

**PIDS President Gilberto Llanto's Remarks on  
"Big Data Revolution for Humanitarian Response"<sup>1</sup>  
28 September 2015, New York City.**

Mr. Chairman, I would like to thank the organizers of this forum for this opportunity to say a few words about the Philippines' use of big data for humanitarian response to natural disasters. The advent of big data has indeed revolutionized the way we live in the modern world, and it could certainly be harnessed for the public good.

In the Philippines we have used big data in the development of a timely mechanism for collecting and disseminating information on impending natural disasters such as tropical cyclones. An average 19-20 typhoons comes to the country every year. Project NOAH - national operational assessment of hazards- was established in June 2012. It employs various sensors such as automated rain gauges, water level sensors, high resolution topographic maps generated by light detection and ranging (LIDAR) for flood modeling. There is however, limited capacity as maps generated are limited to certain areas around the country's 18 major river basins.

NOAH mobile app in android and iOS devices was jointly developed by DOST and a large news media outfit to give information on the probability of rain, typhoon forecasts, temperature, images from Doppler stations, and recordings from weather stations, and others. This is strategic in view of the rising ownership of smartphones and similar devices amongst the population. There is sufficient commercial and humanitarian reasons to motivate private sector collaboration and engagement in harnessing big data for the public good.

Another important development is the Batingaw mobile application, which uses tweets from different sources to find out the situation on the ground in the event of natural disasters. With this app, a smartphone becomes a rescue utility device. It has strobe light, flashlight, siren features. A radio feature allows users to stream one of 3 radio stations to keep updated on the current situation. It also functions as a compass tool and there is also an "I am safe" button, a prepared message for users to send a text message on one own's personal situation or condition. User is geotagged and his or her location is known. Related to this, the government makes use of Twitter as a platform for disseminating government advisories, and for collecting information from the ground. Hashtags were used during two recent big typhoons in April 2015 to inform people and save lives and property.

Policy wise, the government is pursuing an open data policy that seeks to put all datasets of government agencies online and also in offline library. Such data will be available and accessible to the public. The government's Open Data Task Force is working with legislators for the appropriate legislation.

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<sup>1</sup> A high-level meeting in the margins of the 70th session of the United Nations General Assembly, co-hosted by the Kingdom of the Netherlands, the Republic of the Philippines, and UN Secretary-General's Global Pulse Initiative. The multi-stakeholder side event will be at the Ministerial level, and include senior executives from private sector, UN Agencies, academia and civil society. The outcomes of the meeting will serve as input to the World Humanitarian Summit in May 2016.

Finally, to make big data very useful and relevant there should some ground shift in policy and institutional collaborations. There should be clear ground rules on data sharing and use of such data without harming considerations of privacy and individual liberties. How we do this needs the combined energies of different stakeholders, and I believe a forum such as this is an excellent way to initiate this process.

Thank you.