

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

COVID-19 has not only overwhelmed health systems and caused widespread social & economic disruption in Sri Lanka but also left us wondering:

- Are we ready for the next pandemic?
- Do defensive measures taken to limit the short-term impacts of COVID-19 in the country constitute adequate preparedness?
- How can the vulnerabilities of the poor, the displaced, and refugees who live in overcrowded and under-resourced settings be addressed in the long-run?
- Can we effectively cope if another natural hazard occurs concurrently with COVID-19 or a similar pandemic? How can hazard warning services and response activities be geared to meet the demands of such a situation?



Addressing these questions will:

- Require the integration of pandemics into a multi-hazard, national and local strategy for Disaster Risk Reduction (DRR), advocated in Sendai Framework for Disaster Risk Reduction (SFDRR), but not implemented.
- Necessitate a multi-stakeholder approach to collectively examine impacts, coordinate fiscal, monetary, and social measures, share practices, and lessons learned.

So, we aim to work towards the following objectives:

- (1) To identify the key actors and what are the processes involved in the preparation of COVID-19 and other pandemic warning and dissemination processes.
- (2) To propose recommendations to mainstream COVID-19 and other pandemic threats to be integrated within national and local disaster risk reduction strategies
- (3) To explore the impact of COVID-19 on the response capabilities for other hazards, either multiple simultaneous events or cascading impacts and to understand what components of early warning system are greatly affected due to dual challenges associated with COVID-19
- (4) Develop and implement a synergised COVID-19 and public health surveillance system with “the last mile” of Multi-Hazard Early Warning (MHEW)
- (5) To identify how would pandemic response measures impact the downstream response to other hazards, including mass evacuations with increased capacity of shelters, camps and identify measures to overcome these tensions in an emergency
- (6) To propose how the COVID-19 and public health surveillance system can be synergised with “the last mile” of multi-hazard early warning systems, where community networks, communication systems, and citizen behaviours can be utilised for pandemic Early Warning Systems (EWS) at the community level.

Our Approach:

- (1) Desk study on the existing situation of pandemic and epidemic early warning; key actors and processes involved in COVID-19 and other pandemic warning and dissemination processes
- (2) Desk-based policy analysis to explore the extent to which pandemic threats are integrated within national and local DRR strategies
- (3) Focus group discussions
- (4) Expert interviews
- (5) Community Survey



Our Outcomes:

- (1) A conceptual framework on the key actors and processes involved in COVID-19 and other pandemic warning and dissemination processes
- (2) Public engagement events and round table dialogues
- (3) A number of high quality, peer-reviewed multi-institution, multi-disciplinary journal papers in high-impact journals leading to a briefing paper and a policy dialog on current status and recommendations on the integration of pandemics within the national/local DRR strategies
- (4) A vision paper setting out the future integration of pandemics into a MHEW environment
- (5) Oral presentations in leading international conferences
- (6) Project flyer and project website to publish project activities

Our Global and National Footprint

The project will:

- Help Sri Lanka and the wider region to better prepare, respond, and recover from disruptions caused by pandemic threats.
- Influence the Intergovernmental Oceanographic Commission on UNESCO (IOC-UNESCO) and the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS) on approaches to assessing tsunami hazard preparedness and priorities for capacity development of member states
- Change the understanding and awareness/attitudes of national and subnational actors, in particular the impact of COVID-19 on the response capabilities for other hazards.
- Change decision-making and behaviour of national and subnational actors through improved standard operating procedures for natural/pandemic early warning and contribute to progress with Sustainable Development Goals: 13 Climate action; 11 Sustainable cities and communities; and 10 Reducing inequalities.

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