Utilization of ALeRTO Early Warning System for Localized Weather Disturbances in Zamboanga Peninsula, Philippines

Julemer Ann G. Aying (1), Raymond T. Ong, Mario S. Rodriguez, Emir V. Epino, Glenn Leandri Brylle L. Lamparas,

[1] Ateneo de Zamboanga University, La Purisima St., Zamboanga City, Philippines, 7000
Email: ayingjulg@adzu.edu.ph

Abstract:

As the Philippines is geographically located near Pacific Ocean, episodes of natural phenomenon such as typhoons and tropical storms are undeniably present. Such events have brought several damages in the country, and to address that, the Philippine Government launched "OPLAN Listo" which serves as the guide for the local government units during typhoon events. However, due to the changing climate, even localized rain events gradually results to flooding. With this, ADZU GeoSAFER ZAMBASULTA initiated the Automated Water Level and Rain Monitoring Using Near-Real Time Observation (ALeRTO) Early Warning System. The ALeRTO device is programmed to monitor the Advance Science and Technology Institute (ASTI) website for critical water level and rain data, and interpret it into threshold categories which are: high, medium and low; and heavy, intense and torrential, respectively. As the device is programmed to determined water level and rain threshold, it sends out alert messages via sms to registered users specifically to Local Government Units. Along with the warning, a corresponding local action was developed in order for the LGUs to be guided on the actions to be taken in an event that the rain and water data reaches a particular threshold value. This project was implemented in 10 Pilot Sites covering a total of 13 Local Government Units. In order to determine the effectiveness of the ALeRTO Early Warning System in the target areas, monitoring and evaluation was organized by the Regional Disaster Risk Reduction and Management Council IX (RDRRMC IX) composed of different government line agencies to conduct focus group interviews to the project beneficiaries. The participants of the Monitoring and Evaluation rated the ALeRTO Early Warning System as Very Satisfactory and stated that the system effectively delivered its purposes as an early warning in their respective areas.

Keywords: early warning system, action plan