# IMPACT & STATE OF THE PORT OF

LIFE ON LAND



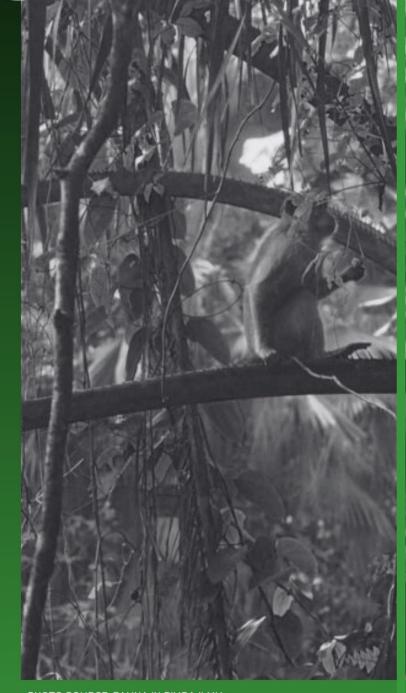


PHOTO SOURCE: FAUNA IN RIMBA ILMU





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#### PROJECT LEADER AND EDITOR

Rahmat Shah Putra Samsul Rizal

#### STUDY TEAM

Muhammad Azhar Arif Mohd Azmi

#### WITH SUPPORT FROM

Tan Siu Ching Nur Dinah Izzaty Mohamad Firdaus Ramli Mohd Fadhli Rahmat Affan Nasaruddin Noor Azril Ramli

#### **EDITORIAL & DESIGN**

Calven Chow Kai Wen Rahmat Shah Putra Samsul Rizal

#### **Associate Fellows (Corporate Data Centre)**

Dr. Bernardine Renaldo Wong Cheng Kiat Dr. Tan Hsiao Wei Huzienetta Hamdan

#### **Subject Matter Experts**

Professor Dr. Saiful Anuar Karsani Dr. Muhammad Azzam Ismail

#### **Administrative Support**

Kamisah Samsuddin Norshila Mat Nor

#### **CONTRIBUTORS**

Deputy Vice-Chancellor (Academic & International)
Office

Deputy Vice-Chancellor (Research & Innovation)
Office

Deputy Vice-Chancellor (Student Affairs) Office Deputy Vice-Chancellor (Development) Office Registrar Office

Associate Vice-Chancellor (Corporate Strategy)
Office

Associate Vice-Chancellor (Global Engagement)
Office

Associate Vice-Chancellor (Infrastructure & Information Services) Office

Department of Development & Estate Maintenance (JPPHB)

Fakulti Alam Bina

Global Enrichment and Mobility Division (GEM)

Rimba Ilmu

UM Sustainability and Development Centre (UM SDC)

**UM Water Warriors** 

UM Zero Waste Campaign (UM ZWC)

## FOREWORD BY ASSOCIATE VICE-CHANCELLOR (CORPORATE STRATEGY)



The Sustainable Development Goals (SDGs) has transformed the landscape of the higher education sector on a global scale. These 17 goals have become a primary reference framework in many institution's planning of education & learning, research & innovation, as well as strategic partnerships strategies.

The publication of the 17 Universiti Malaya Impact Reports 2022 is crucial to monitor our efforts towards SDGs as we are advancing our excellence through the implementation of the UM Strategic Plan 2021-2025, UM Transformation Plan 2021-2030, and UM Sustainability Policy 2021-2030.

For many years, UM has integrated the SDGs into our leadership, university policies, curriculum activities, RDCIE initiatives, values, investments, and strategic partnerships with stakeholders to demonstrate that UM also "walks the talk." These efforts involve active engagement from our staff, students, and the broader community of stakeholders and alumni.

Congratulations to the team at the Corporate Data Centre for formulating data-driven comprehensive reports that will serve the University in becoming a Global University Impacting The World.

## PREFACE BY DIRECTOR OF THE CORPORATE DATA CENTRE



I am delighted to present all 17 Universiti Malaya Impact Reports for 2022, which review the data related to the Sustainable Development Goals (SDGs) and showcase UM's achievements in 2022. The 17 SDGs serve as a guide for addressing the most pressing issues and critical challenges. Each of the 17 SDGs demands strong collaborative efforts from all levels of society to ensure a more resilient and sustainable future for the next generation.

In the Corporate Data Centre, we apply knowledge and data analytics skills to make informed, evidence-based decisions. This not only helps address current challenges but also ensures preparedness for the future.

These 17 Impact Reports for 2022 are flagship reports designed to assist the University in monitoring and examining our contributions to the country's progress in achieving the 17 SDGs.

I would like to seize this opportunity to express my deep appreciation to my team, who have worked tirelessly to collect and analyse data, enabling us to effectively monitor UM's sustainability efforts. I am also sincerely grateful for the support from UM's top management and the hard work of all colleagues across campus, particularly the Sustainable Development Centre, data managers, and controllers, for their cooperation in providing the SDG data for 2022.

#### **OUR IMPACT IN 2022**



24 assistance programs empowered 10694 students in their academic journeys.



12 impactful food assistance programs, including free food, food banks, vouchers, and affordable options, eliminated hunger on UM campus.



Over 20 outreach programs delivered essential health services to local communities in need and refugees.



47 enriching courses featured in the 2022 Short-Term/International Training/Study Tour, part of UM Course Buffet to support lifelong learning.



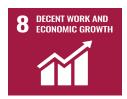
**55%** Female representation in senior positions



429 participants took on 7 weeks of water conservation challenges during the Kita Jaga Air Challenge 2022.



UM subscribed to the Green Electricity Tariff (GET) program, generating 5.5 million kWh of clean energy



Precision Intervention Program for selected students to produce future-ready graduates enriched with UM DNA.

#### **AIM OF THE GOALS**

SDG 1: End poverty in all its forms everywhere

SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

SDG 3: To ensure healthy lives and promote well-being for all at all ages

SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

SDG 5: Achieve gender equality and empower all women and girl

SDG 6: Ensure availability and sustainable management of water and sanitation for all

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for al

SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

SDG 10: Reduce inequality within and among countries

SDG 11: Make cities inclusive, safe, resilient and sustainable

SDG 12: Ensure sustainable consumption and production patterns

SDG 13: Take urgent action to combat climate change and its impacts

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

The development of the Industrial Relations Strategic Planning Framework
- Industry University Hyper Engagement
Collaboration Framework (INSIGHT)

The publication of the First E-Magazine for Persons with Disability by The Secretariat AUN-DPPnet.

The establishment of UM Master Plan document to guide the university towards achieving a Carbon-Neutral Campus by 2050.

9 initiatives conducted by the Zero Waste Campaign to establish an integrated solid waste management system

The establishment of UM Carbon Neutrality Acceleration Living Labs to contribute to the university's carbon-neutral performance.

In 2022, Project Pulih joined forces with RHB ISLAMIC to protect Malaysia marine ecosystems.

Rimba Ilmu, or Forest of Knowledge, covers 40 hectares and contains an estimated living collection of around 1,700 species of plants.

UM as the first university in Malaysia to conduct campus elections fully run by students.

UM as part of 28 Global Network Memberships, has International Partners based in UM, and 96 Academia-Industry Collaborations.





















## Overall Ranked in band **101-200 /**1591

From band **201-300** in 2022



Ranked **50/**876 From **201-300** in 2022



Ranked in band 101-200/1304 From ranked 79 in 2022



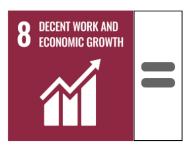
Ranked 13/812 From 201-300 in 2022



Ranked in band 101-200/647 From band 201-200 in 2022



Ranked 3/1081 From ranked 51 in 2022



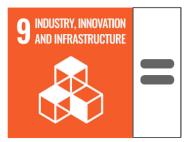
Ranked in band 401-600/960 From band 401-600 in 2022



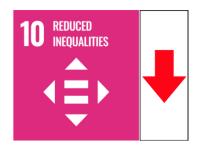
Ranked in band 101-200/1218 From band 201-300 in 2022



Ranked 60/702 From band 201-300 in 2022



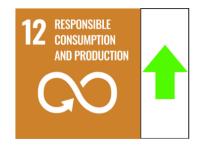
Ranked in band 201-300/873 From band 201-300 in 2022



Ranked in band 201-300/901 From band 101-200 in 2022



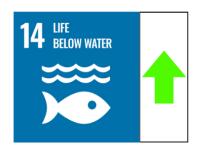
Ranked **72/**860 From **101-200** in 2022



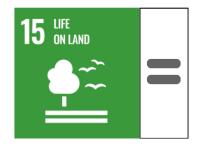
Ranked 73/674 From 201-300 in 2022



Ranked in band 101-200/735 From band 101-200 in 2022



Ranked **85/**504 From **101-200** in 2022



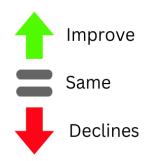
Ranked in band 101-200/586 From band 101-200 in 2022



Ranked in band 101-200/910 From band 201-300 in 2022



Ranked **81/**1625 From **301-400** in 2022





## Purpose Driven SUPPORTING LOCAL LAND ECOSYSTEMS

Supporting land ecosystems through education and action is a fundamental values of Universiti Malaya (UM)'s sustainability efforts. UM recognises the pressing need to foster awareness and promote responsible land stewardship. UM equips its community with the knowledge and skills required to safeguard terrestrial ecosystems. UM also contributes to the broader goal of ensuring the longevity of environments through outreach initiatives.

## EVENTS FOCUSING ON SUSTAINABLE LAND UTILISATION

Many initiatives led by the UM Sustainability and Development Centre (UMSDC), encompasses various events and programs throughout 2022, with a specific emphasis on fostering an understanding of biodiversity and sustainable landscape practices.

One notable event in 2022 was the Klang Valley City Nature Challenge, which took place from 29 April to 2 May. This event was organised as part of the Citizen Science Month celebration and aimed to engage community members in using the iNaturalist app, a tool for recording local biodiversity. The objective was to raise awareness of the rich biodiversity in the vicinity and underscore the importance of its conservation.

In support of the UM Planetary Health campaign, the Institute for Advanced Studies (IAS), in partnership with Rimba Ilmu, UM Centre for Continuing Education (UMCCed), and UMSDC, hosted the 'Let's Rock @ Rimba Ilmu' Explorace 2022 on 27 August 2022. This interactive explorace included educational activities and encouraged a healthy lifestyle. Participants, comprising 21 teams of UM staff and students, engaged in biodiversity and environmental quizzes as part of the event.

Furthermore, in celebration of Earth Day, UM SDC member Mr. Affan Nasaruddin was featured in the World Earth Day Celebration and the Soft Launch of Perak's National Environment Day 2022 in Ipoh. During this event, Mr. Affan conducted a sharing session on urban rivers and wildflowers and provided a hands-on briefing on the 'City

Nature Challenge' to students from UiTM Perak on April 21-22, 2022.

Moreover, in 2022, UM selected a group of ten student delegates from various fields to represent both UM and Malaysia in an annual environmental sustainability gathering. Aligned with the theme for that year, 'Satoyama', which refers to an environment where people have coexisted with nature over time. UMCares partnered with UM Sustainability and Development Centre (UMSDC) to host a one-day Pre-ASEP program. This program aimed to raise awareness of key campus sustainability initiatives among the delegates.





Besides Klang Valley, this year Iskandar Malaysia and Ipoh are also participating in City Nature Challenge 2022.



y Nature Challenge 2022:

9, 2022 - MAY 2, 2022



Taking pictures: 29 April - 2 May Identifying: 3 May - 8 May



Klang Valley
City Nature
Challenge 2022







### SELAMAT HARI BUMI 2022 'INVEST IN OUR PLANET'



TAP INTO THE LOCAL WISDOM FOR NATURE-BASED SOLUTIONS



BE A RESPONSIBLE CONSUMER



GO FOR ENERGY EFFICIENCY, INVEST IN RENEWABLES



CONSERVE WATER AND PROTECT OUR RIVERS



DON'T FORGET THE PEOPLE' ESPECIALLY THOSE IN NEED.



PEACE IS A PREREQUISITE TO UNLOCK PLANETARY HEALTH

UM Sustainability & Development Centre (UM SDC) / Pusat Pembangunan Kelestarian UM

#### **NEWS**







'SATOYAMA OUR COMMON FUTURE'













PRE-ASIAN STUDENTS ENVIRONMENT PLATFORM (ASEP) 2022 -**UM CHAPTER HOSTED BY UMCARES AND UM SDC:** PART 1 (SUSTAINABLE WATER MANAGEMENT & URBAN RIVERS) & PART 2 (PLASTIC UPCYCLING WORKSHOP & GREEN STAYS) 1 August 2022 (Monday) 9:30 am - 1:00 pm @ UM Varsity Lake, Pantai Ríver-Side, & Rumah No. 2

#### MAINTAIN AND EXTEND CURRENT ECOSYSTEMS' BIODIVERSITY

UM is actively engaged in preserving and enhancing existing ecosystems and their biodiversity, encompassing both plant and animal life, particularly in ecosystems facing potential threats. The university recognises the distinctive natural environment in which it is situated, characterized by lush greenery within an urban setting. Protecting and nurturing this unique ecosystem is a fundamental commitment.

To reinforce its commitment to safeguarding ecosystem biodiversity, UM has integrated landscape and biodiversity management as a central component of its <u>UM Sustainability Policy</u>, the primary document

governing sustainable development at the institution. This policy is supported by several subsidiary documents, including the UM Eco Campus Blueprint and UM Eco Campus Guidelines. These documents provide a strategic framework for the preservation of biodiversity on campus.

One of the key initiatives aligned with this goal is the revitalisation of Rimba Ilmu, an 80-hectare botanical garden situated within the university's campus. Rimba Ilmu, which translates to "Forest of Knowledge" in the Malaysian language, serves as a haven for various plant species. The garden features core collections, such as medicinal plants, palms, citruses, ferns, and bamboo. Additionally, it houses a permanent exhibition called "Rain Forests and Our

Environment," a conservatory known as the "Rare Plants and Orchid Conservatory," and a Herbarium.

Rimba Ilmu plays a crucial role in preserving ecosystem biodiversity on campus. It serves as a platform for conducting comprehensive documentation of plant and animal species, thus creating a detailed map of the biodiversity within the campus environment. In doing so, Universiti Malaya actively contributes to the protection and expansion of existing ecosystems, especially those that may be under threat.





#### EDUCATIONAL PROGRAMMES ON ECOSYSTEMS

At UM, there are several educational awareness programs that focus on the biodiversity and ecosystems present on its campus to its academic community. This commitment is notably enshrined within the **UM** Sustainability Policy, where it is listed as one of the core strategies. Specifically, within Pillar 3: Environment, under Item 1: Landscape and Biodiversity Management, the university has articulated its intent to conduct comprehensive awareness and educational initiatives concerning biodiversity and sustainable landscape management. These efforts are intended to encompass the entire academic community, providing support for relevant activities.

The implementation of this strategy is a multifaceted endeavor and involves the active participation of various Centers of Responsibility. One such entity is Rimba Ilmu, entrusted by the university to design and deliver educational programs that highlight the campus's biodiversity and ecosystems.

In the year 2022, several notable educational programs were organised by Rimba Ilmu. A noteworthy event was the **UM** Planetary Health Explorace, hosted by the Institute of Advanced Studies on August 27th, 2022, in alignment with the UM Planetary Health campaign. This engaging event incorporated a series of educational activities aimed at promoting a healthy lifestyle. It attracted the participation of 21 teams comprising UM staff and students, who enthusiastically undertook the

challenge of completing biodiversity and environmental quizzes within a two-hour timeframe, all set amidst the lush surroundings of Rimba Ilmu.

Furthermore, Rimba Ilmu collaborated with various non-governmental organisations (NGOs), including Ecoknights, to deliver informative talks and sharing sessions as part of the sustainability courses provided by the UM SDC. Rimba Ilmu also extends its offerings to interested individuals by providing guided tours of its premises, facilitating an immersive educational experience. These initiatives represent UM's ongoing dedication to fostering a deeper understanding of biodiversity and sustainable landscape management within its academic community.

#### SUSTAINABLE MANAGEMENT OF LAND FOR AGRICULTURE AND TOURISM (EDUCATIONAL OUTREACH)

This programme was established through a collaborative effort between the Global Enrichment and Mobility Division (GEM) and the UMSDC, encompasses an extensive array of sustainability topics. These subjects span from an introductory overview of Sustainability@UM to insights into the Regional Centre of Expertise on Education for Sustainable Development (ESD), the EcoCampus living labs, citizen science initiatives, and tangible sustainability interventions within diverse contexts. This program serves as a catalyst for fostering connections and networks among international participants while simultaneously exploring potential avenues for future engagement

across various formats.

Upon the program's conclusion, participants will have acquired an enriched understanding of fundamental sustainability principles, encompassing both theoretical and practical aspects of Education for Sustainable Development (ESD). The curriculum will also illuminate the distinctiveness of sustainability practices within the Malaysian context through the localized interpretation of the sustainable development agenda.

In the program's final week, participants will delve into ESD initiatives from various Regional Centre of Expertise on ESD network members, which may include RCE Penang, RCE Iskandar, RCE Greater Gombak, or RCE Kuching. This immersive program is designed to provide participants with comprehensive insights into sustainability and its multifaceted applications within educational, practical, and regional contexts.

For more information, please visit Education for Sustainable Development Programme.















## LET'S ROCK @ RIMBA ILMU UM PLANETARY HEALTH (#UMHP) EXPLORACE 2022

HOSTED BY INSTITUTE FOR ADVANCED STUDIES (IAS)
IN PARTNERSHIP WITH RIMBA ILMU, UM CENTRE FOR CONTINUING EDUCATION (UMCCED) &
UM SUSTAINABILITY AND DEVELOPMENT CENTRE (UMSDC)
27 AUGUST 2022 (SATURDAY) 8 AM - 1 PM @ RIMBA ILMU BOTANICAL GARDEN















SUSTAINABILITY COURSE (SHARING SESSION)
HOSTED BY PHYSICS DEPARTMENT
IN PARTNERSHIP WITH UM SDC, RIMBA ILMU & ECOKNIGHTS
PART 1: SLOT 1 (SUSTAINABLE CAMPUS) & GUIDED WALK
11 AUGUST 2022 (THURSDAY) 9:00 AM - 12:30 PM @ RIMBA ILMU, UM

#### ACTION-ORIENTED STRATEGY FRAMEWORK FOR SUSTAIN-ABLE LAND MANAGEMENT

UM pursues a comprehensive approach to land management by integrating policies for the sustainable use, conservation, and restoration of land, incorporating considerations for local biodiversity within planning and development initiatives, and actively addressing the reduction of alien species' environmental impact. UM recognises these as a pivotal area of concern within the framework of **UM Sustain**ability Policy. This policy serves as the primary institutional document governing sustainability-related matters at Universiti Malaya. It operates under Pillar 3: Environment, specifically within Item 1: Landscape and Biodiversity Management, which is a dedicated section within the policy delineating strategies and action plans aimed at ensuring the sustainable use and conservation of the university's land resources.

These initiatives are not standalone but are fortified through a suite of subsidiary documents, including the **UM Eco-Campus** Blueprint, UM Eco-Campus Guidelines, and UM Development Checklist. Collectively, these documents provide an operational framework for the guidance of all Centers of Responsibility within the university's purview. The introduction of this comprehensive strategy underscores Universiti Malaya's enduring commitment to championing and implementing sustainable land utilisation and conservation practices.

#### COLLABORATION FOR SHARED LAND ECOSYSTEMS

In the pursuit of its commitment to establishing a sustainable green campus, UM, facilitated by UM SDC, actively seeks collaboration opportunities with a spectrum of institutions, whether public or private, local or international. These collaborations manifest through knowledge exchange, shared expertise, collaborative research endeavors, and joint event programs, among other initiatives.

A significant milestone in 2022 was the signing of a Memorandum of Understanding between UM and the World Wildlife
Foundation, with the primary objective of conducting joint research aimed at informing policy development and management strategies. These collaborative research findings are reciprocally shared, with a particular focus on the areas of biodiversity conservation and sustainable development.

On a local scale, a strategic partnership meeting occurred between **UMSDC** and Perbadanan Putrajava concerning biodiversity conservation and parks management, involving Rimba Ilmu Botanical Garden and Putrajaya Botanical Garden. This meeting, held at Putrajaya Botanical Garden, sought to explore areas of strategic collaboration between the institutions involved. These endeavors exemplify Universiti Malaya's concerted efforts in fostering strategic collaborations for the effective management of land ecosystems.

#### WATER DISCHARGE GUIDE-LINES AND STANDARDS

Water Management in Malaysia falls under the jurisdiction of the Government of Malaysia. It can be divided generally into two sectors which are water supply and water sanitation/treatment. The Government granted operational licences to state companies to provide water supply to the populace. Meanwhile, water sanitation/treatment in Malaysia is centralised under Indah Water Konsortium (IWK) Sdn Bhd. which is owned by the Government of Malaysia through the Ministry of Finance Incorporated. UM also outsources the water treatment services from IWK.

To keep the standards and ensure the quality of water treatment, the Government introduced the Environmental Quality Act in 1974 which includes provisions on effluent and water discharge into water bodies. Further guidelines, Environmental Ouality Regulation (Industrial Effluent) are introduced to include schedules on the effluent and water discharge in a more detailed manner. The guidelines and schedules are the initiative to protect public health and safety and prevent ecosystem pollution from happening.

