



**BATANGAS STATE UNIVERSITY**  
**The National Engineering University**

## **SOLAR-POWERED ISOTROPIC GENERATORS OF ACOUSTIC WAVES (SIGAW)**



*The SIGAW Project team together with Dr. Melchor P. Avenilla Jr., Quezon Provincial Disaster Risk Reduction and Management Officer, Mr. Ejay Verba, Lopez MDRRMO and Barangay Hondagua Officials after the installation of the SIGAW Lopez Unit*

The Office of the Vice President for Research, Development, and Extension Services has been instrumental in developing and deploying Solar-Powered Isotropic Generators of Acoustic Waves (SIGAW), which are customizable early-warning systems tailored to the specific needs of local and regional governments in the region.

A total of twenty-seven (27) SIGAW units for tsunami have been installed in the provinces of Batangas and Quezon. Additionally, two (2) SIGAW units for flood have already been deployed in Ternate, Cavite, and Mayantoc, Tarlac. By integrating these SIGAW units into community evacuation plans, we have significantly enhanced these communities' capabilities to provide timely and accurate alerts.

Through comprehensive technology transfer programs, we have equipped local government personnel with the necessary skills to operate and maintain these systems effectively. Moreover, our collaborative efforts with DOST-PHIVOLCS and PAGASA is leading to the integration of SIGAW network into their early-warning system networks, further bolstering the credibility and accuracy of our SIGAW units. These initiatives have not only improved disaster resilience but have also empowered communities to be better prepared and respond more effectively to emergencies.

**Leading Innovations, Transforming Lives**  
**Building the Nation**



**BATANGAS STATE UNIVERSITY**  
**The National Engineering University**

## **SOLAR-POWERED ISOTROPIC GENERATORS OF ACOUSTIC WAVES (SIGAW)**



The SIGAW Project Team together with Calauag Mayor Rosalina O. Visorde and her MDRRMO, Mr. Nel B. Resplandor



The SIGAW Project Team together with Mr. Nel B. Resplandor, Calauag MDRRMO and his staff after the SIGAW Calauag Unit installation

**Leading Innovations, Transforming Lives**  
**Building the Nation**





**BATANGAS STATE UNIVERSITY**  
**The National Engineering University**

## ***SOLAR-POWERED ISOTROPIC GENERATORS OF ACOUSTIC WAVES (SIGAW)***



The SIGAW Mayantoc Unit



SIGAW Mayantoc Unit Operation and Maintenance

***Leading Innovations, Transforming Lives  
Building the Nation***





**BATANGAS STATE UNIVERSITY**  
**The National Engineering University**

## ***SOLAR-POWERED ISOTROPIC GENERATORS OF ACOUSTIC WAVES (SIGAW)***



The SIGAW Mayantoc Unit



SIGAW Mayantoc Unit Operation and Maintenance

***Leading Innovations, Transforming Lives  
Building the Nation***