| | PRIORITY PROGRAM ACCOUNTABILITY | | | | | | | |
|---|---|--|--|---|--|--------|--|--|
| | REPORT CARD (PPARC) | | | | | | | |
| | | PROJECT BUDGET | SERVICE/ PRODUCT RESULTS | | | | | |
| Department of Science and Technology | PRIORITY PROGRAMS | (FY 2014) in Million PhP | FY 2014 ACTUAL ACCOMPLISHMENTS | FY 2015 TARGETS/ MILESTONES | FY 2015 ACTUAL ACCOMPLISHMENTS | RATING | | |
| <i>y</i> , | Emergency Distribution of Hydrometeorological Devices in Hard-Hit Areas in the Philippines (HYDROMET) | | Completed the installation of the initial targeted 1,000 units (ARG and WLMS) Deployed all 212 additional devices to the DOST-Ross Installed 81 ARG and 10 WLMS out of the 212 additional devices | Complete installation of the additional 212 devices through the Deployment of Early Warning Systems (DEWS) project | Installed 156 ARG out of 174 targeted (89.7%) and 29 WLMS out of the targeted (76.3%) from additional 212 devices. The installation of the remaining devices from the additional 212 devices are being done under DEWS project | 83% | | |
| | | | Project 1: LIDAR and SAR Da | Project 1: LIDAR and SAR Data Acquisition | | | | |
| | | Acquired following Masbate, Negros Occident Leyte/Sa Siargao 1 Santos, I Leyte, S Samar Project 2 Digital El (DEM) Complet CDO, Ma Agno Riv Draft rep 13 other 13 other Project 3 Project 4 Project 4 Flood Mo HEC-RAS complete HEC-HMA complete Data Project 4 Project 4 CDO, Ma Calibratio | Acquired LIDAR data for the following: Albay, Sorsogon, Masbate, Iloilo, Antique, Negros Occidental/Hilabangan, Leyte/Samar, Dinagat and Siargao Islands, General Santos, Leyte-Southern Leyte, Samar, Northern Samar | LiDAR data acquisition for 18 floodplains and 4+ rivers (Infanta, Lucena, Boracay, Bohol) Cover additional rivers | LiDAR data acquired for 18 of 18 floodplains and 4+ rivers (Infanta, Lucena, Boracay, Bohol) SAR data acquired for all 18 watersheds Covered additional rivers | 100% | | |
| | | | Project 2: LIDAR and SAR Data Calibration and Validation | | | | | |
| DOST provides central direction, leadership, and coordination of scientific and technological efforts and ensures that the | Nationwide DREAM Program (3D LiDAR Mapping) | | Digital Elevation Model (DEM) Completed final reports for CDO, Mandulog, Iponan and Agno Rivers | Ground validation of 18 major rivers and 6+ sites | Completed ground validation of 18 major rivers and 6+ sites | 95% | | |
| | | | | Cross-section and profile of 18 sites Train 14 HEIs | Completed cross-sectioning and profiling of 18 sites Completed the training for | | | |
| | | | Draft reports prepared for 13 other rivers | Cross-section and bathymetry of additional rivers | Cross-sectioning and bathymetry of additional rivers | | | |
| from all geared | | | Project 3: Digital Elevation Models and Salient Features for Flooding Modeling | | | | | |
| and utilized in areas of maximum economic and social benefits for the people. | | | Initial processing of areas in addition to the 18 major river basin covering 29, 420 sq. km. | DEM and Orthophotos for 18 rivers and 4+ sites Feature extraction of 18 floodplains Attribution of 18 sites Pre-process LiDAR data | DEM and Orthophotos completed for 18 rivers and 4+ sites Completed feature extraction of 18 floodplains Completed attribution of 11 out of 18. The remaining 7 being outsourced Pre-processing of newly acquired LiDAR data of additional rivers | 92% | | |
| | | | Project 4: Integrating High Resolution Digital Elevation Models (DEMs) into GIS-based Flood Modelling | | | | | |
| | | | Flood Models: HEC-RAS= 13 (28/22 completed) | Completed real time channinundation models Completed real time channel inundation models Completed real time channel inundation models Discharge model for flood forecasting 3D maps can be produced using a software for visualization 53 forecast points with sensors distributed within the 18 major river basins and 4 additional basin | Completed real time channel inundation models Calibrated flood models for 18 major river basins and 4 additional rivers | 90% | | |
| | | | completed) 2D= 10 (28/21 completed) 20-30 meter resolution | | Produced and automated 2D flood hazard maps of 18 +4 major river basins | | | |
| | | | flood maps produced and distributed | | 3D maps can be produced using a software for visualization | | | |
| | | | | | 53 forecast points with sensors distributed within the 18 major river basins and 4 additional basin | | | |

| | PRIORITY PROGRAM ACCOUNTABILITY | | | | | | |
|---|--|-----------------------------|---|--|--|--------|--|
| | | | | | | | |
| | | PROGRAM/ PROJECT BUDGET | SERVICE/ PRODUCT RESULTS | | | | |
| Department of Science and Technology | PRIORITY PROGRAMS | (FY 2014) in Million PhP | FY 2014 ACTUAL ACCOMPLISHMENTS | FY 2015 TARGETS/ MILESTONES | FY 2015 ACTUAL ACCOMPLISHMENTS | RATING | |
| | | | Project 5: Training for LIDAR Acquisition and Flood Modeling | | | | |
| DOST provides central direction, leadership, and coordination of scientific and technological efforts and ensures that the results there from all geared and utilized in areas of maximum economic and social benefits for the people. | Nationwide DREAM Program (3D LiDAR Mapping) | | Conducted training and seminar/workshop on DREAM LIDAR Data applications and procedures Finalized 4 DREAM Training manuals which is for copyright application | Continuous training on LiDAR data applications Maintenance and updating of DREAM website | Training of 15 HEIs, LGUs, DOST Attached agencies, NGAs and Private Sector DREAM website updated and maintained | 100% | |
| | Enhancing Philippine Landslide Hazard Maps with LIDAR and High Resolution Imageries | | 36 landslide areas have been field inventoried 36 high resolution shallow landslide maps were field validated 33 high resolution alluvial fan maps were field validated 31 out of 33 high resolution debris flow maps were field validated 36 high resolution structurally controlled landslide maps were field validated | Complete the inventory, simulation and validation of 36 priority provinces Continuously monitor landslide susceptible areas | Completed inventory, simulation and validation of 36 priority provinces Continuous monitoring of landslide susceptible areas | 100% | |
| | Dynaslope & Senslope (Phase 2) | | Dynaslope: 4 out of 6 seminar-trainings conducted Provided weekly monitoring updates to communities and LGUs at the sites Conducted event-based monitoring work and alert release for sites in Benguet and Iloilo Senslope: First batch of sensors | Dynaslope: Identify 22 sites for landslide sensor Borehole drilling for installation of sensors in 38 sites Conduct 30 seminar training for communities and LGUs in deployment sites Organize 30 local landslide monitoring communities organized Senslope: Refine power circuits, | Dynaslope: 22 sites identified for landslide installation 24 of 38 sites drilled in preparation for landslide sensor installation 30 seminar training conducted to community monitors 30 LLMCs organized Senslope: Refine power circuits, | 91% | |
| | | | already delivered Design and specifications done and ready for bidding. Bid does for the second batch on preparation | sensors and packaging Manufacture landslide sensor system, data loggers and piezometer Installed 38 sensors onsite | sensors and packaging Manufacture landslide sensor system, data loggers and piezometer readout board for 25 sites delivered Installed landslide sensors for 25 out of 38 sensors onsite | 89% | |
| | System to Identify, Quantify and Map the Storm Surge Threat to Philippine Coasts | | Upgrading and updating of existing storm surge models resulted to automation of storm surge simulation using Japan Meteorological Agency (JMA) 63 out of 67 provinces were storm surge mapped | Field validation of 42 provinces Storm surge inundation maps of all coastal provinces in the Philippines | Field validation of 42 provinces Produced storm surge inundation maps of all coastal provinces in the Philippines | 100% | |

| | PRIORITY PROGRAM ACCOUNTABILITY REPORT CARD (P ^P ARC) | | | | | | |
|---|---|---|--|---|---|--------|--|
| | | PROGRAM/ PROJECT BUDGET (FY 2014) in Million PhP | OVERALL RESULTS ASSESSMENT | | | | |
| Department of Science and Technology | PRIORITY PROGRAMS | | FY 2014 ACTUAL ACCOMPLISHMENTS | FY 2015 TARGETS/ MILESTONES | FY 2015 ACTUAL ACCOMPLISHMENTS | RATING | |
| Technology DOST provides central direction, leadership, and coordination of scientific and technological efforts and ensures that the results there from all geared and utilized in areas of maximum economic and social benefits for the people. | Weather Information- Integration for System Enhancement (NOAH- WISE) | | 240% increase in spatial coverage for early detection of typhoons 28% increase in temporal range (from 5 days to 7 days) The output of NOAH WISE (7 day forecast is integrated in the NOAH website for the use of general public) Increase in the number of Automatic Weather Station that can be used for Data Assimilation and Forecast Validation at a real time (form 200 in May 2013 or 1,100 in November 2014) Using 75% of the BlueGene/P. WISE is able to generate 7-day forecast at 4 km resolution 4 times a day | 7 day forecast of 4-km spatial resolution covering the Philippine Area of Responsibility (PAR) Public access to text outputs, images and weather animations especially for researchers, NOAH components and PAGASA | 7 day forecast at 4km spatial resolution covering the Philippine Area of Responsibility (PAR) typhoon track and intensity The text outputs, images and weather animations are distributed through a public domain for consumption of researches, NOAH components and PAGASA | 100% | |
| | Disaster Management using Web-GIS | | Finalization of NOAH 2.0 website Launches the MOSES tablet at the PICC on June 30, 2014 Developed the tables in Marikina to test the usability and integrity of the units | Additional features for NOAH 2.0 website Launch and deploy 50 MOSES tablets | NOAH 2.0 website additional features are toggle draw and distance and area measurement Addition of WebSAFE impact assessment tool which calculates the minimum needs of a particular municipality in the event of a particular hazard | 100% | |