Improving COVID-19 and pandemic preparedness and response through the downstream of multi-hazard early warning systems

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This study will address two, inter-related challenges: How to cope if a major natural hazard occurs during the COVID-19 pandemic? How can pandemic preparedness make use of the existing infrastructure for tackling other hazards? The project team will focus on the pandemic-natural hazard hybrid scenario. It will also seek to improve early warning and preparedness for such an event, as well as the availability of and access to multi-hazard early warning systems (MHEW) and disaster risk information that include pandemic/biological hazards, Target G of the SFDRR [1]. The project will address these by examining how public health actors be embedded within a MHEW environment and how pandemic threats are integrated within national and local DRR strategies. The project will explore the impact of COVID-19 on response capabilities for other hazards, multiple simultaneous or cascading events, and consider how COVID-19 and public health surveillance can be synergised with "the last mile" of MHEW. Pandemic is global, but the preparedness and response are local and dependent on governance, laws, culture, risk perception and citizen behaviour.



WP1 Conceptual Framework:

Method- desk study, expert interviews/ RQ1 COVID and pandemic actors in early warning

WP2 Pandemic & DRR Policies:

Method- Desk policy analysis, focus

group/ RQ2 Integration with national

and local DRR policies

WP3 Pandemics in MHEW:

Method- expert interviews, multi-hazard

scenario workshops, community survey /

RQ3 Impact of response capabilities/RQ4

Integration of public health/ RQ5 Impact on downstream

WP4 Synergised MHEW last mile:

Method: Public engagement, roundtable dialogue/

RO6 public health surveillance and last mile

Project framework

WP6 Project Management

Advisory Board

Partners

Lead

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Other Associate Partners

University of

Co-Investigators



University of Colombo, Sri Lanka



University of Moratuwa Sri Lanka

Lead Partner



Ministry of Health and Indigenous Medical Services, Sri Lanka

Huddersfield, UK



Disaster Management Centre Sri Lanka



Federation of Sri Lankan Local **Government Authorities**



The Association of Disaster Risk Management Professionals of Sri Lanka



The Asian Disaster **Preparedness Centre**



for Disaster Risk Reduction



Public Health England



Greater Manchester Combined Authority





The Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS) of The Intergovernmental Oceanographic Commission of UNESCO (IOCUNESCO), Working Group 1: Tsunami Risk, Community Awareness and Preparedness

Project outcomes

- · Several high quality, peer reviewed multi-institution, multi-disciplinary journal papers in high-impact journals under WP1,2 and 3
- A briefing paper and a policy dialog on current status and recommendations on the integration of pandemics within the national/local DRR strategies under WP2
- environment under WP3

- Presentations at international conferences, workshops and other events
- A vision paper will set out the future integration of pandemics into a MHEW

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otherwise agreed in writing



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WP5 Dissemination

Scientific papers around the key research questions

Briefing paper and

policy dialogue on

status of integration of

pandemics in to

national and local DRR

strategies

Vision paper on the

integration pandemics

into multi-hazard early

warning

Guidelines on

synergizing public

health and the 'last