

INNOVATION THROUGH COLLABORATION:

Partnering with Agencies for Developing an Effective Tsunami Early Warning System



Dulib Tilekeratne, Senior Manager of GSMA and Engr. Albertson D. Amante, (center) together with Smart Communication delegates during a meeting for SIGAW improvement

The Philippines is one of the countries prone to disasters, since it is located in the so-called “Pacific Ring of Fire” and is surrounded by large bodies of water. One of the most destructive calamities that have hit the country is the tsunami, a series of ocean waves caused by an underwater earthquake or volcanic eruption. This type of disaster can devastate the livelihood of the residents and disrupt the state of economy.

How can the citizens be alerted when a tsunami is detected to hit?

The Solar-Powered Isotropic Generator of Acoustic Wave (SIGAW) was developed by BatStateU researchers and is capable of ensuring the safety

of the citizens by providing early warning through a siren or an alarm and a text message. Data collected by Philippine Institute of Volcanology and Seismology (PHIVOLCS) triggers the sensor of the SIGAW before the tsunami hits the shore, which gives enough time for the residents to prepare and proceed to a safer area.

As of 2017, seventeen (17) units have already been developed and installed in 13 municipalities within Batangas Province. During the first quarter of the year, the team handling the distribution of SIGAW across the country has conducted site visits in Quezon province, wherein 25 alarms of SIGAW will be placed in tsunami-prone areas. BatStateU

targets to deploy more units of SIGAW as part of disaster risk preparedness initiatives.

On February 9, a senior manager at Global System Mobile Communications (GSMA), Dulib Tilekeratne, visited the institution to learn about it. GSMA is known worldwide for its capability in providing successful digital mobile communication. The Smart Communications team also visited together with GSMA with the intention of forming a partnership. Their vital role is to provide a stable signal for a faster and much dependable communication in alerting the community in times of disaster.

Solar-powered Isotropic Generator of Acoustic Wave (SIGAW)

SIGAW is a Tsunami Early Warning System (TEWS), which is part of the WISER program that aims to develop Wireless Integrated Solutions for Emergency Response.

