

# Preserving natural heritage with Government efforts – Forestry

## A Contribution from Sabah Forestry Department

### Forests and Forestry

**T**he tropical rainforests in Sabah are an important asset and a natural national heritage, not only for their significant contribution to the socio-economic development but also for their essential role in the maintenance of the quality of the environment (e.g. protection of water quality and supply, prevention of soil erosion and nutrient depletion, and moderation of climate), biodiversity, nature tourism and biotechnology. Hence, sustainable use of natural resources from the forests while preserving our natural heritage is significant in ensuring a better tomorrow for our future generation.

Forestry is an important economic sector and has been depended upon as the catalyst or main area of growth in Sabah since gaining independence. In terms of its contribution to the State's revenue, forestry had contributed at least 50% (on the average) of the total state revenue annually over the last few decades during the 70s to early 90s. The decline in timber production over the years is attributed to Sabah's depleted forest resource base, as well as the State Government's commitment to fully subscribe to Sustainable Forest Management (SFM).

Since its establishment, the Sabah Forestry Department has established forest reserves throughout the state, and is currently the custodian for about 3.6 million hectares or 49.1% of the state's land mass. Approximately 52% of the land area in Sabah remain forested (forest reserves, wildlife sanctuaries and parks), thus managing Sabah's forest resources is indeed challenging. The department strives to excel in forest management with its vision towards the realization of sustainable forest resource management. Based on the powers vested under the Forest Enactment 1968 and Forest Rules 1969, guided by the Sabah Forest Policy 2018 (replacing the Forest Policy 1954), the department has undertaken various efforts to protect and manage the state's forests. The crucial turning point which has influenced the department as an organisation is in the late 1980s when SFM was introduced and later adopted for statewide application in 1997. Since then, the department had been restructured and its capacity enhanced to cover the many facets of SFM.

### Sustainable Forest Management (SFM)

Achieving SFM has been one of the main agenda of the State Forestry Department. The department has been actively involved in efforts to place the state's forests under SFM from exploitative forestry practices in the past. This was proven by the establishment of a model management area of about 55,000 hectares in Deramakot Forest Reserve, and the subsequent adoption of the management system for statewide application in 1997. The Deramakot Forest Reserve is a Class II Commercial Forest Reserve that has been certified as a well-managed forest according to internationally accepted standards set by the Forest Stewardship Council (FSC). It is the first and longest certified tropical rainforest in the world, for more than 20 years. As part of the strategy, all forest management units in Sabah are



required to adopt the Deramakot model and practise reduced-impact logging harvesting techniques in their timber extraction and forest management. However, SFM is a process and one must realize that it cannot be achieved overnight. It requires a long-term programme of actions that may span over 10 to 20 years of implementation in order to bear results. Despite this, the license holders are committed and serious, and are currently actively engaged in close collaboration with the Forestry Department in carrying out various aspects of SFM. Biodiversity conservation is an important component in SFM in preserving natural heritage, which the department places its emphasis on the following strategic thrusts:

To ensure that the management and development of Sabah's forest reserves are in accordance with sustaina-

ble forestry principles;

To optimize the utilization of forest resources in order to sustain socio-economic benefits to the State;

To enhance the efficiency of the forestry industry in forest resource utilization, while ensuring that the processing capacity of the industry corresponds to the long term productive capacity of the forest resource;

To intensify efforts in research and education towards sustainable forest management; and

To conserve sufficient natural forest areas for the protection and maintenance of the environment, water resources, soils, and biodiversity.





With the implementation of SFM incorporating biodiversity conservation under the Sabah Forestry Department, some notable milestones have been achieved, such as the establishment of Totally Protected Areas (TPAs), the Heart of Borneo (HoB) Initiative, the designation and management of the Lower Kinabatangan-Segama Wetlands (LKSWS) as a Ramsar site, mangrove forest management and restoration, Sabah REDDplus implementation, forest monitoring and enforcement, and forestry research in preserving natural heritage.

#### Totally Protected Areas (TPAs) in Sabah

The Totally Protected Areas (TPAs) in Sabah are now reaching 1.94 million hectares or more than 26 percent of Sabah's total land area, an achievement having exceeded the International Union for Conservation of Nature's (IUCN) standard of 10 percent. Totally Protected Areas (TPAs) in Sabah comprises selected Forest

Reserves gazetted under the Forest Enactment 1968, such as Class I (Protection Forest), Class VI (Virgin Jungle Reserves), and Class VII (Wildlife Reserves), as well as forest estates safe-guarded for the purpose of conservation under the Parks Enactment 1984, the Wildlife Conservation Enactment 1997 and the Environment Protection Enactment 2002. The Sabah Forestry Department manages 86% of Sabah's TPAs while the remaining areas are managed by Sabah Parks and Sabah Wildlife Department. This is a clear testimony on the extent of the state government's will for conservation despite the enormous opportunity cost foregone.

#### The Heart of Borneo (HoB) Initiative

The State Government with the support from the Federal Government, through the Ministry of Energy and Natural Resources is very committed in the implementation of the Heart of

Borneo (HoB) Initiative, with the Sabah Forestry Department taking the lead. The HoB programme is a 'three countries – one vision' responsibility, which is to protect and conserve the rich biodiversity within this area. The initiative is a voluntary transboundary cooperation aiming at conserving and managing the ecologically inter-connected highlands of Borneo and parts of the adjacent foothills and lowland rainforests, which straddle the borders of three ASEAN countries (Malaysian Sabah and Sarawak, Brunei Darussalam and Indonesian Kalimantan) covering an area of approximately 200,000 km<sup>2</sup>. The State Government, through the Sabah Forestry Department, has in fact designated about 39,000 km<sup>2</sup> of the state's landmass, mainly comprising the important inland and highland forest ecosystems. Since the HoB Declaration in 2007, the Sabah Strategic Plan of Action has been formulated in 2009 (revised in 2013) and implemented accordingly. Various forest reserves have been surveyed. Results from these studies were incorporated for the preparation of forest management plans that would contribute significantly to best practices in forest management, including biodiversity management. Improvement in wildlife monitoring and enforcement, relevant infrastructure development (e.g. field

outposts), capacity building and environmental education are among some of the major on-going activities under the HoB programme within the department.

#### Ramsar Convention on Wetlands

Beside the HoB Initiative, the Ramsar Convention on Wetlands is another conservation initiative undertaken by the Sabah Forestry Department in preserving our natural heritage. A Ramsar site is an internationally recognized wetland for its significance on conservation and wise use of its resources. It is named after the city of Ramsar in Iran where the wetland convention was first signed in 1971. There are six Ramsar sites in Malaysia, and the Lower Kinabatangan-Segama Wetlands (LKSWS) in Sabah is the largest, encompassing an area of 78,803 hectares, covering three forest reserves. A management plan (2011-2020) has been jointly formulated by the State Government through the Sabah Biodiversity Centre, Natural Resources Office and Forestry Department in collaboration with Japan International Cooperation Agency (JICA) to manage this site. The Sabah Forestry Department has set up the Kulamba Field Centre in Tundon Bohagin for research and other activities of this Ramsar site.



#### Mangrove management and rehabilitation

As about 60% of the mangroves in Malaysia are located in Sabah, the Forestry Department has always been proactive in sustainably managing as well as rehabilitating the degraded mangrove areas within the jurisdiction of the department. Since 2006, some 1,407 ha of mangroves have been rehabilitated under the State and Federal Governments' initiative. A joint project on mangrove rehabilitation with the International Society for Mangrove Ecosystems (ISME) has been established

since 2011, with funding and support from Tokio Marine & Nichido Fire Insurance Co. Ltd., Japan. The collaboration is in its 3rd phase now, with some 381 ha of degraded mangrove forests being rehabilitated. This collaboration has gained international recognition and all efforts contributed towards preserving mangrove forests in Sabah. Besides rehabilitation, the department also conducted joint mangrove research with the Tropical Biosphere Research Centre (TBRC) of University of Ryukyus in Okinawa, Japan, under this collaboration with ISME.





### Sabah's EU-REDD+ implementation

The EU-REDD+ Tackling Climate Change through SFM and Community Development project is a project funded by the European Union and implemented in three selected pilot sites across different areas in Sabah since 2014. The project is coordinated by the EU-REDD+ Project Unit based in Sabah Forestry Department headquarters, with participation from Sabah Parks and Sabah Wildlife Department. REDD+ is a mechanism which provides an economic incentive to encourage developing countries to reduce carbon emissions through SFM. It is an acronym for 'Reducing Emissions from Deforestation and Forest Degradation', and the plus means enhancement of forest carbon stocks through establishment of conservation areas, restoration and enrichment planting programmes as well as other related activities under SFM. To date, more than 1,252 ha have been restored under this project.

The local community involvement was further strengthened through the establishment of 1,126 ha of Community Conserved Areas (CCA), under the Project's Participatory Land Use Planning (PLUP) approach, to maintain forest resources on their lands. The project collaborates with oil palm companies in restoring and protecting forested areas within their estates through the establishment of 3,079.27 ha of privately owned conservation areas, such as Sawit Kinabalu's Sg. Pin Conservation Area (2,632 ha).

### Forest monitoring and enforcement

Monitoring and enforcement form an essential part of the Sabah Forestry Department in ensuring the success of SFM, and hence, in preserving our natural heritage. This also incorporates investigation and prosecution. Departmental staff under the Regional and District Forestry Officers are assigned to various field outposts to guard as well as to patrol the forest reserves to curb illegal harvesting and wildlife poaching at regular intervals. A tactical team, 'SFD Protect Squad', was launched in 2016 to strengthen the capability of the department in combating forest crimes. The squad is trained in self-defence, hand combat and weapon handling. The department also works closely with the security forces, other relevant agencies, NGOs and local communities, such as army, police, Wildlife Department, Sabah Foundation and Sabah Environmental Trust, in forest monitoring and enforcement. The local community participation is through the appointment as honorary forest rangers, to work together in safeguarding the forests.

### Forestry R&D in preserving natural heritage

Research and development is an important component in supporting the implementation of biodiversity conservation in preserving our natural heritage. The Forest Research Centre (FRC), under the State Forestry Department, endeavours to be a centre of excellence in tropical forestry research, with its mission, to further develop and apply knowledge and technology to support conservation, management, development and sustainable utilization of the forest resources of Sabah through scientific research. The programmes that have been identified to be priority research areas (2021-2025) are Forest Ecosystem Management, Forest Biodiversity and Conservation, Forest Plantations, Forest Produce and Products, and Forest Socio-Economics. Various projects are undertaken in each programme and many involve cooperation with both local and international agencies. All programmes are somewhat related to preserve natural heritage of Sabah either directly or indirectly.

The Forest Research Centre in Sepilok houses several scientific reference collections, namely the Sandakan Herbarium (276,000 plant specimens), Insect Museum (180,000 insect



specimens) and Xylarium (5,500 wood samples). The collections are state and national heritage, significant for biodiversity conservation. They provide important information and serve as references for researchers, students as well as the general public. The Rainforest Discovery Centre (RDC), Sepilok under the Forest Research Centre promotes the importance of tropical rainforests through environmental education and awareness. Located at the fringe of lowland Kabil-Sepilok Forest Reserve, it offers opportunities for discovering the wonders of nature.

### Economic spin-off from preserving natural heritage

Conserving the rich and interesting biodiversity has not only provided recreational or aesthetic enjoyment to the locals but also attracted many tourists to the state. Nature tourism contributes significantly to the state economy. Among the popular forest- and nature-based attractions in Sabah are Kinabalu Park (World Heritage Site), Danum Valley (Borneo Rainforest Lodge), Maliau Basin, Kinabatangan Floodplain, Tabin Wildlife Reserve, Sepilok Orang-utan Rehabilitation Centre, Bornean Sun Bear Conservation Centre and Rainforest Discovery Centre. The Sabah Forestry Department cooperates with various agencies, such as Yayasan Sabah, Sabah Tourism Board, Sabah Parks and Wildlife Department, as well as local communities in promoting nature tourism in Sabah.

### Conclusion



SFM and biodiversity conservation go hand-in-hand in preserving our natural heritage. As the custodian of the rainforests and their biodiversity, the Sabah Forestry Department strives to protect and conserve our natural heritage. To date, Sabah has the highest percentage of forested areas in Malaysia, encompassing 65% of the state's land mass, followed closely by Sarawak with 62% while Peninsular Malaysia, 44%. Forest and biodiversity are for people, but the people must cooperate if the forest and its biodiversity are to continue to truly play a life-supporting role. Protecting the forest means conserving our natural heritage, not only for the present generation but for many more generations to come.

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