



**UTM** MJHT
UNIVERSITI TEKNOLOGI MALAYSIA | Disaster Preparedness & Prevention Centre (DPPC)

DISASTER PREPAREDNESS AND PREVENTION CENTRE (DPPC)



OUR VISION

A leading disaster risk reduction and management (DRRM) institute in multi-hazards and climate change to strengthen community resilience



OUR MISSION

- To champion in providing DRRM solutions through technology driven and risk-informed sustainable development agenda
- To lead and facilitate high-end laboratories, facilities and asset management services for disaster related event
- To become a regional hub for building a safer and disaster resilient community through a transdisciplinary approach
- To facilitate national and international collaborations in applied research, training and field practices for disaster resilience



CORE VALUES

DPPC will win **Shinrai** (信頼 : **Trustworthiness**) by committing **Chousen** (挑戦 : **Challenge**) and **Jissen** (実戦 : **Practice**) with the mind-set of **Kizukai** (気遣い : **Thoughtfulness**) and **Kenkyo** (謙虚 : **Modesty**)



I am honoured to be appointed as the Director of the Disaster Preparedness and Prevention Center (DPPC), Malaysia-Japan International Institute of Technology (MJIIT), UTM as of 1 of June 2020.

As one of co-founders of DPPC back in 2015, this appointment brings its own unique responsibilities and challenges for DPPC leadership.

We aim to become a world-class research and training centre for building resilience to disasters and climate change. Our mission is to facilitate national and international collaboration in applied research, training and field practice for disaster resilience in collaboration with Japanese and other partners from the world.

As a premier global academic and research institution, excelling in science, technology and engineering, UTM is very proud to lead the world. DPPC is indeed one of its strong assets. I believe we should bring our resources and efforts together and engage in active dialogue with various stakeholders to contribute and embrace our similarity towards promoting evidence-informed decision-making at all levels of public policy, discourse and action.

Our world is complex. Systemic, and interconnected issues of disaster, preventing its future risk requires a new paradigm to address the multiple and interrelated processes of vulnerability and risk. DPPC has built momentum towards this effort. Together with many strategic partners, we co-design and co-implement evidence-based local actions and advocacy campaigns in developing partnerships and coalitions for resilience. The inclusion of expert knowledge and local capacities are demonstrated in policies, and action plans, which help to build resilience of communities at various levels.

With cutting-edge research and social innovation, we actively engage policy makers, disaster managers, and various stakeholders towards supporting science-policy nexus and translating research into practice. This year, we are celebrating a 5-year anniversary of DPPC, and looking forward to accelerating the progress and achievements. We welcome all strategic partners and potential collaborators (public-private-academia-civil society) to work with us, enhancing our capacity, and revitalizing our DRR worlds.

With the DPPC present in this vulnerable region, I hope that we can address multi-dimensional needs for rebuilding lives, livelihoods, socio-economic and communities in adaptation for resilience, and promote coherence of global agenda towards accelerating the achievement of the 2030 Agenda for Sustainable Development.

Your support is most welcome!!



PROGRAM GOAL

“ To promote **Disaster Risk Reduction & Resilience (DR3)** agenda based on **transdisciplinary approach** and **scientific-based decision making** for action ”

PILLAR 1 Education & Training

MDRM, Certified Professional Training (CPT), MPhil & PhD



PILLAR 3 Field Practice

High-impact community program & Policy into practice



PILLAR 2 Research

Translational research & high-impact publications



3 PILLARS OF MJIIT'S DISASTER PROGRAM

DISASTER PREPAREDNESS AND PREVENTION CENTRE MALAYSIA-JAPAN INTERNATIONAL INSTITUTE OF TECHNOLOGY UNIVERSITI TEKNOLOGI MALAYSIA (UTM) KUALA LUMPUR

Disaster Preparedness and Prevention Centre (DPPC)

Malaysia-Japan International Institute of Technology (MJIIT) Universiti Teknologi Malaysia (UTM) Kuala Lumpur aims to become a world-class research and training centre for building resilience to natural disasters and climate change. Its mission is to facilitate national and international collaboration in applied research, training and field practice for disaster resilience in collaboration with Japanese and other partners from the world.

With prominent researchers, state-of-the-art facilities, and good resources, DPPC with the UK counterpart has a great potential to complete this translational research, which is very beneficial to decision making process, multi-stakeholders and vulnerable communities. DPPC has currently connected to many well-known disaster research institutes, networks and associations, e.g. the Global Alliance of Disaster Research Institutes (GADRI), ASEAN University Network/Southeast Asia Engineering Education Development Network (AUN/SEED-Net), Japan-ASEAN Science, Technology and Innovation Platform (JASTIP), etc. GADRI is a collaborative platform for sharing knowledge on disaster risk reduction and resilience to disasters, AUN/SEED-Net promotes human resources development in engineering for sustainable socio-economic development of the ASEAN region, and JASTIP aims to build a platform for JAPAN-ASEAN science and technology cooperation especially on the sustainable development research. These international networks are also strengthened by Japanese University Consortium (JUC) membership with MJIIT.

DPPC researchers with strategic partners at federal, state and district level are capable of delivering the research output within the given period. Excellent experiences and exposure in the national policy-based projects are exemplary points to this research consortium. For examples National Slope Master Plan 2009-2023 with revision in 2017 by the Public Work Department (PWD) Ministry of Works Malaysia; Slope Hazard and Risk Mapping by the Minerals and Geoscience Department Malaysia (JMG), Ministry of Natural Resources and Environment Malaysia, and Development Planning for Disaster Resilient City by the Federal Department of Town and Country Planning Peninsular Malaysia (PLANMalaysia), Ministry of Urban Wellbeing, Housing and Local Government; and Community-based Disaster Risk Management leading to the appointment of National Disaster Volunteers Council by the National Disaster Management Agency (NADMA), the Prime's Minister Department Malaysia.

Technically, DPPC researchers are capable of assessing multi-hazards with technological advancement in a tropical environment, quantifying risk factors in a complex setting, measuring disaster resilient index in the cities, and understanding the need of local community towards disaster risk reduction in a changing climate. Such aforementioned national policies stressed the local capacity at UTM to translate words into action and promote science into practice. As DPPC becomes a focal point in the disaster field in ASEAN region, it can be extended into the connection under ASEAN, Asia-Pacific especially in building scientific and innovation partnership to support the economic development and social welfare.

We also promote the need of integrated research and innovation capacity for long-term sustainable growth in the field of disaster risk management in Malaysia.

DPPC has an excellent track of research addressing the need of local stakeholders and communities. In 2015, following the Mw6.0 earthquake in Sabah, a group of researchers managed to organize a community-based disaster awareness program benefited to 11,000 people, which later recognised as a 5-star high impact program by the Centre for Community and Industry Network (CCIN), UTM and Ministry of Higher Education Malaysia. In 2016, DPPC proudly registered a community program under the UNSIDR flagship which was held during the International Day for Disaster Risk Reduction on October 13 in the most vulnerable flood region in Kelantan, Malaysia. It has impact of about 20,000 people who live in the flood prone area, and its Town-Watching for Disaster Risk Reduction (DRR) module has currently adopted by NADMA at a national level. In May 2017, community-based disaster preparedness event was launched to scientifically understand the underlying risk factors, assess the disaster perception, and look for strategically action-oriented initiatives for disaster risk reduction. It was co-organized with Japan International Cooperation Agency, Selangor State Disaster Management Office and Hulu Selangor District Office.

Malaysia-Japan International Institute of Technology with its strategic partners has launched the first ever taught-course postgraduate program related to disaster in Malaysia, namely as Master of Disaster Risk Management (MDRM) @ <http://mjiit.utm.my/dppc/mdrm-homepage/>, which run parallel with Certified Professional Training (CPT) @ <http://mjiit.utm.my/dppc/cpt/> targeting mid-career professionals and practitioners worldwide. The MDRM program has been advised and monitored its quality by an international consortium namely as Disaster Risk Management (DRM) Subcommittee of Japanese University Consortium (JUC) @ <http://mjiit.utm.my/dppc/mdrm-juc/>, and national level, Board-of-Studies (BoS) consists of Chair (Tsukuba University) and Co-Chairs (Kyoto University & Kyushu University) and JICA. This consortium and board also oversee and advise MJIIT related to DRM's academic program and research activity.

In line with the UTM Global Strategic Plan 2012-2020, Disaster Preparedness and Prevention Center (DPPC) is looking for strategic partners, expanding its international and national collaboration, and increasing its visibility at global platform. DPPC has great capacity and capability to support a national platform on disaster risk reduction, regional initiative (ASEAN Vision 2025 on Disaster Management), and also global commitment, Sendai Framework for Disaster Risk Reduction 2015-2030.

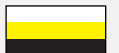
"Disaster Risk Reduction (DRR) is everyone's business"



Training of
School Pre
Tsu



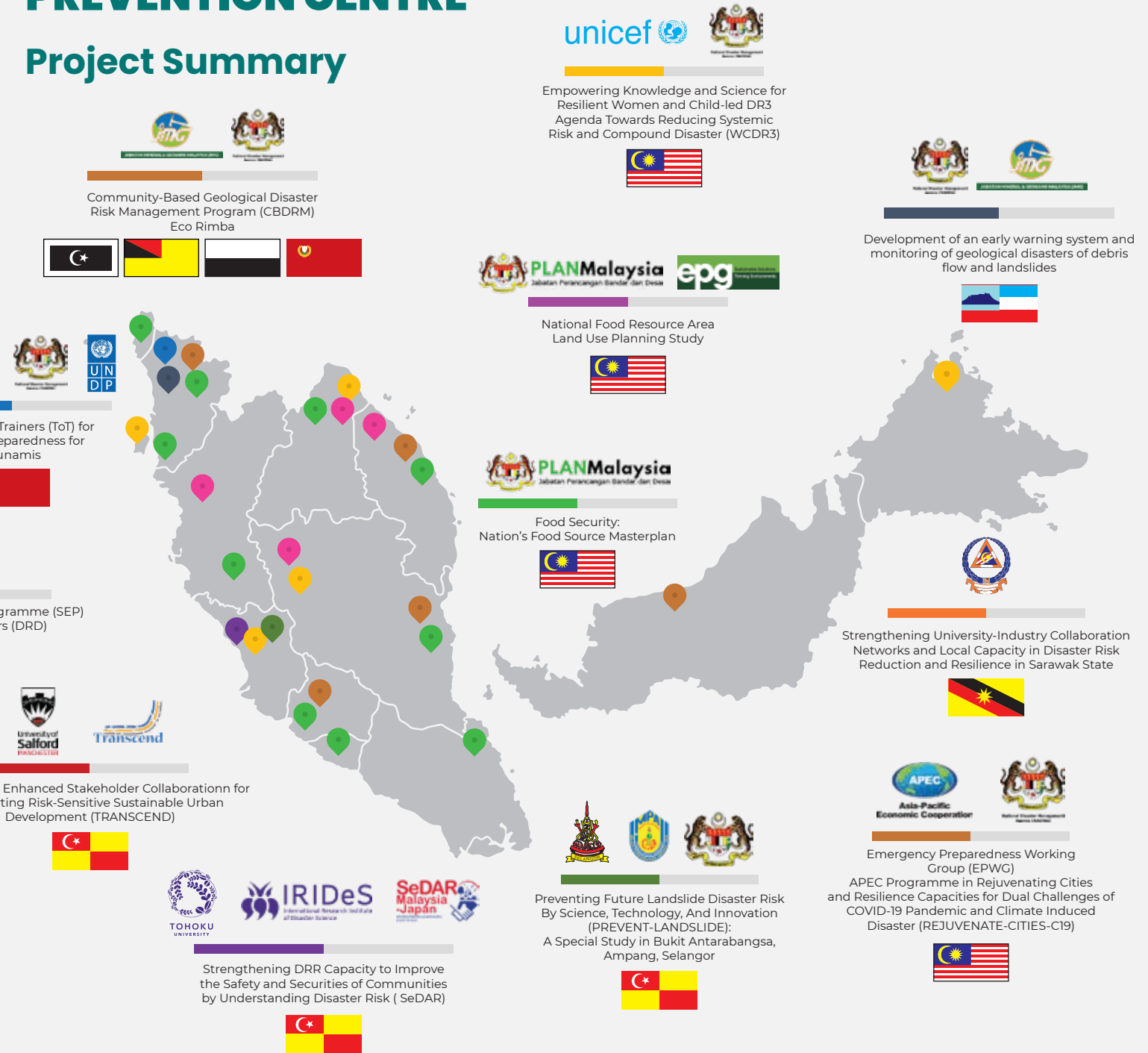
Stakeholder Engagement Prog
for Dam-related Disaster



Technology
Support

DISASTER PREPAREDNESS AND PREVENTION CENTRE

Project Summary



DRM SUB-JUC MEMBERS





DISASTER PREPAREDNESS AND PREVENTION CENTRE (DPPC) LABORATORY

WATER LABORATORY

- Gas Chromatography Mass Spectrometry (GC-MS) Purge & Trap
- Ion Chromatography
- Proteins & Nanoparticles Characterization System
- Hydrographic Survey Device
- Resistivity & IP Imaging Instrument
- Etc

MICROBIOLOGY LABORATORY

- Stereomicroscope
- Compound Microscope
- Freeze Dryer
- Laboratory Turbidimeter
- Benchtop Spectrophotometer
- Etc.

MULTI-GEOHAZARD LABORATORY

- Geophysical-based Disasters System
- Terrestrial Laser Scanning System
- Reflectorless Total Station
- Geo Explorer On-Site System
- Etc.

IMMERSIVE VISUALISATION LABORATORY

- Near Infrared Drone
- Internet of Things (IOT) Smart Security & Agriculture
- Internet of Things (IOT) Smart Cities
- Etc.

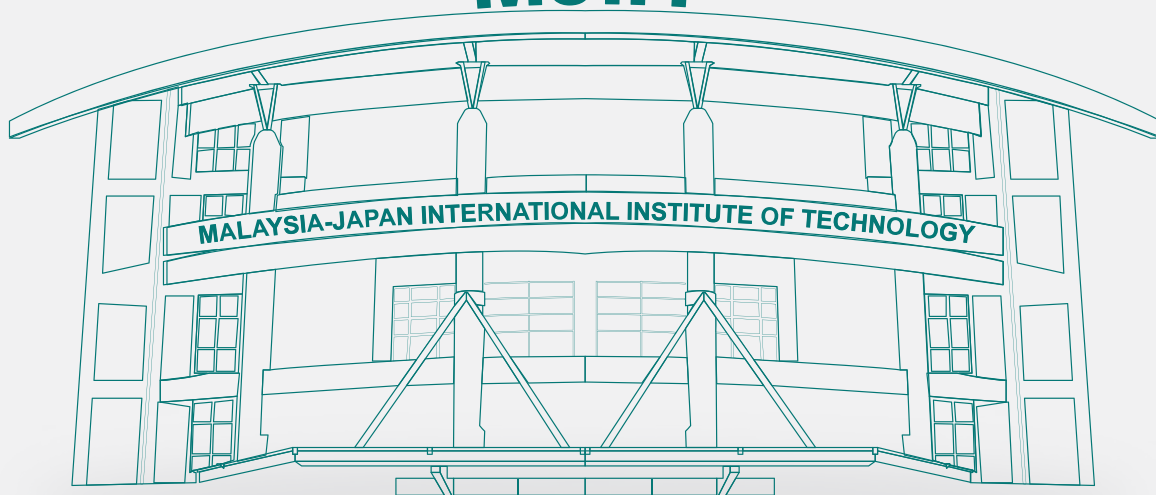
PAGOH EDUCATION HUB

- X-Band Radar
- Virtual Reality (VR) System
- Etc.





MJIIT



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Malaysia-Japan International Institute of Technology (MJIIT)**

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