



UNIVERSITI
MALAYSIA
KELANTAN

UMK SUSTAINABLE DEVELOPMENT GOALS REPORT 2021

PUBLICATION AND RATING DIVISION
RESEARCH MANAGEMENT INNOVATION CENTER (RMIC)
UNIVERSITI MALAYSIA KELANTAN



**SUSTAINABLE
DEVELOPMENT GOALS**

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PREFACE

The United Nation's Sustainable Development Goals (SDGs) are a universal call to achieve a sustainable future and promote equality, human rights, and justice for all by 2030.

The University of Malaysia Kelantan (UMK) is aware of its duty to make a significant contribution to the creation and sharing of knowledge in order to address the issues outlined in the 2030 Agenda for Sustainable Development.

As an entrepreneurship-focused university, we address the SDGs through our research, publishing, student learning, and public engagement activities. UMK is delighted to be ranked 801-1000 for engineering and physical sciences, marking the first time ever in the TOP 1500 World University Ranking 2023.

This report is intended for a broad audience encompassing the local, national, and international public, commercial, NGO, policy, and educational sectors. We hope it inspires additional ideas, projects, and possibilities for collaboration.

INTRODUCTION

UNIVERSITI MALAYSIA KELANTAN

The establishment of a university in Kelantan was made as a component in the Ninth Malaysia Plan to support the quality of human capital development in the higher education sector. The federal agreement was announced by the Prime Minister on the 31 March 2006 in the Ninth Malaysia Plan proposal.

The establishment of the university was approved in the Cabinet Meeting on 14 June 2006. The cabinet has specified that the philosophy of the curriculum in UMK should be based on entrepreneurship and enterprise education in all the study programmes. Therefore, taglines such as "Entrepreneurship is Our Thrust" and "Entrepreneurial University" are widely used to promote the philosophy of this university. Specialised studies for short and moderate term are grouped into three main fields of studies, namely:

1. Entrepreneurship and Business;
2. Creative Technology and Heritage;
3. Agro-Based Industry and Earth Sciences

Apart from the three fields of studies, the significant emphasis would be given to acquiring languages and the development of soft skills. These learning programmes aim is to produce high-quality human capital with a first- class mentality and exemplary entrepreneurship attributes. It is hoped that this would contribute to the global prosperity by improving the capability and capacity of Small and Medium Enterprises (SME), and also towards the development of a highly entrepreneurial commercial society. In line with all areas of study, Information and Communication Technology (ICT) is employed as an enabler.

Vision

Championing balanced and holistic human development with entrepreneurial attributes for global prosperity

Mission

We offer quality and relevant academic programmes and training, high commercial value research and innovation, effective and efficient services, with high priority in providing conducive environment and fulfilling social responsibility

Motto

""Entrepreneurship is Our Thrust""

TRANSFORMATIVE * ENTREPRENEURIAL * EXCELLENT

SDGs@UMK

OUR COMMITMENT

We recognize and uphold the importance of sustainability in our operations and we and we strive to uphold moral standards to mitigate our significant effects on the community, the environment, and society as a whole. We also engage in responsible consumption and production to ensure sustainability for succeeding generations.

OUR ADVOCACY

UMK supports and promulgates sustainability through the SDG task force, community engagement, teaching, international collaboration strategic plan and STEM education.



GOAL 1 NO POVERTY

1 NO POVERTY



RESEARCH
GRANTS

26

RESEARCH
PROVISION

RM 3.9
Million

PUBLICATION

179

CITATION

1200



PUBLIC ENGAGEMENT

Integrated Education Development Program for Sabah's Poor Dropout Community at the Human Mind Development Center (PPMI).

This program focuses on basic education and the mastery of 3M skills and self-management, developing the potential and self-competence of the dropout community and applying the values of patriotism and strong identity in order to create a harmonious society among the dropout community in Sabah

The construction of the solar performance monitoring system at the Sarawak

A solar system was built to improve the condition of Kampung Sawai surau for local residents. This project is expected to make it easier for Muslim students in nearby schools to carry out KAFA activities better and more comfortably with the help of this solar system

RESEARCH

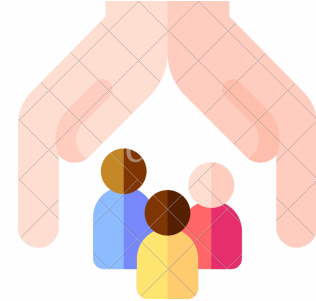
Urbanice Malaysia-Urban Forum 2021

This forum aims to discuss policies and make plans to achieve sustainability in major cities as a result of the urbanization process taking place. In addition, the main focus is also on the needs of communities in urban areas to deal with the urbanization process.

Preparation of the Twelfth Malaysia Plan, 2021-2025

This engagement session is to build the framework of the poverty alleviation and inclusive development agenda in the Five-Year Malaysia Plan in the Eleventh Malaysia Plan (11th RM), 2016-2020, the half-term review of the 11th RM, 2018-2020 and the 12th Malaysia Plan, 2021-2025 especially chapter 8: Dealing with Poverty and Developing an Inclusive Society to Ensure Social Justice.

END POVERTY IN ALL ITS FORM EVERYWHERE



18
SDG 1 RELATED
ACTIVITIES AND
YEARLY STAF
TRAINING

127
SDG 1 RELATED
COURSE UNIT



1211
STUDENTS RECEIVED
UNIVERSITY
FINANCIAL SUPPORT



BANTUAN ZAKAT KOMPUTER RIBA & YURAN PENGAJIAN PELAJAR UMK

Sebagai bentuk tanggungjawab sosial terhadap masyarakat, pemohonan Bantuan Zakat Komputer Riba dan Yuran Pengajian kepada pelajar kategori asnaf UMK terbaharu 2021.

Pelajar yang layak menerima:

- PELAJAR PELAKSANAAN
- PENYADAPTAHAN RUMAH MELAKSANA BUKAN
- TERBUKA KEPADA PELAJAR MELAKSANA

Tertutuh permohonan: 15 Januari 2021
Tertutup permohonan: 26 Januari 2021
Kod permohonan: BCR000872021 (01) (01)
shorturl.at/cRW1

Pelajar yang layak akan dihubung untuk sesi temuduga.

BANTUAN KEWANGAN BAGI KEMUDAHAN PELAN DATA INTERNET

RM 1,088,600

kepada semua pelajar UMK bagi Sesi September 2020/2021

Penyelenggaraan bantuan bermula: 19 JANUARI 2021 secara berperingkat

LEARNING & STUDENTS

Accommodation

11 Free Rental House to Asnaf Student & Students Residential Collage

Food Bank

Food bank to Asnaf students with free meal coupon everyday & Dry Food for students

Transportation

Buses and Van in and out of campus for students

Student Financial Support

Scholarship awarded for student for each semester & One off payment for student financial support

Internship student financial Support

UMK student that undergo internship were granted allowance RM350-RM500

Education Support

RM 1 Million is invested in Internet data support for students and 250 selected students received Free laptop amounted RM1500 per year.

GOAL 2 ZERO HUNGER

2 ZERO HUNGER



RESEARCH GRANTS

65

RESEARCH PROVISION

RM 3.9 Million

PUBLICATION

570

CITATION

2777



PUBLIC ENGAGEMENT

Ginger & Herbs Nursery of the Institute of Food Security and Sustainable Agriculture (IFSSA)

To improve the techniques to provide a high yield for farmers.

Kelantan State Ruminant Breeding Empowerment Course

The main objective of the program is to discuss and provide insight into the establishment of beef cattle production to eradicate poverty through the sharing of several lessons: what to feed; how to feed; how much to feed & how they cope with such situations. This session will also be a sharing session with the youth of ASEAN countries.

Food Bridging 2021 - A Day With Farmers

A CSR program which is purchased some corns from local farmers because lack of demand due to pandemic crisis.



RESEARCH

Agro-Based Industry Product Development Project (ABID)

Agro-Based Industry Product Development Project (ABID) is simply the first agricultural and livestock-based downstream food product development project held at Universiti Malaysia Kelantan. This project emphasizes to all groups, namely faculty staff, students and most importantly the community around UMK and Kelantan to move together to generate income and improve skills in food processing through entrepreneurial activities and the proliferation of new innovations

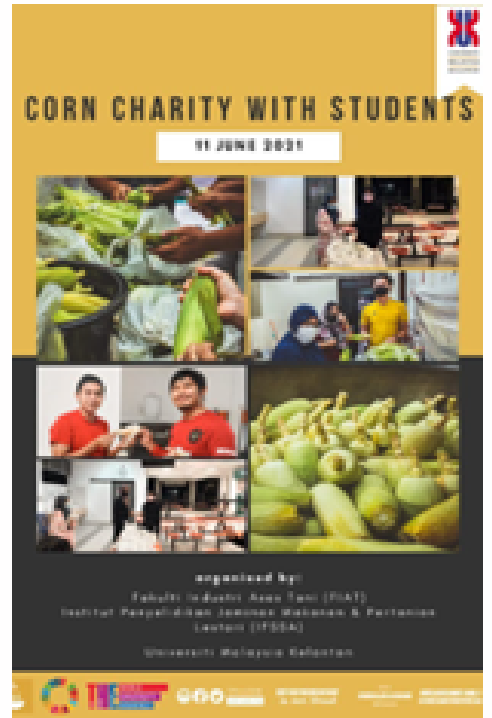
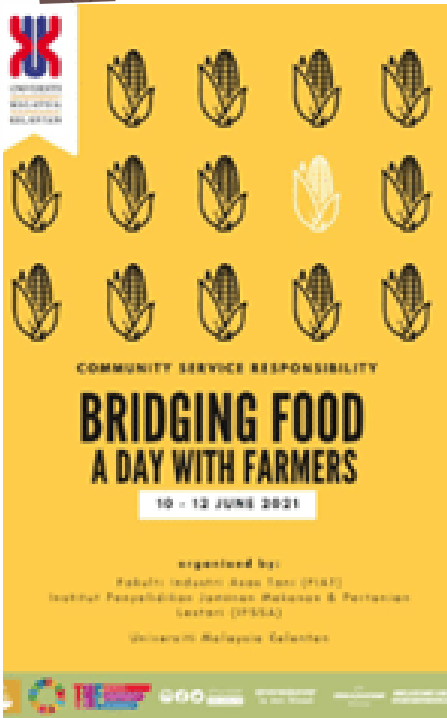
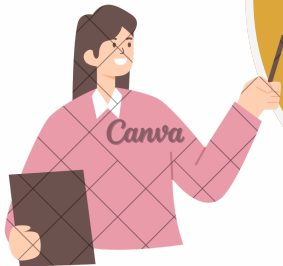
END HUNGER, ACHIEVE FOOD SECURITY , IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

27

SDG 2 RELATED
COURSE UNIT

19

SDG 2 RELATED
ACTIVITIES AND
STAF TRAINING



LEARNING & STUDENTS

Food Bridging A Day With Farmers

A CSR program which is purchased some corns from local farmers because lack of demand due to pandemic crisis

Corn Charity with Student

One of the activities in this Community Social Responsibility (CSR) program is distributing boiled corn to students on campus and delivery of food boxes to the Jeli villager

Ramadhan Food

This program is a CSR program and IFSSA's annual activity during Ramadhan and collaboration with FIAT and assisted by Kelab Pascasiswazah UMK Kampus Jeli.



GOAL 3 GOOD HEALTH AND WELL BEING

3 GOOD HEALTH AND WELL-BEING



RESEARCH
GRANTS

15

RESEARCH
PROVISION

RM 700
Million

PUBLICATION

1404

CITATION

7104



PUBLIC ENGAGEMENT

Researcher from UMK Creates Hand Sanitizer

The product produced by Researcher from was initially targeted for internal use but is seen to be beneficial to the public who are now facing the threat of Covid-19. To begin with, the production of this product is in limited quantities and not even for sale in the market. It is distributed free of charge to parties in need such as the police station, fire department and government agencies including UMK students.

UMK creates and Donate PPE for Malaysia Red Crescent Kelantan

Universiti Malaysia Kelantan (UMK) today successfully handed over sets of Personal Protection Equipment (PPE) in the form of PPE Suits (100 units) and 3D Face Shield Visors (157 units) as well as disinfectant liquid (10 units) to the Malaysian Red Crescent Kelantan (BSMM).

LIVE WEBINAR: SESSION 3
ZOONOTIC DISEASES
SEPTEMBER 19, 2020 (SATURDAY) | 10:00AM - 12:30PM (GMT+8)

Pets associated Zoonosis 10.00AM-10.30AM (GMT+8)	Occupational associated Zoonosis 10.30AM-11.00AM (GMT+8)	Multi-sectorial collaboration: learned from rabies experiences in Thailand 11.00AM-11.30AM (GMT+8)	Bats associated Zoonosis 11.30AM-12.00PM (GMT+8)
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Dr Sandie Choong Siew Shean
Veterinary Physician
specialised in Zoonotic
Diseases and Public Health,
UMK

Assoc. Prof. Aziah Daud
Public Health
Physician and Occupational
Health Doctor,
USM

Dr Karoon Chanachai
Regional Animal Health Advisor
at USAID Regional
Development Mission
Asia, Bangkok

**Assoc. Prof. Nurul
Azmawati Mohamed**
Clinical Microbiologist,
USIM

**FREE ADMISSION
SCAN & REGISTER NOW!**
Any inquiries, contact:
010-2611260 (Izzul)
0184014634 (Nadia)

RESEARCH

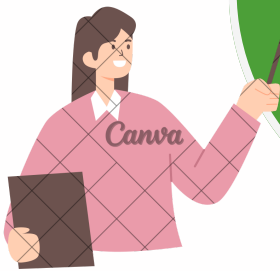
UMK-USM Research -Interrelationship between Burkholderia Pseudomallei distribution in animal and environmental sample with human melioidosis.

This study facilitates to unravel aspect of the disease that unclear through molecular genetic technique for organism identification and typing. This research also will improved by the findings of the geospatial analysis between the bacterial isolates from human cases and environmental samples.

Webinars on Zoonotic Disease

The Malaysia One Health University Network (MyOHUN) in collaboration with Universiti Sains Islam Malaysia (USIM) is organizing a One Health webinar on zoonotic diseases.

ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES



27
SDG 3 RELATED
COURSE UNIT

19
SDG 3 RELATED
ACTIVITIES AND
STAF TRAINING



LEARNING & STUDENTS

Mental Health Support

UMK Health Center provides mental health clinics for every students who need assistance.

Free-Smoking Clinic

Free smoking clinics were provided to the UMK staff and students which need help in stop smoking.

Dental Clinics

Education regarding dental health were also provided to all the students and staff where UMK has their own dental clinics.

MY OHUN club activities

Students of one health students club are actively precipitated and collaborated which each other organizing activities promoting health not only benefit community and environment but also student themselves.

One health Young leaders and Communicator

Introduce students to the concept of 'One Health' and to provide knowledge on the competencies required in the 'One Health' practice. The concept requires an individual to work in a group in dealing with various issues especially zoonotic disease issues.



On 6th April 2019, undergraduate students of multidiscipline from several universities had undergone an exciting 5-day training program named One Health Young Leaders and Communicators at Sudara Beach Resort, Tok Bali, Bachok, Kelantan. This activity was in its fourth installment, and the facilitators were made up of academics from various universities of different disciplines in Malaysia, including UMK, USM, UniSA, and IUM. Additionally, Prof. Dr. Lailifah Hassan MYOHUN Coordinator and Prof. Dr. Stanley Gordon Fenwick from Tufts University, USA, were among the speakers for this program. This year we trained 61 students from eight local universities, including those in social sciences and economy, namely UNIMAS, UMS, USM, UUM, UMT, UniSA, and UMK. Besides five international participants from Bangladesh, with the aim to strengthen the participants' communication, leadership, and partnership skills, participants were involved in interactive lectures, group work, games, role-play, and team building.

GOAL 4 QUALITY EDUCATION

4 QUALITY EDUCATION



RESEARCH GRANTS

41

RESEARCH PROVISION

RM 1.0 Million

PUBLICATION

243

CITATION

1292

GEOSCIENCE @SCHOOL
OCTOBER 30
9:30 AM - 1:30 PM
MICROSOFT TEAMS
LIMITED SEATS APPLY NOW
INTERESTING ACTIVITIES
• TALK FROM EXPERTS
• WORLD HERITAGE GAME
• GEO-QUIZ!
DENGAN KERJASAMA
Any inquiries, contact : Arina - 010 2265374 / Joshua - 018 2310884



RESEARCH

Foundations Program	1
Degree Programmes	29
Postgraduate Programmes	96
Graduates in Year 2021	1887

PUBLIC ENGAGEMENT

Geoscience @ School

Our faculty of earth science held geoscience @ school which aims exposes and gains interest in school kids to geoscience.

UMK Carnival Research and Innovation (CRI)

This yearly carnival provides platform for innovators around the world from primary school to universities in various fields and disciplines to present their innovation and share knowledge and best practices with panels from industry and academicians.

BAMBOO for Community and SULAM

Sharing of Experience Working with International Donors to Support Local Communities through GEF Small Grants Programme implemented by UNDP

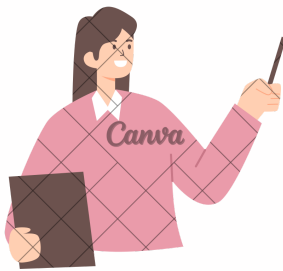
Education for Malaysian Indigenous People

Multidimensional modeling of the human rights of the Malaysian Indigenous People based on the elements of vulnerability, resilience and empowerment to face the impact of Industrial Revolution 4.0 (4IR)

Entrepreneurship Education

The formation of a new identity for B40 UMK student entrepreneurs through a redesigned social entrepreneurship ecosystem

ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL



76
SDG 4 RELATED
COURSE UNIT

19
SDG 4 RELATED
ACTIVITIES AND
STAF TRAINING

LEARNING & STUDENTS



Massive Open Online Courses (MOOC)

Start your online learning journey at Universiti Malaysia Kelantan. Improve your knowledge. Let's learn from our experts.

Massive Open Online Courses (MOOCs)

MOOCs are free online courses available for anyone to enroll. MOOCs provide an affordable and flexible way to learn new skills, advance your career and deliver quality educational experiences at scale. Implement professional development programme and provide training for lecturers through programmes such as the Basic Certification in Teaching and Learning Course Programme for new academic staff and Student-Centred Learning (SCL) training programme. Supervise, coordinate and update e-learning system as well as organise training workshop for all staff to enhance the effectiveness of quality teaching and learning.

MoEL'2021 Series 2: Cultivating Students Engagement Using Comics Via Canva

Nowadays, creativity is important to enhance teaching and learning. Canva provides simple techniques to produce infographics, presentations slides, and other visual content.



Library and Open Access

Our Office of Library and Knowledge Management in three campuses provide the endless reference using library digital webopac where we can find books, ebooks, journals, movies, music, docs, and more.





GOAL 5 GENDER EQUALITY

RESEARCH GRANTS

19

RESEARCH PROVISION

RM 1.5 Million

PUBLICATION

223

CITATION

1015

WANITA TUNJANG KOPERASI: MENYINGKAP REALITI
6 APRIL 2021 (SELASA)
8.30 PAGI - 12.30 TENGAH HARI
@ANGKASACOOP
SIRI 2 SEMINAR AURA

SUPERMOM
BICARA INSPIRASI WANITA : CABARAN PEMIMPIN WANITA SUPERMOM
RABU 29 SEPTEMBER 2021 10.30 PAGI

RESEARCH

A Modeling Study of Women's Economic Empowerment in Entrepreneurship in Kelantan

Women's involvement in business is increasing and growing. This has a positive effect on the national economy. In fact, the success of women has opened the eyes of many parties about the abilities of female entrepreneurs in empowering the national economy. Many women get involved in business, especially women entrepreneurs in Kelantan who create various successes. Therefore research aims to identify the driving factors and success of women in the field of entrepreneurship in Kelantan. The findings show the motivating factors for female entrepreneurs to get involved in business because they want to change the family's economic status, interest in business, helping their husband's economy and inheriting the business field from the family. The success factor of female entrepreneurs is due to deep interest, careful planning, business knowledge and willingness to take risks. This factor has made many women entrepreneurs in Kelantan achieve success.

PUBLIC ENGAGEMENT

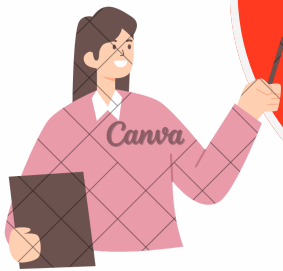
Empowering women entrepreneurs

UMK with collaboration of Global Entrepreneurship Research Centre (GERIC) and UMK Entrepreneurship Institute organized various of online forum and seminar which aims to empower women entrepreneurship and discover the opportunity to expand business potential.

ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

15

SDG 5 RELATED COURSE UNIT



1

SDG 5 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Women and sports at UMK

UMK never discriminates against female students and employees where they are given equal rights in various administrative, management and sports opportunities. UMK is very proud of Aina Nasuha's achievement in representing UMK for the Petanque event for the Women's Team Category at the Malaysian Games (SUKMA) XX MSN 2022.

Fair and Lovely Scholarship

UMK, the creator of history, received a total of 30,577 votes and won first place to win the Fair and Lovely scholarship of RM 50,000. The number of votes is recorded based on the online vote count. The scholarship recipient search program involves 40 female students from seven UA and IPTS where the main criteria are students who have a cumulative grade of 3.0 in academics and are active in the extracurricular field. 10 UMK students received RM5000 each to cover their study needs including tuition fees, purchase of books and other needs.



GOAL 6 CLEAN WATER AND SANITATION

6 CLEAN WATER AND SANITATION



RESEARCH GRANTS

16

RESEARCH PROVISION

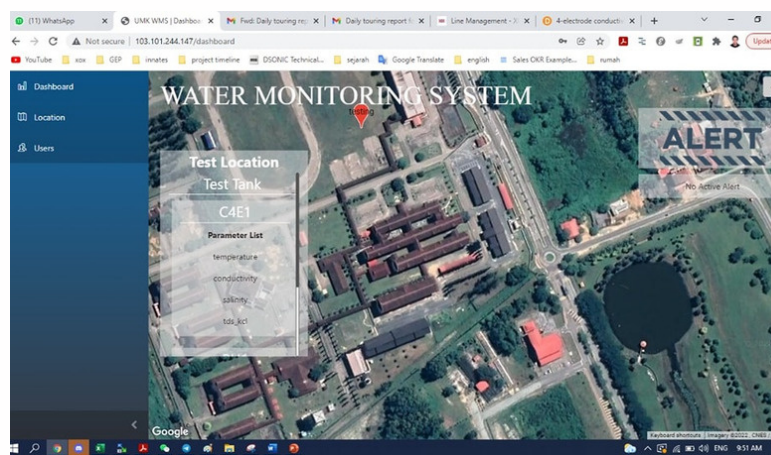
RM 383
Thousand

PUBLICATION

245

CITATION

967



RESEARCH

UMK Ground Water Project: Water Quality Real-time Monitoring System.

A water monitoring system (WMS) that includes a dashboard and sensor parameters was successfully developed with the allocation given by the office of deputy vice chancellor (research and innovation). This project has been developed since 2020. This UMK's first WMS unit was installed with a water treatment unit for the UMK Bachok Campus dormitory block. The next units will be installed throughout UMK.

PUBLIC ENGAGEMENT

Water Mapping at Kuala Koh

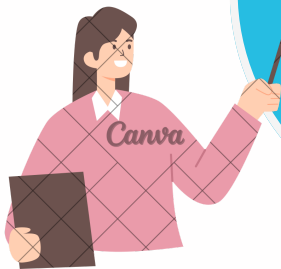
Our faculty of Earth Science (FSB) was given the opportunity to go with the National Disaster Management Agency (NADMA) and NGO Sahabat Jariah to the Indigenous people, Batek Kuala Koh village. NADMA meetings and gatherings with the indigenous people of Kuala Koh are to listen to their expressions and needs there for the purpose of planning steps to prevent the past tragedy from happening again. The FSB team also did not miss to take water and sediment samples at several sources and water sources used by the Indigenous people Kuala Koh population. A second sampling session and a drone survey will be done to "mapping" the village's main tank area will be planned in the near future.



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

22

SDG 6 RELATED COURSE UNIT



15

SDG 6 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Study programme

We deliver cutting edge teaching on clean water and sanitation. For example, Environmental Sustainability Science students take a course unit on water treatment technology and hydrology subject and various postgraduate programme in natural resource management and sustainable sciences which this field will give special attention to the use of science and technology in natural resources management towards maintaining a balance environment that will contribute to the development and formation of a technology-wise society and sustainable Science will emphasize on utilization of integrated science and technology in environmental management towards maintaining a balance environment. This will contribute to the sustainable development and management for human quality of life



Students activities

- Our students from Faculty of Earth Science visiting Ulu Kinta Water Treatment Plant and Sultan Azlan Shah Ulu Kinta Dam for their water treatment technology and hydrology subject. Apart from this various activities have been done in order to expose students to various industry challenges and prepared them.
- The Kem Bumi is yearly program which aims to have a positive impact on improving soft skills and strengthening brotherhood among students It is hoped that the organization of such a program will produce students who have high resilience and quality in conducting research or learning in the field

GOAL 7

AFFORDABLE AND CLEAN ENERGY

7 AFFORDABLE AND CLEAN ENERGY



RESEARCH GRANTS

4

RESEARCH PROVISION

RM 164 Thousand

PUBLICATION

457

CITATION

2818



RESEARCH

Monitoring and Optimizing Solar Power Generation of Flat-Fixed and Auto-Tracking Solar Panels with IoT System

The integration of recent digital technology of Internet of Things (IoT) with solar energy management was made to monitor real-time data of panel voltage (V_{pv}) and current (I_{pv}) of the solar panel. The solar panels were installed in Kelantan, Malaysia and this integrated solar power plant with IoT was developed with hardware setup and virtually tested to enhance the tracking behaviour of the proposed system. The comparison of different tilt angle of solar PV shows that solar PV facing the sun perpendicularly (45°) generated higher power generation compared to flat-fixed (0°). Whilst, by comparing fixed angle (45°) and auto tracking solar panel, the power generation recorded can reach up to double performance value (230 W) compared to 170 W generated from 45° fixed angle of solar PV. The IoT-based control of solar power significantly improves the performance of monitoring and maintenance of the power plant parameters with ease monitoring, cost-effectiveness and 24/7 remotely controlled.

PUBLIC ENGAGEMENT

DELIMA Minecraft Edu Challenge Raya Edition

Guide primary and secondary school students on how to simulate low cost, efficient building construction.

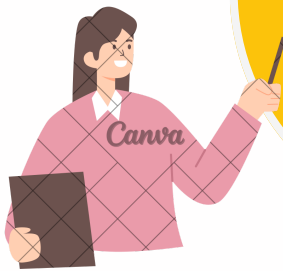
UMK -Industry : Wafer Fabrication

The talk focused on introduction of wafer, fabrication process steps and fabrication equipment as well as role as material technologist in the area of semiconductor. the wafer size and thickness is miniaturized order to reduce the energy usage for electronic devices

ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

13

SDG 7 RELATED COURSE UNIT



15

SDG 7 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Wonder STEM Photography competition 2021

Wonder of STEM is a program to encourage student to know better the concept of science, technology, engineering and mathematics. This program received good response from communities

Study Programme

Our faculty of Earth Sciences offering two courses Bachelor of Applied Science (Natural Resource Science) With Honors and Bachelor of Applied Science (Environmental Sustainability Science) With Honors which Pay special attention to maintaining ecological balance with the application of the use of science and technology that contributes to the balance of development and Provide a clear picture of environmental issues and problems as well as cross-disciplinary solutions to ensure the well-being of society today and future generations.



UMK Green Campus Master Plan 2020-2025

The Universiti Malaysia Kelantan (UMK) Green Campus Master Plan is a document that outlines the policy and management of the Green Campus according to the six Main Criteria of Green Campus UI Metrics, namely (1) Environment (Setting) and Infrastructure, (2) Energy and Climate Change, (3) Waste, (4) Water, (5) Transportation, and (6) Education and Research. It serves as a guide for the management, staff and students of UMK as well as other stakeholders in making the Green Campus Agenda a success, especially at UMK Bachok. As a community, all parties involved from various disciplines, expertise and centers of responsibility need to unite ideas and energy to realize all the policies and plans contained in this document

GOAL 8 DECENT WORK AND ECONOMIC GROWTH

8 DECENT WORK AND
ECONOMIC GROWTH



RESEARCH
GRANTS

57

RESEARCH
PROVISION

RM 3.3
Million

PUBLICATION

150

CITATION

867



RESEARCH

Biochar Enriched Organic Planting Mix Production Capacity Building for Social Enterprise Development

This research project were implemented with the aims to transfer biochar enriched organic planting mix production knowledge and skills set for capacity building (technical thrust) and to impart biochar enriched organic planting in business model and value proposition to the participants as well as to prepare the participants as independent self sustaining Biochar entrepreneur (social enterprise thrust).

PUBLIC ENGAGEMENT

Jeli Cottage Industry Complex

Provide services to SMEs around Jeli in particular and around Kelantan in general to add products based on raw materials that can be found in the Jeli district and providing the space and facilities needed by most industries in addition to improving the quality of their existing products to enter a larger market

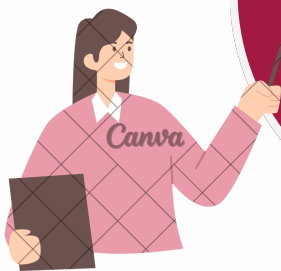
Social re-engineering of fishermen through a career path based on a social enterprise ecosystem

Where this project maps the multidimensionality that builds the social baseline of fishermen in addition to building the career path of fishermen based on the social enterprise ecosystem

PROMOTE SUSTAINED , INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

81

SDG 8 RELATED
COURSE UNIT



19

SDG 8 RELATED
ACTIVITIES AND
STAF TRAINING

LEARNING & STUDENTS



The pre-workshop on mushroom cultivation

This program is a part of UMK-MOF social enterprise project, which intention is to train the B40 category as becoming an entrepreneur to income generation and reduce poverty. At this moment, three communities and seven students registered in this mushroom cultivation project. The pre-workshop started with visiting the mushroom house plot to show them how to set-up the house and mushroom bags. Then, followed a lecture in the lecture room for the requirements of mushroom cultivation, budget, and gross income. It was like a brainstorming and motivational talk for the participants. At the end of the workshop, participants gained new knowledge on mushroom cultivation and its income generation.

Vertical-Hydroponic Cultivation Technology Workshop

Faculty of Agriculture-Based Industry (FIAT) in collaboration with the Research Institute for Food Security and Sustainable Agriculture (IFSAA) and the Institute for Research and Poverty Management (INSPEK) organized a Workshop on Vertical-Hydroponic Planting Technology. The workshop led by Dr. Norhafiza binti Md. Zain (as the Project Leader) is targeting two categories of participants, namely students and the B40 community. The main goal of the workshop is to give exposure to participants about vertical and hydroponic planting techniques that have been successfully achieved through sharing by Mr. Mohd bin Mahmud (FIAT Lecturer). The organization of this workshop is one of the programs sponsored by the UMK-MOF Social Enterprise Project Grant Scheme.





GOAL 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

RESEARCH
GRANTS

8

RESEARCH
PROVISION

RM 655
Thousand

PUBLICATION

228

CITATION

1044



RESEARCH

Advance Material Research Cluster

Drive the application of advance material such as graphene and other materials in variety of application such as antibacterial, energy storage, drug delivery, electrochemistry and water treatment.

Design, development and testing commercial scale hybrid solar dryer of Fish

This research project is design to fabricate and to test a 500 kg and 2000 kg capacity of fish improvised by hybrid solar dryer and mixed mode solar dryer.

PUBLIC ENGAGEMENT

Science @ School

The faculty at UMK have collaborated in highlighting science subjects in schools around the state of Kelantan by organizing various activities and competitions involving primary and secondary schools such as Delima Minecraft, the Science is Fun Video Competition and various other activities.

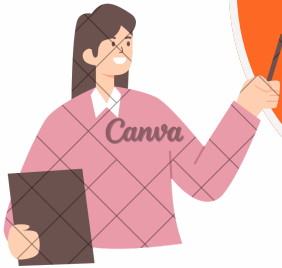
Innovation and Entrepreneurship Incubator Complex (IEIC) @ Jeli Campus

UMK's initiative to create an industry in the campus or industry at university (I@U) which aims to expose its students to the real world of industry in the campus area.

BUILD RESILIENT INFRASTRUCTURE, PROMOTE SUSTAINABILITY INDUSTRIALIZATION AND FOSTER INNOVATION

15

SDG 9 RELATED COURSE UNIT



19

SDG 9 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Our Programme

We deliver undergraduates and postgraduate courses in innovation and entrepreneurship through our Materials Technology, Bioindustrial Technology and Architecture courses. We integrated industrial experience into wide range of science and social science programmes.



Academic Visit

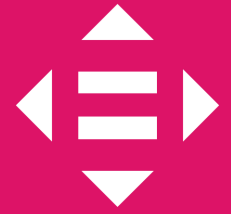
Students from Materials Technology visit Faculty Of Mechanical Engineering, Faculty Of Mechanical Engineering Technology Technical University Of Malaysia Melaka (Utem), Melaka, Kuala Lumpur University (Unikl-Micet) Melaka, Composite Technology Research Malaysia (Ctrm), Melaka And High Technology Training Center (ADTEC), Taiping, Perak.

Resilient Infrastructure

the new construction of the building has adopted glass type walls for natural lighting. In addition, UMK also promotes electrical equipment with 5-star energy efficiency by the Energy Commission, Malaysia for new/renovated buildings.

GOAL 10 REDUCE INEQUALITIES

10 REDUCED
INEQUALITIES



RESEARCH
GRANTS

1

RESEARCH
PROVISION

RM 250
Thousand

PUBLICATION

41

CITATION

193



PUBLIC ENGAGEMENT

Income Generation for Indigenous People

Universiti Malaysia Kelantan (UMK) will provide technological expertise and skills, particularly in the agriculture and animal husbandry industries, to help develop the indigenous people economy and generate income to support their daily lives.. Accordingly, UMK in collaboration with the Jeli Member of Parliament Service Center and the indigenous people Development Department (JAKOA) has distributed 2,000 organic chicken breeds to 100 indigenous people families in conjunction with the University Together with Society program or UMK4SOCIETY organized by the Student and Alumni Affairs Office (HEPA) together with the Community indigenous people at Sungai Rual Primary School, Jeli



RESEARCH

Multidimensional modeling of the human rights of the Malaysian Indigenous People based on elements of vulnerability resilience and empowerment to face the impact of Industrial Revolution 4.0 (4IR)

The evolution of Industry 4.0 (Industry 4.0) which emphasizes the construction of virtual reality technology without using human power will definitely have an impact on various aspects of life and have taken toll towards the Indigenous people. This research will explore the human right of indigenous people based on criteria to know its impact towards the IR 4.0

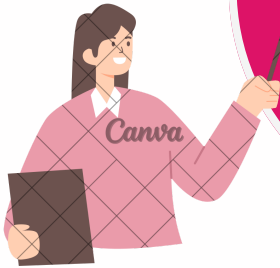
REDUCE INEQUALITY WITHIN AMONG COUNTRIES

4

SDG 10 RELATED
COURSE UNIT

19

SDG 10 RELATED
ACTIVITIES AND
STAF TRAINING



LEARNING & STUDENTS



Reduced Inequalities

UMK opens up towards disabled people; athletes, Indigenous people and B40, Ministry of Education gives a special path for the admission process to university, this is based on the government's concern in expanding educational opportunities to Malaysians, which is in line with the manifestation of Education for All" Ministry of Education is also committed to providing the best education system infrastructure and human capital to ensure that the nation's children get quality higher education that is comparable to international standards.

GOAL 11 SUSTAINABLE CITIES INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

11 SUSTAINABLE CITIES
AND COMMUNITIES



RESEARCH
GRANTS

33

RESEARCH
PROVISION

RM 1.3
Million

PUBLICATION

228

CITATION

1396



PUBLIC ENGAGEMENT

Tamuwaris area as a new local attraction

Agrotechnology Park was given the responsibility by the university management to restore the abandoned pagola in the university estate to attract the outside community and promote sustainable buildings

Fostering rapport between US and Kelantan through Rebana Kercing

UMK received an RM200,000-grant for its Rebana Kercing Kampung Laut conservation project, under the US Ambassadors Fund for Cultural Preservation (AFCP). This project could preserve the Rebana Kercing which is the legacy of ancestors from 150 years ago.

Makyong the Intangible Cultural Heritage

Universiti Malaysia Kelantan (UMK) in honoring culture and artistic heritage includes the art of Makyong dance which is recognized as Intangible Cultural Heritage by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

UMK's initiative through the Faculty of Creative Technology and Heritage (FTKW) shows efforts to preserve traditional heritage that has its own delicacy, softness and uniqueness.

RESEARCH

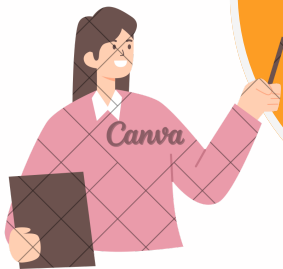
Barriers to the practice of sustainable interior architecture and design for interior renovations: A Parsimonious-Cybernetic Fuzzy AHP approach

While the notion of sustainability has long been a major concern in the built environment, the practice of sustainable interior architecture and design still falls short. This study aimed to identify and analyse barriers to the practice of sustainable interior architecture and design. To this end, after identifying 30 potential obstacles through a review of literature, a two-round Enhanced Fuzzy Delphi Method involving 13 qualified experts was employed resulting in the exclusion of 10, and the addition of one new barrier. To prioritise the remaining, a novel Parsimonious Cybernetic Fuzzy Analytic Hierarchy Process was introduced, significantly reducing the number of pairwise comparisons and eliminating the need for a complicated AHP questionnaire. Results showed the highest prioritised barriers are: (1) lack of sufficient sustainability modules in the education of interior architects/designers, (2) designers' lack of experience and technical understanding, (3) lack of codes, regulations and specific legal frameworks designed for different types of projects, (4) lack of interest from the client, and (5) designers' lack of training. The findings of this study provide valuable insights for professional interior architects/designers, educators, statutory authorities, governments, and policymakers. Considering the dearth of existing literature on this topic, the present study fills this gap by providing a comprehensive list of barriers to sustainable interior architecture and design, establishes the groundwork for future research to build upon, and introduces a novel P-CFAHP that has not been employed before.

MAKE CITIES INCLUSIVE , SAFE, RESILIENT AND SUSTAINABLE

132

SDG 11 RELATED COURSE UNIT



19

SDG 11 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Study programme

Our students learn about cultural heritage, cultural preservation through the Heritage study courses which offers a wide range of cultural and legacy learning opportunities. It encompasses knowledge of heritage, culture, humanity, thinking, lifestyle, community art, management and more learning that focuses on the culture and heritage of the local community. The program is capable of inculcating experienced, knowledgeable graduates who understand and appreciate cultural heritage not only at the technical level but also innovative, creative and ethical through a sustainable approach. Meanwhile our Faculty of Architecture and Ekistics offers various architecture courses which promotes sustainability in the design.



Students Activities :

- Pertandingan Kuala Lumpur Architecture Festival (KLAF 2022) : Installation Competition: DEFYING GRAVITY, Anjuran Persatuan Arkitek Malaysia (PAM) dan Lembaga Arkitek Malaysia (LAM)
- Training of Trainees (ToT) for Preservation of the rebana kerching of Kampung Laut Kelantan
- Academic Tour and Study of Architectural Heritage (Measured Painting) at Istana Tengku Long, Terengganu State Museum

Program TRAINING OF TRAINEES (ToT)
PROJEK "PRESERVATION OF THE REBANA KERCHING OF KAMPUNG LAUT, KELANTAN"

27-29 SEPT. 2022 | 18-20 OCT. 2022
 (SCHOOL TRAINING) | (UNIVERSITY TRAINING)

RAKAN STRATEGIK:

Tsi, Goodwill Cerium, and other partner logos.



GOAL 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



RESEARCH
GRANTS

13

RESEARCH
PROVISION

RM 683
Thousand

PUBLICATION

781

CITATION

4453

River Watcher detects pollution early



PUBLIC ENGAGEMENT

River Watcher

A technology developed by researcher from Faculty of Bioengineering and Technology which aims to provide an early detection system using an all-in-one automated water quality analyser. This Lab on Chip (LOC) based technology analyzer is capable of measuring 14 water quality parameters such as biological oxygen demand, total nitrogen, total phosphate, dissolved oxygen content, ammonia-cal nitrogen, nitrate nitrogen, and phosphate, water temperature, pH, electric conductivity, dissolved oxygen, turbidity and others real time. The system also records automatic measurement set for every 5, 30 or 60 seconds which triggered the alarm if there is a variation in the parameter.

PLANT-BASED BIOCAPSULE



RESEARCH

Waste to Wealth; A Novel Biodegradable Composites From Agriculture Waste For Drug Delivery

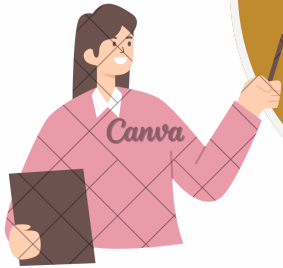
It is known that Malaysia is one of the biggest producers of palm oil products where according to a report by the Malaysian Palm Oil Council (MPOC), the production of crude palm oil in 2020 was 19.14 million tonnes. Malaysian Palm Oil Certification Council (MPOCC) has introduced the Malaysia sustainable palm oil (MSPO) certification to ensure the sustainability of the palm oil industry in Malaysia. To support our local oil palm industry, we took the initiative by implementing the waste to wealth concept, which is in line with Sustainable Development Goals (SDG), where we turn the palm oil trunk waste into a new useful product which is the plant-based capsule. In this research, cellulose was extracted from the oil palm trunk using the hydrothermal method. The extracted cellulose then was mixed with carboxymethyl cellulose (CMC) to form a thin film. Next, the thin film was dried and cut into small pieces as bioresin. The bioresin then was put in a mould to form the biodegradable capsules that could be used for oral drug delivery. Our plant-based capsules could fill the void among consumers to look for clean-label, non-animal products and plant-based alternatives capsules.



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERN

48

SDG 12 RELATED COURSE UNIT



8

SDG 12 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Study Programme

Our student learn about sustainable consumption and production through a range of program Waste management and pollution prevention course , Environmental risk assessment course ,Instrumentation and environmental analysis course and Environmental impact assessment course.



UMK Environmental Policy

The management of Universiti Malaysia Kelantan is committed and resolute to ensure effective environment management in the effort to create safe and healthy workplace environment for all UMK staff and students as well as all parties dealing with UMK



Students activities

- Sungai Rual mushroom enterprise project and mushroom block waste management 2020/2021
- Production of organic fertilizer from Agro Techno Park (ATP)
- Salad Bar-Campaign own food container
- Wildlife virtual run and ride organized by Eco-friendly Club, Fakulti Sains Bumi
- UMMB Ruminant feed supplement from Palm oil waste, Student Company operating UMMB production, Capribos

GOAL 13 CLIMATE ACTION

13 CLIMATE ACTION



RESEARCH GRANTS

4

RESEARCH PROVISION

RM 120 Thousand

PUBLICATION

38

CITATION

331



UNIVERSITI MALAYSIA KELANTAN



FSB INTERNATIONAL WEBINAR

CLOUDS, CONTRAILS AND CLIMATE CHANGE: EMERGING AVIATION TECHNOLOGIES TO REDUCE CLIMATE IMPACTS

15 JUNE 2021, TUESDAY 2.30 PM MALAYSIA TIME / 11.30 AM PAKISTAN TIME

EXTERNAL SPEAKER

DR. SARAH QURESHI
CEO/Founder Aero Engine Craft Pvt. Ltd.
Visiting Academic, School of Aerospace, Cranfield University, UK

EMERGING AIRCRAFT AND ENGINE TECHNOLOGIES TO ADDRESS AVIATION INDUCED GLOBAL WARMING IN THE ATMOSPHERE

INTERNAL SPEAKER

DR. MARIEANNE CHRISTIE LEONG
Senior Lecturer, Faculty of Earth Science
Universiti Malaysia Kelantan

RESPONSES OF CLOUDS TO CLIMATICALLY-PERTURBED THERMODYNAMIC ENVIRONMENTS

MODERATOR

DR. MOHAMMAD MUQTADA ALI KHAN
Senior Lecturer, Faculty of Earth Science
Universiti Malaysia Kelantan



OfficialUMK Entrepreneurship @ UMK WeAreUMKFamily #BinLegasUMK Bersama #OneUMKOneDream

RESEARCH

Paddy Farmers Perceived the Socio-Economic Impacts of Climate Change: A Case Study in Pasir Mas, Kelantan

Agricultural activity is very crucial in the rural area because it provides households with food and revenue besides contributing approximately 7.3% to the national gross domestic product (GDP) in Malaysia. However, the phenomena of uncertain climate nowadays have caused agricultural activity such as paddy farming to be severely affected as the climate is the primary determinant of agricultural productivity. This study was conducted to identify the level of knowledge and awareness of the paddy farmers about climate change and its impact on the socio-economy in Pasir Mas, Kelantan. Besides that, the critical factors that influenced the awareness of the paddy farmers on the climate change impact also examined. A questionnaire was utilized as the primary research instrument, and the total number of respondents was 119. Descriptive and inferential analysis was adopted to analyze the primary data that was collected. The result shows that approximately 90% of the respondents have the knowledge and are aware of climate change and its impact on paddy plantation and production.

PUBLIC ENGAGEMENT

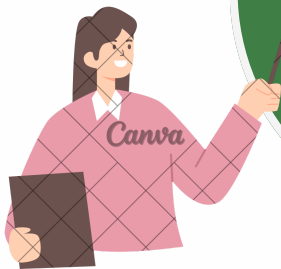
FSB International Webinar On Clouds, Contrails And Climate Change: Emerging Aviation Technologies To Reduce Climate Impacts

The webinar series were held with 2 speakers which mainly discussed regarding the climate changes. The speakers are Dr. Sarah Qureshi (CEO/Founder Aero Engine Craft Pvt. Ltd. Visiting Academic, School of Aerospace, Cranfield University, UK), Dr. Marianne Christie Leong, Senior Lecturer, UMK

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACT

4

SDG 13 RELATED COURSE UNIT



19

SDG 13 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Mini Seed Umk Exposes The Value Of Entrepreneurship, Preserving And Preserving The Environment

Universiti Malaysia Kelantan (UMK) is hosting the UMK SEED Mini Program 2019 which will benefit local residents and reveal the value of entrepreneurship and management in business.

Mini SEED UMK 2019 aims to expose Master of Business Administration (MBA) students to the social concept of entrepreneurship where students are given 'hands-on' learning exposure through research.

This six-day program from April 30 to May 5, 2019 involved a total of 25 participants from Malaysia, Thailand, Indonesia, the Philippines, and Vietnam who participated in this program and more than 50 villagers from Kampung Mangkuk Setiu and Kampung Beris Tok Ku , Terengganu.

Through this program, students together with international participants research village people's businesses and the challenges they face and then submit an action plan or business plan that can help improve local economic activities.

Graduate Employability: TOWARDS ENVIRONMENTAL EXPERT (TEE)

Perkongsian Pakar — **YBRS. EN. SAIFUL BAKRI**
JABATAN ALAM SEKITAR KELANTAN

YBRS. EN. ROSDI MAT YUSOFF
GREEN HOPE CONSULTANCY SDN BHD

21 NOVEMBER 2019 (KHAMIS)
9.00 PAGI
DEWAN SERBAGUNA
UMK KAMPUS JELI

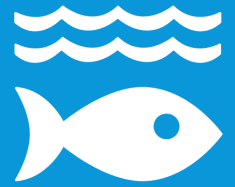
Official UMK **UMK** Entrepreneurship is Our Thrust
#BinaUMK Bersama #WeAreUMKFamily #OneUMKOneDream

Graduate Employability : Towards Environmental Experts

Towards Environmental Expert (TEE) with Mr. Saiful Bakri, Kelantan Environment Department & YBrs. Mr. Rosdi Mat Yusoff, Green Hope Consultancy Sdn. Bhd.. This initiative is to give exposure about job opportunities and how to become an environmental expert

GOAL 14 LIFE BELOW WATER

14 LIFE BELOW WATER



RESEARCH GRANTS

1

RESEARCH PROVISION

RM 30 Thousand

PUBLICATION

53

CITATION

375



PROGRAM PEREKAYASAAN SOSIAL NELAYAN BERASASKAN EKOSISTEM PERUSAHAAN SOSIAL DI KELANTAN (UMK-MOF Social Enterprise)

MODUL TERAS PEMROSESAN MAKANAN

5 MAC 2021 Jumaat

10:00 PAGI - 12:00 TENGAH HARI

Penceramah:
DR. NURHANAN ABDUL RAHMAN
Pensyarah Kanan
Fakulti Industri Asas Tani
Universiti Malaysia Kelantan (UMK)

InsPeK FITRA Incubator (FITRA-I)
INSTITUT PENYELIDIKAN DAN
PENGURUSAN KEMISKINAN (InsPeK)



Entrepreneurship
Our Thrust

Kita Bina Legasi UMK Bersama
#WeAreUMKFamily
#OneUMKOneDream
#NothingIsImpossible

RESEARCH

Palm date meal as a non-traditional ingredient for feeding aquatic animals

Protein ingredients in aquafeed are one of the most important factors responsible for the development and sustainability of aquaculture. Currently, because of high costs and fluctuating production, some animal and plant protein sources are unable to satiate the increasing demand from the fish feed manufacturers. Aquatic animals' nutritional requirements have been accorded particular focus with less costly feedstuff in aqua feed given extra weightage. There has been increasing attention in recent years on finding methods to recycle the animal and plant by-products for feed preparation. Due to its vital amino acid content as well as high protein composition, palm date meal (PDM) which is a renewable and sustainable resource is expected to be a viable raw material option for replacing protein ingredients (e.g., fish meal and soybean meal) or as a supplement in fish feed. PDM is an agro-industry by-product which left from dates as waste in several countries.

PUBLIC ENGAGEMENT

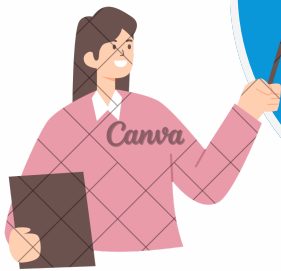
Fishing Social Engineering Program, under UMK-MOF Social Enterprise. Title: Food Processing Core Module

This program is an initiative of UMK's Institute of Poverty Research and Management (InsPeK) under the project "UMK-MoF Social Enterprise Project" which focuses on increasing the human capital of the B40 group based on digital technology by increasing the local wisdom capacity of the community.

CONSERVE AND SUSTAINABILITY USE THE OCEANS , SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

11

SDG 14 RELATED COURSE UNIT



19

SDG 14 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS



Study Of Fish Feeding In The Aquaculture Industry

Fish nutrition research is being actively conducted around the world to find methods and technologies capable of producing fish food that is cost-effective and safe to use. In Malaysia, the Fisheries Research Institute under the responsibility of the Malaysian Fisheries Department focuses mainly on the study of fish nutrition. Among the studies conducted are food for various types of shrimp such as tiger shrimp, white shrimp, lobster, food for various types of freshwater fish such as tilapia, catfish, and food for marine fish such as grouper and sea bream. The history of fish nutrition research in Malaysia has started in parallel with aquaculture activities. In the 1970s, fish farmers used daily human needs to make food for farmed fish. Aquaculture activities in the 1970s in Malaysia were carried out traditionally. Fish seeds are caught from their natural habitat and confined in cages built by the sea, rivers, ditches and so on.

Brown sugar is a very nutritious component of PrIMEK feed. It is well known that brown sugar stores large amount of calories, carbohydrates, sodium, sugars, calcium, iron, copper, and manganese which are all very important for fish development.

Additionally, brown sugar act as supplement for pond ecosystem therefore supplying extra nutrients for the fishes.

Cuka adalah salah satu sumber yang paling penting dalam pemakanan untuk ikan. Cuka mengandungi protein, vitamin B1, B2 dan B6, Biotin, acid folic, stearic, acid Panthothemic, dan vitamin C. Ia juga mengandungi sejumlah kecil mineral natrium, ferrous, kalium, kalsium, besi, dan magnesium.

Walaupun bagaimanapun, penggunaan cuka sering dibatasi kerana ia mempunyai pH yang rendah. Oleh itu, kanvas, pengapik makanan, komposisi mengabungkan penggunaan cuka dalam makanan mereka.

Tetapi tidak lagi! Formula makanan PrIMEK menggunakan kandungan cuka paling optimum untuk memastikan makanan yang berkualiti tinggi. Semuanya dengan harga yang berpatutan.

PRIMEK

formula makanan ikan

Kenapa pilih formula makanan ikan PrIMEK?

- 1) Diet berprotein tinggi
Makanan kami mengandungi >50% protein kasar dan protein larut air
- 2) Agen anti mikroba
Dilempangi dengan agen anti mikroba yang selamat untuk ikan dan alam sekitar
- 3) Bebas kimia
Formula makanan PrIMEK adalah 100% semulajadi dan bebas daripada sebarang bahan kimia yang berbahaya
- 4) Probiotik
Mengandungi probiotik tambahan yang penting dan sangat bermanfaat kepada pertumbuhan ikan
- 5) Fleksibel
Sesuai untuk semua peringkat umur ikan
- 6) Kos efektif
Paling penting, makanan PrIMEK adalah sangat kos efektif dan dalam masa yang sama sangat berkualiti

Probiotik, atau lebih dikenali sebagai mikro-organisma berkesan (MBO) dalam bidang akuakultur, adalah sangat penting dan perlu bagi pertumbuhan dan perkembangan setiap spesies ikan.

Fermentasi PRIMEK bermanfaat yang dihasilkan oleh probiotik dalam peternakan ikan

- Sumber besar nutrisi
- Meningkatkan keaktifan sel ketan
- Meningkatkan tindak balas imun
- Sebagai bahan anti-stres
- Meningkatkan penghasilan nutrisi
- Peningkatan kesihatan ikan

PrIMEK probiotik kami telah mengulangi sendiri probiotik yang digunakan dalam formula makanan PrIMEK. Semuanya dihasilkan untuk memastikan makanan yang lebih sihat dan lebih baik untuk peternakan ikan.

Our Programme

Animal Husbandry is the key to the development of the basic agricultural industry in Malaysia. The livestock industry has gained a foothold in our country and has contributed greatly to economic development. Various types of livestock have the potential to be developed further. Among them are ruminants such as cows and goats and others as well as aquatic animals such as fish and various crustaceans. The Livestock Science program is combined with an entrepreneurial element as well. This will support the National Agricultural Policy to commercialize agricultural products and increase food production.

GOAL 15 LIFE ON LAND

15 LIFE ON LAND



RESEARCH GRANTS

15

RESEARCH PROVISION

RM 579
Thousand

PUBLICATION

204

CITATION

651



PUBLIC ENGAGEMENT

RESEARCH

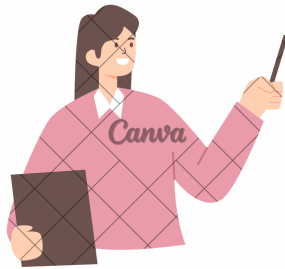
UMK Tropical Rainforest Research Center (TRACE)

Wild life exhibition at faculty

Natural Resource Science Program, FSB held an exhibition related to wildlife in collaboration with wild life department (PERHILITAN) The Sharing Knowledge and Experience from Industrial Practitioner Program and the Wildlife Crime and Taxidermy Exhibition for Natural Resource Science are under 2 subjects Natural Resource Legislation and Management of Protected Areas and Wildlife.

i(TRACE) Is located on Pulau Banding, Gerik, Perak, which creating a Living Lab that will benefit three UMK faculties. : Faculty of Earth Science, the Faculty of Hospitality, Tourism & Wellness and the Faculty of Creative Technology & Heritage. Pulau Banding was chosen due to the factor of PBF's strategic position being so close to the Belum-Temengor Rainforest Complex is very compatible with the Living Lab concept because it will provide an interesting landscape to explore and study its flora and fauna. Directly, UMK on Pulau Banding will become a hub especially for researchers from both inside and outside the country who want to explore the treasures of the Rain Forest Complex which covers an area of 300,000 hectares and is one of the oldest forests in the world, over 130 million years old

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE TERRESTRIAL ECOSYSTEM, SUSTAINABILITY, MANAGE FOREST, COMBAT DESERTIFICATION, HALT AND RESERVE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



35
SDG 15 RELATED
COURSE UNIT

19
SDG 15 RELATED
ACTIVITIES AND
STAF TRAINING

LEARNING & STUDENTS



Students and Land

Students from the Faculty of Earth Sciences, Universiti Malaysia Kelantan have participated in the Green Shoot Initiative by UMW together with its strategic partners Yayasan Hijau and Malaysia Nature Society (MNS). UMW aims to plant 300,000 trees under this initiative. A total of 125 students of Sustainability Science and Natural Resource Science have participated in the mangrove planting program located at Pantai Seri Tujoh, Tumpat.



Our programmes

Our students are taking on the challenges of climate change, wildlife conservations, Natural Resource Legislation and Management of Protected Areas and Wildlife across courses offered in Faculty of Earth Sciences

Universiti Malaysia KELANTAN UNIVERSITY OF ABERDEEN SEARRP North East Asia Environmental Research Partnership

LIVE STREAMING f Universiti Malaysia Kelantan (Rasmi) UMKTU

INTERNATIONAL WEBINAR
"TROPICAL FOREST CONSERVATION IN MALAYSIA"

30 NOVEMBER 2020 | MONDAY
16:00 MYT | 08:00 GMT

DR. DATUK DR. GLEN REYNOLDS
Director of SEARRP

DR. ZULHAZMAN HAMZAH
Faculty of Earth Science,
Universiti Malaysia Kelantan

Co-hosted by:
DR. MUHAMMAD FIRDAUS ABDUL KARIM
Faculty of Earth Science,
Universiti Malaysia Kelantan

PROF. DR. DAVID BURSLEM
School of Biological Sciences,
University of Aberdeen, UK

GOAL 16 PEACE, JUSTICE AND STRONG INSTITUTION

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



RESEARCH GRANTS

1

RESEARCH PROVISION

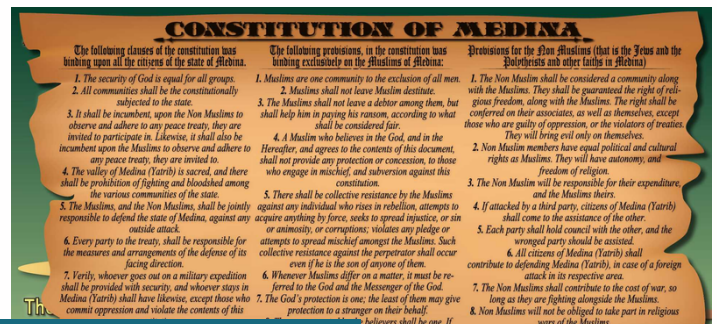
RM 80
Thousand

PUBLICATION

56

CITATION

187



RESEARCH

A diverse community often faces social conflicts. This can lead to issues such as discrimination, fights, wars, oppression, and so on. Social integration plays an important role in achieving harmony in a society. The Constitution of Medina enacted by the Prophet SAW succeeded in managing a plural society until Medina became a country with social cohesion. Therefore, this study aims to identify and analyse the principles of social cohesion that exist in the Constitution of Medina. This study uses data collection methods through library research and in-depth interviews. Meanwhile, the content analysis method is then used to analyse the data. The findings revealed that the Prophet SAW succeeded in forming social cohesion in a plural society through the Clauses contained in the Constitution of Medina. A plural society is recognized as an ummah and has a cooperative relationship and a spirit of belonging in defending Medina from external threats

PUBLIC ENGAGEMENT

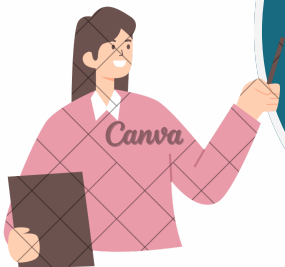
UMK fully supports the corruption prevention plan

Malaysian Anti-Corruption Commission (MACC)- upholdin Universiti Malaysia Kelantan visits the Malaysian Anti-Corruption Commission (MACC) office Kota Bharu Kelantan. The purpose of this visit is to further strengthen the good bilateral relationship that is already established between SPRM Kelantan and UMK, especially in the joint venture to carry out tasks related to corruption prevention activities, especially among UMK citizens and the general public. n the visit session as well, both parties agreed to work together to strengthen and enhance efforts in combating and preventing corruption, abuse of power and misappropriation as well as applying the best practices of integrity values in service at UMK

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACSESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE , ACCOUNTABLE AND INCLUSIVE INSTITUTION AT ALL LEVEL

19

SDG 1 RELATED COURSE UNIT



19

SDG 1 RELATED ACTIVITIES AND STAF TRAINING

LEARNING & STUDENTS

END OF TRAINING CEREMONY AND PRESENTATION OF APPOINTMENT CERTIFICATE OF SUCCESS CORPS OFFICERS UMK SERIES 2/2021

BACHOK 21 December | A TOTAL of 66 Student Police Volunteer Corps (SUKSIS) trainees, Universiti Malaysia Kelantan (UMK) consisting of 27 male and 39 female students were commissioned at the End of Training Ceremony and Presentation of Certificates of Appointment of SUKSIS Corps Officers Series 2/ 2021 held at the Hall Tuanku Chancellor, UMK Bachok, Tangok, Kelantan, today. this ceremony is an annual activity and is held every year to appreciate and recognize the SUKSIS Corps trainees who successfully completed their training while studying at the university.





GOAL 17 PARTNERSHIP FOR THE GOALS

17 PARTNERSHIPS
FOR THE GOALS



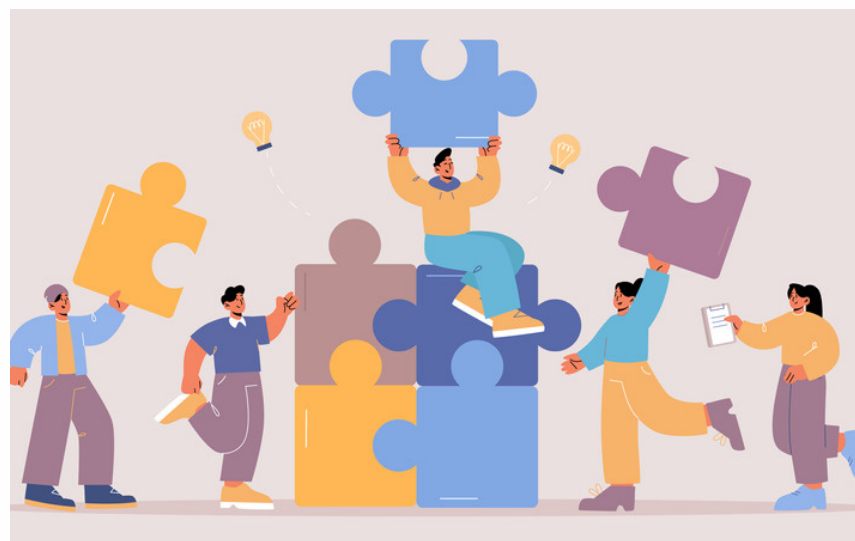
Universiti Malaysia Kelantan (UMK) Strategic Plan 2021-2025

Universiti Malaysia Kelantan (UMK) is committed to becoming one of the elite groups of international entrepreneurial universities through the implementation of UMK Strategic Plan 2021-2025. The fundamental foundations are the Malaysian Education Development Plan - Higher Education (PPPM-PT) 2015-2025 and the Entrepreneurship Action Plan 2021-2025. This new strategic plan still maintains the original vision that is to champion balanced and holistic human capital development ascribed to entrepreneurial distinction for global prosperity. This is very synergistic and coincides with UMK motto, "Entrepreneurship is Our Thrust".



Strategizing for SDGs

The Publication and Rating Division (PRD) acts as a strategic center in the mission to fulfill the SDGs by appointing a task force for each SDG for data collection in addition to formulating strategies in an effort to make UMK a University that always implements the 17 SDG goals in university development. PRD also encourages faculties and research centers to collaborate with industry and universities abroad and in the country to carry out meaningful public engagement with diverse audience and share ideas, research as well as inspiring informed discussion, debate and creativity.



STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT



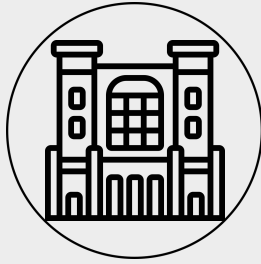
The ARCoFS 2021 will be an excellent platform for academia, researchers, entrepreneurs, policy makers, local and international experts to exchange relevant research results, innovative ideas, recent advances, as well as promote research collaborations through plenary session, oral, and e-poster presentation sessions. This conference will address the latest research findings in various fields of Sustainable Agrotechnology, Food Security and Climate Change, Alternative Agroproduct Development, Environmental Economics



Organized by Faculty of Bioengineering and Technology, Universiti Malaysia Kelantan, the International Conference on Bioengineering and Technology (IConBET2021) is the first conference ever conducted by the faculty since its establishment in 2017. IConBET2021 is organized in line with the vision and mission of the faculty that prioritizes technology innovation with an entrepreneurial implementation. It is also to provide space and exposure for young and senior researchers in the universities to establish a network of collaborators with industrialists and researchers from both, local and abroad institutions and industries.

Bioengineering has always been an important field that contributes to the development of new emerging technologies for the benefit of environments and human beings. IConBET2021 will open up access to the new technology discovery in bioengineering and bring to light these latest technologies to the public attention, at the same time creating awareness of bioengineering technology application with entrepreneurship.

UMK AT A GLANCE



3 CAMPUS
BACHOK, JELI ,
PENGKALAN CHEPA



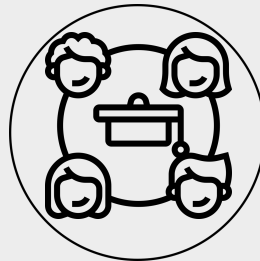
9 FACULTY
1 DEPARTMENT
19 CENTRE
5 INSTITUTE



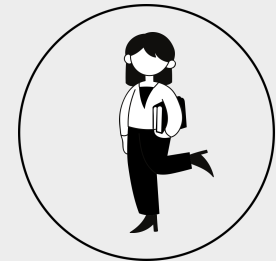
126 FOUNDATION,
UNDERGRADUATE,
POSTGRADUATE
PROGRAMME



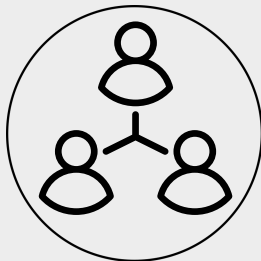
3 RESEARCH CENTER



18 000 ALUMNI



8787
STUDENTS



463 ACADEMIC STAFF



125
INDUSTRI ADVISOR



108 NATIONAL AND
INTERNATIONAL AWARDS



10701 TOTAL OF BOOKS
PUBLICATIONS
AND ONLINE RESOURCES



89.5 %
GRADUATE EMPLOYBILITY

SDG'S REPORT CONTRIBUTORS

GOAL 1 : NO POVERTY

DR TENGKU FAUZAN BINTI TENGKU ANUAR
ENCIK HAFIZI MAT SALLEH

GOAL 2 : ZERO HUNGER

TS. DR.SUGANTHI A/P APPALASAMY

GOAL 3 : GOOD HEALTH AND WELL BEING

DR. MUHAMMAD SABRI ABDUL RAHMAN
DR. MOHD FARHAN HANIF REDUAN
DR. AHMAD FAHME MOHD ALI

GOAL 4 : QUALITY EDUCATION

DR.NAZAHATUL ANIS BINTI AMALUDIN
DR.RUHIL HAYATI BINTI HAMDAN

GOAL 5 : GENDER EQUALITY

ENCIK SYAHRUL HANIF BIN ZULKEFLI

GOAL 6 : CLEAN WATER AND SANITATION

DR. NURUL SYAZANA ABD HALIM

GOAL 7 : AFFORDABLE AND CLEAN ENERGY

DR. NIK NURUL ANIS YUSOFF

GOAL 8 : DECENT WORK AND ECONOMIC GROWTH

ASSOCIATE PROF DR. NOORULAZWIN MD NASIR
DR. SITI AFIQAHZAINUDIN

GOAL 9 : INDUSTRY , INNOVATION AND INFRASTRUCTURE

DR. SITI AISYAH BINTI MUHAMMAD
DR. HASYIYA KARIMAH BINTI ADLI

GOAL 10 : REDUCE INEQUALITIES

DR TENGKU FAUZAN BINTI TENGKU ANUAR
EN. HAFIZI BIN SALLEH

GOAL 11 : SUSTAINABLE CITIES AND COMMUNITIES

DR. WAN SAIFUL NIZAM BIN WAN MOHAMAD

GOAL 12 : RESPONSIBLE CONSUMPTION AND PRODUCTION

PN. HAZREEN NITA MOHAMAD KHALID

GOAL 13 : CLIMATE ACTION

PROF. MADYA DR. NORRIMI ROSAIDA BT AWANG

GOAL 14 : LIFE BELOW WATER

DR. HASNITA CHE HARUN

GOAL 15 : LIFE ON LAND

DR NOR SHAHIRUL UMIRAH IDRIS

GOAL 16 : PEACE, JUSTICE AND STRONG INSTITUTIONS

DR. WAN AB AZIZ BIN WAN DAUD

GOAL 17 : PARTNERSHIP FOR THE GOALS

PROF MADYA. DR. MOHD ASRUL HERY BIN IBRAHIM

FARAH AMANINA BINTI MOHD ZIN

NURWAHIDA BINTI IBRAHIM

EIAP COON CHOON

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