# DEWN

The Disaster and Emergency Warning Network


# TECHNOLOGICAL APPLICATIONS

## Associated with Multi Hazard Early Warnings (MHEWs)

## INTRODUCTION

Multi-Hazard Early Warnings (MHEWs) emerged as a foremost component in Disaster Risk Reduction (DRR) mechanism. The Sendai Framework for DRR (2015-2030) highlights the prominence of MHEWs by indicating it in one of its seven targets. Under this mechanism, the accurate and timely flow of information is vital so as to function the proper systematic behavior of MHEWs. Technological applications can be vividly incorporated along with the components in MHEW mechanism to upgrade the level of effectiveness. However, the applicability of such mechanisms for MHEWS seems to have inadequately utilized in many of the countries in the world.

Sri Lanka is a country, which is subjected to crucial natural hazards each year. Therefore, there is a huge potential for applying technology in MHEWs. On the other hand, Sri Lanka has the necessary technical capacity and skills to facilitate this. However, there are huge gaps and barriers of the proper application of such mechanisms such as lack of proper authorization for undertaking the ownership of the warning alerts, lack of proper collaboration among the interlinked stakeholders and the delays in issuing the Early Warning message by the issuing agencies. Further, the lack of faith towards the Early Warning alerts issued by the authorities was identified through a research study undertaken by the University of Moratuwa and University of Peradeniya.

Under this research study, the key focus is directed towards the identification of the barriers and gaps in the existing mechanism of Sri Lanka.

In order to focus on the research objectives, Disaster and Emergency Warning Network (DEWN) mobile application which was developed by Dialog Axiata PLC, Dialog-University of Moratuwa Mobile Communications Research Laboratory and Micro-image is undertaken as a case study.

To identify the status, gaps and barriers in the existing system of MHEWs, a Questionnaire survey will be conducted with the collaboration of Dialog Axiata PLC. The survey sample infromation will be identified from the Grama Niladari Divisions based on the areas in Sri Lanka where the hazard levels are higher in terms of Floods, Landslides and Tsunami. The collected data from the survey will be analyzed further to deliberate the final outputs of the research study. Further, these outcomes will be used to develop the current status of the DEWN mobile application and extension of the app for the emergency disaster alert warning situations.

## KEY OBJECTIVES

- To identify the current status, gaps and barriers in the existing Technological applications associated with MHEWs
- To develop strategies to bridge the existing gaps in the mechanism
- To identify the potential areas of expansion associated with MHEWs

## PROJECT DELIVERABLES

- Briefing paper highlighting the key findings
- Scientific, peer-reviewed research paper
- Detailed report to be submitted to relevant agencies including Dialog Axiata PLC

**Project Team:**

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