

Climatic Hazards Programme

ANCST Advances Local Level Disaster Prevention through Climate Science

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Professor Zakri Abdul Hamid, Science Advisor to the Prime Minister of Malaysia (right) was instrumental in establishing the Newton Ungku Omar Fund in Malaysia. He delivered the keynote address at the Workshop on New Science and Business Developments for Managing Climate Risks in the Royal Society, London on 5 November 2015, convened by Prof. Lord Julian Hunt (left) of University of Cambridge.

The long-standing linkage of the Malaysian Commonwealth Studies Centre (MCSC), Cambridge to the region has expedited establishment of the Asian Network on Climate Science and Technology (ANCST) coordinated by Universiti Kebangsaan Malaysia's Southeast Asia Disaster Prevention Research Initiative (SEADPRI-UKM) in 2013, funded by the Cambridge Malaysian Education and Development Trust (CMEDT) and MCSC. The Network [<http://ancst.org/>] serves as a conduit to facilitate exchange of knowledge and expertise. Directors of ANCST, Professor Joy Jacqueline Pereira of SEADPRI-UKM and Professor Lord Julian Hunt of MCSC successfully completed their first initiative supported by the Newton Ungku Omar Fund entitled "Future Cities: Science to Action for Building Resilience of Urban Communities to Climate Induced Physical Hazards" in 2016. Professor Pereira and Professor Lord Hunt are now embarking on their second initiative supported by the Newton Ungku Omar Fund on "Disaster Resilient Cities: Forecasting Local Level Climate Extremes and Physical Hazards for Kuala Lumpur". The Newton-Ungku Omar Fund is administered by UK Partners and the Malaysian Industry-Government Group for High Technology (MIGHT) with equal contribution from the Governments of UK and Malaysia.

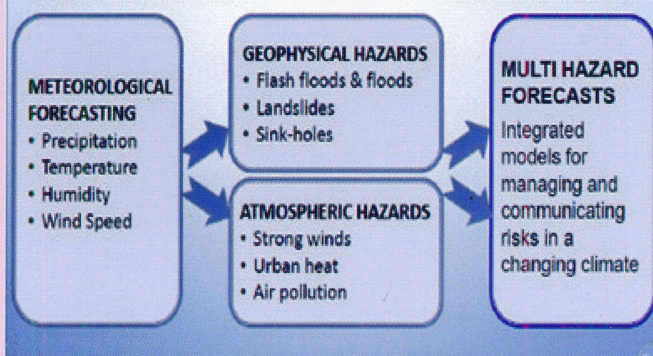
The initiative on Future Cities brought together scientists working on various aspects of physical hazards and risks in a changing climate, with a particular emphasis on large urban areas, to build capacity to innovate and advance practices, scientific tools and techniques relevant to Malaysia and the tropics. There are distinctive aspects of extreme natural hazards in the tropics that are not included in most hazard and climate models.

Examples include extended periods of calm weather with elevated winds aloft that affect the build-up of air pollution, and periods of very intense rainfall leading to extreme localised urban flooding, as happens in Kuala Lumpur. New approaches and technology are being developed in Malaysia and the region that could lead to new businesses and exports to other countries faced with similar challenges.

UK-MALAYSIA PROPOSAL: DISASTER RESILIENT CITIES

Adapting local level temperate models for tropical conditions

AREA BASED, CONTEXT SPECIFIC, ACTION ORIENTED, COLLABORATIVE APPROACH



The initiative on Disaster Resilient Cities deal with six climate-induced hazards in Kuala Lumpur and adjacent areas (flash floods & floods, landslides, sinkholes, strong winds, urban heat and air pollution & haze) and involves six UK and ten Malaysian partners, exploiting the best of expertise on both sides, with ANCST facilitating regional linkages.

The initiative on Disaster Resilient Cities is designed to enhance capacity to conduct multi-hazard assessments and identify areas susceptible to multi-hazards within cities; advance modelling of climate extremes and atmospheric hazards; and promote professional development. The emphasis will be to develop effective products and services for reducing risks at the neighbourhood level, focusing on the bottom 40% income group of Malaysians. The ultimate goal is to deliver new innovative business models for disaster risk reduction, driven by consortiums with multidisciplinary and multi-sector representation. This will directly contribute to national aspirations for socio-economic well-being and climate resilient development.

The two initiatives supported by the Newton Ungku Omar Fund have flourished linkages between UK and Malaysia. More importantly project partners in Malaysia and the UK are able to make use of the regional linkages that have already been established through ANCST, to engage with the wider research and innovation community in Asia.