

# MAINSTREAMING INTEGRATED DISASTER RISK REDUCTION AND CLIMATE CHANGE ADAPTATION INTO COASTAL URBAN AGGLOMERATION POLICY

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## ● Research problem

Coastal urban agglomerations are especially exposed to the impacts of climate change and disaster risk. In the coming decades, climate-induced extreme events are expected to increase and will continue to affect natural and human systems independently or in combination with other determinants to alter the productivity, diversity and functions of many ecosystems and livelihoods.

The recent tsunami events in Indonesia further highlight the need to build capacity to address tsunami and other coastal hazards, including multi-hazard threats, such as landslides and liquefaction. Climate change and disaster impacts of this type threaten to exacerbate existing vulnerabilities and further entrench development disparities.



## ● How did the research address the problem?

The Global Disaster Resilience Centre at the University of Huddersfield, UK and the Institute of Technology Bandung, Indonesia, have been working together to address these challenges. They have been working with national and regional agencies, including the National Disaster Management Agency (BNPB) and Meteorology, Climatology and Geophysical Agency (BMKG), and the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO) Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS).

This collaboration set out to assess existing capacity to tackle these threats, develop more integrated disaster risk reduction (DRR) and climate change adaptation (CCA) strategies, and build capacity to protect centres of economic growth and development outcomes in coastal urban agglomerations, with a particular emphasis on Indonesia.

## ● Project partnership

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Global Disaster Resilience Centre  
School of Applied Sciences,  
The University of Huddersfield, UK  
[www.hud.ac.uk/gdrc](http://www.hud.ac.uk/gdrc)



Institute of Technology Bandung  
Indonesia  
[www.itb.ac.id](http://www.itb.ac.id)



Intergovernmental Oceanographic Commission of UNESCO  
(IOC-UNESCO) Coordination Group for the Indian Ocean  
Tsunami Warning and Mitigation System (ICG/IOTWMS)  
[ioc.unesco.org](http://ioc.unesco.org)



National Disaster Management Agency  
Indonesia  
[www.bnpb.go.id](http://www.bnpb.go.id)



Meteorology, Climatology and Geophysical Agency  
Indonesia  
[www.bmkg.go.id](http://www.bmkg.go.id)

## ● Outcomes of the project

In working towards these objectives, the collaboration has:

- Developed novel, integrated DRR and CCA strategies that can protect centres of economic growth and development outcomes in coastal urban agglomerations
- Documented Indonesia case studies and international good practices, including regional cooperation on tsunami early warning and a stakeholder map of DRR and CCA actors at the city level
- Developed a multi stakeholder transition pathway and a clear policy statement on mainstreaming DRR and CCA in Indonesia's coastal urban agglomeration development plan
- Developed researcher capacity at the University of Huddersfield and Bandung Institute of Technology through a series of workshops and field visits



The project won the 2019 Newton Prize for Indonesia, recognising it as the 'best research / innovation that promotes economic development and social welfare', awarded by the UK's Department for Business, Energy and Industrial Strategy (BEIS), Newton Fund and Global Challenges Research Fund (GCRF).

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