



Photograph (above): The CABARET team meet at the Institute of Technology Bandung in Indonesia, for the 4th and final capacity building workshop on multi-hazard early warning and coastal resilience

4th International Workshop on MHEW and Coastal Resilience held in Bandung, Indonesia

More than 70 participants representing practitioners, politicians, policy makers and scientists from 15 Higher Education Institutes (HEIs) from Asia and Europe participated at the Fourth International Conference on MHEW and Coastal Resilience and the Final Steering Committee Meeting of the project CABARET. The event was held between 6th and 10th January 2020. This five day workshop and the meeting was hosted by the Institute of Technology Bandung, Bandung in Indonesia (ITB).

ITB is situated in the city of Bandung, which is located in the capital of West Java province in Indonesia. It was initially started in the name of Technische Hogeschool (TH) in 1920 in Bandung and later changed to the campus housed the Technical Faculty (including a Fine Arts Department) of Universitas Indonesia. In 1959, the present Institut Teknologi Bandung was founded by the Indonesian government as an institution of higher learning of science, technology, and fine arts, with a mission of education, research, and service to the community.

The visit of the CABARET team coincides with the events to mark ITB's 100 year anniversary.

The event opened with a welcome address by the lead investigator from the host institution, Dr Harkunti Rahayu from the Institute Technology Bandung, Indonesia. Prof Richard Haigh, the lead scientist for the project, then introduced the project CABARET, including some of the key achievements of the project to date. Highlights included 5 national position papers and 1 regional position paper, over 40 scientific papers, 5 newsletters and 2 infographics, 6 international meetings and 4 international workshops involving 319 participants, 7 EU-ASIA and ASIA-ASIA exchanges involving 35 people, 6 sandpits that facilitated 14 capacity building activities, a mentoring programme, 6 events at international conferences and workshops, and securing 4 externally funded spin off projects.

Prof Kadarash Suryani, Rector of ITB, then provided his opening remarks. He explained the role of ITB in disaster risk reduction (DRR) practices in Indonesia. This included an overview of Indonesia's disaster profile, the Indonesian tsunami early warning systems (TEWS), the role of ITB in providing infrastructure and generating and disseminating DRR knowledge to address disaster risks in Indonesia. ITB works with many leading institutions within their specialisation to conduct DRR education

programmes, to provide expert knowledge and to conduct evidenced based studies. He also recalled how ITB also helped to raise community awareness in DRR through seminars, lectures and capacity building programmes.



Photograph (above): Dr Harkunti Rahayu from the Institute Technology Bandung

The first key note speech was delivered by Dr Suharso Monoarfa, the Minister of National Development and Planning and Head of National Development Planning Agency, in Indonesia. He gave an insight into the recent flooding incidents in Jakarta (January 2020) including its impact and how they were managing the situation. He stressed the location of Indonesia in the Ring of



Photograph (above): Field visit to the Tangkuban Perahu Volcano, located 30 km north of the city of Bandung

Fire. He further explained the risks of multi hazard nature in Indonesia specifically from volcanos, floods, tsunami, air quality with their impact on wild life, forest cover, human lives, economy, mangrove cover, and marine biodiversity. His speech highlighted the lessons learned from past disasters and their aim to design new disaster resilient and green cities in Indonesia. An agenda encompassing 3 paradigms of future development agenda was presented.

The second key note speech for the day was delivered by Dr Ir.H. Supriyanto MM. He is the head of the BPBD Provinsi Jawa Barat. He presented the disaster definition within Indonesian legislative framework. This included the West Java disaster profile and its continuous rise. His speech explained the resilience culture in the province along with the 6-side resilience index, along with the resilience centre. In addition, he mentioned the key actions such as tree plantation, tsunami boards, simulation training at the community level including schools and offices. Most of these activities were related to the Tsunami Expedition, a 10- day programme conducted in west Java, to raise community awareness and capacity building.

The workshop also included the results of two sandpit activities carried out by the CABARET team. Dr Crisanto M Lopez and Josel from the Ateneo de Manila University in the Philippines presented the results of the education sandpit. Their outputs were

presented based on three activities they conducted: a mentoring session conducted in April 2019; a short term scientific mission conducted in Maldives National University and a study on DRRE using mixed methods.

Prof Abdul Hakam from the University of Andalas presented the results from the Local Government Risk Assessment sandpit group. He presented the definition for the risk assessment, the disaster risk formula, and a comparison of risk definition in four different countries across the CABARET partnership.

Dr Zin Mar from the Mandalay Technological University concluded the first day with a study conducted on flood risk mapping for local governance in Myanmar. This included the hazard profile and the flooding situation in Myanmar.

The second day began with a key note address by Dr Ir. Suprayoga Hadi, MSP. He is the Primary Planner on Regional Development, National Development Planning Agency, Republic of Indonesia, the Chairman of the Indonesian Development Planners Association (PPPI) and the Vice Chairman of the Indonesian Disaster Experts Association (IABI) on community based DRR. He introduced the history of community DRR in Indonesia and his experience in working in the UNDP project. He was the former DG of the Ministry of Villages. He presented the definition of community based DRR. Their community based DRR was started after the 2004 tsunami which devastated Aceh. He explained issues related

to DRR initiatives in Indonesia. Many CBDRR initiatives were started as mushrooms and very few were sustained due to funding that faded away over time. He showed the present position of CBDRR within Indonesian DRM system, including the importance of CBDRR in the overall approach to disaster risk reduction. A comparison of CBDRR and conventional approaches were highlighted. He explained the importance of CBDRR, its legislative background applicable for CBDRR and 10 determinants related to the success of CBDRR. He further explained the CBDRR experience at the village level in Indonesia, highlighting their limitations and challenges. Five key elements of CBDRR in Indonesia were explained: governance, risk assessment; knowledge and education; risk management and vulnerability reduction; and preparedness and response. Under each elements their key initiatives and level of their achievements were explained.

Prof Dilanthi Amarantunga from the University of Huddersfield led a workshop on research bidding, supporting CABARET's efforts to create innovation. She explained the rationale for bidding, especially for Asian Universities and their opportunities within specific schemes. She gave an introduction to the Erasmus programme, including the types of actions: Learning mobility, Cooperation for innovation and Support for Policy reform. Further, she highlighted the next Erasmus Programme which is arriving in 2021-2027. She emphasised the new possibilities under the Erasmus programme and encouraged

participants to apply for this new programme which gives more funding for HEIs. Steps and guidelines for developing a winning grant application were added. Professor Richard Haigh, Lead of CABARET, described some of his experiences of proposal writing, including the importance of developing a suitable partnership.

The CABARET secondment plan, developed through work package 6, was presented as a handbook by Dr Marlon Era from the University of De La Salle University in the Philippines. The process and activities carried out in finalising the secondment plan were explained, including the contributions of Dr Ignacio Agurrie and Dr Maria Gonzalez from IHC, and the team from De La Salle University. The Secondment Plan was tested at the secondment activity conducted in Lian Batang, a coastal area in the Philippines with the participation of its municipality members and CABARET experts during March 2019.

Dr Day Aung from the University of Yangon presented their flood potential and risk assessment study conducted in the delta region in Myanmar. Their disaster profile, existing flood mitigation system, challenges and recommendations were highlighted.

Ms Fathimath Shadiya and Ms Mariam Humra from the Maldives National University presented progress under on the development of Major Online Open Course (MOOC). Several courses are being completed and will be ready in February 2020. Experts were videoed during the workshop and these will be incorporated within the MOOCs.

The University of Peradeniya, University of Moratuwa, Maldives National University and University of Yangon presented the results from a sandpit about evacuation planning and early warning dissemination among coastal communities. The CABARET project enabled a comparative study of three countries: Sri Lanka, Myanmar, and Maldives. The results were presented by Dr Chaminda Bandara, Prof Seinn Lei, Dr Chandana Siriwardena and Ms Fathima Shadiya.

At the end of the workshop, the project held its final Steering Committee Meeting, including 43 participants from across the partnership.

Photograph (below): CABARET team visit Bandung, the venue for the first Asian-African Conference



Photograph (above): Field visit to the Climate Early Warning System at BMKG

Visit to an active volcano near Bandung

A technical visit to Tangkuban Perahu Volcano was organised by the Institute Technology Bandung, which enabled CABARET team members to experience an active volcano, including the release of sulphur fumes. Tangkuban Perahu is a stratovolcano 30 km north of the city of Bandung, the provincial capital of West Java. It erupted in 1826, 1829, 1842, 1846, 1896, 1910, 1926, 1929, 1952, 1957, 1961, 1965, 1967, 1969, 1983, 2013 and 2019. Together with Mount Burangrang and Bukit Tunggal, it is a remnant of the ancient Mount Sunda after the plinian eruption caused the Caldera to collapse.

Regional cooperation at the Museum of the first Asian-African Conference

The CABARET team visited the venue of the first Asian-African or Afro-Asian Conference (Bandung Conference), which was held in April 1955 in Bandung, Indonesia with the participation of 29 member countries which represented more than 50% of world's population. The conference aimed to promote Afro-Asian economic and cultural cooperation and to oppose colonialism or neo-colonialism by any nation. The conference was an important step towards the eventual creation of the Non-Aligned Movement. Like CABARET, the conference was an opportunity for strengthening regional cooperation.

CABARET team see the work of Indonesian agencies BNPB and BMKG

CABARET members were fortunate to visit two important institutions responsible for tackling disaster risk reduction in Indonesia. The National Disaster Management Agency (BNPB) and Indonesia agency for meteorology, climatology and geophysics (BMKG). The team were given a demonstration of Indonesia's climate early warning system and tsunami service provider role, which benefits 28 Indian Ocean countries and their national disaster management systems.

Participants received a 24/7 real life data simulation experience at the early warning operating system located in BNPB. BNPB is Indonesia's leading government institution in coordinating the planning and implementation of disaster management activities in an integrated manner, and is responsible for implementing disaster management and emergency management from before, during, and after an event, including disaster prevention, preparedness, emergency handling, and recovery. It is involved in coordinating implementation of disaster management activities in a planned, integrated, and comprehensive manner. BNPB also works to raise awareness about the need to reduce disaster risk at the national level, among local government at the provincial and district / city level, and among civil society, the private sector, and international institutions and the community at the grassroots level.





Photograph (above): Conference Chair and CABARET partner, Dr Harkunti Rahayu (centre), with keynote speakers, Hans Guttman, the Executive Director of Asian Disaster Preparedness Centre (left), and Professor Janaka Ruwanpura, Vice Provost of the University of Calgary, Canada

Successful 9th International Conference on Building Resilience held in Bali, Indonesia

The CABARET team were coorganisers of the 9th International Conference on Building Resilience (ICBR). The event was jointly organised by the Institute of Technology Bandung, Indonesia and the University of Huddersfield, United Kingdom from 13th to 15th January 2020 at the Westin Resort, Bali, Indonesia. More than 200 delegates participated in this three-day international conference under the theme of Investing Disaster Risk Reduction and Climate Change Adaptation for Building Resilient Cities. Over 100 research papers were presented under 9 sub-themes

The conference was chaired by Dr Harkunti Rahayu, from the Institute of Technology Bandung, Indonesia, a member of CABARET team. This year ICBR was convened in parallel to ITB's 100 year commemoration. A special feature of the 9th ICBR was the participation of national level policy makers, disaster risk reduction agencies and experts. Among them, Dr. HC. H. Suharso Monoarfa, the Minister of Planning and National Development/Head of National Planning Agency, Indonesia; Letnan Jenderal TNI Doni Monardo, Head of National Disaster Management Agency; Dr. Danis Sumadilaga, the Director General of Human Settlements, Indonesia; Gita Irawan Wirjawan, former Minister of Trade, Founder of Ancora Group and School of Government Public Policy, Indonesia; Dr. Ir. Abdul Kamarzuki, Director

General of Spatial Plan, Ministry of Ministry of Agrarian Affairs & Spatial Planning; Ir. Luky Alfirman, Director General of Budget Financing and Risk Management; Mr. Hans Guttman, the Executive Director of Asian Disaster Preparedness Centre; Dr. Ir. I Wayan Koster, Governor of Bali Province, Indonesia; Polana Banguningsih Pramesti, Director General of Civil Aviation, Ministry of Transportation.

The event included a plenary session by CABARET members on the current context of multi-hazard early warning systems. The session was chaired by Prof Ruben Paul Borg, from the University of Malta, Malta with three resource persons. Professor Dilanthi Amaratunga from the University of Huddersfield, United Kingdom explained her experience and knowledge on the role of HEIs in the process of sharing awareness and education among communities at risk. Prof Louise Comfort from the University of Pittsburgh, USA discussed about the role of knowledge through conducting research in early warning systems and challenges they experienced during this process. Dr Harkunti Rahayu from the Institute of Technology Bandung, Indonesia added her experience in contributing evidence based policy making while highlighting the role of HEIs in the development of tsunami early warning systems.

Prof Richard Haigh moderated a plenary session on Implementing science based disaster risk reduction policies and financing. Mr. Gita Irawan Wirjawan, former Minister of

Trade, Founder of Ancora Group and School of Government Public Policy, Indonesia, Dr. Ir. Abdul Kamarzuki, the Director General of Spatial Plan, Ministry of Ministry of Agrarian Affairs & Spatial Planning with Mr. Ir. Luky Alfirman, the Director General of Budget Financing and Risk Management, Indonesia, contributed to the discussions.

Professor Dilanthi Amaratunga moderated a special talk delivered by Mr Hans Guttman, the Executive Director of Asian Disaster Preparedness Centre.

Dr Chaminda Bandara moderated a plenary session on Enhancing infrastructure research and practice for building resilient communities. He was joined by Prof. Ir. Iswandi Imran, from the Institute Technology of Bandung, Prof. Seigo Nasu from Kochi University of Technology, Japan and Polana Banguningsih Pramesti, the Director General of Civil Aviation, Indonesia.

There was also a side event on Effective and timely early warning for strengthening climate resilience in South and South-East Asia, which was conducted with the participation of five resource persons. Prof Richard Haigh, Dr Senaka Basnayake from the Asian Disaster Preparedness Centre, Dr Harkunti Rahayu, Mr Sarath Premalal, former Director General of Department of Meteorology and the Secretary to the Association of Disaster Risk Management Professional in Sri Lanka.

Alongside these special sessions, around 50 CABARET members presented their research

papers based on CABARET related activities, mainly linked to work packages and sandpit activities.

The 10th International Conference in Building Resilience (ICBR) will be hosted by the University of Moatua, University of Peradeniya and University of Ruhuna in Hambantota, Sri Lanka. Two of the partners are members of CABARET project.

CABARET members win prestigious Newton Prize

The University of Huddersfield and Institute Technology Bandung were awarded the prestigious Newton Prize for the year 2019 on the 14th January 2020 in Jakarta, Indonesia. Out of 150 research teams, this partnership was shortlisted among the 5 finalists who were nominated for the prize. The Newton Prize recognises the best research and innovation project between Indonesia and the United Kingdom from 2016 to 2019. The 2019 Newton Prize was achieved by the winning team for the study conducted on "Mainstreaming Integrated Disaster Risk Reduction and Climate Change Adaptation into Coastal Urban Agglomeration Policy". Professor Haigh said that the Newton Prize would provide funding for a 12-month project titled Developing and harmonising local capacities for tsunami early warning. "We are looking to improve the dissemination of tsunami early warning information, particularly at the local level," he explained. "We will examine the relationships and the flows between the actors involved in the process, as well as the barriers and enablers to some of the emerging

technologies. We hope to improve decision making as well as the communication of early-warning messages among key institutions, and also to communities at risk."

Although coastal Indonesia is the focus, findings from the project will be relevant across the whole of the Indian Ocean region, added Professor Haigh, and they will be widely disseminated.

Coastal erosion study conducted by University of Yangon team

Members from the University of Yangon conducted a study during May to August, 2019 to evaluate the coastal erosion related hazards in Daw Nyein area in Myanmar. This study aimed to propose a flood risk map of Daw Nyein area using remote sensing techniques coupled with field observations for strengthening community resilience to coastal hazards. The study area is located about 30 km SSW from the town of Pyapon, near the coastline of northern Andaman Sea and the Gulf of Mottama in the Pyapon Township, Ayeyarwaddy Region, Myanmar. Geospatial analysis and the DEM for simulation of flood risk mapping into various classes as the maximum five meters of height of water is considered for flood risk mapping. Using the evaluated flood risk map and DEM, the study made some suggestions and recommendations, such as the villages which should be evacuated as flooding increases, identifying the ideal evacuation points and routes for the peoples, and the vulnerability of the area based on an analysis using the Coastal Hazard Wheel (CHW) methodology.

Scientific mission between Latvia and the Philippines

"Resilience" is increasingly becoming a popular concept in the field of climate and disaster science, with researchers and practitioners from different fields defining it in slightly different and nuanced ways. Since, resilience is necessarily a characteristic that evolves over time, to measure and monitor resilience must therefore consider its dynamic aspect. In the context of community resilience, a system dynamics approach could help discern and diagnose structures that lead to degrading or enhancing the performance of city subsystems over time.

An inter-regional collaboration was developed between the Riga Technical University (RTU) and the Ateneo de Manila University (ADMU), for the purpose of joint research on the development of systems thinking approaches and quantitative dynamic methods for characterizing resilience, leading through a comparative study of Riga and Metro Manila.

Part of this collaboration was implemented as a short-term scientific mission last October 2019. Dr. Charlotte Kendra and Gotangco Gonzales of ADMU were hosted by Dr. Francesco Romagnoli of RTU. During the week, research meetings were conducted, along with RTU PhD student, Maksims Feofilovs, to develop, as initial output, a short paper applying causal loop diagramming methods to diagnose city system structures and processes.

Photograph (below): CABARET partners Dr Harktunti Rayahu, Intitute of Technology Bandung, and Professor Richard Haigh and Professor Dilanthi Amaratunga, University of Huddersfield, win the Newton Prize for their work in Indonesia



Write for CABARET Newsletter

The CABARET project provides an opportunity for people to share knowledge and experience. This newsletter is written by the CABARET membership for the CABARET membership, and also for other readers working with national and international NGOs, UN agencies, government and donor institutions, academics, and independent consultants.

We, the Editors of CABARET newsletter, welcome contributions from CABARET partners and associate partners. We are also pleased to consider articles submitted by anyone involved in research capacity building within the context of disaster resilience among coastal communities.

If you have knowledge and experience to share, please consider making a contribution.

The scope of contributions should be consistent with the aims of CABARET.

Typically, we welcome contributions in the following categories (word counts are advisory):

- News and reports from activities and events linked to the project (100 - 500 words)
- Reports on developments in the field / projects that are being investigated by partners – these do not have to be activities directly linked to the project, but should be relevant to project partner institutions (100 - 500 words)
- Useful Resources – relevant publications, websites (up to 20 - 40 words)
- Upcoming events (20 words)

We welcome suggestions for alternative types / styles of contribution.

If you have an idea for an article that you would like to develop, the Editors would be pleased to discuss it with you - send an email to Ms Kinkini Hemachandra (K.Hemachandra2@hud.ac.uk)

The Editors reserve the right to edit any contribution



Co-funded by the
Erasmus+ Programme
of the European Union



The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

www.disaster-resilience.net/cabaret

European partners

University of Huddersfield
University of Central Lancashire
University of Cantabria
University of Mining and Geology
University of Malta
Riga Technical University

United Kingdom (Lead Institution)
United Kingdom
Spain
Bulgaria
Malta
Latvia

Asian partners

University of Moratuwa
University of Peradeniya
Bandung Technical Institute
Andalas University
Maldives National University
De La Salle University
Ateneo de Manila University
Mandalay Technological University
University of Yangon

Sri Lanka
Sri Lanka
Indonesia
Indonesia
Maldives
Philippines
Philippines
Myanmar
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Associate partners

IOC-UNESCO
Asian Disaster Preparedness Center
Federation of Sri Lankan Local Government Authorities

Further information

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