

## **Development of multi-scenario high-resolution hydro-meteorological hazard maps in the Philippines for disaster risk reduction and management planning**

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The Philippines is exposed to natural hazards that impose a threat to population, economy, and the society in general. In 2012, Project NOAH was established to put in place a responsive program for disaster prevention and mitigation by using advanced technology to enhance current geo-hazard vulnerability maps. For the past four years, Project NOAH had completed hazard maps of storm surge hazard using Japan Meteorological Agency storm surge model and rain-induced landslide hazard using SINMAP, Matterocking, Coltop-3D and Conefall software for the entire Philippines. Flood hazard map using FLO-2D GDS PRO were also completed for major river basins in the country. This paper aims to present the Philippines' accomplishment in developing multi-scenario high-resolution hydro-meteorological hazard maps and how these maps were effectively used in disaster risk reduction and mitigation (DRRM) planning in the country as demonstrated last 23-27 December 2016 when Typhoon Nock-Ten hit the country and left 3 death toll and Typhoon Haima last 17-30 October 2016 which left 14 death toll.

These high-resolution hazard maps are now being used in government's pre-disaster risk assessment (PDRA) as one of the bases for determining the appropriate level of response action to reduce and mitigate the impact of severe weather disturbances. The local government units are also using NOAH hazard maps in mainstreaming vulnerability and risk assessment to their comprehensive land use and development plans. Moreover, the project has been involved in hundreds of information, education, and communication campaign towards disaster awareness and preparedness.

The implementation of Project NOAH provides an improved enabling environment for disaster management in the Philippines both at the national and local levels. Further, Project NOAH fosters a culture of preparedness and empower policymakers in providing an appropriate response to the disaster.