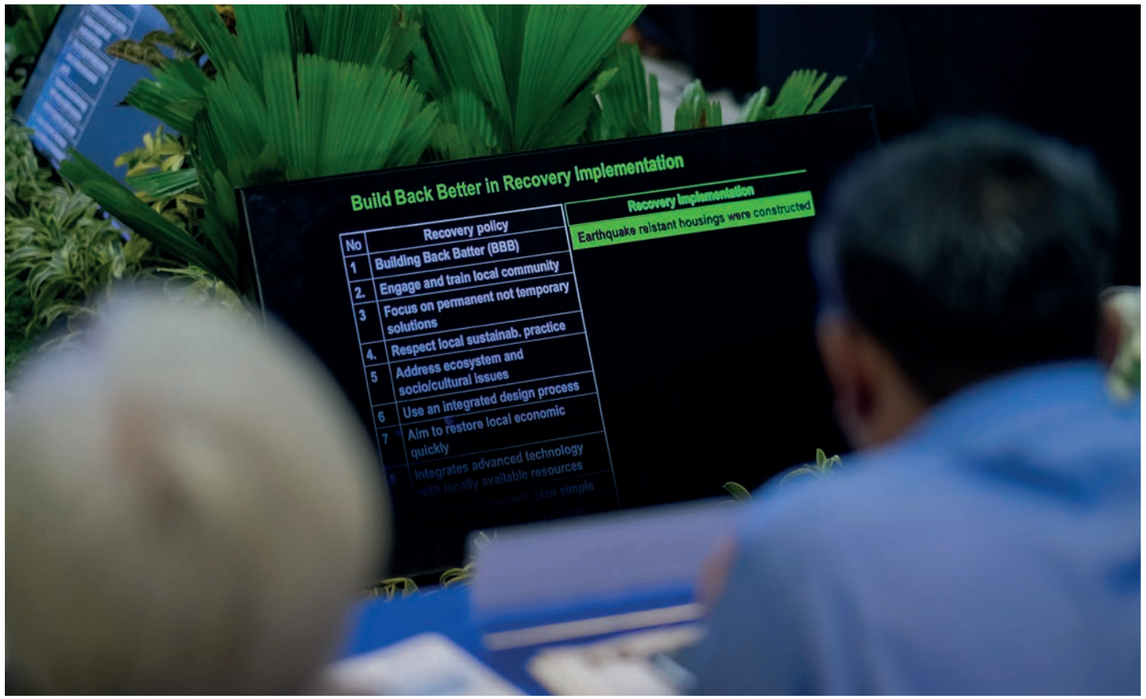


Universitas Islam Indonesia, Yogyakarta

# Universities taking centre stage in building disaster resilience

Enhancing resilience is recognised as one of the most important tasks of policy institutions. Governments and supranatural institutions are playing a crucial role in fostering policies towards the cohesion and prosperity of society and environmental sustainability, reports **Nadine Sulkowski**

Playing a leading role in emergency response internationally, the European Union (EU) is committed to promoting and facilitating the embedding of the United Nations' Sustainable Development Goals (SDGs) around the globe and was a key player in building the Sendai Framework for Disaster Risk Reduction. The EU seeks to extend its international humanitarian and disaster aid programmes further, which is reflected in the funding of hundreds of international collaboration projects in the broad fields of disaster risk reduction (DRR), disaster management and resilience. These projects typically bring together educational institutions, the public, private and third sector, and can act as powerful catalysts for scaling up relevant outputs nationally, as well as internationally.

However, what remains clear is that more needs to be done to increase designated funds and to improve collaboration, co-ordination and innovation capability.

The questions that follow are how and where relevant knowledge and technical solutions can be created, and how these can be scaled up for maximum benefit. The same applies to the role of communities and notions of citizenship in building disaster resilience.

At constant risk of volcanic eruptions, earthquakes, floods and tsunamis, Indonesia has been described as a laboratory for disaster research. Extreme wet or dry seasons can ruin food crop harvests, trigger inflation and put financial pressure on the poor, while human-caused disasters such as wildfires can have far-reaching consequences. As a signatory of the Sendai Framework and the SDGs, Indonesia is committed to developing its disaster resilience capability. However, problems that impede the effective implementation of mitigation and response strategies are endemic in each aspect of disaster resilience. These include: Sub-optimal performance in co-ordination and co-operation in emergency response and post-disaster recovery; inconsistent data and lack of version control in capturing the impact of disasters; and too much emphasis on emergency response rather than DRR and awareness training. The role of central government is perceived as too dominant, with little involvement from local communities. Other challenges include the suboptimal utilisation of science and technology in disaster mitigation, low risk awareness among the local population, weak law enforcement and corruption.

The year 2018 was particularly devastating and counted around 2,800 disasters that left 4,800 people dead or missing. A further 21,000 people were injured, while ten million were temporarily or permanently displaced. Among those directly affected by the earthquake in Palu and the eruption of Mount Krakatoa were universities which, for the past few years, have been working in partnership with higher education institutions in the UK and across Europe to build Indonesia's socioeconomic prosperity. This led to the creation of the Erasmus+ Capacity Building in Higher Education Project 'Building Universities in Leading Disaster Resilience' (BUiLD), which has attracted close to €1 million of EU funding.

Led by the University of Gloucestershire in the UK, the BUiLD project brings together eight universities from across Indonesia. These include: Universitas Ahmad Dahlan; Universitas Islam Indonesia and President University (all Java); Universitas Andalas (West Sumatera); Universitas Lambung Mangkurat (Kalimantan); Universitas Muhammadiyah Palu (Sulawesi); Universitas Khairun (North Maluku); and Universitas Surabaya (Java).

The consortium is joined by three EU partners, including University College Copenhagen (Denmark), Polytechnic Institute of Porto (Portugal) and Educational Consulting Group Hafelekar (Austria).

Most partner universities in Indonesia are involved in wider disaster resilience initiatives. Examples include the Disaster Risk Reduction Centre (DiRReC) at Universitas Islam Indonesia, which incorporates a disaster responsive medical team that was deployed to provide early medical support during past and recent earthquake disasters in Indonesia, including those in Lombok, Palu and Donggala. Universitas Ahmad Dahlan has established a Centre for Environmental Studies and Disaster Management, which has been involved in numerous disaster recovery initiatives, for example during the Merapi volcanic eruption in Yogyakarta in 2005 and the earthquakes in Lombok and Palu in 2018. The centre conducts training on mitigation and disaster management and collaborates with the Muhammadiyah Disaster Management Centre (MDMC) in various areas of disaster recovery, including volunteering for psychosocial, logistical and health assistance, and fundraising. Universitas Andalas and Universitas Lambung Mangkurat are involved in disaster research and provide consulting services to the Indonesian Government, while Universitas Khairun delivers frequent disaster awareness courses to local communities. Other universities, such as Universitas Muhammadiyah Palu and President University, are pursuing the establishment of a disaster resilience centre after having been directly affected by the triple disaster in Sulawesi in September 2018, and the tsunami following the eruption of Mount Krakatoa later the same year.

The BUiLD project seeks to consolidate the existing expertise, capability and networks of the 12 consortium partners. Its mission is to develop Indonesia's national crisis management and resilience knowledge, preparedness and response capability through the design and implementation of a comprehensive disaster resilience framework across Indonesia's higher education institutions. Capacity building in universities is listed as one of Indonesia's development priorities in its aspiration to improve national disaster resilience. It sits alongside endeavours to enhance disaster management regulatory frameworks, improve collaboration between the public, private and third sector, and integrate risk reduction programmes into development programmes and disaster resilience initiatives aimed at communities and vulnerable groups. Universities have strong networks within the public and private sector, and with local, regional and international communities. This places them into a position not only to act as catalysts for research and educational initiatives, but also to mobilise networks, resources and specialist expertise in the event of emergencies and during recovery phases. This position is strengthened through their capacity to contribute to knowledge transfer, scenario planning, post-assessments and impact studies, curriculum development and innovative research initiatives to improve the diverse aspects of disaster resilience.

## Centres of excellence

In the initial phase, eight Centres of Excellence in Disaster Resilience across all major regions in Indonesia will act as local enablers in the implementation of a comprehensive disaster resilience framework. Based on the penta helix model, the vision is to facilitate collaboration between universities and the public, private and third sector through all stages of the disaster management cycle. The disaster resilience framework integrates resilience capacity building at multiple levels, including the individual, programme, institutional, regional and national levels. It addresses several aspects of resilience capacity building, including university governance, disaster response and recovery capability, disaster awareness training, curriculum development, fundraising, networking and knowledge transfer, as well as research and innovation. Concrete outputs include: Physical spaces for the co-ordination of disaster resilience activities with a defined institutional governance structure; an information exchange and management model and target operating model for disaster recovery involving internal and external stakeholders; needs-based training solutions; curriculum benchmarks; and a national disaster resilience network designed to drive knowledge transfer, innovation and policymaking. Based on a common standard that integrates the principles of systems thinking, multi-stakeholder integration and adaptive governance, the framework is scalable nationally, as well as internationally.

Cumulatively, Indonesian partner universities have a diverse network and close working relationships with key organisations. These include the National Ministry of Education and Higher Education, the National Disaster Mitigation Agency, non-governmental disaster aid organisation ACT Alliance, the MDMC and funding platforms Kitabisa and Lazismu. At local level, partner universities have working relationships with emergency services, including the police, hospitals and the military, as well as local businesses and communities.

Earlier this year, the consortium formed a strategic partnership with the Institute of Strategic Risk Management to leverage dissemination and exploitation opportunities internationally. The BUiLD project commenced in November 2019 and has been granted a three-year funding period. C·RJ

■ *For more information, visit disasterresilience.eu*

**Author**

NADINE SULKOWSKI, *M ISRM, is leading the Erasmus+ BUiLD Project and is a Senior Lecturer in the Gloucestershire Business School, UK*

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