillance & Monitoring

The Survey Unit of the Division continued to undertake regular boundary demarcation of Forest Reserves in collaboration with personnel from various Forestry Districts. The Unit was also responsible for monitoring and evaluating survey works carried out by registered surveyors appointed to delineate Forest Reserve boundaries.

In 2025 the Unit's objective was to enhance the capacity of the Department to monitor and protect the Forest Reserves. Several capacity-building programmes were successfully implemented, including training on the operation and handling of Unmanned Aerial Vehicles (UAVs), Global Positioning System (GPS) calibration, helicopter surveillance operations, as well as ground-truthing of survey boundaries to ensure accuracy and compliance with established standards. A list of training programmes conducted by the Survey Team is shown in Table 19.

Table 19: List of training programmes conducted by the Survey Team.

No.	Title	Date	Venue
1	*Kursus Pengendalian GPS*	17 – 19 June 2025	IPS, Telupid
2	*Latihan Undang-Undang dan Asas Penggunaan Drone*	25 – 28 August 2025	IPS, Telupid
3	*Kalibrasi Peralatan Jabatan Perhutanan Sabah*	05 – 17 May 2025	Tapak Kalibrasi IPS, Telupid



GPS Training for district forest representatives.



Drone training at Forestry Institute of Sabah (FORiNS), Telupid.



(Left) Updating calibration Data and (right) Telupid HypsoMeter calibration at Forestry Institute of Sabah (FORiNS), Telupid.

DEVELOPMENT OF FOREST RESOURCE DIGITALISATION

This is a new module developed in the GeoForest system for managing Comprehensive Harvesting Plan (CHP) and Coupe Permit records. The purpose of this module is to digitalise and centralize all harvesting approval information in one integrated platform.

a. CHP Module

This section manages and records approved Comprehensive Harvesting Plans. It stores important information such as:

- Licensee / Company Name
- District and Forest Reserve
- FMU and Compartment Numbers
- Approval and validation period
- Spatial information (road, riparian, harvesting trees, etc.)

b. Coupe Permit Module

This section records and manages coupe-level permits. It allows officers to:

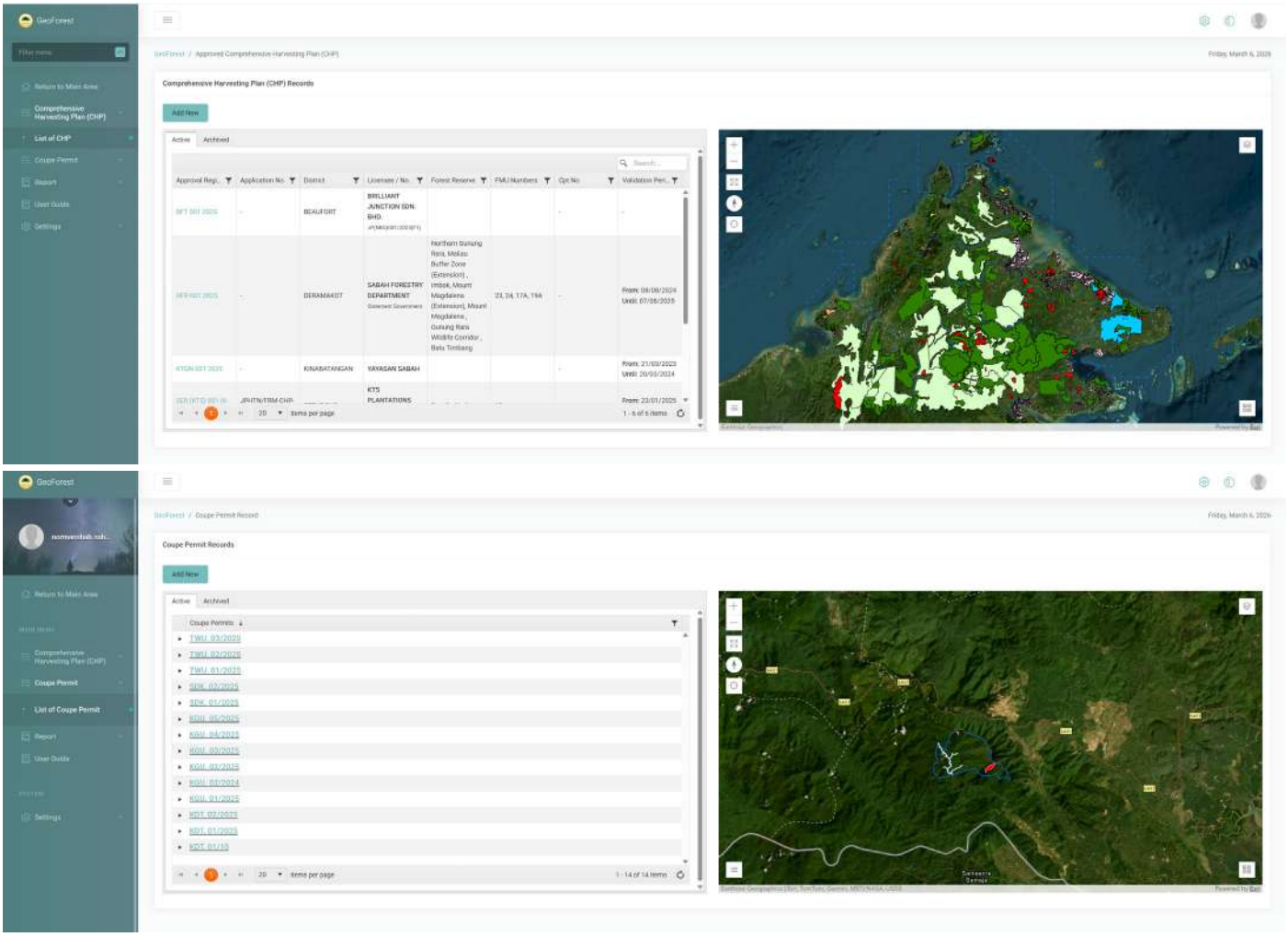
- Add new coupe permits
- Track active and archived permits
- Spatial information (Coupe boundaries, etc.)

In support of the Sabah State Government's digitalization initiative, this system was developed to facilitate online submission and management of Occupation Permit (OP) and Form IIB applications.

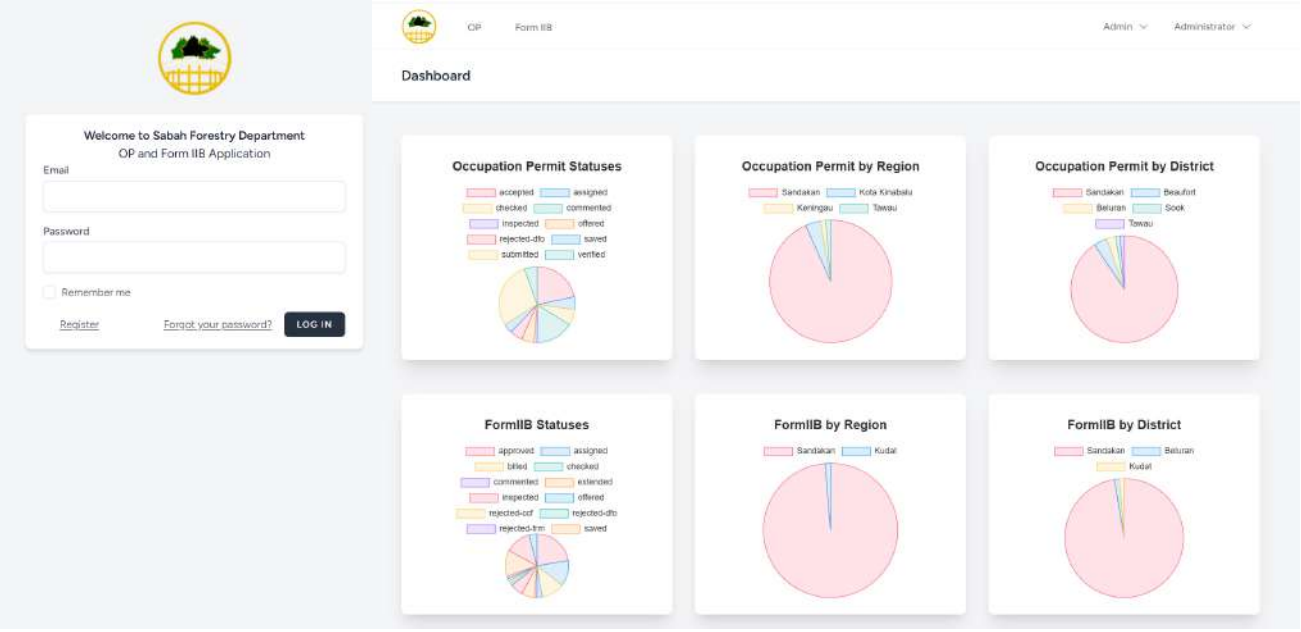
The platform enables applicants to submit their applications digitally, reducing paperwork and improving processing efficiency. At the same time, the system records and stores all application data in a centralized database, ensuring proper documentation and data integrity.

Through its integrated dashboard, officers can monitor application status in real-time, track progress by region and district, and generate statistical summaries for reporting and decision-making purposes.

Overall, this system enhances transparency, improves administrative efficiency, and strengthens the digital governance framework of the Sabah Forestry Department.



Show Module for CHP and Coupe Permit



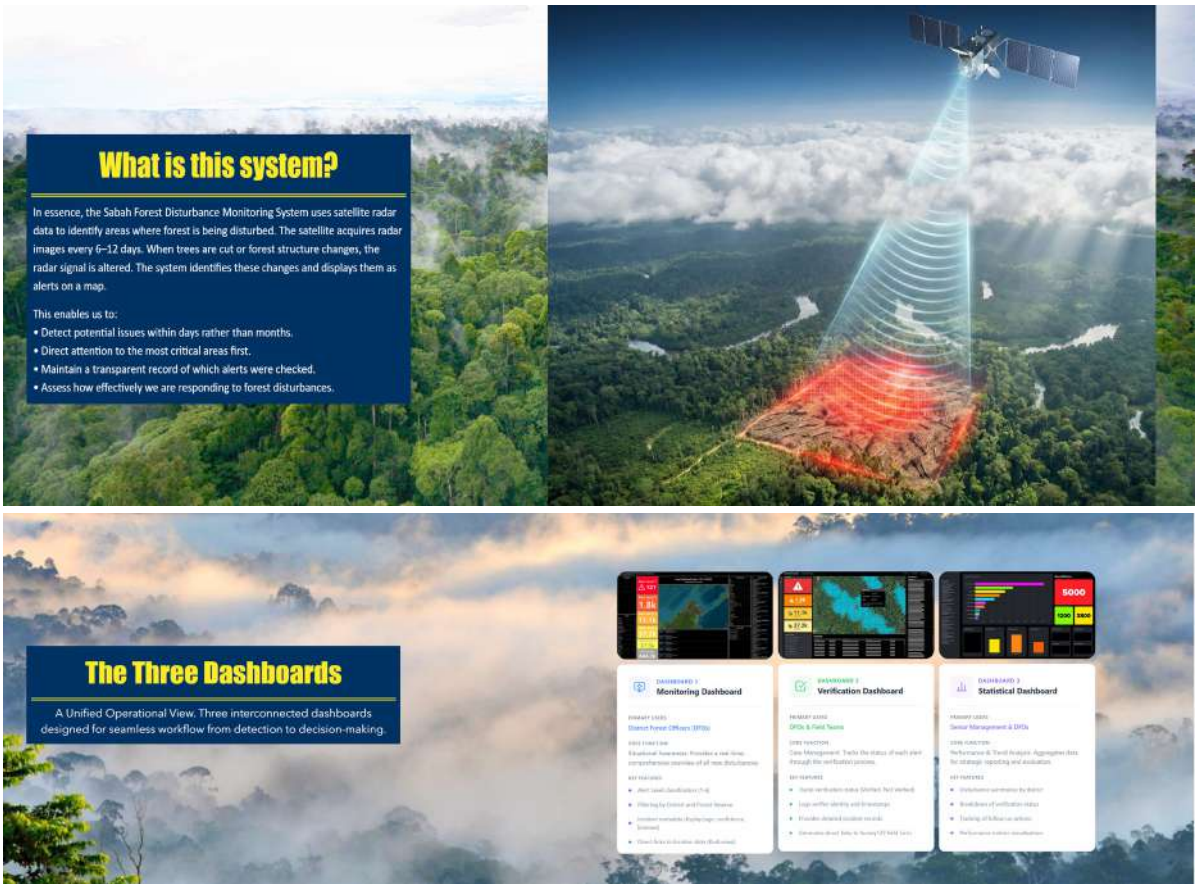
Dashboard Summary Showing Application Form IIB and OP Information.

The Sabah Forest Watch – Forest Disturbance Monitoring System was developed to strengthen forest protection through advanced satellite-based technology.

This system uses radar satellite data to detect forest disturbances such as illegal logging, encroachment, or land clearing. By analyzing satellite imagery at regular intervals, the system can identify changes in forest cover and generate alerts within days rather than months.

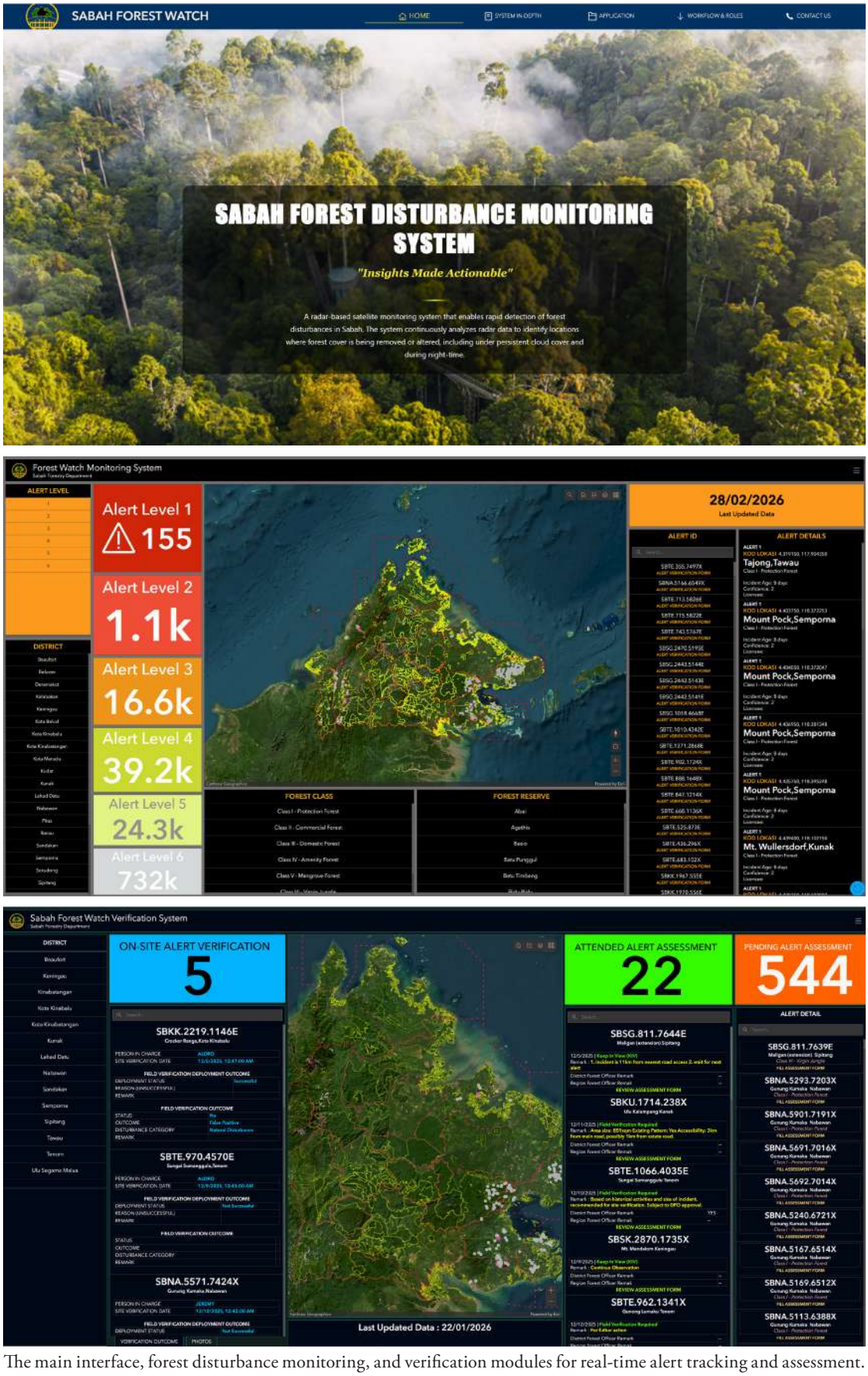
The platform is supported by three interconnected dashboards:

- Monitoring Dashboard – Provides near-real-time alerts and spatial visualization of detected forest disturbances.
- Verification Dashboard – Enables field officers to verify alerts, update case status, and record findings.
- Statistical Dashboard – Generates summaries, trends, and performance reports to support management decision-making.



Dashboard interface of the Sabah Forest Watch System.

Overall, Sabah Forest Watch enhances early detection, improves response time, strengthens monitoring transparency, and supports data-driven forest governance in Sabah.



The main interface, forest disturbance monitoring, and verification modules for real-time alert tracking and assessment.





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(Left) *Eucalyptus pellita*, one of the plantation timber species grown in Sabah.

SUSTAINABLE FOREST MANAGEMENT

Sustainable Forest Management (SFM) remains at the core of SFD's agenda in balancing ecological, social, and economic objectives for the benefit of present and future generations. The year 2025 remained challenging for the forestry sector, amid the global economic slowdown, continued instability in the timber market, declining demand, and increasingly stringent legality requirements. These external pressures affected Sabah's timber sector and contributed to underperformance against timber harvesting and planting targets within forest plantation areas. In addition, the introduction of the European Union Deforestation Regulation (EUDR) has further raised pressure for timber industries to follow new requirements to enter the EU market, where products must now be traceable, risk-assessed, and free from deforestation and forest degradation. In response, SFD with support from the EU-Malaysia Cooperation Facility (EMCF) has reached the finalisation stage to align the Sabah TLAS with the EUDR and incorporate the EU Corporate Sustainability Due Diligence Directive (CS3D) to strengthen due diligence on human rights and environmental risks across timber value chains.

Despite these emerging global challenges, SFM continues to provide an important framework for strengthening forest governance, supporting the expansion of Totally Protected Areas (TPAs), and advancing key social forestry initiatives in collaboration with SFD's strategic partners. Through these efforts, SFD remains committed to ensuring that forest resources are managed responsibly while strengthening conservation, promoting community participation and building a more resilient forestry sector.

This report highlights the initiatives and achievements of the Sabah Forestry Department through the implementation of SFM practices throughout 2025.

TIMBER HARVESTING

In 2025, approximately 5,683 hectares were harvested under Natural Forest Management (NFM), with the main contributions from Yayasan Sabah (FMU 15), Sapulut Forest Development Sdn Bhd, and TSH Resources Bhd. Logging operations in these areas applied Reduced Impact Logging (RIL) methods to reduce environmental impacts.

For Industrial Timber Plantations (ITP) and Agroforestry development, salvage logging covered about 10,512 hectares in 2025. Top Quantum Sdn. Bhd. recorded the highest harvested area at 2,338 hectares, followed by Benta Wawasan Sdn. Bhd. (Golden Borneo Palm Sdn Bhd), Asian Forestry Company (Sabah) Sdn. Bhd., Bornion Timber Sdn Bhd, KTS Plantation Sdn Bhd, Yayasan Sabah (Hasrat Gagah Sdn Bhd), Benta Wawasan Sdn Bhd (Serijaya Industri Sdn Bhd), Timberwell Berhad, Pesona Majukaya Sdn Bhd, and Eco-Plantation Sdn Bhd. Overall, the harvested area declined significantly by 29%, or about

4,229 hectares, compared to the previous year's total of 14,741 hectares. This decrease was mainly due to poor timber market conditions and labor shortages faced by the licensees. Further details on the harvested areas by contributing SFM licensees are provided in Table 1.

In total, the harvested area in 2025 amounted to 18,659 hectares. Of this, approximately 13% (2,465 hectares) came from plantation forests, while the remaining 87% (16,195 hectares) was still largely dependent on natural forests.

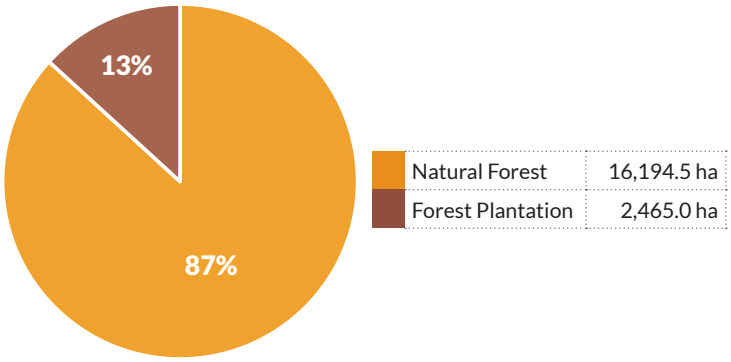


Fig. 1: Extent of area harvested in 2025 (ha).

Table 1: Area of timber harvested in 2025.

No.	SFM Licensee/ SFM Project/ Agency / Smallholder	Natural Stands		Plantation Trees			Total	
		NFM Area (Forest Reserve) (ha)	ITP (Forest Reserve) (ha)	Forest Reserve (ha)	Stateland (ha)	Alienated land (ha)	Natural Stands (ha)	Plantation Trees (ha)
A	SFM Licensee							
1	Eco-Plantations Sdn Bhd		387.4					
2	Jayakuik Sdn Bhd			60.0				
3	Asian Forestry Company (Sabah) Sdn Bhd (AFCS) Paitan FR		834.4					
4	Timberwell Berhad		700.0					
5	TSH Resources Berhad	1,108.5						
6	Bornion Timber Sdn Bhd		1,459.3					
7	K.M. Hybrid Plantation Sdn Bhd			67.0				
8	Sapulut Forest Development Sdn Bhd	1,476.0	63.7	10.0				
9	Jawala Plantations Industries Sdn Bhd			6.0				
	Yayasan Sabah (FMU 15)	2,096.8						
	Yayasan Sabah (FMU 16)	484.6						
10	Yayasan Sabah (JV Indah Serimas Sdn Bhd)		9.1					
	Yayasan Sabah FMU 20	355.5						
	Yayasan Sabah (Hasrat Gagah Sdn Bhd)		714.9					
11	Lebihasil Sdn Bhd FMU 17A (Area A)			5.0				
12	Maxland Sdn Bhd FMU17B (Area C)		377.4	380.1				
13	KTS Plantation Sdn Bhd		798.0					
14	Top Quantum Sdn Bhd		2,337.8					
15	Pesona Majukaya Sdn Bhd	33.2	452.1					
16	Benta Wawasan Sdn Bhd (Golden Borneo Palm Sdn Bhd)		1,668.9					
17	Benta Wawasan Sdn Bhd (Serijaya Industri Sdn Bhd)		709.2					
18	Asian Forestry Company (Sabah) Sdn Bhd (Begaraya Sdn Bhd)				145.6			
	Sub Total	5,554.6	10,512.0	528.1	145.6	-	16,066.6	673.7
B	SFM Project							
1	Deramakot Forest Reserve	127.9						
	Sub total	127.9	-	-	-	-	127.9	-
C	Agency & Smallholder							
1	Sabah Softwood Berhad				1,245.9			
2	Acacia Forest Industries Sdn Bhd				545.5			
	Sub total	-	-	-	1,791.4	-	-	1,791.4
	Grand Total	5,682.5	10,512.0	528.1	1,937.0	-	16,194.5	2,465.0

FOREST REHABILITATION

Forest rehabilitation efforts were implemented through a combination of silvicultural treatments and enrichment planting, aimed at restoring degraded forest areas while improving their ecological functions and long-term productivity. These activities focused on enhancing forest structure, encouraging natural regeneration, and increasing the presence of valuable and indigenous tree species.

Silvicultural treatments included practices such as climber cutting, liberation thinning, and selective tending to reduce competition and promote the growth of desirable trees. Enrichment planting was also carried out in heavily degraded areas by introducing suitable species to accelerate forest recovery. The activities were mainly carried out by SFM licensees and the Sabah Forestry Department through its SFM projects.

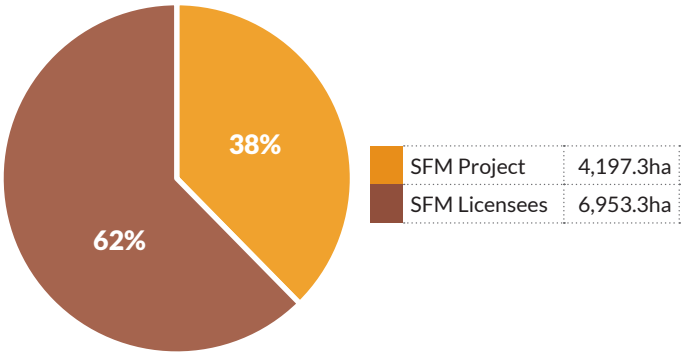


Fig. 2: Forest areas silviculturally treated in 2025.

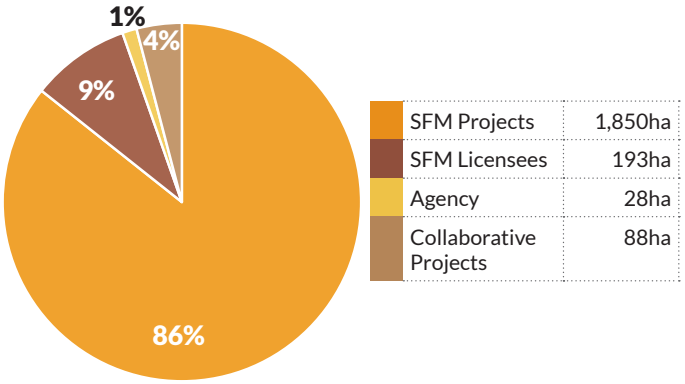


Fig. 3: Restoration/Enrichment planting conducted in 2025.

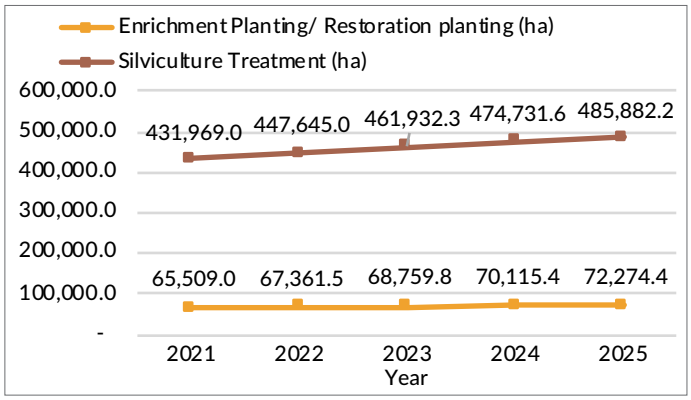


Fig. 4: Accumulated degraded forest areas planted and silviculturally treated (2021 - 2025).



The forest condition at Sapulut Forest Development Sdn Bhd post-treatment.

In 2025, about 11,151 hectares of degraded forest were treated, the largest treated area in 2025 was approximately 1,848 hectares, which was carried out by TSH Resources Bhd. For the SFM Project, the highest treated area was conducted by the Ulu Segama Malua SFM Project of about 1,215 hectares. **Fig. 2** shows the area treated by SFM Licensees & SFM Projects. The total treated area as of December 2025 was about 485,882 hectares. This is an increase of 2.3% or about 11,150 hectares compared to 2024 (474,732 hectares).

Meanwhile, about 2,159 hectares of natural forests were restored or enriched through the planting of native species in 2025. This is a 59% increase compared to 2024 (1,356 hectares). **Fig. 3** shows the restored/enriched area contributed by SFM Licensees, SFM Project, Agency and collaborative projects.

As of December 2025, the total forest rehabilitation through silviculture treatment and enrichment planting/forest restoration was approximately 558,157 hectares. This is an increase of 2.44% or about 13,224 hectares as compared to 2024 (544,847 hectares). The trend of area treated and restored over the period of five years, from 2021 to 2025 is shown in **Fig. 4**. It showed that the silviculture treatment and enrichment planting are increasing annually.

FOREST PLANTATION

In 2025, forest plantation in Sabah maintained its core function in supporting sustainable timber production while reducing pressure on natural forests. Guided by the Action Plan on Forest Plantation Development (2022-2036), the State endeavors to establish new forest plantations annually, in order to meet the ultimate goal of 400,000 hectares by 2036.

However, the progress of forest plantation establishment in 2025 was disparaging following several factors, with the most prominent being the downturn of the global timber market.

The SFM Licensees achieved 65% of their planting target, i.e., 5,565 hectares out of the 8,516 hectares as outlined in their Annual Work Plan (2025). Although this was a far cry from the target set in the Action Plan, the establishment of new forest plantation areas is increasing slowly but steadily, with the cumulative forest plantation areas established in Sabah now standing at 414,915 ha, as compared to 409,305 hectares in previous year.

The total area included 188,525 ha established by SFMLA Licencees, 195,377 ha of smallholders' rubber plantation developed through rubber planting projects under LIGS, FELCRA, RISDA and LGM, and another 31,013 hectares developed by other companies and agencies such as SAFODA, Acacia Forest Industries and Sabah Softwood (**Table 2**).

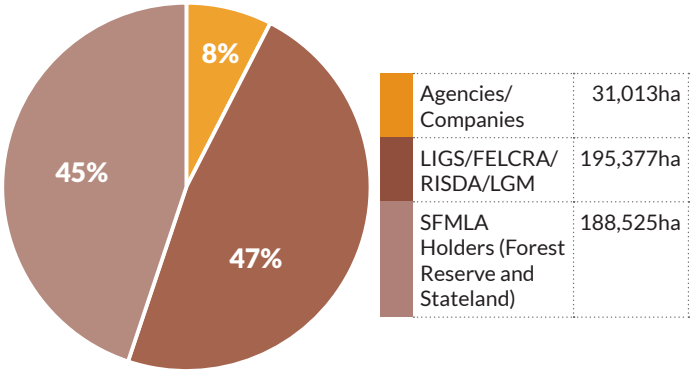


Fig. 5: Accumulated forest plantations established as of 2025.

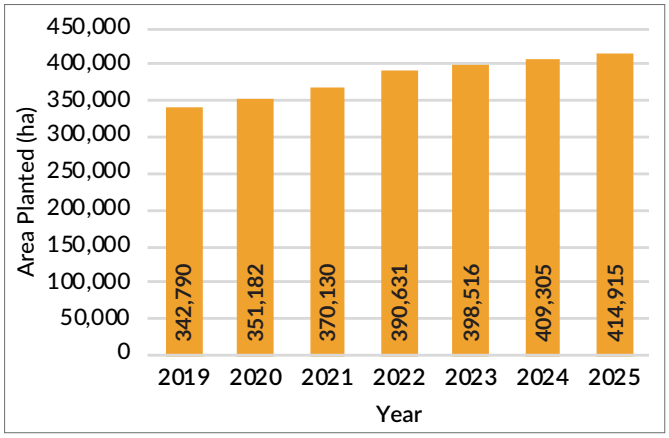


Fig. 6: Total area planted in Sabah from 2019 - 2025.

Table 2: Main forest plantation species planted by SFM Licensees in 2025.

Species	Area planted
Eucalyptus pellita	1,544
Laran	2,322
Batai	566
Rubber	75
Mahogany	95
Gagil	107
Binuang	139
Talisai	80
Acacia crassicarpa	228
Others	409
Total	**5,565**



Harvested logs of *Eucalyptus pellita* waiting to be transported to the mill.

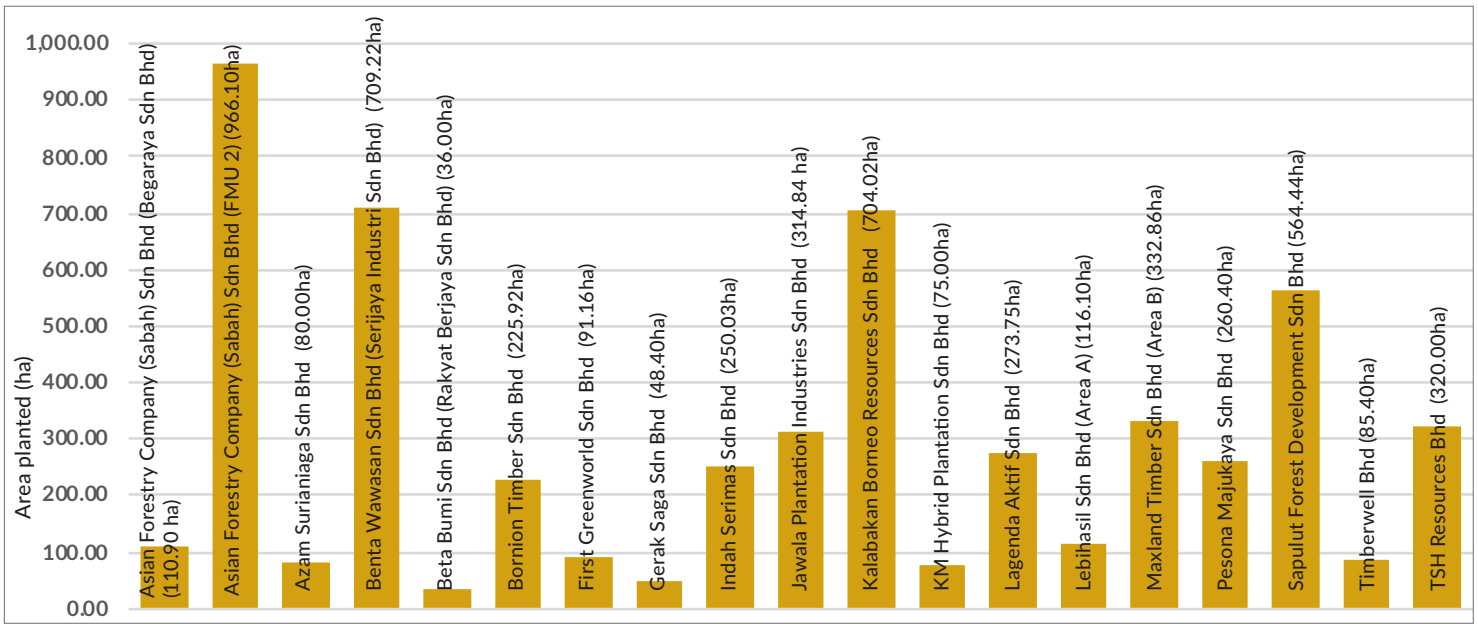


Fig. 7: Plantation area established by SFM Licencees in 2025.

AGROFORESTRY

In 2025, fresh fruit bunches (FFB) harvested from 78,311 hectares of oil palm plantations generated approximately RM 48 million in royalties. This represents an additional RM 6.2 million, which is a 15% increase in royalty collection compared to the previous year. The increase was mainly attributed to improved FFB prices and the expansion of mature oil palm areas.

Table 3: Oil palm plantation area harvested in 2025.

SFMLA/LTL Holder	Area planted (ha)	Area harvested (ha)
Benta Wawasan Sdn. Bhd.	24,857	24,857
Benta Wawasan Sdn. Bhd. (Samel Plantation Sdn Bhd)	2,193	1,983
Benta Wawasan Sdn Bhd (Serijaya Industri Sdn Bhd)	12,246	12,258
Benta Wawasan Sdn Bhd (Golden Borneo Palm Sdn Bhd)	16,621	12,691
Benta Wawasan Sdn Bhd (RT Plantation Sdn Bhd)	1,770	1,770
Silam Forest Products Sdn Bhd (Ikatan Kayangan Sdn Bhd)	7,219	7,219
Silam Forest Products Sdn Bhd (Arus Sawit Sdn Bhd)	6,173	6,173
Silam Forest Product Sdn Bhd (Kelola Maju Sdn Bhd)	6,167	6,167
Aspirasi Kristal Sdn Bhd	2,948	2,948
Satria Eramaju Sdn Bhd	2,245	2,245
Total	**82,438**	**78,311**

FOREST CERTIFICATION

Sabah remains committed to maintaining and expanding certified forest areas as part of its efforts to strengthen forest governance and promote sustainable forest management (SFM). The State currently implements three internationally recognised forest certification schemes, namely the Forest Stewardship Council (FSC), the Malaysian Timber Certification Scheme – Programme for the Endorsement of Forest Certification (MTCS–PEFC), and the IUCN Green List of Protected and Conserved Areas.

As of 2025, a total of 214,859 hectares of forest areas in Sabah hold valid forest management certificates under these schemes, comprising 167,397 hectares of natural forests and 47,462 hectares of forest plantations. In the same year, Deramakot Forest Reserve had successfully completed its Second Surveillance Audit under the FSC certification scheme.

In addition, Sabah continued to advance its participation in the IUCN Green List process. Several forest management units and protected areas amounting to 271,340 hectares have been identified to undergo assessment, including Sook Lake Forest Reserve (1,452 ha), Trusan Sugut Forest Reserve (8,860 ha), Sungai Pinangah–Tawai–Sungai Radapan (PINTAR) Forest Reserve (41,993 ha), Lumaku SFM (12,252 ha), Ulu Kalumpang–Wullersdorf SFM (64,953 ha), Timimbang–Botitian SFM (13,610 ha), and Tabin Wildlife Reserve (123,779 ha).

Some of these sites have successfully completed the Application phase and progressed to the candidate phase, which requires the submission of a comprehensive dossier addressing 45 indicators in accordance with the IUCN Green List Standard.

Table 4: Certified Forest Areas as of 2025.

No.	SFM Project	FMU / Location	Total Area (ha)	Certification Scheme
1	Deramakot	FMU 19A	55,507	FSC (Natural Forest Management)
No.	**SFM Licensee**	**FMU / Location**	**Total Area (ha)**	**Certification Scheme**
2	KTS Plantations Sdn Bhd	FMU 19B / Segaliud Lokan	57,247	MTCS-PEFC (Natural Forest Management)
3	Sapulut Forest Development Sdn. Bhd.	FMU 14	54,643	MTCS-PEFC (Natural Forest Management)
4	Gerak Saga Sdn. Bhd.	FMU 2	6,476	MTCS-PEFC (Forest Plantation)
No.	**Company**	**Location**	**Total Area (ha)**	**Certification Scheme**
5	Acacia Forest Industries Sdn Bhd	Bengkoka Peninsula	17,334	MTCS-PEFC (Forest Plantation)
6	Sabah Softwoods Sdn Bhd	Brumas & Kalabakan	23,652	FSC (Forest Plantation)

Scan QR Code to view the map of the certified forest areas in Sabah

IUCN Green List Achievement

In 2025, the SFD successfully achieved IUCN Green List certification for Pin Supu Forest Reserve, with a certificate validity of five years from 16 May 2025 to 15 May 2030. The certificate handover ceremony was held in conjunction with the International Conference "Borneo's Green Heart: Advancing Climate Resilience, Conservation and Sustainable Livelihoods" on 22–23 October 2025.

The certificate was presented by Mr. Mohammad Khalid Sayeed Pasha, Regional Coordinator for Protected and Conserved Areas (IUCN), to YBhg. Datuk Frederick Kugan, Chief Conservator of Forests, Sabah. The ceremony was witnessed by YBhg. Datuk Norlijah Haji Darin, Deputy State Secretary (Administration), Sabah, and Mr. Henry Chan, Senior Director of Conservation, WWF–Malaysia.



Handing Over of IUCN Green List Certificate during the International Conference Borneo's Green Heart: Advancing Climate Resilience, Conservation and Sustainable Livelihoods.



IUCN Green List Certificate of Pin Supu Forest Reserve (16 May 2025 – 15 May 2030).

SABAH TIMBER LEGALITY ASSURANCE SYSTEM

The Sabah Timber Legality Assurance System (TLAS), established in 2009, is a due diligence framework designed to ensure that timber products from Sabah are legally sourced, compliant with local legislations and international standards. It plays a critical role in meeting the requirements of the European Union (EU)'s Forest Law Enforcement, Governance, and Trade (FLEGT) program. This system is mandatory for all licensees in both upstream and downstream timber industries in Sabah.

In 2025, the SFD continued its collaboration with the EU in preparation for the launch of the Sabah TLAS+, aimed at strengthening alignment with international standards such as the EU Deforestation Regulation (EUDR) and the EU Corporate Sustainability Due Diligence Directive (CS3D). Further details on this initiative are highlighted in the Special Feature Report titled 'Sabah Timber Legality Assurance System Plus (Sabah TLAS+): Strengthening Timber Legality, Sustainability and Market Credibility'

For Sabah TLAS auditing activities, SFD appointed an independent third-party auditor to assess both upstream and downstream timber industries. The audit framework covers six (6) Principles: Right to Harvest, Forest Operations, Statutory Charges, Other User Rights, Mill Operations, and Worker Safety and Health.

Compared to 2024, the number of auditees increased in 2025 following the renewal of the auditing contract, allowing audits to resume as scheduled. Auditees under Principles 1 to 4 increased from 45 to 57, while those under Principles 5 & 6 rose from 117 to 136.

Audit results for Principles 1 to 4 showed that 56 out of 57 licensees (98%) complied with the Sabah TLAS requirements and were awarded TLAS Compliance Certificates (TLAS-CC). This represents a significant improvement of 18% from the previous year, where 36 out of 45 licensees (80%) were certified. The most common findings were related to workers' welfare, management plan requirements and payment of royalty and applicable fees.

For Principles 5 and 6, a total of 136 companies including mill operators, exporters, and importers were audited across Sabah in 2025. Of these, 135 companies (99%) complied with Sabah TLAS requirements, reflecting a 1% increase from 2024, where 115 out of 117 companies (98%) were certified. The most frequent findings were pertaining to inconsistencies in referencing Sabah TLAS status of purchased materials, workers' welfare and records of monthly mill production returns.

The SFD awarded TLAS-CC to auditees who successfully met the TLAS requirements in 2025. The TLAS-CC serves as a critical instrument in the timber supply chain, providing assurance that timber products sourced from Sabah are legally harvested, processed and traded.

Table 5: Summary of TLAS audit result.

Principle	Audited	Passed (TLAS – CC)	Non-Compliance
P1 – P4	57	56 (98%)	1
P5 & P6	136	135 (99%)	1



Segregation of Sabah TLAS timber Products at Lamitech International Sdn Bhd.

Digitalization of the Sabah TLAS Compliance Certificate

The SFD had initiated the digitalization of the TLAS-CC through the appointment of a certified consultant. This digitalization system is designed to streamline the Department's compliance process, covering the verification of audit reports, generating, approving and managing TLAS-CC. By adopting a digital platform, the Department aims to enhance efficiency, transparency, and accountability in timber legality assurance.

SOCIAL FORESTRY

In 2025, collaboration in social forestry has mainly focused on activities carried out by SFD with relevant stakeholders such as SFM Licensees, local authorities, NGOs including KIPMAPS socialization with SASOF. The detailed achievements of social forestry are as follows:

A. Social Forestry Activities

Various social forestry activities conducted within and adjacent to forest reserves managed by SFD and SFM Licensees in 2025 (**Table 6**).

Table 6: Social forestry activities

Forest Reserve	Activity
Deramakot FR	Consultations related to social forestry and high conservation value (HCV) were carried out involving the communities of Kg. Tulang-Tulang and Kg. Tangkuyan.
Gunung Lumaku FR	Tenom District Forestry Office conducted social forestry studies and documentation for the formulation of the Lumaku FR Conservation Area Management Plan (CAMP). The studies included the Social Baseline Survey (SBS), Social Impact Assessment (SIA), and High Conservation Value Forest (HCV 5 & 6) assessments in 29 villages adjacent to Lumaku Forest Reserve.
Ulu Segama -Malua FR	Social forestry studies and documentation were conducted for the preparation of the Ulu Malua Segama Forest Reserve Forest Management Plan (FMP). The studies included the Social Baseline Survey (SBS), Social Impact Assessment (SIA), and High Conservation Value Forest (HCV 5 & 6) assessments involving communities from nine villages adjacent to the forest reserve.
Kelawat FR	Community-based biodiversity conservation activities were implemented in collaboration with the community of Kampung Ponopuan. The activity involved the participation of 20 villagers and resulted in the planting of 600 trees covering an area of 2 hectares.
Tamparuli FR	The Tamparuli Forest Reserve Conservation Area Management Plan (CAMP) was completed and published, which incorporated social forestry studies from the two villages adjacent to the forest reserve.
Bengkoka and Tambalugu FRs	SFM Licensee (Gerak Saga Sdn Bhd) supported social forestry activities with the community of Kampung Bawing, focusing on forest reserve conservation and safety awareness programmes.
Lingkabau FR	Timberwell Bhd supported various social forestry and corporate social responsibility (CSR) involving communities from two villages adjacent to Lingkabau Forest Reserve. Activities included awareness programmes on social forestry and forest protection, support for community initiatives, and assistance in the maintenance of village access roads.
Segaliud-Lokan FR	SFD collaborated with KTS Plantation Sdn Bhd to carry out social forestry activities with communities from four villages adjacent to the forest reserve. The programmes focused on forest protection, conservation, and environmental awareness.
Ulu Sungai Milian FR	Lagenda Aktif Sdn Bhd in close collaboration with SFD provided support to communities from two villages, through the maintenance of village access roads and facilitated discussions related to social forestry initiatives.

B. Social Forestry Assessments

Social forestry assessments which consist of Social Baseline Survey (SBS), Social Impact Assessment (SIA), and High Conservation Value Forest (HCV 5 & 6) were carried out in the forestry districts of Tongod, Lahad Datu, Beaufort, Kota Kinabalu, Tenom, and Sandakan. Such undertaking aims to obtain the current status of local communities adjacent/within FR and stakeholders. The social assessments conducted in 2025 are listed in **Table 7**.

Table 7: Social forestry assessments

No.	Location	No. Villages covered	Activity
1	Gunung Tinkar FR (Class I), Tongod	0	SBS on temporary settlement
2	Tabin Wildlife Reserve (Class VII), Lahad Datu	1	- SBS - SIA - HCV 5&6
3	Padas Damit FR (Class IV), Beaufort	10	- SBS - SIA - HCV 5&6
4	Tamparuli FR (Class I), Kota Kinabalu	2	- SBS
5	Gunung Lumaku FR (Class I), Tenom	29	- SBS - SIA - HCV 5&6
6	Ulu Segama- Malua FR (Class I), Lahad Datu	9	- SBS - SIA - HCV 5&6
7	Tangkulap & Sg. Talibu FRs (Class I), Tongod	4	- SBS - SIA - HCV 5&6
8	Trusan Kinabatangan FR (Class V), Kinabatangan	1	- SBS
9	Elopura FR (Class V), Sandakan	2	- SBS



Social Baseline Survey activities were carried out in Kg Pp Adion, adjacent to the Gunung Tingkar Forest Reserve.

C. Social Forestry Collaboration

i. ASEAN Working Group on Social Forestry

The 19th Meeting of the ASEAN Working Group on Social Forestry (AWG-SF) was held virtually on 7 May 2025. Prior to the meeting, a preparatory meeting was organised by NRES on 28 April 2025 involving forestry and relevant agencies officers from Peninsular Malaysia, Sabah and Sarawak. The Sabah Forestry Department was represented physically by Mr Ricky Alisky Martin and Mr Mohd Daniel Aiman Mutasil, while Ms Elne Betrece Johnlee and Ms Bellinda Debra Raymond participated virtually. The meeting discussed the finalization of Malaysia's Intervention Notes and Country Report related to social forestry.

ii. KIPMAPS

KIPMAPS serves as an easy-reference document on forestry and community engagement, developed through a series of focus group discussions and stakeholder consultation workshops, to strengthen sustainable forest management practices in Sabah through increased public awareness and community participation.

SFD in collaboration with WWF-Malaysia kickstarted the KIPMAPS (Kit Informasi Penglibatan Awam dalam Perhutanan, Sabah) Roadshow, in Kota Kinabalu Forestry Region, to introduce the KIPMAPS to the public. The programme was officiated by Mr. Zulkifli Suara, Deputy Chief Conservator of Forests (Operations), and was participated by 83 representatives comprising local communities and stakeholders from KK Forestry Region. The closing ceremony was officiated by Mr. Daim Balingi, Head of Sustainable Forest Management Division. Similar roadshows are planned for four other forestry regions, namely Kudat, Keningau, Tawau and Sandakan, in 2026.

iii. SASOF (Sabah Association for Social Forestry)

SASOF, comprising representatives from the government agency, academia and NGO provides a platform for collaboration among stakeholders in the policy, management and development of various aspects of social forestry in Sabah. It also promotes social forestry in sustainable forest management, towards increasing forest productivity and the socio-economic well-being of the indigenous peoples and local communities (IPLC).

SFD through SASOF has carried out various activities, under the *Adaptive Landscape Management in Building Socio-Ecological Resilience* project in the Crocker Range Biosphere Reserve, Sabah (GEF-SGP Project). Activities were, amongst others, the tri-monthly SASOF-SGP Project Meeting, various online facilitation meetings, focus group discussions, Tree Identification Training for Local Communities in Kampung Bolotikon, Papar, working visits to several community-based enterprises in Tambunan, Kota Belud and Kota Marudu. These activities aim to strengthen community capacity building, knowledge sharing and stakeholder collaboration in supporting sustainable landscape management in the Crocker Range Biosphere Reserve.

FOREST FIRE PROTECTION

The total burnt forest area reported to the SFD in 2025 was about 157 ha. The trend of forest fire occurrences in Sabah from the year 2021 to 2025 is shown in **Fig. 8**.

The most affected forest areas were in Sook (**Table 8**). Compared to previous years, the primary cause of forest fires has been open burning on nearby agricultural land which then spreads into adjacent forest reserves.

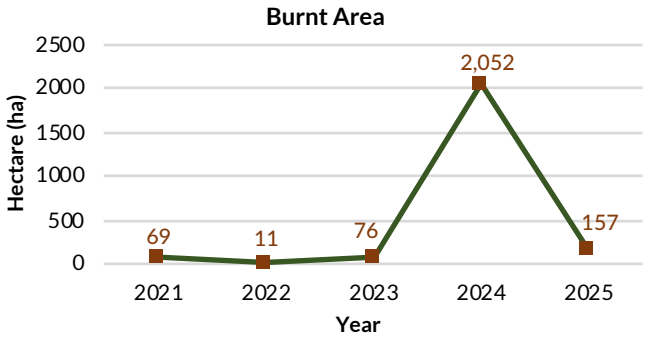


Fig. 8: Trend of Forest Fire Occurrences (2021 – 2025).

Table 8: District Areas Affected by Fire in 2025.

No.	District	Causes	Size of Area Affected (ha)		Total
			FR	SL & AL	
1	Kota Kinabalu	Open Burning	6	0	6
2	Sook		151	0	151
	Total		**157**	**0**	**157**

FR – Forest Reserve; **SL** – State Land; **AL** – Alienated Land

A. Forest Fire Early Detection Measures

One of the strategies for forest fires monitoring is through the Fire Weather Index (FWI), which is produced daily based on the Fire Danger Rating System (FDRS).

Surveillance by the department's Forest Fire Crew is activated when the level of FWI is rated medium or high.

Scan QR Code to view the forest fire management prescription according to FWI level.

B. Forest Fire Training and Awareness Programme

Forest fire training involving the Forest Fire Crew of the SFD and Forest Department Sarawak, stakeholders and forest communities were continuously conducted in 2025 in order to refresh the crew's knowledge and skills in handling forest fire incidents. There were five training sessions conducted in 2025, which involved 177 participants as shown in **Table 9**. Apart from theory, fire drills were conducted and included activities such as the construction of fire guards, handling water pumps, efficient water delivery system and fire suppression (**Fig. 10**). The training was conducted by the SFD's Forest Fire Trainers (**Table 10**).

Table 9: Forest Fire Prevention and Suppression Training in 2025.

Date	District	Location/Area	No. of Participant
17-20 February	Kinabatangan	Sg. Pin Conservation Area	23
12-15 August	Sook	Sook Lake Forest Fire Training Centre	44
25-29 August	Telupid	Forestry Institute Sabah	24
14-17 October	Telupid	Tawai Rainforest Camp	46
16-19 December	Lahad Datu	Lahad Datu Forestry office	40
Total			**177**

Table 10: Sabah Forestry Department's Forest Fire Instructor.

Name	Station	Specialization
Daim Balingi	SFM Division, HQ	Forest Fire Management & Enforcement
Sylvester Michael	FORiNS	Forest Fire Suppression – Incident Command System
Farrah Salvena Savaln	SFM Division, HQ	Forest Conservation (EIA) Awareness
Vallentine Sebastian	SFD, Kota Kinabalu	Forest Fire Suppression – Fire Behaviour
Bede Charles Joanis	FORiNS	Equipment and Tools Handling
Juprin Khoo	FORiNS	Equipment and Tools Handling



Fig. 9: Forest fire training at Borneo Samudera Sdn Bhd, Kinabatangan.



Fig. 10: Practical training for staff of the Forest Department Sarawak, Forestry Institute of Sabah (FORiNS) Kinabatangan.



Fig. 11: Forest fire training for SFM PINTAR, Telupid.



Fig. 12: Forest fire training for SFM Tabin-Silabukan, Lahad Datu.

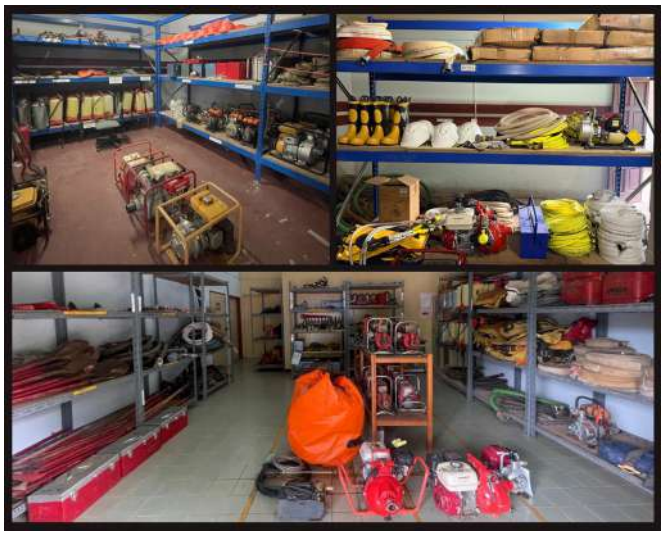


Fig. 13: Forest fire tools and equipment in a fire store.

C. Forest Fire Store, Tools and Equipment

Preparedness and ever ready tools and equipment are very important in forest fire management. The equipment is regularly maintained throughout the year.

TRAINING AND SEMINAR

In 2025, the division team members attended various domestic and international trainings and seminars as follows:

No.	Program	SFM Officer	Date
1	Training of Trainers Workshop on the Updated Sabah TLAS aligning with the EUDR and the EU Corporate Sustainability Due Diligence Directive (CS3D), Hilton Hotel Kota Kinabalu	Mr Robert Martin Mijol Mdm Charlene Billy	22-25 Apr
2	Training of Trainers for Forest Fire Suppression in Peatland (TOTFFS), Indonesia	Ms Farrah Salvena Savaln	21 Apr - 2 May
3	Training Workshop on Strengthening Data Management Practices for the IUCN Green List, Kota Kinabalu	Mr Daim Balingi Mdm Amelia Cynthia Bosi	28-30 Oct
4	Program Kelestarian Hijau: Ekologi dan Kepentingan Silvikultur Pokok Ara, RDC Sepilok	Ms Heidi Henry William	02 Oct
5	Workshop on Soil Health in Forestry, RDC Sepilok	Ms Heidi Henry William	14 Oct
6	Training on Effective Safety and Health Committee, Institut Latihan Perindustrian Sandakan	Mdm Charlene Billy	4-6 Nov
7	Bengkel Mini Forest Reference Level (FRL) in Sabah, RDC Sepilok.	Ms Heidi Henry William	02 Dec
8	Sabah Seed to Tree (STT) Value Chain Workshop, RDC Sepilok	Ms Heidi Henry William	10 Dec
9	Technical Training on FSC Ecosystem Services Procedure (FSC-Pro-30-006), RDC Sepilok	Mdm Amelia Cynthia Bosi	11 Dec
10	Training-of-Industry Workshop on The Updated Sabah TLAS aligned with the EUDR and the EU Corporate Sustainability Due Diligence Directive (CS3D), Hilton Hotel Kota Kinabalu	Mdm Hamidah Bujing Ms Heidi Henry William Mr Robert Martin Mijol Mdm Charlene Billy	17-18 Dec
11	2025 AFoCO–French MOEFA Science and Technology Exchange Partnership (STEP) Program, France	Ms Farrah Salvena Savaln	10 Nov - 19 Dec



Group Photo of the Training of Trainers for Forest Fire Suppression in Peatland (TOTFFS) scheduled on 21 April to 2 May 2025.



Training of Trainers Workshop on the Updated Sabah TLAS aligning with the EUDR and the EU Corporate Sustainability Due Diligence Directive (CS3D) attended by Mr Robert Martin Mijol and Mdm Charlene Billy.



Group Photo of the Technical Training of FSC Ecosystem Services Procedure (FSC-PRO-30-006



Training on Effective Safety and Health Committee attended by Mdm Charlene Billy.



Training-of-Industry Workshop on the Updated Sabah TLAS aligned with the EUDR and the EU Corporate Sustainability Due Diligence Directive (CS3D) attended by Mdm Hamidah Bujing, Ms Heidi Henry William, Mr Robert Martin Mijol and Mdm Charlene Billy.





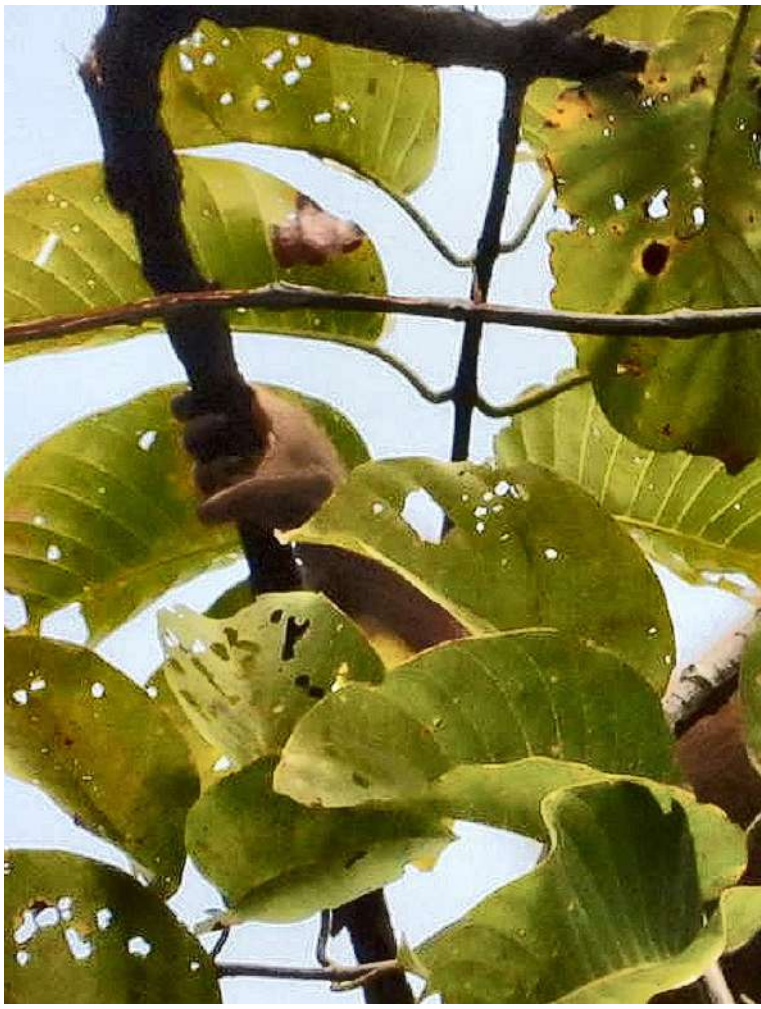
(L) IUCN Green List Programme attended by SFD District Forest Officers and Assistants, KOPEL personnel, and Yayasan Sabah representatives from Danum Valley. (R) Group Photo of the 2025 AFoCO–French MOEFA Science and Technology Exchange Partnership (STEP) Program, held in France from 10 November to 19 December 2025.





(L) Group photo of the IUCN Green List training on Strengthening Data Management Practices. (R) Technical Training on the FSC Ecosystem Services Procedure, attended by SFD and FRC personnel, SFMLA licensees, and UMS representatives.

DERAMAKOT FOREST RESERVE (FMU19A) OPERATIONS



The Deramakot Forest Reserve (DFR), designated as Forest Management Unit 19A (FMU 19A), is one of the most established examples of Sustainable Forest Management (SFM) in Sabah and is widely recognised within the region. DFR was certified under the Forest Stewardship Council (FSC) in 1997, making it the first tropical rainforest to be certified under the FSC scheme, and remains the longest-standing FSC-certified tropical forest. Managed under the Sabah Forestry Department, DFR continues to demonstrate that timber production can be carried out alongside the conservation of biodiversity and protection of forest ecosystems.

DFR operates within a tropical environment characterised by high and often unpredictable rainfall, which directly influences the planning and implementation of forest management activities. As such, all operations require proper coordination between operational, environmental, and logistical aspects to ensure that activities can be carried out effectively under varying field conditions.

Forest management in DFR is implemented in accordance with established standards and requirements, including SFM principles, Reduced Impact Logging (RIL) practices, Sabah Timber Legality Assurance System Plus (Sabah TLAS+), and ISO 9001:2015. These frameworks collectively guide the planning and execution of all activities within the forest reserve.

In 2025, forest management activities in DFR continued to be guided by the Annual Work Plan (AWP), with necessary amendments made to reflect prevailing field conditions, particularly those related to prolonged rainfall. This adaptive approach ensured that planned activities remained practical while maintaining overall management objectives.

CORE BUSINESS

DFR's primary business remains the production of logs under the principles of SFM, with emphasis on ensuring sustainable yield while maintaining ecological integrity. In 2025, operations covered pre-harvest planning, harvesting, timber extraction, and log disposal.

Pre-harvest activities commenced with the preparation of the Comprehensive Harvesting Plan (CHP). The initial CHP covered cpt 106B (204 ha) and cpt 70 (629.9 ha), totalling approximately 833.9 ha. However, due to prevailing field conditions, the Annual Work Plan (AWP) 2025 was revised, reducing the CHP area to cpt 106B (204 ha) and part of cpt 70A (200 ha), totalling approximately 404 ha.

The revision of AWP 2025 was primarily due to prolonged and excessive rainfall experienced throughout the year, which significantly reduced the number of effective working days and limited accessibility to operational areas.

As shown in Fig. 1, rainfall in 2025 remained consistently high, with a total of 2,443.4 mm recorded over 235 rain days, indicating that a large proportion of the year was affected by wet conditions. This directly constrained the implementation of pre-harvest and harvesting activities, particularly in terms of site accessibility and ground operability.

Harvesting operations were subsequently carried out in cpt 66A, covering approximately 77 ha, with a total actual production of 7,720.42 m³. This is below the Annual Allowable Cut (AAC) of 17,600 m³, reflecting the operational limitations encountered during the year.

While felling activities were implemented as planned, timber extraction and hauling were significantly affected by saturated ground conditions. Wet soil conditions limited machinery movement and slowed skidding operations, resulting in delays in the extraction of logs from stump to landing and subsequently to log yards. These constraints reduced the volume of logs available for timely disposal.

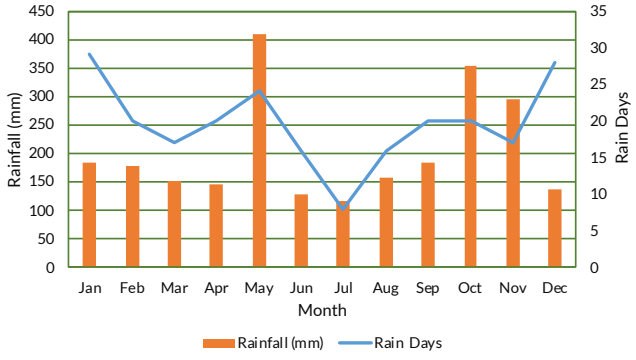


Fig. 1 : Rainfall and raindays in DFR 2025.



A cute juvenile Orangutan captured hanging on a tree.

> True forest sustainability is measured not just by the timber we leave standing, but by the biodiversity we actively protect. ***Safeguarding the orangutan within managed forests is the ultimate litmus test for whether our conservation strategies are genuinely sustainable or merely transactional.***

In addition to conventional harvesting, 'matahari felling' was carried out along selected main road corridors, covering approximately 50.9 ha. This activity was implemented to improve sunlight penetration and facilitate road surface drying. Although these activities were not included in the planned harvesting volume under the AAC, the extracted timber contributed to overall timber output.

In terms of log disposal, two log auctions were conducted in 2025. The first auction, Batch 1-2025 (101st Log Auction), was held on 24 January 2025, comprising primarily of logs harvested in 2024, totalling 718 logs (1,770.71 m³) with total sales amounting to RM 551,988.86. The second auction, Batch 2-2025 (102nd Log Auction), was held on 18 August 2025, involving 1,462 logs (5,396.56 m³) with total sales of RM 2,986,598.38.

Despite the conduct of these auctions, the overall revenue generated in 2025 remained relatively low compared to expected levels. This was primarily due to the limited volume of logs successfully extracted and made available for sale within the year, arising from operational constraints caused by excessive rainfall.



A log loader loading logs onto a lorry at a temporary log landing.

In addition, market conditions further influenced revenue performance. Timber prices remained relatively subdued in 2025, reflecting a continued downturn in the global timber market since the onset of the Russia–Ukraine conflict. The conflict disrupted supply chains, increased fuel and transportation costs, and affected international demand, resulting in weaker timber prices and reduced market competitiveness.

Due to the operational constraints, logs produced towards the later part of 2025 could not be fully extracted and transported to the log yards in time for auction. As a result, approximately 2,108 logs (2,207.18 m³) were carried forward for auction in 2026. This carry-forward was directly attributed to prolonged rainfall, which restricted extraction and hauling activities and delayed log readiness for disposal.

Overall, harvesting performance in 2025 was influenced by both operational and external factors. While excessive rainfall significantly constrained field operations, prevailing global market conditions also contributed to lower revenue generation. Despite these challenges, operations were carried out in a controlled manner, ensuring that activities remained consistent with established management objectives and operational requirements.



A chainsaw operator and CHP Monitoring personnel in action in Cpt 66A.



All in a day's work : The CHP team upon completion of daily work in cpt 160.

NATURE-BASED RECREATION

DFR continues to serve as an important site for nature-based recreation, offering wildlife observation and forest-based experiences within a sustainably managed environment. While timber production under Reduced Impact Logging (RIL) remains the primary revenue source, recreation provides a significant supporting income stream, indicating that DFR is not solely dependent on timber-based activities.

In 2025, a total of 2,221 visitors were recorded, comprising 1,033 Malaysian visitors and 1,188 international visitors. Revenue generated from nature-based recreation activities amounted to RM950,554.00, representing the highest revenue recorded to date.

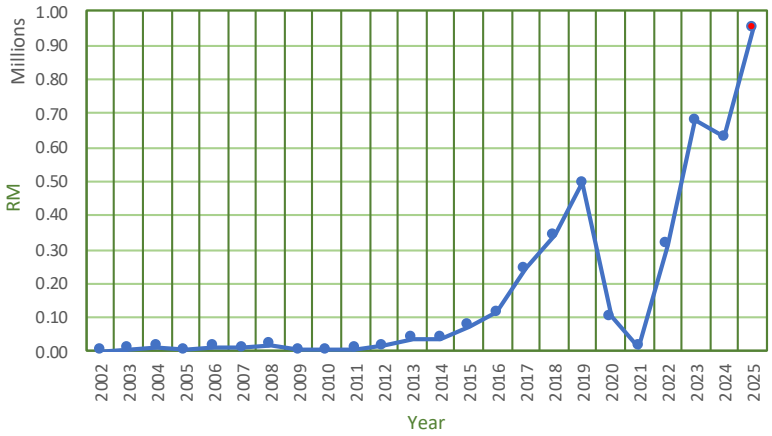


Fig. 2 : Trend of nature-based recreation revenue in DFR from 2002 to 2025.

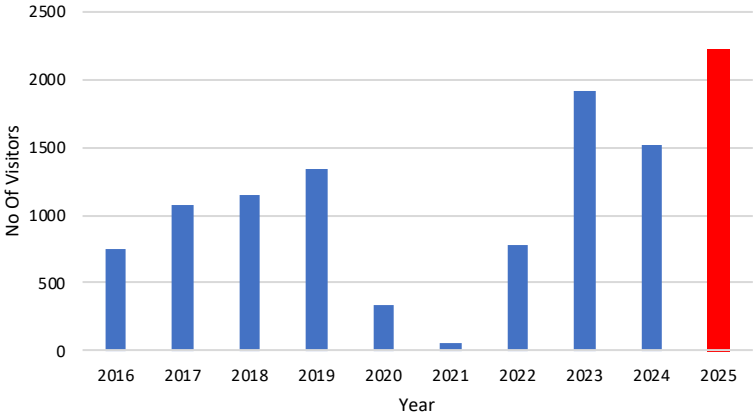


Fig. 3: Trend of visitor arrivals to DFR from 2016 to 2025.

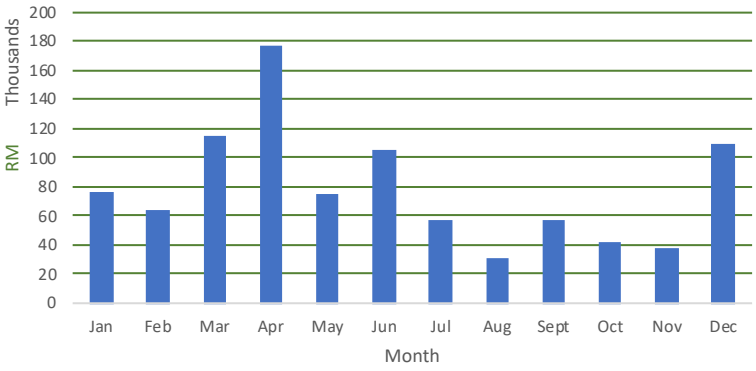


Fig. 4: Monthly nature-based recreation revenue in DFR for 2025.

The long-term revenue trend shows gradual growth from the early stages of implementation, with a more pronounced increase between 2016 and 2019, reflecting growing recognition of DFR as a specialised nature-based recreation destination.

A sharp decline was observed in 2020 and 2021, which can be directly attributed to movement restrictions and border closures during the COVID-19 period. These restrictions severely limited both domestic and international travel, resulting in a significant drop in visitor arrivals and revenue (Fig. 2).

From 2022 onwards, revenue began to recover. However, the recovery phase occurred under broader global uncertainties, including the economic uncertainties associated with the Russia–Ukraine conflict, which affected international travel costs, fuel prices and overall travel sentiment. Despite these external pressures, DFR recorded strong recovery, with revenue increasing substantially in 2023, 2024 and reaching its highest level in 2025.



Tourists from the UK (left) and France (right).

This indicates that demand for nature-based experiences in DFR remains resilient, particularly among niche and international visitors.

Visitor arrivals follow a similar pattern, increasing from 756 visitors in 2016 to 1,341 visitors in 2019, before declining sharply to 338 visitors in 2020 and 64 visitors in 2021 due to COVID-19 restrictions (Fig. 3).

Following the easing of restrictions, visitors numbers recovered to 773 in 2022, 1,912 in 2023, 1,511 in 2024 and 2,221 in 2025. The strong increase in visitor numbers after 2022 reflects the resumption of international travel and renewed interest in nature-based tourism.

However, visitor numbers alone do not fully explain revenue performance. In DFR, revenue is significantly influenced by visitor behaviour and booking types. Certain high-value bookings, such as exclusive use of accommodation blocks or longer stays, can generate substantial revenue even with a small number of visitors. Conversely, higher visitor numbers do not necessarily result in proportionately higher revenue.

This explains why revenue growth may appear stronger or more variable compared to visitor trends in certain years.

Monthly revenue patterns in 2025 show variation, with the highest collection recorded in April (RM177,492.00), followed by relatively strong performance in March, June and December, while lower collections were observed in August, October and November (Fig. 4).

However, when compared across previous years, similar peak periods are not consistently observed. This indicates that nature recreation in DFR does not follow a fixed seasonal pattern typical of mass tourism destinations. Instead, fluctuations are driven primarily by booking timing, visitor profiles, duration of stay, and facility usage, rather than by seasonality alone.

External factors such as accessibility and weather conditions, including rainfall affecting road access, may influence visitation to some extent, but they are not the dominant drivers of monthly variation.

Overall, the performance of nature recreation in 2025 demonstrates strong recovery and continued growth following the COVID-19 period, despite broader global economic uncertainties. While RIL remains the main revenue contributor, the increasing role of nature recreation highlights the importance of diversified income streams in DFR, supporting long-term sustainability and reducing reliance on a single source of revenue.

PROTECTION OF FOREST ECOSYSTEM

Protection of the forest ecosystem in Deramakot Forest Reserve (DFR) was implemented through a structured and risk-based approach guided by the Protection Plan and High Conservation Value (HCV) requirements. The overall objective was to prevent encroachment, illegal activities and ecological degradation, while ensuring continuous monitoring of sensitive areas.

Patrolling activities in 2025 were carried out in accordance with predefined operational targets, comprising a minimum of 500 km per month for ground patrols, 100 km per month for river patrols, and at least three (3) aerial patrols per year. These targets are designed to ensure sufficient spatial coverage and sustained enforcement presence throughout the forest reserve, particularly in areas identified as high, medium and low risk under the Protection Plan.

Based on these targets, the expected annual patrol coverage was 6,000 km for ground patrols and 1,200 km for river patrols. Actual patrol achievements exceeded these requirements significantly, with 9,108.83 km recorded for ground patrols and 1,873.40 km for river patrols, while aerial patrols met the required three (3) flights.

Table 1: Comparison of Patrol Targets and Actual Achievements in DFR for 2025.

Patrol Type	Target (Monthly)	Target (Annual)	Achievement	Performance
Ground Patrol	500 km	6,000 km	9,108.83 km	Exceeded (+3,108.83 km / +51.8%)
River Patrol	100 km	1,200 km	1,873.40 km	Exceeded (+673.40 km / +56.1%)
Aerial Patrol	-	3 times/ year	3 times	Achieved (100%)

The patrol coverage achieved, exceeding planned targets by more than 50% for both ground and river patrols, reflects a strong and proactive enforcement presence throughout DFR. This level of effort enhances the ability to detect and deter illegal activities, particularly in remote and high-risk areas, and demonstrates effective implementation of the Protection Plan. Importantly, no forest offences were recorded throughout the year. This indicates that the combined effect of continuous patrol presence, strategic deployment of enforcement resources and sustained monitoring has been effective in preventing encroachment, illegal harvesting and poaching activities within the reserve.

Enforcement activities in DFR are carried out by forestry personnel and are significantly strengthened through collaboration with PANTHERA Malaysia and active participation from local communities. Field enforcement operations are led by DFR staff and are assisted by PANTHERA Malaysia, particularly in deep jungle reconnaissance and the deployment of camera traps, which enhance monitoring coverage in remote and less accessible areas.

Local community involvement forms a critical component of enforcement. Through DFR's social forestry initiatives, villagers contribute directly to protection efforts. The Renjer Hutan Kehormat (RHK) programme enables trained community



In memory of the late Karim Likop, pictured during river patrol work with an RHK member.

members to assist in enforcement work, including monitoring, reporting and supporting patrol activities. In addition, the Aki Kuamut initiative, while primarily established to alleviate human–wildlife conflict, also contributes to enforcement through its continuous presence in areas prone to wildlife interaction and potential intrusion, thereby supporting early detection and deterrence.

This integrated enforcement approach—DFR staff as the primary authority, supported by PANTHERA Malaysia and community-based participation through RHK and Aki Kuamut—significantly strengthens overall protection effectiveness by extending spatial coverage, improving intelligence gathering and strengthening field response capability.

Protection efforts were further reinforced through the application of the Spatial Monitoring and Reporting Tool (SMART), which enables systematic and risk-based deployment of patrols. This ensures that enforcement resources are directed towards priority and high-risk areas, including HCV zones.

In addition to patrol and enforcement activities, boundary maintenance was carried out as a critical preventive measure, covering a total of 71.1 km of forest boundary. The maintenance works involved rebrushing of overgrown vegetation, re-marking of boundary lines and replacement of damaged or missing signage to ensure that forest boundaries remain clearly visible and identifiable on the ground.

Table 2: Boundary Maintenance Coverage in DFR for 2025.

Area	Length (km)
Sg. Tabalion – Sg. Deramakot	21
Sg. Karis-Karis – Sg. Rago-Rago	12
Sg. Deramakot – Sg. Karis-Karis	20.5
Sg. Rago-Rago – Sg. Tangkulap	17.6
Total	**71.1**

Boundary maintenance works are carried out by local villagers under contract, providing income opportunities while directly involving them in forest protection activities. Villagers also act as the first line of defence, contributing to early detection and deterrence of encroachment through their continuous presence and familiarity with surrounding areas.

However, there remains a risk of intrusion from external parties such as illegal gaharu collectors, hunters and other unauthorised entrants, particularly in remote or less monitored areas. In such cases, well-maintained and clearly defined boundaries are essential in reinforcing control, guiding enforcement actions and preventing unauthorised entry.

The integration of patrol operations, SMART-based monitoring, aerial surveillance, camera trap deployment, boundary maintenance and strong community participation forms a comprehensive protection framework. Each component serves a complementary role, combining enforcement, prevention, monitoring and conflict mitigation.

Overall, the protection of the forest ecosystem in DFR in 2025 can be considered highly effective, as evidenced by patrol achievements exceeding planned targets, absence of recorded forest offences, strengthened boundary control, extensive community involvement and enhanced monitoring through strategic collaboration and technology.

MAINTAINING BIOLOGICAL DIVERSITY

Maintaining biological diversity in DFR is primarily achieved through continuous monitoring of forest growth and targeted restoration of planted areas. These activities are essential to ensure that forest structure and productivity remain consistent with SFM requirements, particularly under RIL.

Forest Health and Growth Monitoring

Forest condition and growth performance are monitored through the Permanent Sample Plot (PSP) system, which serves as the main tool for assessing long-term forest dynamics. In 2025, a total of 19 PSP plots were measured, comprising 9 plots in Compartment 62 and 10 plots in Compartment 49, with all data submitted to the Forest Research Centre (FRC) for analysis.

The purpose of this monitoring is not merely to collect data, but to verify that actual forest growth remains consistent with projected growth used in yield regulation. This is critical in ensuring that the prescribed harvesting levels remain sustainable. If the measured growth falls below projections, it would indicate that harvesting intensity may need to be reduced or adjusted. Conversely, stable or expected growth confirms that current forest management practices, including RIL, are not adversely affecting forest recovery.

The Continuous Forest Inventory (CFI) programme, which complements PSP data at a broader scale, has been temporarily put on hold since 2023. This is due to manpower limitations at the FRC and the ongoing effort to integrate remote sensing technology into forest assessment. The suspension of CFI does not affect overall monitoring integrity, as PSP data continues to provide reliable growth indicators. The transition towards remote sensing is expected to improve efficiency and accuracy in future forest assessments.

Forest Restoration and Maintenance

Restoration activities in DFR are focused on ensuring the successful establishment and growth of previously planted areas rather than initiating large-scale new planting. In 2025, maintenance works were carried out within an existing 125-hectare planted area, which has been under development since 2016. The approach adopted is selective and need-based, targeting only areas where infilled plants require maintenance. Maintenance activities included weeding and fertilising to improve survival and growth performance.

In addition, 65 hectares of planting that were not completed in 2024 were carried forward and successfully implemented in 2025, followed by the first round of maintenance. This reflects that restoration delays were operational rather than ecological, and have since been addressed.

The restoration programme is closely linked to DFR's social forestry framework, where local communities are engaged as contractors for planting and maintenance works. This not only ensures continuity of restoration activities but also strengthens local participation and accountability in forest management.



(Left) Planting in Cpt 110 and (right) the planting line.

The biological diversity of DFR remains well supported through consistent forest monitoring and sustained restoration efforts. The PSP system continues to provide critical data for validating growth assumptions and ensuring sustainable harvesting levels.

Although the CFI programme is currently on hold, this is part of a transition towards more advanced monitoring methods and does not compromise overall forest assessment. Restoration activities, while focused on maintenance rather than expansion, indicate that previously established areas are being sustained and managed effectively.

Overall, the current approach reflects a maintenance and verification phase of forest management, where emphasis is placed on ensuring that existing forest conditions remain stable and aligned with long-term sustainability objectives.

WILDLIFE MONITORING

Wildlife monitoring in DFR was conducted continuously throughout 2025 using a combination of orangutan nest census, camera trapping and opportunistic sightings. These monitoring approaches are implemented in accordance with the framework outlined in the FMP 4, where multiple methodologies are integrated to provide a comprehensive assessment of species presence, population trends, habitat utilisation and overall ecosystem condition. The use of complementary methods ensures that limitations inherent in individual approaches are addressed through cross-validation, thereby strengthening the reliability of the monitoring outcomes.

Orangutan Nest Census

The orangutan (*Pongo pygmaeus*) nest census remains the primary method used to assess population trends in DFR due to its role as a key ecological indicator species. The long-term population estimates derived from aerial nest surveys are presented in Table 3.

The 2025 survey recorded an estimated population of 369 individuals. While this appears lower compared to several previous assessments, interpretation must be made in the context of the full time-series dataset, which demonstrates considerable inter-annual variability rather than a consistent declining trend. Similar reductions were recorded in 2008 and 2013, followed by subsequent increases, indicating that such fluctuations are characteristic of the monitoring series.

Table 3: Orangutan Population Estimates in DFR (1999–2025).

Year	Estimated Population
1999	772
2002	981
2003	910
2004	959
2005	904
2006	651
2007	1,059
2008	441
2009	1,230
2010	1,726
2011	1,698
2012	1,020
2013	397
2014	1,798
2015	2,084
2016	1,092
2017	1,185
2019	1,610
2021	1,511
2023	391
2025	369



Orangutan in DFR.

> *"The orangutan is the architect of the canopy. To manage a forest sustainably without ensuring their survival is to maintain a structure while letting its foundation crumble."*

Field clarification provided through a HUTAN expedition led by Dr. Marc Ancrenaz indicates that variation in estimates is strongly influenced by methodological factors inherent in aerial nest surveys, including observer judgement, canopy density and nest detectability. In addition, the transition to biennial survey intervals after 2017 reduces temporal resolution and contributes to apparent differences between survey periods.

Taking these factors into account, the orangutan population in DFR is assessed to be stable over the long term, and the lower population estimate recorded in 2025 is interpreted as a reflection of survey-related variability rather than an actual population decline.

Camera Trapping

Camera trapping was implemented as a complementary monitoring method to detect wildlife species that are cryptic, nocturnal or infrequently encountered through direct observation. In 2025, camera traps were deployed at salt lick areas, areas identified through ground surveys conducted during Comprehensive Harvesting Plan (CHP) preparation. These sites are ecologically significant as focal points for wildlife activity and are protected through the establishment of a 50-metre buffer zone, where logging activities are excluded.

Camera traps were operated continuously, with data retrieved on a monthly basis and compiled for annual analysis. In line with the FMP4 monitoring framework, camera trapping contributes to wildlife assessment by providing direct photographic evidence of species presence, improving detection of elusive species and enabling observations of behaviour and temporal activity patterns.

Table 4: Camera Trap Deployment in DFR (2025).

Location	Compartment	Number of Camera Traps
Tagai Jack	Cpt 49	1
Tagai Karis-Karis	Cpt 63	1
Tagai Kuari	Cpt 72	2



(Top) A young bearded pig sighting in Deramakot after the severe ASF period (above) Herd of Tembadaus.



(Top) Clouded leopard and (above) Sun bear sighted along MR 1.

In addition to the operational camera trapping conducted by DFR, research-based camera trapping activities were also carried out within the forest reserve by external organisations and academic institutions. Notably, Panthera has implemented systematic camera trap surveys using a grid-based approach to support wild cat conservation studies, while research led by Dr. Hisashi from the University of Tokyo has utilised camera traps to study selected wildlife species, including orangutan, bats, otters and wild boar. These research initiatives involve broader spatial coverage and are designed to generate more detailed ecological insights, complementing the operational monitoring conducted by DFR.

The consistent detection of wildlife at salt lick locations indicates that these areas continue to function as active ecological nodes within the forest. This suggests that habitat connectivity remains intact, essential resources such as mineral licks are available and disturbance levels are effectively controlled through the protection of these sites. Camera trapping therefore serves as a critical validation tool, confirming habitat utilisation and reinforcing findings from other monitoring approaches, while research-based efforts further enhance understanding of species ecology and distribution within DFR.

Opportunistic Sightings

Opportunistic sightings were recorded continuously throughout 2025 during routine field operations in DFR, including patrols, monitoring activities and forest management work. Observations comprised both direct encounters and indirect evidence such as tracks, dung, calls and other signs, providing broad spatial coverage across operational areas. Although this method does not follow a standardised sampling design, it remains an important component of wildlife monitoring due to its ability to capture real-time information on species presence across the forest reserve.

The summary of wildlife observations recorded in 2025 is presented in Table 5.

Table 5: Top 20 Wildlife Species Recorded in DFR.

Species	IUCN Status	Sightings
Rhinoceros Hornbill	VU	57
Orang Utan	CR	41
Sambar Deer	VU	38
Crested Fireback	VU	35
Bornean Gibbon	EN	32
Long-tailed Macaque	EN	31
Black Hornbill	VU	26
Bornean Elephant	EN	24
Great Argus	VU	24
Bornean Yellow Muntjac	NT	20
Pig-tailed Macaque	EN	18
Proboscis Monkey	EN	13
Lesser Mousedeer	LC	11
Maroon Leaf Monkey	VU	10
Monitor Lizard	LC	10
Malay Civet	LC	8
Leopard Cat	LC	8
Crested Serpent Eagle	LC	8
Band Palm Civet	NT	7
Barking Deer	LC	7

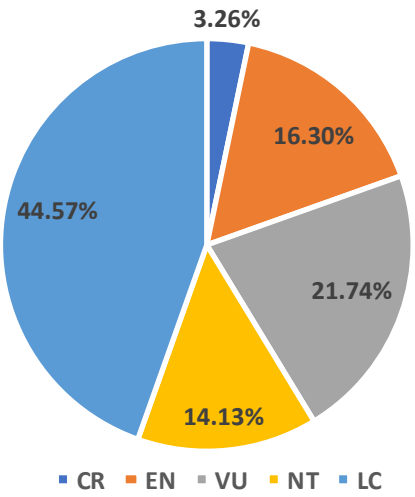


Fig. 7 : IUCN Status Distribution of Wildlife Species Sighted in DFR.

The distribution of sightings indicates frequent detection of a range of taxa, including hornbills, primates and large terrestrial mammals. Species such as Rhinoceros Hornbill, Orang Utan and Sambar Deer recorded relatively high numbers of observations, reflecting both their utilisation of accessible habitats and their detectability during routine field activities. The repeated occurrence of large-bodied mammals and arboreal primates suggests that habitat conditions within DFR remain favourable and capable of supporting species that are typically sensitive to disturbance.

The conservation profile of species recorded during 2025 is illustrated in Fig. 7. This distribution is based on species sighted or recorded during monitoring activities in 2025 and should not be interpreted as representing the complete composition of wildlife species present within DFR.

The relatively high proportion of species within threatened categories reflects the role of DFR as an important habitat for conservation-significant fauna. However, this distribution represents the conservation profile of species detected during the reporting period and does not reflect overall species abundance or total species composition within the forest reserve.

Further analysis of threatened species recorded during 2025 is presented in Table 6.

Table 6: Top 10 Threatened Wildlife Species Recorded in DFR (2025).

Species	IUCN Status	Sightings
Rhinoceros Hornbill	VU	57
Orangutan	CR	41
Sambar Deer	VU	38
Crested Fireback	VU	35
Bornean Gibbon	EN	32
Long-tailed Macaque	EN	31
Black Hornbill	VU	26
Bornean Elephant	EN	24
Great Argus	VU	24
Proboscis Monkey	EN	13

The repeated detection of these threatened species indicates that they continue to utilise the forest environment. While opportunistic sightings are influenced by encounter probability and do not provide direct estimates of population size, the consistent presence of these species suggests that habitat conditions within DFR remain suitable and capable of supporting species of conservation concern.



A visual survey of key wildlife species thriving under DFR's sustainable management.
A. Bornean gibbon, B. Red giant flying squirrel, C. Pygmy elephant, D. Clouded leopard

"Sustainable forest management changes the narrative from exploitation to coexistence. It turns a logging zone into a sanctuary where wildlife doesn't just survive—it thrives."

Overall, the opportunistic sightings recorded in 2025 demonstrate the continued presence of a diverse wildlife assemblage in DFR, including a substantial proportion of threatened species. The regular occurrence of large mammals and arboreal species further indicates that ecological conditions remain favourable and that levels of disturbance within the forest reserve are low.

Overall Assessment

The integration of results from all monitoring methods indicates that wildlife populations in DFR remain stable and that the forest continues to support a diverse and functionally intact ecosystem. The long-term stability of the orangutan population, together with consistent detection of wildlife through camera trapping and opportunistic observations, demonstrates that habitat conditions remain suitable for a wide range of species.

The absence of hunting cases throughout 2025 further supports the conclusion that enforcement measures are effective, allowing wildlife populations to persist without significant anthropogenic pressure. In addition, the continued presence of threatened species highlights the importance of DFR as a conservation refuge within the region.

Overall, the findings confirm that DFR continues to function as an ecologically intact forest ecosystem under current management practices, with monitoring results indicating that biodiversity conservation objectives are being effectively achieved.

STAKEHOLDER ENGAGEMENT

Stakeholder engagement in Deramakot Forest Reserve (DFR) was carried out continuously in 2025 to strengthen collaboration between the Sabah Forestry Department, local communities and partner organisations in supporting sustainable forest management and protection efforts.

During the year, one formal stakeholder meeting was conducted together with six direct field engagement sessions. These engagements provided a platform for coordination, information sharing and discussion of issues related to forest management, protection and conservation activities. Field-based engagements were particularly important in facilitating direct interaction with local communities within operational areas.

A key aspect of stakeholder engagement in DFR is the active involvement of local communities through social forestry initiatives, which integrate participation in forest management with livelihood opportunities. Local communities were engaged as contract workers in activities such as boundary maintenance, forest restoration and other field operations. These engagements not only support the implementation of management activities but also provide income opportunities and strengthen long-term stakeholder commitment.

Boundary maintenance activities, carried out by local villagers, contribute directly to forest protection while reinforcing community presence along forest edges. Similarly, involvement in restoration works, including planting and maintenance of previously established areas, ensures continuity of rehabilitation efforts while fostering shared responsibility in sustaining forest resources.

Community participation is further strengthened through structured programmes such as the *Renjer Hutan Kehormat* (RHK), where trained members assist in monitoring, reporting and supporting patrol operations. In addition, the Aki Kuamut initiative, which focuses on alleviating human–wildlife conflict, also contributes to protection efforts through its continuous presence in areas prone to wildlife interaction and potential intrusion.

Collaboration with external partners also continued during the year. Enforcement and monitoring activities were supported by Panthera Malaysia, particularly in deep jungle reconnaissance and camera trapping operations, enhancing monitoring coverage and field intelligence.

Capacity building and awareness programmes further contributed to stakeholder engagement, including roadshows and briefings involving personnel, contractors and local communities to improve understanding of forest management practices and conservation objectives.

Overall, stakeholder engagement in DFR in 2025 strengthened cooperation, enhanced community participation and reinforced shared responsibility, while also providing livelihood opportunities that support the sustainability of forest management efforts.

FOREST MANAGEMENT CERTIFICATION

DFR continued to maintain its Forest Stewardship Council (FSC®) Forest Management certification (Licence Code: FSC-C180387) in 2025 following its successful recertification



2025 FSC® surveillance field auditing.

in 2023. This marks the continuation of its certification status and reinforces its standing as one of the longest FSC®-certified tropical rainforest management areas.

The non-conformities and observations identified during the 2024 surveillance audit, comprising six (6) non-conformity reports (NCRs) and three (3) observations, have been successfully rectified. During the 2025 surveillance audit, a total of five (5) minor non-conformities and one (1) observation were identified. Corrective actions for these findings are currently underway and are scheduled to be fully addressed in 2026.

In addition to FSC® certification, DFR operations continued to comply with the requirements of Sabah Timber Legality Assurance System (TLAS Plus) and MS ISO 9001:2015 Quality Management System throughout the year.

INFRASTRUCTURE AND FACILITIES

DFR continued to maintain and improve its infrastructure and facilities in 2025 to support forest management operations and ensure accessibility within the forest reserve. The road network remained a critical component for operational activities, particularly for timber extraction, monitoring and enforcement.

During the year, road maintenance works covering approximately 100 km of main and secondary roads were carried out to ensure that access routes remained operational. This included maintenance of key routes such as MR 1 and MR 2, as well as several secondary roads and associated structures, including bridge repairs. Maintenance activities were undertaken on an as-needed basis, depending on operational requirements and prevailing site conditions.



The newly built canopy walkway (Phase 1: 50 m) along the ecology trail.

However, maintenance efforts were constrained by prolonged wet weather conditions, which affected road stability and reduced soil bearing capacity, thereby limiting the effectiveness of repair works. In addition, frequent machinery breakdowns due to ageing equipment and an insufficient number of machines further hampered maintenance efficiency, contributing to delays in road rehabilitation and affecting overall operational performance, particularly in timber extraction and transportation.

In terms of infrastructure development, two new facilities were initiated in 2025, namely the construction of a 50 m canopy walkway and a communication tower to improve connectivity within the forest reserve. The canopy walkway was completed within the year and is expected to support nature-based activities, while the communication tower project remained under construction and will be carried forward to 2026.

Despite these challenges, DFR continued to prioritise essential maintenance and development works to ensure that critical infrastructure remained functional. Continued improvement in machinery capacity and maintenance planning will be required to enhance operational efficiency in the coming years.

CAPACITY BUILDING

Capacity building activities in DFR were carried out in 2025 to enhance the knowledge, competence and awareness of personnel, contractors and local communities in supporting sustainable forest management practices. Training and refresher programmes were implemented to ensure that all stakeholders remained aligned with operational requirements, safety standards and certification obligations.

During the year, refresher courses covering key areas such as AWP, FMP, occupational safety and health (OSH), AFSC requirements, standard operating procedures (SOP) and High Conservation Value (HCV) management were conducted for personnel, contractors and selected community representatives. These programmes were aimed at reinforcing compliance with operational guidelines and strengthening implementation at the field level.

In addition, training activities were undertaken in areas including Forest Stewardship Council (FSC) requirements, HCV management, forest fire preparedness, wildlife monitoring and safety and health. These were delivered through a combination of structured sessions and field-based briefings to ensure practical application of knowledge.

Capacity building efforts were also carried out in collaboration with FMU 17A through a series of roadshows involving both personnel and local communities. These engagements included briefings on AWP 2025 and the DFR FMP, as well as awareness programmes related to forest management and conservation.

Overall, the capacity building initiatives in 2025 contributed to strengthening institutional capacity and stakeholder participation, ensuring that forest management activities in DFR continued to be implemented effectively and in accordance with established standards.

TANGKULAP–PINANGAH Forest Development Project (FMU17A)



FMU 17A covers an area of approximately 50,410 ha and forms an ecologically significant forest landscape in central Sabah. It consists of VJR Timbah, Tangkulap FR and Sg. Pinangah FR east of the Karamuak River. The management of FMU 17A falls under the Deramakot Forestry District and continues to focus primarily on conservation, biodiversity protection, restoration and community involvement in line with SFM principles.

A major portion of FMU 17A is managed for protection purposes. Tangkulap FR and part of Sg. Pinangah FR were reclassified as Class I Protected Forests in 2015, reflecting the high conservation value of the area, particularly its Lowland Mixed Dipterocarp forest, Ultramafic forest and Kerangas forest types. These habitats are important for wildlife conservation and ecological connectivity within the wider forest landscape.

Although FMU 17A is largely a conservation area, approximately 1,979 ha remains designated as Class II Commercial Forest. This area is managed under Sustainable Forest Management Licence Agreement (SFMLA) by Lebihasil Sdn. Bhd. and Maxland Sdn. Bhd., mainly for restoration and sustainable land-use purposes. The multiple-use approach adopted in FMU 17A allows conservation, restoration, nature-based recreation and community participation to be implemented alongside one another.

FMU 17A was in the final year of its Second FMP, covering the period from 2016 to 2025. The implementation of activities in 2025 therefore focused on concluding the objectives of the current management plan while maintaining protection and monitoring efforts, supporting biodiversity conservation and strengthening the foundation for the next phase of forest management.

FOREST PROTECTION AND BIODIVERSITY MONITORING

Forest protection and biodiversity monitoring in FMU 17A were carried out continuously in 2025 to safeguard High Conservation Value (HCV) areas, maintain ecological integrity and strengthen protection across the largely Totally Protected Area (TPA) landscape. The monitoring approach combined SMART-based patrols, boundary maintenance, Permanent Sample Plot (PSP) assessment and wildlife monitoring. These components are closely interrelated, as effective protection presence, clearly defined boundaries and biological monitoring collectively support conservation objectives and long-term forest management.

i. SMART Patrol for HCV Monitoring

SMART patrols remained the primary mechanism for monitoring HCV entities and strengthening forest protection in FMU 17A. Patrol activities were conducted through ground, river and aerial modes, with additional joint patrols involving relevant enforcement and conservation agencies.

In 2025, ground patrols recorded 9,078.83 km, exceeding the annual target of 3,600 km, while river patrols recorded 1,874.12 km, exceeding the annual target of 1,200 km. Aerial patrols were conducted three (3) times, meeting the annual target, and six (6) joint patrols were carried out during the year. HCV monitoring was conducted simultaneously during these patrol activities. Patrol coverage focused on access routes, boundary areas and interior forest zones where HCV entities are located. Monitoring results indicated that key HCV areas, including VJR Timbah and identified water catchment areas, remained intact throughout the year.

Importantly, no forest offence or encroachment cases were detected in 2025, indicating that the high level of patrol coverage and continuous field presence contributed effectively to maintaining the integrity of FMU 17A.

Protection activities were further strengthened through collaboration with Panthera Malaysia, which conducted deep-forest reconnaissance patrols within FMU 17A. These patrols complemented existing SMART operations, particularly in remote interior areas that are less accessible through routine patrol routes. Panthera Malaysia is also assisting in the revision of the FMU 17A Protection Plan, which is currently based on risk classification of boundary areas.

Previously, boundary areas adjacent to villages were categorised as high-risk zones requiring higher patrol intensity. However, similar to the situation in DFR, these areas are no longer considered high risk. This is largely attributed to the active involvement of local communities, who have become the first line of defence in protecting the forest reserve. Their



Slow loris sighted in the vicinity of Tangkulap basecamp.



Part of the AKI Keramuak team doing patrolling work and on the lookout for elephants.

participation in activities such as boundary maintenance, monitoring and engagement programmes has contributed to a stronger sense of ownership and reduced encroachment pressure.

ii. Boundary Maintenance

Boundary maintenance was implemented as an integral component of forest protection in 2025. Clearly demarcated and maintained boundaries are essential in FMU 17A, as they define the legal limits of the forest reserve, support enforcement activities and reduce the risk of encroachment, particularly in areas adjacent to settlements and access routes.

In 2025, boundary maintenance covered 16.5 km, meeting the annual target. The accumulated achievement as of 31 December 2025 reached 130.8 km, exceeding the accumulated target of 127 km. Maintenance works were carried out across multiple compartments, including Cpt 5, 6, 7, 20, 23, 24, 80 and 90.

The works were implemented with the involvement of the Social Forestry Committee workforce from Kg. Kenang-Kenangan and Kg. Keramuak. This community participation strengthens the effectiveness of boundary maintenance by fostering local awareness and shared responsibility in protecting the forest reserve. In this context, boundary maintenance serves not only as a physical activity, but also as part of a broader forest protection and enforcement strategy.



Field personnel inspecting the maintained boundary.

iii. Permanent Sample Plots

PSP monitoring was carried out to assess forest condition, growth and long-term ecological change within FMU 17A. As most of FMU 17A is managed as a protected landscape, PSP monitoring is important for tracking forest recovery, stand development and ecosystem stability rather than focusing solely on timber production alone.

In 2025, a total of 10 PSP plots were assessed, achieving the annual target. The plots were located across several compartments as shown in Table 1.

All PSP data collected in 2025 were submitted to the Forest Research Centre (FRC) for analysis. However, it was observed that several plots are located in areas that are difficult to access, with some requiring up to a full day to reach. As such, the current PSP network is pending revision to optimise data collection efficiency while maintaining adequate representation of forest conditions.

Table 1: PSP Assessment in FMU 17A, 2025

Compartment	No. of Plots
Cpt 27	2
Cpt 53	3
Cpt 51	1
Cpt 52	1
Cpt 43	1
Cpt 54	1
Cpt 57	1
Total	**10**



PSP data collection

iv. Wildlife Monitoring

Wildlife monitoring in FMU 17A was conducted through orangutan nest census, camera trap installation, wildlife signage and opportunistic sightings. In 2025, four (4) camera traps and eight (8) wildlife signs were installed, while opportunistic sightings were recorded continuously. One orangutan aerial transect survey was also completed during the year.

The orangutan nest census conducted in August 2025 recorded 0.61 individuals/km², with an estimated 305 orangutans in Tangkulap and Sg. Pinangah FR. This represents an increase compared to the 2023 estimate of 0.51 individuals/km² and 255 orangutans. However, as with previous monitoring results, the figure should be interpreted as part of the long-term monitoring series rather than as a direct short-term population trend, as orangutan nest census results may vary due to survey conditions, visibility and observer-related factors.

Table 2: Orangutan Population Estimates in Tangkulap and Sg. Pinangah FR

Date of Census	Individuals/km²	Estimated Orangutan Population
May 2009	0.96	481
Nov 2009	1.10	551
June 2010	0.55	275
Oct 2010	2.06	1,031
July 2011	0.31	155
Dec 2011	1.44	721
May 2012	1.06	531
Dec 2012	0.69	345
July 2013	0.48	240
Feb 2014	1.55	776
July 2014	1.76	881
April 2015	2.11	1,056
Sept 2015	1.34	671
April 2016	1.11	556
July 2017	1.62	811
March 2019	1.58	791
Oct 2021	1.23	616
Aug 2023	0.51	255
Aug 2025	0.61	305

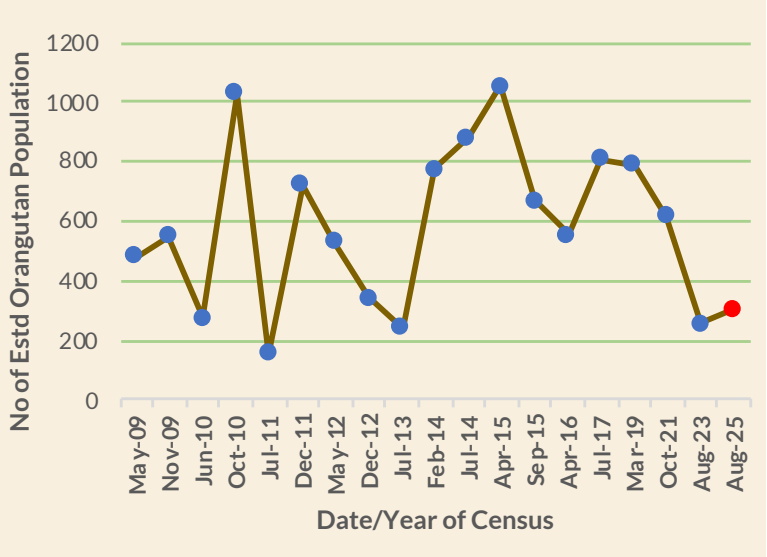
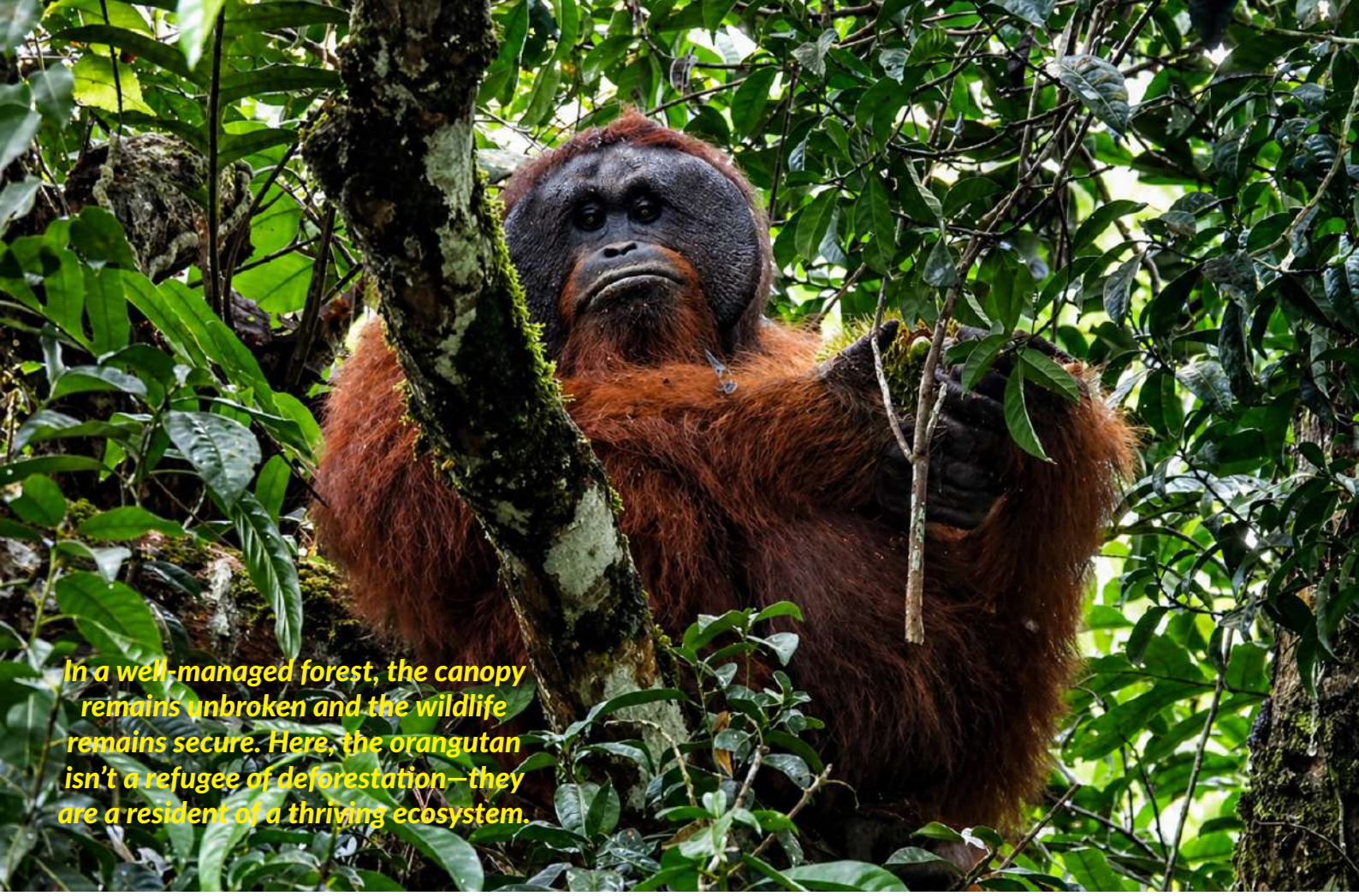


Chart 1: Orangutan Population Trend in Tangkulap and Sg. Pinangah FR (2009–2025).



An orangutan sighted in Kun Kun area.

The long-term (Chart 1) trend shows fluctuations over time rather than a consistent increase or decline, highlighting the importance of continuous monitoring to better understand population dynamics.

Opportunistic sightings were recorded continuously during field activities. This method captures both direct and indirect evidence of wildlife presence, including sightings, tracks, calls and other signs encountered during patrols and operational works.

Table 3 : Top 10 Wildlife Species Sighted in FMU 17A, 2025.

Species	IUCN Status	No. of Sightings
Bornean Elephant	EN	15
Long-tailed Macaque	EN	12
Sambar Deer	VU	12
Lesser Mousedeer	LC	8
Monitor Lizard	LC	6
Pig-tailed Macaque	EN	5
Sunda Clouded Leopard	VU	4
Black Hornbill	VU	4
Leopard Cat	LC	4
Rhinoceros Hornbill	VU	3

The results indicate that sightings were dominated by relatively common and more detectable species, particularly large mammals and primates such as the Bornean elephant, macaques and sambar deer, which recorded the highest encounter frequencies. In contrast, many threatened and elusive species recorded low or zero sightings. This reflects the nature of opportunistic data, which is influenced by species detectability, behaviour and survey conditions rather than actual population abundance.

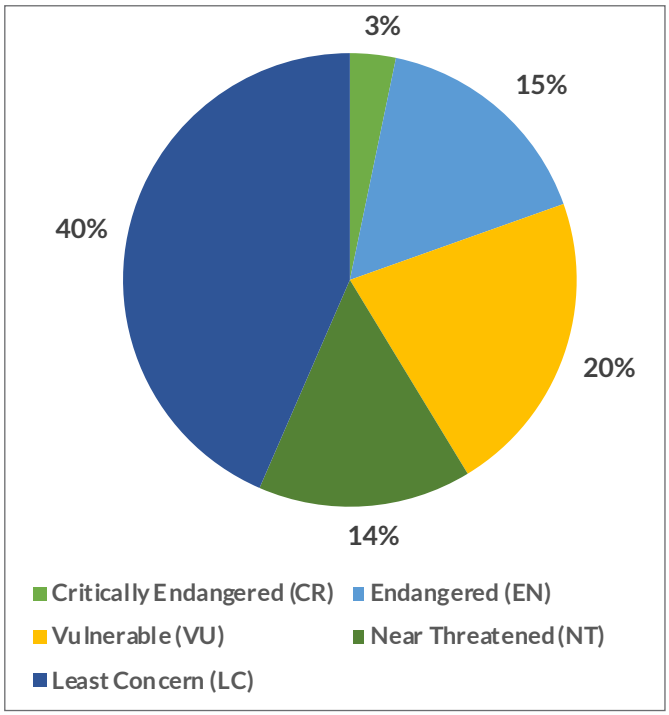


Chart 2: The IUCN status distribution of wildlife sighted in 2025.

The IUCN distribution in Chart 2 shows that while the majority of recorded species fall under the Least Concern (LC) category, a substantial number belong to threatened categories (CR, EN and VU). This highlights the continued importance of FMU 17A as a habitat supporting species of high conservation value.




Amongst the wildlife sighted in 2025: (left) pygmy elephant with its infant and (right) a lone greater mouse deer.

Overall, the combined results from SMART patrols, boundary maintenance, PSP monitoring and wildlife monitoring indicate that FMU 17A remained effectively protected and actively monitored in 2025. HCV areas were maintained in good condition, no forest offences were recorded, PSP monitoring targets were achieved, and wildlife monitoring continued to confirm the presence of a wide range of species within the forest reserve.

FOREST REHABILITATION

Forest rehabilitation activities in FMU 17A in 2025 were focused on the maintenance of previously planted areas to support forest recovery and ensure the continued development of regeneration within the largely protected landscape.



Maintenance/in filling work in Cpt 75.

Maintenance activities were carried out in Cpt 73, Cpt 75 and Cpt 76, covering a total area of 420 ha. Four maintenance rounds were completed throughout the year, achieving 100% of the planned target. The activities were undertaken by appointed contractors, each assigned to specific compartments to ensure effective implementation.

The maintenance of planted areas is essential to reduce competition from other vegetation, improve survival and growth rates of planted species, and support the overall objective of forest restoration within FMU 17A.

It is noted that silvicultural treatment, specifically vine and climber cutting, was not carried out in 2025. This activity was omitted following the approved amendment to the Annual Work Plan due to funding constraints. As a result, rehabilitation efforts during the year were limited to maintenance of existing planted areas.

Overall, the rehabilitation activities implemented in 2025 contributed to sustaining the progress of forest restoration within FMU 17A, despite the limitation in carrying out additional silvicultural treatments.

FOREST MANAGEMENT CERTIFICATION AND AUDIT

FMU 17A was certified as a “Well Managed Forest” under the Forest Stewardship Council (FSC) in June 2011 and remained certified until 2021. Following the expiry of its certification, the Forest Management Unit has yet to undergo recertification, partly due to constraints encountered during the COVID-19 period as well as subsequent operational and logistical considerations.

As FMU 17A is largely managed as a Totally Protected Area (TPA), the direct commercial benefits typically associated with FSC certification, particularly price premiums for timber products, are limited. In this context, certification serves more as a mechanism for demonstrating adherence to sustainable forest management and conservation credibility rather than for economic return.

Financial considerations also remain a key constraint. The costs associated with certification and audit processes are substantial and, in the absence of direct commercial returns, require careful evaluation in terms of cost-effectiveness and overall management priorities.

Despite the absence of current certification, FMU 17A continues to be managed in accordance with Sustainable

Forest Management (SFM) principles and remains aligned with certification standards. Management practices, protection measures and monitoring activities implemented within the area continue to reflect the requirements of internationally recognised forest management frameworks.

In light of these considerations, the Department is currently exploring alternative recognition mechanisms, including the International Union for Conservation of Nature (IUCN) Green List, as a potential pathway to recognise and strengthen conservation management in FMU 17A.

STAKEHOLDER ENGAGEMENT

Stakeholder engagement activities in FMU 17A continued throughout 2025 to strengthen collaboration with local communities, government agencies and conservation partners in supporting forest management and protection efforts.

During the year, a series of engagement sessions were conducted, including two formal meetings and multiple stakeholder consultations. These sessions provided a platform for information sharing, coordination of activities and discussion of issues related to forest management, protection and community involvement. In addition, roadshows and capacity-building programmes were carried out to enhance awareness and understanding of forest management objectives among stakeholders.

A key feature of stakeholder engagement in FMU 17A is the active involvement of local communities in forest protection and management activities. The establishment of the AKI Keramuak group in 2022 marked an important milestone, as it was the first initiative of its kind and later served as a model for similar approaches, including in DFR. The initiative was developed with the support of the Sabah Wildlife Department, Panthera Malaysia, Seratu Aatai and the Deramakot Forestry Office.

The primary role of AKI Keramuak is to alleviate human–wildlife conflict while simultaneously supporting patrol activities as part of an enforcement support mechanism. Members of the group assist enforcement agencies and stakeholders in monitoring and protection efforts within and around the forest reserve. Following this model, a similar initiative was introduced through AKI Kenang-Kenangan, which is linked to the Social Forestry programme in FMU 17A.

In addition to these groups, local community members are actively involved in various operational activities, including boundary maintenance, monitoring and field operations. Engagement is further strengthened through the appointment of contract workers and Renjer Hutan Kehormat (RHK), who contribute to protection and management activities within the forest reserve. Similar to the approach in DFR, these personnel are compensated by FMU17A management, reinforcing sustained participation and commitment.

Through continuous involvement in these activities, local communities have developed a stronger sense of ownership and responsibility towards the forest. As a result, areas previously considered high-risk, particularly those adjacent to villages, are no longer categorised as such. Instead, communities now serve as the first line of defence in safeguarding FMU 17A from encroachment and illegal activities.

Collaboration with external partners also continued during the year. Engagement with organisations such as Panthera Malaysia supported both protection and conservation-related initiatives, further strengthening the overall management framework of FMU 17A.

Overall, stakeholder engagement in 2025 contributed to strengthening cooperation, enhancing community participation and reinforcing shared responsibility in the protection and management of FMU 17A.



The backbone of the establishment of Aki Keramuak – the model. Seated below (L) : Mr Roshan Guharajan (PANTHERA Malaysia), Seated above (L) : Mdm Sylvia Alsisto (SWD Kinabatangan), seated above (R) : Dr Nurzhafarina Othman (Seratu Aatai) and seated below (R) Mr Johny Kissing @ John (SFD Deramakot).

NATURE RECREATION

Nature recreation activities in FMU 17A continued to be centred at the Kun-Kun Rest Centre, which serves as the primary site for public access and forest-based recreational use within the forest reserve.

In 2025, government revenue collected from the Kun-Kun Rest Centre amounted to RM9,845.00. The relatively low collection for the year was due to the limited operating period, as the site was only reopened in October following enhancement works focused on visitor safety infrastructure. These improvements were undertaken in response to a



The stakeholder meeting in 2025.

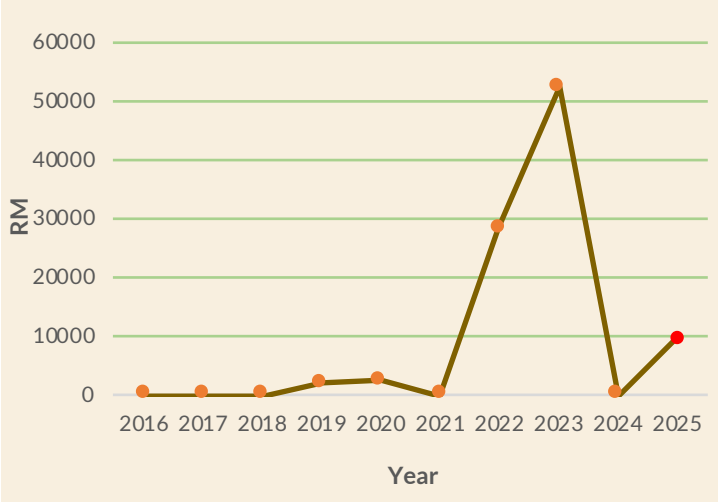


Chart 3: Nature Recreation Revenue at Kun-Kun Rest Centre (2016–2025).

fatal drowning incident that occurred two years earlier, with the objective of ensuring safer conditions for visitors before resuming operations.

Despite the reduced collection in 2025, long-term records indicate a generally increasing trend in revenue prior to the temporary closure, reflecting growing public interest in nature-based recreation within FMU 17A.

The trend in Chart 3 shows a gradual increase in revenue leading up to 2023, followed by a sharp decline in 2024 due to the temporary closure of the site. The partial recovery observed in 2025 reflects the resumption of operations towards the end of the year. This pattern demonstrates both the growing demand for nature-based recreation and the direct impact of operational disruptions on revenue performance.

In addition to nature-based recreation, government revenue was also collected through occupation permits within the forest reserve, including permits related to road usage and office compound facilities. In 2025, a total of RM30,250.00 was collected through these permits.

Overall, nature-based recreation in FMU 17A continues to support public awareness and appreciation of forest conservation, while contributing to government revenue. Future development of the Kun-Kun Rest Centre will remain guided by safety considerations, infrastructure readiness and the need to maintain the ecological integrity of the forest reserve.

TRAINING AND CAPACITY BUILDING

Training and capacity-building activities in FMU 17A in 2025 were carried out to enhance the competency of personnel, contractors and local community members involved in forest management and protection activities.

The training programmes conducted were similar in scope to those implemented in DFR, covering key areas such as Annual Work Plan (AWP) implementation, Forest Management Plan (FMP) requirements, occupational safety and health (OSH), Sustainable Forest Management (SFM) requirements and High Conservation Value (HCV) management. These programmes were delivered through a combination of refresher courses, briefings and practical sessions.

Training activities were extended not only to forestry personnel, but also to contractors and local community participants involved in field operations, including boundary maintenance, monitoring and protection activities. This approach ensures that all parties involved in the management of FMU 17A are aligned with operational requirements, safety standards and conservation objectives.

In addition to formal training, capacity-building was also strengthened through continuous engagement, roadshows and on-site guidance during field activities. These efforts contributed to improving understanding of management practices, enhancing technical skills and reinforcing compliance with established procedures.

Overall, training and capacity-building activities in 2025 contributed to strengthening the operational capacity of personnel and stakeholders, supporting the effective implementation of forest management and protection activities within FMU 17A.

INFRASTRUCTURE AND FACILITIES

Infrastructure and facilities in FMU 17A in 2025 were maintained to support operational, protection and nature-based recreation activities within the forest reserve. These included basic facilities such as base camp infrastructure, field stations and the Kun-Kun Rest Centre, which serves as the primary site for nature recreation activities.

In 2025, a new storage and administrative building was constructed at the Kun-Kun Rest Centre at a cost of RM250,000.00. The facility was developed to support operational requirements, including equipment storage and administrative activities, thereby improving overall management efficiency at the site.

Maintenance works were carried out throughout the year to ensure that existing facilities remained functional and safe for use. This included routine upkeep of buildings, basic utilities and essential infrastructure required for field operations and visitor use.

In addition, access infrastructure within the forest reserve was maintained as necessary to support patrol activities, monitoring work and limited public access. Due to the largely protected status of FMU 17A, infrastructure development remains minimal and is carefully managed to avoid unnecessary disturbance to the forest environment.

Maintenance efforts were constrained by weather conditions, limited accessibility and funding availability. These factors affected the scheduling and extent of works, particularly in remote areas that are difficult to reach.

Overall, infrastructure and facilities within FMU 17A remained adequate to support management and operational requirements in 2025, with continued emphasis on maintaining functionality while preserving the ecological integrity of the forest reserve.



The new admin/storage building in Kun-Kun.



© Eyen Khoo

Immature fruits of *Canarium odontophyllum* developing on a tree near the Birder's Rest in RDC, marking the early stage of a fruit valued within the rainforest ecosystem.

ULU SEGAMA-MALUA

Sustainable Forest Management Project



Laran planted in USM

INTRODUCTION

Area and gazettement

The year 2025 is the eighth year of implementation of the Ulu Segama-Malua Sustainable Forest Management Project under the Second Forest Management Plan (2nd FMP), which provides an updated project description and the activities framework for the ten-year period (2018–2027).

The USM comprises eleven (11) forest reserves from two (2) forest reserve classes, namely Class I and Class VI Virgin Jungle Reserves. These forest reserves form a large contiguous complex of aggregated Totally Protected Areas, covering an area of 242,884 ha, which largely consists of previously logged forests at various stages of regeneration, as well as areas of pristine forest. There were no changes to the designated functions of the forest reserves within the project area, as follows:

Table 1: USM SFM project area.

No	FR Name	FR Class	Function	Area (Ha)
1	Sapagaya	I	Protection	698.00
2	Ulu Segama	I	Protection	126,846.00
3	Mount Louisa	I	Protection	54,760.00
4	Sungai Taliwas	I	Protection	9,546.00
5	Extension Danum Valley	I	Protection	92.00
6	Bukit Piton	I	Protection	11,612.00
7	Malua	I	Protection	33,969.00
8	Kawag Gibong	VI	Protection	707.00
9	Sepagaya	VI	Protection	2,316.00
10	Merisuli	VI	Protection	552.00
11	Extension Mt Louisa	I	Protection	1,786.00
Total				**242,884.00**

Scan QR Code to view the Map of Forest Reserves within USM

Administrative info

USM is part of the Sabah Foundation (YS) Concession Area, and this SFM project is a collaboration between the Department and YS, in which the SFD leads the management of the entire project area.

Forest Management Plan – Main objective

The main objectives of the project are to ensure the maintenance and enhancement of key ecosystem functions, to conserve and rehabilitate wildlife habitats (including orangutans, pygmy elephants, tembadau, clouded leopards, etc.), and to safeguard environmental quality, particularly soil and water resources.

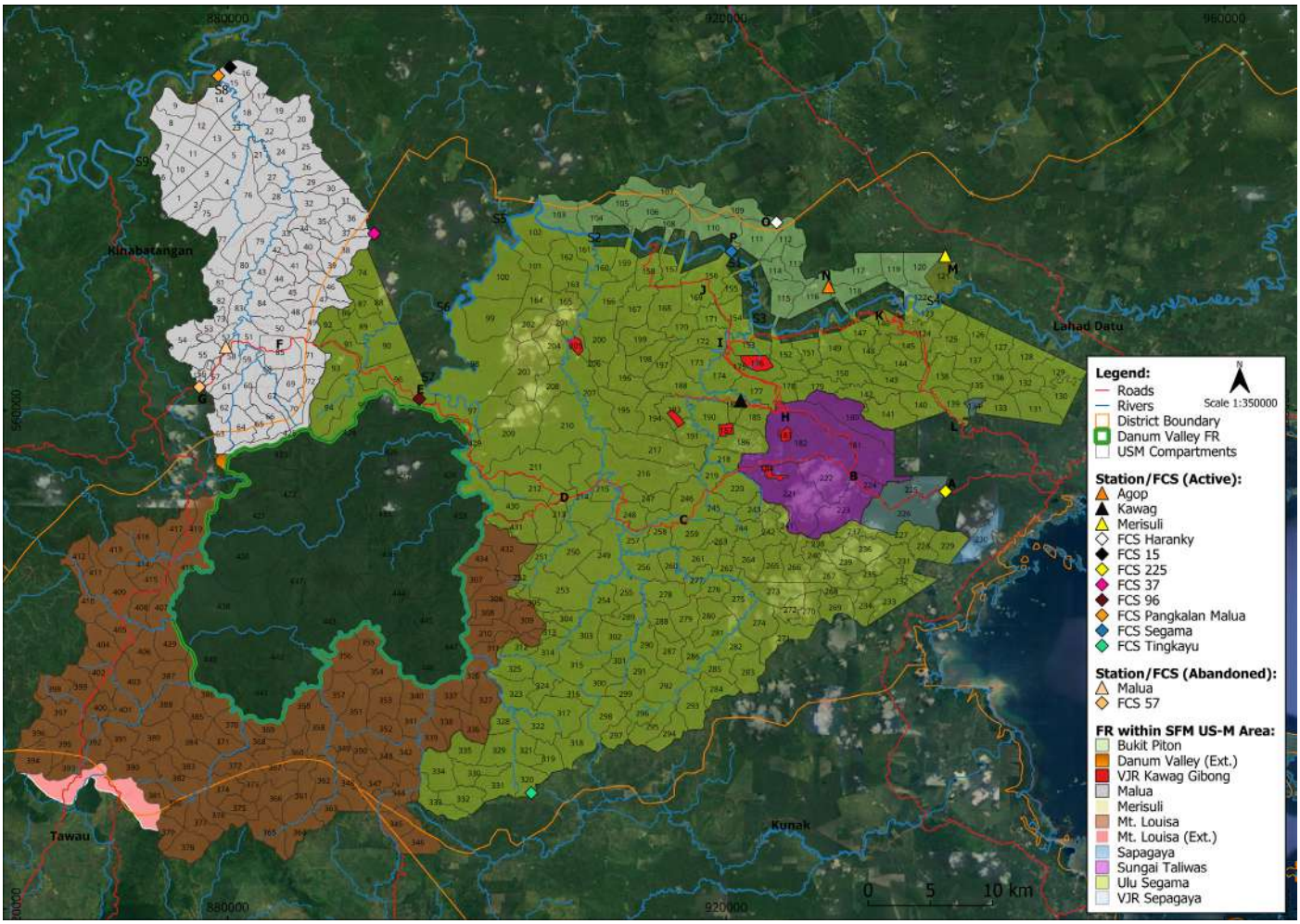


Fig. 1: The map illustrates priority monitoring and control zones within the SFM project area, emphasizing areas vulnerable to encroachment into the forest reserve. The established night patrol and river surveillance routes, identified as A–P and S1–S9 respectively, are routinely patrolled by the protection team as part of ongoing enforcement operations.

Certification

The Department prioritizes the implementation of sustainable forest management to align with the SFD's objectives and to ensure that forest management in the State of Sabah remains sustainable.

FSC certification for the USM SFMP has yet to be implemented and remains under consideration. The certification approach is still being refined to align with the overall project objectives for conservation and forest landscape management.

While awaiting the implementation of FSC certification, the USM SFMP has taken the opportunity to obtain recognition under the Ecosystem Restoration Standards (ER) introduced by Preferred by Nature (PbN), an international certification body.

Outstanding conservation values

Several intervention activities were carried out in 2025 and are highlighted in this report, namely: forest rehabilitation, wildlife monitoring, resource protection, forest road management, community forestry, and forest certification. The implementation of these activities was based on the approved Annual Work Plan (AWP) 2025 and was primarily funded through the Sabah State Development Fund of the 12th Malaysian Plan (RMK-12), with a total allocation of approximately RM2,880,179.00.

Table 2: Summary of forest protection activities conducted in the USM SFM project area in 2025.

Protection Activities	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Total
Ground Surveillance	43	48	63	59	213
Night patrolling	27	22	40	26	115
River Patrolling, focus at Segama and Malua River	29	19	0	24	72
Aerial Surveillance	1	0	1	0	2

PROTECTION FOREST ECOSYSTEM

Forest protection and enforcement

The protection activities were implemented to prevent, monitor, and control forest crimes within the project area, including illegal tree felling, illegal cultivation, illegal occupation, forest fires, poaching, and illegal gold panning, through intensive ground surveillance, river patrols, and aerial surveillance (refer to **Table 2**).

Night patrol operations (anti-poaching) were conducted on 115 occasions throughout 2025, primarily focusing on the designated Route A–B–H–J–I (**Fig. 1**). Compared to previous years, the frequency of night patrols in 2025 showed a slight

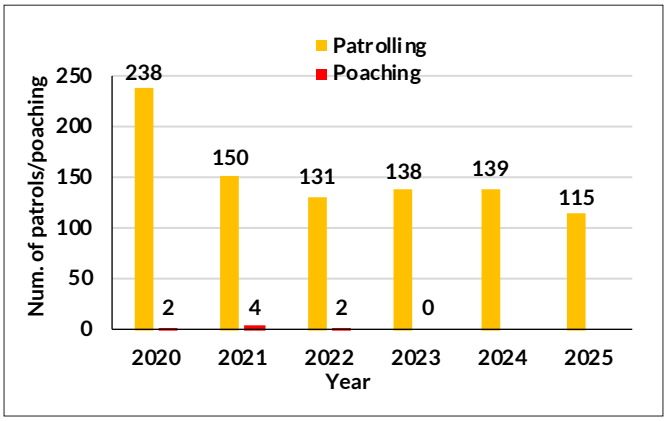


Fig. 2: Night patrol effort and trend in recorded hunting incidents within USM SFM Project area (2020 – 2025).

reduction due to logistical constraints. Nevertheless, no active poaching activities were detected during the patrols conducted in the reporting year.

The trend illustrated in **Fig. 2** indicates a marked reduction in recorded hunting incidents between 2019 and 2025, demonstrating the overall effectiveness of sustained patrolling and enforcement efforts. In addition, a series of intensive and successive special operations under the Lahad Datu Anti-Poaching Task Force were jointly implemented within the project area by the Sabah Forestry Department (SFD) Protection Unit, the Sabah Wildlife Department (SWD), Yayasan Sabah (YS), the Royal Malaysia Police, and WWF-Malaysia. These coordinated multi-agency enforcement operations likely to have contributed significantly to the observed decline in poaching incidents by strengthening surveillance coverage, enhancing deterrence, and improving rapid response capacity within the SFM project area.





Night surveillance at KM4.5 Kawag, lower Kawag, and Sungai Taliwas FR, conducted jointly with Yayasan Sabah and WWF-Malaysia.



Participants during aerial surveillance in USM SFM Project Area.





The ground surveillance and intensive patrols conducted jointly by WWF-Malaysia and SFD Protect

In 2025, ground surveillance activities were successfully conducted over a total of 213 days, averaging approximately 18 patrol days per month. Surveillance efforts focused on forest boundary segments identified as high-risk areas, including Bukit Piton Forest Reserve (FR), Malua FR, Segama FR, Sungai Taliwas FR, Mount Louisa FR, and Sepagaya Virgin Jungle Reserve (VJR). These vulnerable boundary sections are illustrated by the yellow demarcation line in **Fig. 3**.

To ensure comprehensive boundary monitoring, aerial surveillance was also undertaken at least twice during the year, specifically in March and July. An integrated analysis of data obtained from both ground and aerial surveillance revealed that several abandoned logging roads within Compartments 139 and 271, which had previously been dismantled, were being actively used by suspected poachers to gain unauthorised access to the forest reserve for hunting purposes. In addition, evidence of illegal gold panning in Compartment 163, waste dumping adjacent to Compartments 107 and 109, as well as land clearing and illegal tree felling in the vicinity of Compartments 333/332, 318, 271, 141, and 133, was detected.

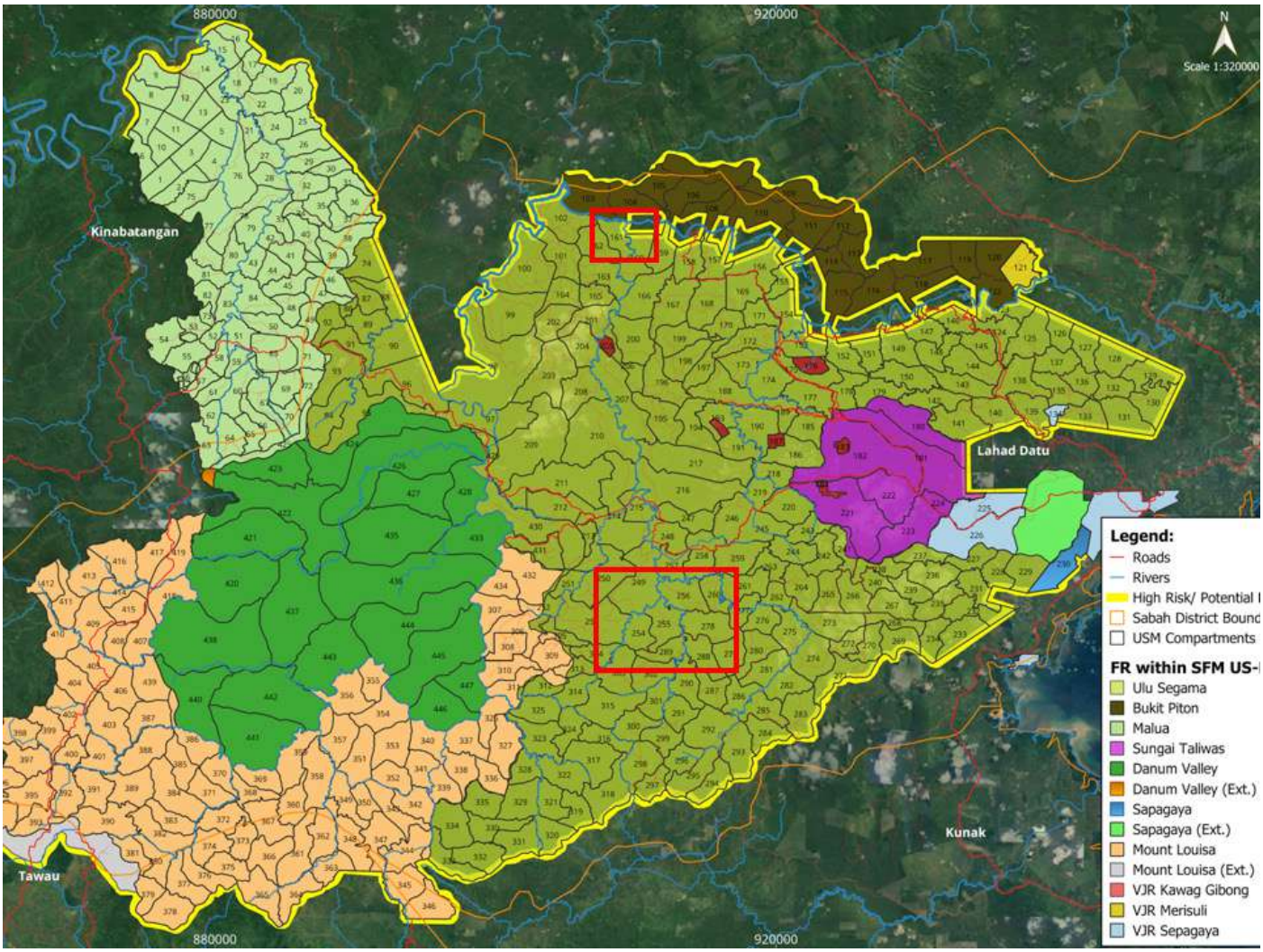


Fig. 3: The target area (highlighted in red) for foot and river patrols operation, and vulnerable boundary sections are delineated by the yellow lines.



(L) Detection of active illegal gold panning in Compartment 163; (R) Land clearing in adjacent to Compartment 318 of Ulu Segama FR.

As preventive and corrective measures, the protection team successfully monitored, secured, and resecured and dismantled again at several identified entry points to restrict further illegal access. These operations were carried out with the strong cooperation and support of the management of the oil palm plantation management bordering the forest reserve. These sustained enforcement and monitoring efforts played a critical role in addressing illegal activities, particularly poaching, within the SFM project area.

In addition, river surveillance activities were successfully conducted over a total of 72 patrol days, averaging approximately six (6) patrol days per month. These patrols primarily focused on the Malua River and Segama River corridors. Throughout the reporting period, no incidents of illegal tree felling were detected.

Forest fire prevention programme

The USM SFM Project area is adjacent to human settlements and plantation areas and is exposed to various human activities, making it more susceptible to forest fire hazards. In response to the extensive forest management area, a protection unit was established to conduct patrols and monitor forest fire incidents throughout the project area. Ground surveillance, river patrols, and aerial surveillance were systematically carried out for this purpose.

In 2025, river patrols were conducted over a total of 72 days, averaging six (6) patrol days per month, with a primary focus on the Segama–Bole River and the Malua River. Aerial surveillance was carried out twice, in March and July 2025. Despite the scale and frequency of these patrol and surveillance activities, no forest fire incidents were detected within the project area during the reporting year.



(A) Aerial surveillance for forest fire risk and boundary inspection in Compartments 107 and 109 of Bukit Piton FR identified waste piles near the forest boundary; **(B)** River inspections along Sungai Segama and Sungai Bole in the northern Ulu Segama FR; **(C)** Ground surveillance in Compartment 139 as part of fire prevention and monitoring efforts.

MAINTAINING BIOLOGICAL DIVERSITY

Forest health

The Forest Rehabilitation Programme is one of the key components of Sustainable Forest Management (SFM), serving as a mitigation measure to address declining forest cover, restore wildlife habitats and corridors, and promote ecosystem recovery towards natural forest conditions.

In 2025, the 2,500-hectare degraded Orangutan Habitat Restoration Program in Lower Kawag, Ulu Segama Forest Reserve (2019–2029) was revised in line with the signing of a novation agreement between the Department, the Malaysian Palm Oil Council (MPOC), and the Malaysian Palm Oil Green Conservation Foundation (MPOGCF), where the target area of tree planting for Phase 3 was reduced based on current financial projections. The project direction continued so that the green conservation collaboration is expected to strengthen the Malaysian palm oil industry's contribution to forest conservation.

With this novation agreement, further planting projects are officially managed and fully funded under the MPOGCF through the collaboration of the Ministry of Plantation Industries and Commodities (MPIC) and the Department.

Forest Rehabilitation

• Silviculture

A total of 1,215 hectares was treated in 2025 and achieved the AWP target of 1,215 hectares as shown in **Table 4**. All 1,215 hectares was treated at Bukit Piton FR which was funded by various funders, i.e Rhino and Forest Fund (RFF) and under the 12th Malaysia Plan (Federal Fund EFT). The treatment focuses on climbers with a diameter less than 5 cm which can adversely affect natural forest regeneration and structure. Whilst climbers and woody vines exceeding 5 cm diameter may provide an alternative food source and provide shelter to the wildlife, in particular bird community.

Table 4: Silviculture treatment in 2025.

No.	Compartment ID	Target (Ha)	Achievement (Ha)	(%)	Funded by	Contractor
1	112	230	230	100%	Federal Fund (EFT) under KeTSA	Viana Enterprise
2	117	370	370	100%		
3	117	353	362	102%	Rhino & Forest Fund (RFF)	Sulia Maju
4	118	262	253	97%		
	Total	**1,215**	**1,215**	**100%**		

Table 3: Action Plan for Implementation of SFD-MPOGCF Restoration Project (2019 – 2029).

Phase	Target Year	Target of Planting (ha)	Total Seedlings	Achievement (ha)	Remarks
1	2019 - 2026	25	10,000	25.00	• MCO: Year 2020 & 2021; • Planting completed by Kontraktor DY Mekar; • 16th Maintenance Round completed (up to 18 rounds)
2	2021 - 2026	200	80,000	200.00	• Planting completed by Kontraktor Fajar • 16th Maintenance Round completed (up to 20 rounds)
3	2023 - 2025	750	300,000	0.00	• No planting activities were carried out due to the restructuring process of the donor organization; • This organizational restructuring affected existing agreements and novation agreements were implemented and signed on 3rd October 2025 to enable the project to be implemented according to the project direction; • The target area for Phase 3 of 750 ha will be rescheduled based on the latest donor financial projections.
4	2026 - 2029	-	-	-	Rescheduling

*__Note__: Four maintenance rounds were scheduled per year.



Silviculture treatment at Compartment 117, Bukit Piton FR.



Silviculture treatment at Compartment 118, Bukit Piton FR

• Planting

In 2025, the target compartments for tree planting activities cover Compartment 154, Lower Kawag, Ulu Segama FR with a total area of 241 ha which was funded under Malaysian Palm Oil Green Conservation Foundation (MPOGCF) via the Ministry of Plantation Industries and Commodities (MPIC) engagement with the Sabah Forestry Department.

However, no planting activities were carried out at the project site due to the restructuring process of the donor organization.

In addition, maintenance activities were also carried out in 3 compartments as stipulated in **Table 5**. About 949.5 hectares was achieved or 90% as targeted in the AWP. However, the tree planting activities cannot be done in Compartment 154, and this affected the proposed maintenance programme in Compartment 154. Therefore, no maintenance activities were carried out at Compartment 154 throughout 2025.

Maintenance programme consisted of line and point clearance and resupply of dead seedlings. In the aspect of mortality rate of planted seedlings, it ranged from 10% to 20%.

In Compartment 153 (Phase 2: 200 ha), Lower Kawag, Ulu Segama FR, the electric fence have been installed by Kontraktor Fajar as its own initiative focused on the open area covered about 2.16 ha (874 planted trees) since March 2022 and continued to install the electric fence in second phase on January 2023 which covered about 2.89 ha (1,156 planted trees) so more open areas will be successfully covered with healthier growth of planted tree. The installation of electric fence (totally about 5.08 ha in Sub Block A) showed a positive progress when almost all the tree planted grew well since more than (3) years (March 2022 - Dec 2025) with reduced disturbance of wild animals (i.e: Herds of Elephants and Sambar Deer) as well as Kontraktor Fajar following the maintenance schedule that was given by Sabah Forestry Department (SFD).

Table 5: Maintenance area for forest rehabilitation in 2025.

No.	Compartment ID	Target (Ha)	Achieve-ment (Ha)	(%)	Funded by	Contractor
1	109	6.0	6.5	108%	Brother Cycling, Switzerland (BC)	Kontraktor Fajar
2	109	40.0	40.0	100%	Bike & Tours Sdn. Bhd. (BTSB)	Kontraktor Fajar
3	111	4.0	3.0	75%	Brother Cycling, Switzerland (BC)	Kontraktor Fajar
4	153	100.0	100.0	100%	MPOGCF	Kontraktor Fajar
	Total	1,215	1,215	100%		
5	153	800.0	800.0	100%		Kontraktor Fajar
6	154	50.0	0.0	0%		Perusahaan Panglima 1 Kunak
7	154	50.0	0.0	0%		Pemborong Molapsia
	Total	**1,050**	**949.5**	**90%**		



Fig. 12: The Electric Fences (Phase 1) and (Phase 2) were installed on the open areas to prevent the disturbance of wild animals from damaging the planted trees and the installation budget was fully borne by Kontraktor Fajar using their own financial resources.



(A) Binuang, **(B)** Laran and **(C)** Kapur paji species planted on the open areas based on the selection of fast growing tree species.

WILDLIFE MONITORING

Wildlife monitoring is essential for conservation, as it provides critical data on species distribution, population dynamics, and habitat conditions. In the Ulu Segama–Malua Sustainable Forest Management (USM SFM) Project Area (QR Code below), systematic monitoring efforts are crucial for assessing key wildlife species and informing long-term conservation strategies. A range of methodologies, including Orangutan census, nocturnal surveys, opportunistic sightings, and bird surveys, are employed to evaluate species presence and abundance.

In 2025, comprehensive surveys conducted jointly with the HUTAN team within the USM SFM Project Area recorded more than 25 mammal species and 10 species of large birds. Among these, several species are fully protected under the Wildlife Conservation Enactment 1997, including *Nasalis larvatus*, *Pongo pygmaeus morio*, *Elephas maximus*, *Bos javanicus*, *Helarctos malayanus*, and *Manis javanica*. In addition, more than 20 species are listed under Schedule II, while two species fall under Schedule III, which permits limited hunting under licence.

The conservation status of terrestrial mammals varies, with more than 17 species classified as threatened (Table 6), three species as near threatened, and the remaining species as least concern under the IUCN Red List criteria. Bird surveys recorded over 170 species from 40 families, including 17 threatened and 40 near-threatened species based on the IUCN Red List. These findings underscore the high ecological significance of the project area and highlight the need for continued and strengthened conservation efforts.

Scan QR Code to view The wildlife monitoring study sites in the USM SFMP, indicating key survey locations for species and habitat assessments

Table 6: Threatened wildlife species recorded in the USM SFM project area in 2025.

Wildlife (Common Name)	Scientific Name	IUCN Redlist
Helmeted hornbill	*Buceros vigil (Rhinoplax vigil)*	CR
Bornean orangutan	*Pongo pygmaeus morio*	CR
Sunda pangolin	*Manis javanica*	CR
Long-tailed macaque	*Macaca fascicularis*	EN
Pig-tailed macaque	*Macaca nemestrina*	EN
Proboscis monkey	*Nasalis larvatus*	EN
Storm's stork	*Ciconia stormi*	EN
Bornean pygmy elephant	*Elephas maximus borneensis*	EN
Bornean gibbon	*Hylobates funereus*	EN
Bornean banteng	*Bos javanicus*	EN
Bornean sun bear	*Helarctos malayanus*	VU
Rhinoceros hornbill	*Buceros rhinoceros*	VU
Asian black hornbill	*Anthracoceros malayanus*	VU
Red leaf monkey	*Presbytis rubicunda*	VU
Sambar deer	*Cervus unicolor*	VU
Slow loris	*Nycticebus* sp	VU
Crested fireback	*Lophura ignita*	VU
Bearded pig	*Sus barbatus*	VU
Horsfield's tarsier	*Tarsius bancanus*	VU

Note: CR-Critically Endangered, EN-Endangered, VU-Vulnerable

Ground Orangutan Nest Census

In 2025, the annual orangutan census was conducted at established monitoring sites within the USM SFM Area (**Fig. 4**). The survey covered Compartment 112 of Bukit Piton FR, Compartments 154, 171, and 172 in the Lower Kawag region of Ulu Segama FR, as well as Compartments 36, 37, 15, and 16 of Malua FR. Census results indicated that the population density of orangutan ranged from 1.23 to 2.01 individuals per km² in Malua FR and from 0.63 to 1.07 individuals per km² in Bukit Piton FR. In the Lower Kawag region of Ulu Segama FR, recorded densities ranged between 0.50 and 0.96 individuals per km². Consistent with previous census findings, Orangutan nests were predominantly observed on medium-sized trees and within the lower crowns of dominant trees across all survey locations. More than 60% of nesting trees were pioneer species, primarily *Neolamarckia cadamba* (36%) and *Pterospermum* spp. (34%).

The ground census data indicated a higher Orangutan density in North Malua FR (2.01 individuals per km²) compared to other surveyed areas, including East Malua FR, Bukit Piton FR, and the Lower Kawag region. However, census results from most monitoring sites, particularly Lower Kawag and Bukit Piton FR, showed a slight decline in Orangutan densities between 2024 and 2025. In contrast, densities in North and East Malua FR exhibited a slight increase (**Table 7**). Despite the absence of recorded hunting incidents, fluctuations in Orangutan densities may be influenced by several factors, including food availability along census transects, nest visibility, weather conditions, and detection probability during surveys. Overall, the Orangutan population, especially in Lower Kawag and Bukit Piton FR, is considered to be gradually stabilizing and becoming more evenly distributed. This assessment is supported by observations of individual of Orangutan, indicating successful reproduction, as well as the presence of planted tree species that provide food resources and suitable nesting canopies. Considering that Orangutan population densities in Borneo typically range from 0.1 to 3.5 individuals per km² (Rijksen & Meijaard, 1999), the densities recorded across all study sites indicate that the populations remain viable.

Table 7: Orangutan densities across four (4) study sites within Malua FR (North and East), Bukit Piton FR, and lower Kawag of Ulu Segama FR, 2020 – 2025

Location/ Year	2020	2021	2022	2023	2024	2025
Malua North	2.43	1.93	3.00	1.66	1.64	2.01
Malua East	2.52	0.88	1.92	1.49	1.24	1.23
Bukit Piton	2.55	1.5	1.73	1.34	1.33	1.07
Lower Kawag (Ulu Segama FR)	0.89	1.33	2.21	1.38	1.43	0.96





(A) Presence of mature pioneer tree species providing essential food resources and suitable nesting canopies for Orangutan. **(B)** Observation of a flanged male Orangutan encountered during the census. **(C)** Ground census conducted by the US-M team.

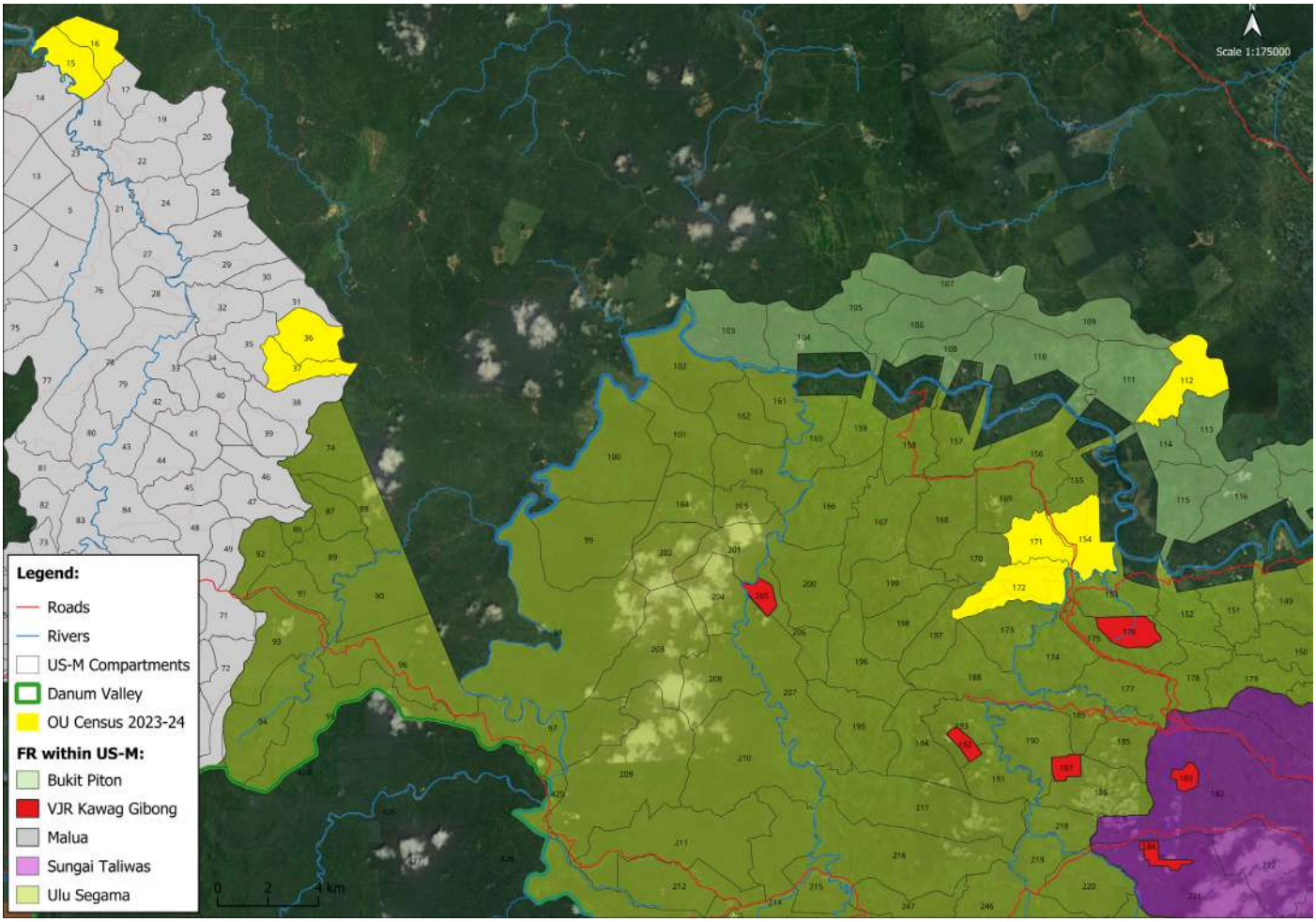


Fig. 4: Permanent study sites for the Orangutan nest census within the USM SFM project area, including Malua FR, Bukit Piton FR, and Lower Kawag of Ulu Segama FR.

Night Survey

In 2025, a successful nocturnal observation initiative was conducted primarily in Bukit Piton FR and lower Kawag within the Ulu Segama FR. The surveys were carried out for an average of three days per month, covering daily distances ranging from 7.0 to 12.0 km. A team of three individuals utilized vehicles to enhance mobility and survey efficiency. The recorded observation metrics indicate a low wildlife detection rate at both locations, ranging from 0.29 to 0.65 sightings per km per day. The Malay civet (*Viverra tangalunga*) was the most frequently observed species across both study sites. Biodiversity analysis using the Shannon Diversity Index (H) revealed a value of 2.10 for Bukit Piton FR, indicating a relatively high level of species diversity. This value surpasses that of lower Kawag, where the corresponding H value was lower at 1.81. A higher Shannon Diversity Index reflects greater species richness and a more proportionally represented community (**Table 8**).

The Evenness Index (J) further provides insights into species distribution. In lower Kawag, the Evenness Index was recorded at 0.93, approaching 1, suggesting a more balanced representation of species. In contrast, Bukit Piton FR exhibited a lower Evenness Index of 0.74, indicating that certain species were more dominant within the community. These findings highlight the ecological differences between the two study sites, with Bukit Piton FR demonstrating higher overall species diversity but lower evenness due to the dominance of specific species. In contrast, lower Kawag exhibits a more balanced species distribution, despite lower overall diversity.

The analysis identified four threatened species within the study area: the Bornean Elephant (*Elephas maximus borneensis*, EN), Sambar Deer (*Rusa unicolor*, VU), Slow Loris (*Nycticebus* spp., VU), and Horsfield's tarsier (*Tarsius bancanus*). All species were directly observed during the survey, however no photographs were taken. This visual confirmation enhances the reliability and significance of the findings. While the data do not account for variations in sampling effort between sites, the data remains valuable for understanding nocturnal biodiversity at Bukit Piton FR and Lower Kawag, providing key insights into species composition and sighting frequencies.

Table 8: Species composition and number of sightings during nightspot survey at two distinct locations, Bukit Piton FR and Lower Kawag (Ulu Segama FR), 2025.

Wildlife Species (Common Name)	Bukit Piton	Ulu Segama (Lower Kawag)
Malay civet	28	4
Lesser mousedeer	21	1
Moonrat	14	-
Common palm civet	9	2
Leopard cat	8	3
Sambar deer	7	1
Red giant flying squirrel	5	2
Banded linsang	4	-
Bornean elephant	1	-
Brown wood owl	2	-
Common porcupine	2	-
Slow loris	2	-
Thomas's flying squirrel	2	-
Flying lemur	1	-
Malay badger	1	-
Masked palm civet	1	-
Western tarsier	1	-

Opportunistic Sightings (Adhoc)

In 2025, over 18 wildlife species were encountered, with more than 15 classified as threatened according to the IUCN Red List (refer to **Table 9**). Among these, three species were categorized as Critically Endangered (CR), six as Endangered (EN), and at least six as Vulnerable (VU). Notable species recorded include the Bornean Orangutan (CR), Sunda Pangolin (CR), Helmeted hornbill (CR), Bornean Elephant (EN), Pig-tailed macaque (EN), Long-tailed macaque (EN), Bornean Gibbon (EN), Proboscis Monkey (EN), Storm's Stork (EN), Sambar Deer (VU), Red Leaf Monkey (VU), Bearded Pig (VU), Crested Fireback (VU), Rhinoceros Hornbill (VU), and Asian Black Hornbill (VU). Opportunistic sightings of threatened species in 2025 indicated greater species diversity, with a diversity index (H) of 2.79, which was slightly lower than the previous year. Annual sightings showed that the Bornean Orangutan and two large bird species, namely the Rhinoceros Hornbill and Asian Black Hornbill, were the most frequently observed, followed by the Bornean Elephant and Macaque (**Table 10**). The bearded pig was also recorded in 2025, indicating a potential recovery of the species following the African swine fever outbreak.

Table 9: Detailed list of threatened wildlife species recorded and identified in 2025.

Species (Common Name)	Scientific Name	Number of sightings	IUCN Status
Bornean pygmy elephant	*Elephas maximus borneensis*	16	EN
Long tailed macaque	*Macaca fascicularis*	12	EN
Pig tailed macaque	*Macaca nemestrina*	17	EN
Bornean orangutan	*Pongo pygmaeus morio*	18	CR
Sambar deer	*Cervus unicolor*	11	VU
Bornean banteng	*Bos javanicus*	-	CR
Small-Clawed otter	*Anoyx cinereus*	-	VU
Sunda pangolin	*Manis javanica*	1	CR
Bornean gibbon	*Hylobates funereus*	1	EN
Slow loris	*Nycticebus* sp	2	VU
Horsfield's tarsier	*Tarsius bancanus*	1	VU
Red leaf monkey	*Presbytis rubicunda*	2	VU
Bearded pig	*Sus barbatus*	1	VU
Bornean sun bear	*Helarctos malayanus*	-	VU
Proboscis monkey	*Nasalis larvatus*	1	EN
Rhinoceros hornbill	*Buceros rhinoceros*	23	VU
Asian black hornbill	*Anthracoceros malayanus*	23	VU
Crested fireback	*Lophura ignita*	13	VU
Storm's stork	*Ciconia stormi*	7	EN
White-crowned Hornbill	*Berenicornis comatus*	-	EN
Helmeted hornbill	*Buceros vigil (Rhinoplax vigil)*	1	CR



Bornean Elephants sighted within the Ulu Segama-Malua SFM project area.



(1) Great Argus, (2) Bornean Orangutan and (3) Masked palm civet are some of the species found in USM SFM project area.

Table 10: Annual sightings of (10) commonly recorded threatened wildlife species within the USM SFM project area in 2025.

Wildlife Species (Common Name)	Number of sighting
Asian black hornbill	23
Rhinoceros hornbill	23
Bornean Orangutan	18
Pig-tailed Macaque	17
Bornean elephant	16
Crested fireback	13
Long-tailed Macaque	12
Sambar deer	11
Oriental pied hornbill	9
Storm stork	7

Bird Survey

In 2025, bird observations were conducted as part of routine monitoring. The results indicated that no new species were recorded during the survey period, with avian diversity remaining consistent with previous records. A total of more than 170 bird species representing 40 families were documented, suggesting a stable bird population within the project area. Based on the IUCN Red List categories, 17 species (9.60%) are classified as threatened, including the Helmeted Hornbill, Storm's Stork, and Rhinoceros Hornbill. In addition, 50 species (28.25%) are listed as Near Threatened, while 110 species (62.15%) are classified as Least Concern. These findings underscore the importance of continued monitoring and targeted conservation efforts, particularly for large bird species within the project area.

FOREST MANAGEMENT CERTIFICATION – AUDIT SURVEILANCE

The USM SFMP achieved certification as a Well-Managed Forest by the Forest Stewardship Council (FSC) in June 2011, adhering strictly to the FSC's Principles and Criteria but the certificate has since lapsed in June 2021. Nevertheless, the department has since initiate to get the area re-certified. It stands as the second model forest reserve for Sustainable Forest Management (SFM) managed by the Forestry Department of Sabah, following the FSC-certified Deramakot Forest Reserve. However, its proximity to agricultural industries and local villages raises significant concerns regarding illegal encroachment and poaching.

Between 2008 and 2017, forest restoration efforts were primarily concentrated in Bukit Piton Forest Reserve (11,612 ha) and VJR Merisuli (552 ha). The main objective of these efforts was to enhance the quality of the degraded orangutan habitats. Historically, these reserves were heavily logged from the 1980s until 2007, with the situation further exacerbated by major forest fires during the El Niño events in 1983 and 1997/98. Consequently, much of the area was left degraded, virtually devoid of tree cover, and classified as Stratum 4 (very poor forest) and secondary forest. Some areas had also been encroached upon for oil palm cultivation. Without restoration interventions, these areas were likely to remain degraded and continue to be at high risk for forest fires due to the openness of the canopy. To address these challenges, management has devised a strategy focused on habitat enhancement through enrichment planting and intensive forest restoration efforts.

While awaiting the implementation of FSC certification, USM SFMP has taken the opportunity to obtain recognition in the 'Ecosystem Restoration Standards (ER)' which was introduced by Preferred by Nature (PbN), an international certification body. From 3–5 Sept 2024, USM SFMP was audited by PbN to evaluate the ecological, economic, and social performance of Sabah Forestry Department, Lower Kawag Project restoration initiative located within the USM Forest Reserve in Sabah, Malaysia. The field audit lasted for three days, was preceded by a stakeholder consultation process that continued throughout the audit as well. The methodology consisted of triangulating the verification of existing files with the various SFD's responsible staff, interviews with stakeholders and beneficiaries, and the field visit observations. With no major specific stakeholder concerns having been raised, the sites were sampled based mainly on the type of management, the different measures being applied on-site and landform. Three sites were selected: Block A, B and C in Compartment 153 (200 ha) which falls under the scope of audit. The USM SFMP was successfully verified and issued with a compliance certificate with **Reg.# PBN-ER-024465**, valid for **26/11/2024 – 25/11/2029**.


Preferred by Nature

Preferred by Nature hereby certifies that

Sabah Forestry Department

Jln Pejabat Jabatan Perhutanan, Beg Berkunci 68
Sandakan, Sabah 90009
Malaysia

conform with the following standards:
Ecosystem Restoration Field Verification Standard V3.1

The verification certificate is valid from 26 November 2024 to 25 November 2029
Certificate version date: 26 November 2024

Certification scope
Project: Rehabilitation of Orangutan Habitat at Cpt 153 Lower Kawag in Ulu Segama-Malua Sustainable Forest Management Project, Sabah
Area: 200 ha
For additional details regarding the scope of verification please check the publicly available documentation on the Preferred by Nature Certification Database:

Certificate registration code
PBN-ER-024465

The Compliance Certificate was awarded to the USM SFMP by PbN for successfully complying with the Ecosystem Restoration Field Verification Standard V3.1

On the 10–12 November 2025, USM SFMP was audited again by PbN to assess continual improvement and address gaps identified during the previous audit of 2024. The ER Standard has entered the First (1st) Surveillance Audit of 1st Cycle focused on 200 hectares of project area in Compartment 153.

The Annual Surveillance Audit of 2024 has identified 3 Minor NCRs and 3 Observation which were:
1. Indicator 1.5.6 (Minor)
2. Indicator 3.1.5 (Minor)
3. Indicator 3.3.4 (Minor)
4. Indicator 2.5.1 (Observation)
5. Indicator 3.1.2 (Observation)
6. Indicator 4.6.2 (Observation)

The Minor nonconformances must be addressed prior to the next audit to maintain the certificate. However, during the closing meeting of 1st Surveillance Audit, USM SFMP successfully closed all three Minor NCRs and addressed all three.

Meanwhile, during the audit process of 1st Surveillance, PbN auditor had identified 1 Minor NCRs and 2 Observations and must be addressed prior to the next audit in 2026.

Scan QR Code to view Annual Surveillance Audit 2024 of the 3 Minor NCRs and 3 Observation

Table 11: Findings of the 2025 Annual Surveillance Audit - Minor NCRs and 2 Observation.

Indicator	Non-Conformity	Corrective Action Request
3.3.4 (Minor)	Occupational Work and Safety	Document review and interviews indicated that the health and safety procedure has not been updated since 1 January 2012. Interviews with community nursery members further indicated limited awareness of the required response in the event of injury during seedling collection for the project. Given the exposure to field hazards and risk of injury, a non-conformity is raised.
1.6 (Observation)	Restoration techniques	Field verification confirmed that cluster planting has been introduced, with two species per cluster at a 2:1 ratio, following the approach used in another project within the Bukit Piton Forest Reserve. Increased competition for light and associated mortality are expected, consistent with observations from the reference project. As the cluster planting was recent, it is premature to assess performance adequacy from a technical field perspective.
3.1.5 (Observation)	Restoration threats controlled	Interview with the RM indicated that grazing is a primary threat to newly planted seedlings. Mitigation measures have been introduced, including scarecrows and application of chilli paste to leaves. Effectiveness has not yet been demonstrated; continued monitoring is required to verify reduction in grazing/wildlife disturbance at the restoration area.







The USM SFMP was successfully audited by Preferred by Nature (PbN), one of the International Certification Body conducted by Mr. Nicholas Fong Vui Chik as a Lead Auditor on 10th to 12th November 2025 covered a pilot site (200 ha) under the 'Ecosystem Restoration Standards (ER)' during the 1st Surveillance Audit.




(L) The stakeholder meeting organized by Segamaha Estate (boundary of Malua FR), was attended by staff from SFD USM; (R) Consultation with FELCRA Estate (boundary of Ulu Segama FR) led by RH Jonius Kadil.

STAKEHOLDER ENGAGEMENT

Several other programs that are still being carried out by stakeholders of surrounding USM SFMP areas such as Rakyat Berjaya Sdn. Bhd. (RBJ, YSG), Danum Valley Conservation Area (DVCA), INFAPRO Project, Taliwas River Conservation Area (TRCA), Borneo Rainforest Lodge (BRL), Tropical Rainforest Living Collection (TRLC) in VJR Merisuli FR, rehabilitation program by Brother Cycling, (Switzerland), Rhino and Forest Fund e.V (Germany) which supported restoration efforts and to ensure success in long term to restore Bukit Piton FR. Therefore, the role of these stakeholders is very important in determining the direction of sustainable forest management in achieving the objectives of USM SFM Project.

In 2025, as part of ongoing social forestry engagement, quarterly consultations were conducted with Oil Palm Plantations (OPPs) along the USM SFMP boundary focusing on the boundaries of Bukit Piton FR, Malua FR and Ulu Segama FR (Tingkayu area). These engagements aimed to strengthen collaborative approaches to sustainable land use, promote shared responsibility in forest conservation, and address cross-boundary issues related to forest resource management. Key discussion topics included responsible land stewardship practices, forest fire prevention and early response measures, and the potential development of eco-recreational initiatives to balance economic activities with environmental sustainability.

Scan QR Code to view the list of stakeholders throughout the year 2025 within the management of USM SFMP

In addition, structured consultations were held with local communities from the Segama and Silam areas, including Kampung Tempenau, Dewata, Bumiputera, Lamak, Upak, Tawayari, Litok Pulau, and Bukit Belacon. These engagements emphasized community participation in forest conservation, recognition of traditional land-use practices, and the exploration of sustainable livelihood opportunities under the social forestry framework. Community representatives raised key concerns related to access to forest resources, human–wildlife conflict, and opportunities for community-based ecotourism.

The outcomes of these consultations provide important inputs for strengthening participatory forest management and social forestry implementation within the project area. Continued engagement will focus on addressing identified concerns, enhancing cooperation among stakeholders, and developing sustainable solutions that support both conservation objectives and local socio-economic development.




Consultation with the local community in Kampung Upak (Segama Zone) regarding preparations for a visit by the potential funder, the foreign NGO 'New Community Project (NCP), USA' in May 2025, coordinated by Dr. Teo Yan Hock, to the Segama community focusing on Kg. Upak, Segama, Lahad Datu.



A courtesy visit by the Forever Segama Project of Lahad Datu (NGO) along with the leadership of the Koperasi Mukim Segama Lahad Datu Bhd (KOPSA Bhd) to the Ulu Segama-Malua District Forestry Office to discuss collaborative initiatives to support green livelihood development among local communities of Segama.



Consultation with the local community (Segama Zone) in the Pre-Social Baseline Survey (Pre-SBS) program conducted together with staff from the Social Forestry Section, SFM Office, Sabah Forestry Department to assist in updating the current data of the Community Forestry in USM SFMP.



Consultation with the local community of Kg. Tampenau, Silam, Lahad Datu on the status of the seedling supply activities for the continuation of the Orangutan habutat Forest Restoration in Lower Kawag, Ulu Segama Forest Reserve Project.

INFRASTRUCTURE & SUPPORT FACILITIES

Infrastructure Development and Maintenance

Basic infrastructure and facilities are already available in the USM SFMP area, which is owned and managed by the Sabah Foundation (YS) and the Sabah Forestry Department, respectively. The management of basic infrastructure is crucial for carrying out regular maintenance work to ensure public facilities such as access forest roads, bridges, and existing buildings are always in good, safe, and functional condition, involving preventative work (cleaning, regular inspections) as well as repair work, to avoid serious damage and ensure the comfort and safety of users. The maintenance of these basic infrastructure and facilities needs to be strategically planned, whether it should be done whether daily or periodically, as this involves budget utilisation and budget management, which will affect the quality and effectiveness of the maintenance work itself. When infrastructure and facilities are well-managed, it reduces the risk of significant damage and ensures that service standards remain high.

In 2025, the Ulu Segama-Malua Forestry District received funding approval from the Federal Fund (EFT) under NRES for the restoration and upgrading of staff housing and the construction of public toilets at the Forest Checking Station (FCS) 225. The staff houses identified were found to be outdated, in disrepair, and unsafe for occupancy by the staff. This matter was brought to the attention of the Head of Division,(PPA) Sabah Forestry Department Headquarters, and then PPA office inspected the condition of the staff houses based on information from the *Jawatankuasa Keselamatan dan Kesihatan Pekerjaan* (JKKP). Based on field observations, K(PPA) also identified needs and recommendations for upgrading work to meet JKKP requirements and the comfort of the staff working at the FCS 225. The construction of public toilets in the FCS 225 area was considered necessary to urgent needs, as well as to provide assistance to visitors accessing tourism attractions in the Ulu Segama-Malua FR area. Staff working at FCS 225 were relieved to have privacy for using staff toilet facilities without the disturbance of visitors wishing to use the toilet services.



Forest Checking Station (FCS) connecting eco-tourism attractions, includes the Sg. Taliwas Conservation Area, Kawag-Danum Riverside Lodge (KDRL), the INFAPRO Project, the Danum Valley Conservation Area, and the Borneo Rainforest Lodge (BRL) within the USM SFMP landscape.





Staff quarters after the renovation and upgrading of the new public toilet.

Forest Road

In 2025, maintenance and upgrading activities for forest roads were strategically focused on the main routes A-B-C-D-E-F-G, B-H-I-J, M-L, and N-O-P (**Fig. 5**). The objective of these forest road maintenance works is to ensure the safety of road users and to enhance operational efficiency for field activities, particularly under various and challenging weather conditions. The forest road maintenance programme is implemented through collaboration between the Sabah Forestry Department and the Sabah Foundation (YS), with Sri Jaya Ikhlas Sdn. Bhd. appointed as the main contractor by Rakyat Berjaya Sdn. Bhd. Additional technical and financial support is also provided by the SEARRP Project, which funds the maintenance of forest road activities accessing to the SEARRP project site in Compartment 85, Malua FR. Furthermore, oil palm plantation companies are cooperating in financing the maintenance work of the forest roads used by the plantations when these roads have been granted occupation permits (OP) for the access and use of forest roads in transporting palm oil products using company vehicles. However, the achievements and quality of forest road maintenance work are also influenced by the availability of funding provisions within each stakeholder organisation as well as the operational capacity of the machinery provided by the oil palm companies.



Road Maintenance along Main Line West from Cpt. 225 to Danum/ BRL and KM 79 (sections A-B-C-D-E-F) conducted by Contractor Sri Jaya Ikhlas Sdn. Bhd.

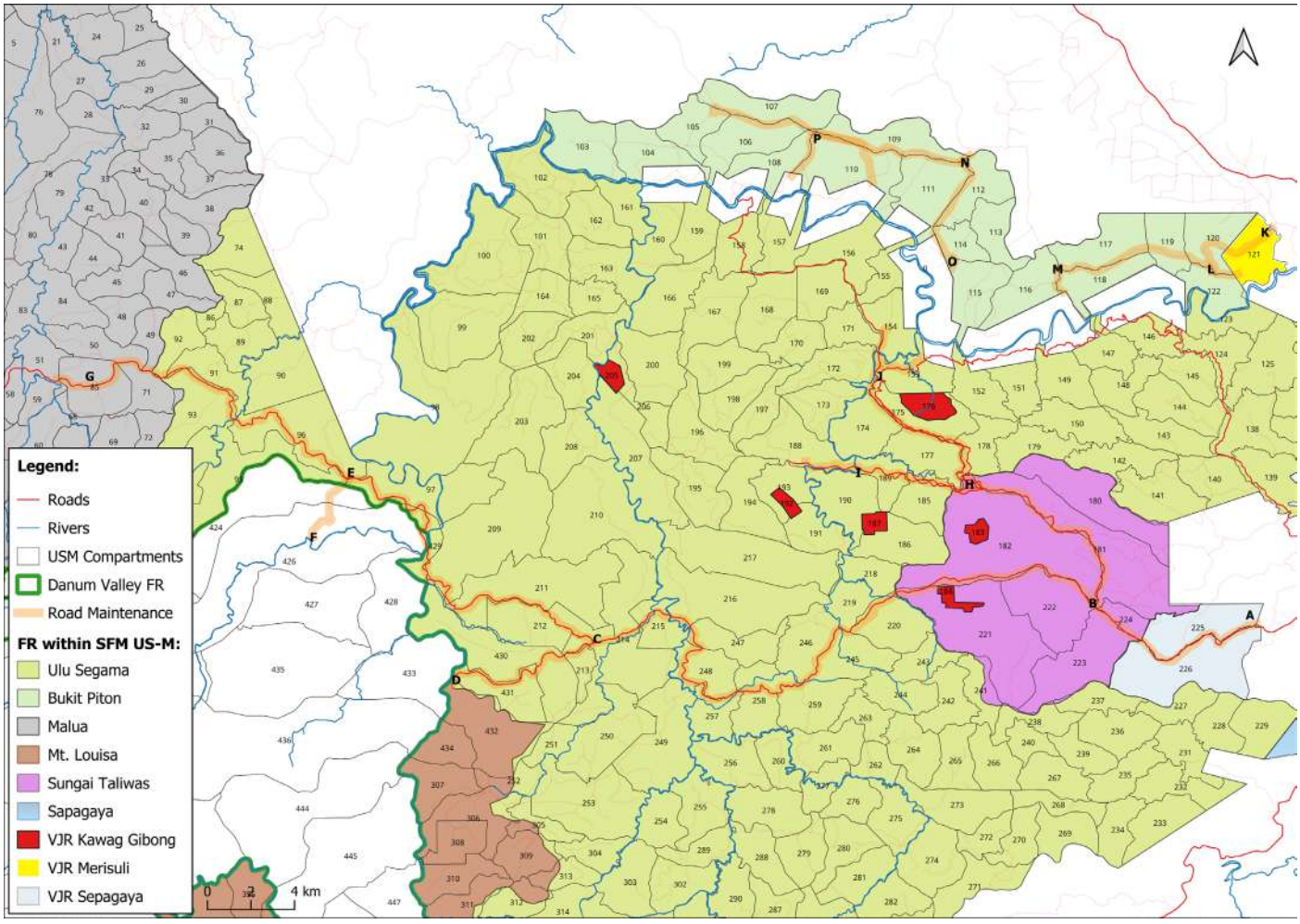


Fig. 5 : The map of forest road maintenance for 2025, highlighting primary routes A-B-C-D-E-F-G, B-H-I-J, M-L, and N-O-P. The map illustrates the sections prioritized for upgrading and routine upkeep to enhance accessibility, ensure user safety, and support operational efficiency across the project area. Each marked route corresponds to specific maintenance interventions, including surface reinforcement, drainage improvements, vegetation clearance, and stabilization of erosion-prone segments, providing a comprehensive overview of the road network improvements.

Table 12: Overview of forest road maintenance activities for the year 2025.

No	Location	Compartment	Target (km)	Achievement (km)	Note
1.	Bukit Piton	Cpt. 121-112	5.0	8.0	• Undertaken by Kontraktor Sulai Maju [contractor appointed by Rhino and Forest Fund (RFF)]; • Sections M-L
2.	Bukit Piton	Cpt. 109-103	5.0	38.2	• Undertaken by Kontraktor CT Enterprise Sdn. Bhd. [contractor appointed by RBJ (YS)] and with the assistance from the oil palm plantation companies (Kiat Swee Sang Properties Estate and Miyasa Estate); • Sections N-O-P
3.	Main Line North	Taliwas to North Lower Kawag (Cpt. 181-156)	20.0	49.5	• Undertaken by SFD with the assistance from the oil palm plantation company (Tee Kiam Swee Estate); • Sections B-H-I-J
4.	Main Line West	Silam to BRL (Cpt. 225-96)	50.0	399.0	• Undertaken by Kontraktor Sri Jaya Ikhlas Sdn. Bhd. (contractor appointed by RBJ, YS); • Sections A-B-C-D-E-F
5.	Malua	FCS 96 to SBE (Cpt. 96-85)	5.0	11.0	• Undertaken by Kontraktor CT Enterprise Sdn. Bhd. (contractor appointed by SEARRP); • Sections E-G
			85.0	**505.7**	

A total of 505.7 kilometres of forest roads underwent routine maintenance and upgrades, covering five major operational zones (**Table 12**). The scope of work included road surface reinforcement, drainage improvements, clearing of debris and vegetation, and stabilization of erosion-prone segments. These measures not only enhanced year-round accessibility but also reduced the risk of road deterioration, thereby increasing the longevity and reliability of the forest road network. Collectively, these efforts significantly strengthened the logistical and operational capacity of field activities and contributed to the sustainable management of the USM SFM Project Area.



Road maintenance in main line north Taliwas to Kawag/ KNL / Lower Kawag (B, H, I & J) executed by Road Unit, SFD.



Road maintenance in Bukit Piton FR from Cpt. 121 to Cpt. 116 (M-L) conducted by Contractor Sulai Maju.

CAPACITY BUILDING

In order to enhance the preparedness and effectiveness of staff, periodic training and capacity-building programmes are conducted, focusing on improving technical skills, knowledge, and operational readiness for managing project areas.

In 2025, the management of USM SFMP organized a First Aid briefing and training program for Heads of Units/ Heads of Forest Checking Stations (FCSs) and involved rehabilitation contractors, such as managers and field workers from Kontraktor Fajar. This program was carried out in collaboration with the





Training program on First Aid delivered by the Health Department of Lahad Datu area.

Lahad Datu Health Department, aiming to raise awareness and provide essential skills for handling emergencies before professional assistance arrives. This briefing is crucial to ensure that each individual can be an effective 'first responder' in saving lives.

Moreover, attention is also directed towards the management of oil palmplantations adjacent to Ulu Segama FR and Bukit Piton FR. The Environmental Education (EE) program, organized by the management of the Sg. Taliwas Conservation Area (KKST) in partnership with the Ulu Segama-Malua District Forestry Office and the Lahad Datu District Wildlife Department, aims to enhance understanding of forest care, including flora and fauna, as well as current environmental challenges and potential solutions related to local and global environmental issues such as pollution, climate change, and biodiversity loss. To date, among the oil palm companies that have participated in the EE program with their management representatives are Harmonic Sdn. Bhd. estate, FEB Sdn. Bhd. estate, Agro Oil Palm Sdn. Bhd. estate, March Surge Sdn. Bhd. estate, and Danum (FELCRA) estate, all located in areas bordering Ulu Segama FR.With the exposure provided by the Environmental Education Program to the management of these oil palm companies, it is that they will help to assist the Sabah Forestry Department and the Sabah Wildlife Department in achieving their respective departmental objectives, including meeting the long-term outcomes required by the organisers.







The briefing session was delivered by the officer and staff of the Ulu Segama-Malua Forestry District as part of the EE Program, which was attended by representatives from the management of the plantation company adjacent to the forest reserve.

LESSONS LEARNT OVER THE YEARS

In 2025, the USM SFMP management has emphasized two (2) components that will influence the direction of sustainable forest management for this project as 2026 marks the beginning of the 13th Malaysian Plan (RMKe-13) and the project management strategy should be strengthened in the following areas::-

Human Resource Requirement

The management of USM requires people trained in all forestry disciplines, covering administration, economics, legal affairs, tourism, technical and scientific aspects related to natural and planted forests. This requires a new mindset, which may be unfamiliar and intimidating to many long-service personnel. But "change" needs to be embraced and supported by all stakeholders. Teamwork is essential, because all activities as prescribed in this plan need to be compatible and function in tandem with present operations. This requires brave, innovative and forward-thinking leadership. Therefore, a human resource development plan will be initiated with appropriate detailed studies to be undertaken into staffing requirements, training needs, and appropriate singular, to ensure the future successful management of USM.

Sources of Funds

Implementing SFM in the USM are is costly while the funds available are limited. From 2021 to 2025, the USM SFM project received approximately RM15 million in remaining State Government funding under the 12th Malaysia Plan (RMKe-12). Since USM is a big and complex project, while the funds are limited, the SFD would have to actively pursue and explore new and additional funding and financing mechanisms. Priority for further support and development in USM would be required in the following areas:

- Forest rehabilitation and silviculture treatment;
- Wildlife management and protection;
- Management of the protected and conservation areas;
- Forest management certification;
- Maintenance of forest road and infrastructure; and
- Procurement of new vehicles and boats to mobilise the field team.

> *Sustainable forest management is the backbone of our national green economy—a system where every hectare is restored, every wildlife corridor is secured, and every policy decision is measured against the yardstick of environmental permanence.*



A healthy forest reserve is a sanctuary where the smallest elephants find their biggest protection. When pygmy elephants thrive, it stands as proof that our commitment to conservation is working.

ULU KALUMPANG-WULLERSDORF
Sustainable Forest Management Project

The Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project (UKW-SFM) spans approximately 64,953.74 hectares and encompasses several forest reserves. The UKW-SFM project area consists of six (06) forest reserves, including Class I (Protection Forest) and Class VI (Virgin Jungle Reserve), as listed below:

No	Forest Reserve	Area (Ha)
1	Ulu Kalumpang FR (Class I)	50,736.00
2	Mt. Wullersdorf FR (Class I)	8,137.00
3	Kalumpang VJR107C (Forbes & Sangster) FR (Class VI)	950.00
4	Kalumpang VJR10D (Sapang) FR - (Class VI)	1,950.00
5	Kalumpang VJR107E (Bt. Mangkok) FR - (Class VI)	868.00
6	Madai Baturong VJR107F (Binuang) - (Class VI)	2,312.74
	Total	**64,953.74**

INTRODUCTION

i. Administrative Information

All forest reserves in UKW SFM are classified as either Class I (Protection Forest Reserve) or Class VI (Virgin Jungle Reserve). Ulu Kalumpang FR was initially gazetted as a forest reserve in 1956 and re-gazetted as a Commercial Class II Forest Reserve in 1984. The status was changed to Class I Protection Forest in 1992, primarily to preserve the watershed and supply to the Kunak and Tawau districts. The UKW SFM Project area is adjacent to Tawau Hills Park, forming a large contiguous forest area north of Tawau, Sabah. It lies between longitudes E 117° 50' and 118° 10' and between latitudes N 4° 40' and 4° 25'. The UKW SFM Project area is managed by the Kunak Forestry District, Sabah Forestry Department.

UKW SFM map

ii. Forest Management Plan Main Objective

The Conservation Area Management Plan 2026-2036 is being prepared and is now in its final draft. The overall goal of the SFD is to manage the conservation areas to deliver environmental benefits towards socio-economic development and provide ecosystem services, such as carbon sequestration benefits to mitigate climate change.

iii. Certification

The certification status of the Ulu Kalumpang–Wullersdorf Sustainable Forest Management (UKW-SFM) Project is summarised below:

- **Forest Stewardship Council (FSC)**: The project area was previously certified under FSC (FSC-C135456 / SCS-FM/COC-005816) from May 2017 until the certification expired on 15 May 2022. The department is currently considering options to continue forest management certification under FSC.
- **IUCN Green List**: UKW-SFM has decided to pursue certification under the IUCN Green List of Conserved and Protected Areas. In 2025, the site completed the Green List Application Phase and is now working towards completing the Green List Candidate Phase in accordance with the Green List User Manual.
- An audit of the Ecosystem Restoration Standard, applying the *Social & Environmental Standard for Field Verification of Restoration, Version 3.1*, was conducted by Preferred by Nature from 9 to 11 December 2024. The audit was carried out in the Wullersdorf Corridor Restoration area, covering 276 hectares within the Ulu Kalumpang Class I Forest Reserve. The purpose of the audit was to ensure that restoration activities within the project area are aligned with the Ecosystem Restoration Standard and comply with all legal and environmental requirements. The Sabah Forestry Department and WWF-Malaysia, as collaborating partners implementing the restoration project, together with the restoration contractor, participated in the audit. The audit findings are as follows:

Summary from the auditors:

- There are 4 minor NCRs,1 Observation identified.
- Minor nonconformances, they must be addressed prior to the next audit to maintain the certificate.
- Based on the company's conformance with the requirement,the audit team makes the following recommendation: Core requirement met, certificate issuance will be recommended.

A certificate of compliance was awarded on 12 March 2025, with a five-year validity period from 10 February 2025 to 9 February 2030. On 8 September 2025, a symbolic handover of the certificate of compliance took place during a meeting at the Forestry Headquarters in Sandakan, attended by the Chief Conservator of Forests, officers of the Sabah Forestry Department, and a delegation from WWF-Malaysia.


Preferred by Nature

Preferred by Nature hereby certifies that

WWF-Malaysia

6th Floor, CPS Tower, No. 1, Jalan Centre Point
Kota Kinabalu, Sabah 88800
Malaysia

conform with the following standards:
Ecosystem Restoration Field Verification Standard V3.1

The verification certificate is valid from 10 February 2025 to 09 February 2030
Certificate version date: 12 March 2025

Certification scope
Project: WWF- Malaysia and the Sabah Forestry Department Mt Wullersdorf Forest Reserve - Ulu Kalumpang Forest Reserve Habitat Restoration
Area: 276 ha
For additional details regarding the scope of verification please check the publicly available documentation on the Preferred by Nature Certification Database:
cs.preferredbynature.org/s/

Certificate registration code
PBN-ER-074400

Justinas Januleitis
Management board member
Preferred by Nature

The Certificate of Conformance to the Ecosystem Restoration Field Verification Standard V3.1 valid from 10 February 2025 to 9 February 2030

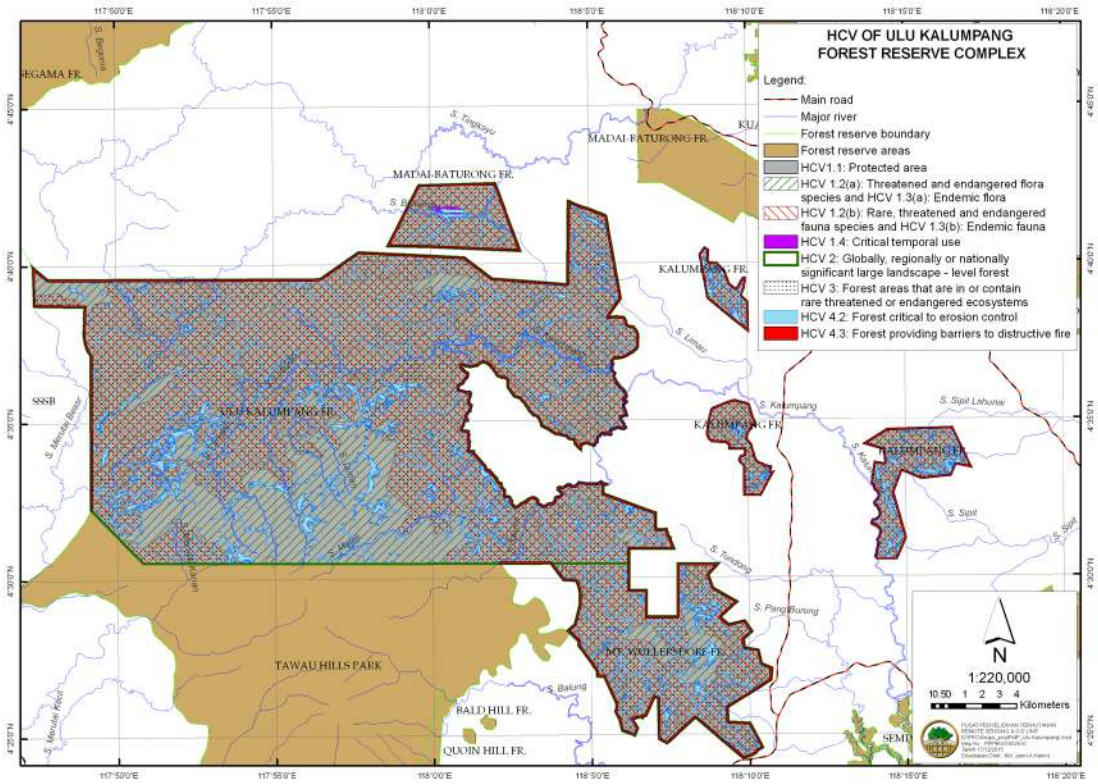
Certification Scope:
Project: WWF Malaysia and Sabah Forestry Fepartment Mt Wullersdorf and Ulu Kalumpang Forest Reserve Habitat Restoration
Area: 276 Hectares
Certificate registration code: PBN-ER-074400

iv.. Outstanding Conservation Values

Generally, four HCV elements were elaborated for the Ulu Kalumpang Forest Reserve Complex (UKFRC) project area, and they overlap with each other almost 100%. The entire project area is gazetted as protected areas (HCV 1.1). All reserves contain endemic, endangered, or prohibited species of flora and fauna (HCV 1.2 & 1.3). One of the forest units, Madai-Baturong FR, features a critical nesting habitat for troglofaunal species, especially within the limestone karst system (HCV 1.4). On a landscape level (HCV 2), Ulu Kalumpang, Mt Wullersdorf, and Madai-Baturong FRs, including Tawau Hills Park, provide habitats for fauna but also act as a transient wildlife migratory pathway between the southeast forested area into the greater central forest area in Ulu Segama Malua project area through Sabah Softwood Sdn Bhd agroforestry area. Lowland forests below 200 m in elevation and freshwater swamp habitats preserve species diversity, including those unique to particular forest types (HCV 3). The Sustainable Forest Management (SFM) Division of the Sabah Forestry Department has prepared a Forest Fire Management Plan to develop and manage the detection, prevention, and eradication of forest fires in the UKFRC (HCV 4).



A symbolic handover of the certificate of compliance was held during a meeting at the Forestry Headquarters, Sandakan, attended by the Chief Conservator of Forests, the Deputy Chief Conservators of Forests, officers of the Sabah Forestry Department, and a delegation from WWF-Malaysia.



A composite map of HCV elements in Ulu Kalumpang Forest Reserves Complex, Sustainable Forest Management Project Area

PROTECTION FOREST ECOSYSTEM

i. Forest Protection and Enforcement

Routine aerial surveillance, drone surveys, and regular patrolling were conducted to detect illegal encroachment, tree felling, and poaching activities within the Project Area. These activities included routine patrols in collaboration with other agencies and NGOs. In August 2025, aerial surveillance was conducted over the Project Area and areas within the Kunak Forestry District. Drone surveillance was also conducted periodically. Two joint operations involving HEC, anti-poaching strategies, and forest patrolling were conducted in collaboration with the Community Rangers of the Sabah Wildlife Department and WWF-Malaysia. Another joint operation was conducted with other agencies (EPD, Jabatan Bomba dan Penyelamat).

Boundary re-brushing of the demarcated boundary was conducted in 2025, covering a total of 3,000 meters of the boundary in Kalumpang VJR (Forbes & Sangster) Class VI, with 50 FD Plates installed along the borders. An operation to eradicate approximately 1,705 illegally planted oil palm stands (approximately 31 acres) within the forest reserve using herbicide was also successfully carried out.









A. Aerial Surveillance.

B. HEC, anti-poaching strategy and Forest patrolling joint operation with Community Rangers of the Sabah Wildlife Department and WWF-Malaysia

C. Tingkayu Field Outpost

D. Patrolling and installation of FD Plates along the Forest Reserve boundaries

ii. Forest Fire Prevention Program

A fire drill demonstration and awareness program was conducted at the Wullersdorf Corridor Restoration area, with the participation of WWF MY, staff from SFD Kunak and restoration contractor personnel. The programme was conducted by the Initial Attack Crew (IAC) SFD Fire Crew Kunak.





Fire drill demonstration and awareness programme conducted with WWF-Malaysia.

MAINTAINING BIOLOGICAL DIVERSITY

i. Forest Health

Under the forest health monitoring programme, fourteen permanent sample plots (PSPs) were established in October and December 2015. In 2025, all 14 permanent sample plots were re-enumerated and maintained by inspecting for natural damage within the plots and checking for faded tree labels on monitored trees. Any faded tree labels were renumbered using the appropriate paint. This activity was carried out in collaboration with FRC and SFD Kunak staff.





(Left) The team from FRC and SFD Kunak and (right) Re-enumeration and maintenance of PSP Plots within UKW SFM.

ii. Forest Rehabilitation

- **Silviculture**

A total of 1,200 hectares of forest (comprising 100 hectares in Cpt. 8; 1,025 hectares in Cpt. 18, 19 and 21; and 75 hectares in Cpt. 90, Cpt. 92, and Cpt. 93) within Ulu Kalumpang FR Class 1 and VJR Kalumpang 107E (Bt Mangkok) have undergone silvicultural treatment by the appointed contractor.







Ground site inspection of silviculturally treated area and Silviculture treatment line and block.



Drone Inspection on silviculturally treated area.

- **Restoration/ Enrichment Planting**

A total of 187 hectares of restoration and enrichment planting were carried out in 2025. Approximately 130 hectares of restoration planting were carried out in Cpt. 7 of Kalumpang VJR107C (Forbes & Sansgter) FR, while a further 57 hectares of restoration planting were carried out in Cpt. 90 and Cpt. 92 in Ulu Kalumpang FR (within the Wullersdorf Corridor Restoration Area, in collaboration with WWF Malaysia).





(Left) Ground site inspection of the restoration area. (Right) Installation of restoration project signboard.





(Left) Drone inspection of the planting lines in restoration area. (Right) Datuk Dr. John Payne and Dr. Zainal Zainuddin from BORA visited the nursery at Ulu Kalumpang FR.

iii. Wildlife Monitoring

Three methods were used to monitor wildlife in the forest management unit: camera trapping, transect line/recce walk surveys, and opportunistic sightings.

- **Mammals**

Based on the monitoring data, a total of seven (7) recorded mammal species are classified as threatened under the IUCN Red List, of which two species are categorised as Critically Endangered (CR) – [Bornean Orangutan and Pangolin], and five species as Endangered (EN) – [Bornean Banteng, Bornean Elephants, North Bornean Gibbon, Southern Pig-Tailed Macaque, and Long-tailed Macaque]. The monitoring exercise also recorded Red Leaf Monkey and Bornean Sun Bear, which are endemic to Borneo. These wildlife species recorded within the Ulu Kalumpang-Wullersdorf project area are known to have the highest conservation value in Sabah, comprising both endemic and threatened species.

- **Birds**

In 2025, the outstanding conservation value bird species include one endemic species, namely the Bornean Crested Fireback (*Lophura ignita*), and two threatened species on the IUCN Red List, namely the Helmeted Hornbill (*Rhinoplax vigil*) and Storm's Stork (*Ciconia Stormi*), both categorised as Critically Endangered (CR).

- **Ulu Kalumpang Core Area Expedition – General Wildlife Survey (The Result)**

In October 2025, a General Wildlife Survey (GWS) was conducted in the Ulu Kalumpang Forest Reserve to assess the presence of key wildlife species, the level of habitat function, and to support sustainable forest management planning. The area is a Class I Protected Forest Reserve that is important as a watershed and habitat for a variety of threatened species, including Borneo's endemic species. The study was conducted in collaboration between WWF-Malaysia and the Sabah Forestry Department to address data gaps, particularly in the reserve's core area. As a continuation, a second survey was conducted in May 2025 to retrieve all the camera traps installed during the first survey.

Assessment was conducted at two main locations within the Ulu Kalumpang FR Class I, namely Ulu Sungai Melati and the Sungai Kalumpang Core Area. The main methods used were:

– A 2 km line transect was conducted for three consecutive days at each location to record visual and acoustic observations of wildlife.

– Camera traps, with 18 camera units installed at both locations and operating from October 2024 to May 2025.

Additional observations, including recce surveys and opportunistic observations around campsites. Data from camera traps were analysed using the Relative Abundance Index, RAI, to assess the relative abundance of species, while North Bornean Gibbon calls were mapped to estimate population density.











From top: Wildlife Monitoring Transect Line; Camera trapping for wildlife monitoring; Rhinoceros Hornbill; Storm's Stork; and Orangutan's nest.

According to the GWS report, a total of 134 wildlife species, including mammals and birds, have been recorded across 24 taxonomic orders. Of these, several species are classified as endangered on the IUCN Red List, including the Bornean Orangutan, Bornean Elephants, Bornean Banteng, North Bornean Gibbon and several species of hornbills.

- Ulu Sungai Melati shows good levels of forest recovery, with high densities of North Bornean Gibbon and the presence of sensitive species such as Bulwer's Pheasant.

- The Sungai Kalumpang core area records the presence of large species such as Bornean Elephants and Bornean Banteng, including evidence of an active breeding population of banteng. However, the forest structure in this area is still degraded, with a predominance of early-stage plants and a lack of large trees.

The expedition confirmed that the Ulu Kalumpang Forest Reserve remains a vital area for biodiversity conservation, particularly for endemic and threatened species. Ulu Sungai Melati is showing encouraging natural recovery, while the core area of the Sungai Kalumpang River still requires habitat restoration interventions. Threats to the area, such as prospecting for gold mining, agarwood (gaharu) encroachment, and poaching, were also highlighted. In this regard, continued monitoring, enforcement against encroachment, and forest restoration in degraded areas are recommended. The data collected will support the preparation of the Ulu Kalumpang Forest Reserve Management Plan and integrated Tawau–Kunak landscape planning.

List of IUCN Red List mammal and bird species recorded in the survey area:

Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)
Bornean Orangutan*	North Bornean Gibbon*	Red Leaf Monkey*
Bornean Banteng**	Long-tailed Macaque	Western Tarsier
Sunda Pangolin	Pig-tailed Macaque	Bornean Sun Bear**
Straw-headed Bulbul	Bornean Elephant**	Sambar Deer
Helmeted Hornbill	Flat-headed Cat	Bornean Bearded Pig**
	Bornean Clouded Leopard**	Tufted Ground Squirrel*
	Wrinkled Hornbill	Bornean Crested Fireback**
		Great Argus
		Bulwer's Pheasant*
		Rouloul
		Asian Black Hornbill
		Rhinoceros Hornbill
		Wreathed Hornbill
		Bornean Ground-cuckoo*
		Great Slaty Woodpecker
		Grey-cheeked Bulbul

Note: *Bornean endemic species; ** Bornean endemic subspecies

FOREST MANAGEMENT CERTIFICATION – AUDIT SURVEILLANCE

In 2024, The Ulu Kalumpang – Wullersdorf SFM Project, together with WWF-Malaysia, underwent third-party auditing by Preferred by Nature for Mt. Wullersdorf -Ulu Kalumpang Forest Reserve Habitat Restoration area of 276 Hectares under the Ecosystem Restoration Field Verification Standard V3.1. In summary, there are four minor NCRs and one observation. A certificate of compliance was awarded on 12 March 2025, with a five-year validity period from 10 February 2025 to 9 February 2030.

STAKEHOLDER ENGAGEMENT

Throughout 2025, UKW SFM held several targeted consultations with stakeholders, rights holders, and civil society. This approach focused on direct one-to-one engagement with key stakeholders to address emerging issues in a timely and constructive manner. These included:

- Consultation with WWF Malaysia and the WWF Safeguard International Redress Mechanism (GRM) on 23 May 2025 – improvement of the complaint mechanism for each conservation activity, especially those involving communities and stakeholders.
- Consultations with the PPHT Tawau and the District Surveyor, together with PPW Tawau and the K(FRM) Survey Unit Tawau, on 03 Dec 2025 and 16 Dec 2025 – discussing emerging issues regarding land applications in the Ulu Kalumpang Forest Reserve area. Issues were also resolved regarding village applications in the forest reserve.
- Consultation with the Public Works Department and contractor Advance Grow Sdn Bhd on the development of the Pan Borneo road bordering the Mt Wullersdorf Forest Reserve on 22 September 2025.
- Consultation with Sri Kunak Estate and South Sea Gold regarding environmental impacts, especially mudslide incidents.
- Consultation with Bongalio Estate Office, Borneo Samudera Sdn Bhd regarding the enforcement of the Forest Enactment 1968 and the issue of forest encroachment. Consultation also involved the issue of an integrated assessment study of High Conservation Value and High Carbon Stock, in May and September 2025.
- Consultation with Estates under Guthrie SD (Tingkayu, Jeleta Bumi, Giram.
- Consultation with Kunak Oil Palm Mill, Sawit Kinabalu Group in Joint Consultation Committee (JCC) regarding Rare, Threatened and Endangered Species (RTE) – 30 April 2025.



Team snapshot before being transported by helicopter to Ulu Kalumpang FR Core Area.



A. Bornean Orangutan in CT03. **B.** Bornean Clouded Leopard CT08. **C.** A pair of Bornean Sun Bear in CT05. **D.** Sunda Pangolin in CT04. All photos by WWF-MY.

- Joint Consultation (WWF Malaysia and SFD) with Sabah Mineral Management regarding conservation in Ulu Kalumpang-Wullersdorf and Prospecting License issues on 26 March 2025.
- Consultation with Balung Cocos Community regarding ecotourism activities (hiking) in Mt Wullersdorf FR.









From top: Consultation with WWF Malaysia and WWF Safeguard International Redress Mechanism (GRM); Consultation with Bongalio Estate Office, Borneo Samudera Sdn. Bhd. regarding the enforcement of the Forest Enactment 1968 and the issue of forest encroachment; and Consultation with the PPHT Tawau and District Surveyor, together with PPW Tawau and the K(FRM) Survey Unit Tawau; and Consultation with Balung Cocos Community.

INFRASTRUCTURE & SUPPORT FACILITIES

There are six Forestry Checking Stations (FCS) / Field Outposts, each functioning as a station for monitoring routine activities, i.e., boundary inspections and patrolling at hotspot areas, silvicultural and rehabilitation planting activities, enforcement/checking gates for entry to or exit from the forest reserve, monitoring of eco-tourism activity, and routine monitoring and curbing of illegal activities (e.g., poaching, encroachment, illegal felling, forest fires, etc.) to prevent and deter illegal activities.

Generally, upgrades and maintenance of Forest Checking Stations involve upgrading solar-powered lights and wiring, maintaining sewerage systems, generator sets, and water supply pumps, and performing general repairs to the Checking Station.

CAPACITY BUILDING

A total of 15 training courses, workshops, conferences, and capacity-building initiatives were conducted for the field staff involved in managing the Project Area. This is to ensure that staff and contractors are kept informed of updated rules and regulations, as well as new procedures, for the management and monitoring of the Project Area. The list of training and capacity-building activities throughout 2025 is as follows:

No	Title	Date
1	Perbincangan berkenaan Bornean Pygmy Elephants sebagai Natural Values for IUCN Green List, UKW SFM	20 Feb 2025
2	Latihan Refresher Kebakaran Hutan dan Demo Penggunaan Pemadam Api	6 May 2025
3	Kursus Occupational Safety & Health For Forest Industry & Effective Safety & Health Committee Awareness	4-6 Jun 2025
4	Latihan Keselamatan & Kesihatan Pekerjaan (JKKP)	12 Jun 2025
5	Webinar: Green Returns: Why Ecosystem Service Are Every Stakeholder's Business	26 Jun 2025
6	Program Konsultasi Dengan Kakitangan Pensijilan Berkenaan Cara Pengambilan Data Restorasi Hutan menggunakan Kobo Toolbox	3 Sept 2025
7	Latihan Penggunaan Pemadam Api & Teknik Selanggara Tanaman	23 Oct 2025
8	Latihan Refresher dan Demo untuk: i. Pensijilan Hutan IUCN Green List ii. HCV: UKW SFM iii. Kebakaran Hutan dan Pencegahan iv. Demo: Kebakaran hutan, pemadam api	24 Nov 2025
9	Invitation to Technical training on FSC Ecosystem Services Procedure (FSC-St3-30-006)	11 Dec 2025
10	Permohonan Menganjurkan Kursus Kebakaran Hutan bagi kawasan SFM Tabin/ Silabukan	16-19 Dec 2025

TIMIMBANG-BOTITIAN
Sustainable Forest Management Project

The Timimbang - Botitian Sustainable Forest Management (TBSFM) Project, covering 13,349 ha, comprises a cluster of 3 forest reserves, namely Botitian, Timimbang A and Timimbang B. The management of these forest reserves falls directly under the Beluran Forestry District of the Sabah Forestry Department. The main activities of this SFM project focus on forest recreation, biodiversity conservation, protection, and wildlife management. The three areas were gazetted as forest reserves in 1984. The forests constitute an important repository of native biodiversity play a significant role in long-term conservation.



HoB Programme at Timimbang Rainforest Lodge.





(Left) Timimbang B Monitoring Station, Compartment 42, Timimbang FR and (Right) Robert Ong View Point, Timimbang FR.

PROTECTION FOREST ECOSYSTEM

The enforcement and protection strategy focuses on teamwork comprising Beluran District Forestry Office personnel, the SFD Protect Team, PDRM, the Wildlife Department, WWF-Malaysia, local communities, and neighbouring oil palm estates, involving routine inspections and patrols within the forest reserve and along its boundaries. The project has maintained good relationships and cooperation with external stakeholders, including the local communities surrounding the forest reserve. As a result, no forest offences or forest fires were detected throughout the year 2025.



Joint patrol with the local community in the SFM Timimbang-Botitian.



Joint patrol with the Wildlife Department Rangers.

MAINTAINING BIOLOGICAL DIVERSITY

During the year 2025, tree growth data were collected for all 13 of the Permanent Sample Plots, and the plots were maintained by replacing the number plates and repainting the tree numbers that had faded.



The PSP data collection team was lead by FRC.



Measuring tree DBH during PSP data collection.

MAINTENANCE OF REPLANTING SITES

In 2025, the entire forest reserves were enhanced through enrichment planting, with a total of more than 2500 mixed trees planted. The planting activities were carried out by local communities, neighbouring oil palm estates, and project personnel to achieve the project targets in line with the *Kempen Penanaman 100 Juta Pokok* (2021-2025).





Maintaining the planting rows and replanting trees.

INFRASTRUCTURE AND SUPPORT FACILITIES

In 2025, a number of infrastructure development activities were carried out, including maintenance and repair of the existing facilities, in order to promote effective management, mainly in terms of social welfare and smooth management practices.



Upgrading the access road to Timimbang Station

CAPACITY BUILDING

In 2025, refresher courses were conducted, with participation from SFD field staff, stakeholders and communities. The courses covered Forest Enactment, Forest Fire Prevention, Wildlife Enactment, and forest certification standards. In-house courses and briefings were conducted for field staff to ensure they keep abreast with project management and monitoring of the project area, some of the trainings included topics on Safety and Health and PSP establishment.





(Left) Refresher courses with stakeholders and local communities, IPS Telupid and (right) Wildlife Enactment training.

LESSONS LEARNT OVER THE YEARS

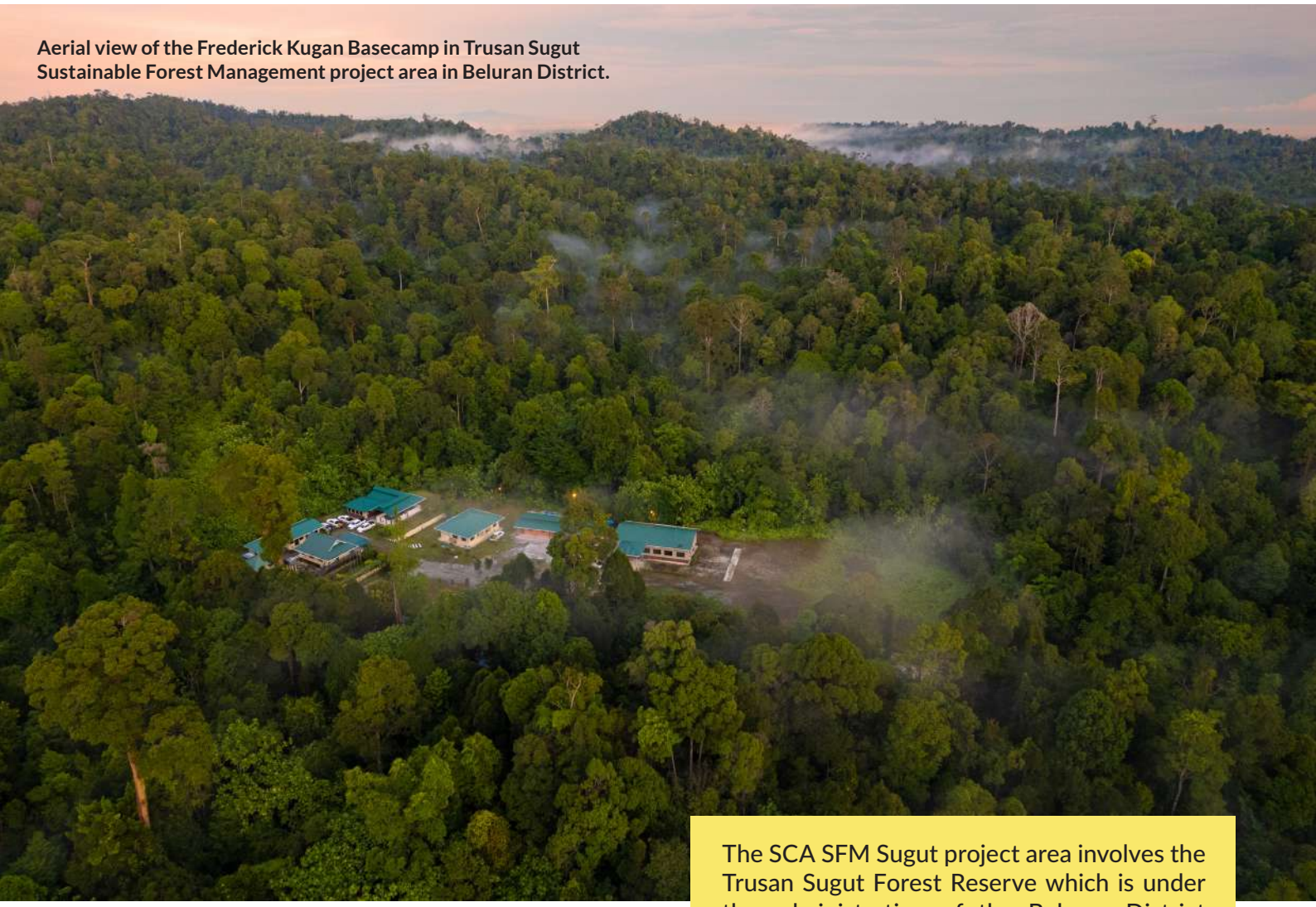
Throughout 2025, a number of activities were successfully conducted with local communities, oil palm estates, government agencies and NGOs. This approach proved effective in raising awareness of the forest's benefits in line with SFD objectives, directly fostering good relationships and cooperation. The continued involvement of all stakeholders remains essential to achieve sustainable forest management objectives.

"Life along the river is where the forest grows its quiet abundance"



© Eyen Khoo

Keruing neram (*Dipterocarpus oblongifolius*).



Aerial view of the Frederick Kugan Basecamp in Trusan Sugut Sustainable Forest Management project area in Beluran District.

TRUSAN SUGUT
Sustainable Forest Management Project

The SCA SFM Sugut project area involves the Trusan Sugut Forest Reserve which is under the administration of the Beluran District Forestry Office. It is located on the south of Sugut River at precisely N 06°17'23.13" and E 117°37'10.37". The entire area is 8,680 hectares (ha) and is divided into 15 compartments based on topography, forest stratum, roads and rivers.

The primary management objective of Trusan Sugut Forest Reserve is to ensure the long-term conservation of the various types of forests and other ecosystems in the reserve, as well as the species that inhabit the area, their ecological functions, and the long-term viability of the forest. The following are the precise management targets for the next 5 to 10 year planning period.

PROTECTION OF FOREST ECOSYSTEM

Forest protection and enforcement of the Forest Enactment 1968 are crucial components of the Sugut Conservation Area Sustainable Forest Management (SCASFM) project. The project's core activities focuses on continuous monitoring and enforcement measures. The enforcement and protection strategy adopted by SCASFM emphasises teamwork and active participation among personnel from the Beluran District Forestry Office, SFD Protect Team, field staff, local communities and other stakeholders. Extensive routine inspections and patrols inside the forest reserve including its rivers, coastlines, and its boundary zones are the only ways to prevent illegal encroachment and poaching activities.

The forest protection efforts include installing signboards, Sabah Forestry Department demarcation plates, and aerial surveillance operations using unmanned aerial vehicles (UAVs). In 2025, aerial surveillance was conducted over the SCASFM project area as well as other areas within the Beluran Forestry District.




Patrols were conducted both during the daytime along the mangrove areas and on a scheduled basis at night.




MAINTENANCE OF PERMANENT SAMPLING PLOTS

In 2025, maintenance of all 10 Permanent Sample Plots within SCASFM was carried out through inspections for natural damage within the plots and assessments of the condition of the tree labels. Faded tree labels were painted accordingly.

BOUNDARY DERMARCATION

Re-brushing of the reserve boundary was conducted in 2025 to deter encroachment. Boundary maintenance covering a total of 10 km was carried out in Compartments 1 and 2.








MAINTENANCE OF REPLANTING SITES

Maintenance activities involving 20 ha of a tree-planting site at Compartment 3 were conducted in 2025. The tree species used in the replanting project consisted mainly of fruit trees supplied by WWF Malaysia.

CAPACITY BUILDING

In 2025, refresher courses were conducted for SFD field staff, local community members, and other stakeholders. Topics covered included the Sabah Forest Enactment 1968, prevention of forest fires, the Sabah Wildlife Enactment, as well as forest certification standards adopted in Sabah. The SFD field staff were encouraged to participate in these courses to ensure that they are up to date with current management and monitoring procedures within the SCASFM project area. In addition, a Safety and Health training course and a Forest Fire Workshop were also conducted during the reporting period.







© Eyen Khoo

Alocasia are commonly found in RDC, where they thrive on the forest floor in low-light conditions, rooted in rich, decomposing organic matter.

NORTHERN GUNUNG RARA
Sustainable Forest Management Project

Overview of Activities In The Northern Gunung Rara SFM Project: Sustainable Forest Management, Protection, And Future Direction

Spanning about 69,777 hectares, the Northern Gunung Rara Sustainable Forest Management Project stands as a living, connected landscape—linking key protected forests, safeguarding the Kuamut River watershed, and providing a safe haven for wildlife while bridging major ecosystems like Danum Valley, Imbak Canyon, and Maliau Basin under a long-term management plan that continues into its second phase (2023–2032).

Several activities were carried out on the ground. Approximately 1,500 hectares of forest were treated in 2025 to support tree growth. About 120 hectares of planted forest were restored, with ongoing maintenance and regular patrols under OPS BURU, alongside boundary-marking works to keep the area protected from encroachment and poaching.

Another key activity involved a series of meetings on the 13th Malaysian Plan (2026–2030) with the internal Project Planning Committee in Sandakan. As a result, in October 2025, a budget allocation of RM 5.3 million was approved. Looking ahead, its main purpose is to promote sustainable forest management in related forest areas by focusing on forest protection, restoration, infrastructure, boundary demarcation, and firebreaks, ensuring this landscape remains strong, resilient, and thriving for generations to come.





Budget presentation to representatives from Unit Perancang Ekonomi Negeri and the state Ministry of Finance in October 2025.

Wildlife Monitoring

The project area's importance for wildlife conservation is highlighted by monitoring efforts. Five survey methods were used: camera trapping, transect line surveys, night surveys by car, and opportunistic sightings, including gibbon calls. Camera traps were placed at five locations near road access points. For transect surveys, eight fixed trails, totalling 16 km, were regularly monitored. Night surveys were conducted along two permanent routes covering 108 km. Opportunistic sightings, including gibbon calls, were recorded during routine patrols.

In 2025, an impressive 3,933 wildlife sightings were recorded solely through camera trap surveys, comprising 3,716 mammals and 217 birds. This data highlights the exceptional biodiversity within the Project Area, with 20 mammal species from 14 families observed. Herbivores were the most frequently recorded group (9 species), followed by omnivores (8 species) and carnivores (3 species). The high number of sightings underscores the Project Area's vital role in sustaining diverse wildlife habitats. Notably, one species of high conservation value in the bird category, the Bornean Crested Fireback, identified as endemic was recorded in the NGR-SFM project area. Another species listed as Near Threatened (NT) on the IUCN Red List is the Great Argus.

Herbivorous mammals had the highest number of individual sightings (2,408), followed by omnivores (1,300) and carnivores (8). Despite this abundance, only four (4) endemic mammal species were documented. Alarmingly, 10 species are classified as threatened on the IUCN Red List, including three (3) Endangered species, five (5) Vulnerable species, and two (2) Near Threatened species.





Example of outstanding conservation value mammals capture using camera traps and digital camera during the wildlife survey activities: (Top) Bornean Sun Bear; (Above) Sambar Deer.

Among the recorded mammals, nine (9) species stand out for their outstanding conservation value in Sabah, as they are both endemic and threatened: the Bearded Pig (*Sus barbatus*), Banteng (*Bos javanicus*), Tufted Ground Squirrel (*Rheithrosciurus macrotis*), Bornean Pygmy Elephant (*Elephas maximus* borneensis), Yellow Muntjac (*Muntiacus atherodes*), Pig-tailed Macaque (*Macaca nemestrina*), Sambar Deer (*Cervus unicolor*), Bornean Clouded Leopard (*Neofelis diardi*), and Bornean Sun Bear (*Helarctos malayanus*).

The Bornean-Yellow Muntjac was the most frequently recorded species, with 878 sightings, followed by the Sambar Deer (758 sightings), Pig-tailed Macaque (712 sightings), Barking Deer (434 sightings), Bearded Pig (244 sightings), and Bornean Pygmy Elephant (187 sightings). These findings highlight the Project Area as a critical stronghold for some of Borneo's most ecological significant species of conservation importance.

List of mammals recorded in Northern Gunung Rara Sustainable Forest Management Project, Sabah [Note of survey method: Camera trap (CT)].

No	Common Name/Scientific Name	Family	# of individual	IUCN
1	Banded Palm Civet (*Hemigalus dermianus*)	Viverridae	62	VU
2	Bearded Pig (*Sus Barbatus*)	Suidae	244	VU
3	Bornean Banteng (*Bos javanicus lowii*)	Bovidae	67	EN
4	Bornean Clouded Leopard (*Neofelis diardi*)	Felidae	6	EN
5	Bornean Crested Fireback (*Lophura ignita*)	Phasianidae	122	CR
6	Bornean Pygmy Elephant (*Elephas maximus borneensis*)	Elephantidae	187	EN
7	Bornean Sun Bear (*Helarctos malayanus*)	Ursidae	129	VU
8	Bornean-Yellow Muntjac (*Muntiacus atherodes*)	Cervidae	878	NT
9	Common Palm Civet (*Paradoxurus philippinensis*)	Viverridae	15	LC
10	Malayan Porcupine (*Hystrix brachyura*)	Hystricidae	43	LC
11	Giant Squirrel (*Ratufa affinis*)	Sciuridae	2	NT
12	Great Argus (*Argusianus argus*)	Phasianidae	95	LC
13	Greater Mouse-deer (*Tragulus napu*)	Tragulidae	77	LC
14	Long-tailed Macaque (*Macaca fascicularis*)	Cercopithecidae	3	LC
15	Malay Civet (*Viverra tangalunga*)	Viverridae	56	LC
16	Mask Palm Civet (*Paguma larvata*)	Viverridae	33	LC
17	Pig-tailed Macaque (*Macaca nemestrina*)	Cercopithecidae	712	LC
18	Red Muntjac or Barking Deer (*Muntiacus muntjak*)	Cervidae	434	VU
19	Sambar Deer (*Cervus unicolor*)	Cervidae	758	LC
20	Short-tailed Mongoose (*Urva brachyurus*)	Herpestidae	3	LC
21	Tufted Ground Squirrel (*Rheithrosciurus macrotis*)	Sciuridae	5	LC
22	Yellow-throated Marten (*Martes flavigula*)	Mustelidae	2	VU
Total			**3,933**	

Note: LC= Least Concern; VU=Vulnerable; NT=Near Threaten; EN= Endangered.

NULUHON TRUSMADI FR (FMU 10) Sustainable Forest Management Project



The SFM Forest Management Unit (FMU 10) Project covers an area of 88,401 hectares, which includes several reserves: the Nuluhon Trusmadi Forest Reserves, the Sg. Kiluyu Forest Reserve, the Nuluhon Trusmadi (Extension) Forest Reserve, and the Rafflesia Forest Reserve. Within the entire FMU 10 project area, 88,045 hectares are designated as Class I Protection Forest Reserve and 356 hectares are recognized as Virgin Jungle Reserves. FMU10 is governed by two forestry administration districts which are Tambunan and Keningau. FMU10 is home to three prominent mountains; Mount Trusmadi (2,642 m a.s.l), Mount Sinsing (2,586.164 m a.s.l), and Mount Kaingaran (2,467.640 m a.s.l). Mount Trusmadi is the second highest mountain in Malaysia, is home to one of the richest assemblages of flora and fauna in the country.

Table 1: List of forest reserves under the SFM FMU10 project.

No	Forest Reserve	Class	Area (Ha)
1	Nuluhon Trusmadi Forest Reserve	Class I	74,736
2	Nuluhon Trusmadi (Extension) Forest Reserve	Class I	12,241
3	Sungai Kiluyu Forest Reserve	Class I	1,068
4	Rafflesia Forest Reserve	Class VI	356



Aerial Survey and Monitoring of Nuluhon Trusmadi Forest Reserves

An aerial survey conducted on 16 June 2025 has confirmed the integrity of the boundary of the Nuluhon Trusmadi Forest Reserve. The boundary extends from coordinates of 5° 28' 54.97" N, 116° 20' 20.52" E to 5° 32' 44.96" N, 116° 38' 06.67" E. During this survey, no signs of forest violations were observed; no new encroachments or evidence of forest burning were found within the reserve. In an effort to uphold sustainable



management practices, ongoing ground patrols have been strategically scheduled. These patrols will be carried out and documented on a monthly basis to ensure the continuous monitoring and protection of the area.

Forest Recreation Activities under the SFM FMU10 Project

As the home of three iconic mountains, FMU10 project offers a diverse range of forest recreation activities, offering visitors spectacular experiences and unforgettable journeys into the forest. The reserve provides the best opportunity for observing the Rafflesia flowers in their full and magnificent bloom.

In addition, FMU10 has an Entomology Camp that operates year round for insect enthusiasts, researchers and tourists interested in experiencing insect-related activities. Birdwatching activities are also actively conducted within Nuluhon Trusmadi Forest Reserve via Kupu-kupu gate, birdhide at Kaingaran trail and the newest birdhide at Sinua Trail. This pursuit has not only captured the attention of local birdwatching enthusiasts while also attracting the interest of international tourists, and also researchers from related fields.

Furthermore, to enhance forest recreation activities such as mountain climbing and hiking activities, FMU10 provides facilities and services to climbers and hikers through several service providers. To ensure the safety of these activities, porters and guides are trained according etablished guidelines.

Visitors Arrivals in 2025

In 2025, the total number of visitor arrivals was 26,469 visitors, showed an increase and receive positive response from both local and international visitors, generating a total revenue of RM 557,922.00. The visitor arrival data for 2025 is shown in (Table 2).

Development of Facilities for Forest Recreation

To increase interest in exploring the natural beauty and biodiversity of FMU 10 project area, the management committee undertook a significant initiative to develop additional facilities designed to enhance the comfort, accessibility, and overall experience of visitors. This initiative follows the successful implementation of several projects in 2025, which improved the visitor amenities within FMU10.

Table 2: Number of visitor arrivals at the FMU 10 SFM Project in 2025.

Month	Mt. Trusmadi			Mt. Sinsing	Mt. Kaingaran	Entomology Camp	Rafflesia Information Centre (RIC)	Kupu-kupu Gate	Birdhide
	Kaingaran Trail	Apin-apin Trail	Sinua Trail						
Jan	60	0	14	0	38	57	1,225	60	42
Feb	98	18	14	0	63	27	1,082	12	25
Mar	46	7	13	0	27	51	854	36	79
Apr	151	0	3	3	45	67	1,179	70	69
May	281	0	21	10	49	5	1,584	74	85
Jun	239	0	3	0	36	39	2,837	46	104
Jul	25	0	15	2	0	123	4,524	45	106
Aug	71	0	28	1	16	133	3,969	25	99
Sep	80	0	17	0	23	3	1,451	0	0
Oct	56	0	23	9	18	4	2,295	47	139
Nov	27	0	22	0	28	0	695	21	22
Dec	10	0	13	0	7	13	1,268	35	13
Total	**1,144**	**25**	**186**	**25**	**350**	**522**	**22,963**	**471**	**783**

Installation of Signboard

The installation of 10 signboards at selected locations within the Nuluhon Trusmadi Forest Reserve is essential to prevent encroachment and to support the proper maintenance and demarcation of the project area boundaries.

MALIM FMU10 PROGRAMME AND ACTIVITIES

i. Kursus Malim Trusmadi FMU10

The Kursus Malim Trusmadi FMU10 was conducted in October 2025 in collaboration with Habitat Foundation. The training involved the participation of 50 FMU10 Malim and 20 SFD staff members and was carried out with the cooperation of the National Institute of Occupational Safety and Health (NIOSH) Sabah and Jabatan Bomba dan Penyelamat Malaysia (Tambunan Branch). Throughout the six-day programme, comprehensive training and practical exposure were provided to both the Malim and staff members through the following components:

a. Physical fitness assessment through practical sessions on procedures, techniques, and more effective emergency response actions in compliance with established Standard Operating Procedures (SOPs).
b. Coordination of safety systems used in the management of tourist safety in Malaysia with the existing management system implemented within FMU10.
c. Raising awareness and knowledge on the importance of a systematic safety system and the correct actions to be taken when handling cases or emergency situations in the forest.
d. Enhancing the quality of the assessment and recruitment management of Nuluhon Trusmadi FMU10 Malim, thereby increasing visitors' confidence during their activities.





ii. Forest Fire Training

In August 2025, the training was attended by 70 participants, comprising FMU10 Malim and staff members, and was conducted from 12 to 15 August. The programme provided participants with practical, hands-on experience and training, which could be effectively applied in the field, particularly during emergency situations and forest fire incidents within areas under the management of FMU10.





iii. Malim FMU10 Meeting

In August 2025, a Malim FMU10 meeting was held at the Rafflesia Information Centre (RIC) Tambunan. The meeting aimed to provide information and gather input from FMU10 Malim regarding the operations and management of eco-tourism activities under the jurisdiction of Nuluhon Trusmadi FMU10. A total of 50 FMU10 Malim attended the meeting, which was chaired by the Project Manager of SFM FMU10. The programme also included a briefing session conducted by PERKESO Sabah on the contributions required from Malim FMU10.





INFRASTRUCTURE AND SUPPORT FACILITIES

i. Road Maintenance

Regular maintenance of the road is undertaken to facilitate forest management operations and to ensure safe and efficient access to the Apin-Apin Trail Nuluhon Trusmadi Forest Reserve. The maintenance is essential not only to support forest operations but also to enhance visitor safety and promote recreational activities in the area.





ii. Maintenance of Firebreaks

Firebreak maintenance in the Nuluhon Trusmadi Forest Reserve (Sinua area) was undertaken to prevent forest fires. Ongoing maintenance helps strengthen forest management and enhance overall protection of the area.





iii. Botanical Garden Gate Maintenance

The Botanical Garden in the Rafflesia Forest Reserve serves as the main access route for visitors to witness the blooming of *Rafflesia pricei*. The area comprises approximately 300 plots of Rafflesia pricei, which bloom on a rotational basis each week, making it one of the key attractions for nature enthusiasts, researchers, and tourists seeking to experience this unique endemic flora. To further enhance the site's appeal, the main entrance gateway has been upgraded to provide a more welcoming and visually attractive feature for visitors. This initiative forms part of a broader enhancement effort aimed at restoring the area's prominence as a high-potential nature-based tourism destination.In line with these revitalisation efforts, the Botanical Garden has been rebranded as the Rafflesia Discovery Garden (RDG), reflecting a refreshed identity that strengthens its image and competitiveness in promoting local ecotourism to both domestic and international visitors.





The Nuluhon Trusmadi Forest Reserve Conservation Awareness Programme

The Nuluhon Trusmadi Forest Reserve Conservation Awareness Programme – Class I (FMU10) is a regular initiative implemented to enhance public understanding of the importance of forest protection and conservation. The programme also serves as a key strategic approach within FMU10, supporting sustainable forest management efforts and strengthening conservation practices in the Nuluhon Trusmadi Forest Reserve.

An awareness programme carried out at Sinsing Kaingaran was attended by 150 individuals, including local community and departmental staff. The event featured several briefings on forest protection and its importance, along with various activities organised by the Rainforest Discovery Centre and the FMU10 team. Additionally, the awareness programme included a tree planting activity aimed at raising awareness about the importance of forests for the environment and the sustainability of our green planet.







Rainforest Discovery Centre
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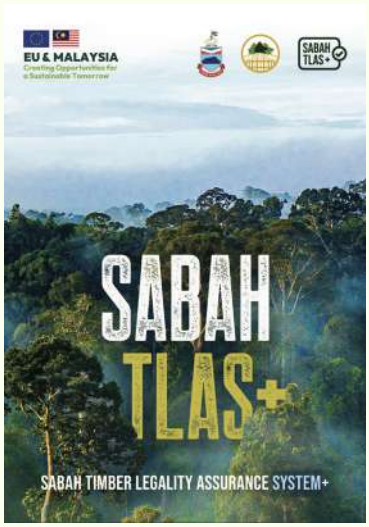
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Special Feature

TOTALLY PROTECTED AREAS (TPA)

30% PROTECTED AREA MILESTONE

The year 2025 marks an important milestone in Sabah's conservation journey. In line with the Sabah Forest Policy 2018, the State has fulfilled its commitment to place at least 30% of Sabah's total land area under Totally Protected Areas (TPAs). With Sabah covering approximately 7.4 million hectares, reaching this target represents a significant structural achievement for the State's forest governance framework.

This milestone is the result of consistent policy direction and sustained implementation by the Sabah Forestry Department over more than a decade. The expansion of protected areas was not a short-term initiative but a phased, deliberate approach, supported by legal instruments, structured land-use planning and inter-agency coordination.

Achieving the 30% target places Sabah among Malaysia's leading states in legally secured forest protection. It demonstrates that conservation commitments can be translated into measurable outcomes when supported by institutional continuity and clear governance mechanisms. More importantly, this milestone reflects a long-term vision — to ensure that ecologically significant landscapes remain protected and functionally intact for future generations.

LEGAL FRAMEWORK AND SECTION 5A IMPLEMENTATION

The achievement of the 30% Totally Protected Area target was supported by a clear legal foundation. Section 5A of the Forest Enactment 1968 played a crucial role in strengthening the State's protected area framework.

While Class I (Protection Forest), Class VI (Virgin Jungle Reserve) and Class VII (Wildlife Reserve) form the core of the TPA network, Section 5A was also applied to safeguard areas of high ecological value outside these classes. Under this provision, the Department identified forest areas of significant conservation importance — including sensitive landscapes, steep terrain, riparian corridors, buffer zones and critical habitats — and declared them protected under Section 5A.

This mechanism ensured that ecologically important areas received formal legal recognition and protection even if they were not classified under the traditional protection classes. The structured application of Section 5A therefore contributed directly to achieving the 30% TPA target in a lawful and transparent manner.

In addition to Forest Reserves, suitable State Land areas of ecological significance were identified and brought under protection through lawful gazettement procedures. This expanded the protected landscape beyond existing forest classifications, strengthening overall conservation coverage.

The 30% achievement is therefore not merely an administrative milestone. It reflects deliberate governance decisions grounded in legal authority and implemented through systematic planning.

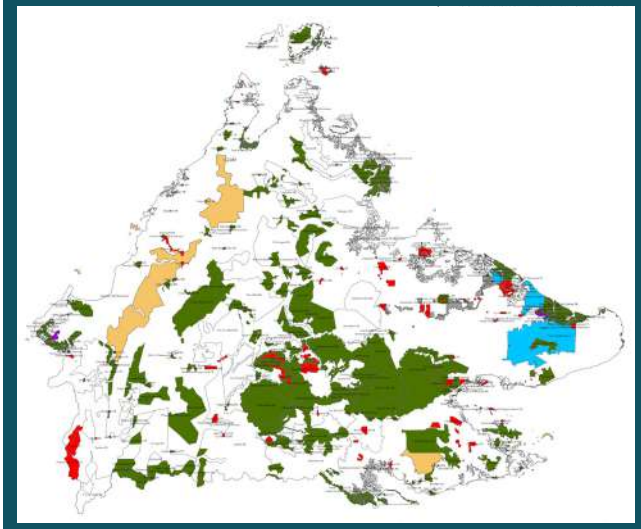
FROM EXPANSION TO STEWARDSHIP

With the 30% coverage target achieved, Sabah now enters a new phase of conservation stewardship. The priority shifts from expanding protected area coverage to consolidating and strengthening the quality of the protected estate.

The expansion phase has successfully secured the legal status of ecologically important areas. The next challenge is to ensure that these areas remain resilient, well-managed and ecologically functional.

OUR FORESTS TODAY

Sabah's total landmass: 7.4 mil ha



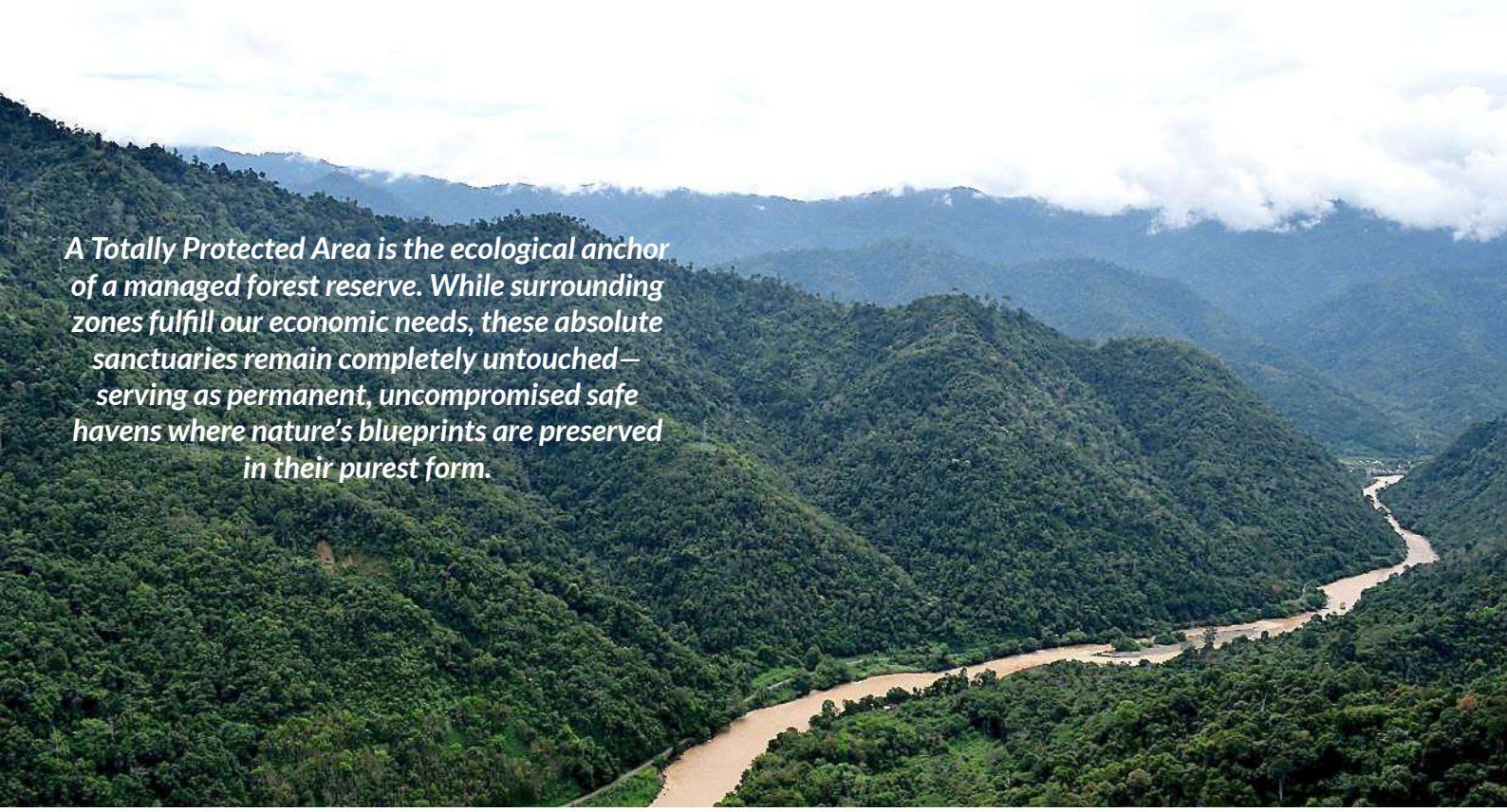
63% — **FOREST COVER (4.6 mil ha)**
- PFE: 3,849,163.573 ha
- Stateland 784,301.427 ha

48% — **FOREST RESERVES (3.6 mil ha)**
7 classes of forest reserves

25% — **PRODUCTION FOREST (1.9 mil ha)**
- FRs (Class II, III, IV, V): 1.8 mil ha
  i. SFM Licensed: 1,527,833 ha. ii. Managed by SFD: 55,507 ha
- Stateland: 14,940 ha

52% — **PERMANENT FOREST ESTATES (PFE) (3.8 mil ha)**
- Forest reserves: 3,558,325.673 ha
- Sabah Parks: 245,172 ha
- Wildlife Sanctuary & Wildlife Conservation Area: 28,957 ha

27% — **TOTALLY PROTECTED AREAS (TPA) (2.011 mil ha)**
- FR (Class I, VI & VII): 1,737.681 ha
- Sabah Parks: 245,172 ha
- Wildlife Sanctuary & Wildlife Conservation Area: 28,957 ha



View of Gn. Lumaku Forest Reserve

Consolidation involves maintaining strong protection standards, preventing degradation and ensuring that management practices remain consistent across all TPAs. As the protected network increases in size, the need for structured monitoring, enforcement and adaptive management becomes even more critical.

This transition reflects maturity in conservation governance. Protection by designation must now be complemented by protection through effective implementation.

RESTORATION AND ECOLOGICAL STRENGTHENING

Restoration within Totally Protected Areas has been undertaken over the past decade, particularly in forest reserves that were logged prior to their reclassification. These earlier initiatives focused on stabilising degraded forest structure and supporting natural regeneration processes.

With the protected estate now reaching 30% of the State's land area, restoration efforts will be strengthened and implemented more comprehensively. Moving forward, the emphasis is on improving forest condition in degraded areas and enhancing ecological resilience across the landscape.

Restoration is not limited to tree planting activities. It involves improving forest structure, supporting biodiversity recovery, strengthening watershed functions and ensuring long-term ecosystem stability. Consistency in implementation and monitoring will be important to ensure that restoration outcomes are sustainable.

To support effective conservation outcomes, science-based monitoring approaches will be further strengthened. These include field surveys, permanent sample plots, biodiversity indicators, remote sensing technologies, drone applications and LiDAR assessments to monitor ecosystem health, forest condition and biodiversity trends. Such approaches will provide reliable data to support adaptive management and evidence-based conservation planning.

The objective is to ensure that protected areas are not only legally secure but also ecologically healthy and capable of sustaining biodiversity over time.

STRENGTHENING PROTECTION AND MANAGEMENT EFFECTIVENESS

Managing a larger protected estate requires stronger institutional capacity and consistent operational oversight. Protection within TPAs involves continuous monitoring, effective enforcement and sound ground-level management. As pressures evolve — including encroachment risks and environmental change — proactive management becomes increasingly important.

The Department remains committed to strengthening patrol coverage, improving reporting mechanisms and ensuring that protection measures are consistently applied. Safeguarding ecological integrity requires not only legal designation, but also sustained operational vigilance supported by scientific monitoring and regular ecosystem assessments.

Equally important is the recognition of cultural and community values in conservation efforts. Traditional knowledge, local stewardship and active community participation can contribute significantly to the long-term protection of forest landscapes. Strengthening collaboration with local communities and Indigenous Peoples will help foster shared responsibility in safeguarding Sabah's natural heritage while enhancing the effectiveness and sustainability of conservation measures.

Management effectiveness will continue to be strengthened through improved planning consistency, clearer accountability and structured evaluation processes. As the TPA network grows in scale, coordination and oversight must grow in parallel.

THE WAY FORWARD

The achievement of the 30% Totally Protected Area target marks the completion of a significant strategic phase in Sabah's conservation history. It reflects long-term policy commitment and the institutional strength of the Sabah Forestry Department.

However, percentage coverage alone does not define conservation success.

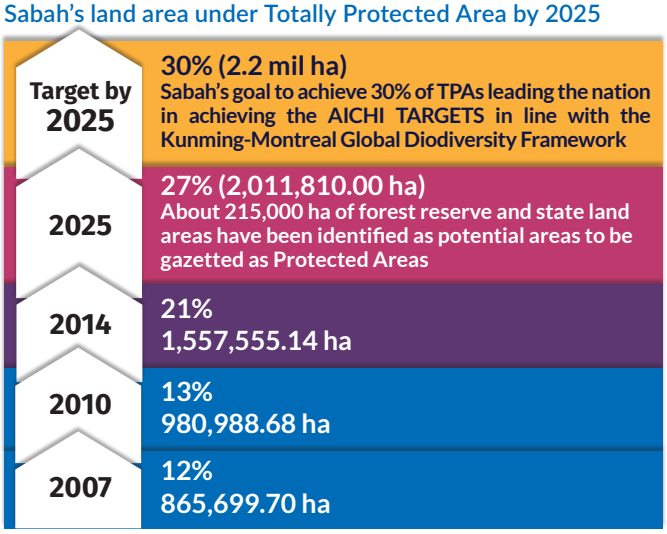
Future performance will be measured by the health of ecosystems, the stability of forest landscapes and the effectiveness of day-to-day management. The responsibility now is to ensure that conservation gains are maintained, strengthened and protected against future pressures.

The focus moving forward is clear: to maintain the integrity of the protected estate, enhance restoration where necessary, strengthen science-based monitoring systems and ensure that management standards remain consistent and effective. Community engagement, traditional knowledge and local stewardship will continue to play an important role in supporting conservation outcomes and strengthening long-term resilience.

With approximately 30% of Sabah's land area now designated as protected landscapes, the State demonstrates a strong commitment to preserving its natural capital. This nature-based approach aligns with national priorities and global initiatives, including the Sustainable Development Goals (SDGs) and the global "30 by 30" conservation target, which seek to halt biodiversity loss and promote sustainable development. Through these efforts, Sabah contributes to international conservation commitments while supporting a green economy, ecosystem resilience and the well-being of future generations.

Sabah has achieved the 30% milestone. The next chapter is defined by responsibility — to protect better, manage more effectively and uphold the integrity of Sabah's forests as a lasting natural heritage.

Sabah Forest Policy 2018: To have not less than 30% of Sabah's land area under Totally Protected Area by 2025



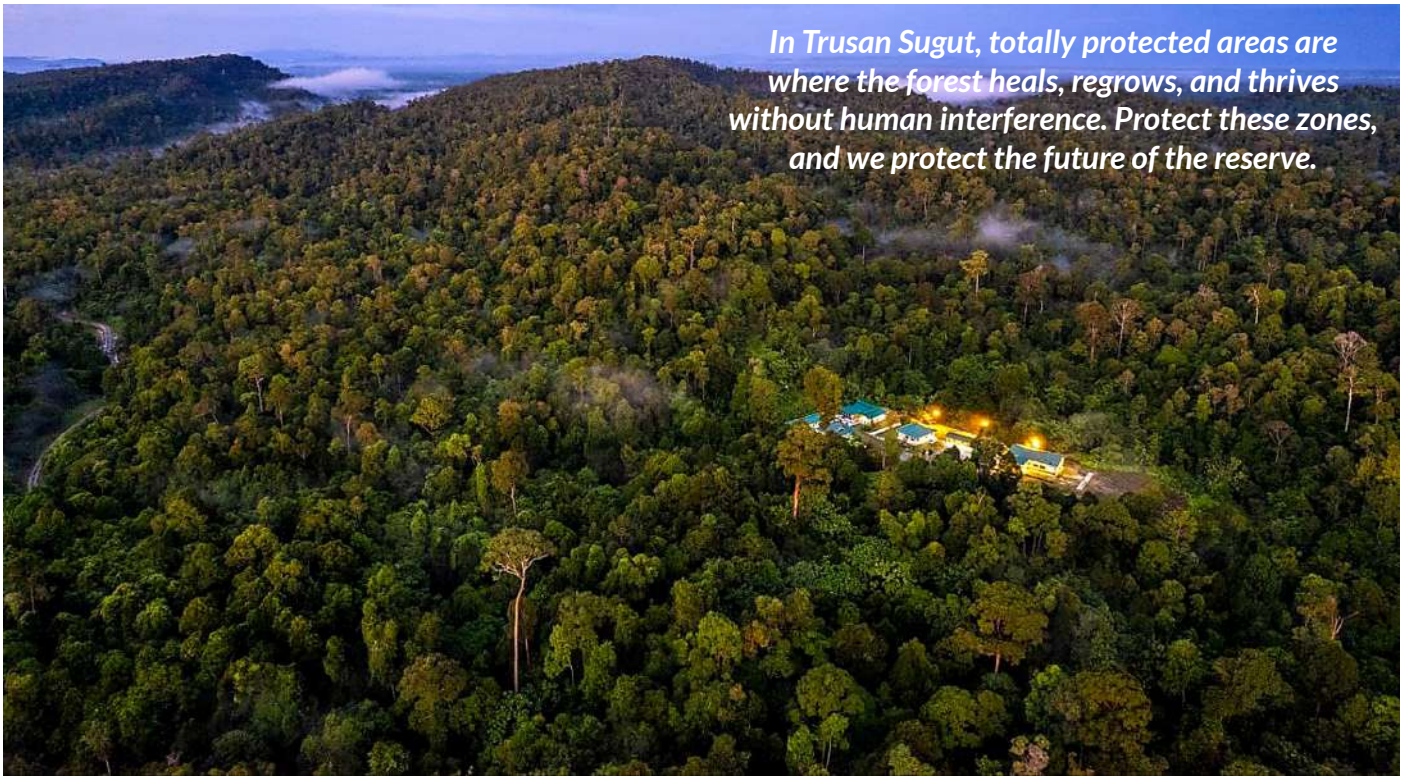
CONSERVATION – NEXT APPROACH: Expanding the scope of TPAs to include OECM and CCA

The current TPAs only comprise forest reserves (of class I, VI and VII), the State Parks, Wildlife Sanctuary and Wildlife Conservation Areas. With approximately 200,000 ha left to be identified, the state should also explore the potential role of Other Effective Conservation Measures (OECM) as introduced by IUCN. This may include forested areas conserved by a community or company with agreed protcols for its protection and recognized by world body such as IUCN. Recognizing such initiatives will further strengthen the protection of forests beyond the existing legal arrangement in the state.

7 Classes of Forest Reserves

Class	Forest Reserves	Area (Ha)	Percentage over Sabah's total Landmass
Class I	Protection Forest Reserve	1,473,251.26	20%
Class II	Commercial Forest Reserve	1,570,545.95	21%
Class III	Domestic Forest Reserve	4,634.00	0.1%
Class IV	Amenity Forest Reserve	11,081.87	0.2%
Class V	Mangrove Forest Reserve	234,382.84	3%
Class VI	Virgin Jungle Reserve	124,729.903	2%
Class VII	Wildlife Forest Reserve	139,699.85	2%
	Total	**3,558,325.673**	**48.3%**

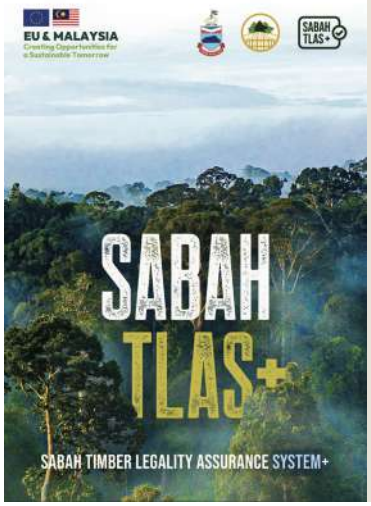
Aerial View of Trusan Sugut Forest Reserve



Special Feature

SABAH TIMBER LEGALITY ASSURANCE SYSTEM PLUS (TLAS+):

Strengthening Timber Legality, Sustainability and Market Credibility



The Sabah Timber Legality Assurance System Plus, or Sabah TLAS+, represents a major step forward in Sabah's ongoing effort to strengthen timber governance, enhance international market credibility, and align the State's timber industry with emerging global sustainability requirements, particularly the European Union Deforestation Regulation (EUDR) and the European Union Corporate Sustainability Due Diligence Directive (EU CS3D). More than a compliance tool, Sabah TLAS+ reflects Sabah Forestry Department's long-term commitment to responsible forest management, transparent timber supply chains, and sustainable trade.

Sabah TLAS was established in 2009 in response to the European Union's Forest Law Enforcement, Governance and Trade (FLEGT) and the Voluntary Partnership Agreement (VPA) negotiations in 2007. The system was developed around six core principles covering key legality requirements, namely the right to harvest, forest operations, statutory charges, other users' rights, mill operations, and trade and customs. Over the years, Sabah TLAS has continued to evolve as a living system, including the inclusion of downstream industries in the audit process in 2015, supported by independent third-party audits, digital traceability, and enhanced governance. These improvements have contributed to the acceptance of Sabah timber in major international markets, including Europe, the United States, Japan, Australia and Korea.

However, global market expectations continue to evolve. With the introduction of the EUDR, legality alone is no longer sufficient. Timber and other key commodities entering the European Union market are now expected to be legal, traceable, risk-assessed, and free from deforestation and forest degradation. These developments have redefined market access, not as a trade barrier, but as a new baseline for responsible and sustainable trade.

In response, the Sabah Forestry Department entered into a strategic collaboration with the EU-Malaysia Cooperation Facility (EMCF) to update and strengthen Sabah TLAS, thereby creating Sabah TLAS+. This enhanced framework aligns Sabah's timber assurance system with EUDR requirements and incorporates elements of the EU CS3D, which industry players may adopt on a voluntary basis. The CS3D component enables companies to strengthen due diligence on human rights and environmental risks across their value chains, in line with Environmental, Social and Governance (ESG) compliance and Malaysia's broader direction towards responsible business practices.

The development of Sabah TLAS+ involved extensive technical consultations, industry dialogues, and capacity-building with the Implementing Agencies Coordination Committee (IACC), Sabah Timber Industries Association (STIA), Timber Association of Sabah (TAS), and timber operators. This inclusive process ensured that the updated framework not only meets international requirements but also remains practical, credible and implementable for Sabah's timber industry. Key enhancements include strengthened traceability and geolocation systems, clearer legality and compliance checklists, improved monitoring and verification mechanisms, and reinforced social and labour safeguards across upstream and downstream operations.

Importantly, Sabah TLAS+ is not a new system that replaces Sabah TLAS. Rather, it is an enhanced and integrated evolution of an already robust framework. Sabah TLAS+ operates as one single system covering legality compliance, deforestation-free verification, traceability, and voluntary corporate sustainability due diligence. Principles 1 to 6 continue to form the foundation of legality compliance, while two new principles have been introduced under the Sabah TLAS+ Checklist. Principle 7 covers deforestation-free requirements aligned with the EUDR, ensuring that timber production is free from deforestation and forest degradation. Principle 8 covers Corporate Sustainability Due Diligence aligned with the EU CS3D, focusing on the prevention and mitigation of human rights and environmental risks across the timber value chain on a voluntary compliance basis.

Compliance under Sabah TLAS+ is progressive and transparent. Companies that comply with Principles 1 to 6 qualify for the Sabah TLAS+ Compliance Certificate. Where companies additionally comply with Principle 7 and/or Principle 8, this will be clearly indicated in the certificate. This approach





(Top) Participants took part in a practical exercise during the Industry Training Workshop and (above) Workshop participants from the Sabah Forestry Department, industries and EU-Malaysia Cooperation Facility Experts

ensures that market claims are not assumed, but are verifiable, defensible and credible.

As part of industry readiness, an Industry Training Workshop on the Sabah TLAS+ was held on 17–18 December 2025. The workshop aimed to strengthen the capacity of upstream and downstream timber operators by providing a clearer understanding of the updated Sabah TLAS requirements, enhanced criteria, and alignment with international due diligence and sustainability frameworks. The programme marked an important milestone in preparing the industry for evolving regulatory and market expectations, particularly regarding deforestation-free supply chains, due diligence, and transparent risk management.

The Sabah TLAS+ Booklet was officially launched on 5th February 2026 at Hilton Hotel, Kota Kinabalu, marking a major milestone in Sabah's commitment to sustainable forest governance, international market credibility and responsible trade. The launch was officiated by Yang Berhormat Datuk Seri Panglima Haji Masidi bin Manjun, Deputy Chief Minister of Sabah II and Minister of Finance, on behalf of Yang Amat Berhormat Datuk Seri Panglima Haji Hajiji bin Haji Noor, Chief Minister of Sabah. The ceremony was attended by His Excellency Rafael Daerr, Ambassador of the European Union to Malaysia, senior State and Federal Government officials, representatives of the European Union, timber industries, civil society organisations and international partners.



Launching Speech by Yang Berhormat Datuk Seri Panglima Haji Masidi bin Manjun, Deputy Chief Minister II of Sabah and Minister of Finance.









A. The Sabah TLAS+ Booklet was officially launched by Yang Berhormat Datuk Seri Panglima Haji Masidi bin Manjun, Deputy Chief Minister II of Sabah and Minister of Finance, and witnessed by His Excellency Rafael Daerr, Ambassador of the European Union to Malaysia (standing third from right).

B. Welcome remarks by Datuk Frederick Kugan, The Chief Conservator of Forests.

C. Remarks by His Excellency Rafael Daerr, Ambassador of the European Union to Malaysia.

D. The launch was attended by distinguished representatives from federal and state agencies, the timber industry, NGOs, and educational institutions

"This Sabah TLAS+ booklet is a testament to the state's readiness to trade responsibly, safeguard its forests for future generations, and remain a trusted leader in the global green economy."

– Datuk Seri Panglima Haji Hajiji Haji Noor, Chief Minister of Sabah
(Delivered by Datuk Seri Panglima Masidi Manjun, Deputy Chief Minister and Finance Minister)





Yang Berhormat Datuk Seri Panglima Haji Masidi bin Manjun toured the exhibition following the official launch of the book, taking time to engage with the displays and acknowledge the works presented.



Visit to the Sabah Timber Industries Association (STIA) booth by the Deputy Chief Minister of Sabah and the Ambassador of the European Union to Malaysia.

The launch of Sabah TLAS+ positions Sabah as the first in the world to align its Timber Legality Assurance System with both EUDR and EU CS3D requirements under a single, unified framework. This achievement places Sabah at the forefront of global efforts to modernise forest governance systems in line with emerging environmental, social and governance expectations. It also demonstrates that Sabah timber is not only legal but also responsibly produced, traceable and globally competitive.

Moving forward, upgrading Sabah TLAS to Sabah TLAS+ marks the beginning of a longer journey. The real work lies in effective implementation, continuous improvement, digital integration, auditor competence, and mutual recognition with market partners. Sabah Forestry Department's priorities will include ensuring consistent, credible audits, supporting industry readiness, especially among small and medium enterprises, strengthening digital traceability and geolocation systems, and maintaining transparency with international partners.

Sabah TLAS+ is therefore not merely a market access tool. It forms part of Sabah's broader governance reform agenda to support forest conservation, social responsibility and long-term economic resilience. Through Sabah TLAS+, Sabah reaffirms its readiness to trade responsibly, safeguard its forests for future generations, and remain a credible and trusted partner in the global green economy.

Special Feature

FOREST CARBON Activities

INTRODUCTION

The Sabah Forestry Department (SFD) has updated its Forest Enactment 1968 (Amendment) 2025 during the April 2025 State Legislative Assembly. In Sabah, forest carbon activities are regulated under Section 28D of the Forest Enactment 1968, which came into effect on 15 May 2025. This provision establishes the primary legal framework governing projects that aim to reduce greenhouse gas (GHG) emissions through forestry-based interventions such as forest conservation, restoration, and tree planting.

It creates a government-controlled system to manage and monetize the carbon-capturing potential of forests.

It also lays out the strict requirements for obtaining a license, the severe penalties for non-compliance, and provides a detailed glossary of terms to ensure legal and commercial clarity in the carbon market.

The legal text establishes a comprehensive regulatory framework for 'forest carbon activities', which are projects designed to reduce greenhouse gas (GHG) emissions through forestry, such as planting trees or preserving existing forests to sell carbon credits.

Key provisions include (i) Section 28D on the details of the rules and regulations; and (ii) Section 28E which provides the official definitions.

a. Regulatory Scope and Coverage

Section 28D applies broadly to all forest carbon activities conducted within Sabah, regardless of land status. This includes activities on:

i. **Forest Reserves**
ii. **State land** (Land owned by the State that has not been leased or granted to any other party (alienated lands) or is a Forest Reserve). This includes Parks, Wildlife Sanctuaries etc.
iii. **Alienated Land** (Land that the State has disposed of to a private owner or entity).

Forest Reserves covered under the Enactment include all gazetted forest classes such as Class I: Protection Forest, Class II: Commercial Forest, Class III: Domestic Forest, Class IV: Amenity Forest, Class V: Mangrove Forest, Class VI: Virgin Jungle Reserve, and Class VII: Wildlife Reserve. The provision ensures that any carbon-related project involving forest ecosystems falls under a unified regulatory regime.

b. Section 28D: Forest Carbon Activity (Operational Framework)

i. Subsection (1): The Licensing Authority & Scope
Summary:

- The Chief Conservator of Forests (CCF) is empowered to issue a time-limited license for a 'forest carbon activity'.
- This requires the written approval of the Cabinet and is subject to specified terms, fees, and royalties.
- This rule applies to Forest Reserves, State land, and alienated (privately owned) land and explicitly overrides subsection (2) of Section 15 of the mother Enactment, which likely pertains to other forms of forest licensing.

ii. Legal Interpretation:

- This subsection establishes a centralized and high-level approval regime. Requiring Cabinet approval elevates forest carbon projects from a simple administrative matter to an issue of State or National policy, ensuring political oversight.
- It creates a specific legal pathway for carbon projects, distinct from traditional forestry.
- The State Government's power to impose fees and royalties confirms its intent to generate revenue from the monetization of these ecosystem services.

c. Subsection (4): Pre-Approval of Feasibility Studies

Summary:

- Before a Project can even be fully considered, any Feasibility Study for it must first receive written approval from the Minister, who can impose their own terms and conditions.

Legal Interpretation:

- This creates a two-stage approval process, acting as a preliminary screening mechanism. It allows the Government of Sabah to filter out unviable or undesirable projects early on, saving time and resources. Granting the Minister discretionary power ("as he thinks fit") provides significant executive control over the entire pipeline of potential carbon projects in the jurisdiction

d. Subsection (2): Protection of Private Property Rights

Summary:

- On alienated (private) land, a license can only be issued to the registered landowner or with their explicit written consent.

Legal Interpretation:

- A critical provision upholding the fundamental principle of indefeasibility of title. It ensures that Sabah cannot grant rights over private property to a third party without the owner's consent. The landowner is positioned as a necessary and consenting party, protecting their proprietary rights against encroachment by project developers or the state itself.

e. Subsection (5): Criminal Offences & Penalties

Summary:

- A person who conducts a forest carbon activity without a valid licence commits a criminal offence. Upon conviction, they face a severe penalty: a fine of not less than RM100,000 and not more than RM5,000,000, imprisonment for up to five years, or both.

Legal Interpretation:

- The severity of the penalties, especially the high minimum fine, signals a strong deterrent intent. The law frames unlicensed carbon activities not as a minor administrative breach but as a serious crime. This protects the integrity of the regulated market, prevents unauthorized exploitation of Sabah's resources, and underscores the high economic and ecological value the Government of Sabah places on these activities.

f. Subsection (3): Power to Revoke Licenses

Summary:
- A license issued for a forest carbon activity can be revoked, cancelled, or suspended according to procedures laid out in other sections of the Enactment (Sections 24A or 24D).

Legal Interpretation:
- This clause confirms that a license is a privilege, not an absolute right. It provides the Regulatory Authority with a crucial enforcement tool to ensure ongoing compliance with the license's terms and conditions. It allows for administrative remedies short of criminal prosecution.

g. Subsection (6): Additional Punitive Financial Orders

Summary:
- In addition to the criminal penalties in subsection (5), a Court can order a convicted offender to pay the Government of Sabah further sums, including up to ten (10) times the amount of unpaid royalties and up to ten (10) times the value of the "forest produce" generated.
- These sums are recoverable as if they were a court-imposed fine.

Legal Interpretation:
- This is a disgorgement and punitive provision.
- Its purpose is to strip the Offender of all illicit profits and then penalize them further, ensuring that crime does not pay.
- The use of a multiplier (ten times) makes the financial consequences potentially ruinous.
- By classifying the illegally generated carbon credits as "forest produce", the law adapts traditional forestry concepts to this new intangible asset.
- The mechanism for recovery makes it easier for Sabah to seize assets to satisfy the payment

h. Dual Legal Compliance Framework

Forest Carbon Activities in Sabah operate under a dual regulatory system involving:

i. Forest Enactment 1968 (Section 28D).
ii. Sabah Climate Change and Carbon Governance Enactment (SCCACG) 2025.

The SCCACG 2025 does not replace the Forest Enactment but complements it. Carbon project developers must comply with both legal frameworks, including registration with the Sabah Climate Registry and oversight by the Sabah Climate Change Action Council (SCCAC).

This integrated approach ensures that forest carbon projects are aligned with Sabah's broader climate governance and carbon market infrastructure. (Table 1).

INSTITUTIONAL WORKFLOW FOR FOREST CARBON PROJECTS

The implementation of forest carbon activities follows a structured process involving multiple institutions:

a. Project Proponent

- Submits application and feasibility study proposal to the Sabah Forestry Department (SFD).

b. Sabah Forestry Department

- Reviews the application.
- Issues feasibility permits.
- Conducts technical assessments.

c. Sabah Climate Change Action Council (SCCAC) and Sabah Climate Registry and Inventory Centre (SaCRIC)

- Review feasibility studies.
- Register projects and issue carbon rights certificates.

d. State Cabinet

- Provides final approval for the licensing agreement.

Once approved, the project proceeds under a Licence Agreement with conditions, and the Sabah Forestry Department conducts Monitoring, Reporting, and Verification (MRV) throughout the project period.

CONCLUSION

Section 28D of the Forest Enactment 1968 represents a significant milestone in Sabah's climate governance framework. By introducing strict licensing requirements, protecting landowner rights, enforcing strong penalties, and integrating with the Sabah Climate Change and Carbon Governance Enactment 2025, the State has established a comprehensive regulatory system for forest carbon activities.

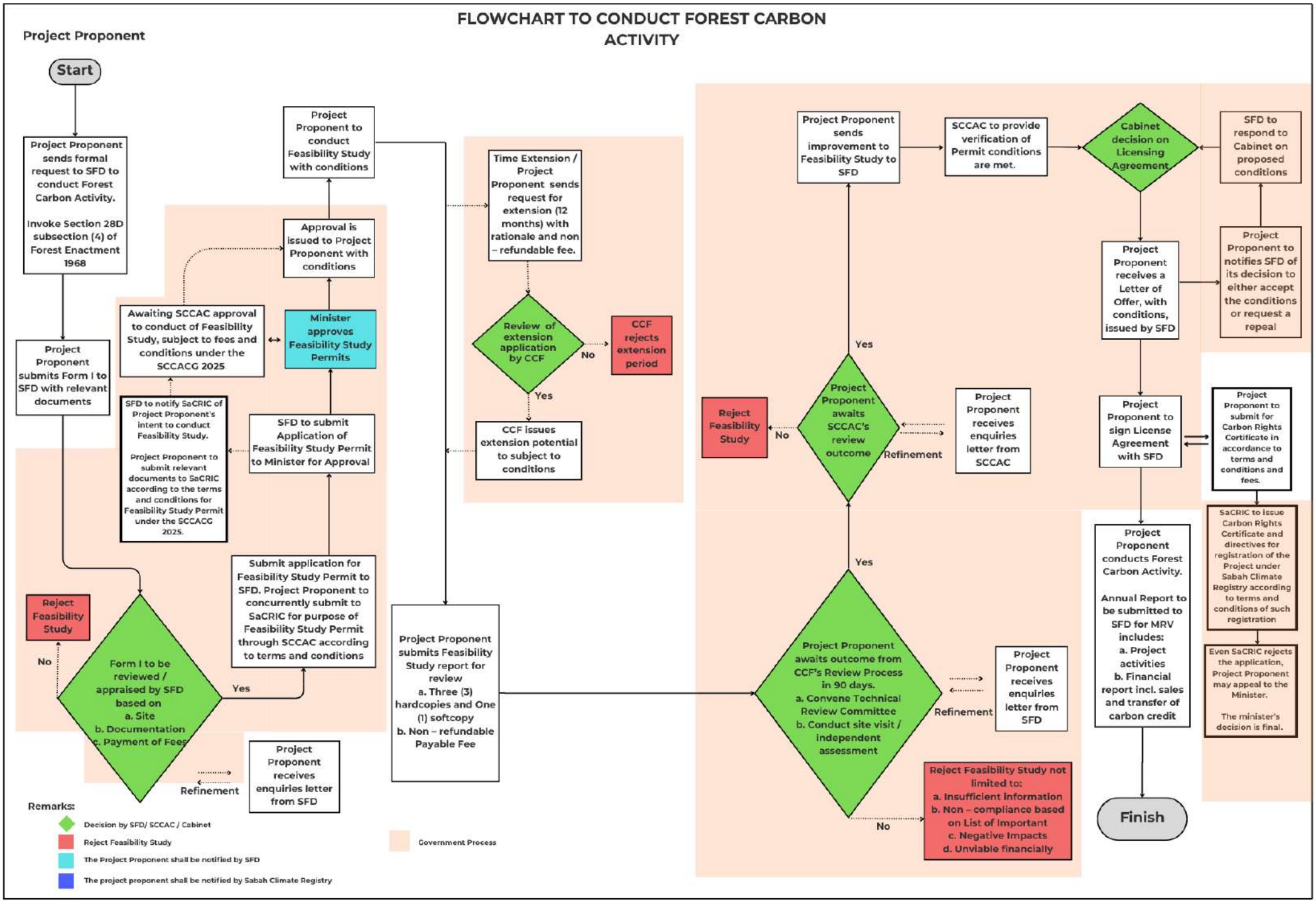
This framework not only safeguards Sabah's forest resources but also positions the state to participate effectively in global carbon markets while ensuring environmental integrity, regulatory oversight, and equitable governance.



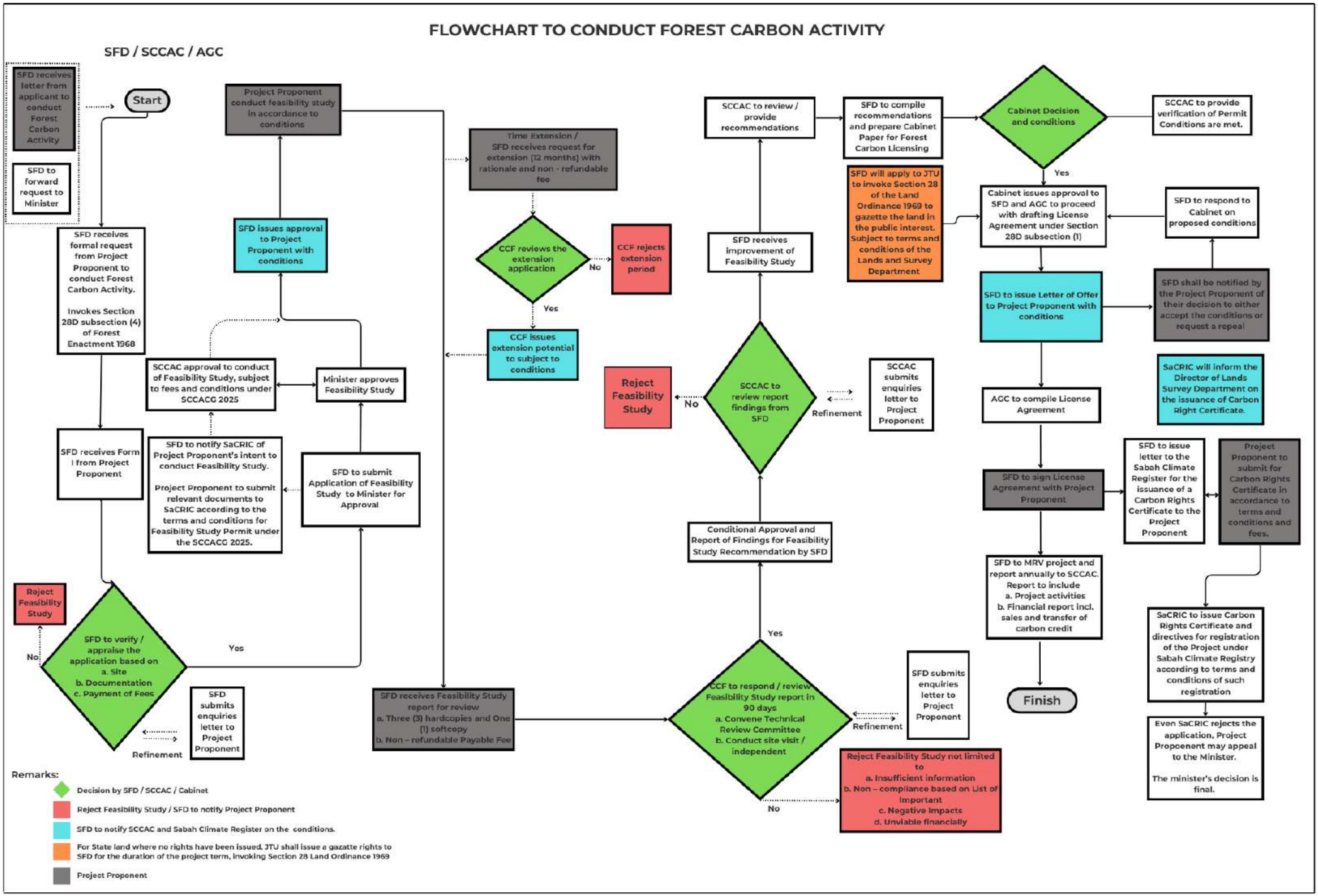
SFD Senior Officials at Sabah State Assembly Hall in July 2025 DUN Sitting.

Table 1: Regulatory Aspects of Forest Enactment 1968 (Section 28D) and SCCCGE 2025.

No	Regulatory Aspect	Forest Enactment 1968 (Section 28D)	Sabah Climate Change and Carbon Governance Enactment 2025 (SCCCGE 2025)
1	Primary Objective	Regulates the undertaking of forest carbon activities within area subject to Forest Enactment through a licensing and enforcement framework.	Establishes the State-wide framework for climate governance, carbon rights administration, carbon project registration and carbon market oversight.
2	Scope of Application	Applies to forest carbon activities carried out within Forest Reserves and other areas prescribed under the Forest Enactment.	Applies to carbon rights, carbon projects, carbon credits and carbon-related activities throughout Sabah.
3	Legal Basis for Activity	Forest carbon activities may only be undertaken pursuant to a licence issued under Section 28D and subject to prescribed conditions.	Carbon projects must comply with registration, permitting and governance requirements established under the Enactment.
4	Regulatory Authority	Chief Conservator of Forests (CCF), subject to the powers conferred under the Forest Enactment and any approval requirements prescribed therein.	Sabah Climate Change Action Council (SCCAC), Director of the Sabah Climate Registry and Inventory Centre (SaCRIC), and other authorities established under the Enactment.
5	Carbon Rights	Does not independently establish a comprehensive carbon rights administration system but regulates the conduct of forest carbon activities through licensing.	Sabah Climate Change Action Council (SCCAC), Director of the Sabah Climate Registry and Inventory Centre (SaCRIC), and other authorities established under the Enactment.
6	Feasibility Assessment	Subject to requirements prescribed under the Enactment, subsidiary legislation and licence conditions.	Requires submission and evaluation of feasibility and project information in accordance with statutory requirements and prescribed procedures.
7	Land and Tenure Considerations	Activities must comply with applicable land tenure arrangements and obtain approvals where required under law.	Registration and approval processes require disclosure of land tenure status and supporting agreements where applicable.
8	Native Customary Rights (NCR)	Activities remain subject to applicable laws relating to native customary rights and any consultation requirements prescribed by law.	Requires consideration of social safeguards, stakeholder engagement and measures relating to affected native or local communities where applicable.
9	Project Registration	Licensing of Forest Carbon activities.	Registration of carbon projects, carbon rights and carbon credit transactions through the Sabah Climate Registry.
10	Financial Obligations	Subject to payment of prescribed fees, royalties, charges or other financial obligations imposed under licence conditions or subsidiary legislation.	Subject to levies, registry charges, royalties and other payments prescribed under the Enactment or subsidiary legislation.
11	Monitoring and Reporting	Compliance with licence conditions, reporting requirements and monitoring obligations imposed by the forestry authority.	Ongoing reporting, disclosure and registry requirements relating to carbon projects and carbon credit transactions.
12	Enforcement	Offences, penalties, suspension, revocation and enforcement measures under the Forest Enactment.	Administrative, civil and criminal enforcement mechanisms established under the SCCCGE 2025.
13	Relationship between Laws	Regulates forest carbon activities from a forestry and land management perspective.	Provides the overarching climate governance and carbon administration framework. Both laws operate concurrently and are intended to be read harmoniously.



Flowchart to conduct Forest Carbon Activity for Project Proponent.



Flowchart to conduct Forest Carbon Activity for Sabah Forestry Department, Sabah Climate Change Action Council and Attorney General Chamber.

Special Feature

FOLUR
Food Systems • Land Use • Restoration

Integrated Landscape Management for Sustainable Food Systems, Land Use and Restoration (MY-FOLUR) Project

The Food Systems, Land Use and Restoration (FOLUR) Impact Programme is a US$345 million, seven-year initiative funded by the Global Environment Facility (GEF) and led by the World Bank, that seeks to transform the global food system by promoting sustainable, integrated landscapes and efficient commodity value chains.

1. FOLUR Impact Programme

The Impact Programme consists of a global platform and 27 country projects targeting the production landscapes of eight commodities:

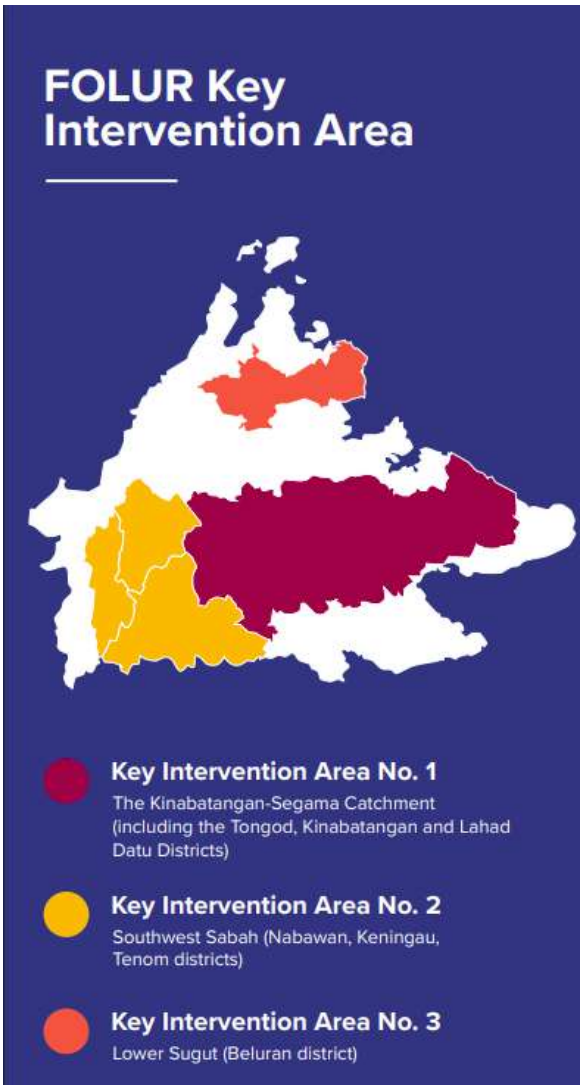


The global platform supports and coordinates implementing agencies, participating countries and core partners to achieve transformational impact. The platform also promotes FOLUR's integrated approach and the programme results externally to a wide range of stakeholders. The global platform activities are organised based on the following pillars:



2. MY-FOLUR Project

Malaysia is one of the 17 megadiverse countries, and its food system is shaped by agriculture and commodity production; whereby Sabah contributed national agriculture GDP at 15.9% in 2021. The tropical rainforests of Sabah are important global carbon sinks and are home to over 6,0000 species of flowering plants, 450 bird species and 42 endemic mammal species





Threats to Sabah's natural resources include increasing population with growing demand for food, water, houses, jobs and other infrastructure, as well as unsustainable agricultural development, lack of land development models and smallholder support, climate change, forest fires, hunting and poaching. Therefore, the Sabah Government is committed to a deforestation-free supply chain through a jurisdictional approach, with a policy to keep 50% of Sabah's land mass under forest cover and preserve at least 30% land area as Totally Protected Areas (TPA).

Within the Malaysian context, the MY-FOLUR Project targets palm oil commodity and aims to strengthen the protection of high conservation value and high carbon stock areas in Sabah through integrated landscape management approaches, sustainable and resilient palm oil value chains, and participatory conservation and restoration. The Project landscape is composed of three (3) Key Intervention Areas:

3. Goals And Targets

Due to growing demand for palm oil, which can be found in food, biofuels, soap and various mundane products, there are unprecedented pressure on tropical ecosystems that drives forest loss; and through the MY-FOLUR Project represents an opportunity to embrace landscapes and jurisdictional approaches to drive practical strategies for an integrated landscape management (ILM).

The MY-FOLUR Project set its sights on achieving these outcomes, within the Key Intervention Areas (KIAs), during the Project implementation phase from 2025 to 2030.



Target Outcomes

1. **200,000 ha – Area of Land Restored**
2. **2.38 mil ha – Area of Landscape Under Improved Practices**
3. **10.7 mil tCO2e – Greenhouse Gas Emissions Mitigated**
4. **54,000 – Direct Beneficiaries (27,000 females)**

4. Organisational Structure

The MY-FOLUR Project is governed by the Project Board (PB), that consisted of a Project Executive (chair), Development Partners (7) and Beneficiary Representatives (2). The Chair of the MY-FOLUR Project is the Secretary of Natural Resource, and the Project Board (PB) members consist of the following:

a. State Attorney-General
b. Director of State Economic Planning (UPEN)
c. Permanent Secretary of Ministry of Agriculture, and Fisheries and Food Industry (MAFFI)
d. Permanent Secretary of Ministry of Finance (MoF)
e. Permanent Secretary of Ministry of Local Government and Housing (KKTP)
f. Permanent Secretary of Ministry of Rural Development (KPLB)
g. Permanent Secretary of Ministry of Tourism, Culture and Environment (KePKAS)
h. Permanent Secretary of Ministry of Community Development and People's Wellbeing (KPMKR)
i. Resident Representative (RR), UNDP Malaysia, Singapore & Brunei Darussalam

MY-FOLUR Team is made up of 13 staff members, and is led by the National Project Director (NPD), Tuan Indra Purwandita Herry Sunjoto, the Deputy Chief Conservator of Forests on Planning & Management; and the Project Manager, Madam Rosila Anthony, the Head of the Forest Sector Planning Division.



The MY-FOLUR Team Organisational Chart.


STAFF
BRINGING BACK
OUR RARE
ANIMALS

PREVENTING BIOLOGICAL EXTINCTIONS WILL NOT HAPPEN BY PROTECTION AND CONSERVATION ALONE

Programmes for healthy demography and adequate nutrition through habitat enrichment are key

In the 2022 Sabah Forestry Department Annual Report, [Borneo Rhino Alliance (BORA), www.bringingbackourrareanimals.org] reported on two programmes being conducted in Tabin Wildlife Reserve: Sabah *Ficus* Germplasm Centre (SFGC) and Developing feeding grounds for large herbivorous mammals. Both programmes have continued and expanded in scope.

Over the period 2022-2025, BORA has been involved not only in developing and maintaining grasslands for elephants and wild cattle in Sabah and Perak, and growing food plants for orangutans in the eastern Sabah oil palm landscape. In addition, supplementing foods for a remnant cluster of Bornean bearded pigs in Kinabatangan, BORA also developed pastures for Malayan tiger prey in Pahang, as well as developing and improving Sabah Ficus Germplasm Centre. BORA believes that the latter programme is especially important in that, along with the dipterocarps, *Ficus* is the most important keystone woody plant genus in Sabah. The SFGC centre has now supplied some 20,000 *Ficus* seedlings and marcots for restoration and enrichment work on corporate-owned and Forest Reserve lands.

The underlying purposes of these programmes are to demonstrate that for preventing the extinction of endangered large mammals, the requirements are not simply to reduce poaching, but to reduce illegal wildlife trade, or to do captive breeding, or to rehabilitate and release captive individual animals, and also to do public awareness. None of those aims contribute much towards what is really needed: to sustain or recover healthy numbers and demography by ensuring that all wild individuals get adequate daily nutrition to allow a species-specific normal rate of reproduction. In short, endangered species are not much threatened by an increasing death rate (all animals die) but by an insufficient reproduction rate. Broadly, the same applies to invertebrates and plants.

In 2023, BORA produced two books based on work done over the previous five years: 'Habitat Restoration for fruit-eating wildlife - an illustrated handbook' which describes nursery, planting and maintenance in detail and 'An illustrated guide to Bornean orangutan food plants'. At the end of 2025, three additional books were published: 'Wildlife Conservation in the Oil Palm Landscape', which shows that all types of 'set-aside lands' in oil palm plantations must be enriched with vertebrate food plants if those set-asides are to have lasting biological value. The book on 'Orangutans in a Mixed Land Use Landscape', argues that the 20th century paradigms of 'rescue and rehabilitation'



A 4-years 8-months *Ficus annulata* marcot planted on a riparian zone in an oil palm estate owned by SD Guthrie.



Footprints of the last breeding Bornean banteng herd in Tabin Wildlife Reserve, which moves freely between the Reserve and the corporate and privately-owned lands.

(Left) The single biggest threat to the survival of woody seedlings planted on dry lands in eastern Sabah now is repeated damage by macaque monkeys, which here have broken off the growing branches of *Endospermum peltatum* planted in Genting Plantations conservation area.



(L–R) The threat to grasses planted as elephant food in wetlands is competition with reeds, sedges and non-grass plants, requiring constant weed removal; The single biggest threat to restoration of freshwater wetlands is flood waters – here, bamboo posts near Tenegang Besar river have survived but the *Ficus* marcots planted in them have died; and After the flood waters have receded in Kinabatangan, millions of seedlings of native trees (here *Nauclea orientalis*) spring up and could potentially be left to grow for future wood harvest.



Grass planted in Tabin for elephants have to be constantly managed - it grows faster than the elephants return and the elephants will not eat grasses that have flowered.

and protected areas are no longer fit for purpose, and that populations of wild orangutans now need to be supported and managed at landscape scale. The third book is entitled 'Lessons and Reflections on Nature Restoration - Orangutans and Figs in an Oil Palm Landscape', which provides detailed analyses and big-picture recommendations for all nature conservation-related stakeholders, with figs and orangutans used as an example. The production of all five books was supported by Unilever/WWF-Malaysia and all are freely available as pdf files. Landscape-level wildlife management applies not only to Bornean orangutans. For example, the last herd of Bornean banteng (now reckoned as Sabah's most endangered wild mammal species) spends much of its time out of the Reserve feeding on grasses in corporate and privately-owned lands.

The lesson learned by BORA in 2025 range from general to specific. A general lesson is that new paradigms are not widely accepted for many years. Established paradigms neither die nor give way willingly. Another lesson re-learned is that the prevailing interest in planting things is just a beginning. Much time, effort and funding are needed for maintenance. Competing weeds along with damaging animals on dry lands and flood waters on wetlands will kill most of what has been



Tabin elephants spend more than half their time in surrounding plantations, feeding on oil palms, a plant species on which they now depend for the bulk of their diet.





(Left) Fifteen month old *Sonneratia caseolaris* planted in Sandau Estate and (right) (here 15 months old, with pneumatophores) was found to be the most promising tree for restoration in freshwater wetlands as its fruits are relished by frugivorous mammals.

planted. In some cases, grasses grow so quickly that there are too few large mammals to eat them. One interesting lesson is that most of the tree species being planted in Kinabatangan do not need to be planted - natural dispersal of seeds by flood waters, wind and birds will do the job. The idea then arises: why not leave natural tree regeneration in freshwater wetlands on corporate-owned lands to become a supplement to the wood-based industry, with no nursery, planting, fertilizer and maintenance costs? If the aim is biodiversity rather than wood production, a better bet might be to plant wetland-tolerant *Ficus* species, along with BORA's best-performing native wetland 'fruit tree' *Sonneratia caseolaris*, in a programme supported by The Habitat Foundation.

Finally, the BORA programmes are not just of academic or species interest. In addition to providing ideas for utilisation of unproductive corporate-owned lands for wood production at very low cost, we should be aware that Bornean elephants now spend half their time outside Forest Reserves feeding on oil palms, a situation that is not sustainable when there is no replanting of palms underway. Programmes that are undertaken in Forest Reserves – whether planting of woody plants or grasses – can have significant economic implications – if we are open to new paradigms.

Special Feature

BORNEAN SUN BEAR CONSERVATION CENTRE Annual Report 2025

1. OPERATIONS

BSBCC Board Of Directors

In 2025, BSBCC's Board of Directors comprised of Dr. Wong Siew Te (Founder and CEO, BSBCC) and Datuk Frederick Kugan (Chief Conservator of Forests, Sabah Forestry Department).

Meetings With Partners

Two board meetings were held with partners, Sabah Forestry Department and Sabah Wildlife Department on 14th January and 8th September 2025.

Staffing

Two Research Assistants joined the BSBCC's Tabin Sun Bear Project team. BSBCC's veterinarian left BSBCC in May 2025. At the end of 2025, the Centre had a total of 34 staff based at the Centre and 6 staff in Tabin for the Tabin Sun Bear Project.

2. SUN BEARS

Sun Bear Reintroduction

A 5-year-old female sun bear, *Itam*, was reintroduced into the Tabin Wildlife Reserve after undergoing five years of rehabilitation at the Bornean Sun Bear Conservation Centre (BSBCC).

Itam was rescued as a cub and arrived at BSBCC in July 2020. Throughout her rehabilitation, she gradually developed strong forest survival skills, including natural foraging behaviours and nest-building. She remained highly alert and consistently avoided human presence, demonstrating behaviours that indicated readiness for release.

Itam was released to the Tabin Wildlife Reserve on 10th March 2025. Post-release monitoring initially indicated that Itam remained close to her release area.

On 30 April 2025, a mortality signal was received from her satellite collar, although no location data was available at that time. A subsequent alert on 10 May 2025 provided location data that enabled a focused search. Due to challenging terrain, weather conditions, and limited manpower, a field team was only able to access the site in early June 2025.

Itam's collar and incomplete skeletal remains were discovered beneath a tree near a small stream. Based on field evidence and examination of the remains, it is believed that Itam sustained fatal injuries after falling from a tree. There was no evidence of human involvement. This outcome is deeply saddening, particularly after the significant effort invested in Itam's rehabilitation and release. Nevertheless, her case provides valuable insights that will help strengthen future sun bear rehabilitation, release, and post-release monitoring efforts.



Itam, walking out from her translocation crate during her release into Tabin Wildlife Reserve.

Sun Bear Soft Release Programme

Tenom

Tenom, a 2-year-old female sun bear was first brought to Tabin Wildlife Reserve on 30 January 2024 as the first candidate for the soft-release programme. Her caretakers began walking her on 20 February 2024. She has now progressed from wearing a VHF cub collar to a GPS collar for monitoring.

Tenom is becoming increasingly self-sufficient—she climbs well, forages for wild fruits and insects, and responds to unfamiliar sounds. During her daily walks, she frequently moves away from the keepers, either foraging in thicker bush or nesting high up in the trees. However, due to her small size, a full release remains risky. Her caretakers will continue to care for her until she is fully weaned.



Tenom is starting to show independence and often will play alone away from her caretakers.

Pitang

Pitang was rescued in October 2024 at six months old, weighing 5 kg. She was highly habituated to humans upon arrival at BSBCC. After moving to Tabin Wildlife Reserve in January 2025, she quickly adapted to the forest environment, becoming more playful and curious. Her survival skills have improved significantly, although she is still adjusting to a fully wild diet. She is currently wearing a GPS collar for monitoring. Pitang and Tenom have been gradually introduced and are showing positive interactions. Tenom is more independent, while Pitang looked to her for guidance. Pitang often followed Tenom, climbing and playing alongside her. Through these interactions and her environment, Pitang is gradually gaining confidence and learning to navigate the forest on her own.



Pitang, during her forest walk in Tabin Wildlife Reserve.

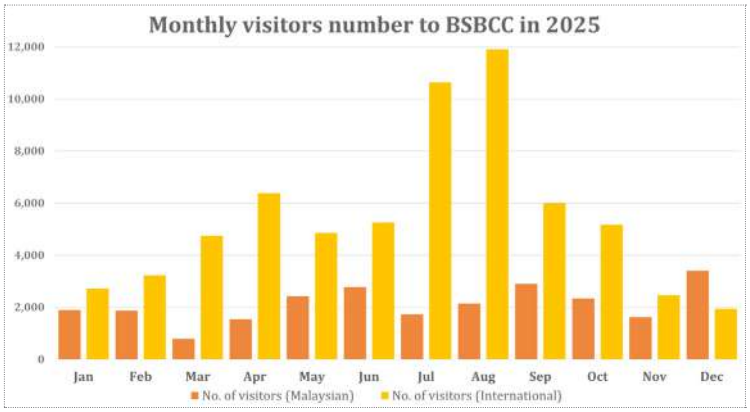
3. VOLUNTEERS AND INTERNS

In 2025, a total of 57 volunteers from nine countries, i.e., Malaysia, Australia, Singapore, the United Kingdom, the United States, Latvia, Mexico, Japan, and Sweden were recruited. In addition, 20 interns were recruited from Kolej Vokasional Sandakan 2, Politeknik Tawau, Universiti Putra Malaysia, Universiti Malaysia Terengganu, Universiti Teknologi MARA, Universiti Malaysia Sarawak, and Universiti Malaysia Sabah.
The volunteer and internship programme supports BSBCC's operations by assisting in the care of rescued sun bears. Volunteers and interns help the bear care team with food preparation, feeding, health checks, and enrichment activities.

4. VISITOR CENTRE OPERATIONS

The total number of visitors in 2025 was 90,760, of which 25,445 (28%) were Malaysians. A total of 65,315 (72%) were international visitors from 113 countries with the United Kingdom (20,694 visitors), Australia (9,420 visitors) and Italy (4,240 visitors) being the top three international nationalities that visited the Centre.

The month of August saw the highest total visitor numbers with 14,055 visitors and November the lowest with 4,085 visitors.



5. FACILITY UPGRADES

Expansion of Sun Bear Enclosures

The expansion of the sun bear enclosures, along with the replacement of the existing ironwood fencing, was completed in 2025. This upgrade provides larger forested areas for the sun bears to explore and forage. The original ironwood fencing was replaced with chain-link fencing, which is more durable and easier to maintain. In addition, new hotwire systems were installed to enhance the safety and security of the bears.



The newly installed chain-link fence replacing old iron-wood fences along the perimeter of sun bear enclosures.



Seating areas at BSBCC's new entrance foyer.



From left: Professor Benoit Goossens, Tuan Mohd Soffian Abu Bakar and Dr. Wong Siew Te holding the hard copy of the newly launched sun bear action plan.



Students from UiTM Kota Kinabalu participated in the sun bear enrichment making activities during the Pre-International Sun Bear Day event.



A group photo with students from SMK Elopura after their enrichment making activity with BSBCC's bear keepers.

Upgrading of Entrance Foyer

The construction of the BSBCC's new entrance foyer began in November 2024 and continued throughout 2025. This facility has been designed to enhance the overall visitor experience, offering ample space for interactive briefings and informative signage, while improving the Centre's visibility. The construction of this facility was funded by the Ministry of Tourism, Culture and Environment Sabah (KePKAS) and the Ministry of Tourism, Arts and Culture, Malaysia (MOTAC) and was officially completed on 4 October 2025.

6. SIGNIFICANT EVENT

Bornean Sun Bear Action Plan Official Launch

On 12 March 2025, the 10-Year Bornean Sun Bear Action Plan for Sabah (2025-2034) was officially launched at the Sabah Wildlife Department headquarters in Kota Kinabalu. This comprehensive plan marks a new era of focused conservation efforts for sun bears. The groundwork for this plan began in September 2019, during the International Symposium on Sun Bear Conservation and Management held in Kota Kinabalu. After several years of dedicated work, the action plan is finally a reality. The launch was officiated by Tuan Mohd Soffian Abu Bakar, Director of Sabah Wildlife Department, Dr. Wong Siew Te, CEO & Founder of BSBCC, and Prof. Benoit Goossens, Director of the Danau Girang Field Centre. The launch was also attended by Mdm Sarah Audrey Alexis, Assistant Secretary (Environment) for the Ministry of Tourism, Culture and Environment Sabah (KePKAS), alongside senior officers from the Sabah Wildlife Department. We extend our heartfelt thanks to Dr. Miriam Kunde, Prof. Benoit Goossens, the Danau Girang Field Centre, and all who poured countless hours into making this plan come to life.

Pre-International Sun Bear Day

The Pre-International Sun Bear Day and Earth Day 2025 celebration took place at the Lok Kawi Wildlife Park on 26–27 April 2025. Visitors of all ages enjoyed a day full of vibrant activities, educational booths, and hands-on fun — all while learning more about the importance of protecting our amazing wildlife species. The event was organized in collaboration with the Lok Kawi Wildlife Park and Borneo Behavior Solutions.

The highlights of the event included coloring contest, scavenger hunt, sun bear enrichment making for the resident bears at Lok Kawi Wildlife Park, and informative exhibitions by BSBCC, 1Stop Borneo, Seratu Aatai and Lok Kawi Wildlife Park.

International Sun Bear Day 2025

The 9th celebration of the International Sun Bear Day took place on the 16 May 2025 at the Bornean Sun Bear Conservation Centre (BSBCC), in Sepilok, Sandakan. With this year's theme "Conservation Education: Bridging People and Wildlife", the Centre hopes conservation education will bring people closer to nature, thus appreciating the importance of wildlife in maintaining the health of our ecosystem.

Some 50 students and teachers from local schools SJK (C) Ming Chung, SJK (C) Yuk Choi, SK Sung Siew, SK Muhibbah and SMK Elopura were present at the BSBCC to join the celebration. Activities in store for these students include interactive guided tours and a sun bear enrichment making activity which highlighted the importance of animal welfare to participants. Prior to the actual celebration day, online contests were announced including quizzes, doodle art contest and drawing contests which were opened for local and international audiences to participate. Visitors to the BSBCC also get to

enjoy a Pre – International Sun Bear Day celebration on the 3–4 May 2025, with booths from the BSBCC themselves, Sepilok Junior Rangers and Kolej Vokasional Sandakan that offered interactive activities for all ages.

7. EDUCATIONAL ACTIVITIES

Group Visits

A total of 76 groups comprising 3,273 people visited BSBCC in 2025. These groups were from local kindergartens, primary and secondary schools, tertiary education institutions and governmental departments.



SJK (C) Chi Hwa Sandakan visit to BSBCC on 4th January 2025.

Exhibitions

BSBCC exhibited in 15 invited events in Sandakan, Tongod, Telupid, Lahad Datu, Kinabatangan, Kota Kinabalu, Kuala Lumpur and Kuching. Apart from displaying sun bear information and specimens, interactive activities were conducted to enhance learning about sun bears among visitors to the exhibition booth.

School Outreach Programmes

BSBCC visited 15 schools located in Sandakan, Kinabatangan, Tambunan, Tongod and Beluran for outreach programmes during 2025. The Centre collaborated with the Sabah Wildlife Department, Rainforest Discovery Centre, Seratu Aatai, Orangutan Appeal UK and KLK Sawit Nusantara Berhad in conducting activities which included talks, exhibitions and interactive games.



BSBCC's intern, Meriecelly interacting with students during an outreach programme at SK Imbak, Tongod.

8. FINANCIAL SUMMARY

Funding

In 2025, BSBCC generated RM6,116,922.54 from grants, ticket sales, sales of souvenirs, beverages and snacks, donations, filming fees, education activity fees, and BATs volunteer programme fees.

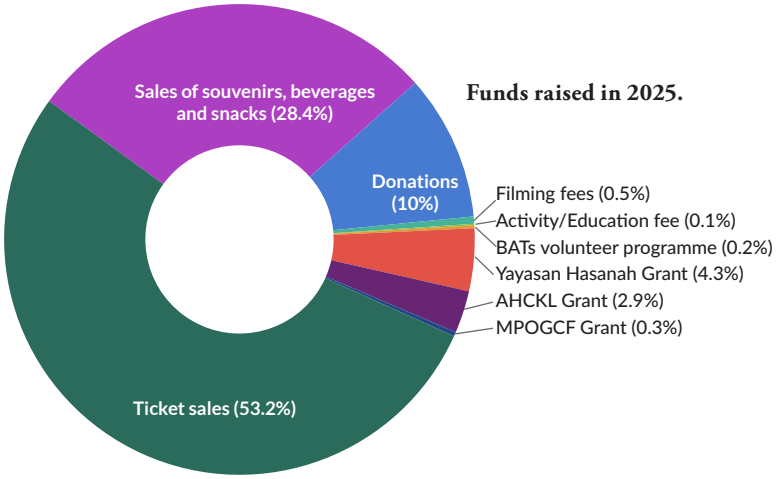
Most funds were raised from ticket sales (53.2%), sales of souvenirs, beverages and snacks (28.4%) and public donations (10%). Among major donations received were from APE Malaysia, Yip Choo Lian, Stitching Bears, Winton Foundation and Oakland Zoo.



Ecotourism activities at BSBCC continue to be a key contributor to the Centre's income.

Sun Bear Adoption Programme

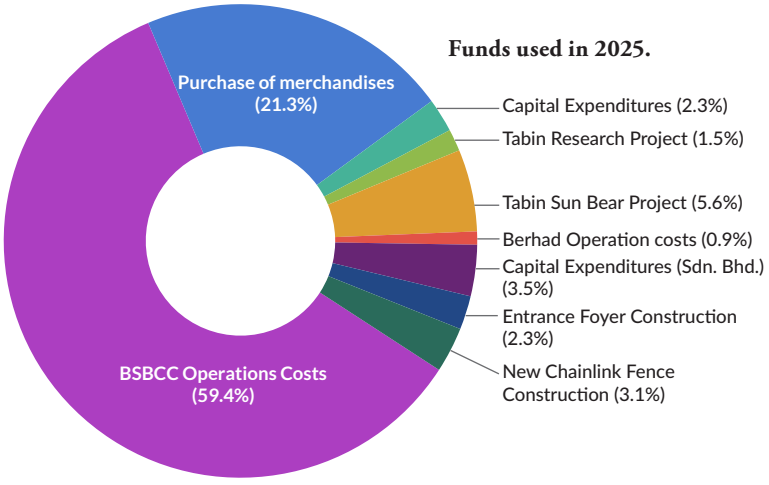
A total of RM220,646.13 was generated from the BSBCC's Adoption Programme which includes 25 exclusive adoptions through the My Bear Adoption Programme. The adoption programme was promoted among visitors at the Centre as well as through BSBCC's social media platforms and website.



Funds raised in 2025.

Expenses

The expenses incurred for 2025 totaled RM5,758,257.30, most of which was spent on the Centre's operations (59.4%) which included staff salaries, bear food, bear medication and facility maintenance. This was followed by the purchase of merchandises for sale at BSBCC's shop (21.3%) and Tabin Sun Bear Project expenses (5.6%), which includes staff salary, minor construction and repair works for basecamp.



Funds used in 2025.

Special Feature

PANTHERA Report In 2025

1. WILDLIFE PROTECTION INITIATIVES

Panthera Malaysia partnered with the Deramakot, Tangkulap, and Tongod District Forestry Office of Sabah Forestry Department (SFD), the Sabah Wildlife Department's Community Rangers (Tongod-Alpha team), and the Aki Keramuak Rescue Team (AKRT) to conduct joint patrols in deep forest zones identified as high-risk for poaching and illegal entry (Fig. 1 and Fig. 2).



Fig. 1: Joint patrol team members from Panthera Malaysia, the Sabah Forestry Department, and the Sabah Wildlife Department during a deep-forest counter-poaching operation.

Coordinated Patrol Efforts

The joint patrol covered a total distance of 3,054 km and 722 hours of active patrol, including 2,611 km by vehicle, 431 km on foot, and 12 km by boat. The 2025 patrols recorded 60 detections of human threats and illegal activities in the Deramakot landscape, comprising 39 detections of poaching activities, 16 detections of agarwood collection activities, and five detections of illegal logging (Table 1).

Table 1: Summary of Detections of Illegal Human Activities in the Deramakot Landscape (2022 –2025).

Year	Loggers	Poachers	Agarwood Collections	Total Cases
2022	21	72	23	116
2023	13	39	2	54
2024	0	19	9	28
2025	5	39	16	60

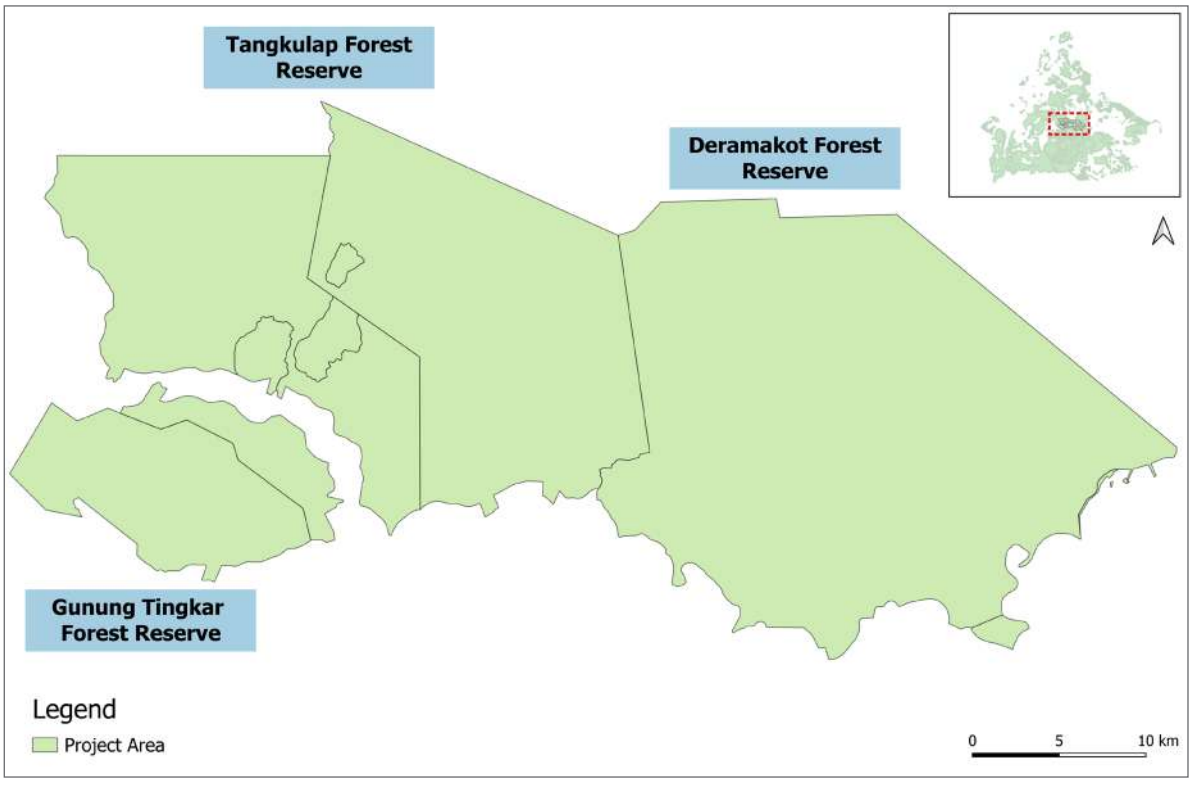


Fig. 2: The project area of Panthera Malaysia's Project Dupot, encompassing the Deramakot, Tangkulap, and Gunung Tingkar Forest Reserves.

Total Access Point (AP) Monitoring

Panthera Malaysia continued monitoring key access points (APs) using strategically deployed PoacherCam units. The surveillance data and total monitoring effort for 2025 are summarized below (Table 2).

To build local field capacity, Panthera Malaysia and SFD also conducted a joint workshop on Basic Navigation and SMART Data Collection Training in 2025. The session was attended by members of AKRT, Lebihasil Sdn. Bhd. personnel, and community representatives from kampung Kuala Keramuak (Fig. 3).

Table 2: Access Point (AP) Monitoring Effort

No.	Access Point (AP)	Monitoring start date	Total Monitoring Effort (Days)
1	KK-04	17-Nov-2024	374
2	KK-06	23-Jan-2025	353
3	GG-03	16-Apr-2025	100
4	GG-04	16-Apr-2025	244
5	GT-03	14-Dec-2024	253
6	LH-07	23-Jan-2025	235
7	LH-08	15-Apr-2025	244
8	LL-08	11-Nov-2024	224
9	LL-09	15-Apr-2025	245



Fig. 3: Joint training workshop participants from AKRT, Lebihasil Sdn. Bhd., and the Kampung Kuala Kuala Keramuak community representatives with facilitators from Panthera Malaysia and SFD.

Incursion Findings







Fig. 4: An illegal logging activity in Deramakot Forest Reserve detected during a joint patrol with Panthera Malaysia. Mr. Bonaventure Tuatin, Head of the Enforcement Unit for the Deramakot District Forestry Office (left), measures and inspects a log illegally felled by encroachers to document evidence for follow up enforcement action.

Fig. 5: Two suspected illegal agarwood (gaharu) collectors detected at night by a PoacherCam in Gunung Tingkar Forest Reserve.

Fig. 6: PoacherCam imagery capturing an armed encroacher carrying a homemade shotgun (bakakuk) within a forest reserve.

2. COMMUNITY ENGAGEMENT

Panthera Malaysia's 2025 community programme focused on operationalizing the Community Conservation Area (CCA). The Programme transitioned from building local trust to executing legal and technical frameworks on the ground. The key milestones detailed below highlight our progress toward formalizing community-led protection and co-management of the Keramuak landscape.

Strategic Realignment of Conservation Boundaries

Technical consultations with the Lands and Surveys Department (JTU) and the Department of Irrigation and Drainage (DID) helped identify unclaimed riparian zones that may form a continuous conservation corridor for the CCA. The project is now pursuing the Temporary Occupation License (TOL) mechanism. If approved, this will allow the Keramuak community to navigate complex private land-tenure issues and establish the legal authority required to secure the corridor and block illegal poachers.

Capacity Building: Community-Led Mapping & Monitoring

In February 2025, a hands-on workshop was held to train nine local community members in GPS tracking and field navigation. This allows community members to independently map land-use boundaries and critical conservation areas. Equipping locals with these technical skills ensures their spatial knowledge is directly integrated into the long-term monitoring and management efforts within the CCA.

Table 3: Number of participants by village for the Community Mapping Workshop.

Village	Number of Participants
Kampung Kenang-Kenangan	2
Kampung Kuala Keramuak	3
Kampung Keramuak Dalam	4
TOTAL	**9**

Socio-Economic Baseline Survey

Between February and August, we surveyed 283 households across four villages, reaching roughly 90% of the adult population. This baseline survey provided clear data on local demographics including their level of education, and main sources of income. We will use these insights to design conservation programs and training workshops that match the actual needs and economic realities of the community.

Table 4: Total number of survey respondents by village in the Keramuak villages

Village	Number of Participants
Kampung Keramuak Dalam	144
Kampung Kuala Keramuak	94
Kampung Tenaga Baru	32
Kampung Kenang-Kenangan	13
TOTAL	**283**



Fig. 7: Panthera Malaysia staff Beathres Petrus (right) and Welneita Ribut (left) discuss riverbank protection boundaries for the Keramuak CCA with Sabah DID Deputy Director Miklin Ationg (center).



Fig. 8: Panthera Malaysia staff demonstrating how to navigate and record coordinates using a handheld GPS during the Community Mapping workshop.



Fig. 9: The participants from the Keramuak community alongside Panthera Malaysia trainers at the conclusion of the field navigation training.



Fig. 10: Keramuak Dalam residents completing the household baseline survey at the community hall.

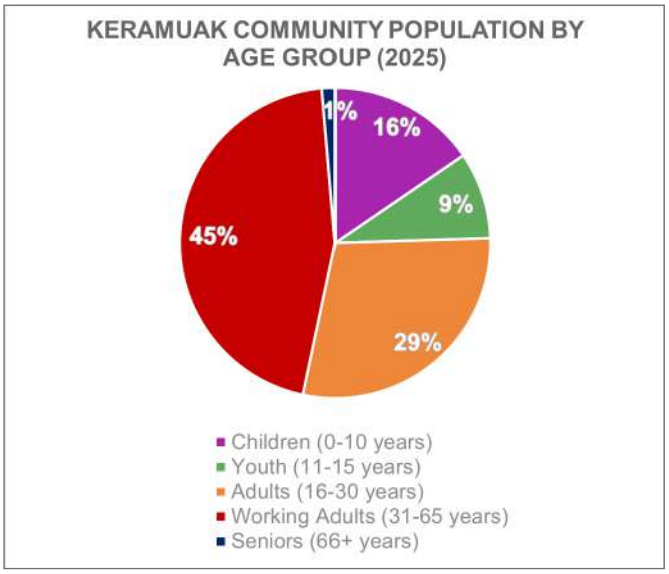


Fig. 11: Age distribution of respondents based on demographic survey data.

Securing Legal Status for the Keramuak CCA Committee

The Keramuak CCA Committee has submitted its initial registration through the Electronic Registry of Societies (e-ROS). In response to follow-up requests from the Registrar of Societies (JPPM), the committee provided the required supplementary documentation. Completing this registration will give the committee a formal legal status needed to sign land agreements and officially manage the conservation area.

Survey of Community Hunting Practices

Following the completion of the Free, Prior, and Informed Consent (FPIC) consultations in 2024, we completed a survey on community hunting practices with a total of 999 respondents across four villages. The data shows that local hunting is strictly for subsistence and reveals a strong community willingness to adopt sustainable wildlife management practices. This data will be used to help establish Sabah's first community-managed hunting zone under Section 32 of the Wildlife Conservation Enactment 1997 (Village Animal License), protecting both local food security and wildlife populations.

Next steps and 2026 Work Plan

- **Official Committee Approval**

We will support the committee in securing full official approval for their pending e-ROS registration by mid-2026. Gaining this formal legal status will allow the committee to work directly with government agencies and transparently manage the conservation area's resources.

- **Boundary Mapping & TOL Application**

We will train and guide a community survey team to physically map out the 60-km CCA riverbank corridor by December 2026. This fieldwork will provide the precise mapping data needed to complete the application for the Temporary Occupation License (TOL).

- **Drafting the Community Protocol**

We will host management workshops to help local leaders draft the official Keramuak Community Protocol. This document will formally outline the community's traditional rules for managing forests and wildlife while protecting local livelihoods.



Fig. 12: Panthera Malaysia staff assisting the Keramuak CCA Committee representatives with their online e-ROS registration.



Fig. 13: Jumin bin Mampang (right) from Panthera Malaysia interviewing a Keramuak Community member during the hunting practices survey.

3. WILDLIFE MONITORING

Monitoring of Sunda Clouded Leopard

In Deramakot Forest Reserve (FR), 16 paired-camera stations were deployed to support continued monitoring efforts of the Sunda Clouded Leopard (*Neofelis diardi*), a flagship carnivore species within Borneo's forest ecosystems. The survey forms part of a long-term monitoring initiative designed to assess the persistence and spatial ecology of known individuals within the landscape. Camera stations were deployed at approximately 2.5-km intervals to facilitate individual identification and improve detection probability. Data generated from this survey are expected to strengthen understanding of Sunda clouded leopard habitat use and contribute towards the long-term wildlife-monitoring efforts within Deramakot.

Flat-Headed Cat Density Estimation

At the Tangkulap FR, two camera trap clusters comprising 25 stations each were established to monitor the Flat-headed cat (FHC) (*Prionailurus planiceps*), one of Southeast Asia's most threatened and least-studied small felids. The survey adopted the Space-to-Event (STE) sampling design, with stations systematically deployed at 500-m intervals to maximize spatial coverage within potential habitat areas. Given the limited ecological information currently available for the species throughout much of its range, the survey will generate valuable density estimation data to support future conservation planning and further research initiatives. Data collection is currently ongoing, with retrieval scheduled for February 2026.



Fig. 14: Panthera Malaysia staff, Rudy George, placing branches to mark the camera trap's field of view during the STE survey setup.



Fig. 15: Panthera Malaysia Project Coordinator, Tee Thye Lim, briefing field staff during the first implementation of the STE survey procedure at Sepilok Forest Reserve.

Pilot Implementation of STE-based Wildlife Density Monitoring in Sepilok Forest Reserve

A pilot wildlife density survey was initiated in the Sepilok FR using the same STE sampling framework employed in Tangkulap Forest Reserve. A total of 25 camera trap stations were deployed at 500-m intervals across the study area, representing the first structured and systematic camera trap survey conducted within the Sepilok landscape. Beyond refining the STE sampling framework, the survey will provide baseline information on species occurrence and provide important insights into population density of small- to medium-sized mammals. Retrieval of all camera equipment is scheduled for January 2026.

Otters of Tangkulap: Incidental Records of Two Rare Otter Species

Beyond our primary survey goals, our long-term camera trap monitoring captured incidental but highly significant records of two rare otter species in Tangkulap Forest Reserve: the endangered hairy-nosed otter (*Lutra sumatrana*) and the Eurasian otter (*Lutra lutra*).

The hairy-nosed otter is one of the rarest and least-studied mammals globally, with very few confirmed records in Southeast Asia. Its presence within Tangkulap Forest Reserve is a vital addition to our understanding of the species' remaining distribution in Malaysia. Meanwhile, our analysis of previous flat-headed cat survey data confirmed the presence of the Eurasian otter in the reserve. This represents the first definitive photographic evidence of the species in Malaysia since a sighting near the Danum Valley Field Centre, Lahad Datu in 2014. With these records, Tangkulap FR is now the only known site in Malaysia that supports all four native otter species, highlighting its exceptional conservation value.



Fig. 16: Key wildlife species recorded by camera traps during the survey period. Clockwise from top-left: (A) Bearded pig (*Sus barbatus*); (B) Proboscis monkey (*Nasalis larvatus*); (C) Sunda pangolin (*Manis javanica*); (D) Binturong (*Arctictis binturong*).

These discoveries received international attention at two major scientific conferences:

i. The 16th International Otter Congress (Lima, Peru): Mr. Woo Chee Yoong from Malaysia Otter Network (MNO) featured our findings in his presentation, "The Status and Conservation Efforts of the Hairy-nosed Otter in Malaysia."
ii. The Eurasian Otter Conference (Colchester Zoo, UK): Ms. Anna Wong presented our photographic data in her talk, "Rediscovery of Eurasian Otter in Tangkulap Forest Reserve, Sabah, Malaysia.

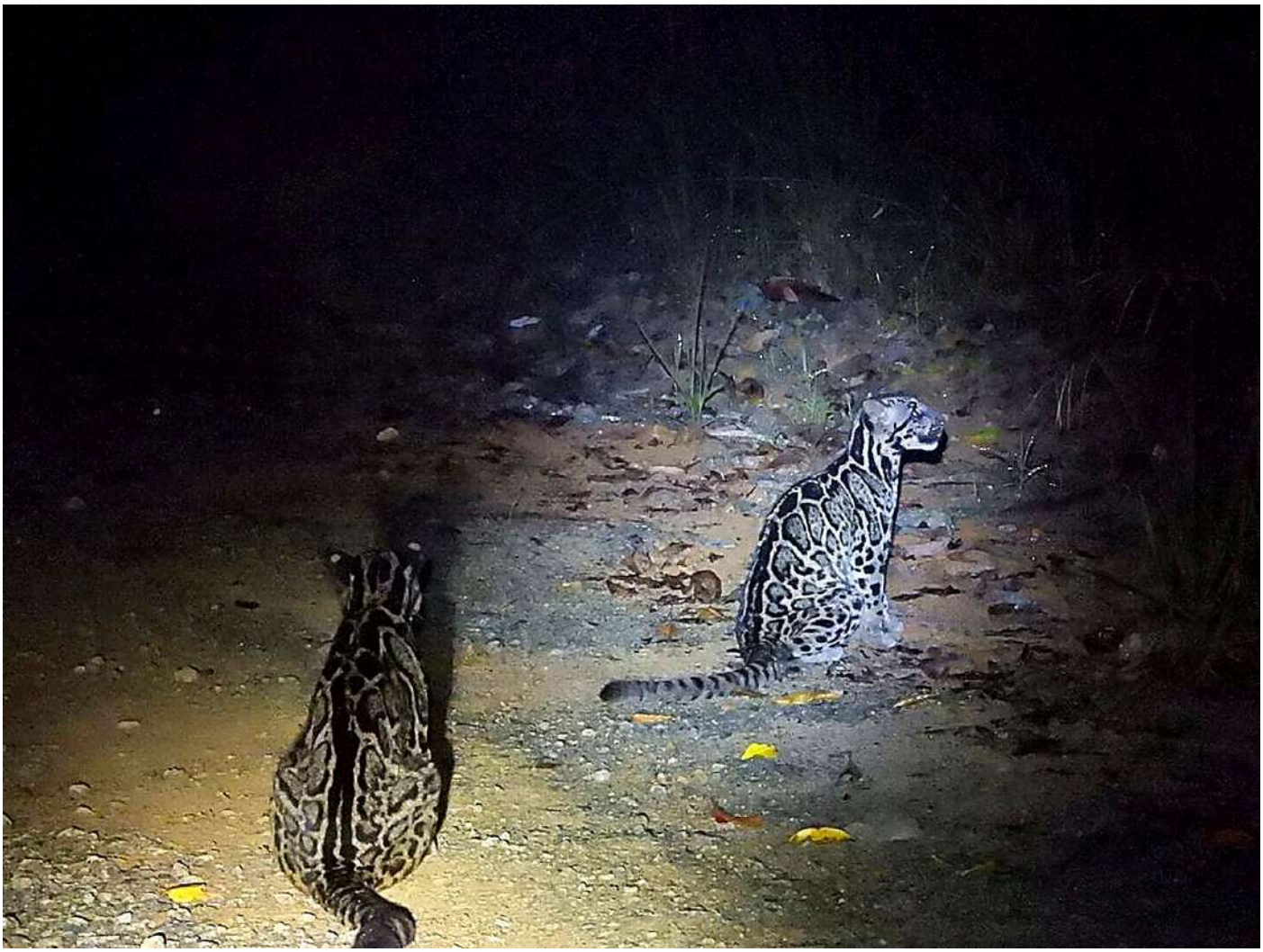
Upcoming Monitoring Priorities

Bukit Hampuan Felid Inventory

Building upon ongoing monitoring efforts and recent survey findings, the Wildlife Monitoring Unit of Panthera Malaysia continues to identify priority landscapes requiring further biodiversity assessments and species documentation.

Preliminary planning discussions were initiated with SFD for a proposed felid inventory in Bukit Hampuan FR, an important forest corridor located adjacent to Kinabalu Park. Owing to its strategic location between protected and production forest landscapes, the reserve is believed to play a critical role in maintaining habitat connectivity for a range of montane and lowland wildlife species. However, the area remains relatively under-surveyed, particularly with regards to medium- and large-sized carnivores.

The proposed survey will focus on documenting high-priority felid species, including the Sunda clouded leopard (*Neofelis diardi*) and the endemic bay cat (*Catopuma badia*), while also establishing important baseline information on mammal diversity within the landscape. In addition to confirming species presence, the survey is expected to contribute preliminary insights into habitat use and species occupancy that will support future conservation planning and management interventions within the region. Camera trap deployment is tentatively scheduled to commence in March 2026.



Clouded Leopard (*Neofelis diardi*) at Deramakot Forest Reserve.

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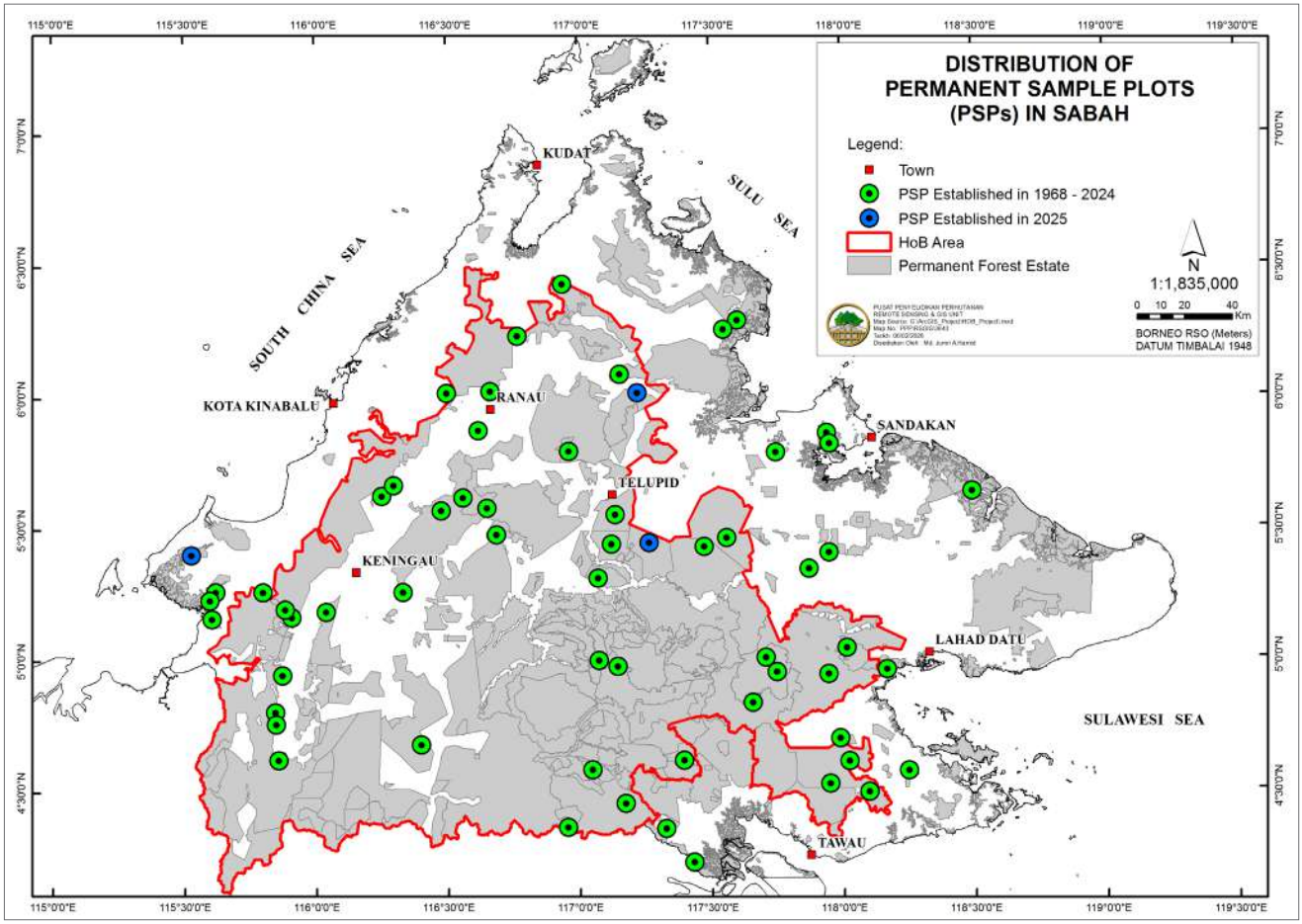
FOREST ECOSYSTEM MANAGEMENT

1. SUB-PROGRAMME TERRESTRIAL ECOSYSTEMS

A. Ecological Integrity of Terrestrial Ecosystem

i. Monitoring of forest ecosystem health

In 2025, the Ecology, Silviculture and Systematic Botany sections established 25 permanent sample plots (PSPs) in three study areas: Meliau Range Forest Reserve (FR), Tangkulap FR, and Padas Damit FR. Plot establishment in Meliau Range FR and Tangkulap FR was carried out under the HoB Project, while activities in Padas Damit FR supported the formulation of the conservation area management plan.



Distribution of Permanent Sample Plot Clusters in Sabah (Map: Mohd. Jumri Abdul Hamid)

ii. Forest dynamics

Re-census of established Permanent Sample Plots (PSP) was conducted in several forest reserves. The table below summarises the re-census activities in 2025.

Forest Reserve/Area	Activity	Purpose	Remarks
Kabili-Sepilok FR	Maintenance and re-measurement of RP17	Routine monitoring	Block 2 (2ha plot) completed
Timimbang-Botitian SFM	Second re-census of plots established in 2014	Management plan	Conducted ground measurements and plot maintenance.
Ulu Kalumpang-Wullersdorf SFM	Second re-census of plots established in 2015	Management plan	Conducted ground measurements and plot maintenance.

iii. Inventory of forest cover and land use (update 2025)

Unlike the previous year, the project focus in 2025 was on areas that will be scanned during the 2026 Airborne LiDAR survey, namely the Ulu Tungud Forest Reserve (FR) Complex, Sapulut FR Complex, and Ulu Segama-Malua FR Complex. Despite challenges faced by the inventory team, a total of 48 inventory points (IPs) were successfully recced. However, due to safety considerations, only 37 IPs (equivalent to 148 plots) were established, representing approximately 70% of the recced IPs. In addition to ground plot establishment, the necessary software and hardware to support project data processing and analysis were successfully procured. A three (3)-day Technical Training on the RIEGL VZ-600i Terrestrial Laser Scanner and RiSCAN PRO Software was also conducted to enhance the team's readiness for terrestrial LiDAR scanning, a new technology for the department that is expected to support future field data collection.





A & B: Biometric Project Field Inventory Team from Ecology, Systematic Botany, and Soil Science Section. (Image: FEM Programme) **C.** Technical Training on RIEGL VZ-600i Terrestrial Laser Scanner and RiSCAN PRO Software.

iv. Land Use and Land Cover Monitoring using GIS and Remote Sensing Technology

As part of the biennial land use and land cover (LULC) monitoring programme implemented across Sabah, 64 satellite scenes have been acquired for the 2025 cycle to support statewide mapping activities, and the mapping exercise has commenced. The classification will be based on 19 land cover classes, with a focus on 9 major classes for analysis and reporting. In addition, forest cover analyses were conducted for Meliau Range Forest Reserve, Tangkulap Forest Reserve, and Padas Damit Forest Reserve. This information was also used to support the formulation of the conservation management plan for Padas Damit Forest Reserve.

v. Timber resource Assessment in Deramakot Forest Reserve.

A field inventory exercise was conducted in Deramakot Forest Reserve as part of the 2025 Forest Resource Assessment. This activity continued the work initiated in 2024 and generated updated inventory data for forest management planning. A total of 11 inventory points were established in 2025; a total of 88 PSP plots were enumerated, and approximately 3,500 individual trees were recorded. The outputs contributed directly to the formulation of the 4th Deramakot Forest Management Plan (2025-2034).



Field personnel conducting forest inventory activities in Deramakot Forest Reserve. (Image: Silviculture Section)

2. SUB – PROGRAMME TIDAL ECOSYSTEMS

A. Ecological Integrity of Tidal Ecosystems

i. Assessment of Mangrove Ecosystems in Sabah—the Long-Term Ecological Research (LTER)

The 21st Project Steering Committee (PSC) Meeting was held on 4 November 2025 at the Forest Research Centre and chaired by Datuk Frederick Kugan, Chief Conservator of Forests. A progress report was presented by Dr. Joseph Tangah, Project Leader of the SFD–ISME Mangrove Rehabilitation Project in Sabah. The International Society for Mangrove Ecosystems (ISME) delegation, led by Professor Shigeyuki Baba, comprised Professor Emeritus Toyohiko Miyagi, Associate Professor Ko Hinokidani, and Professor Yanagisawa. Two invited speakers from Universiti Malaysia Sabah, Mr. Sikula Magupin and Ms. Lilian Jose, also presented their PhD research. Following the PSC meeting, a six-day field programme was conducted across the Beluran, Sandakan, Lahad Datu, and Kunak districts, involving site inspections and field training. Hands-on sessions focused on soil sampling techniques and the estimation of wood density for selected mangrove species using LiDAR technology.



21st PSC Meeting on 23rd February 2024 at Forest Research Centre, Sepilok, Sandakan. (Image: Mangroves Ecosystem Section).

ii. Study Tour by Tokyo Metropolitan Kunitachi Senior High School

A study tour by Tokyo Metropolitan Kunitachi Senior High School took place from 25–29 March 2025. The delegation comprised 10 students aged 16–17, accompanied by two teachers. The highlight of the programme was a mangrove planting activity at Weston Forest Reserve. The educational visit also included a firefly observation session, a learning visit to the Klias Peat Swamp Field Centre to study peat swamp ecosystems, and site visits to Sulaman Lake Forest Reserve (planted mangrove area), Kota Kinabalu Wetland Centre, and Lok Kawi Wildlife Park, as well as a cultural visit to the Kota Kinabalu Wet Market. At the end of the programme, student representatives delivered a brief presentation summarising their learning experiences and reflections.

iii. Launch of the Coffee Table Book: *Rehabilitation of Mangroves in Sabah*

A coffee-table book titled *Rehabilitation of Mangroves in Sabah* was officially launched on 22 October 2025 at the International Conference on Borneo's Green Heart, held at the Sabah International Convention Centre (SICC), Kota Kinabalu, Sabah. The publication documents the development and implementation of Phase 3 (2019–2024) of the Sabah Forestry Department–International Society for Mangrove Ecosystems (SFD–ISME) Mangrove Collaborative Project. It presents a compilation of case studies, key findings, practical management approaches, and future directions from the project, intended as a comprehensive reference for researchers, practitioners, policymakers, and community stakeholders involved in mangrove conservation and restoration. Ultimately, the publication aims to enhance public understanding of the ecological and socio-economic importance of mangroves while inspiring continued efforts to protect, conserve, and restore these critical ecosystems for the benefit of present and future generations.





(Left) Launching of the Coffee Table Book: Rehabilitation of Mangroves in Sabah (The SFD-ISME Phase 3: 2019 – 2024 Mangrove Collaborative Project) (Image: Mangrove Ecosystem Section) (Right) Mangrove planting by Tokyo Metropolitan Kunitachi Senior High School at Weston Forest Reserve, Weston, Beaufort. (Image: Mangrove Ecosystem Section)

3. SUB-PROGRAMME PHYSICAL ENVIRONMENT

A. Ecological Integrity of Physical Environment

i. Soil Productivity and Carbon Assessment in Selected Forested Areas

In 2025, the Soil Science Section conducted field-based soil assessments and carbon stock estimation studies at two forest management areas as part of the Heart of Borneo Scientific Expeditions. These assessments aimed to safeguard the vital ecosystem services provided by soils in supporting ecological processes, and to estimate carbon pools to inform sustainable land-use planning and low-carbon emission strategies. The soil assessment involved detailed investigations of soil characteristics, including parent material, drainage conditions, soil depth, and key physical and mechanical properties. For the forest carbon stock study, estimates were made for five carbon pools: aboveground biomass (AGB), belowground biomass (BGB), non-tree vegetation (NTV), deadwood and litter (debris), and soil organic matter.

Assessments were conducted in four forest reserves, namely Meliau Range Forest FR, Tangkulap FR, Timbah FR, and Padas Damit FR, to evaluate soil characteristics and ecosystem conditions. The sites showed clear spatial variation in soil types, ranging from ultramafic-derived soils in Meliau Range, to nutrient-poor mineral soils in Tangkulap and Timbah, and peat swamp and mangrove soils in Padas Damit. Across all sites, soils were generally low in nutrients, particularly nitrogen, phosphorus, and potassium. Meliau Range FR is characterised by ultramafic soils with elevated heavy metal content, whereas Tangkulap FR and Timbah FR are characterised by low-fertility mineral soils. Padas Damit FR consists of peat and mangrove systems that contribute significantly to carbon storage and coastal ecosystem functions. Overall, the findings highlight the influence of soil properties on ecosystem patterns and support ecosystem-based forest management approaches.



Team members from the Soil Science Section conducting soil sampling at Padas Damit Forest Reserve. (Image: Soil Science Section)

ii. Baseline Study of Soil Carbon in a Mangrove Restoration Site at Teluk ISME, Kota Marudu

The Ecological Fiscal Transfer (EFT) fund approved an allocation of RM100,000.00 for a study entitled "Kajian Awal Karbon Tanah di Kawasan Restorasi Bakau, Teluk ISME (Hutan Simpan Marudu Bay, Kelas 1), Kota Marudu", jointly implemented by the Mangrove Ecosystem Section and Soil Science Section of the Forest Research Centre. As part of the study, 60 soil samples were collected from the restoration site and transported to the Forest Research Centre for laboratory analysis to support soil carbon assessment. A mangrove planting programme was also held on 18 September 2025 in conjunction with World Mangrove Day 2025, involving more than 30 staff from various sections, reflecting strong institutional collaboration in mangrove conservation and restoration efforts.



Team members from the Mangrove Ecosystem Section and Soil Science Section conducting soil sampling at Marudu Bay, Kota Marudu, for the EFT-funded Soil Carbon Project. (Image: Soil Science Section)

iii. Water quality of rivers

Water quality assessments are conducted in Forest Management Units (FMUs) and forest reserves using the national Water Quality Index (WQI) standard. This system evaluates river water quality and supports monitoring of changes associated with forest management activities. Ongoing monitoring is being carried out in the Ulu Segama–Malua and Deramakot Forest Reserves.

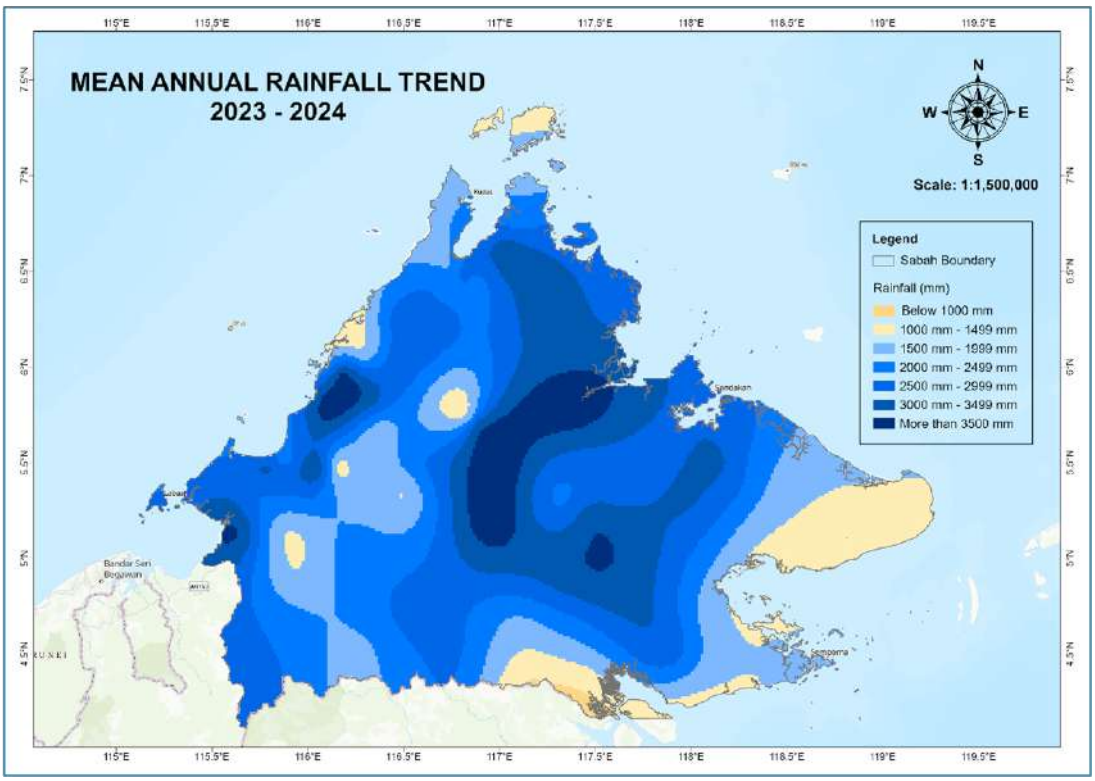
River water quality monitoring programme.

FMU	River	No. of sampling point	WQI
Deramakot Forest Reserve	Sg. Tebelion, Sg. Mannan, Sg. Balat & Sg. Kun-kun	4	All Class II
Ulu Segama-Malua Forest Reserves	Sg. Kawag Sg. Bole Sg. Malua Sg. Segama Bawah Sg. Juak Sg. Segama Ulu	6	Class II Class II Not Available Class II Class I Class II

B. Climate

i. Rainfall of Sabah

The Hydrology Unit obtained 2024 rainfall data from 79 stations managed by the Department of Irrigation and Drainage (DID), with an additional station added in 2025. However, only 68 stations provided comprehensive data for 2023 and 2024. The Ecosystem Monitoring Unit utilised the available data to generate an isohyet map of mean annual rainfall distribution for 2023–2024. Approximately 36 stations (53%) recorded mean annual rainfall of less than 2000 mm, 27 stations (40%) recorded between 2000 and 2999 mm, while the remaining 5 stations (7%) recorded more than 3000 mm.



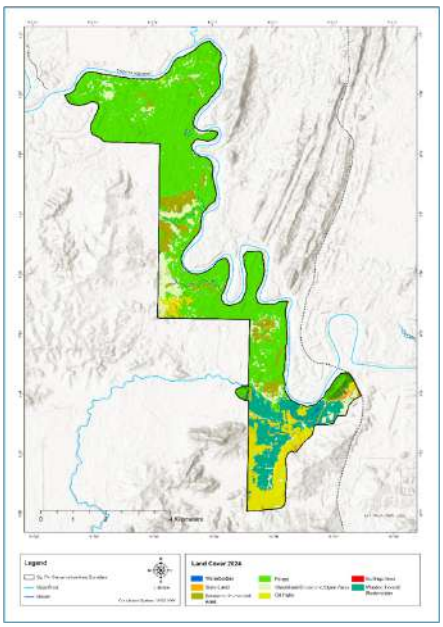
The isohyet map of Sabah is based on the mean annual rainfall from 68 rainfall stations in Sabah for the period 2023 to 2024. (Data source: Drainage and Irrigation Department; Map: Ecosystem Monitoring Unit).

4. SUB-PROGRAMME ECOSYSTEM SERVICES

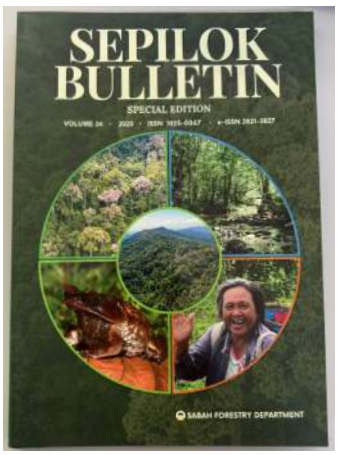
A. Evaluating Forest Ecosystem Services in Sabah

i. Assessment of ecosystem services in Sg. Pin, Kinabatangan

The fourth ecosystem service assessment was conducted in the Sg. Pin Conservation Area, Kinabatangan, in September 2024, followed by the *Bengkel Ekspedisi Saintifik Sg. Pin Conservation Area (SPnCA) Siri 2* in September 2025. The assessment was conducted to evaluate ecosystem health, the ecosystem services provided by the conservation area, and its conservation significance. A multidisciplinary approach was adopted, incorporating physical environmental, biodiversity, and social components, including forest cover analysis, forest ecosystem assessment, soil assessment, biodiversity surveys, and a social survey, to provide a comprehensive evaluation of ecosystem conditions and ecosystem service provision. The key findings underscored the importance of the Sg. Pin Conservation Area as a provider of critical ecosystem services, particularly regulating and provisioning services, which play a vital role in maintaining ecological integrity and supporting local community livelihoods.







(Left) Land cover map of the Sg. Pin Conservation Area, Kinabatangan, showing the study area. (Map: Ecosystem Monitoring Unit, 2025).
(Centre and right) Handover of Sepilok Special Edition Vol. 34 to the Chief Conservator of Forests, Datuk Frederick Kugan, featuring research findings on ecosystem services assessment in Kawang Forest Reserve, supported under the RMK12 project 'Memperkasa pemantauan perkhidmatan ekosistem hutan untuk menyokong pembangunan strategi hijau di Sabah' P23 10801 012 0001.

B. Enhancement of Forest Ecosystem Services

i. SFD – ISME: Mangrove Rehabilitation Project in Sabah

The collaboration between the Sabah Forestry Department (SFD) and the International Society for Mangrove Ecosystems (ISME) is currently in its Fourth Phase (2024–2028). As part of the 2025 rehabilitation programme, 30 hectares of mudflats were rehabilitated through the establishment of 17,772 mangrove seedlings and propagules at two planting sites.

ii. SFD-TMIM: Mangrove Rehabilitation Project in Sabah

The remaining 3.50 hectares of mudflat area that were not completed in the previous year were carried forward into 2025 for implementation. Rehabilitation of this area was completed. A total of 3,600 *Sonneratia caseolaris* propagules were planted, hence achieving the restoration target. In 2025, rehabilitation activities under this collaboration were undertaken in the Marudu Bay Forest Reserve, Kota Marudu District, where a total of 10,501 mangrove propagules and seedlings were planted within the designated mudflat area, successfully meeting the annual planting target.

Summary of the project site and mangroves planted under the SFD-ISME Collaborative Project.

Forestry District	Forest Reserve (FR)	Area (Ha)	Species (total plants planted)
Sandakan	Sg. Gum-Gum & Sg. Loboh FR (Class V) *Pulau Loboh	20	• *Rhizophora apiculata* (8,365) seedlings & propagules • *Rhizophora mucronata* (546) propagules • *Bruguiera gymnorrhiza* (5) seedlings • *Bruguiera cylindrica* (10) seedlings • *Ceriops tagal* (5) seedlings • *Avicennia alba* (227) seedlings • *Xylocarpus moluccensis* (10) seedlings
Beaufort	Weston FR (Class I) *Point 2027	10	• *Sonneratia caseolaris* (5,404) seeds & seedlings • *Kandelia candel* (3,200) seedlings & propagules
	Grand Total	30	17,772 propagules/seedlings/seeds

Summary of the project sites and mangroves planted under the SFD-TMIM Mangrove Collaborative Project.

Forestry District	Forest Reserve (FR)	Area (Ha)	Species (total plants planted)
Kota Marudu	Marudu Bay FR (Class I) *SFD-TMIM Lot 1	10	• *Rhizophora stylosa* (1,520) seedlings & propagules • *Rhizophora apiculata* (3,681) seedlings & propagules • *Rhizophora mucronata* (1,011) propagules • *Bruguiera cylindrica* (4) seedlings • *Bruguiera gymnorrhiza* (4) seedlings • *Bruguiera sexangula* (10) seedlings • *Ceriops tagal* (388) seedlings • *Avicennia alba* (3,777) seedlings • *Avicennia marina* (22) seedlings • *Xylocarpus moluccensis* (2) seedlings • *Excoecaria agallocha* (72) seedlings
	Grand Total	10	10,501 (propagules & seedlings)

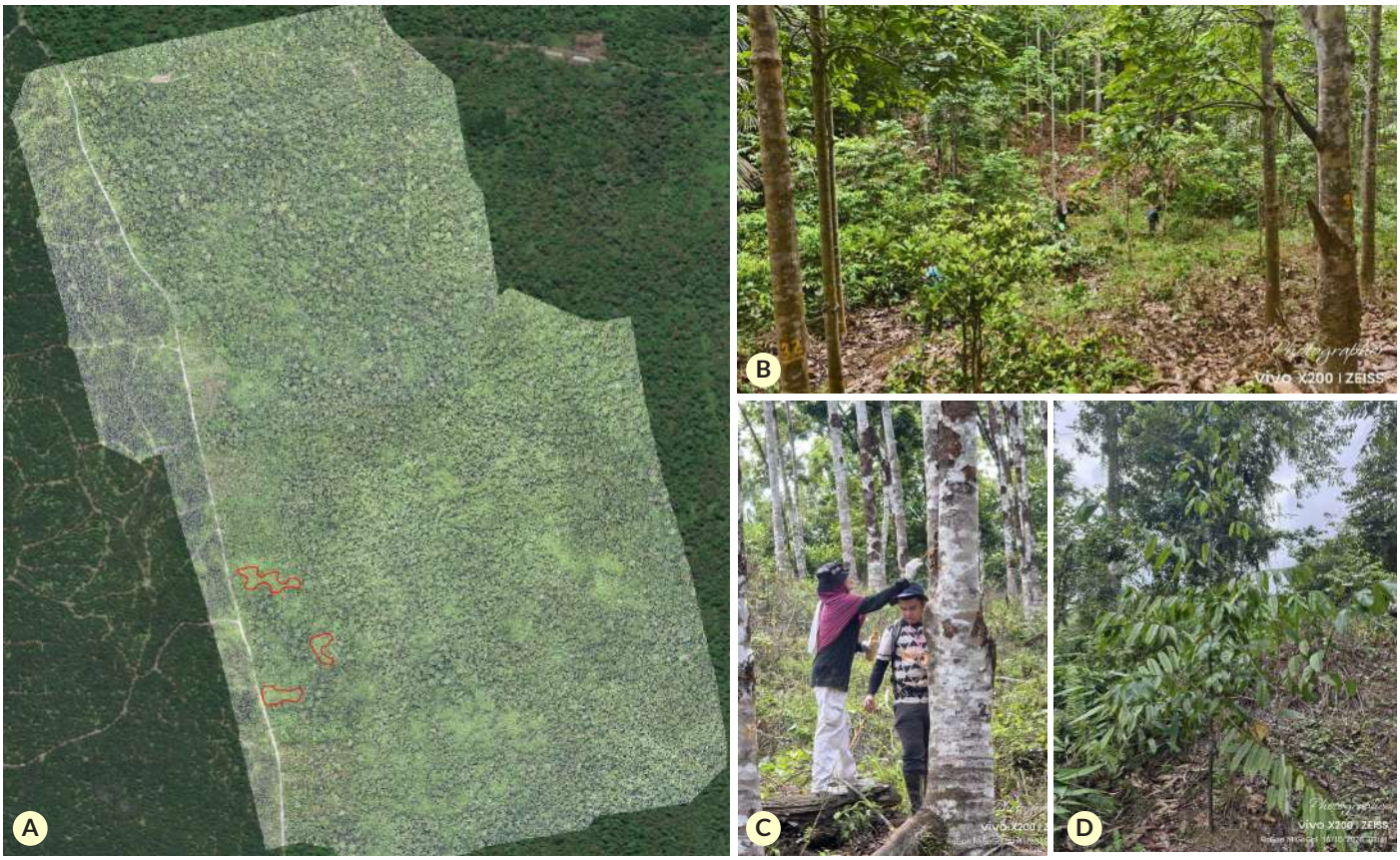
In July 2025, a group of 11 senior officials from Tokio Marine Insurance Malaysia Berhad (TMIM), led by Mr Nying Mun Wai, visited the Kota Marudu District. During this visit, the group successfully planted approximately 500 mangrove seedlings and propagules of various species at Marudu Bay Forest Reserve as part of their Corporate Social Responsibility (CSR) initiative.



Mangrove planting by TMIM at Marudu Bay Forest Reserve, Kota Marudu. (Image: Mangrove Ecosystem Section)

iii. Tending, reassessment, and planting of the Seed Orchard Plot at Lungmanis Forest Reserve

Activities at the Lungmanis research site in 2025 focused on forest tending and ecosystem restoration. A total of 15 hectares were tended by removing weeds and creepers around tree boles within a 3-metre radius. Maintenance and enrichment planting were carried out throughout the year within the restoration area. A total of 1,500 seedlings representing Dipterocarp, Terminalia, and Laran species were successfully established. In addition, a plot re-census of 2.5 hectares continued within the established plot area in Lung Manis (FR) to support ongoing monitoring efforts. To support restoration planning, aerial photographs were acquired over the restoration and seed orchard areas in January 2025. Approximately 500 hectares were mapped, and a Digital Surface Model (DSM) was generated to identify potential restoration sites. The analysis identified three areas suitable for restoration; however, field verification confirmed that only one area was accessible for implementation.



A. Aerial photo of Lung Manis FR and potential areas for restoration (marked in red). **B**. Tending and silvicultural activities conducted in Lung Manis Forest Reserve. **C**. Plot re-census activities in Lung Manis Forest Reserve. **D**. Tree seedlings established within ecosystem restoration activities in Lungmanis Forest Reserve. (Image: Silviculture Section)

iv. Phenological observation and collection of the seed of *Ficus* species

The FRC wildlife team conducted fig surveys in the Deramakot and Bukit Piton Forest Reserves. A total of 132 individual trees, representing 18 species, were recorded and monitored for flowering and fruiting. This year, the team collected seeds and vegetative cuttings from selected fig species that are highly consumed and preferred by wildlife. These materials were then processed at the FRC nursery for enrichment planting in targeted forest areas.



(Left) Field collection of leaves and seeds, using a slingshot to reach specimens from higher branches. (Right) Collected *Ficus xylophylla* sample for species identification. (Image: Wildlife Research Unit)

v. Wildlife research on enhancing food resources in forest areas

Efforts to raise fig planting material for restoration in selected forest areas have been undertaken. Overall, 1,000 fig seedlings from 12 species were raised and planted in the Deramakot and Bukit Piton Forest Reserves to support habitat enrichment and wildlife food availability. A further 200 seedlings were successfully planted as part of the Arboretum project in the Kabili Forest Reserve.

vi. Elevating Wildlife Conservation: Artificial Nest Boxes as a Tool for Ecological and Tourism Enhancement

The Wildlife Research Unit of the Forest Research Centre (FRC) is conducting ongoing research to integrate artificial nest boxes into wildlife conservation. In 2025, four artificial nest boxes designed for hornbill species were constructed and installed at the Forest Edge Resort. This initiative aligns with the resort's vision of promoting nature-based tourism, aiming to attract visitors by enhancing the ecological experience in the area. In addition, four nest boxes in the Sg. Pin Conservation Area were maintained and repaired to ensure their continued suitability for target wildlife species, thereby supporting ongoing conservation and monitoring efforts.

vii. Wildlife Corridor Restoration

Under the RFF restoration programme in 2025, restoration and maintenance activities continued across the Tabin–Kulamba Wildlife Corridor, the Northern Encroached Silabukan Forest Reserve, and the Bukit Piton Forest Reserve. A total of 42 hectares of restoration areas and 25 hectares within the 50-hectare planting block were maintained in Tabin, while 15 hectares of restoration plots were maintained in Silabukan. Invasive species management included the treatment of approximately 900 oil palm trees, and 12 camera traps were installed to support long-term wildlife monitoring. In Bukit Piton, silvicultural maintenance continued within a 10-hectare restoration plot as part of the broader restoration programme. In addition, the acquisition of a 32-hectare area is underway to further expand the Tabin–Kulamba Wildlife Corridor.

5. SUB-PROGRAMME CONSERVATION MONITORING SYSTEM

A. Conservation Areas Information & Monitoring System (CAIMS)

The Conservation Areas Information & Monitoring System (CAIMS) website has been migrated to state-environment. The new website is still undergoing internal review and has not yet been made available online. The previous website (*caims-sabah.online*) is no longer accessible.

B. Sabah Ecosystem Hub

Development of the Sabah Ecosystem Hub (SEH) continued in 2025, although progress was affected by the migration of the platform to the state environment following recent policy and administrative changes. During the year, the updated landing page design was completed, and the Physical Environment page was developed, including the integration of the map functionality. Further updates to the SEH About Page are currently being undertaken. As of 2025, the interface design component is approximately 70% complete, while data input and integration activities are about 10% complete.



Successful germination of fig seedlings. (Image: Wildlife Research Unit)



One of the artificial nest boxes installed within Forest Edge Resort, Sepilok. (Image: Wildlife Research Unit)



(Left) Maintenance of planted seedlings and (right) Silviculture treatment on the other side of the trench under the RFF restoration programme. (Image: RFF)



Updated landing page of the Sabah Ecosystem Hub (SEH) under development in 2025. (Image: Ecosystem Monitoring Unit)

6. SPECIAL ASSIGNMENTS

A. Assessment of forest composition and wildlife (large mammals and birds) in selected protected areas.

The Ecology, Silviculture and Systematic Botany sections and the Rainforest Discovery Centre have conducted annual assessments of tree communities and wildlife associates (large mammals and birds) in the Heart of Borneo (HoB) regions and other selected forest reserves. In 2025, the assessment was expanded to include Meliau Range FR, Tangkulap FR, and Padas Damit FR. These assessments provide insights into biodiversity and ecosystem health, focusing on characterising forest ecosystems and documenting the richness of large mammal species. The findings are disseminated through departmental reports to inform policy decisions and through scientific publications and public talks to raise awareness.




(Left) Peat Swamp Forest in Padas Damit FR. (Right) Meliau Range FR (Image: Ecosystem Monitoring Unit)

B. Establishment of Drone Profile and mapping of the current vegetation cover for selected ecosystem sites

Seven locations were surveyed and mapped using drones, with each mapping exercise completed in an average of two weeks. Aerial photographs were also acquired to complement the drone-based datasets. The resulting high-resolution imagery was used to assess forest health, analyse forest structure, and verify land cover conditions. Outputs included orthomosaics and spatial layers that support detailed interpretation of forest conditions. All imagery and aerial photographs were systematically compiled into a georeferenced database for future reference and long-term monitoring. This integrated dataset supports forest management planning, disturbance assessment, and ecosystem monitoring across all surveyed locations.

Location	Drone Mapping			
	Orthomosaic Mapping	Multispectral Mapping	LiDAR Scanning	Aerial Photo
Kungkular FR	✓	✓		✓
Padas Damit FR	✓			✓
Meliau Range FR	✓			✓
Tangkulap FR	✓			✓
Sg. Pin Conservation Area	✓			✓
Deramakot FR	✓		✓	✓
Lung Manis FR	✓		✓	✓

C. GNSS Receiver Performance Assessment Across Consumer, Mapping, and Survey Grades in Forest Environments

In March 2025, the Silviculture, Ecology and Ecosystem Monitoring Unit, under the Forest Ecosystem Management Programme, conducted a GNSS test project. The study evaluated three GNSS receiver tiers: Tier 1 (consumer-grade smartphones), Tier 2 (mapping-grade devices such as Garmin GPSMAP), and Tier 3 (survey-grade receivers). Three models per tier were tested over three days using different observation methods: static observations for Tier 3 (≥6 hours), waypoint averaging for Tier 2 (recorded every 1.5 hours over 6 hours), and point logging for Tier 1 using the All-in-One Offline Maps application.

Results showed that performance varied with environmental conditions, particularly in areas with signal obstruction. Tier 1 devices produced surprisingly comparable results under favourable conditions despite limited satellite tracking. Tier 2 devices showed moderate variability but remained operationally reliable and more robust in field conditions. Tier 3 receivers delivered the highest accuracy, achieving centimetre-level precision when corrected with a base station, making them the most suitable for high-precision applications.





Location of each recording station of the GNSS receivers. (Image: FEM Programme)

C. Research Study in Kungkular Forest Reserve to Support the Yayasan Petronas – Sabah Forestry Department Tree Planting Programme – Continuation of Carbon Assessment Work

The carbon assessment study continued in 2025 by members of the Silviculture, Soil Science sections and the Ecosystem Monitoring Unit. Site visits were conducted in February, August, and October, focusing on tagging and measuring planted trees in Phase 1 and Phase 2 of the restoration site. Tree height, stem diameter, crown diameter, and GPS locations were recorded. Overall, 876 trees were successfully tagged, including various fruit tree species such as durian, rambutan, and terap, as well as several local dipterocarp species such as urat mata (*Parashorea* spp.) and kapur (*Dryobalanops* spp.). The assessment will continue in 2026, focusing on the growth of the tagged trees and biomass assessment of selected trees within Phase 2 of the restoration site.



(Left) Measuring a planted Petai tree in Phase 2. (Right) Tagged Terap tree in Phase 1 (tagged in 2025) (Image: Silviculture Section)

7. TRAINING & SEMINAR CONDUCTED BY THE PROGRAMME

A. Bengkel Ekspedisi Saintifik Sg. Pin Conservation Area (SPnCA) Siri 2

The Workshop on the Scientific Expedition of the Sungai Pin Conservation Area (SPnCA) was held on 30 June 2025 at the Rainforest Discovery Centre, Sepilok. The workshop followed the SPnCA scientific expedition conducted in September 2024 and was organised in collaboration with the Conservation and Biodiversity Unit of Sawit Kinabalu Group. It presented key findings from the expedition and the ecosystem services assessment, with comparisons to results from 2019. More than 100 participants, including community stakeholders,



The proceedings were officially handed over by the Chief Conservator of Forests, Datuk Frederick Kugan, to the Conservation and Biodiversity Unit of the Sawit Kinabalu Group delegation. (Image: FEM Programme)

NGOs, and government agencies, took part and contributed their perspectives and expertise. The programme included a project overview presentation, nine research presentations, interactive discussions, and a plenary session to consolidate recommendations for future management, with an emphasis on biodiversity monitoring, threat mitigation, and stakeholder collaboration.

B. Workshop 'Program Kelestarian Hijau: Ekologi & Kepentingan Silvikulktur Pokok Ara'

The programme was organised by the Wildlife Research Unit, FRC, on 2nd October 2025. This programme aims to raise awareness and understanding of the crucial role of fig trees (*Ficus* spp.) in tropical forest ecosystems, as well as their potential in modern silvicultural practices. Overall, this programme is expected to contribute to science-based conservation efforts and enhance the integration of silviculture with local biodiversity conservation.

C. Tree Planting Programme



The programme was launched by Datuk Frederick Kugan, Chief Conservator of Forests. (Image: Wildlife Research Unit)



Group photo of the participants of the Workshop on the Scientific Expedition of the Sungai Pin Conservation Area (SPnCA) Ver.2 held at the Rainforest Discovery Centre on 30 June 2025. (Image: FEM Programme)

The planting programme was held on 16 October 2025 and was attended by students from various schools around Sandakan. Approximately 100 participants took part in the programme. The objective of the planting programme was to raise awareness, especially among students, of the importance of the planted species for biodiversity conservation, and to highlight the significance of planting methodologies in establishing fig tree plots to enhance wildlife oasis within forested areas.

D. Workshop on Soil Health in Forestry

The Soil Science Section, in collaboration with the Faculty of Tropical Forestry at Universiti Malaysia Sabah (UMS), organised the "Workshop on Soil Health in Forestry" on 14 October 2025 at the Rainforest Discovery Centre (RDC), Sandakan. The workshop was attended by more than 50 participants, including internal officers and staff, representatives from Forest Management Units (FMUs), and NGOs. The programme featured paper presentations by Professor Kanehiro Kitayama, Ts. Dr Januarius Gobilik, Ms Esther Dyi Ka Mei, Mr Rolando Robert, and Mr Tom Khoo, covering soil health (fertility and biology), soil amelioration, soil sampling techniques, and analytical services at FRC. The workshop comprised paper presentations, a panel discussion moderated by Dr Arthur Chung, and a field soil demonstration led by Ms Esther Dyi Ka Mei.

Level (FRL) Sabah

A Mini Workshop on the Development of the Forest Reference Level (FRL) was held at the Rainforest Discovery Centre on 2 December 2025. The workshop was jointly organised by the Forest Sector Planning (FSP) Division and the Forest Research Centre (FRC) and attended by staff from relevant Sabah Forestry Department divisions, FRC researchers, and Forest District Offices. The workshop focused on strengthening Sabah's forest and Land Use/Land Cover (LULC) monitoring through standardised methods developed under the Biometric Project, supporting national and international reporting requirements on forest resources and land-use change. Findings from the Tabin Landscape Pilot Project were presented, demonstrating how this approach can be used to assess forest structure, biomass, carbon stocks, and biodiversity, through collaboration between FRC, WWF-Malaysia (Sabah), and ANRICA. The workshop also emphasised the dissemination of monitoring information to support forest management, policy development, and informed decision-making among researchers, the private sector, local communities, and other stakeholders.



Group photo during a tree planting programme, showcasing the collaboration between students, teachers, and forestry staff in promoting reforestation and environmental stewardship. (Image: Wildlife Research Unit)



Group photo of participants of the "Workshop on Soil Health in Forestry" held at the Rainforest Discovery Centre on 14 October 2025. (Image: FEM Programme)



Participants of the Mini Workshop on the Development of the Forest Reference Level (FRL) held at the Rainforest Discovery Centre on 2 December 2025. (Image: FEM Programme)

FOREST BIODIVERSITY & CONSERVATION

1. PLANT DIVERSITY

A. Botanical Expeditions/Assessments

The staff of the Herbarium Sandakan participated in 5 botanical expeditions in 2025.

Preliminary data recorded from the forest reserves/areas surveyed.

Forest Reserve/ Area	Date	Number of species	Endemic plant species		Number of threatened plant species (CR/EN/VU)
			Borneo	Sabah	
Malawali Island & Mount Silam (SESE 2025)	7 - 12 Apr	3 (Silam)	0	0	0/0/0
Meliau Range FR (Northern part)	21 – 26 Apr	181	33	2	0/1/2
Padas Damit FR	13 – 18 May	75	0	0	0/0/0
Tangkulap and Timbah FRs	14 – 19 Jul	431	42	1	0/2/11
Deramakot FR, Kinabatangan	26-29 Aug	111	11	1	0/0/2
Darau River Basin, Menggatal	1 - 6 Sept	138	5	0	0/0/0



Botanical assessment in Deramakot Forest Reserve.



FRC staff participating in the Darau River Basin Scientific Expedition.



Dr Joan Pereira and the team from the Systematic Botany Section, Botanickel Sabah Sdn. Bhd. and Sabah Parks participated in this expedition to Malawali Island, Kudat, as part of the collaborative project on metal accumulation in ultramafic flora in Sabah.

B. Research Activities

i. Plant Diversity Projects

There are four main plant diversity projects in which researchers at the Sandakan Herbarium are involved, as shown in the table below.

Project	Researcher(s)	Taxon/Taxa
Tree Flora of Sabah and Sarawak (TFSS) Project	John B. Sugau Joan T. Pereira Suzana Sabran	Pentaphylacaceae and Theaceae *Ridsdalea* (Rubiaceae) *Ternstroemia* (Pentaphylacaceae)
Flora of Peninsular Malaysia	Joan T. Pereira	*Payena* (Sapotaceae)
Lower Plant Flora	Andi MAM	Ferns and Lycophytes of Borneo; Cyatheaceae of Malaysian Borneo
Figs of Sabah	Suzana Sabran and Andi MAM	*Ficus* (Moraceae)

ii. Plant Conservation Projects

- **Red Listing in Sabah**

In 2025, a total of 21 species were assessed and submitted to the IUCN Red List of Threatened Species. This brings the cumulative number of species assessed to 113 since the project's inception in 2023. With the completion and submission of these assessments, the Conservation Assessments of Sabah Tree Species under BGCI's Global Tree Assessment project, funded by Botanic Gardens Conservation International (BGCI), have now been successfully completed.

- **Conservation of threatened plant species**

The project titled "The Conservation and Recovery of Rare, Threatened, and Endemic Plants in Sabah", funded by the National Conservation Trust Fund for Natural Resources (NCTF), was led by Alviana Damit and has been successfully completed. The final report has been submitted to and presented to the committee at the Ministry of Natural Resources and Environmental Sustainability (NRES). In recognition of its achievements, the project has been invited to contribute to the NCTF Coffee Table Book and to participate in the upcoming Karnival NRES 2026.

A conservation grant totalling £45,000 has been secured for 2025–2027 in collaboration with Botanic Gardens Conservation International (BGCI). The project, titled "Conserving Critically Endangered *Adonidia dransfieldii* and *Saurauia sammanniana* in Sabah," is one of the projects in Southeast Asia selected to receive funding from Fondation Franklinia (2025–2027) under the Global Trees: Action for All Tree Species – Tree Conservation Action Project initiative. The project is led by Alviana Damit, and in 2025 the team successfully conducted a field survey to assess in situ populations and established ex situ conservation collections for both target species.

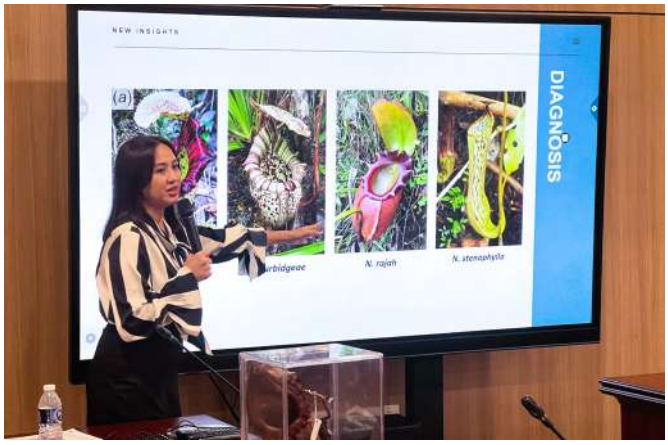


The survey team rediscovered the original population of *Adonidia dransfieldii* at Lemaas Forest Reserve, the same site where the species was first collected 27 years earlier, before its formal description as a new species in 2015.

C. Research Finding Dissemination

List of oral presentations.

No.	Programme	Date & Place	Title	Speaker
1	FRC Seminar 1/2025	24 Jan FRC Sepilok, Sandakan	*Nepenthes pongoides*: A Journey of Past Misidentification, New Insights, and Future Emerging Threats	Alviana Damit
2	Bengkel Mini mengenai Pembangunan Forest Reference Level (FRL) di Sabah	1 Dec RDC, Sepilok, Sandakan	Tabin Landscape Project – Flora Diversity	Jonathan J. Lucas
3	Pembentangan Kertas Kajian Penyelidikan Program Ekspedisi Saintifik Lembangan Sungai Darau bagi Program UMS-DBKK: Sustainable Tourism Living Lab: Innovation and Engagement	26 Sept Hilton Hotel Kota Kinabalu	Preliminary Survey of Vascular Plant at Darau River Basin, Kg. Darau Menggatal	Nur Adillah, M.Y.



Presentation on *Nepenthes pongoides* in FRC Seminar 1/2025.

List of poster presentations

No.	Programme	Date & Place	Title	Speaker
1.	11th International Conference on Serpentine Ecology (ICSE 2025)	13–17 June Kyoto, Japan	Discovery of Nickel Hyperaccumulator Plants in Coastal Ultramafic Mount Silam and Malawali Island in Sabah, Malaysia	Alviana Damit, Jonathan J. Lucas & Dr Joan T. Pereira *et al.*

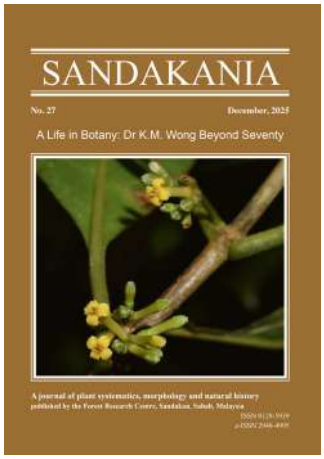


Poster presented at the ICSE 2025, Kyoto, Japan.

- **Publication of Sandakania**

Sandakania is an occasional journal focusing on plant systematics, morphology and natural history, published by the Forest Research Centre, Sepilok, Sandakan. In 2025, two volumes were published. Sandakania No. 26 is a special issue on Plant Conservation in Borneo, featuring 10 scientific articles. Sandakania No. 27 is a special issue titled A Life in Botany: Dr K.M. Wong Beyond Seventy, comprising 24 scientific articles.





D. Herbarium Curation

i. Status of Herbarium Holdings

Number of accessions	210,833
Number of specimen sheets	282,209
Number of spirit collections	4,909
Number of carpological collections	1,917

ii. Specimens on loan

Institute/Researcher	Number of specimens (Family)
Singapore Botanic Gardens - Dr Chen Junhao	35 (Annonaceae)
Universiti Malaysia Sabah - Dr Avelinah Julius	369 (Primulaceae)

iii. Exchange position

Institute	Specimens sent
Botanical Research Institute of Texas (BRIT)	54
Kew Herbarium (K)	120
Case Western Reserve University (CWRU)	212
Singapore Herbarium (SING)	336
Herbarium Kepong (KEP)	27
Sabah Parks Herbarium (SNP)	278

Institute	Specimens received
Universiti Brunei Darussalam (UBD)	3
Herbarium Kepong (KEP)	1 box
Singapore Herbarium (SING)	2 boxes

E. Collaboration, Services and Consultation

i. Research Collaborative Projects with Local Collaborators from the Systematic Botany Section

In 2025, a total of 5 collaborative projects were carried out, as shown in the table below.

List of collaborative projects.

No.	Name	Institution/Organisation	Local Collaborator	Title of Research
1.	Max Fontaine	University of Aberdeen	Alviana Damit	The origin and maintenance of plant diversity in tropical forests: a case study from the clove genus, *Syzygium*
2	Dr. Elliot Gardner et. al	Case Western Reserve University, USA	Suzana Sabran	The evolution and reproductive ecology of figs (*Ficus*, Moraceae)
3	Mr Tan Wei Harn	University of Brunei Darussalam	Joan T. Pereira & Eyen Khoo	The ecology of scatter-hoarding dispersal for Fagaceae in tropical Southeast Asia and the impacts of anthropogenic pressures on seedling recruitment
4	Mr Hoo Pui Kiat	Universiti Malaysia Sarawak (UNIMAS)	Joan T. Pereira	Systematics of Bornean *Acranthera* (Rubiaceae)
5	• Dr Julenah Ag uddinn • Prof Guillaume Echevarria • Dr Antony van der Ent • Paul Gangku • Sukaibin Sumail • Rimi Repin • Matsain bin Buang • Farnidah Jasnie	Botanickel Sabah Sdn. Bhd. Econick, France Wageningen University & Research, The Netherlands Sabah Parks TaniLab, UiTM	Joan T. Pereira, Alviana Damit & Jonathan J. Lucas	Collaborative Research on Metal Accumulation in Ultramafic Flora in Sabah

ii. Capacity Building

Tree identification courses/trainings:

Title	Venue	Date	Speaker
Tree identification training for IPS students	IPS, Telupid	19-21 Feb	John B. Sugau & Jonathan J. Lucas
Latihan Pengenalan dan Pengecaman Tumbuhan for SICA and Wilmar Staff	Sekar Imej Conservation Area (SICA), Beluran	9-11 Apr	John B. Sugau &Jonathan J. Lucas
Tree Identification Course for Officers, Research Assistants and Rangers of the Sabah Forestry Department	RDC, Sepilok, Sandakan	12-14 Aug	Officers from the Systematic Botany Section
Latihan Pengenalan dan Pengecaman Tumbuhan for the local community of Kampung Bolotikon	Kampung Bolotikon, Papar	8 Nov	Dr. Joan T. Pereira, Suzana Sabran & Jonathan J. Lucas



Mr John Sugau briefing participants during a practical fieldwork for the FORiNS students.



A group photo of facilitators and participants of the Tree identification course in RDC Sepilok.





(Left) Participants undergoing identification assessment at Sekar Imej Conservation Area Centre, Beluran, during the Plant Introduction and Identification Training and (right) Participants infront of St Anthony Catholic Church, Kampung Bolotikon, Papar, Pitas, during the Plant Introduction and Identification Training.

Other plant-related workshops, courses and programmes - the section also participated in other workshops, courses and programmes, as summarised in the table below.

Title	Date & Venue	Organiser	Participants
Kursus "Conservation/ Restoration of Herbarium Specimens" & Kursus Pangkalan Data	5-9/5/2025 Penang Botanic Gardens	Sabah Forestry Department & Penang Botanic Gardens	Suzana Sabran, Nur Adillah M. Yusof, Dg Ku Rozianah Matusin, Mohd. Adzwan Sapar & Markus Gumbilil
Lawatan Konservasi ke George Town World Heritage Incorporated, Pulau Pinang	9/5/2025 George Town, Penang	Sabah Forestry Department & Penang Botanic Gardens	Suzana Sabran, Nur Adillah M. Yusof, Dg Ku Rozianah Matusin, Mohd. Adzwan Sapar & Markus Gumbilil
Malaysia Book of Records "First Historical Tree Trail in Malaysia" in conjunction with Sandakan Founding Day 2025 and 22nd Anniversary of Sandakan Heritage Trail	28/6/2025 Sandakan Heritage Trail, Sandakan	Sandakan Heritage Trail Committee, STAN, Sabah Forestry Department, MPS, Sabah Society, etc.	Dr Joan Pereira, Dr Arthur Chung & Eyen Khoo Involved in identification and preparation of WQRof selected trees: Jemson Jumian, Postar Miun, Jeisin Jumian, Johan John, Alviana Damit and Nur Adillah M. Yusof
Persidangan Ekspedisi Saintifik Kepelbagaian Biologi Hutan Tahun 2025	4-6 Aug Raia Hotel & Convention Centre, Kuala Terengganu	Jabatan Perhutanan Semenanjung Malaysia (JPSM)	Joel Dawat & Markus Gumbilil
Bengkel Konsultasi Prosedur Sistem Permohonan Lesen Akses dan Lesen Eksport (SaBAES)	20/8/2025 Sabah International Convention Centre (SICC), Kota Kinabalu	Sabah Biodiversity Centre	Suzana Sabran
Maesa (Primulaceae) Identification Workshop	02/10/2025 Institute for Tropical Biology and Conservation, UMS	Institute for Tropical Biology and Conservation (ITBC), Universiti Malaysia Sabah (UMS)	Nur Adillah M. Yusof
Forum on "Conservation Crossroads: Navigating the Future of Sabah's Biodiversity"	27 Nov ITBC, UMS	Institute for Tropical Biology and Conservation (ITBC), Universiti Malaysia Sabah (UMS)	Alviana Damit



A. In front of the George Town World Heritage Incorporated building, the agency that leads efforts to preserve the Outstanding Universal Value of the UNESCO World Heritage Site of George Town (including efforts on paper conservation for museums, archives, and herbaria).
B. SAN participants during the "Conservation/Restoration of Herbarium Specimens" course and the Database Course with the instructors, Mr. Sivakumaran A/L Vasudevan, Ms. Maliga A/P Gnasan, and Ms. Noor Kamilah Omar (far right) at the Penang Herbarium Building, Penang Botanic Gardens.
C. With MPS President, Mr Walter Kensom, holding the framed certificate of the Malaysia Book of Records "First Historical Tree Trail in Malaysia" with Dr Arthur Chung together with Dr Joan Pereira (far right) with other Sabah Forestry Department officers.

iii. Visit to SAN Herbarium

A total of 37 visit events, involving various groups and individual visitors, were recorded at the SAN Herbarium in 2025, as summarised below:

Group/Individual	Local Malaysian	Foreigners
Scientific researchers	3	15
Schools	1	0
Higher education institutions	1	0
Government agencies	8	1
Private sector and other organizations	3	0
General public	1	4
Total	**17**	**20**



A. Visit from Jabatan Perhutanan Brunei.
B. Study visit of students from SMK Mat Salleh, Ranau.
C. Visit by government officers from the Ministry of Economy .

iv. Other Activities

The Systematic Botany section had participated in various events and outreach programmes, as listed below:

No.	Name of Events/Outreach Programmes	Venue	Date
1.	Identification of trees along the trail of Marian Hill, A Catholic Pilgrimage Site	Marian Hill, St Mary's Cathedral, Sandakan	6 May
2.	The Youth Camp on Climate Change 2025	RDC, Sepilok	2 May
3.	Environmental Education Race (EERace) 29	RDC, Sepilok	7 – 8 Jul
4.	Borneo Bird Festival 2025	RDC, Sepilok	25-26 Oct
5.	Career Path 2025 "Own Your Passion" And Alumni Experience	Faculty of Sustainable Agriculture, UMS, Sandakan	1 Nov



A. Identification of trees along Marian Hill, St Mary's Cathedral, Sandakan. **B**. EERace 29 programme at RDC Sepilok, Sandakan. **C**. Borneo Bird Festival 2025. **D**. Career Path programme at Faculty of Sustainable Agriculture, UMS, Sandakan.

2. PLANT BIOTECHNOLOGY

i. Revival and Regeneration of Long-Term Dormant *Phalaenopsis amabilis* (L.) Blume Protocorms Using PLB Techniques: A Cost-Effective Strategy for Orchid Germplasm Conservation

The study aims to develop a protocol to revive and regenerate long-term dormant *Phalaenopsis amabilis* protocorms using Protocorm-Like Body (PLB) techniques for orchid germplasm conservation. Tissue culture materials were successfully reactivated, with ½ MS medium showing the fastest regeneration, highest survival (60%), and regeneration rate (40%). Reduced-nutrient media promoted metabolic reactivation, while MS supplemented with coconut powder enhanced secondary PLB proliferation. The preliminary findings demonstrate a practical alternative to seed banking and cryopreservation for conserving valuable orchid germplasm.



(a) *P. amabilis* in the tissue culture chamber. (b) Cultured protocorms (c) Cultured protocorms were arranged in the growth room for observation.

ii. Diversification of Planted Species in Habitat Restoration for Targeted Restoration Sites Through Seedlings Supplies Preliminary Phase

Recognizing that restoration efforts in disturbed areas often rely on monoculture or limited species selection, this project was initiated as a preliminary study to address gaps in the collection and supply of diverse native seedlings, with the aim of establishing a balanced, multi-layered and self-sustaining habitat capable of withstanding environmental stressors. Field surveys were conducted across nine districts, namely Keningau, Kota Marudu, Kota Belud, Tuaran, Kota Kinabalu, Tambunan, Sandakan, Ranau and Tenom. Planting materials were collected for seven native species, namely *Eusideroxylon zwageri*, *Litsea garciae*, *Baccaurea lanceolata*, *Parkia* spp., *Sandoricum koetjape*, *Irvingia malayana* and *Pangium edule*. From the EFT collection, a total of 498 seedlings were successfully raised in the nursery, strengthening the availability of diverse planting stocks for restoration purposes.

During the duration of the project, outreach activity was undertaken with McCorry Sdn Bhd to restore 0.5 ha of degraded forest within Mandalom Forest Reserve. A total of 100 seedlings encompassing 10 species were planted (*Ficus variegata*, *Ficus magnolifolia*, *Ficus*, *albipila*, *Ficus pisocarpa*, *Ficus tinctoria*, *Ficus parietalis*, *Bauccarea lanceolata*, *Garcinia forbesii*, *Bauccara angulata* and *Willughbeia angustifolia*). Planting and maintenance activities were co-conducted by McCorry Sdn Bhd, with a total of 20 staff participating on a rotational basis, reflecting practical industry involvement in restoration implementation. Through McCorry Sdn Bhd's example, both Sabah Timber Industry Association and Integrated Wood Processing Sdn Bhd have expressed interest to contribute towards restoration efforts within forest reserves in their respective districts, with further discussions scheduled in January 2026. Aside from that, in support of the

Tenom Districts' PPM Restoration Project, 128 seedlings representing five species—*Parkia* spp., *Artocarpus elasticus*, *Baccaurea lanceolata*, *Durio graveolens* and *Durio oxleyanus* were delivered to the Tenom District Forest Office for planting at selected project sites.




(Left) *Eusideroxylon zwageri* seedlings raised in the nursery; (right) Fruit of *Willughbeia angustifolia*.





(L–R) McCorry Sdn Bhd team members performing maintenance at planting site; Growth data such as height and girth were undertaken for 2025; and Pre-briefing is provided for every site visit.

3. FUNGI DIVERSITY

A. Fungal Diversity Studies

In 2025, two scientific expeditions, namely Meliau Range FR and Tangkulap & Timbah FR, were conducted on 22nd – 25th April 2025 and 15th – 18th July 2025, respectively, under the Sabah Forestry Department's Forest Biodiversity and Conservation Research Programme to determine fungal diversity in selected forest reserves in Sabah. The findings provided baseline information to support forest biodiversity documentation and future forest health and conservation initiatives, and contributed to the formulation of the Forest Management Plan (FMP) and High Conservation Value Forest (HCVF) reports.

Diversity levels were evaluated using standard ecological indices to provide an overall indication of fungal diversity status. The assessment showed that the Meliau Range Forest Reserve recorded a moderate level of fungal diversity, whereas the Tangkulap-Timbah Forest Reserves exhibited lower diversity and were highly dominated by a limited number of taxa.

Summary of fungal diversity assessment in selected forest reserves, Sabah (2025)

No.	Forest Reserve	Shannon Index (H')	Simpson Index (D)	Overall Diversity Interpretation
1	Meliau Range Forest Reserve	2.542	0.193	Moderate fungal diversity
2	Tangkulap–Timbah Forest Reserves	0.117	0.976	Low diversity with high dominance



Participants of the scientific expedition at Meliau Range (Timimbang Basecamp).

The fungal diversity assessments conducted in 2025 provided baseline information on fungal diversity status in selected forest reserves in Sabah. The findings indicate variation in fungal diversity levels between forest reserves, reflecting differences in environmental conditions, substrate availability, and habitat characteristics. These baseline data will support future biodiversity monitoring efforts and contribute to informed forest management and conservation planning by the Sabah Forestry Department.





Pathology team at Meliau Range Forest Reserve.



Group photo at Tangkulap (Kun-Kun River) basecamp.





Pathology team collecting fungal specimens at Tangkulap & Timbah Forest Reserves.

4. MAMMAL DIVERSITY

Terrestrial mammal diversity surveys in selected forest reserves in Sabah

In 2025, terrestrial mammal surveys were conducted in two forest reserves of different management classes, namely Meliau Range Forest Reserve (Class I, Protection Forest), and Padas Damit Forest Reserve (Class IV, Amenity Forest). The survey in Meliau Range was conducted in conjunction with the Sabah Heart of Borneo Scientific Expedition, while the survey in Padas Damit formed part of an ecosystem assessment undertaken to support the formulation of the Conservation Area Management Plan (CAMP). Overall, Meliau Range recorded higher species richness and endemic representation, although both reserves supported an equal number of threatened species. The table below summarises the output from the two surveyed areas.

No.	Survey areas	No. of recorded species	No. of Bornean endemic	No. of threatened species
1	Meliau Range Forest Reserve	18	2	6
2	Padas Damit Forest Reserve	10	1	6

5. ANURAN AND FRESH WATER FISH DIVERSITY

A. Anuran Diversity

Anuran (Frog and toads) diversity survey under the Heart of Borneo (HoB)

The study of species richness and abundance of frogs and toads in Sabah was conducted at two locations: Meliau Range FR and Tangkulap FR. These expeditions in 2025 aimed to provide valuable baseline data on anuran distribution, which is essential for future studies and conservation efforts in the region. The survey not only documents the diversity of amphibian species present but also serves as a critical tool for assessing the health of the local ecosystem. Monitoring their diversity and population trends can reveal key insights into environmental conditions, such as water quality, habitat integrity, and the overall biodiversity of an area. Summary of frogs and toads recorded during the expeditions in 2025.

Summary of frogs and toads recorded during the 2025 expeditions.

Location	Total Recorded Species	Endemic to Borneo	IUCN Red List
Meliau Range FR	18	12	1 Vu
Tangkulap FR	19	7	1 Vu



Hylarana megalonesa (left) and *Rhacophorus pardalis* (right) that were found in Meliau Range FR.

B. Freshwater Fish Diversity

In 2025, preliminary surveys were carried out at three locations: Padas Damit FR, Meliau Range FR and Tangkulap FR. These surveys were conducted with the primary objective of assessing and documenting the freshwater fish fauna within selected forest areas. They provided essential information to evaluate water quality, determine the health of aquatic habitats, and improve understanding of species distributions across different ecosystems.

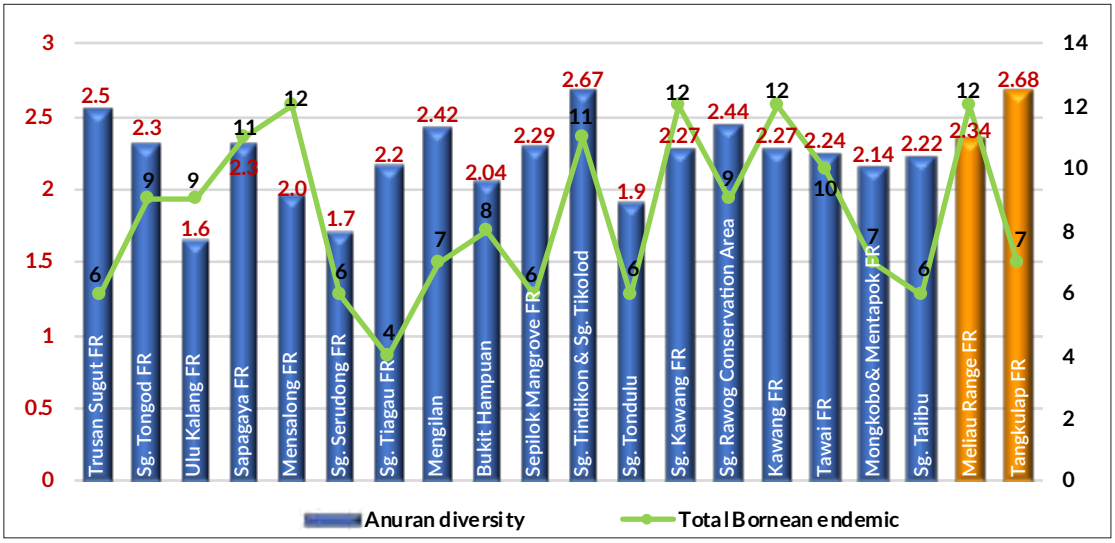


The largest freshwater gourami species in Southeast Asia found in Padas Damit FR is *Osphronemus gourami*.

Location	Total Recorded Species	Endemic to Borneo	IUCN Red List
Padas Damit FR	14	1	Null
Meliau Range FR	15	9	Null
Tangkulap FR	23	16	Null



Bornean Endemic Species: *Brachygobius sabanus(left)* and *Nematabramis everetti* (right) that were found in Padas Damit FR.



Shannon Wiener Index of anuran diversity within twenty study sites in Sabah (2017-2025).

6. INSECT DIVERSITY

A. Insect diversity surveys under the Heart of Borneo (HoB) programme

The objectives of these surveys were to document the insect fauna of selected forest reserves under the Heart of Borneo (HoB) programme, assess threats to insect diversity, and provide recommendations to support biodiversity conservation within the study areas. The findings will be incorporated into the preparation of the Forest Management Plan (FMP) and High Conservation Value Forest (HCVF) reports for the surveyed forest reserves. In 2025, the Entomology Section participated in scientific expeditions to two forest reserves, namely Meliau Range Forest Reserve in Beluran and Tangkulap and Timbah Forest Reserves in Deramakot.

Summary of insects recorded during the HoB Scientific Expedition in 2025.

Forest Reserve	Date of Survey	Total Recorded Species	Endemic to Borneo
Meliau Range FR	21 – 26 April	121	3
Tangkulap & Timbah FRs	14 – 19 July	194	3



The Entomology team conducting insect daytime sampling in Meliau FR.



A notable insect recorded during the survey was the Bornean endemic damselfly *Libellago phaeton* (Chlorocyphidae), which is currently listed as Near Threatened on the IUCN Red List.

B. Other insect diversity survey

From 13 to 18 May 2025, an insect diversity survey was conducted in the Padas Damit Forest Reserve, Beaufort. The scientific expedition was organised by the Forest Ecosystem Management Programme of the Forest Research Centre. The entomological survey aimed to document insect diversity in the area and identify taxa that contribute to key ecosystem services.



(Left) Eumorphus quadriguttatus, a handsome fungus beetle associated with decaying wood and fungi. (Right) *Rhyothemis obsolescens* (Odonata: Libellulidae), a male individual observed near freshwater habitat.

C. Collaborative projects on insects

The Entomology Section is collaborating with various foreign researchers conducting insect research in Sabah. Dr Phil Bragg is an independent researcher from Chesterfield, United Kingdom. His study focuses on praying mantises and cockroaches in several forest reserves in Sabah, namely Kabili-Sepiok FR in Sandakan, Gomantong cave in Kinabatangan, and Bukit Gemok in Tawau. Dr Chiew Li Yuen is an expert on dung beetles and conducted a study entitled "Effects of habitat modification and fragmentation: a re-survey of dung beetles of the lowland tropical forests of Sabah" in several forest reserves in Sabah, namely Kabili-Sepilok FR, Kuamut FR, and Danum Valley Conservation Area.



Dr. Philip Bragg with his local collaborator, Dr. Arthur Chung.



Entomology team of FRC with Dr. Li Yuen and her colleagues from NTU did sampling at Kabili -Sepiok FR.

D. Forest Insect Museum

The Forest Insect Museum, under the Entomology Section, maintains one of the most significant insect collections in Sabah. To date, the collection comprises approximately 180,000 mounted specimens representing an estimated 18,000 species. The collection continues to expand steadily and serves as a key reference centre for researchers, academic institutions, and university students both locally and internationally.

During the reporting period, the Entomology team successfully updated the Mantodea checklist within the Insect Reference Centre, further strengthening the taxonomic accuracy and scientific value of the collection. In addition, continued taxonomic research has resulted in the description of seven species new to science by Orthoptera specialist Dr Tan Ming Kai. Among the newly described species are *Tapiena dimidia*, *Tapiena munae*, *Lipotactes* (*Mortoniellus*) *sanguineus*, *Bolotettix adik*, *Cercoteratura reniforma*, *Pseudoteratura* (*Pseudoteratura*) *bifurcata*, and *Pseudoteratura* (*Pseudoteratura*) *maliau*.

Furthermore, three newly described ant species namely, *Oceraea magna*, *Syscia sabahna*, and *Syscia yekzoeae,* have been formally deposited into the Forest Insect Museum collection, enhancing its role as a permanent scientific repository and strengthening Sabah's documented biodiversity records.

E. Visitors to the FRC Insect Museum (Exhibition & Collection)

In 2025, the FRC Insect Museum received approximately 400 visitors from 14 countries, namely Malaysia, Brunei Darussalam, the United States of America, Australia, the Netherlands, Germany, Japan, France, Spain, Taiwan, China, Switzerland, the United Kingdom, and Belgium. This international representation reflects the growing global interest in Sabah's insect biodiversity and the scientific value of the museum's collection.

Beyond serving as a research and reference facility, the museum plays a strategic role in promoting awareness of insect diversity within tropical rainforest ecosystems. It also functions as an educational platform to foster greater appreciation for biodiversity conservation from an entomological perspective.

Visitors are provided with opportunities to observe the remarkable diversity of Bornean insects, ranging from large and visually striking species to minute and cryptic taxa. For many international guests, the visit offers their first encounter with numerous unique and fascinating insect species endemic to the forests of Borneo.



Briefing on some research activities by Cyril Ann Daniel to the delegation from Brunei Forestry Department.



Working visit from Malaysian Timber Council, led by Pn. Noraigan Abdul Rahman.

F. Seminar, workshop and publication on forest insect diversity

The Entomology Section organised an Insect Diversity Workshop on 7–8 October 2025. The workshop was attended by representatives from various government agencies, including the Sabah Biodiversity Centre (SaBC), Sabah Parks, and the Sabah Wildlife Department, as well as participants from Universiti Malaysia Sabah and licensed tourist guides from several agencies. The workshop aimed to introduce the diversity of tropical rainforest insects and entotourism activities in Sabah, enhance participants' knowledge of Sabah's rainforest insects, and emphasise relevant enactments, regulations, and ethical practices in insect observation (insect-watching).

The Entomology Section developed seven educational posters highlighting insect diversity in Sabah. These include: "Butterfly Diversity in Rainforest Discovery Centre (RDC), Sepilok, Sabah", "Moth Diversity in Rainforest Discovery Centre (RDC), Sepilok", "A Glimpse into the Insects of RDC", "Odonata Diversity in Rainforest Discovery Centre (RDC), Sepilok, Sabah", "Dragonflies and Damselflies of Sungai Pin Conservation Area and Its Adjacent Areas, Kinabatangan, Sabah", "Lepidoptera of Sungai Pin, Kinabatangan", and "Other Insects of Sungai Pin Conservation Area and Its Adjacent Areas." These posters serve as educational and awareness materials to promote public understanding of insect biodiversity and are available for download from the Sabah Forestry Department (SFD) official website.



Group photograph of the Deputy Chief Conservator of Forests (Research & Development) together with participants at the Insect Diversity Workshop held on 7–8 October 2025.



The Insect Diversity posters were presented by the Deputy Chief Conservator of Forests (R&D) to the Manager of the Rainforest Discovery Centre (RDC).

G. Other activities

The Entomology team was invited by the Tropical Rainforest Conservation & Research Centre (TRCRC) to deliver a lecture in Lahad Datu on the insects of Sabah. The session was presented to M.Sc. students from Kew Gardens, London, and Queen Mary University, led by Dr Kalsum.

Other than that, the Entomology team was active in outreach programmes in collaboration with local government and non-governmental agencies. Activities such as quizzes, puzzles, and an insect exhibition were prepared for students and the public. These were intended to disseminate information to students and the public and to raise awareness of the importance of insects in ecosystem services. The Entomology Section participated in three outreach programmes, as listed below:

i. International Day of Forests in UMS, Kota Kinabalu
ii. Awareness Program at Sook Lake, Keningau
iii. Borneo Bird Festival in RDC, Sepilok



Cyril Ann Daniel promoting the Insect Diversity and Insect Pest books published by the Sabah Forestry Department.



Primary school students engaging enthusiastically with the displayed insect specimens during the exhibition.



A student observing one of the world's smallest beetles under a microscope during the Borneo Bird Festival.



Razy Japir giving a talk on insect diversity in Sabah to the M. Sc. students from Kew Garden and Queen Mary University.

FOREST PLANTATIONS

ACHIEVEMENTS: COMPLETED PROJECTS UNDER THE 12TH MALAYSIA PLAN

A. Promoting Tree Plantation by Smallholders and Local Communities as an Important Source of Wood for the Timber Industry

The aforementioned project was implemented by the Forest Research Centre through the Sabah Forestry Department and funded under the Twelfth Malaysia Plan (RMK12) with a total allocation of RM2,000,000. It aimed to assess and promote the development of forest plantations in Sabah by producing and distributing quality seedlings of selected timber species to smallholders and local communities. In addition, the project sought to share knowledge on forest plantation practices and provide a collaborative platform for stakeholders interested in plantation development.

During the five-year implementation period, the project made significant progress. Participation from smallholders and local communities was encouraging, with 101 participants from 15 districts across Sabah. A cumulative total of 45,003 seedlings were successfully distributed throughout the period. The species distributed included *Neolamarckia cadamba* (23,914 seedlings), *Terminalia copelandii* (7,585 seedlings), *Eucalyptus pellita* (6,190 seedlings), and *Falcataria falcata* (5,002 seedlings), along with smaller quantities of *Khaya senegalensis*, *Octomeles sumatrana* and *Swietenia macrophylla*. Among these, *Neolamarckia cadamba* was the most widely distributed, reflecting its strong suitability and demand among participants.

Distributions of seedling by species (2021 to 2025).

Species	2021	2022	2023	2024	2025	Total
Eucalyptus pellita	1,260	2,860	1,270	180	620	6,190
Falcataria falcata	1,900	450	2,062	420	170	5,002
Khaya senegalensis	-	-	300	-	-	300
Neolamarckia cadamba	3,985	5,600	8,548	4,805	976	23,914
Octomeles sumatrana	-	-	100	97	230	427
Swietenia macrophylla	-	-	1,020	445	120	1,585
Terminalia copelandii	970	1,510	950	2,105	2,050	7,585
Total	8,115	10,420	14,250	8,052	4,166	45,003

The project implementation revealed several key insights. Public awareness and acceptance of the potential benefits of forest plantations remains limited. To strengthen public engagement, greater efforts are needed to promote their importance. While traditional practice emphasises site conditions for species selection, the project underscored that factors such as proximity to processing mills are equally critical for efficient integration between plantation activities and downstream industries. At the same time, structural constraints persist. Certification requirements, while essential for market access, often exceed the capacity of smallholders. Additionally, poor infrastructure, limited bargaining power, and low market awareness hinder smallholders from accessing profitable markets. Consequently, they frequently depend on intermediaries, which diminishes their returns and makes forest plantations less appealing compared with other types of plantation. Moreover, outreach efforts were hampered by limited resources, emphasising the need for stronger collaboration with partner organisations to enhance engagement.

In conclusion, the project has successfully demonstrated the potential of smallholders and local communities to contribute to Sabah's timber supply. However, it is essential to address issues related to logistics, certification, market access, and collaborative outreach to sustain and scale up these efforts.

B. Enhancing Seed Production and Productivity through Intensive Selection of Candidate Plus Trees (CPT)

The RMK-12 project was successfully completed in 2025, meeting its main goal of enhancing seed production and productivity by selecting Candidate Plus Trees (CPT) for seven forest plantation species: Laran (*Neolamarckia cadamba*), Talisai Paya (*Terminalia copelandii*), *Eucalyptus pellita*, Batai (*Falcataria falcata*), Binuang (*Octomeles sumatrana*), Mahogany (*Swietenia macrophylla*), and *Acacia* sp. The table below lists the number of CPTs selected by species, totalling 403 documented between 2024 and 2025.

Species	CPT
Laran (*Neolamarckia cadamba*)	139
Binuang (*Octomeles sumatrana*)	52
Batai (*Falcataria falcata*)	51
Eucalyptus pellita	60
Talisai Paya (*Terminalia copelandii*)	74
Acacia sp.	14
Mahogany (*Swietenia macrophylla*)	13
Total	403

Selection was carried out systematically, focusing on growth performance, stem form, tree health, and phenotypic superiority to ensure the production of high-quality planting materials. Throughout the project, we monitored flowering and fruiting patterns. Additionally, tree management practices, such as fertilisation and disease control, were improved to enhance seed yield and quality. A data management system utilising Google Maps and structured spreadsheets supported CPT documentation, traceability, and seedling tracking.

Three reference books were published, detailing CPT selection guidelines and providing a photographic catalogue of selected CPTs from both local and exotic species. Additionally, a related poster was presented at international seminars to share the project's outcomes with stakeholders in the forest plantation sector.





(Left) A visit to a smallholder planting in Kampung Bambangan Baru, Kiulu. (Right) A 3-year-old Talisai Paya plot in Beaufort, owned by Ms. Denise and Mr. Tiong Yoong Choong.

The project also fostered collaboration with plantation companies and research institutions, establishing two progeny trial plots at Jawala Plantation Industries Sdn. Bhd. in Keningau, and Serijaya Industri Berhad in Tawau. It included research partnerships with SAFODA and UMS, supporting applied research aligned with Sabah Forest Policy Thrust 3 and Item 5 of the 20th MFC Resolution.

Overall, the project improved the availability of high-quality seed sources, enhanced technical capacity in CPT selection, and established a strong foundation for tree improvement programmes in Sabah's forest plantations.



Poster presented in International Conference of Forest Plantation Research and Innovation 2025, Pullman Hotel, Kuching, Sarawak. 17-19 November 2025.



Datuk Frederick Kugan, Chief Conservator of Forests, receives a new set of books on Candidate Plus Trees from the Head of Forest Research Centre, Dr. Arthur Chung, in the presence of the authors during the book launch on 9 December 2025.

COORDINATED COLLABORATIVE PROJECTS/STUDIES/ WORKSHOPS/VISITS

A. Lebihasil Sdn Bhd and Integrated Wood Processing (IWP) Sdn Bhd: Harvesting Economics and Timber Utilization of *Eucalyptus pellita*

This joint upstream and downstream study aims to quantify harvest yield and productivity from a 5-ha *Eucalyptus pellita* plot planted in 2018. Key metrics include total volume, log size distribution, and volume recovery rate. The trees were spaced at 5 × 5 m, and harvesting operations were conducted in December 2025. Data on log diameter and harvesting operation costs were collected to assess the economics of the FMU's harvesting practices. The study is expected to generate site-specific data and provide recommendations for enhancing silvicultural practices, improving harvesting efficiency, and boosting the overall economic performance of *Eucalyptus pellita* plantations at Lebihasil Sdn. Bhd. and in other areas with similar site conditions.



A. *Eucalyptus pellita* stand planted since 2018.
B. Harvesting operations in progress within the 5-ha test plot.
C. Harvested logs at the stumping area.

B. Harimaju Plantation Sdn Bhd: Oil Palm Plantation Conversion Demonstration Plot

The collaborative research at the 45-ha Kinabatangan plot has entered its third year, focusing on the economics of converting an oil palm plantation. The study examines: (i) the minimum oil palm area needed to cover operational costs; (ii) timber harvest rotation intervals and management regimes; and (iii) additional operational cash flows. To date, 75% of the plantation has been converted—20 ha in 2023, with timber seedlings planted between April and May. The remaining 25 ha is scheduled for late 2024 and early 2025, delayed by seedling shortages. Six months after planting, seedling survival was 89%, and after two years, *Neolamarckia cadamba* reached an average diameter at breast height (DBH) of 17.6 cm. No significant growth differences were observed between sloped and flat areas, likely because the stands have not yet reached canopy closure.



(Left) Smallholder Mr. Lo standing beside a 2½-year-old *Laran* tree planted in April 2023. (Right) The Malaysian Timber Council team, led by Chief Executive Officer Mdm. Noraihan Abdul Rahman, visiting the project site.

Before conversion, the plantation's annual oil palm production averaged 490 MT in 2023. Following the transition, yields dropped by 60% in 2024 due to the reduced productive area. To offset income loss during timber establishment, short-term crops such as bananas, sweet potatoes, and pumpkins were introduced. These intercrops generated RM 25,000 in 2024 and RM 77,000–85,000 in the first seven months of 2025, providing vital interim financial support until timber harvesting begins in years 6–8.

C. Visit to MCBIO Sabah Sdn Bhd, Keningau – 3rd September 2025

A group of departmental personnel, including researchers from the Forest Research Centre (FRC) and officers from the Keningau District Forestry Office, visited MCBIO Sabah Sdn. Bhd. to gain deeper insights into the wood pellet market. The delegation was welcomed by the Managing Director, Mr Lee Jung Mok, and the Finance Director, Mr Park, who provided a comprehensive briefing on the company's background, operations, and customer base. This was followed by a productive discussion on the prospects of the wood pellet industry in Sabah, including potential future developments. The visit concluded with a guided tour of the factory, allowing participants to closely observe the production processes and further enriching the exchange of ideas.







A. Group photo with the Managing Director, Mr. Lee Jung Mok, in front of the wood pellet mill. **B**. Mill operations in progress. **C**. Wood pellets ready for export.

D. MTC Visit yo Gum-Gum Forest Reserve and CTF Suan Lamba – 11th September 2025

The Malaysian Timber Council (MTC) delegation, led by CEO Puan Noraihan Abdul Rahman, visited two Community Tree Farming (CTF) sites in Suan Lamba, Sukau. The purpose of the visit was to gain first-hand insights into the implementation of CTF by the Sabah Forestry Department (SFD), particularly in collaboration with smallholders and local communities.



Visit to a Demonstration plot at Gum-Gum Forest Reserve.



CTF Suan Lamba Cocoa mix with Durian.



CTF Suan Lamba fruit trees with Laran.

Additionally, the delegation explored the Laran, Batai, and Talisai Paya plots in the Gum-Gum Forest Reserve. These demonstration plots were established in 2016 as part of the Eleventh Malaysia Plan (RMK11).

E. Workshop on Research Achievements and Progress Between SFD and Sawit Kinabalu Group (CBU) – 05th November 2025

The workshop was attended by approximately 25 staff members from FRC and four representatives from the CBU, including Mr. Charis Saliun, Senior Manager at CBU. It was organised to conclude ongoing collaborative activities and explore potential opportunities for future collaboration. The event reaffirmed the shared commitment of the Sabah Forestry Department (SFD) and the Sawit Kinabalu Group to enhance research collaboration, promote sustainable practices, and strengthen biodiversity conservation efforts.



Discussion session FRC - Sawit Kinabalu Group.

F. Research Outputs And Participation in the International Conference on Forest Plantation Research and Innovation (ICFPRI 2025)

Four Research Officers from the Forest Plantation Programme, along with other officials from the Sabah Forestry Department (SFD), attended the *International Conference on Forest Plantation Research and Innovation* (ICFPRI 2025) and actively participated in the event. They successfully presented a total of seven poster papers listed in the table below, showcasing ongoing research and innovations within the programme. This contribution reflects the programme's commitment to advancing knowledge in forest plantation research and enhancing its visibility and engagement at the international level.

No.	Poster Title	Author(s)
1	Experience in Promoting Smallholder Forest Plantation in Sabah	K.N.K. Pang *et al.*
2	The Suan Lamba Approach – Rethinking Agroforestry for Sustainability	E. Khoo *et al.*
3	Phenology and Reproductive Cycles of Key Plantation Tree Species in Sabah, Malaysia	F.Y. Chong *et al.*
4	Effect of Multiple Rootstock Technology (MRT) on Laran (*Neolamarckia cadamba*) Development: A 48-Month Assessment in RP Gum-Gum Forest Reserve, Sandakan, Sabah	R. Majapun *et al.*
5	Effect of Neem and Garlic Oil Extracts on Damping-off Disease in *Neolamarckia cadamba*	V. Paul *et al.*
6	Effect of Weedmat Mulching on Early Growth Performance of Two Tree Species in a Research Plantation in Sabah	K. Kimjus *et al.*
7	Enhancing Seed Production and Plantation Productivity through Intensive Candidate Plus Tree (CPT) Selection: Choosing the Best Today for the Forests of Tomorrow	K. Kimjus *et al.*



A. Sabah Forestry Department representatives, including officers from the Forest Research Centre (FRC). **B & C.** Viviannye Paul (left) and Veronica S. Guanih (right) with their poster presentations

FOREST PLANTATIONS

A. Growth Measurement of RMK11 (Rancangan Malaysia Ke-11) Plots

The Plantation Section conducted assessments and maintenance for all active plots at Kolapis A Station in 2025. A summary of the growth assessments for the spacing trial and the species trial is presented in Tables 1 and 2, respectively.

Table 1: Growth Assessment of 6-year-old Species and Spacing Trial.

Species	Spacing (m)	Mean DBH (cm)	MAI DBH (cm/yr)	Mean Height (m)	MAI Height (m/yr)	Survival (%)
Neolamarckia cadamba	7X7	22.37	3.73	15.32	2.55	86.36
	5X5	18.65	3.11	13.75	2.29	72.82
	3X3	15.68	2.61	15.32	2.55	77.55
Octomeles sumatrana	7X7	17.85	2.98	9.22	1.54	96.94
	5X5	14.35	2.39	10.01	1.67	86.22
	3X3	12.29	2.05	10.97	1.82	80.61
Falcataria falcata	7X7	37.01	6.17	18.07	3.01	44.9
		20.29	3.38	11.78	1.96	11.73

Table 2: Growth Assessment of 6-year-old of Mixed Species Trial.

Species	Spacing (m)	Mean DBH (cm)	MAI DBH (cm/yr)	Mean Height (m)	MAI Height (m/yr)	Survival (%)
Terminalia copelandii	5X5	15.9	2.65	10.75	1.79	77.04
Octomeles sumatrana	5X5	15.17	2.53	8.29	1.38	83.67
Falcataria falcata	5X5	31.29	5.21	17.36	2.89	39.42
Terminalia calamansanai	5X5	17.49	2.91	9.7	1.62	95.92
Swietenia macrophylla	5X5	18.93	3.16	16.21	2.7	83.18
Litsea sp.	5X5	12.97	2.16	7.01	1.17	54.08
Dryobalanops lanceolata	5X5	8.54	1.42	6.82	1.14	27.55
Neolamarckia macrophylla	5X5	17.9	2.98	9.16	1.53	29.75

B. Inventory of Dipterocarp Species Trial at Gum-Gum FR, Sandakan and Mandahan FR, Papar

An inventory was conducted to assess the number of surviving trees on old plots planted in 1964 and 2004. The data from five Dipterocarp plots in Gum-Gum and Mandahan are presented in Table 3.

Table 3: Summary of planted Dipterocarp species trials at Gum-Gum and Mandahan as of 2025.

Species	Station	n	Year Planted	Spacing (m)	DBH Mean (cm)	DBH MAI (cm/yr)
Shorea parvifolia	Gum-Gum, Sandakan	17	1989	5x4	46.95	1.3
Dryobalanops lanceolata	Gum-Gum, Sandakan	134	1993	2x4	32.42	0.95
Dryobalanops lanceolata	Mandahan Papar	39	2004A	3x3	17.38	0.87
Dryobalanops lanceolata	Mandahan Papar	42	2004B	5x5	20.24	1.01
Dryobalanops lanceolata	Mandahan Papar	37	1964	13x5.5	76.73	1.28

C. Field and Site Visits

i. Universiti Malaysia Sabah (UMS) Field Visit to Gum-Gum Forest Reserve, Sandakan – 14th May 2025

Approximately 50 students, led by Dr. Affendy Hassan from the Faculty of Tropical Forestry, UMS, visited various forest plantation demonstration plots in the Gum-Gum Forest Reserve. The primary aim of the visit was to provide students with first-hand field exposure to forest plantation practices.



Third-Year Students of the Forestry Plantation and Agroforestry Programme, Universiti Malaysia Sabah (UMS)

ii. Field Visit to all Smallholders in the West Coast– July and August 2025

The Plantation Section conducted a field visit to meet with several smallholders in Tongod, Sook, Tenom, Beaufort, Penampang, and Ranau. The main purpose of the visit was to assess the growth progress of the Laran, Talisai Paya, and Mahogany plantations. Additionally, the team aimed to identify challenges, such as pest infestations, and to gather feedback and expectations from the smallholders for future planning and reference.



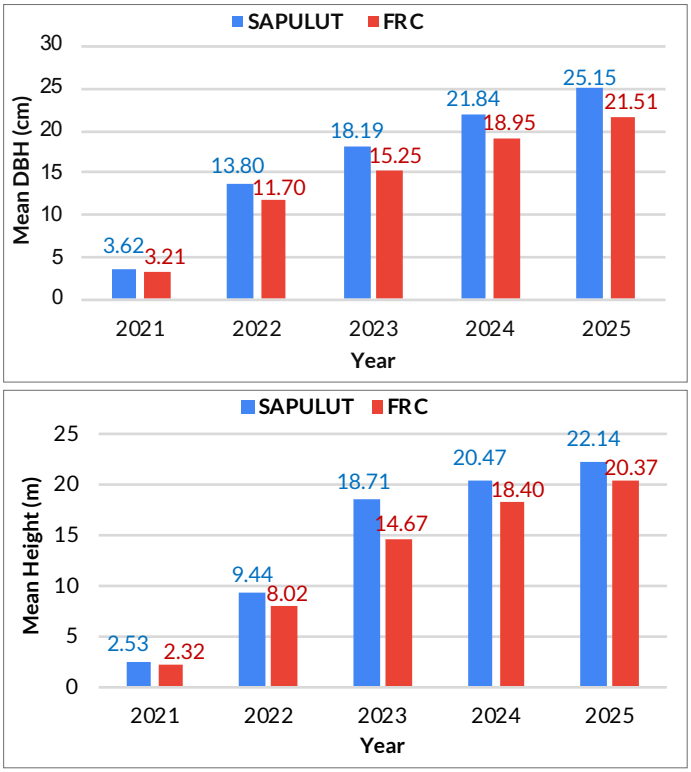
A. Two-year-old Laran at Tongod. **B**. One-year-old Laran at Sook. **C**. One-year-old Laran at Tenom. **D**. Two-year-old Laran at Penampang. **E**. Two-year-old Mahogany at Ranau. **F.** Four-year-old Talisai Paya at Beaufort.

TREE IMPROVEMENT

A. Research Activities

i. Preliminary Results of the Comparative Growth Study on Laran Trees Raised by Sapulut Forest Development and FRC

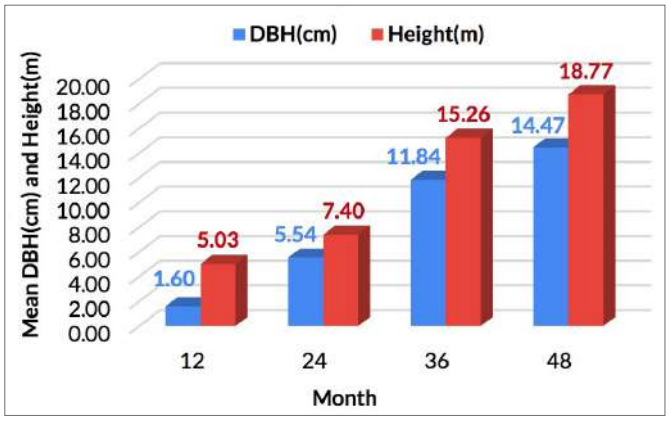
This five-year study (2021–2025) demonstrated a steady upward trend in both diameter at breast height (DBH) and height for Laran trees sourced from Sapulut and FRC, with no recorded declines. Trees from Sapulut consistently outperformed those from FRC each year, particularly in DBH, with the largest differences observed in 2024 and 2025. Height differences between the two sources were minimal. Notably, both sources showed a marked increase in growth between 2022 and 2023. These variations are likely attributable to site-specific environmental factors at each site, and ongoing monitoring will further validate these findings.



Comparative growth study of mean DBH and mean height of 5 year-old Laran (*Neolamarckia cadamba*) tree sourced from Sapulut Forest Development and FRC.

ii. Growth performance of Laran Merah (*Neolamarckia macrophylla*) derived from stem cuttings

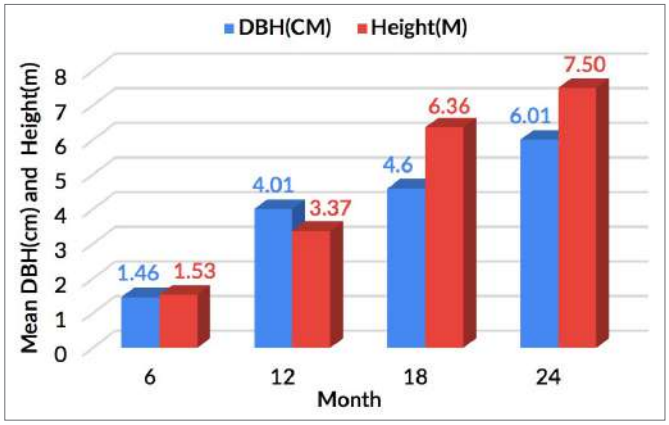
The 48-month (four-year) study of Laran Merah (*Neolamarckia macrophylla*) clonal plots, established from stem cuttings at the Gum-Gum Forest Research Station in the Forest Reserve Gum-Gum, Sandakan, demonstrated a consistent increase in both mean DBH and mean height from month 12 to month 48. Mean DBH rose from approximately 2.0 cm to 15.0 cm, while mean height increased from about 5.5 m to nearly 19.0 m. Overall, the findings indicate stable and vigorous growth. The study will continue to assess the influence of environmental conditions and climate variability on growth performance.



48-month growth performance of Laran Merah (*Neolamarckia macrophylla*) derived from stem cuttings.

iii. Growth Performance of *Eucalyptus* Hybrids (Ex-SFI) Established from Stem Cuttings at the Gum-Gum Forest Research Station, Forest Reserve Gum-Gum, Sandakan, Sabah

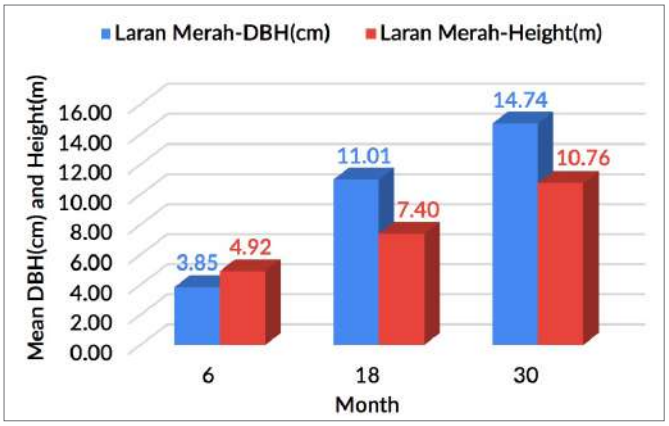
The 24-month study data revealed that all stem cuttings of E. Hybrid (Ex-SFI) consistently increased in both mean DBH and mean height from month 6 to month 24. Specifically, the mean DBH rose from 1.46 cm to 6.01 cm, and the mean height increased from 1.53 m to 7.50 m over the course of the study. Notably, the most significant height increase occurred after month 12, indicating a period of rapid vertical growth. Overall, these results demonstrate that the growth performance of E. Hybrid stem cuttings was both strong and stable throughout the observation period.

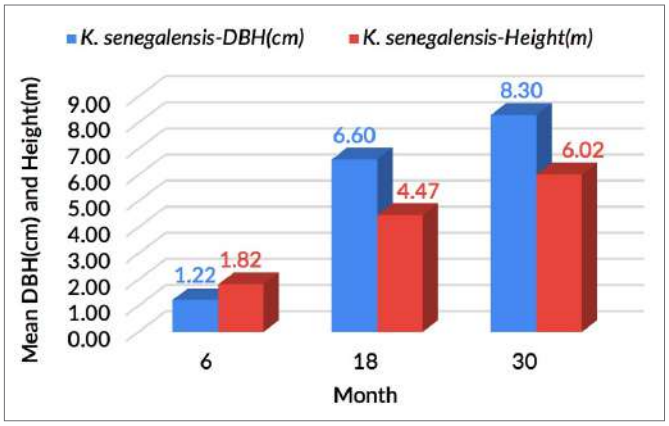


24-month growth performance of *Eucalyptus* Hybrids (Ex-SFI)) derived from stem cuttings.

iv. Seedling Seed Orchards of Laran Merah (*Neolamarckia macrophylla*) and *Khaya senegalensis*

This study compared the growth of Laran Merah and *Khaya senegalensis* over two and a half years in seedling seed orchard plots (June 2023–December 2025). Both species exhibited consistent increases in mean DBH and mean height. Laran Merah outperformed *K. senegalensis*, achieving a mean DBH of 15 cm and a mean height of 11 m, compared to 9 cm and 7 m, respectively, for *K. senegalensis*. Overall, Laran Merah demonstrated superior growth under the same site conditions.





Early growth evaluation of Laran Merah (*Neolamarckia macrophylla*) and *Khaya senegalensis* seedlings at the Gum-Gum Forest Research Station, Forest Reserve Gum-Gum, Sandakan.

B. Activities at FRC Nursery - Training and Knowledge Exchange

On June 18, 2025, a group of 18 students and three coordinators from Oregon State University (OSU), USA, visited the Forest Plantation Nursery. During the visit, they received a comprehensive briefing and gained practical exposure to nursery management practices, including seedling production and maintenance procedures.





On 25 November 2025, a group of 40 students and 6 lecturers from the Forest Institute of Sabah (FORiNS) conducted a half-day study visit to the FRC Nursery. The visit aimed to expose participants to nursery management practices, including seedling production and maintenance techniques. The program also featured a presentation and field briefing on the procedures and criteria for selecting mother trees.



C. Distribution of planting materials

The following figures represent the number of seedlings distributed to various agencies in support of the Kempen Penanaman 100 Juta Pokok initiative:

No	Distributed to (total recipients)	Total seedlings distributed
1.	Public agency in Sabah (2)	170
2.	Private company (stakeholder) in Sabah (6)	4,443
3.	District Forest Office (4)	1,809
	Grand Total	6,422

In addition, proceeds of RM3,308 were generated from the sale of seedlings to companies and individuals interested in establishing forest plantations, landscaping, or using them for ornamental purposes.

SEED

A. Seed Collection

Seed stocks in 2025 consisted of seven tree species sourced from different locations in Sabah (Table 4). The total recorded fruit weight was 355.74 kg, and the seed weight was 216.55 kg. Laran contributed the most seed lots, totalling 39, while Talisai Paya had the highest fruit and seed weights at 207.34 kg. Initial germination percentages varied from 33.33% to 89.33%, with Laran's germination still ongoing. All seed collections were exclusively obtained from selected Candidate Plus Trees (CPTs), and phenotypic selection was used to ensure superior genetic quality and enhanced seed performance.

B. Seed Distribution

In 2025, a total of 74.9 kg of seeds were distributed to Forest Management Units (FMUs) and smallholders (Table 5). Of this total, 50.9 kg were provided to FMUs, which then sowed the seeds in their nurseries before field planting. In contrast, private sector entities and smallholders typically preferred to receive seedlings for immediate planting. As a result, 24.0 kg of seeds were sent to the Forest Research Centre nursery for propagation, and the planting materials were distributed to recipients once they were ready.

Table 4: 2025 Seed Collection by Plantation Tree Species.

No	Total Seedlots	Origin	Fruit Weight (kg)	Seed Weight (kg)	Initial Germination %
Acacia Hybrid	3	Ulu Kukut (SAFODA)	3.26	0.0036	33.33
Batai	3	Badaraya FR & Jawala plantation	7.41	0.8200	89.33
Binuang	3	Segaliud Lokan & Tabin FR	11.78	0.4500	68.52
Laran	39	Trusmadi, Gum-Gum & Kolapis A	29.58	0.9700	19-73 (ongoing)
Mahogani	4	Ulu Kukut (SAFODA)	69.38	6.6600	73.75
Pelita	15	Kolapis A & B	27.01	0.3100	77.13
Talisai Paya	14	RDC, Kolapis A, FRC & Pinsupu FR	207.34	207.3400	73.20
	Total		**355.74kg**	**207.34kg**	

Table 5: Distribution of Seeds in 2025.

Recipient	Purpose	Weight (kg)
Private Sector & Smallholders	Forest Plantation	24.0
Forest Management Units (FMU)	Forest Plantation (ITP)	50.9
	Total	74.9

C. Research Activities

Breaking Seed Dormancy in *Neolamarckia cadamba*: A Preliminary Mixed-Effects Analysis of Seed Germination along an Elevation Gradient

This study examined how water-based pretreatments affect the germination and seed physiology of high-elevation *Neolamarckia cadamba* (Laran) seeds collected from the Trusmadi Forest Reserve, Sabah. The results showed that soaking seeds in ambient water for 24 hours significantly enhanced seed imbibition and increased germination rates, reaching a maximum of 62%. In contrast, boiling-water pretreatments induced thermal stress, leading to a substantial decrease in germination (Fig. 1). These findings suggest that high-elevation *N. cadamba* seeds are particularly sensitive to heat and benefit from ambient-water pretreatments to optimise germination performance. The manuscript has been accepted for presentation at a conference and may also be considered for publication.

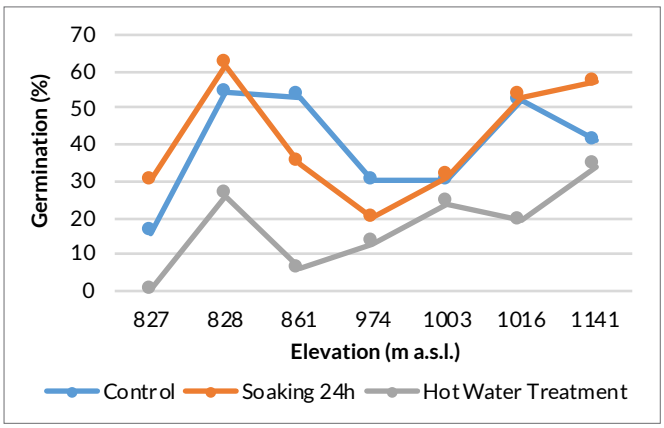


Fig. 1: Germination of High-Elevation *N. cadamba* Seeds under Different Treatments.

D. Other activities

Chong Fung Yun delivered a presentation titled "Seeds of Hope: How Trees Secure Our Food Future" at a public science talk organised by Petrosains PlaySmart Kota Kinabalu, themed "Feeding Tomorrow: The Future of Food", on 20 September 2025 at the Sabah State Library. Her presentation helped raise public awareness and understanding of the crucial role trees and forests play in securing future food systems and promoting sustainability.



A flyer featuring Ms Chong Fung Yun's presentation on how trees help secure our future food systems.

BIOTECHNOLOGY

A. Effect of seed size on seedling growth and biomass traits of Terminalia copelandii under nursery conditions

The study examined the effects of seed size on germination, seedling growth, and biomass traits of *Terminalia copelandii* under nursery conditions to enhance seedling selection. Among the 450 seeds graded by weight, length, and width, the heavier seeds (>9.36 g) exhibited the highest germination rate (98%) and the shortest mean germination time. In contrast, medium-weight seeds (7.4–9.3 g) produced the tallest and most uniform seedlings. To validate seedling performance in the field, a study was conducted in July 2025 at the Sg. Pin Conservation Area (SPnCA) in Kinabatangan (Sawit Kinabalu).



Experimental seedlings at the hardening bed before field planting at Sg. Pin Conservation Area.

B. Evaluating dormancy-breaking treatments for *Terminalia copelandii* using weighted ranking and GLM

The study examines seed dormancy constraints in *Terminalia copelandii*, a lightweight tropical hardwood crucial for ecological restoration and timber planting in swamp-prone areas of Sabah. Dormancy-breaking treatments were evaluated using Forward Weight Ranking (FWR) and a Generalized Linear Model (GLM). The results identified 24-hour water soaking, mechanical sanding, and 10% H_2SO_4 soaking as the most effective and practical methods, offering actionable guidance for enhancing germination.

C. Effect of Multiple Rootstock Technology (MRT) on Laran (*Neolamarckia cadamba*) Development: A 48-Month Assessment in RP Gum-Gum Forest Reserve, Sandakan, Sabah

A field assessment was conducted on 48-month-old Multiple Rootstock Technology (MRT) *Neolamarckia cadamba* plants established in the research plot at Gum-Gum Forest Reserve, Sandakan, Sabah. MRT-treated and control seedlings were planted in July 2021 and monitored at multiple intervals without fertilizer treatment. The results indicated that MRT trees consistently outperformed the controls, showing significantly greater diameter growth (DBH) over time. By 48 months, MRT trees averaged 23.3 cm DBH compared to 16.5 cm in the controls, while height differences were marginal. MRT nearly doubled the estimated wood volume per tree (0.76 m³ vs. 0.38 m³). This study demonstrates MRT's strong potential to enhance productivity and early yield in tropical plantation forestry, while also highlighting the need for further refinement and long-term validation.

DBH and Estimated Height for MRT and Control Groups Over Time.

Month (m)	Variable	Control	MRT	*t*-statistic	*p*-value
25	DBH	11.0 ± 2.3 cm	13.9 ± 3.39 cm	-1.28	0.28
25	Height	7.5 ± 2.1 m	10.0 ± 5.3 m	-0.77	0.51
31	DBH	14.1 ± 1.6 cm	17.5 ± 2.6 cm	-1.95	0.14
31	Height	11.8 ± 3.6 m	15.9 ± 3.8 m	-1.43	0.22
44	DBH	15.4 ± 2.9 cm	21.4 ± 2.7 cm	-2.8	0.041*
48	DBH	16.5 ± 3.5 cm	23.3 ± 3.6 cm	-2.49	0.062
48	Height	16.7 ±1.7 m	17.5 ± 1.5 m	-0.71	0.51

Note. * $p = 0.05$

D. Program Career Path 2025 "Own Your Passion"

On 1st November 2025, the Forest Research Centre (FRC) Sepilok participated in the Career Path 2025 Program, organized by the Student Association of the Faculty of Sustainable Agriculture, Universiti Malaysia Sabah (UMS). The program aimed to strengthen collaboration between UMS and external agencies while enhancing graduates' employability by exposing students to career and industrial training opportunities. FRC hosted an exhibition booth showcasing five sections: Plantation, Biotechnology, Seed, Pathology, and Systematic Botany. In addition, FRC research officer Mr. Richard Majapun delivered a presentation introducing FRC and highlighting the industrial training opportunities available within the Forest Research Centre.



Sharing session with the UMS students.

INSECT PESTS & DISEASES

A. Plantation Health Monitoring and Surveillance

i. Plantation Health Assessment at Jawala Plantation Industries Sdn. Bhd., Sapulut

On 16 April 2025, a plantation health assessment was conducted at Jawala Plantation Industries Sdn. Bhd., Sapulut. The assessment was part of a collaborative effort between the Forest Research Centre (FRC) and plantation stakeholders. It included field inspections and discussions on the overall condition of the plantation and potential pest and disease issues affecting key plantation species, specifically Falcataria falcata (Batai) and *Neolamarckia cadamba* (Laran). Observations revealed Gall Rust disease on *Falcataria falcata*, while no significant disease issues were noted in the *Neolamarckia cadamba* plots. The assessment highlighted the importance of routine monitoring and early detection to minimise potential impacts of disease on plantation performance.



Group photo of the plantation team with Mr. Donny Ayun from Jawala Plantation Industries.



Plantation team members in discussion with Mr. Maxy of Jawala Plantation Industries Sdn. Bhd., Sapulut.

B. Plantation Disease and Pest Surveillance at Sg. Pin, Kinabatangan

A plantation disease and pest surveillance visit was conducted at Sg. Pin, Kinabatangan, on 25 July 2025, to assess the overall health of the trees and identify potential pest and disease risks in the plantation and seed garden areas.

The assessment identified isolated cases of root disease in *Falcataria falcata*, likely linked to the site's history. However, no significant disease or pest issues were observed in the other assessed plots during the visit. Minor insect activity was noted but did not require immediate management action. Ongoing monitoring was recommended to ensure early detection and prompt intervention.





Ground inspection of the *Falcataria falcata* plot at Sg. Pin, Kinabatangan, conducted on 25 July 2025. The assessment showed one tree exhibiting signs of decline. A joint site inspection was carried out by the Plantation and Pathology teams together with representatives from the Sawit Kinabalu Conservation and Biodiversity Unit. Examination of an uprooted Batai tree confirmed Ganoderma infection likely associated with previous oil palm land use.

C. Internship

In 2025, the Pathology Section hosted internship students to provide them with exposure to plantation research, nursery management, and disease monitoring activities.

During the reporting period, two internship students were assigned to the section.

1. Jennive Joan Jupin – Faculty of Tropical Forestry, University Malaysia Sabah (UMS) (17 March 2025 – 04 July 2025)
2. Norfarhana Binti Muhamad Hatta – International Islamic University Malaysia (3 March 2025 – 15 August 2025)

Norfarhana Binti Muhamad Hatta underwent a 24-week internship from 3 March 2025 to 15 August 2025.

- First 13 weeks (3 March 2025 – 1 June 2025): Attached to the Tree Breeding Section under the supervision of Mdm Maria Ajik and guided by Ms. Kuina Kimjus.
- Remaining period (2 June 2025 – 15 August 2025): Continued internship placement under the Pathology Section, Forest Research Centre (FRC), Sepilok.

During the internship, the student participated in nursery activities, including monitoring and documenting plant growth, recording growth measurements, and preparing planting media for research mini-projects.



Norfarhana Binti Muhamad Hatta conducting laboratory activities under the Pathology Section during her internship attachment at the Forest Research Centre (FRC), Sepilok.



Intern organising and preparing planting media for research mini-project activities under the Forest Plantation Programme.



Intern documenting plant growth measurements for monitoring and research purposes

FOREST PRODUCE AND PRODUCTS

TECHNICAL SERVICES

A. Wood Identification and Analytical Services

Wood samples received in 2025 for identification totalled 1 sample (Table 1). The Xylarium continued to maintain 5638 authenticated samples comprising 1075 species across 404 genera of 96 families. No samples were sold in 2025.

Table 1. Applicant and number of wood samples for identification in 2025.

Date	Applicant	Number of wood sample (pieces)
23.04.2025	Region Forestry Officer Tawau	1

B. Conversion-factor from metric tons to cubic meters, log from selected plantation species

For now, the Sabah Forestry Department measures plantation log volume by measuring the diameter and length of the log. However, this method makes accurate log volume measurement difficult due to the irregular shape of the logs. As an alternative, log-weighting methods are being considered. Before this method can be applied by the Sabah Forestry Department, research is required to determine the conversion factor from metric tons to cubic metres for plantation logs. The study is being coordinated by the Division of Forest Industry and Trade, Sabah Forestry Department, with assistance from the Wood Science and Wood Utilization Sections, Forest Research Centre, Regional Forestry (Keningau, Kudat, Sandakan, Tawau), District Forestry (Beluran, Pitas, Serudong, Sook, Tibow), and the Forest Management Unit (Asian Forestry Company (Sabah), Sdn. Bhd., Bornion Timber Sdn. Bhd., First Greenworld Sdn. Bhd., Gerak Saga Sdn. Bhd., Jawala Plantation Industries Sdn. Bhd., Sabah Softwood Berhad., Total Degree Sdn. Bhd., TSH Resources Berhad., Zillion Fortune Sdn. Bhd.). In 2025, the research is focused on data analysis and report writing.

C. Wood Testing Laboratory (Formaldehyde Emission) at Forest Research Centre, Sabah Forestry Department (SFD) – Progress towards MS ISO/IEC 17025:2017 Accreditation

The Wood Testing Laboratory's Formaldehyde Emission (FE) Lab has made significant progress, particularly in equipment procurement and lab preparation to meet the requirements for MS ISO/IEC 17025 accreditation. This accreditation remains a key KPI for FRC before launching its services to the public. Additionally, the FE Lab has strengthened its team by welcoming three research assistants to enhance its operational capacity.

i. Pre-Internal Audit on MS ISO/IEC 17025:2017

A pre-internal audit of the Formaldehyde Emission (FE) Laboratory was conducted from 24 to 26 February 2025 to evaluate the laboratory's readiness, particularly in procedures, equipment, and documentation, for compliance purposes. The findings from the audit consisted of 17 OFI, 7 OBS, and none on NCR, as per the notice.



Pre-internal audit of MS ISO/IEC 17025 for FE Laboratory.

ii. Method Validation and Verification and Quality System (MVVQS)

On 21–22 April 2025, a team of researchers from FE Laboratory attended a course on Method Validation & Verification Procedure and Quality System Compliance (MVVQS) at Shangri-La Tanjung Aru Resort, Kota Kinabalu, Sabah. The delegation, led by Mr. Zamrie Imiyabir, Head of the Forest Produce and Products Programme, comprised Mr. Jarry Lajanga, Dr. Noraidah Haini, Mr. Nor Hashim Ahmad, Mr. Abdullah Osman, Ms. Siti Rashidah Sainuddin, and Mr. Aqmar Badrie from the Wood Science and Utilization Section. The course aimed to enhance participants' knowledge and skills in complying with ISO/IEC 17025 standards for laboratory practices and analysis reporting. It was delivered by ChM Dr. Malarvili Ramalingam, an expert in laboratory accreditation and a Malaysian Laboratory Accreditation Scheme (SAMM) Technical Assessor for ISO/IEC 17025 since 2013.



Method Validation and Verification and Qualiti System (MVVQS) course.

iii. Laboratory Quality Management System (Measurement Uncertainty for Chemical Analysis)

The ISO/IEC 17025:2017 Training on Laboratory Quality Management System (Measurement Uncertainty for Chemical Analysis) was held on 25–26 June 2025 at the Pitta Room, Rainforest Discovery Centre (RDC), Sepilok. The course was officiated by Tn. Roslan Lalete, Head of the Quality Management & Training Division. The session was conducted by Pn. Norlia Musa from SIRIM Academy, an expert in laboratory quality systems. This training was organised by the Wood Science & Utilisation Section (under the Forest Produce & Products Programme) of the Forest Research Centre, with support from four student interns from Universiti Malaysia Kelantan. The students were involved as the secretariat responsible for being the MC, handling the PA system, technical issues, and



ISO/IEC 17025:2017 Training on Laboratory Quality Management System (Measurement Uncertainty for Chemical Analysis).

logistics. A total of 30 SFD officers and staff participated in the training. Participants included research officers, research assistants, administrative staff, general workers and ISO internal auditors of SFD. The course aimed to strengthen participants' understanding and implementation of laboratory standards, especially in managing measurement uncertainty.

iv. Internal Audit of Wood Testing Laboratory (Formaldehyde Emission) – MS ISO/IEC 17025:2017 (9 – 12 December 2025)

An internal audit based on MS ISO/IEC 17025 was conducted at the FE Laboratory from 9–12 December 2025. The audit findings recorded four (4) minor NCRs. The primary objective of an internal audit for MS ISO/IEC 17025 is to systematically evaluate the laboratory's quality management system (QMS) and technical operations for conformity with standards, ensure impartiality, and identify opportunities for improvement.





Internal Audit of Wood Testing Laboratory (Formaldehyde Emission) – MS ISO/IEC 17025:2017.

D. Laboratory Analysis of Ecological Materials

The Chemistry Section processed a total of 1,625 samples for laboratory analysis in 2025 (a decline of 28% from 2,248 samples in 2024) for various local and international stakeholders in forestry including from the Department. These samples comprised materials collected for either routine forest inventory or forest ecology research, with the largest amount comprising leaf samples from Dr. Petter Axelsson of the Swedish University of Agricultural Sciences. Similar to previous years, determination of total nitrogen (985 samples) was the most requested with total carbon (951 samples) coming in second. Routine work was temporarily disrupted from July to September 2025 due to the relocation of the Plant and Soil Testing Laboratory to the new Chemistry Section building. The move was necessary due to safety and operational requirements, as the previous facility, which was established in 1987, could no longer support the expanding R&D and analytical service activities of the section.

Table 2. List of sample batches received for laboratory analysis in 2025.

Applicant (Sample Type)	Organisation/s represented	Qty.
Dr. Petter Axelsson (leaves)	Swedish Uni. of Agricultural Sciences Sabah Forestry Dept.	411
Dr. Jacob Cook (mineral soil)	Imperial College London Sabah Forestry Dept.	276
Dr. Ryota Aoyagi (mineral soil)	Sabah Forestry Dept. Uni.of Kyoto	171
Dr. Salwana Md. Jaafar (mineral soil)	Uni. Brunei Darussalam	108
Dr. Salwana Md. Jaafar (peat soil)	Uni. Brunei Darussalam	78
Dr. Michael O'Brien (mineral soil)	Estacion Experimentales De Zonas Aridas Sabah Forestry Dept.	132
Dr. Elia Godoong (mineral soil)	Uni. Malaysia Sabah Sabah Forestry Dept.	16
Dr. Emma Docherty (leaves)	Sabah Forestry Dept. Uni. of Leeds	91
Vanielie Justine (plants)	Sabah Forestry Dept. Board of Trustees of Sabah Parks	8
Richard Majapun (mineral soil)	Sabah Forestry Dept. Jawala Plantation Sdn. Bhd.	128
Dr. Giacomo Sellan (mineral soil)	Manchester Metropolitan Uni. Sabah Forestry Dept.	12
Maria Espinosa (mineral soil)	Estacion Experimentales De Zonas Aridas Sabah Forestry Dept.	124
Jacqueline Joseph (mineral soil)	Uni. Teknology MARA (UiTM) Sabah Forestry Dept.	6
Tom Khoo (mineral soil)	Sabah Forestry Dept.	40
Kojima Satoru (mineral soil)	Uni.of Kyoto Sabah Forestry Dept.	24



The soil survey team from FRC Sepilok at Pegalongan Camp of Jawala Plantation Industries Sdn. Bhd. in Sapulut.

E. Soil Survey at Jawala Plantation Industries Sdn. Bhd. Pegalongan Camp

On 20 May 2025, a team of researchers from the Forest Research Centre (Chemistry and Biotechnology Sections, led by research officers Tom Khoo and Richard Majapun) conducted a soil survey of talisai paya (*Terminalia copelandii*) plantation plots at the Pegalongan Camp of Jawala Plantation Industries Sdn. Bhd. in Sapulut. The sampling was carried out to assess soil nutrient status and to investigate factors contributing to differences in growth and maturity of talisai paya across planting compartments. Laboratory analyses were conducted at the Plant and Soil Testing Laboratory FRC, and a technical report is being prepared and will be submitted to the Chief Operating Officer in early 2026.

RESEARCH & DEVELOPMENT

A. Project: Impacts of Land-Use and Land-Cover Change on Microbiome Diversity and Functioning in Sungai Tangkulap (2021–2024)

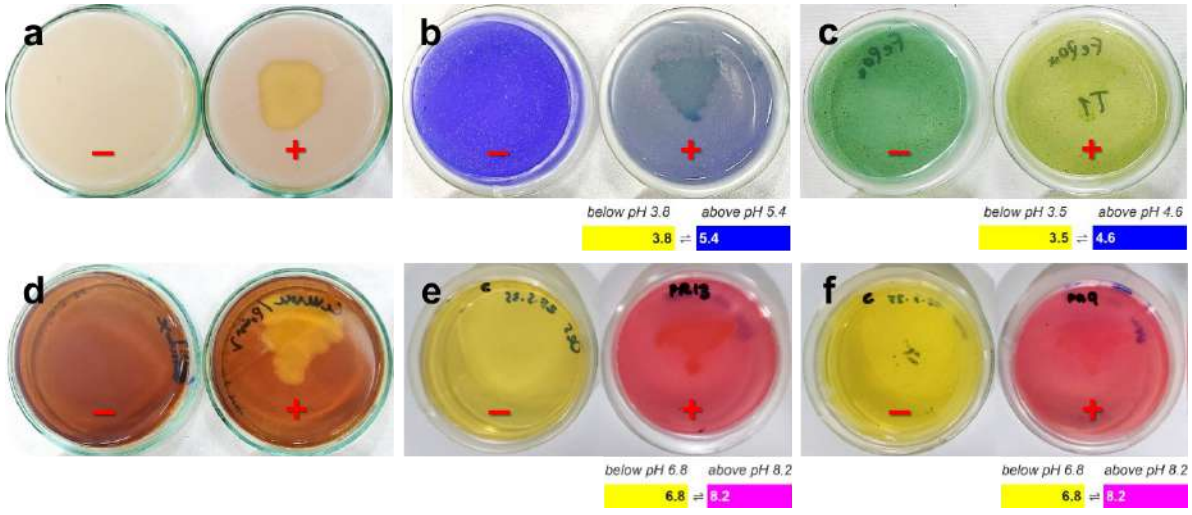
This project was completed in 2024, with several scientific papers now in preparation. A follow-up proposal to extend the study to six other disturbed forest landscapes has undergone several rounds of evaluation under the 13th Malaysia Plan. Although not funded in RP1, the improved proposal was accepted for initial screening under RP2 in December 2025.

i. Study: Impacts of Land-Use and Land-Cover Change on Soil Biodiversity

A manuscript examining how land-use intensification in Sungai Tangkulap alters how various soil physical and chemical properties are interlinked and the implications of these shifts on bacterial community assembly was submitted for review at the end of 2025. The study demonstrates that covariance along key soil fertility gradients—particularly pH—breaks down substantially with forest-to-agriculture conversion but remains comparatively intact under logging. These decoupling fragments the soil environment into multiple ecological niches, enabling greater taxonomic accommodation consistent with the niche packing hypothesis. A second manuscript, currently in preparation, addresses how the aforementioned shifts in microbial community structure translate into functional consequences for soil processes with emphasis on phosphorus cycling. Collectively, these findings have direct relevance for forest restoration, where microbially mediated plant-soil feedbacks strongly influence tree establishment and performance.

ii. Study: Significance of Phosphate-Mobilising Bacteria in Soil Fertility

Two additional papers focus on phosphate-mobilising bacteria (PMB) found in Sungai Tangkulap soils. Laboratory tests showed that all 27 isolates can produce useful enzymes such as phytase, urease, and cellulase. A follow-up study looks at how these bacteria interact with one another—sometimes helping, sometimes competing—and how these relationships affect their ability to support plant growth. These results suggest that when land-use disrupts natural microbial communities, negative interactions may become more common, reducing soil fertility and weakening plant-soil feedbacks that forests rely on.



Results of biochemical assays of soil bacteria from Sungai Tangkulap showing positive reaction for a) phytase and phosphatase, b–c) organic acid and siderophore, d) cellulase, e) urease, and f) deaminase production.

B. Project: Bioprospecting and Conservation of Tuhau in Sabah (2021–2025)

This five-year project, completed in 2025, successfully established baseline data on the genetic diversity and phytochemical variation of tuhau (*Etlingera coccinea*) across protected forests in Sabah. The findings provide essential groundwork for future conservation and sustainable-use efforts. The studies were conducted by contract research officers Dzulyana Idhamsah and Nurul Syahbillah Amir Mahmud of the Chemistry Section, with guidance from researchers at FRC, Yayasan Sabah, and Universiti Malaysia Sabah.

i. Study: Molecular Phylogeny and Genetic Diversity of Tuhau in Sabah

Wild tuhau in Sabah shows clear differences in pith colour, ranging from red to white. This study examined whether these differences arise from genetics, growing conditions, or natural changes as the plant matures. Analysis of DNA barcoding sequences confirmed that both colour types lacked genetic separation, indicating that the variation is more likely due to environmental factors or plant age, which are not heritable traits. Furthermore, the DNA barcoding marker identified two main management units for conservation, namely the southwestern Sabah group and the central-northeastern Sabah group. Meanwhile, microsatellite genotype data revealed finer genetic sub-structuring within each unit, although these patterns require more rigorous statistical testing to determine whether the genetic distinctions reflect natural separation or arise from small sample sizes (only three to seven individuals per site). Overall, the study provides essential baseline information to guide the sustainable management and conservation of wild tuhau, with three scientific papers now in preparation.

ii. Study: Variation in the bioactivity of *Etlingera coccinea* across Sabah

This study examined the antioxidant properties of tuhau collected from both wild and cultivated plants in Sabah. Wild tuhau generally exhibited stronger and more diverse antioxidant activity, highlighting the importance of natural growing conditions. Differences between locations were linked to factors such as elevation and basic soil conditions, indicating that the environment strongly influences the expression of secondary metabolites in tuhau. Comparisons with cultivated tuhau also showed how domestication can alter its natural chemical composition. The team is now finalising the results, with a scientific paper underway, to help guide the sustainable use and cultivation of tuhau in the future.

iii. Project: Genetic Diversity and Phytochemistry of *Mitragyna speciosa* in Sabah

Mitragyna speciosa, or ketum, is a medicinal plant native to Southeast Asia and traditionally used as a stimulant, pain reliever, and general herbal remedy. It has attracted global interest because its leaves contain unique natural compounds, including alkaloids such as mitragynine, which are linked to both medicinal effects and debated psychoactive properties. Some studies have also reported possible side effects. This study examined ketum growing in the Kinabatangan area of Sabah to assess the extent of genetic diversity in local populations and the variation in their chemical content. DNA tests were used to assess genetic variation, while chemical analyses were carried out on leaf samples. Combining both types of information provides a clearer picture of how ketum populations in Sabah differ, which can help inform future management, research, and safety considerations.

iv. Project: Shifts in Soil Phosphorus Pool Under Forest Plantation

Phosphorus availability in tropical soils depends on how it is partitioned among different chemical pools, and forest-to-plantation conversion can alter these pools in ways that affect long-term soil fertility. This project, in collaboration with research officer Kelving Pang of the FRC Plantation Programme, was launched to quantify phosphorus partitioning under plantation conditions. In October 2025, a team led by contract research officer Tom Khoo conducted a matched-pairs soil and litter survey in Lungmanis Forest Reserve, comparing intact forest with an adjacent Terminalia copelandii plantation. Litter and soils to 40 cm depth were sampled from 10 paired plots and analysed for key physical and chemical properties, including phosphorus fractions using the Hedley method. The study will clarify how phosphorus cycling shifts under plantation management. Data analysis is in progress, and a manuscript is in preparation.



Collection of soil and litterfall samples under talisai paya plantation.

v. Project: Development, Optimisation, and Standardisation of Analytical Methods

Boron is an essential micronutrient for tree growth, particularly in forest plantations, yet soil assessment methods often yield inconsistent results. This study compared two extraction approaches—hot water extraction (HWE) and dilute (0.01 M) $CaCl_2$—using plastic pouches and flasks to identify a reliable method for routine analysis. Boron recovery varied by extraction method, container type, and soil properties. HWE generally produced higher values, while $CaCl_2$ yielded lower, more conservative estimates. Flasks gave more consistent results than pouches due to better mixing and heat transfer, although pouches remained convenient for routine work. These findings highlight the need to optimise extraction conditions and account for soil type when standardising boron testing. Further work will evaluate which colorimetric assay provides the most stable measurements.



Development of a novel method to measure boron content in ecological materials showing the changes in colour from the reaction of borate ion and the curcumin reagent.

vi. Project: TRAILS 2—Agroforestry Plantations for Biodiversity and Ecosystem Services (2024– on-going)

The TRAILS agroforestry experiment is a long-term collaboration involving Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Melangking Oil Palm Plantation Sdn. Bhd., Universiti Putra Malaysia, and HUTAN, established on MOPP land in Sukau to evaluate biodiversity and ecosystem functions under monoculture and intercropped oil palm systems. In 2025, TRAILS 2 progressed with continued soil monitoring by the Chemistry Section of FRC. A handing-over ceremony in May formalised the Letter of Intent (LoI) between the Sabah Forestry Department and CIRAD, reaffirming their collaboration. As the LoI covered only one year, FRC Head Dr. Arthur Chung proposed upgrading the agreement to a full Memorandum of Understanding (MoU), a recommendation supported by lead principal investigator Prof. Alain Rival. Preparations for the MoU are underway to ensure long-term continuity of the research and to strengthen Sabah's role in advancing evidence-based agroforestry and soil biodiversity studies.



Tuan Indra Purwandita Herry Sunjoto, Deputy Chief Conservator of Forests (Planning and Management), representing the Chief Conservator of Forests, Datuk Frederick Kugan, in handing over the Letter of Intent to Prof. Alain Rival of CIRAD in May 2025. Also present were DC of Operations as well as DC of Research and Development.

vii. Project: The Importance of Soil Nitrogen in the Functioning of Tropical Heath Forests (2016–on-going)

Now in its ninth year, the long-term liming and nitrogen fertilisation experiment in the Kabili–Sepilok heath forest continued in 2025 with scheduled urea and lime applications and periodic monitoring of soil pH and treatment responses. Led by Dr. Giacomo Sellan of the Ecology of Guianan Forests Laboratory, Dr. Francis Brearley of Manchester Metropolitan University, and Dr. Jill Thompson of the UK Centre for Hydrology and Ecology, with Rolando Robert as local collaborator, the study investigates how changes in soil acidity and nitrogen availability influence sapling growth and forest regeneration. A major milestone this year was a publication in the journal "Forest Ecology and Management", which showed that nutrient addition accelerates crown expansion in canopy tree saplings but not in understorey specialists, highlighting differing growth strategies and the potential impacts of rising nitrogen deposition on species composition and regeneration dynamics.

viii. Project: TROPHIC—Testing Regeneration Outcomes, Plant-Hyphal Interactions, and Climate in Tropical Forests (2024–2027)

The TROPHIC project investigates how plant-mycorrhizal interactions support forest regeneration under changing climatic and land-use conditions. Led by Dr Michael O'Brien of Estación Experimental de Zonas Áridas-CSIC, in collaboration with Rolando Robert and Rebecca Chong from the Forest Research Centre (FRC), the study examines soil fungal communities and seedling establishment across a disturbance gradient in Ulu Segama-Malua, Lahad Datu. In 2025, seedlings were deployed between January and March during the first field campaign, which also included the initial round of soil sampling. These early samples were submitted to the Plant and Soil Testing Laboratory at FRC for analysis in July 2025. A second soil sampling campaign took place between July and August, marking the completion of the first full year of field data collection under TROPHIC.

- **Study: Ecology of Invasive Alien Species at Kinabalu Park (2024–2025)**

This study, in collaboration with Vanielie Justine of Sabah Parks, examined how anthropogenic disturbance along the Kinabalu Park trail influences soil conditions and the extent of invasion by invasive alien plant species. Findings of a soil survey conducted in 2024 and laboratory analysis by the FRC Chemistry Section were summarised in a technical report submitted to Sabah Parks in May 2025. Overall, even small-scale trail disturbance significantly alters soil nutrient regimes, with consequences for invasive plant dynamics and habitat resilience in the UNESCO World Heritage site.

- **Study: Soil Microbiome in Forest Reserves of Brunei Darussalam (2025–2026)**

This study was carried out in collaboration with Assoc. Prof. Dr. Rahayu Sukmaria binti Haji Sukri and Dr. Salwana Jaafar from the Institute for Biodiversity and Environmental Research (IBER) of Universiti Brunei Darussalam. The aim is to look into the bacterial and fungal diversity of mineral soils under the lowland mixed dipterocarp forest of Batu Apoi Forest Reserve and peat soil of Badas Forest Reserve in Brunei Darussalam. Soil samples from each site were submitted in February 2025 during a visit by Dr. Salwana Jaafar to FRC Sepilok. Chemical and molecular genetic analyses of the soil samples were carried out by the Chemistry Section team and were completed in September. Bioinformatics analyses of the soil nutrient and microbiome datasets are due to be completed in early 2026 and will be documented in technical reports to IBER.

CAPACITY DEVELOPMENT

A. Organized courses

i. In 2025, Wood Science & Wood Utilization Section, had organized two courses as follows:
   Basic Wood Identification Course, on 14 – 15 May, in Rainforest Discovery Centre and Forest Research Centre Sawmill.
ii. MS ISO/IEC 17025:2017 Laboratory Quality Management System (Measurement Uncertainty for Chemical Analysis on 24– 25 May, in Rainforest Discovery Centre.

B. Study tour

Staff from the Wood Science and Wood Utilisation Section participated in a study tour programme to enhance competency skills.

List of visitations in 2025.

No	Company	Programme studied
1.	Darau Furniture Sdn Bhd.	Wood handicraft production using laser cut technology.
2.	MCBIO Sabah Sdn. Bhd.	Wood pellet production.

C. Acquisition of Research Equipment

The Wood Science & Wood Utilization Section received new research equipment, obtained through the 12th Malaysian Plan (Federal fund), for the project Upgrading Facilities and Acquisition of Research Equipment for Forest Research Centre, Sepilok, Sandakan.

The equipment obtained is as listed in the table below.

No	Equipment	(Unit)
1.	Zeiss Trinocular Microscope	1
2.	Hewlett Packard Workstation PC	2
3.	Hewlett Packard Workstation Laptop	1
4.	Life Good (LG) Oled Smart TV	2
5.	Epson Projector	1
6.	Honor Pad	1

D. Upgrading Facilities for FRC Wood Science & Wood Utilization Section Office Sawmill and Wood Working Workshop

In 2025, upgrading works for the facilities in the FRC Wood Science & Wood Utilization Section Office, Sawmill and Wood Working Workshop have been completed.

List of upgrading work project in 2025.

No	Project	Funding
I	Upgrading Work of Wood Science & Wood Utilization Section and Wood Working Workshop Forest Research Centre Sepilok.	12th Malaysian Plan (Federal fund)
2	Upgrading Work of Wood Samples Preparation Room and Wood Anatomy Laboratory Forest Research Centre Sepilok.	12th Malaysian Plan (Federal fund)
3	Upgrading Work of Sawmill and Wood Working Workshop Forest Research Centre Sepilok, Sabah Forestry Department (The project is still on going to 2026).	Community Forestry Project Fund, Sabah Forestry Department

E. Universal Testing Machine (UTM) – Collaboration with UMS

The Wood Science and Wood Utilization Section has been assisting the Faculty of Tropical Forestry, Universiti Malaysia Sabah (UMS), in conducting mechanical property tests (hardness) on Laminated Veneer Lumber using the Universal Testing Machine (UTM). The testing is for the UMS final-year student research project titled Hardness Properties of Laminated Veneer Lumber made of *Acacia* hybrid.

F. Participation in exhibition

The Wood Science & Wood Utilization Section was involved in the preparation and supervision of the Forest Research Centre exhibition at the Borneo Bird Festival on 25th – 26th October 2025, held at the Rainforest Discovery Centre, Sepilok, Sandakan. The exhibition mainly featured samples of forest biodiversity, such as wood, leaves and insects, as well as some research equipment.

G. Practical students

- In 2025, the Wood Science & Wood Utilization Section received five (5) practical students for their industrial training. During their training, the students were exposed to a range of methods for carrying out various tasks, including dealing with exhibition visitors and analysing research data. The practical students are listed below:

List of interns attached to the Wood Science & Utilisation Section in 2025.

No.	Trainee	University
1.	Mr. Mohd Ruhalezan Bin Alfian	Universiti Malaysia Kelantan
2.	Mr. Ali Masdar Bin Jamal	Universiti Malaysia Kelantan
3.	Mr. Ahmed Faldan Bin Rosdin	Universiti Malaysia Kelantan
4.	Mr. Jandy Veldy Kim Ann	Universiti Malaysia Kelantan
5.	Mr. Ridzwan Bin Mansur	Universiti Malaysia Kelantan

- Four (4) students from various higher learning institutions were interned with the Chemistry Section in 2025. The students were exposed to the R&D activities from designing experiments, field surveys, sample preparation, and laboratory analyses.

List of interns attached to the Chemistry & Phytochemistry Section in 2025.

No.	Trainee	University
1.	Constance Lee Su Er	Sandakan Polytechnic
2.	Azra Marini bte Abdul Talib	Uni. Putra Malaysia
3.	Elsie Ellyza John Lee	Uni. Malaysia Sabah
4.	Jheantzen Calvin J.M. Jamirus	Uni. Malaysia Sarawak

H. New staff

In 2025, the Wood Science and Wood Utilization Section of the Forest Research Centre expanded with the addition of two new Research Assistants, Mr. Faizal Bin Nurullah and Mr. Aqmar Badrie Bin Abu Bakar.

SPECIAL ASSIGNMENT FROM THE DEPUTY CHIEF CONSERVATOR OF FOREST FOR RESEARCH AND DEVELOPMENT

The Forest Research Centre (FRC), Head of the Wood Science and Wood Utilization Section, was tasked by the Deputy Chief Conservator of Forests for Research and Development to manage a highland recreational forest at the Bukit Hampuan Forest Reserve, Ranau. Projects implemented



Officers and staff from the Sabah Natural Resources Office, paid a visit to Bukit Hampuan Forest Reserve Ranau.

in Bukit Hampuan FR in 2025 included the Concrete Drain at Sunrise Camping Ground, Bukit Hampuan Ranau, and the Construction of Concrete Pavement for Erosion Control on the Critical Section along the Route to Bukit Hampuan Ranau. Officers and staff from the Sabah Natural Resources Office paid a visit to Bukit Hampuan FR on 26 August 2025 to inspect the Campsite Recreational Facilities project in Bukit Hampuan Ranau, which had been developed using the Community Forestry Project Fund. Overall, they were satisfied with the project and encouraged further activities to be carried out in Bukit Hampuan FR, Ranau.

STAKEHOLDER ENGAGEMENTS

A. Study Tour of Regional Sewage Treatment Facility in Kundasang, Ranau

On 25 June 2025, a delegation from the Chemistry and Soil Science Sections of FRC, led by research officers Rolando Robert and Esther Dyi Ka Mei visited the regional sewage treatment facility in Kundasang, Ranau, managed by the Sabah Sewerage Service Department (Jabatan Perkhidmatan Pembetungan Sabah, JPP Sabah). The visit supported discussions on a joint project to evaluate dried sewage sludge as a soil amendment for forestry. The initiative aligns with Sustainable Development Goal 6.3, which promotes safe wastewater treatment and sludge reuse as part of a circular economy. Because sludge originates from household waste, its use requires careful assessment—from laboratory testing to nursery and field trials—to ensure biosafety. Under the proposed collaboration, FRC will provide technical expertise, while JPP Sabah will lead funding and project coordination.



FRC and JPP Sabah delegates during the study tour of the Regional Sewage Treatment Facility in Kundasang, Ranau, as part of preliminary discussions on collaborative research for safe and sustainable reuse of sewage sludge in forestry.

B. Tuhau (Wild Ginger) and Wild Fungi Workshop in Imbak Canyon Conservation Area, Tongod

From 1–7 August 2025, a Tuhau and Wild Fungi Workshop was held at the Imbak Canyon Study Centre in Tongod. This event was the final programme and marks the end of the five-year RMKe-12 project funded by the Ministry of Natural Resources and Environmental Sustainability. The workshop aimed to share research findings and to build community understanding of the biology, diversity, and sustainable use of wild ginger and wild fungi. The programme included talks, hands-on training on cultivation techniques, and exhibition. Research officers Dzulyana Idhamsah and Nurul Syahbillah Amir Mahmud represented Sabah Forestry Department in the programme. Also present were collaborators of the project Dr. Yap Sau Wai of Yayasan Sabah, TS. Dr Elia Godoong of the Faculty of Tropical Forestry UMS, and Assoc. Prof. Dr Jaya Seelan A/L Sathiya Seelan of the Institute for Tropical Biology and Conservation UMS.



Group photo with the participants of the Tuhau and Wild Fungi Workshop at the Imbak Canyon Study Centre.

C. Workshop on Soil Health in Forestry

On 14 October 2025, Rolando Robert and Tom Khoo of the Chemistry Section delivered presentations on soil-health R&D in Sabah and key laboratory analytical methods at SFD's first-ever workshop on soil health in forestry. The event attracted broad participation from NGOs, Forest Management Units, forest plantation companies, and academia. A common feedback theme was the need to close the gap between technical and field personnel by establishing a low-cost, standardised soil-testing workflow in which trained field personnel collect samples and submit them to the laboratory for analysis of basic soil fertility variables.

D. First Engagement Session with Baden Research and Testing Lab

On 14 October 2025, Chemistry Section officers Nurul Syahbillah Amir Mahmud and Dzulyana Idhamsah represented Sabah Forestry Department at a meeting with Sabah Biodiversity Centre and Baden Research and Testing Lab to plan a collaborative project on exosome bioprospecting of tuhau (*Etlingera coccinea*). The session was also attended by SaBC director Mdm. Ken Kartina Khamis, officer Pn. Alessandra Markos, and BRTL researchers Drs. Pan Shing Yi and Lem Fui Fui, who received the delegations. Beginning in 2026, SaBC, BRTL, and SFD will undertake a five-year programme to screen and characterise tuhau-derived exosomes for potential use in treating neurodegenerative diseases. With Malaysia's elderly population projected to more than double between 2030 and 2060, the need for new therapeutic options is increasing. Supported under RMKe-13, the initiative builds on RMKe-12 bioprospecting by FRC, which identified tuhau populations with high bioactive potential.



First engagement session between SaBC, SFD, and BRTL in October 2025, which was followed up with a tour of the latter's state-of-the-art R&D facilities at Kota Kinabalu Industrial Park.

FOREST SOCIO-ECONOMIC

Since its establishment in 2019, the Forest Socio-Economic Programme has continued to advance diverse research initiatives in social science, forest recreation, agroforestry, and ethnobotany across Sabah's Permanent Forest Estate.

RESEARCH ACTIVITIES

A. Study on "Stakeholder Perspectives on the Conservation and Sustainable Management of the Meliau Range Forest Reserve, Sabah"

From 21st to 26th April 2025, a social study titled "Stakeholder Perspectives on the Conservation and Sustainable Management of the Meliau Range Forest Reserve, Sabah" was conducted in conjunction with the Heart of Borneo (HOB) Scientific Expedition at the Meliau Range Forest Reserve. The objectives were to explore the roles of stakeholders in the management and conservation of the reserve and to assess the perspectives of different stakeholder groups regarding its importance. The study involved three villages, namely Kg. Pinuanakan, Kg. Rumidi Baru, and Kg. Sinaputan, and successfully engaged seven key stakeholders through interviews, including TSH Resources Berhad, KLK Sawit Nusantara, Felcra, IOI Meliau Estate, Syarikat Andamy (Ladang Kamansi Dua), Arunamari, and Fortuna Leong Company.



Stakeholder interview with Syarikat Fortuna Leong.



Stakeholder interview with Syarikat IOI Meliau Estate.

B. Exploring Local Community and Stakeholder Perceptions of Forest Ecosystem Services in Tangkulap Forest Reserve

From 14th to 19th July 2025, a social study was conducted in conjunction with the Heart of Borneo (HOB) Scientific Expedition at Tangkulap Forest Reserve to assess local community dependence on forest resources and identify the types and perceived importance of forest ecosystem services. The study focused on Kg. Keramuak Dalam and Kg. Kuala Keramuak, where Dusun, Sungai Sukang, and Sungai communities rely on small-scale oil palm, rubber, paddy farming, and fishing, as well as gravity-fed water systems sourced from Mount Tinkar. Community members, including the Renjer Komuniti and Aki Keramuak groups, actively support forest protection through patrols and wildlife monitoring, particularly in addressing elephant disturbances. Findings highlight the importance of provisioning (water supply), regulating (water purification), cultural, and supporting ecosystem services. Nearby plantation stakeholders, including Agroco Plantation, IOI Tangkulap Estate, Kebaco Estate, and Meliau Estate, also recognise the need to protect river systems through buffer zones, water quality monitoring, and proper waste management.



Household survey with community at Kampung Kuala Keramuak.



Stakeholder interview at Syarikat IOI Group Tangkulap Estate, together with Tn Jaime (ADFO Deramakot).

C. Exploring Local Community Perceptions of Forest Ecosystem Services: A Case Study in Kampung Balat, Tongod

From 10th to 13th June 2025, a social study was conducted under the Peneplains Project at Deramakot Forest Reserve. The study sought to examine the extent of local community reliance on forest resources and to identify and evaluate



Focus group discussion with the community leaders in Kampung Balat.

the types and perceived importance of forest ecosystem services. Conducted in Kg. Balat, the study found a high level of reliance on forest resources, particularly for water supply, food, medicinal plants, and non-timber forest products, while communities also strongly value regulating, cultural, and supporting services such as climate regulation, biodiversity conservation, and environmental knowledge.

D. Evaluation of Local Community Participation and the Impacts of Ecotourism on Livelihoods in the Crocker Range Biosphere Reserve (CRBR)

The study assessed the level of community participation and the socio-economic and environmental impacts of ecotourism in Kg. Bolotikon, Papar, Kg. Tudan, Tuaran, Kg. Buayan and Kg. Tiku, Penampang, and Kg. Ulu Senagang – Mongool Baru, Keningau, within the Crocker Range Biosphere Reserve (CRBR). Using a mixed-methods approach involving household surveys, focus group discussions, and key informant interviews, the study found that overall community involvement remains relatively low, particularly in Kg. Tudan, although ecotourism has generated positive social, economic, and environmental outcomes. Key benefits include strengthened social cohesion, supplementary income opportunities, support for small-scale businesses, youth engagement, and increased environmental awareness. However, challenges such as limited participation, unequal benefit distribution, waste management issues, infrastructure limitations, and vulnerability to natural disasters highlight the need for stronger community-based approaches, capacity building, and sustainable management strategies to enhance long-term livelihood resilience within CRBR.



Expedition team at Kampung Tudan.



Expedition team at Kampung Buayan, Penampang.


The expedition team at Kampung Ulu Senagang – Mongool Baru, Keningau.

E. Social Assessment for the Formulation of Forest Management Plan (FMP) for Padas Damit Forest Reserve

A social assessment was conducted from 13th to 17th May 2025 at Padas Damit Forest Reserve, involving a range of stakeholders, including local communities residing near the forest reserve, oil palm plantation companies, government agencies, and local tour operators. The survey aimed to gather relevant socio-economic information to support the development of the Forest Management Plan (FMP) for the reserve. The findings were compiled into a comprehensive social report, which has been completed and subsequently incorporated into the FMP.


Group photo taken at one of the villages surveyed.

F. Project on Stakeholder Engagement and Participatory Planning for Sustainable Tourism in Ranau District

The Forest Socioeconomics Programme led and implemented the project *Stakeholder Engagement and Participatory Planning for Sustainable Tourism in Ranau District*, which aimed to develop a strategic framework for sustainable tourism planning in Ranau. The project, supported by a Sustainable Tourism Grant awarded to The Habitat Foundation by the Ministry of Finance Malaysia, focused on a preliminary tourism assessment, compiling visitor data, attraction profiles, and management information, while actively engaging key stakeholders to identify shared development priorities. Field assessments and key informant interviews were carried out across major tourism


Stakeholder interview with Manager of Sosodikon Hill, Kundasang.



Stakeholder interview with Manager of Ranau Blue Sky Paragliding.



Stakeholder interview with Manager of Aki-aki Trail, Ranau.



Stakeholder interview with Manager of Taman Rekreasi Mini Kembara, Ranau.



(L) Stakeholder Consultation Workshop in Ranau officiated by Dr. Reuben Nilus, representing DC(R&D). (R) Briefing by Dr. Robert Ong during site visit at Bukit Hampuan, Ranau.

clusters, which demonstrated positive visitor growth trends and strong community-based management models. The findings were synthesised into strategic recommendations covering infrastructure improvement, capacity building, environmental sustainability, destination promotion, and strengthened multi-stakeholder collaboration in preparation for Visit Malaysia 2026.

G. Project on Adaptive Landscape Management in Building Socio-Ecological Resilience in Crocker Range Biosphere Reserve, Sabah

A Memorandum of Agreement is made between the United Nations Office for Project Services (UNOPS) and the Sabah Association for Social Forestry for a project funded by the Global Environment Facility/Small Grants Programme (GEF/SGP). The project is "Adaptive Landscape Management in Building Socio-Ecological Resilience in CRBR Sabah" and aims to strengthen governance through stakeholder collaboration to preserve the Crocker Range Biosphere Reserve (CRBR) in line with the CRBR 2023-2029 Management Plan. The Forest Socio-Economic Programme is responsible for implementing the activities under this project. The project officially commences in October 2024 and is to end in March 2026. The flagship activity under the project was the Seminar Kolaboratif Rizab Biosfera Banjaran Crocker (CRBR), which served as a consolidation platform bringing together the key outputs, findings, and engagements from the various research activities, exchange learning visits, and capacity-building trainings implemented throughout the project period. The seminar functioned as an integrated knowledge-sharing and stakeholder engagement forum, enabling partners, community representatives, government agencies, and other relevant stakeholders to review progress, synthesise lessons learned, and align future collaborative actions. A total of 5 research was conducted, 4 training courses for local community organized, and at the seminar, 21 research posters were presented and 14 exhibition booths participated.

List of research conducted under the project.

No	Title of Research	Investigator(s)
1	Preliminary Study on Spatial Analysis of Land Cover Mapping to Assess Ecosystem Service Dynamics in the Crocker Range Park	Dr Kamlisa Uni Kamlun, **Elne Betrece Johnlee, Jesselyn Kijin, Dessy Ijes**
2	Preliminary Study on Utilizing Traditional Knowledge: The Role of Local Communities in Enhancing Ecosystem Services in the Crocker Range, Sabah	Ts. Hardawati Yahya, **Elne Betrece Johnlee, Jesselyn Kijin, Dessy Ijes**
3	Assessment of Fauna In selected Crocker Range areas that Support Natural Ecosystem Services	Prof. Madya Dr. Andy Russel Mojiol, Celeviana Dominic, Assera Binti Saip, **Elne Betrece Johnlee, Jesselyn Kijin, Dessy Ijes**
4	Assessment of Stakeholders' Level of Readiness and Involvement in the Governance and Management of Ecosystem Services in Crocker Range Park, Sabah	Dr. Walter J. Lintangah, **Elne Betrece Johnlee, Jesselyn Kijin, Dessy Ijes**
5	Evaluation of Local Community Participation and the Impacts of Ecotourism on Livelihoods in the Crocker Range Biosphere Reserve (CRBR)	Tasha Ally Marcela Hairin, Anis Maisarah, **Elne Betrece Johnlee, Jesselyn Kijin, Dessy Ijes**



The organizing committee from SFD during the seminar.


Seminar was officiated by Tn. Zulkifli Suara, DC (O).

TRAINING & WORKSHOPS

A. User Training Session for the Sabah Traditional Knowledge Information System (SaTKIS)

Ms. Elne Betrece, representing SFD from the Forest Socioeconomic Programme, participated in the User Training Session for the Sabah Traditional Knowledge Information System (SaTKIS), organised by the Sabah Biodiversity Centre at Menara Kinabalu, Kota Kinabalu. The training aimed to provide hands-on exposure to the SaTKIS platform, a digital system developed to document traditional knowledge related to biological resources in Sabah. In addition, she is a member of the Steering and Technical Committee for the Development of the Information System and Traditional Knowledge Database Related to Biological Resources (TK). A series of meetings for the development of the system has been held since early 2025. The training session provided an opportunity for participants to familiarise themselves with the system's functions and to contribute feedback to support the further development and improvement of the platform.



Ms. Elne Beatrice together with the participants of the SaTKIS User Training Session.

B. Training on Strategic Communication and Campaign Development

The Training on Strategic Communication and Campaign Development under the UNDP-SGP Capacity Building Programme, was held from 10th to 12th May 2025 at Pusat Latihan Kepimpinan, Lumunu, Penampang. The training was organised by United Nations Development Programme (UNDP) for all Small Grants Programme (SGP) grantees in Malaysia, including Sabah Association for Social Forestry (SASOF) as one of the invited recipients. Ms. Dessy Ijes, from the Forest Socioeconomics Programme participated in the training. The three-day training focused on strengthening digital communication skills, campaign strategy formulation, and practical tools for designing structured and results-oriented communication initiatives.

C. Training of Open Data Kit (ODK)

On 6th March 2025, a hybrid training workshop (conducted both physically and virtually) was organised in collaboration with PACOS Trust, Universiti Malaysia Sabah (UMS) and Kyoto University. The training aimed to enhance participants' knowledge and technical skills in data collection using Open Data Kit (ODK), as well as to develop appropriate methodological approaches for studying ecosystem services in the Crocker Range area, thereby strengthening research capacity and collaborative efforts in ecosystem service assessment.

D. FPIC Mechanism of Sustainable Resource Management Certification Schemes Workshop

In line with our programme's commitment to strengthening social safeguards and participatory forest governance, the FPIC Mechanism of Sustainable Resource Management Certification Schemes Workshop was successfully held on 13th March 2025 in a hybrid format at the Kota Kinabalu District Forestry Office and via Zoom. The workshop was jointly organised by the Forest Socioeconomics Programme, PACOS Trust and SASOF (Sabah Association for Social Forestry), bringing together 20 to 30 participants from Indigenous Peoples' organisations, civil society, government agencies, academia, and industry stakeholders. The one-day workshop aimed to enhance understanding of Free, Prior and Informed Consent (FPIC) principles and to examine their integration within certification frameworks such as the Roundtable on Sustainable Palm Oil (RSPO) and the Forest Stewardship Council (FSC). Through expert presentations, case studies, and multi-stakeholder discussions, participants explored practical challenges in implementing FPIC at the community and corporate levels and collaboratively developed recommendations to strengthen policy alignment, safeguard Indigenous rights, and improve the effectiveness of sustainable resource management certification schemes in Sabah and Malaysia.

E. Training for Local Community

Four trainings have been conducted for local communities to enhance their knowledge and skills in biodiversity monitoring and environmental management. The trainings included Bird-Watching for Ecotourism Potential in Kg. Bolotikon, Papar (5 June 2025), Plant Introduction and Identification in Kg. Bolotikon, Papar (8 November 2025), Water Quality Assessment for local community in Kg. Kuyungon, Tambunan (9 November 2025), and Camera Trapping Techniques Training in Kg. Bolotikon, Papar (20 January 2026). These trainings involved trainers and resource persons from the Forest Research Centre (FRC), Sabah Forestry Department and Universiti Malaysia Sabah (UMS).



Group photo of Camera Trap Training at Kampung Bolotikon.



(L) Water Quality Monitoring Training for the local community in Kampung Kuyungon, Tambunan. (R) Hands on activity during the Tree Identification Course at Kampung Bolotikon, Papar.

F. Research Methodology and Survey Training Workshop

The Research Methodology and Survey Training Workshop was held on 2nd July 2025 to refine the data collection methodology and coordinate the research team prior to field implementation. The workshop was jointly organised and facilitated by lecturers from Universiti Malaysia Sabah (UMS), the Sustainable Forest Management (SFM) team, and the Forest Socioeconomic Programme team from the Forest Research Centre (FRC). A total of 31 participants attended the workshop, comprising UMS students and field staff. The training aimed to strengthen participants' understanding of the research instruments, field procedures, and task distribution to ensure consistency and reliability during data collection.



Participants of the training workshop at UMS with one of the facilitators is Dr. Walter Lintangah (seated 2nd from right) from UMS.

OFFICIAL EXCHANGE LEARNING VISITS

A. Official Visit to the Coconut Plantation at the Ulu Dusun Agricultural Research Centre, Sandakan.

On 24th January 2025, the Forest Socioeconomics Programme team conducted a technical visit to the Coconut Plantation at the Ulu Dusun Agricultural Research Centre, Sandakan, to enhance the team's knowledge and practical understanding of coconut cultivation and plantation management. The visit focused on planting techniques, maintenance regimes, fertilisation, and overall farm management practices, which are directly relevant to the Programme's agroforestry research plot at Gum-Gum Forest Reserve. The exposure provided valuable insights into best management practices that will strengthen the monitoring and management of the research plot, while also supporting the exploration of coconut-based livelihood and agroforestry opportunities within the broader framework of sustainable forest management.



An Agricultural Officer gave a briefing during a visit to the Coconut Plantation smallholders.

B. Official Visit to Community Based Enterprises

Under the coordination of the Forest Socioeconomics Programme, engagements were conducted at four Community-Based Enterprises (CBEs): PermaLab Kg. Kuyungon (Tambunan), Moyog Innovation House (Penampang), Koperasi Koonduan Kiau Nuluh (Kota Belud), and the Corn Husk Craft initiative (Kota Marudu). The visits highlighted diverse community-driven models integrating forest conservation, watershed protection, sustainable agriculture, value-added processing, cooperative-based ecotourism, heritage governance, and women-led enterprises. PermaLab Kuyungon demonstrated a permaculture-based greenhouse system linked



Visit to Permalab Kuyungon Project at Tambunan.



Visit to Moyog Innovation House.



Visit to Koperasi Koonduan Kiau Nuluh, Kota Belud.



KIPMAPS roadshow at Kota Kinabalu Forestry Region.



Visit to Corn Husk Craft, Kota Marudu.



KIPMAPS Roadshow at Sandakan Forestry Region was officiated by Dr. Arthur Chung, DC(R&D).

to forest conservation and downstream product development; Moyog Innovation House showcased rural product innovation and community processing facilities; Koperasi Koonduan Kiau Nuluh presented structured cooperative governance combining tourism, protected forest management, and women-led pineapple enterprises; while the Corn Husk Craft initiative illustrated a circular economy approach transforming agricultural waste into income-generating handicrafts. Collectively, the visits provided key insights into scalable socio-ecological enterprise models that strengthen community resilience, local livelihoods, and sustainable resource management in Sabah.

SPECIAL ASSIGNMENTS

A. Kit Informasi Penglibatan Masyarakat dalam Perhutanan Sosial Sabah (KIPMAPS)

The Kit Informasi Penglibatan Masyarakat dalam Perhutanan Sosial Sabah (KIPMAPS) was officially launched by the Chief Minister of Sabah on 22nd October 2025 during the opening ceremony of the International Conference on "Borneo's Green Heart: Advancing Climate Resilience, Conservation and Sustainable Livelihoods" held at the Sabah International Convention Centre, Kota Kinabalu. The Forest Socioeconomics Team was part of the working committee and contributed significantly to the success of KIPMAPS. The initiative continues through the organization of KIPMAPS roadshows across forestry regions. To date, two KIPMAPS roadshows have been successfully held in the Kota Kinabalu Forestry Region and the Sandakan Forestry Region. The objective of the roadshows is to introduce and disseminate information on KIPMAPS to users, particularly local communities.



Part of the KIPMAPS working committee during the launching of KIPMAPS at HoB International Conference.

B. Social Baseline Survey (SBS) at Gunung Lumaku Forest Reserve, Tenom

From 4th to 9th October 2025, a full Social Baseline Study (SBS) was conducted, with teams from the Sandakan Forestry Headquarters, the Forest Socioeconomics Team from the Forest Research Centre, PPW Keningau, PPD Tenom, PPD Nabawan, PPD Sook, and PPD Tibow. The study aimed to



The Forest Socioeconomics Team involved in the coordination and implementation of SBS for Gunung Lumaku Forest Reserve.



SBS activity at Kampung Cinta Mata, Tenom.

examine differences between communities living within ≤2 km of the Gunung Lumaku Forest Reserve and those located more than 2 km away, particularly in terms of their dependence on forest resources, their level of involvement in implementing the Sustainable Forest Management (SFM) project, and the impacts experienced as a result of the project. A total of 31 villages were successfully surveyed during the study period.

C. Community Forestry Programme at Kinabatangan

A data collection programme was conducted from 14th to 16th April 2025 involving representatives from the Sustainable Forest Management (SFM), Forest Socioeconomics Programme, Forest Research Centre (FRC), Sabah Forestry Department Lahad Datu, WWF-Malaysia and others. The activity was carried out to fulfil the assessment criteria under the International Union for Conservation of Nature (IUCN) Green List indicators and formed part of the planned community-related activities under the 2025 Annual Work Plan for Tabin Wildlife Reserve. The data gathered will contribute towards strengthening documentation, improving management effectiveness, and supporting the evaluation process required for IUCN Green List recognition.

D. Participation in Working Visit to Sarawak under the SMPEM Project

A working visit to Sarawak was conducted under the Sustainable Management of Peatland Ecosystems in Malaysia (SMPEM) project as part of a departmental knowledge-sharing and benchmarking activity. The Head of the Forest Socioeconomics Programme participated in the training together with other officers from SFD. The visit focused on gaining insights into sago plantation development in peatland areas and the preparation of related manuals and procedures to support community-based initiatives in peatland management. Participation in this visit provided an opportunity to learn best practices and strengthen technical understanding that can contribute to supporting local communities in peatland areas in Sabah.



Visit to Craun Research Sdn Bhd, Sarawak.

E. Mesyuarat Pelaporan Status dan Pelan Perancangan Aktiviti Perhutanan Sosial Malaysia

The Mesyuarat Pelaporan Status dan Pelan Perancangan Aktiviti Perhutanan Sosial Malaysia 2021–2025 was held from 3rd to 5th November 2025 at Colmar Tropicale, Bukit Tinggi, Bentong, Pahang. Mr. Ricky A. Martin and Mr. Mohd Daniel Aiman Mutasil from SFM Division and Ms. Elne Betrece Johnlee, from FRC represented SFD in the meeting. The meeting aimed to review the implementation status of the Social Forestry Strategic Plan and to discuss future directions for strengthening social forestry initiatives in Malaysia. During the meeting, Ms. Elne Betrece delivered a presentation on the status, activities, and future planning of social forestry initiatives in Sabah, highlighting key programmes, community-based livelihood initiatives, research activities, and challenges faced in implementation representing the Sabah Forestry Department. A learning site visit was also conducted at Kampung Janda Baik, Bentong, where community-based activities such as agro-based enterprises and eco-tourism initiatives were observed as examples of local livelihood development.



Mr. Ricky, Mr. Mohd Daniel Aiman, and Ms. Elne Betrece represented SFD in the meeting.



Ms. Elne Betrece presenting on Social Forestry in Sabah.



Picture taken before site visit at Air Terjun Ulu Tampik hiking trail managed by local community at Kampung Janda Baik, Bentong, Pahang.

F. Participation in the Hari Konservasi Ekosistem Hutan Paya Laut Antarabangsa Peringkat Kebangsaan and Karnival Perhutanan Sosial Peringkat Kebangsaan 2025

The Sabah Forestry Department (SFD) participated in the *Sambutan Hari Konservasi Ekosistem Hutan Paya Laut Antarabangsa Peringkat Kebangsaan dan Karnival Perhutanan Sosial Peringkat Kebangsaan Tahun 2025*, held from 20th to 21st September 2025 at Padang Kemahkotaan (Pata Ndo), Tumpat, Kelantan. The programme was organised by the Ministry of Natural Resources and Environmental Sustainability (NRES) in collaboration with the Forestry Department of Peninsular Malaysia and the Kelantan State Forestry Department. As part of the exhibition component, Ms. Elne Betrece from the Forest Socioeconomic Programme, together with Ms. Bellinda Debra Raymond from FSP, prepared and presented materials on social forestry initiatives in Sabah, highlighting community involvement in forest conservation and livelihood development. The exhibition served as a platform to share experiences and promote awareness of sustainable forest management and community-based forestry practices. The programme aimed to enhance public awareness of the importance of conserving mangrove ecosystems and to strengthen community participation in forest conservation.



Booth manning officers from SFD with Tn. Indra, DC.



Ms. Elne Betrece explaining Social Forestry initiatives in Sabah to visitors during the exhibition.

INTERNSHIP

The Social Science Section receive one intern from Universiti Putra Malaysia (UPM), Selangor and two interns from the Faculty of Tropical Forestry, Universiti Malaysia Sabah, as listed in the table below.

No.	Trainee	University
1.	Arysha Fatin Fifieyana Binti Andres	Faculty Of Science, Universiti Malaya
2.	Tasha Ally Marcela Binti Hairin	Fakulti of Tropical Forestry, Universiti Malaysia Sabah
3.	Anis Maisarah	Fakulti of Tropical Forestry, Universiti Malaysia Sabah



Ms. Arysha and Ms. Anis preparing to facilitate a Focus Group Discussion.



Ms. Tasha interviewing a local community.

RAINFOREST DISCOVERY CENTRE (RDC)

In 2025, the Rainforest Discovery Centre (RDC) continued to strengthen its role as a strategic centre for Environmental Education (EE), advancing knowledge, nurturing conservation leadership, and supporting the Sabah Forestry Department's objectives in sustainable forest management and public outreach. Through its programmes and interpretive facilities, RDC remained an important platform for connecting visitors with Sabah's rich forest biodiversity and fostering greater appreciation for conservation.

The year was also marked by a tragic incident in January, when a falling tree branch, following several days of heavy rainfall, struck a visitor and resulted in the death of a 75-year-old tourist from China. This deeply saddening event stands as the most tragic incident in RDC's history.

In response, RDC reviewed its visitor safety procedures and tree risk management practices, and strengthened precautionary measures within the park. Public Liability Insurance has also been secured to provide an added layer of protection for visitors. Moving forward, RDC remains committed to responsible management and its mission of promoting environmental education and conservation awareness.

1. VISITORS & FINANCIAL PERFORMANCE

In 2025, the Rainforest Discovery Centre (RDC) recorded a total of 76,681 paying visitors, comprising 29,006 Malaysian residents, 36,570 non-Malaysian residents, and 11,105 participants of the Night Walk activity, which included a mixture of both resident and non-resident visitors. In addition, RDC also received 1,530 non-paying visitors, consisting mainly of official visitors and family members of the Sabah Forestry Department.

The steady visitor turnout contributed to RDC's positive financial performance in 2025. The centre successfully exceeded its targeted income of RM1.3 million, generating a total revenue of RM1,323,592.00, compared to RM1,132,695.00 recorded in 2024, representing an increase of approximately 16.8%.

Revenue was generated not only from entrance fees but also from other sources, including the renewal of Birder's Passes and sales of RDC publications and books. These revenues are channelled into the RDC Trust Fund to support RDC's operations, environmental education programmes, and facility maintenance. In addition, RM92,650.00 was generated from venue rental, which is credited directly to government revenue.

2. OPERATIONAL BUDGETS AND EXPENDITURES

A. Budget

Source of budget	Amount (RM)
RDC Trust Fund (K75)	764,898.00
RDC State Budget	61,000.00
Nature Centre Maintenance	15,000.00
Heart of Borneo	153,495.00
Total	**2,317,985.00**

B. Expenditures

Source of budget	Key Activities/ Items Supported	Amount (RM)
Operational costs	Salaries of Contract staff (11-12)	301,278.09
	Allowances of Contract staff	55,513.46
	Overtime of Contract staff	18,666.63
	Meetings (Refreshment)	20,540.00
	Office Supplies	24,492.25
	Sub-total	**364,913.97**
Environmental Education Programmes	School EE programme, EERace course, Sepilok Junior Ranger Programme, HoB Roadshows, Borneo Bird Festival, educational materials, etc	**151,952.05**
Maintenance	Facility Maintenance	344,995.71
	Vehicle maintenance	31,618.40
	Sub-total	**376,614.11**
Others	Others (Funeral, Public Liability Insurance)	**114,526.09**
	Total	**1,008,006.22**

3. HUMAN RESOURCE & CAPACITY BUILDING

In 2025, the Rainforest Discovery Centre (RDC) was supported by 32 staff members, comprising 19 permanent/temporary staff and 13 contract staff appointed under the Contract of Service (COS) and Contract for Service (CFS) arrangements. The team supports RDC's operations in visitor management, environmental education programmes, facility maintenance, educational garden management and conservation outreach activities.

Two of our staff retired this year. Mdm. Subturin Lampongan retired in May 2025. She served the department for 39 years, first as a General Worker D47 (1986-1992) and then as Pengawas Hutan G1 (1993-2025). G. Hubert Petol (Q10 Contract Research Officer), Head of Communications at RDC, retired on 31 December 2025 after 30 years of service. He was responsible for designing most of the infographics at RDC. He is also an avid birdwatcher and bird researcher, which is reflected in the numerous papers on bird surveys he has written. We value their dedication and contributions.



G. Hubert Petol



Mdm. Subturin Lampongan

RDC staff continued to strengthen professional competencies by participating in conferences, seminars, workshops and professional forums related to environmental education, forestry and sustainability. Notable events include the following:

Conferences, seminars, workshops and forums related to environmental education	RDC's Role / Contribution
11th International Congress on Education in Botanic Gardens, Seoul, 9th -13th June, 2025	Beyond the garden: Building partnership for effective Environmental Education and public awareness. Presentation by Fifilyana Abdul Karim
	Education, engagement and action: Youth as changemakers in nature conservation. Presentation by Fazidah Ismail
International Heart of Borneo Conference – Borneo's Green Heart	Participants: Bernadette D. Joeman & Fifilyana Abdul Karim
International Heart of Borneo Conference – Youth Forum	RDC Co-ordinated the forum with Fifilyana Abdul Karim serving as moderator and Bernadette D. Joeman as chairperson
Environmental Education Materials Training	by the Environment Protection Department
Seminar on Ecology and Silviculture of Fig Species	Several RDC staff participated & assisted as organising committee
National and regional Networking of EE practitioners and researchers in Asia-Experience of Japan and Malaysia", (Zoom platform)	Building connections for change: The Sabah Environmental Education Network (SEEN) Experience. Presentation by Bernadette D. Joeman
Half-day Talk on Plastic pollution and environmental sustainability	Participant: Fifilyana Abdul Karim





Seminar on Ecology and Silviculture of Fig Species
Participants: Bernadette D. Joeman Fifilyana & Abdul Karim

4. ENVIRONMENTAL EDUCATION AND PUBLIC ENGAGEMENT ACTIVITIES

In 2025, the Rainforest Discovery Centre (RDC) continued to expand its role as a hub for environmental education, youth engagement and community outreach, implementing a wide range of programmes for students, educators, youth leaders and the wider public. Collectively, these programmes strengthened RDC's role as a leading platform for environmental education, community engagement and conservation awareness in Sabah.

A. Summary of RDC's EE programmes and engagement activities in 2025

No	Activity / Programme	Participants	RDC's Role / Contributions
1	School Environmental Education (EE) Programme: Throughout the year	3,788 students from primary, secondary, vocational schools and universities (local and international)	Hosted and facilitated environmental education visits, providing guided learning experiences and practical exposure to forest biodiversity and conservation.
2	Sepilok Junior Ranger Programme: Throughout the year	Children aged 9–17; 21 activities conducted	Implemented long-term youth programme involving birdwatching, environmental exhibitions and guided learning activities to nurture young conservation advocates.
3	EERace – Environmental Education Course for Youth: 7 – 12 Julai 2025	Youth participants including in-service teachers and EE practitioners from across Malaysia (	Organised RDC's 6-day experiential EE course featuring site-based assignments on sustainable forestry, wildlife rehabilitation, ecotourism and conservation research.
4	HoB Roadshows (Tongod: 18 Jun 2025 & Telupid: 26-27 Aug 2025)	328 participants (213 teachers/ adults, 115 students)	Organised and facilitated outreach programmes to raise awareness of the Heart of Borneo initiative through environmental talks and interactive sessions with partner agencies.
5	Environmental Education Outreach Programmes: Throughout the year	2,853 participants (181 teachers/ adults, 2,672 students) across 14 activities	Conducted outreach activities outside RDC focusing on environmental awareness, conservation education and community engagement.

No	Activity / Programme	Participants	RDC's Role / Contributions
6	Internship Programme: Throughout the year	11 interns from 8 institutions	Provided hands-on training in environmental education, visitor guiding, outreach activities, HoB roadshows and basic visitor management.
7	Sandakan Community Recycling Action Programme (SCRAP):	130 volunteers during World Cleanup Day event	Led community clean-ups along Sepilok Road, coordinating volunteers and partner organisations to collect and properly manage waste and recyclables.
8	Borneo Bird Festival (15th Edition): 24th & 25th October	About 2,000 Public visitors, students, booth exhibitors, bird enthusiasts and the organising committee members	Co-organised the festival with the Borneo Bird Club; managed event logistics, coordinated exhibitions, organised student competitions and the Children's Bird Camp.
9	Sepilok Jazz Festival: 5th & 6th Sept	Public visitors and music enthusiasts	Hosted the event organised by FOSTER; supported venue preparation, logistics coordination and facility management.
10	World Environment Day Events: 21st & 22nd June	Public visitors and students	Hosted environmental exhibitions and hands-on learning activities with partner organisations highlighting biodiversity and conservation research.
11	International Day of Forests	UMS students & public	Set up EE booth with activities for tertiary students and general public.
12	Youth Leadership & Climate Action Initiatives	~200 forum participants including 60 youth; Youth Camp involved 40 participants	Facilitated youth engagement platforms including the HoB Youth Forum and organised the Youth Camp on Climate Change to promote youth leadership in conservation and climate action.





EE for students at RDC

A. Students discovering the rich biodiversity of the Lakeside Trail during an educational tour.

B. Students from an international school learning firsthand about the tropical rainforest.



EERace: Environmental Education Course (Youth Edition 3)

A. Approximately 70% of EERace is conducted outdoors, providing participants with immersive, hands-on learning through field-based assignments

B. Each group is given three assignments to complete and present, encouraging peer learning and knowledge sharing throughout the course.





A



B



C



D

15th Borneo Bird Festival

A. Environmental talks delivered by field experts.
B. Participants showcase creativity in an Artistic Bird-Themed Make-Up Competition inspired by avian beauty.
C. Environmental Exhibition by Various Organisations.
D. Young participants express creativity through a Children's Colouring Competition.


A


B


C


D

EE Outreach

A. Using role-play to strengthen community engagement in forest conservation.
B. RDC conducting Environmental Education (EE) activities during St. Mary's Parish Day 2025
C. RDC Exhibition at the MATTA Fair, Sabah International Convention Centre (SICC)
D. EE Exhibition at the International Day of Forests, Universiti Malaysia Sabah (UMS)





Sepilok Jr Rangers Programme

A. In addition to birdwatching, Junior Rangers regularly participate in plant propagation activities.
B. Jr. Rangers engaged in a hands-on session on making bio-enzyme and its uses.





Youth Forum during the HoB International Conference

A. Panellists, Dandy Dzakyesa of Palakali Creative Art Space & Gallery, Indonesia, and Aidil Iman Aidid of WWF-Malaysia
B. The chairperson, moderator, and panellists leading an engaging session.





Youth Camp on Climate Change

A. A participant sharing his experiences and the impact of the camp on him.
B. Participants presenting their group findings.







Conference/ Presentation

A. CBU Ranger Day event organised by Sawit Kinabalu – Jamirus Jumian, RDC Head of Arboretum Unit, sharing insights into his life as a ranger.

Presentations at the 11th International Congress on Education in Botanic Gardens 9th -13th June, Seoul, Korea

B. Fazidah Ismail, RDC Environmental Educator
C.Fifilyana Abdul Karim, RDC Communication Officer

5. PUBLICATION

RDC staff contributed to scientific research and publications, including studies on avian diversity in forest reserves in Sabah, further strengthening the centre's role in supporting biodiversity conservation and environmental education.
Bird research publication & presentation:

A. *Bird Diversity at Sungai Pin Conservation Area.* Presentation for the Scientific Expedition to Propel Sungai Pin Conservation Area Towards the IUCN Green List Goal by Loraiti Lolin.
B. *Bird Diversity and Functional Guilds in Sungai Talibu Forest Reserve*, Sabah, Malaysia. Joeman, B.D., Petol, G.H., Lolin, L. and Rudolf, Vivian.

6. RMK-12 PROJECT PROGRESS

RDC's RMK-12 project, titled "Pembangunan kawasan pemuliharaan, pengembangan dan pendidikan hutan simpan sepilok (Fasa II)" carries a total allocation of RM7,925,000.00. The project comprises two tender packages: (i) Projek pembangunan kemudahan tambahan kawasan Rainforest Discovery Centre (RDC) Heritage Park (Phase II) & associated works di Hutan Simpan Sepilok Sandakan, Sabah; and (ii) Pembinaan Aerial Walkway (Fasa II) di Rainforest Discovery Centre, Sepilok, Sabah.

The first package commenced on 14 May 2024 and is scheduled for completion on 13 February 2026, while the second package began on 14 October 2024 and is expected to be completed by 13 January 2026. As of 31 December, 2025, Package 1 has achieved 94.34% completion, while Package 2 has reached 99.23% completion.

The major components of projects are the Forestry Gallery, outdoor stage and courtyard, car park, toilets and an Aerial Walkway.

7. MAJOR MAINTENANCE

In 2025, several major maintenance works were carried out at the Rainforest Discovery Centre (RDC) to ensure the safety, stability and functionality of its facilities. These works addressed infrastructure issues arising from natural events and normal wear and tear within the forest environment.

A. Construction of Gabion Retaining Wall

Following a landslide that occurred in 2024, a retaining wall using gabion structures was constructed to stabilise the affected slope and prevent further soil movement. This measure was necessary to safeguard nearby infrastructure and ensure the safety of visitors and staff. This work cost RM199,880.00

B. Replacement of Kabili Theatre Roof

The roof of the Kabili Theatre was replaced due to deterioration and persistent leakage. The new roofing improves the condition of the facility and ensures that the theatre can continue to support environmental education programmes, briefings and visitor activities. The cost of this reconstruction was RM178,922.00.

C. Replacement of Drongo House Roof

The roofing of Drongo House was replaced due to leakages caused by weathering and ageing, at a total cost of RM49,550.00. The facility is also equipped with bird-related informational posters, enhancing its value as an interpretive space for both bird watchers and general visitors.

The total cost of these maintenance works amounted to RM428,352,00, representing an important investment in maintaining RDC's infrastructure and ensuring a safe and conducive environment for visitors.

8. KEY ACHIEVEMENTS

A. Successfully exceeded our targeted income of RM1.3 million, generating a total revenue of RM1,323,592.00, compared to RM1,132,695.00 recorded in 2024.
B. Facilitated 107 EE-related activities which includes school EE programmes, EE outreach, Sepilok Junior Ranger programme, EERace, HoB Roadshows, Intership programme, youth camp and other environmental events.
C. Produced 1 research paper on birds, did 4 presentations, including 3 international presentations and coordinated the Youth Forum at the HoB International Conference.
D. Received recognitions in tourism:
   i. User rating of 4.4/5.0 in Trip Advisor, 1,070 reviews.
   ii. Trip Advisor Travelers' Choice, 2025.
   iii. User rating of 4.6/5.0 in Google, 1.5K reviews.









RMK-12 Project Progress

A. The Aerial Walk at approximately 98% completion
B. The Forestry Gallery building at approximately 94% completion
C. The Outdoor Stage building at approximately 98% completion
D. The Car Park at approximately 98% completion







Major Maintenance

A. Kabili Theatre Roof replacement was completed on the 22 September 2025.
B. Drongo House roof replacement was completed on the 5 August 2025
C. Construction of Gabion retaining wall at Ridge Trail following a landslide.

PUBLICATIONS, PRESENTATIONS & REPORTS IN 2025

Scan QR Code to view List of publications, presentations & reports in 2025

"Knowledge is not acquired by chance; it must be sought for with ardor and attended to with diligence, and reading remains the single most reliable path to expanding what you know."

— Abigail Adams



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A striking water lily (*Nymphae* sp.), with exquisitely formed, luminous yellow blooms that will light up the pond.

This annual report was compiled by the Forest Research Centre, Sepilok,
and the Communication & Public Relations Division of Sabah Forestry Department