

ACCESS TO GENETIC RESOURCES AND BENEFIT SHARING

**Theory to Practice
under the
Nagoya Protocol**

United Nations Development Programme



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Malaysia

Strengthening the National
ABS Framework and delivering
environmental, social and economic
benefits through the anti-microbial and
anti-inflammatory properties
of *Litsea cubeba*

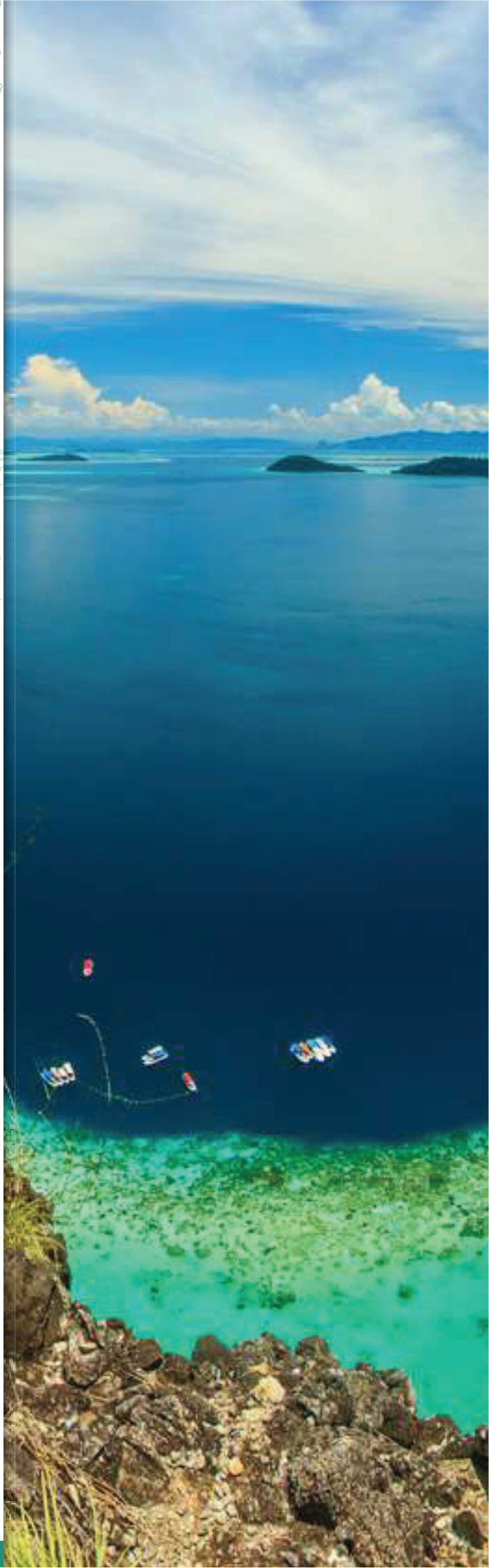
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SETTING THE SCENE

A megadiverse
country



Malaysia possesses
a wide array of
ecosystems ...



Malaysia's most recent,
reported species:



15,000

vascular
plants



306

mammals



742

birds



242

amphibians



567

reptiles



449

freshwater fish



1,619

marine fish



150,000

invertebrates



Malaysia – one of the twelve mega-biodiverse countries in the world – belongs to the Sundaland biogeographical region, which comprises the Malay Peninsula and the Malay Archipelagic Islands, including Sumatra, Java and Borneo, and possesses a wide array of coastal, marine and terrestrial ecosystems. The Sundaland region is further divided into several terrestrial and marine ecoregions, which include the Peninsular Malaysian, Borneo lowland and Borneo montane forests, the Sulu-Sulawesi marine ecoregion, and the Andaman Sea. Malaysia is also home to 18 ethnic subgroups of *Orang Asli* in Peninsular Malaysia and 64 indigenous groups of *Orang Asal* in Borneo's Sabah and Sarawak. This ethnic and cultural human diversity is the source of a vast variety of traditional knowledge about Malaysian ecosystems.

Malaysia's 6th National Report to the CBD in December 2019, its most recent, reported an estimated 15,000 species of vascular plants, 306 species of mammals, 742 species of birds, 242 species of amphibians, 567 species of reptiles, over 449 species of freshwater fish, over 1,619 species of marine fish and more than 150,000 species of invertebrates. Some of the iconic species include Malayan tiger, Malayan tapir, Asian elephant, Orang utan, Sunda pangolin and Sunda clouded leopard. The Borneo states of Sabah and Sarawak host the richest rainforests in the world with a high diversity of Dipterocarps, comprising 291 species or 75% of the family. With a total coastline of 8,840 km and 879 islands, Malaysian waters are home to approximately 4,006 km² of coral reefs, and host more than 77% of the world's known coral species.



National framework on ABS and associated traditional knowledge

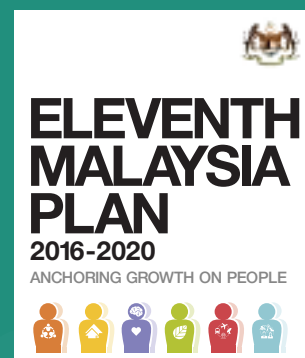
Malaysia pledged to maintain at least 50% of its land under forest and tree cover during the Rio Summit in 1992. To meet global and national targets and aspirations to conserve this rich natural endowment, Malaysia has become a party to various international environmental instruments related to biodiversity including the Nagoya Protocol (2019). “Green growth/economy” is recognized as an important development strategy under the most recent 5-year Malaysia Plans – Eleventh Malaysia Plan 2016–2020 and Twelfth Malaysia Plan 2021–2025. The strategy emphasizes strengthening an enabling environment for green growth, adoption of sustainable consumption and production, conserving natural resources and strengthening resilience against climate change and natural disasters. These actions are expected to conserve biodiversity and safeguard its traditional knowledge holders and beneficiaries.

On 9 October 2017, the “Access to Biological Resources and Benefit-Sharing Act 2017” (Act 795) was enacted in Malaysia following the Royal Assent and reading by the Parliament. This is a landmark law that protects and safeguards indigenous peoples’ rights of their traditional knowledge through prior informed consent, ensures benefit-sharing agreements with the resource provider for commercial uses and curbs biopiracy – stealing of biological resources without the consent of the country of origin. The law regulates the access to genetic or biological resources and traditional knowledge of indigenous peoples, known as *Orang Asli* or *Orang Asal* in Malaysia, associated with these resources and benefit-sharing arising from their utilization.

The process of formulating a national policy and regulatory framework in Malaysia started as early as 2008, drawing lessons and feedback from existing subnational legislation in the states of Sabah and Sarawak on bioprospecting and traditional knowledge. More than 20 participatory consultations were held with subnational governments, academia, research institutions, civil society and non-governmental organizations, private businesses involved in bioprospecting and biotechnology, indigenous peoples and local communities to create awareness and understanding as well as getting feedback and views on the legal framework. The pilot projects executed by the Forest Research Institute Malaysia, Sarawak Biodiversity Centre and Sabah Biodiversity Centre with the support from the UNDP-GEF Project ‘*Developing and Implementing National Access and Benefit-Sharing Framework in Malaysia*’ implemented by the Ministry of Energy and Natural Resources, demonstrated the principles and application of PIC for access to biological resources and MAT for fair and equitable sharing of benefits. The knowledge exchange among ABS practitioners in Malaysia, India and Bhutan during technical missions to these countries in 2012–2014 was particularly beneficial to the drafting of legal provisions to incorporate best practices and to address current and potential issues during the enforcement of the new law. The draft law was also uploaded onto the website of the Ministry of Energy and Natural Resources twice, in 2012 and 2015, for public notification, feedback and comments.



“Green growth/economy” is recognized as an important development strategy under the most recent 5-year Malaysia Plans ...



The strategy emphasizes strengthening an enabling environment for green growth, adoption of sustainable consumption and production, conserving natural resources and strengthening resilience against climate change and natural disasters.



The law regulates the access to genetic or biological resources and traditional knowledge of indigenous peoples ...





The federal government plays a coordinating role, as well as providing the link to international enforcement when a resource illegally taken from the state is developed and patented elsewhere.



“The bill was a long time in the making. Essentially because our constituent states, which constitutionally have exclusive jurisdiction over land and its resources, were wary of the encroachment of federal authority over their rights. The matter was resolved with the jurisdiction to implement the law being vested entirely in states. The federal government plays a coordinating role, as well as providing the link to international enforcement when a resource illegally taken from the state is developed and patented elsewhere.”

PROFESSOR GURDIAL SINGH NIJAR, Prominent advocate and solicitor, founder of the Centre of Excellence for Biodiversity Law, University of Malaya and the main drafter of the ABS law in Malaysia, from his article *“Finally, A Law to Curb Piracy”* in The Sun Daily on 7 August 2017 about the key challenges in the legal drafting process



Key provisions of Act 795 include:

- Distribution of authority between Federal and State institutions through clear description of the functions of National Competent Authority and Competent Authorities
- Access to biological resources through requirements for PIC and permits for commercial and non-commercial purposes
- Benefit-sharing through MAT
- Application of benefits for biodiversity conservation
- Compliance and monitoring of domestic ABS requirements.

In November 2018, Act 795 (ABS law) paved the way for Malaysia to ratify the Nagoya Protocol, reaffirming the country's commitment to conserving its unique biodiversity while also promoting the sustainable use and equitable sharing of benefits. In February 2019, Malaysia's ratification came into force and has been supported by new national regulations and amended subnational legislation. National subsidiary regulations under Act 795 were finalized by the Attorney General's Chamber on 22 November 2019 and gazetted on 17 December 2020. These subsidiary regulations will be enforced together with the Act once all the implementation mechanisms are in place in 2021.



A BIODISCOVERY CASE

The LitSara® story – Enriching lives with a breakthrough innovation of traditional knowledge

In the serenity of the highlands of Sarawak, Malaysia has an enigmatic hold on those who set foot on its soil. From the cool mountain climate of the Lawas and Bario highlands in the north, to the remoteness of the Padawan range in the south, these areas are blessed with breath-taking views, peaceful remoteness and rich soil that leaves one with a feeling of calm and content.

Amidst these gentle hills and rolling valleys of this region are found the *Kelabit* villages of Pa'Ukat and Pa'Lungan in the Bario highlands, the *Lun Bawang* villages of Long Kerebangan and Long Telingan in the Lawas highlands and the *Bidayuh* community of Kampung Kiding in the Padawan range. These five villages share a common resource, the *Litsea cubeba* tree, which each community has long utilized for its culinary and healing properties. Through the Traditional Knowledge Documentation Programme, an activity implemented by the Sarawak Biodiversity Centre (SBC) since 2001, and the ABS Programme of the biological resources pilot demonstration project supported by the UNDP-GEF ABS Project in 2014, SBC partnered with these indigenous communities to jointly learn and develop innovative products from this exciting plant species.

Known to the *Bidayuh* as “pahkak” and to the *Kelabits* and *Orang Ulu* as “tenem”, the tree produces a scintillating scented essential oil that invigorates, rejuvenates and inspires. Laboratory tests have found that the essential oil derived from the *Litsea* trees in Sarawak differs from that of the same species found in China and other countries in the region. The essential oil shows anti-microbial and anti-inflammatory properties and is able to repel insects, which make it suitable as an active ingredient in personal care products. This potentially multipurpose oil derived from the fruits and leaves of the *Litsea* tree has led to intellectual property certifications – a geographical indication for the tree as “Sarawak Litsea” and a trademark for its essential oil “LitSara®”.

The LitSara® pilot initiative demonstrates the good spirit of ABS which utilizes PIC from participating communities, who, themselves, are actively involved in the project which including the *in-situ* conservation of the *Litsea cubeba* plant's natural habitat through sustainable harvesting using Good Wild Craft Practice. The initiative ensures that the valuable traditional knowledge is recognized and benefits, in both monetary and non-monetary ways, are appropriately shared.



LitSara® products



Propagation of tenem (*Litsea cubeba*) by Kelabit people from the Pa'Lungan village in the Bario highlands, Sarawak



... sharing of benefits with local indigenous communities allows them to improve their livelihood ...



SDG 1
No poverty



SDG 8
Decent work and economic growth



SDG 15
Life on land

IPLCs' capacities and SDGs impacts

The Sarawak Biodiversity Centre, on 19 April 2017, entered into a two-year agreement with Interhill Group, the owning company for both Pullman Kuching and Pullman Miri Waterfront Hotel for collaboration on the sale of LitSara® products. The collaboration is part of a corporate social responsibility initiative of Interhill and its hotels in giving back the proceeds from the sales of LitSara® products to the indigenous communities in Sarawak.

In 2019, SBC successfully signed ABS agreements (the first in Malaysia) with the five communities involved in *Litsea cubeba* oil production namely Pa'Ukat, Pa'Lungan, Long Kerebangan, Long Telinga and Kampung Kiding. The pilot initiative created a complete value chain: from biological resource (raw material) collection, through primary oil extraction, to secondary product processing for health and personal care products such as soap, essential oil, air freshener, etc. to marketing and sales. The sharing of benefits with local indigenous communities allows them to improve their livelihood and at the same time preserve their traditional knowledge while promoting the sustainable use of the biological resources. This initiative has been a practical demonstration of how an ABS biodiversity case contributes to SDG 1 (No poverty), SDG 8 (Decent work and economic growth) and SDG 15 (Life on land) for Malaysia.



Benefit sharing agreement signing with five communities



From left to right, Sah Lasung, Ken Mutang, Eriana Daniel (sitting in the middle), Linda Lagang and Laput Baru from Long Kerebangan community

"The project gave us new experience and additional income from the sale of LitSara essential oil. LitSara is regarded as a potentially high-value crop and is being sustainably cultivated by the communities. A sense of cooperation and collaboration through various activities were fostered among community members and when benefits obtained were shared equally by everyone. The project provided the opportunity for communities to share traditional knowledge and be recognized as the rightful owner in addition to enabling communities to reap benefits from the royalties."

KEN MUTANG, Lun Bawang participant in the LitSara® pilot initiative from Long Kerebangan village

"LitSara essential oils can be incorporated into products such as soap and shampoo to kill germs and remove odour. From my own experience, LitSara essential oil is great for healing toothache. Furthermore, LitSara's soap and shampoo is gentle on the skin and is able to reduce itchiness. The project has given us an opportunity to generate alternative sources of income."

LINDA LAGANG, Lun Bawang participant in the LitSara® pilot initiative from Long Kerebangan village



EYEWITNESS STATEMENTS



LitSara is regarded as a potentially high-value crop and is being sustainably cultivated by the communities.



LitSara essential oils can be incorporated into products such as soap and shampoo to kill germs and remove odour.