EMBEDDING
COVID-19
Preparedness Into
Local Disaster
Risk Reduction

➡ What is the nature of the research problem?

The ongoing COVID-19 outbreak is an unprecedented event in modern human history. While the World Health Organisation has declared COVID-19 a pandemic, its underlying factors, vulnerabilities and impacts go far beyond the health sector, hitting the world's most vulnerable the hardest, including women, children and youth, older persons, migrant workers, displaced people and refugees, and persons living with disabilities, among others. It is an example of systemic risk: when a hazard leads not only to negative effects in parts of the system but also threatens the failure of the entire system.

The national approach evident in the pandemic response is not sufficient to meet the challenges that lie ahead. It is particularly important to better align prevention and response efforts of health ministries and disaster management authorities, from national to local. COVID-19 has underlined that response mechanisms require a lot of strengthening. Most countries do not have operational experience in handling a combination of natural and biological hazard preparedness planning.

Our project will provide insights on several critical problems that need to be better understood in order to improve epidemic and pandemic preparedness. There needs to be a better understanding on how risk works, especially how risk cascades with unexpected consequences, and how to build capacities to manage this. How can we prepare for early and better recovery, that prevents the emergence of new risk with early and rapid actions from the DRR-relate organisations? Our rationale is that pandemic preparedness has to be holistic and build national to local resilience that integrates public health and disaster risk management.

➡ How will the research problem be addressed?

Risk has become systemic. Our approach cannot be divided into categories that are then assigned to health authorities, disaster management agencies or early warning centres. A better understanding of these issues will lay the foundation for better approaches for epidemic and pandemic preparedness. The specific objectives of our project are to:

1. Explore the extent to which COVID-19 preparedness planning is currently embedded at national level DRR planning as a biological hazard
2. Identify how public health aspects be better integrated into DRR and resilience planning, in combatting the dual challenges of other disasters and COVID-19
3. Identify mechanisms on how public health aspects (including COVID preparedness planning) can be "localised" with other hazards
4. Develop guidelines to consider COVID-19 risks from many angles and work in a collaborative way, linking national to local stakeholders in order to fight systemic risks, which is joined up and cascading

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What are the planned outputs and outcomes?

1. A state of the art report on the extent to which COVID-19 preparedness planning is currently embedded and integrated at the national level DRR planning as a biological hazard
2. A synthesis report on how can public health aspects be integrated with DRR and resilience planning, in combatting the dual challenges
3. A multi stakeholder transition pathway for integrated and localised public health aspects
4. Policy paper (detailing out the guidelines) on systemic risks with cascading impacts
5. Several jointly authored, peer reviewed journal papers published in high impact SCOPUS indexed journals
6. Minimum two conference presentations.
7. Two training workshops with stakeholders (graduate students and local government units)
8. One capacity development mission

Short-term impacts of our research will increase awareness of the role of the public health system in DRR preparedness planning. A literature review of Covid-19 will give an overview of the position of CoVID-19 preparedness planning in DRR framework in Indonesia. The project directly supports National Disaster Management Agency (BNPB), and the Government of West Sumatra (and its Disaster Management Agency of West Sumatra; Social Office of West Sumatra; Health Office of West Sumatra; Public Works and Spatial Planning Office of West Sumatra. In situations where disaster managers are dealing with crises on multiple fronts, responding to one disaster may exacerbate the impact of another. There need to be redesigning its approach to disseminating early warnings at the community level to ensure physical distancing and greater use of mass communication tools including public address systems and social media. These are some of the long-term impacts that this project will generate.

Who is involved in the research?

The 24-month project will be managed with equal responsibility by scientists from Indonesia and the UK who will ensure that the project delivers its planned outputs and outcomes. The team is led by Professor Dilanthi Amaratunga, Professor Richard Haigh, (University of Huddersfield, UK) and Dr Taufika Ophiyandri (Andalas University, Padang, Indonesia)

The scientists will work closely with relevant government and regional agencies, including the National Disaster Management Agency (BNPB), the Government of West Sumatra and the UNDRR.

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