## Department of Science and Technology (DOST) Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD) List of 2018 Programs and Projects per Status of Implementation

Project Title	Implementing Agency	Beneficiaries
NEW PROJECTS		
ADMATEL Expansion and Business Continuity	Industrial Technology Development Institute (ITDI)	<ul> <li>Semiconductor &amp; electronics</li> <li>Automotive</li> <li>Aerospace</li> <li>Plastics</li> <li>Other manufacturing industries</li> <li>Oil and gas</li> <li>Academe/Universities</li> <li>Other government agencies</li> </ul>
DOST-JSPS: Development of Novel Materials as Emitters and Detectors for (Sub)-Terahertz Time-Domain Spectroscopy Carrier Dynamic Studies	UP Los Baños	Young Filipino Researchers
Application of Predictive Data Analytics on Multivariate Analysis of Methamphetamine-HCI Chemical Fingerprints	Industrial Technology Development Institute (ITDI)	<ul> <li>Law Enforcement Agencies (i.e. PDEA)</li> <li>Filipino individuals, families and society</li> </ul>
Fabrication of Metal Oxide Thin Films for Optical Coatings with Plasma Assisted Deposition Using a Plasma Enhanced Chemical Vapor Deposition (PECVD) System	UP Diliman	<ul> <li>Students of Ateneo de Manila University</li> <li>Interested parties in the industrial sector, primarily the sector engaged in optical materials such as lenses and optical filters</li> </ul>
Embedding of Functional Materials onto Paper for Antimicrobial and Electromagnetic Shielding Applications	UP Los Baños	<ul> <li>Household</li> <li>Communities</li> <li>Hospitals</li> <li>Offices/ institutions</li> <li>Industry</li> </ul>
Pulp-to-Print: Development of Print- Ready Cellulose Composites from Paper Mulberry	UP Diliman	Small and medium enterprises in the furniture and paper industries
Smart Plant Production in Controlled	I Environments (SPICE)	
SPICE Project 1: Standalone Urban Farm	UP Diliman	<ul> <li>Students, academicians, businessmen, policy-makers, farmers</li> <li>Urban developers, investors</li> <li>Local Government Units (LGU),</li> </ul>
SPICE Project 2: Sensor-based Monitoring and Analytics for Smart Hydroponics (SMASH)	UP Diliman	
SPICE Project 3: Establishment of Soilless Culture Technology for Urban Food Production	UP Diliman	<ul> <li>Non-Government Organizations (NGO)</li> <li>Consumers of vegetables and fruits</li> </ul>

Project Title	Implementing Agency	Beneficiaries	
SPICE Project 4: Ex-Situ Conservation through Micropropagation Cryopreservation of Native Plant Species	UP Diliman		
Generalized Automated Microfluidics and Micro-actuator Assembly (GAMMA)	UP Diliman	<ul><li>Chemical industry</li><li>Pharmaceuticals</li></ul>	
Electrochemical and Quantum Mechanical Investigation of Various Small Molecule Organic Compounds as Corrosion Inhibitors in Mild Steel	De La Salle University (DLSU)	<ul> <li>Industry</li> <li>Society and Environment</li> <li>Undergraduate/ Research students</li> </ul>	
Environmental, Health and Safety Research in the Risk Assessment of Nanomaterials (Phase 1)	Industrial Technology Development Institute (ITDI)	<ul> <li>Manufacturers</li> <li>End-users of nanotechnology - based materials and products</li> </ul>	
Development of a Passive Neutron Spectrometry System	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Philippine Nuclear Research Institute (PNRI)</li> <li>Academic Institutions</li> <li>Personnel working with neutron sources</li> </ul>	
Development of Error Resilient Joint Source-Channel Wireless Video Transmission System for High Efficiency Video Coding (HEVC) Standards over Wireless Channel	University of Santo Tomas (UST)	<ul> <li>Mobile phone users</li> <li>Video coding policy makers such as VCEG (Video Coding Expert Group) or MPEG (Moving Picture Expert Group)</li> <li>Researchers in the field of video coding and video transmission</li> </ul>	
Enhancing Man-Machine Interaction through Intelligent Conversational Agents	De La Salle University (DLSU)	<ul> <li>Health practitioners and patients in Healthcare counseling</li> <li>Mentors and learners in Language and literacy education</li> <li>Other service-driven sectors who may utilize conversational agents</li> </ul>	
Original Content Development Project	Toon City Academy	Philippines' animation community	
Bomb Removal Automated Vehicle (BRAVE)	De La Salle University (DLSU)	<ul> <li>Philippine National Police (PNP)</li> <li>Armed Forces of the Philippines (AFP)</li> <li>Local Government Units (LGU)</li> <li>Institutions, Communities, and</li> </ul>	
		General public	
EPDC as Platform for Innovation and Collaboration (EPIC)			
Project 1. Electronics Product Development Center Upgrade and Operation	Advanced Science and Technology Institute (ASTI)	<ul> <li>Electronics companies and other members of the supply chain</li> <li>Academic and other training institutions</li> <li>Engineering associations</li> <li>Government institutions</li> <li>Venture capitalists, SMEs</li> <li>Original Equipment Manufacturers (OEMs), Original Design Manufacturers (ODMs), Resellers</li> </ul>	

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		Independent designers
Project 2. Electronics Product Inclusive Innovation Center (EPIIC)	Advanced Science and Technology Institute (ASTI)	<ul> <li>Electronics companies and other members of the supply chain</li> <li>Higher Education institutions (HEIs)</li> <li>Venture capitalists, Small and Medium Enterprises (SMEs), and Inventors</li> </ul>
Development of a Philippine Music Instrument Sample Database of Isolated Note	UP Diliman	<ul> <li>Philippine Music Industry</li> <li>Indigenous People (IP)</li> <li>The Academe</li> </ul>
NovaSAR Imaging Capacity Share Pi	ogramme	
Synthetic Aperture Radar (SAR) and Automatic Identification System (AIS) for Innovative Terrestrial Monitoring and Maritime Surveillance	Advanced Science and Technology Institute (ASTI)	<ul> <li>Office of the President         <ul> <li>Climate Change Commission (CCC)</li> <li>National Irrigation Authority (NIA)</li> </ul> </li> <li>Department of Science and         Technology (DOST)         <ul> <li>Advanced Science and Technology                 Institute (ASTI)</li> <li>Philippine Institute of Volcanology and                 Seismology (PHIVOLCS)</li> <li>Philippine Atmospheric, Geophysical, and                 Astronomical Services Administration                 (PAGASA)</li> </ul> </li> <li>Department of Environment and         Natural Resources (DENR)         <ul> <li>National Mapping and Resource                 Information Authority (NAMRIA)</li> <li>Mines and Geosciences Bureau (MGB)</li> <li>Ecosystems Research and Development                 Bureau Forest Management Bureau                       (ERDB)</li> <li>Environmental Management Bureau (EMB)</li>                       Biodiversity Management Bureau (BMB)</ul></li>                      Laguna Lake Development Authority                      (LLDA) </ul> <li>Department of Agriculture (DA)         <ul> <li>Sugar Regulatory Administration (SRA)</li>                      Bureau of Fisheries and Aquatic Resources                              (BFAR)</ul></li> Sugar Regulatory Administration (SRA)                     Bureau of Agricultural Research (BAR)                            Philippine Rice Research Institute (PRRI)
Niche Center on Environmental Informatics in Central Visayas Program (NICER Program)	UP Cebu	<ul> <li>Department of Agriculture (DA)</li> <li>Department of Environment and Natural Resources (DENR)</li> <li>Mango entrepreneurs</li> <li>Regional Development Council 7</li> <li>Central Visayas Local Government Units</li> <li>ICT Sector</li> <li>Academe</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Flood Risk Assessment for Mitigation and Effective Response (FRAMER) of Riverine Towns in Selected River Basins in Cavite, Batangas, and Quezon Provinces using Most Recent LiDAR DEM	Mapua Institute of Technology (MIT)	<ul> <li>Local Government Units (LGU)</li> <li>Citizens</li> </ul>
Geospatial Monitoring System for High	gh Value Projects funded	by DBM Program
Project 1. Geospatial Monitoring System for National Greening Program (NGP)	UP Diliman	Department of Budget and Management (DBM)
Project 2. Geospatial Monitoring System for National and Communal Irrigation Systems (NCIS)	UP Diliman	Department of Budget and Management (DBM)
Metro Manila Transportation Network: Big Data Analytics and Applications (MMTN:BDAA)	De La Salle University (DLSU)	<ul> <li>Department of Transportation (DoTR)</li> <li>Department of Public Works and Highways (DPWH)</li> <li>Department of Interior and Local Government (DILG)</li> </ul>
Prototype Development of Severe Weather Amphibious Navigator Using Local Abaca Composites	Wesleyan University of the Philippines (WUP)	Households in Region 3 who are affected by floods and typhoons
Development of a hybrid trimaran fast craft passenger cargo vessel using multi engine and alternative energy source from ocean waves	Aklan State University (ASU)	<ul> <li>Maritime Industry including investors and shipbuilders</li> <li>Transportation sector</li> <li>Environmental sector</li> <li>Local Community</li> <li>The University</li> </ul>
Performance Testing and Evaluation of Prototype Trainset Y2	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Philippine National Railways (PNR)</li> <li>Light Rail Transit Authority (LRTA),</li> <li>Manila Metro Rail Transit and Northrail Project</li> </ul>
AGT UP End of Project	Metals Industry Research and Development Center (MIRDC)	
Formulation of a Settlements Development Model in New Growth Areas in the Philippines	UP Diliman	Residents living along the 3-meter easement of eight waterways in Metro Manila
CATfish: A Modular Mini-Autonomous, Underwater Vehicle (AUV) initially submitted as (Remotely operated underwater vehicle (ROV-One))	UP Diliman	<ul> <li>Environmental and hazards monitoring</li> <li>Researchers</li> <li>Aquaculture</li> <li>Security</li> <li>Industry</li> <li>Hobby</li> </ul>
A Dispersive Long-Wave Model for Predicting Coastal Flooding due to Storm Surges and Surface Waves in Manila Bay	Philippine Atmospheric, Geophysical and Astronomical Services	<ul> <li>Philippine Navy</li> <li>Philippine Ports Authority (PPA)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
	Administration (PAGASA)	<ul> <li>Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)</li> <li>Philippine Coast Guard (PCG)</li> <li>National Disaster Risk Reduction Management Council (NDRRMC)</li> <li>Manila International Container Terminal (MICT)</li> <li>International Container Terminal Services (ICTS)</li> </ul>
Investigation and numerical modeling of Philippine tsunamis based on historical, geomorphological and geological evidence of past earthquakes	UP Diliman	<ul> <li>Local Government Units (LGUs)</li> <li>Research Institutes</li> <li>Armed Forces of the Philippines (AFP)</li> <li>Philippine Coast Guard (PCG)</li> <li>National Mapping and Resource Information Authority (NAMRIA)</li> <li>Mines and Geosciences Bureau (MGB)</li> </ul>
Optimization of the Operational Capabilities of Hydromet Sensors in Line with International Standards (WMO Standards) for Effective Weather, Flood Warning (CBFEWS) and Application to Research Analyzing CORDEX - SEA Regional O	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	<ul> <li>Flood-prone communities</li> <li>Hydrometeorologists, climatologists, and other researchers</li> <li>Farmers</li> <li>Private industry</li> <li>Local Government Units</li> <li>Other concerned Government Agencies</li> </ul>
Philippines: SST Influence, Variabilit		
Analysis of the Influence of Sea Surface Temperature Representation in Downscaled Regional Climate Using the SEACLID/CORDEX – Southeast Asia Simulations	Manila Observatory	Scientists and practitioners that need to understand the ability of regional climate models
Multitemporal and Extremes Analysis of Modeled Climatology over the Philippines in the SEA CORDEX Domain	Manila Observatory	<ul> <li>Scientists</li> <li>Researchers</li> <li>Academics</li> <li>Stakeholders</li> <li>that need information on climate variability</li> </ul>
Detecting Tropical Cyclones in a Downscaled Regional Climate Model for CORDEX – SEA	Manila Observatory	<ul> <li>Scientists</li> <li>Researchers</li> <li>Academics</li> <li>Stakeholders</li> </ul>
Geospatial Information Management & Analysis Project for Hazards & Risk Assessment in the Philippines (Georisk PH)	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	<ul> <li>Local Government Units (LGUs)</li> <li>Civil defense institutions</li> <li>Planners</li> <li>Local and International researchers</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		General Public
Development of Earthquake Intensity Monitoring System	Mapua Institute of Technology (MIT)	Philippine Institute of Volcanology and Seismology (PHIVOLCS)
Development of Philippine Structural Integrity Monitoring System for Critical Infrastructures in Metro Manila (PhilSIMS Phase 1)	Mapua Institute of Technology (MIT)	<ul> <li>Department of Public Works and Highways – Bureau of Design (DPWH-BOD)</li> <li>Officials of Local Government Units (LGUs)</li> <li>Building owners</li> <li>Civil/structural engineers</li> </ul>
Micro Grid Solar PV System	Ateneo De Davao University (ADDU)	Local community in Manurigao, New Bataan, Compostella Valley
Techno - Economic Feasibility Study of Micro-Grid in a Remote Community	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	<ul> <li>Local people in a sitio in Rogongon, lligan City and of other remote rural communities</li> <li>Graduate and Undergraduate students who will improve their research capabilities in line with Micro-grid Development, Optimal Operation and Sustainable Management</li> <li>Local personnel and interested stakeholders</li> </ul>
Establishing a 25-kW Waste-to- Energy Facility Using a Direct Combustion Process for Municipal Solid Waste: A Technical, Economic and Environmental Studies	UP Los Baños	<ul> <li>Policy makers</li> <li>Government institutions</li> <li>Law makers</li> <li>Energy sector in the Philippines</li> </ul>
Establishment of an Additive Manufacturing Research Laboratory	Bataan Peninsula State University (BPSU)	<ul> <li>Philippine Government</li> <li>Central Luzon Region</li> <li>Local communities</li> <li>Industries/Research Institutions</li> <li>Researchers</li> </ul>
Establishment of the University of San Carlos Center for Advanced Computational Modelling and Simulation (CACoMS)	University of San Carlos (USC)	<ul> <li>Students undertaking research on computational material and other related fields</li> <li>Scientists/researchers in the field of computational materials research and other related fields</li> <li>Universities/colleges in the Visayas with no capability of undertaking advanced computational research</li> <li>Industries and research facilities developing new materials and other energy harvesting materials</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Professionals who will undergo training-workshops in the field of computational science</li> </ul>
Establishment of a Wind Turbine Development and Testing Laboratory	Central Philippines University (CPU)	<ul> <li>Central Philippines University (CPU)</li> <li>Researchers (faculty, students, and private individuals)</li> <li>Engineers</li> <li>Equipment fabricators</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> </ul>
Acquisition of Laboratory Equipment in Support of the facility for Nanotechnology R&D in Central Luzon State University	Central Luzon State University (CLSU)	<ul> <li>Farmers</li> <li>Fisherfolks</li> <li>Students</li> <li>Faculty and staff researchers</li> <li>Scientists</li> <li>Other SUCs</li> <li>Extension workers</li> <li>Communities</li> <li>Consumers</li> </ul>
Sustainable Wastewater Treatment Systems with Nutrient (SWAN) Recovery	De La Salle University (DLSU)	<ul> <li>Department of Environment and Natural Resources (DENR)</li> <li>Department of Science and Technology (DOST)</li> <li>Wastewater Utility Agencies</li> </ul>
Characterization of Tailings and Monitoring of the Integrated Gold- Copper Mineral Processing Pilot Plant in Benguet	DOST Region CAR	<ul> <li>Small-scale Mining (SSM) Industry</li> <li>SSM operators in Benguet, and Academic Institutions</li> <li>SSM Mining Communities and Associations in Benguet</li> </ul>
MECO-TECO Program		
Development of Titanium Dioxide Films and its Derivatives for Semiconductor Mediated Photocatalytic Treatment of Water	UP Diliman	<ul> <li>Students and researchers who work on photocatalytic materials for environmental applications</li> <li>General Public</li> <li>Environment</li> </ul>
Multi-platform and Cross-Sensor Water Quality Monitoring	UP Diliman	<ul> <li>National government agencies</li> <li>Laguna Lake Development Authority (LLDA)</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> <li>Academe</li> </ul>
Electromagnetic Radar Technique for Water Detection	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	<ul> <li>Masteral Engineering Research and Development for Technology (ERDT) scholars</li> <li>Local Geodetic Engineers</li> <li>Local Government Units (LGUs)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Other academic and research institutions</li> </ul>
Master of Research and Developmen	t Management	
Project 1. Curriculum Development for the Master of Research and Development Management Project 2. Course Material Development for the Master of	UP Open University UP Open University	Incumbent and potential research managers from the present researchers, scientists, engineers, and other research practitioners
Research and Development Management		
Wastewater Treatment System Upgra	ading Program (WATSUP)	
Enhancing the Applicability of Vertical Helophyte Filter Systems for Small Communities, Local MSMEs and Public Entity	DOST Region XI	<ul> <li>Bankerohan Livestock Multipurpose Cooperative</li> <li>National Meat Inspection Service (NMIS)</li> <li>Poultry industry</li> <li>Local MSMEs and small communities</li> <li>Department of Environment and Natural Resources — Environmental Management Bureau (DENR — EMB)</li> </ul>
Support to the Rehabilitation of Boracay Island Through the Upgrading of Material Recovery Facilities (MRFs) - Phase I	DOST Region VI	LGU Malay specifically the MRFs of Barangay Yapak, Manoc-manoc, and Balabag
Food Manufacturing: Establishment	of Halal Assurance Syster	ns for Food
Establishment of Halal Assurance System for Processing Selected Banana Products (Banana Chips, Banana Catsup, and Frozen "Saba" Banana)	Industrial Technology Development Institute (ITDI)	<ul> <li>Food Manufacturers/ Processors</li> <li>Halal Food Consumers</li> <li>Halal Food trade organizations/association and academic Institution</li> </ul>
Establishment of Halal Assurance System for Bakery Products	Industrial Technology Development Institute (ITDI)	Small and Medium Enterprises (SMEs) particularly the Halal bakery industry
Establishment of Halal Assurance System for Production, Method Development and Standardization of Cosmetics and Toiletries	Industrial Technology Development Institute (ITDI)	<ul> <li>Philippine Halal Industry</li> <li>Philippine toiletries industry</li> <li>Policy makers</li> <li>Farmers/Raw Materials /Natural Ingredients Suppliers</li> </ul>
Establishment of Halal Assurance System for Muslim Delicacies and Processing Techniques	Sultan Kudarat State University (SKSU)	Philippine Halal Industry
Development of Regional Halal Native Delicacies	Mindanao Autonomous College Foundation, Inc. (MACFI)	Local food processors, producers and enterprises in Maguindanao, Lanao del Sur, Basilan, Sulu and Tawi-tawi

Project Title	Implementing Agency	Beneficiaries
		engaged in producing and selling native delicacies
Technical Guidelines Development for Minimally Processed Halal Chicken and Chicken By-Products (Edible Giblets)	Industrial Technology Development Institute (ITDI)	<ul> <li>Poultry Industry</li> <li>Halal Food Service Industry Halal Food Manufacturing Industry</li> <li>Halal Food Consumers</li> </ul>
Development of Emulsified Meat Products (Sausage, Nuggets, and Burgers)	Industrial Technology Development Institute (ITDI) with University of Southern Mindanao (USM)	<ul> <li>Academe</li> <li>Halal Food Service Industry</li> <li>Halal Food Manufacturing Industry</li> <li>Halal Food Consumers</li> </ul>
Operationalization of Halal Verification Laboratories (HVLs) of DOST Regions CALABARZON, 11, 12, and ARMM in Support to Halal Assurance Systems	DOST Region IV-A with DOST Regional Offices 11, 12, and ARMM	<ul> <li>Halal industry (local and export)</li> <li>Researchers</li> <li>Students</li> </ul>
Human Resource Development of Ha		
Training Needs Assessment and Development and Deployment of Training Modules on Halal	DOST Region XI	<ul> <li>Halal export industry; accreditation, certifying bodies and regulatory bodies)</li> <li>Halal food processors, service providers and policy makers</li> <li>Public, professionals, and industry</li> </ul>
Curriculum Development and Offering on Halal Science and Scholarship for SUC Faculty on Halal Science	University of Southern Mindanao (USM) with Sultan Kudarat State University (SKSU) and Central Mindanao University (CMU)	
Integrated Food Safety Program		
Prevalence of Mycotoxin in Rice and Corn in the Philippines	Food Development Center - National Food Authority	<ul> <li>National Food Authority (NFA) and other concerned agencies such as Food and Nutrition Research Institute (FNRI)</li> <li>Local farmers</li> <li>Other researchers from the academe, private sector and/or other government agencies</li> </ul>
Prevalence of Heavy Metals and Pesticide Residues in Milled Rice and White Corn Grits in the Philippines	Food Development Center - National Food Authority	

Project Title	Implementing Agency	Beneficiaries
Development of Food Safety Guidelines for the Food Service Sectors	Food and Nutrition Research Institute (FNRI)	<ul><li>Food Establishments</li><li>General Population</li></ul>
Development of Grading System for Adoption of Food Establishments in the Philippines	Food and Nutrition Research Institute (FNRI)	<ul> <li>Owners/operators/food handlers of food establishments</li> <li>LGUs/food inspectors and clients/customers</li> </ul>
DOST Food Safety Human Resource Development Project	DOST Region IV-A	<ul> <li>DOST Food Safety Team members</li> <li>Researchers</li> <li>Specialists</li> <li>Lab analysts</li> </ul>
Design and Improvement of Gong Fabrication Processes Through S&T Intervention	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Gong Makers of the Bedbed Senior Citizens Association of Mankayan, Benguet</li> <li>The Local Government Unit of Mankayan, Benguet</li> </ul>
Metrology and PDEA: Correct Quantity, Right Decision	Industrial Technology Development Institute (ITDI)	Philippine Drug Enforcement Agency (PDEA)
Technical and Economic Feasibility Study to Determine the Most Suitable Ironmaking Technology for Value- Adding of Philippine Magnetite Resources	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Iron ore mining, processing companies and surrounding community</li> <li>Coal and natural gas mining and processing companies</li> <li>Magnetite-rich local communities</li> <li>Iron and steel foundry and other metals and engineering industry</li> </ul>
Coal Ash as a Resource of Rare Earth and Strategic Elements in the Philippines: Amenability to Metallurgical Processing	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	<ul> <li>Researchers and graduate students of the Department of Ceramics, Metallurgical and Mining Engineering and College of Engineering</li> <li>Coal-Fired Power Plants and Cement Companies</li> <li>Department of Environment and Natural Resources – Mines and Geosciences Bureau (DENR – MGB)</li> <li>Department of Energy (DOE)</li> </ul>
Geopolymerization and its Potential Application in Artisanal Gold Mine Tailings Stabilization	Central Mindanao University (CMU)	<ul> <li>Small scale mining industry</li> <li>Local communities</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> <li>National Government Agencies (NGAs)</li> </ul>
3R Approach to Sustainable Manage	ment of Nickel Laterite Or	e Mining

Project Title	Implementing Agency	Beneficiaries
Utilization of Nickel Laterite Ore rock (low grade) for various applications: Acid Mine Drainage treatment and Carbon Sequestration	De La Salle University (DLSU)	<ul> <li>Nickel mining industry</li> <li>Local communities</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> <li>National Government Agencies (NGAs)</li> </ul>
Recycling and reprocessing of siltation sediments from selected nickel laterite mining areas in the Philippines as raw materials for the synthesis of iron-based novel adsorbents	Central Mindanao University (CMU)	<ul> <li>Nickel mining industry</li> <li>Local communities</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> <li>National Government Agencies (NGAs)</li> </ul>
Recovery of Nanominerals from Silt for Various Ceramic Applications	Central Mindanao University (CMU)	<ul> <li>Affected local communities</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> <li>National Government Agencies (NGAs)</li> </ul>
Recycling of silt and spent residue from reprocessing as raw materials for geopolymer composite	Central Mindanao University (CMU)	<ul> <li>Nickel mining industry</li> <li>Local communities</li> <li>Local Government Units (LGUs)</li> <li>Non-Government Organizations (NGOs)</li> <li>National Government Agencies (NGAs)</li> </ul>
Pilot Scale Production of Nickel Pig Iron from Low Grade Laterite Ores	Mines and Geosciences Bureau (MGB)	<ul> <li>Mineral sector/mining public</li> <li>Companies involved in direct shipping Laterite Ores arrangement</li> <li>Foundries</li> </ul>
Laboratory Scale Continuous Extraction System for the Recovery of Uranium from Philippine Wet Phosphoric Acid	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Fertilizer industry</li> <li>Mining &amp; minerals extraction industry</li> <li>Energy sector</li> <li>Other private industries</li> <li>General public</li> </ul>
Extraction of Radionuclides Rare Earths, and other Valuable Industrial Elements from Phosphogypsum Tailings	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Philippine Government</li> <li>Fertilizer industry</li> <li>Mining sector</li> <li>Agricultural sector</li> <li>Environment sector</li> <li>Health sector</li> <li>General Public</li> </ul>
Establishment of the PTRI "Perfect Fit" Textile Product Development Center	Philippine Textile Research Insitute (PTRI)	<ul> <li>Philippine textile and garment industry</li> <li>Ms. Patrice Ramos-Diaz</li> <li>Retailer/Manufacturer Power Fashion Inc. (PFI)</li> <li>Uniform Manufacturer</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		• Kingsmen
Establishment of Regional Yarn Production and Innovation Center	Philippine Textile Research Insitute (PTRI)	<ul> <li>MSME's involved in handloom weaving</li> <li>Garment manufacturers who are engaged into the utilization of natural materials available in the Philippines</li> </ul>
Utilization of Spent Tea Leaves and Tobacco Dusts as Additives for Plywood Adhesives	Forest Products Research and Development Institute (FPRDI)	<ul> <li>Tea-flavored drink producers/generators of spent tea leaves</li> <li>Tobacco farmers generating tobacco stalks as waste</li> <li>National Tobacco Administration</li> <li>Resin/adhesives manufacturer</li> <li>Plywood industry and allied industry (furniture &amp; handicraft utilizing plywood as raw materials)</li> <li>General public</li> </ul>
Production of Ready-to-Buy (RTB) Natural Textiles and Dyes in Support of Increasing Utilization of Local and Indigenous Philippine Textile	Philippine Textile Research Insitute (PTRI)	<ul> <li>MSME's involved in handloom weaving</li> <li>Garment manufacturers who are engaged into the utilization of natural materials available in the Philippines</li> </ul>
Tabang MARAWI (Malnutrition Alleviation and Health Restoration through After- WarInterventions)	Food and Nutrition Research Institute (FNRI)	<ul> <li>Children six (6) months to below three (3) years old in evacuation centers in Iligan City and Cagayan de Oro City</li> <li>Community workers and program implementers</li> </ul>
Nutrition Intervention Model in Time	of Man-Made Calamities –	
Project 1. Production of Nutritional Food Products for Conflict Stricken Areas	Food and Nutrition Research Institute (FNRI)	Distressed victim of man-made calamities
Project 2. Implementation of GarNESupp (Gardening, Nutrition Education, Supplementary Feeding) Model in Conflict-stricken area (Marawi)	Food and Nutrition Research Institute (FNRI)	<ul> <li>Distressed Marawi Residents</li> <li>Victims of Marawi Seige</li> </ul>
Detection of Adulteration in Philippine Honey using Carbon-13 Isotope Analysis	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Honey producers</li> <li>Consumers</li> <li>Regulatory bodies</li> <li>Researchers</li> <li>Academe</li> </ul>
Jumpstarting the Enterprise Virtual Reality Ecosystem in the Philippines	MATA VR	Philippine creative and manufacturing industry
Development of an Enhanced Radio Frequency Mesh Network to Track and Monitor Boats at Sea using FAME Transponders	Futuristic Aviation and Maritime Enterprise, Inc. (FAME)	<ul> <li>Sabang Port/ Cooperative</li> <li>Honda Bay/ Palawan Bay/ Cooperative</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Palawan International Technology Business Incubator</li> </ul>
Enhancement, Field Validation and Market Readiness Detection of of DNA-based Nanobiosensor for the E. coli, E. coli 0157:H7 and Salmonella enterica in Food, Feed and Farm Produce	National Institute of Molecular Biology and Biotechnology (NIMBB)	<ul> <li>Animal Feeds Standard Division</li> <li>Philippine Chamber of Food Manufacturers</li> <li>Water Service Providers</li> <li>Farming Industry</li> <li>Testing laboratories</li> <li>University Research Centers</li> <li>Government Agencies</li> <li>Private Hospitals in Metro Manila</li> </ul>
Development of Data Analytics, Big Data and Artificial Intelligence to Build a Smart Restaurant Management Platform (STARTUP)	Restograph Inc.	Restaurant Owners and Managers
Enhancement of Prototype and Assessment of Product Marketability of Machibox (a robotics kit for STEM- based learning)	MachiBox Inc.	Public Grade School Students of • Sitio Target, Pampanga • Cavinti, Laguna
CONDAMA & EEMA - Artificial Intelligence Vision System for Retail Analytics	UP Diliman	<ul> <li>Filipino retail businesses</li> <li>Fast Moving Consumer Goods (FMCG) companies</li> <li>Retail stores</li> </ul>
Rurok Bikes: Variable Geometry and Efficient Suspension Pedalling Platform	Rurok Industries	Performance bicycle consumers, enthusiasts, hobbyists, and professionals
Prototype Development of Semi- Automated Foam Shredder Equipment (TECHNICOM)	Holy Angel University	<ul> <li>Pampanga Furniture Industry Foundation</li> <li>Furniture makers from Manila, Cebu and Davao</li> </ul>
Development of an Alternative Credit Scoring Model applying Machine Learning in Financing Farmers	Cropital Enterprises Corporation	Smallholder Farmers
Establishment of the Technology Management System of the University of the Philippines Cebu	UP Cebu	<ul> <li>Researchers</li> <li>Students</li> <li>TBI incubates</li> <li>Shared service providers</li> <li>Business and industry sector</li> <li>Government institutions and agencies</li> <li>Local community</li> </ul>
Enhancement of K-12 Grading System towards Intelligent Computing Environment Through Wela School System Innovations (Responsive Monitoring System for Educational Institution)	Wela School System	Private K-12 Schools in Metro Cebu City
Enhancement of the Micab Cab Hailing Engine thru Big Data Analytics	Micabsystems Corp.	<ul><li>Taxi Drivers</li><li>Passengers</li></ul>

Project Title	Implementing Agency	Beneficiaries
		General Public
Integration of Data Science and Scaling Up of Payruler, a comprehensive Human Resource Management System (HRMS)	Genii Hut Technologies Corporation	<ul> <li>Almost all segments of industries from brick and mortar to professional services, to CFMGs and even government</li> <li>Medium to Large-sized enterprises</li> </ul>
Integrated Parking Management System (iPark)	Tekno Logika Pilipinas, Inc.	<ul> <li>Shopping Malls</li> <li>Hospitals</li> <li>Commercial centers</li> <li>Schools</li> </ul>
Development of Data Analytics-Ready Info Unified System (DARIUS) for Agile Delivery of Regional Services	DOST Region IV-A	<ul> <li>DOST Regional Offices</li> <li>DOST Central Office DOST Executives</li> <li>DOST RO customers and partners (MSMEs, LGUs, startups, Government Agencies)</li> <li>DOST - PCIEERD</li> </ul>
Science on the Move and Science Works: Enhancing the Interest of Students in Geographically - Isolated and Depressed Areas (GIDA)	Philippine Foundation for Science and Technology (PFST)	Grades 4 to 10 students of selected GIDA public schools
Development of a Philippine Indigenous Instrument Sounds Database	UP Diliman	<ul> <li>Philippine Music Industry</li> <li>Indigenous people</li> <li>Academe</li> </ul>
Beta Testing of Biotechnology Kits for STEM Education	Kinovette Scientific Solutions Co.	K-12 Schools     Students
Development of a Social Media Listening Tool for Filipino	Senti Techlabs Inc.	
Filipinnovation Entrepreneurship Corps: Enabling Researchers to Assess Commercial and Societal Value of their Research	De La Salle University (DLSU)	Researchers of DOST – funded researches
Mobile Application Venture Capital Competition	DOST Region VII	Student groups/firms that participate in Mobile Application Venture Capital (MAVC) 2
Development, Standardization, and Characterization Studies of Tupig with Ube, Bukayo, and Bibingka-Region I Native Delicacies	Pangasinan State University (PSU)	Food processors and small entrepreneurs of Pangasinan producing Tupig, bukayo, bitso-bitso, puto, bibingka, and latik
Intellect: Intelligent Electric Transpor		
Project 1. EmoCION: Electric Mobility and Charging Infrastructure Operating as a Network	UP Diliman	<ul> <li>University campuses</li> <li>Government complexes</li> <li>Science and technology parks</li> <li>Tourist spots</li> <li>Protected areas</li> </ul>
Project 2. Ad-hoc Vehicle- Infrastructure Cooperative Environment	UP Diliman	<ul> <li>UP Administration</li> <li>Business Sectors located in metropolitan business areas</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Project 3. E-trike Deployment and Utilization Study	Cagayan State University (CSU)	<ul> <li>Commuters/employees working within the government center</li> <li>Clients who are transacting business with all the offices in the government center</li> </ul>
Geospatial Assessment and Modelling of Urban Heat Islands in Philippine Cities (GUHEAT)	UP Diliman	<ul> <li>Metro Manila cities</li> <li>Cities adjacent to and near Metro Manila</li> <li>Cagayan de Oro City</li> <li>Zamboanga City</li> <li>Metro Cebu</li> <li>Davao City</li> <li>Bacolod City</li> <li>Baguio City</li> </ul>
Establishment of ISO17034:2016 Quality Management System and Development of Fish Reference for Proximate, Minerals and Cholesterol Analysis	Food and Nutrition Research Institute (FNRI)	<ul> <li>DOST Regional Standards and Testing Laboratories (RSTLs) and Research and Development Institutes (RDIs)</li> <li>Small and medium scale (SMS) food industries</li> <li>Local and regional food testing laboratories that are participants of Proficiency Testings (PTs) and/or users of Reference Materials (RMs)</li> <li>Local accreditation body (Public Attorney's Office (PAO), Department of Trade and Industry (DTI)) which gives 3<sup>rd</sup> party ISO/IEC 17025:2005 accreditation</li> <li>Commercial testing laboratories providing the analytical services</li> <li>Local recognition bodies which give 2<sup>nd</sup> party accreditation namely: Food and Drug Administration (FDA) and the Department of Health (DOH)</li> </ul>
Design Review, Design Finalization, and Production Assessment of a Locally Fabricated Optical Aerosol Monitor	UP Diliman	<ul> <li>Academe</li> <li>Private institutions</li> <li>Commercial entities</li> <li>Government agencies</li> <li>Non-government organizations</li> </ul>
Establishing an Environment-Friendly Chromium Plating Process Using Generation Ionic Liquids	UP Diliman	<ul> <li>Academe (Science and Engineering (materials and metallurgical)</li> <li>Courses in engineering schools</li> <li>UP, Ateneo, Mapua, and Iligan Institute of Technology)</li> <li>Government Research Institutions (i.e. MIRDC)</li> <li>Plating Industries in the Philippines</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Liquefaction Hazard Assessment for Resilient Schools in GMMA: A Liquefaction Probabilistic Model using Non-Invasive Geophysical Techniques and Limited Probe Hole	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	DepEd school buildings within the liquefaction susceptible areas identified as coastal municipalities in Metro Manila, Bulacan, and Cavite
Establishment of a Solar Photovoltaic Testing Laboratory	UP Diliman	Energy sector
PH UK Newton Agham Joint Coopera	-	anding the Impacts of
Hydrometeorological Hazards in Sou Catchment Susceptibility to Hydrometeorological Events: Sediment Flux and Geomorphic Change as Drivers of Flood Risk in the Philippines	UP Diliman	<ul> <li>Department of Environment and Natural Resources - Mines and Geosciences Bureau (DENR - MGB),</li> <li>Department of Public Works and Highways (DPWH)</li> <li>City of Ilagan</li> <li>Municipality of Vintar</li> <li>River Basin Control Office (DENR- RBCO)</li> <li>National Institute of Geological Sciences (NIGS), UP Diliman</li> <li>Marine Science Institute (MSI),UP Diliman</li> <li>Department of Geodetic Engineering &amp; Training Centre for Applied Geodesy and Photogrammetry (TCAGP), UP Diliman</li> <li>Institute of Environmental Science &amp; Meteorology (IESM), UP Diliman</li> <li>Department of Science and Technology - Philippine Atmospheric Geophysical &amp; Astronomical Services Administration (DOST- PAGASA)</li> <li>National Disaster Risk Reduction and Management Centre (NDRRMC)</li> <li>Department of Environment and Natural Resources - Environmental Management Bureau (DENR-EMB)</li> <li>Geoscience Foundation Inc</li> <li>Metro Pacific Investment Corporation</li> <li>Primewater</li> </ul>
Philippines – Quantitative Lahar Impact and Loss Assessment under Changing Land Use and Climate Scenarios	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	Department of Science and Technology - Philippine Institute of Volcanology and Seismology (DOST - PHIVOLCS)

Project Title	Implementing Agency	Beneficiaries
Philippines Groundwater Outlook (PhiGO)	Ateneo De Manila University (ADMU)	<ul> <li>Filipino water industries</li> <li>Government agencies</li> <li>Local Government Units (LGUs)</li> </ul>
Simulating Catastrophic Rainfall- triggered Landslides and Related Sedimentation in the Philippines (SCaRP)	Mapua Institute of Technology (MIT)	<ul> <li>Department of Science and Technology - Philippine Atmospheric, Geophysical, and Astronomical Services Administration (DOST – PAGASA)</li> <li>National Water Resources Board (NWRB)</li> <li>Mines and Geosciences Bureau (MGB)</li> <li>Weather Philippines Foundation (WPF)</li> <li>General Public</li> </ul>
Upgrading the PNS for Virgin Cocon	ut Oil (VCO) and the Philip	
Project 1. Physico-chemical factors which affect the quality of VCO	Ateneo De Manila University (ADMU)	
Project 2. Investigation of the microbiological factors which affect the quality of VCO	Ateneo De Manila University (ADMU)	<ul> <li>SME sector of VCO industry</li> <li>Coconut farmers</li> <li>VCO exporters and local traders</li> </ul>
Project 3. Investigation of factors affecting the sensory properties and acceptability of VCO	UP Diliman	
Project 4. Assessment of VCO Production: GMP and HACCP	Ateneo De Manila University (ADMU)	
Project 5. Water Activity and Percent Moisture: Effect on VCO Stability	Ateneo De Manila University (ADMU)	
Technology and Market Validation for Universal Structural Health Evaluation and Recording (USHER) System	Mapua Institute of Technology (MIT)	<ul><li>Building officials</li><li>Structural Engineers</li></ul>
CATCH-ALL: Vision-Based Artificial Intelligence Analytics Software Development for Traffic and Transport Applications	De La Salle University (DLSU)	<ul> <li>Drivers/Pedestrians</li> <li>Metro Manila Development Authority (MMDA)</li> <li>North Luzon Expressway (NLEX)</li> </ul>
Product and Market Validation for a Semi-Automated Reef Fish Census System	UP Diliman	<ul> <li>LGUs and Government Agencies in charge of monitoring Marine Protected Areas (MPAs) (DENR, BFAR)</li> <li>Non-Government Organizations (NGOs) involved in marine environment monitoring</li> <li>Companies</li> </ul>

Project Title	Implementing Agency	Beneficiaries
CHARM: Charging in Minutes Spinoff Project – Technology Development for Manufacturability and Open – water Market Validation	UP Diliman	<ul> <li>Electric Vehicle manufacturers (EV Wealth, Prozza Hirose, Get EV just to name a few)</li> <li>EV Technology adapters</li> <li>Electric vehicle operators</li> <li>EV Industry in the Philippines and neighboring Asian countries in general</li> </ul>
Fabrication and Cathode Optimization of a Solid-State Rechargeable Lithium-ion Coin Cell Battery	UP Diliman	<ul> <li>Undergraduate and Graduate students</li> <li>Researchers</li> </ul>
Development of Chitosan Film from Sardine Fish Scales	Western Mindano State University (WMSU)	<ul><li>Sardine canning industry</li><li>Tuna processors and manufacturers</li></ul>
TITAN: Vision-based Traffic Information & Analysis	De La Salle University (DLSU)	<ul> <li>Department of Environment and Natural Resources – Environmental Management Bureau (DENR – EMB)</li> <li>Manila Observatory</li> <li>Other institutions engaged in the study of air quality (AQ) management and Traffic Management</li> <li>Health officials</li> <li>Metro Manila Development Authority (MMDA)</li> <li>Local Government Units (LGUs)</li> </ul>
Summer Training Camp for High School Students on Genomics and Bioinformatics at the Philippine Genome Center	Philippine Genome Center (PGC)	Philippine Science High School Students (PSHS)
Development of a Future Earth Philippines Program (FEEP) Phase I	National Research Council of the Philippines (NRCP)	<ul> <li>Scientists (natural and social)</li> <li>Policy or decision makers</li> <li>Local Government Units (LGUs)</li> <li>Industry, Entrepreneurs, Civil society and indigenous communities</li> <li>National, Regional and Local educational system</li> </ul>
Effectiveness of 21st Century Learning Environment Model as a Support System to Teaching and Learning of Science and Mathematics (formerly Establishment of the 21st Century Education Centers in the Division of LIPA City, Batangas City)	DOST Region IV-A	<ul> <li>Teachers and students of Lipa City National Science HS</li> <li>Teachers and students of Lipa City National High School</li> <li>Community</li> <li>Parents</li> <li>General Public</li> </ul>
Tracing the Pathways of Mercury Concentration in Mined-Out Area	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Local government and residents of Puerto Princesa City and Palawan province</li> <li>Local water district and Local Water Utilities Administration (LWUA)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Tourists and visitors in Palawan particularly those who visit Honda Bay and spring resorts in Sta. Lourdes and Tagburos area</li> </ul>
Sustained Support for Local Space T Advancement (STAMINA4Space)	echnology & Applications	s Mastery, Innovation and
Project 1. Optical Payload Technology In-depth Knowledge Acquisition and Localization (OPTIKAL)	UP Diliman	<ul> <li>Engineers/ Scientists/ Researchers of space systems, engineering and technology</li> <li>Aeronautics, aerospace and other related industry sectors</li> <li>Universities, space educators, and science and technology community</li> </ul>
Project 2. Building PHL-50: Localizing the Diwata-1 and Diwata- 2 Bus Systems as the Country's Space Heritage 50-kg Microsatellite Bus (LoKAL)	UP Diliman	<ul> <li>Engineers/ Scientists/ Researchers of space systems, engineering and technology</li> <li>Aeronautics, aerospace and other related industry sectors</li> <li>Universities, space educators, and science and technology community</li> </ul>
Project 3. Space Science and Technology Proliferation in an Inter- University Network (STEP-IN)	UP Diliman	<ul> <li>Amateur Radio Community</li> <li>Secondary and tertiary educational institutions and science and technology community</li> <li>Engineers/ Scientists/ Researchers of space systems, engineering and technology</li> <li>Aeronautics, aerospace and other related industry sectors</li> </ul>
Project 4. Ground Receiving and Archiving System for PHL- MICROSAT (GRASP)	Advanced Science and Technology Institute (ASTI)	<ul> <li>Government agencies</li> <li>Researcher Institutions</li> <li>Academe</li> <li>General public</li> </ul>
Providing High Resolution 5km Climate Change Projections in the Philippines Using Weather Research and Forecasting (WRF) Model	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	<ul> <li>General Public</li> <li>Local Government Units (LGUs)</li> <li>Natural Resource Managers</li> <li>Scientists</li> <li>Researchers</li> <li>Stakeholders</li> <li>Decision Makers</li> </ul>
Strategic Communication Approaches to Boost the Philippine Nuclear Research Institute Promotions	Philippine Nuclear Research Institute (PNRI)	<ul> <li>General Public</li> <li>Business/Private Sectors in food, medical, pharmaceutical, cosmetics, and agribusiness</li> <li>Academe</li> <li>Youth</li> <li>Local Government Units (LGUs)</li> <li>Philippine Nuclear Research Institute (PNRI) and Department of</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		Science and Technology (DOST) employees • Government agencies • Investors • Entrepreneurs • Potential adopters • Raw material suppliers • Equipment supplier
Fringe-area Data Access by Transient Altitude Provision	De La Salle University (DLSU)	Health centers, schools and local government units (LGUs) who are currently a few kilometers outside the reaches of wireless broadband coverage
Impact Assessment of the Department of Science and Technology (DOST) Small Enterprise Technology Upgrading Program (SETUP)	Development Academy of the Philippines (DAP)	<ul> <li>SETUP beneficiaries</li> <li>Department of Science and Technology (DOST)</li> </ul>
ONGOING PROJECTS		
PHL-MICROSAT Project 5. Remote Sensing Product Development	UP Diliman	<ul> <li>National Disaster Risk Reduction and Management Center (NDRRMC)</li> <li>Philippine Atmospheric, Geophysical and Astronomical Services Administrations (PAGASA)</li> <li>Philippine Institute of Volcanology and Seismology (PHIVOLCS)</li> <li>Department of Interior and Local Government (DILG)</li> <li>Department of Environment and Natural Resources (DENR)</li> <li>Department of Public Works and Highways (DPWH)</li> <li>Local Government Units (LGUs)</li> <li>Department of Environment and Natural Resources – National Mapping and Resource Information Authority (NAMRIA)</li> </ul>
Industry Defined 2D Basic Animation Course	Toon City Academy	Graduating animations student from universities in the urban areas
Development of a Low-Energy Ion Source System for the Synthesis of Diamond-like Carbon Films	UP Diliman	Industries in the urban areas Industries that manufacture and use tools and implements, which may be from: • Agricultural Sector • Woodworking • Metalworking • Machining • Manufacturing • Automotive

Project Title	Implementing Agency	Beneficiaries
Angular Goos-Hänchen Shift: An Optical Phenomena for Ultra-Thin Film Thickness Measurement	UP Diliman	<ul> <li>University testing laboratories</li> <li>Industries involved in thin film manufacturing</li> </ul>
Fabrication of Highly C-axis Oriented YBCO Superconducting Thin Films by Sedimentation Deposition	UP Diliman	<ul> <li>Power generation and distribution sector</li> <li>Electronics and communication sector</li> <li>Academic/Manpower Development</li> </ul>
Hard Coating Thin Film Synthesis Us	ing DC and RF Magnetro	n Sputtering via Gaseous Discharges
Project 1. Development of Direct Current (DC) Magnetron Plasma System for Ti-Al-C Thin Film Synthesis	Ateneo De Manila University (ADMU)	<ul> <li>Industries that manufacture cutting tools</li> <li>Machining industries</li> <li>All industries that employ machines in their processes including but not</li> </ul>
Project 2. Development of Radio Frequency (RF) Plasma System for Ti-Al-N Thin Film Synthesis	UP Diliman	<ul> <li>in their processes including but not limited to woodworking, metalworking, automotive, construction, etc</li> </ul>
Ultrafast MBE-grown Terahertz Photoconductive Antenna Devices	UP Diliman	Companies that are currently manufacturing photoconductive antennas (PCAs) for various terahertz (THz) spectroscopies and imaging systems
Sonochemical Synthesis of Cobalt Oxide and Copper Oxide Nanostructures as Electrodes in Photoelectrochemical Water-Splitting Applications	Mapua Institute of Technology (MIT)	<ul> <li>Solar Cell Companies</li> <li>Fuel Cell Companies</li> <li>Undergraduate and Graduate students</li> </ul>
Uncooled Carbon Nanotube Microbolometers	UP Baguio	<ul><li>Local industry</li><li>Academe</li></ul>
Ionic Liquid Assisted Electrospinning of Conductive Nanofibers as Solid Polymer Electrolyte/ Separator Membrane of Solid-State Supercapacitor	UP Diliman	<ul> <li>Energy storage companies</li> <li>Industries that use polymer-based membranes</li> <li>Undergraduate and graduate students</li> </ul>
Up-Scaled Solution-Phase Synthesis of Metal Nanowires and its Application in Transparent Metal Nanowire Touch Panel	UP Diliman	<ul> <li>Small and medium scale semiconductor and electronics industries</li> <li>Local metal industries</li> <li>Researchers in the academe and research institutes</li> <li>University undergraduates, graduate students, and graduate researchers</li> </ul>
Green Synthesis of Carbon Quantum Dots from Biowaste for Biomedical and Industrial Applications	Industrial Technology Development Institute (ITDI)	Industries for: • Biomedical applications • Optronics • Catalysis • Optical sensors

Project Title	Implementing Agency	Beneficiaries
Development of a Raman Microscopy and Spectroscopy (RMS) Setup	UP Diliman	<ul> <li>Academic institutes interested in doing micro Raman experiments</li> <li>Prospective academic institutions UP Campuses         <ul> <li>UP Diliman: National Institute of Physics (NIP) and Institute of Environmental Science and Meteorology (IESM)</li> <li>UP Baguio</li> <li>UP Manila</li> </ul> </li> </ul>
Optical trap-mediated interaction between cancer cells and elucidated compounds from vegetable extracts in PEMF	De La Salle University (DLSU)	<ul> <li>Breast cancer or lung cancer or leukemia patients</li> <li>Medical Practitioners</li> </ul>
Binary Gels - Rheology of Two- component Biopolymer Hydrogels Investigated Using Optical Tweezers and Non-Linear Rheometry	University of San Carlos (USC)	<ul> <li>Bio-medical industries</li> <li>Mining industry</li> <li>Local Carrageenan companies or biopolymer, food additive, and related gelling agent producers</li> </ul>
μC-IC: Design of Microcontroller Inte		sting and Power Management
Project 1. Development of Microprocessor for Wireless Sensor Network Application	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	
Project 2. Power Management Unit using Low Drop-out Regulator and Switched Capacitor DC-DC Converters	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	
Project 3. Design of Indoor Light Energy Harvesting for Wireless Sensor Network Applications	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	<ul> <li>Masteral Engineering Research and Development for Technology (ERDT) scholars and other academic and research institutions</li> <li>Local semiconductor and electronics integrated circuit (IC) design industry</li> </ul>
One Click: Android/Web-based Student Response and Understanding Visualizer	Mapua Institute of Technology (MIT)	Schools offering Senior High School
Remote Sensing and Data Science: DATOS Helpdesk	Advanced Science and Technology Institute (ASTI)	<ul> <li>Government agencies (Department of Budget and Management (DBM), Department of Public Works and Highways (DPWH), Department of Tourism (DOT), Department of Interior and Local Government (DILG), National Disaster Risk Reduction and Management Center (NDRRMC), Department of Education (DepED), Commission on Higher Education (CHED), Department of Health (DOH), etc.)</li> <li>Researcher Institutions</li> <li>Academe</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		General Public
Integrated Assessment and Modellin Management (IAMBlueCECAM)	g of Blue Carbon Ecosyst	tems for Conservation and Adaptive
Project 1. Mangrove Remote Sensing Using LiDAR, Multispectral, and Hyperspectral Data (MaRS)	UP Diliman	<ul> <li>Local Government Units (LGUs)</li> <li>Coastal communities</li> <li>Researchers involved in coastal resources</li> </ul>
Project 2. LiDAR, Hyperspectral, and Sonar Remote Sensing of Seagrass Meadows (SeaRS)	UP Diliman	<ul> <li>Local Government Units (LGUs)</li> <li>Coastal communities</li> <li>Researchers involved in coastal resources</li> </ul>
Project 3. Geosimulation of Mangroves and Seagrass Vegetation Dynamics (GeoSiMAS)	UP Diliman	<ul> <li>Local Government Units (LGUs)</li> <li>Bureau of Fisheries and Aquatic Resources (BFAR)</li> <li>Department of Environment and Natural Resources – Biodiversity Management Bureau (DENR-BMB)</li> </ul>
Project 4. Hydrodynamic Modelling for the Assessment of Protective Services of Mangroves and Seagrass (HMAPS-MS)	UP Diliman	<ul> <li>Local Government Units (LGUs)</li> <li>Local coastal communities Department of Environment and Natural Resources (DENR)</li> <li>Disaster Risk Reduction National Disaster Risk Reduction and Management Council (NDRRMC)</li> <li>Department of Tourism (DoT)</li> <li>Department of Public Works and Highways (DPWH)</li> <li>Research community</li> </ul>
Project 5. Modelling, Analysis and Simulation of Blue Carbon Cycle and Budgets (BlueCyMAS)	UP Diliman	Researchers and students of the Marine Science Institute of UP Diliman
Project 6. Suitability Models for Guiding Mangrove RePlanting Efforts (SuitMaPs)	UP Diliman	<ul> <li>Local Government Units (LGUs)</li> <li>Coastal communities</li> <li>Relevant National Government Agencies (NGAs)</li> <li>Researchers involved in coastal resources</li> </ul>
Project 7. Economic Valuation of Generated Blue Carbon Ecosystem Services (EconValBlue)	UP Diliman	<ul> <li>Local government units, staff, and constituents</li> <li>Other researchers in economics and other disciplines</li> <li>Policy makers</li> <li>Students from different technical fields including natural resource economics</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Government technical staff especially from DENR and its attached agencies</li> </ul>
Project 8. Multi-agent Systems for Simulating Policy Scenarios on Blue Carbon Ecosystems (BlueMASSPoliS)	UP Diliman	<ul> <li>Local governments and communities in the four study sites</li> <li>Local researchers in public policy</li> <li>Students and researchers from engineering and the sciences</li> </ul>
Project 9. WebGIS for Mapping, Supporting Decision-making, and Promoting Ecological Services of Blue Carbon Ecosystems (BlueWebMapS)	UP Diliman	<ul> <li>Local Government Units (LGUs) in coastal communities</li> <li>Relevant National Government Agencies (NGAs)</li> <li>Researchers</li> </ul>
Project 10. Geospatial Decision Support Systems and Capacity Building on Geomatics for Mangrove Seagrass Conservations (CapGeoDSS)	UP Diliman	<ul> <li>Local Government Units (LGUs) in coastal communities</li> <li>Relevant National Government Agencies (NGAs)</li> <li>Researchers</li> </ul>
GeoSafer Mindanao Program (ZAMB) Mindanao and Southeastern Mindana		nao/ Cotabato, Agusan, Western
Project 1. Geo-SAFER Zamboanga Peninsula – Systematic Assessment of Flood Effects and Risks in Zamboanga Peninsula, Mindanao, Philippines	Ateneo De Zamboanga University (ADZU)	<ul> <li>Local Communities</li> <li>Local Government Units (Provinces, Cities/ Municipalities) <ul> <li>Local Disaster Risk Reduction and Management Offices</li> <li>Local Planning and Development Offices</li> </ul> </li> <li>Office of Civil Defense (OCD) Zamboanga Peninsula</li> <li>Department of Science and Technology (DOST) Zamboanga Peninsula</li> <li>Department of Social Welfare and Development (DSWD)</li> <li>Department of Public Works and Highways (DPWH)</li> </ul>
Project 2. Geo-SAFER Northern Mindanao/ Cotabato – Systematic Assessment of Flood Effects and Risks in Northern Mindanao and Cotabato, Philippines	Central Mindanao University (CMU)	<ul> <li>Local Communities</li> <li>Local Government Units (Provinces, Cities/ Municipalities)</li> <li>Local Disaster Risk Reduction and Management Offices</li> <li>Local Planning and Development Offices</li> <li>Office of Civil Defense (OCD) Region IX and Cotabato</li> <li>Department of Science and Technology (DOST) Region IX and Cotabato</li> <li>Department of Social Welfare and Development (DSWD)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Department of Public Works and Highways (DPWH)</li> <li>Department of Environment and Natural Resources (DENR)</li> <li>DENR – River Basin Control Office (RBCO)</li> <li>National Power Corporation (NPC)</li> <li>Department of Agriculture (DA)</li> <li>DA - Bureau of Soils and Water Management (BSWM)</li> <li>National Irrigation Authority (NIA)</li> </ul>
Project 3. Geo-SAFER Agusan – Systematic Assessment of Flood Effects and Risks in the Agusan River Basin, Caraga Region, Mindanao, Philippines	Caraga State University (CarSU)	<ul> <li>Local Communities</li> <li>Local Government Units (Provinces, Cities/ Municipalities)</li> <li>Local Disaster Risk Reduction and Management Offices</li> <li>Local Planning and Development Offices</li> <li>Office of Civil Defense (OCD) Caraga</li> <li>Department of Science and Technology (DOST) Caraga</li> <li>Department of Social Welfare and Development (DSWD)</li> <li>Department of Public Works and Highways (DPWH)</li> </ul>
Project 4. Geo-SAFER: Western Mindanao - Systematic Assessment of Flood Effects and Risks in Western Mindanao	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	<ul> <li>Local Communities</li> <li>Local Government Units (Provinces, Cities/ Municipalities) <ul> <li>Local Disaster Risk Reduction and Management Offices</li> <li>Local Planning and Development Offices</li> </ul> </li> <li>Office of Civil Defense (OCD) Davao Provinces and Compostela Valley</li> <li>Department of Science and Technology (DOST) Regional Office</li> <li>Department of Social Welfare and Development (DSWD)</li> <li>Department of Public Works and Highways (DPWH)</li> <li>Department of Environment and Natural Resources (DENR)</li> <li>DENR – River Basin Control Office (RBCO)</li> <li>National Power Corporation (NPC)</li> <li>Department of Agriculture (DA)</li> <li>DA - Bureau of Soils and Water Management (BSWM)</li> <li>National Irrigation Authority (NIA)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Project 5. Geo-SAFER: Southeastern Mindanao - Systematic Assessment of Flood Effects and Risks in Southeastern Mindanao	UP Mindanao	<ul> <li>Local Communities</li> <li>Local Government Units (Provinces, Cities/ Municipalities) <ul> <li>Local Disaster Risk Reduction and Management Offices</li> <li>Local Planning and Development Offices</li> </ul> </li> <li>Office of Civil Defense (OCD) Davao Provinces and Compostela Valley</li> <li>Department of Science and Technology (DOST) Regional Office</li> <li>Department of Social Welfare and Development (DSWD)</li> <li>Department of Public Works and Highways (DPWH)</li> <li>Department of Environment and Natural Resources (DENR)</li> <li>DENR – River Basin Control Office (RBCO)</li> <li>National Power Corporation (NPC)</li> <li>Department of Agriculture (DA)</li> <li>DA - Bureau of Soils and Water Management (BSWM)</li> <li>National Irrigation Authority (NIA)</li> </ul>
Advanced Traffic Pollution Monitoring and Analysis System Based on Data Collected from Air Quality Sensors, Engine Status Sensors and GPS Trackers Installed on Selected PUVs in Metro Manila (ATMAS)	Ateneo De Manila University (ADMU)	<ul> <li>Department of Transportation (DOTR)</li> <li>Metro Manila Development Authority (MMDA)</li> <li>Public User</li> <li>Academician</li> <li>Company Owner</li> </ul>
Design and Development of UP Bike Share System	UP Diliman	UP Students, faculty, and staff     UP Administration
A Vision-Based Vehicle Counter for Traffic Monitoring (VEMON)	De La Salle University (DLSU)	<ul> <li>Department of Environment and Natural Resources – Environmental Management Bureau (DENR – EMB)</li> <li>Manila Observatory</li> <li>Other institutions engaged in the study of air quality (AQ) management and traffic management</li> <li>Health officials</li> <li>Metro Manila Development Authority (MMDA)</li> <li>Local Government Units (LGUs)</li> </ul>
Engineering the Public Utility Vehicles (PUVs) Using an OEM Vehicle Platform	UP Diliman	<ul> <li>Department of Transportation (DOTr)</li> <li>Land Transportation Office (LTO)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Land Transportation Franchising and Regulatory Board (LTFRB)</li> <li>Department of Science and Technology – Philippine Council for Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD)</li> <li>Department of Trade and Industry – Bureau of Philippine Standards (DTI- BPS)</li> <li>Transport operators and drivers</li> <li>Public transport commuters</li> <li>Public Utility Vehicle (PUV) builders</li> </ul>
Development of a Customized Local Traffic Simulator (LocalSim Phase 2)	UP Diliman	<ul> <li>Transportation Sector</li> <li>Local Government Units (LGU) Traffic Offices</li> </ul>
Recycling and Recyclability Index for End-of-Life Jeepneys	University of Asia and the Pacific (UA&P)	<ul> <li>People of Metro Manila</li> <li>Formal and informal workers in recycling and recovery</li> </ul>
Development of a Local Automatic Identification System (AIS) for Ship Tracking and Monitoring	De La Salle University (DLSU)	<ul> <li>Maritime Industry Authority (MARINA)</li> <li>Philippine Ports Authority (PPA)</li> <li>Coastguard</li> <li>Ship owners and other parties involved in the production and sales of the system</li> </ul>
Cyber-Physical Transportation System	UP Diliman	<ul> <li>Transportation Sector</li> <li>Local Government Units (LGUs)</li> <li>Department of Public Works and Highways (DPWH)</li> <li>Land Transportation Franchising and Regulatory Board (LTFRB)</li> <li>Metro Manila Development Authority (MMDA)</li> </ul>
Testing for Standardization and Optimization of five Coach Hybrid Road Train Phase III	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Transportation Sector</li> <li>Local Government Unit (LGU)</li> </ul>
System Expansion of the 120- Passenger per Coach Capacity Automated Guide-way Transit System	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Transportation Sector</li> <li>Bicutan, Taguig community</li> </ul>
Development of Information Gathering and Utilization Systems using small Unmanned Airborne Vehicles (UAVs) for Disaster Risk Assessment, Monitoring and Response	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	<ul> <li>People living near active volcanoes and active faults</li> <li>People affected by disasters</li> <li>Local government units (LGUs)</li> <li>PHIVOLCS researchers and monitoring personnel</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Development of a fixed wing short ta disaster risk reduction and managen		unmanned aerial vehicle (UAV) for
Design and fabrication of an airframe for a medium-range, short take-off and landing UAV	FEATI University	<ul> <li>Local Unmanned Aerial Vehicle (UAV) operators/users</li> <li>Aeronautical schools</li> <li>UAV developers</li> <li>Abaca farmers</li> </ul>
Development of a Flight Controller for a Modular UAV System	De La Salle University (DLSU)	<ul> <li>Government agencies:</li> <li>Philippine Navy</li> <li>Department of Science and Technology (DOST)</li> <li>DOST – Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)</li> <li>National Disaster Risk Reduction and Management Center (NDRRMC)</li> <li>Philippine Coastguard (PCG)</li> <li>Armed Forces of the Philippines (AFP)</li> <li>Local Government Units (LGUs)</li> <li>Relief organizations</li> </ul>
Cooperative UAV-UGV Missions and Applications with Custom Communications and Imaging Capabilities	Ateneo De Manila University (ADMU)	<ul> <li>Disaster response teams and relief organizations</li> <li>Emerging drone services industry</li> <li>Agriculture or marine resource (rivers, lakes, coastal areas) agencies</li> <li>Data collection agencies that need aerial platforms to assist operations</li> </ul>
National Loss and Damage Registry: A Disaster Management Information System for the Office of the Civil Defense	De La Salle University (DLSU)	Office of Civil Defense
Fire Check: Urban Fire Hazard Mapping and Fire Spread Modeling	UP Cebu	<ul> <li>Local government units In Metro Cebu (Mandaue and Lapu-Lapu)</li> <li>Bureau of Fire Protection (BFP)</li> </ul>
The Use of Radon Technique in Mapping Geological Faults in the Philippines	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Government and private planners and developers</li> <li>Academe</li> <li>Department of Science and Technology – Philippine Institute of Volcanology and Seismology (DOST – PHIVOLCS)</li> <li>Department of Environment and Natural Resources – Mines and Geosciences Bureau (DENR – MGB)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Mapping of offshore active faults for resilient coasts	UP Diliman	<ul> <li>National Disaster Risk Reduction and Management Center (NDRRMC)</li> <li>Provincial and Local Government Units (LGUs) involved in land use planning, land development, disaster preparedness and risk reduction management</li> <li>Coastal communities in Lingayen Gulf, Manila Bay</li> </ul>
Automated Real-Time Monitoring System (ARMS) for Magat Dam	Mapua Institute of Technology (MIT)	<ul> <li>National Water Resources Board (NWRB)</li> <li>National Irrigation Authority - Magat River Integrated Irrigation System (NIA-MARIIS)</li> <li>SN Aboitiz</li> <li>Dam TWG's</li> <li>LGU's covered by the Dam breach</li> </ul>
Development of Groundwater Resource Management Plan and Monitoring System for Zamboanga City and its Surrounding Areas	Ateneo De Manila University (ADMU)	<ul> <li>Local Water Utilities Administration (LWUA)</li> <li>National Water Resources Board (NWRB)</li> <li>Water District of Zamboanga City and surrounding areas</li> </ul>
Enhancing the Hydrometeorological Hazards Monitoring and Risk Assessment Capabilities of PAGASA through the Adoption and integration of NOAH Operating Systems	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)	<ul> <li>National Disaster Risk Reduction Management Center (NDRRMC)</li> <li>Regional Disaster Risk Reduction Management Center (RDRRMC)</li> <li>Municipal Disaster Risk Reduction Management Center (MDRRMC)</li> <li>Disaster Response Organizations</li> <li>International Non-Government Organizations (INGOs)</li> <li>Non-Government Organizations (NGOs)</li> <li>Academe</li> <li>National Government Agencies (NGAs)</li> </ul>
FEATURE: Feature-based Earthquake Analysis Toolset for Urban Response Estimation - Enhancing PHIVOLCS damage estimation capability using building- specific analysis aided by high resolution GiS data	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	<ul> <li>Department of Science and Technology - Philippine Institute of Volcanology and Seismology (DOST - PHIVOLCS)</li> <li>Agencies working on disaster mitigation planning and quick response</li> </ul>
Specific Earthquake Ground-Motion to help enhance the seismic resiliency of residential and medium-to-high rise buildings in Metro Cebu and Metro Davao	Philippine Institute of Volcanology and Seismology (PHIVOLCS)	<ul> <li>Researchers of DOST - PHIVOLCS and academe</li> <li>Civil/structural engineers</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		Earthquake disaster planners and local administrators in Metro Cebu and Metro Davao
Automated Real-time Monitoring System for Ambuklao, Binga and San	Mapua Institute of Technology (MIT)	National Water Resources Board (NWRB)
Roque Dams		Dam Operator
		<ul> <li>People and the LGU's within the watershed</li> </ul>
Development of HFDR Ship Tracking	Mapua Institute of	Philippine Navy
Algorithm Software for Maritime Surveillance, Search and Rescue	Technology (MIT)	Search-and-rescue volunteers
Regional Disaster Science and Management S&T Capacity	Mariano Marcos State University (MMSU)	<ul> <li>State Universities and Colleges (SUCs) in CAR</li> </ul>
Development (Phase III)		<ul> <li>Regional and Local Disaster Risk Reduction and Management Councils</li> </ul>
		<ul> <li>Local Government Units (LGUs) Non-Government Organizations (NGOs) in CAR</li> </ul>
		Vulnerable communities
Improvement of Forecast Capability	-	orology and Short-Range Climate
Project 1. Typhoon Formation, Structure and Intensity Change in	Philippine Atmospheric,	• Forecasters
Western NP and Wave Observation	Geophysical and Astronomical Services	Researchers     Emergency Managers
and Modeling	Administration	Emergency Managers     Planners
	(PAGASA)	General Public
Project 2. Heavy Rain Monitoring	Philippine Atmospheric,	Local Government Units (LGUs)
and Forecasting in the Mountainous	Geophysical and	<ul> <li>Research institutions</li> </ul>
Area and Early Warning Landslides	Astronomical Services	Relevant government agencies
	Administration (PAGASA)	(local and national disaster management agencies)
Project 3. Observations and	Philippine Atmospheric,	Forecasters
Dynamical Downscaling of Seasonal	Geophysical and	Researchers
and Sub-seasonal Forecasts	Astronomical Services	
	Administration	
Integrative Studies on the geodynam	(PAGASA) ics of the Philippine and "	Taiwan ARC Systems
	<b>1</b>	
Project 1. Investigating the Tectonic	UP Diliman	Local government Units (LGUs)
Evolution of Northern and Central		Research Institutions
Philippine Arcs through		Relevant Government Agencies
Geochemistry and Geophysics		(Local and National Disaster
		Management Agencies)
Project 2. Coastal Tectonics of	UP Diliman	<ul> <li>Exploration companies</li> <li>Local government units (LGUs)</li> </ul>
Central Philippine Islands and Its		Research Institutions
Implications for Seismic Hazards		Relevant Government Agencies

Project Title	Implementing Agency	Beneficiaries
Project 3. Geophysical Characterization of the Western Philippine Subduction Zones	UP Diliman	<ul> <li>Local government units (LGUs)</li> <li>Research Institutions</li> <li>Relevant Government Agencies</li> <li>Exploration Companies</li> </ul>
Climate Change Adaptation and Disaster Resilience Cluster PH-US Joint Cooperation	Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD)	
Setting Up a Concrete Petrography Laboratory for Quality Control of Construction Projects	UP Diliman	<ul> <li>Owners of buildings who will want to quality check the materials and construction methodologies used</li> <li>Potential buyers of buildings or condominium units</li> <li>Government auditors</li> <li>Forensic investigators</li> <li>Investors who want top quality construction materials in their buildings or rented business space</li> </ul>
Development of a Functional and Durable Pervious Concrete Pavement for Local Roads and Parking Lots	Central Mindanao University (CMU)	<ul> <li>Construction industry</li> <li>Local communities</li> <li>Local Government Units (LGUs)</li> <li>Water districts</li> <li>Non- Government Organizations (NGOs)</li> <li>Government Organizations (GOs)</li> </ul>
Upgrading of the PNRI Nuclear Training Center Laboratory Facility	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Department of Science and Technology - Philippine Nuclear Research Institute (DOST - PNRI)</li> <li>Researchers</li> </ul>
UP Cebu Cybersecurity Research and Extension Center	UP Cebu	<ul> <li>Philippine Government</li> <li>Local Communities</li> <li>Research Institutions</li> <li>Researchers</li> <li>UP Cebu</li> </ul>
Field-testing of the Integrated Gold-C	Copper Mineral Processing	g Pilot Plant in the Regions
Field-testing of the Integrated Gold- Copper Mineral Processing Pilot Plant in the Regions (CARAGA)	UP Diliman	
Field-testing of the Integrated Gold- Copper Mineral Processing Pilot Plant in the Regions (Bicol)	UP Diliman	Small scale mining industry in Region II, V, IX, XI, and CARAGA
Field-testing of the Integrated Gold- Copper Mineral Processing Pilot Plant in the Regions (Compostela Valley)	UP Diliman	

Project Title	Implementing Agency	Beneficiaries
Synergistic effect of Forward Osmosis and Capacitive De-Ionization for Water Purification and Recovery	Malayan Colleges Laguna (MCL)	<ul> <li>Industry partners along the CALABARZON-Region IV-A with wastewater discharges containing heavy metals</li> <li>Laguna Lake Development Authority (LLDA) for the protection of Laguna Lake</li> </ul>
Synergistic Capacity Advancement for	or the Management of Lag	guna LakE: SCALE
Antibiotics, Endocrine Disruptors and Heavy Metals in Laguna Lake Water: Impacts on Food and Water Security	UP Diliman	<ul> <li>Laguna Lake Development Authority (LLDA)</li> <li>People that derive their livelihood from the lake</li> <li>Community leaders</li> </ul>
Microbial Source Tracking in Selected Tributaries of Laguna de Bay	UP Diliman	<ul> <li>Laguna Lake Development Authority (LLDA)</li> <li>Research and Development Institutions (RDIs)</li> <li>Regulators</li> <li>Policy makers/ planners/coordinators</li> <li>Local Government Units (LGUs)</li> </ul>
TRACe Fish – Trace oRganics and metAls in Commodity Fish: Method optimization, extent of contamination and health risk due to fish intake	UP Diliman	Laguna Lake Development Authority (LLDA)
Molecular and Culture-based Charact Spring in Pangasinan	erization of Bacterial Col	mmunity from Manieluag Alkaline
Project 1. Molecular characterization of bacterial community from Manleluag alkaline spring through next-generation sequencing of 165 rDNA	UP Los Banos	
Project 2. Isolation and screening of alkaliphilic bacteria from Manleluag alkaline spring producing an industrially important enzyme	UP Los Banos	
Assessment of Metal Content in Agric Areas	cultural Products and Its	Environment in Volcanic Impacted
Project 1. OneLab Capability Assurance System for Metal Content Assessment in Agricultural Produce, Water and Environmental Samples	Industrial Technology Development Institute (ITDI)	Consumers of Water and Agricultural Produce in the Affected Area     Policy Makers on Food and Water
Project 2. Metal Content of Water Supplies in Volcanic Impacted Area and its Impact to Vegetation	Industrial Technology Development Institute (ITDI)	<ul> <li>Policy Makers on Food and Water Safety</li> <li>Private and Public Water Resource Managers</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Project 3. Household and Community Based Filters for Metals in Water	Industrial Technology Development Institute (ITDI)	<ul> <li>Local Government Officials as overseers of community health and welfare</li> </ul>
Water - Energy - Nutrient Nexus in the Cities of the Future	De La Salle University (DLSU)	<ul> <li>Researchers, university teachers and research students in several interdisciplinary areas</li> <li>Professionals</li> <li>Businesses</li> <li>Policy making bodies</li> </ul>
Forward Osmosis System using locally-made membrane from Nata- de-coco for the production of rehydration water and application for desalination	Malayan Colleges Laguna (MCL)	<ul> <li>Laguna Lake Development Authority (LLDA)</li> <li>Department of Science and Technology (DOST)</li> <li>Philippine Coconut Authority (PCA)</li> </ul>
Optimization of Ready-to-Drink Sweet Potato Leaf Extract (SPLE)-Tropical Fruit Juice Blends through the UP- DOST Food Innovation Facility	UP Diliman	<ul> <li>Fruit juice and beverage industries</li> <li>Sweet potato and fruit farmers</li> </ul>
Establishment of Shelf-Life of Vacuum Fried Okra developed by ITDI Main FIC	Industrial Technology Development Institute (ITDI)	<ul> <li>DOST Food Innovation Centers (FICs)</li> <li>Entrepreneurs</li> </ul>
Package Development of Bakery Product and Field Testing of Ready- to-Eat (RTE) Smoked Fish Rice Meal and Sweet Potato as Disaster/Relief Foods - Phase 2	Industrial Technology Development Institute (ITDI)	<ul> <li>Victims of natural calamities such as typhoons, floods, earthquakes, and landslide</li> <li>Providers of services such as medical team, DSWD staff, military, etc.</li> <li>Local food manufacturers</li> </ul>
Monitoring and Evaluation of Batch II Complementary Food Technology Adoptors	Food and Nutrition Research Institute (FNRI)	<ul> <li>Beneficiaries of nine (9) medium scale complementary food production equipment from the nine priority regions identified in MRP Batch III</li> <li>Staff of operational medium scale Complementary Food Production Facilities (CFPFs)</li> <li>Adoptors provided with Training- Workshop on Malnutrition Reduction Program (MRP) modules</li> </ul>
Product Development and Utilization Program of Abalone in MIMAROPA		
Development of bottom housing system for abalone farming	Western Philippines University (WPU)	<ul> <li>Abalone farmers</li> <li>Marine aquaculturists</li> <li>Coastal resource managers Local Government Units (LGUs)</li> <li>Researchers</li> <li>Fisher folks</li> <li>Investors</li> <li>Entrepreneurs</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		Peoples Organizations (POs)
Development of Food and Non-Food Products from Abalone	Marinduque State College (MSC) Western Philippines University (WPU)	<ul> <li>Western Philippines University (WPU)</li> <li>Marinduque State College (MSC)</li> <li>Consumers within the college/university</li> <li>Restaurants or food chain within the MIMAROPA region</li> <li>Other consumers or tourists</li> </ul>
Performance Evaluation of Dipstick Assay for the Detection of Salmonellae in Selected Food Matrices	National Institute of Molecular Biology and Biotechnology (NIMBB)	<ul> <li>Regulatory agencies</li> <li>Quality control laboratories in both private and public institutions</li> <li>Academe</li> </ul>
Upgrading and Enhancing the Capacity of the Packaging Technology Division in Packaging Research and Innovation	Industrial Technology Development Institute (ITDI)	<ul> <li>Packaging Technology Division (PTD) of the DOST – Industrial Technology Development Institute (ITDI)</li> <li>Customers/Clients of PTD</li> </ul>
Development of Ready-to-Eat Corn Grit Meals	UP Diliman	<ul> <li>Victims of disasters and emergency situations</li> <li>Food processors</li> </ul>
Pilot-Scale Production of Spray-Dried Powder Dextran and High Fructose Syrup using Whole Cell (Leuconostoc mesenteroides isolates) ITDI Fermentation Technology	Industrial Technology Development Institute (ITDI)	<ul> <li>Coconut oil processors with coconut water as by-product</li> <li>Food industry and other potential users of locally supplied high fructose syrup and dextran</li> <li>Potential commercial producer of dextran and high fructose syrup</li> </ul>
Development of an Effective Distribution System for RTE Retort Foods (Chicken Arroz Caldo and Smoked Fish Rice Meal) to Mitigate the Magnitude of Distress for Calamity Survivors and Providers of Services	Industrial Technology Development Institute (ITDI)	<ul> <li>Potential victims of typhoons</li> <li>Providers of services such as medical team, DSWD staff, military, etc</li> </ul>
Enhancing OneLab for Global Competitiveness	DOST Region IX Note: 16 ROs and 7 RDIs	<ul> <li>Manufacturing industries</li> <li>Micro-, Small, and Medium Enterprises (MSMEs)</li> <li>Academe</li> <li>Researchers</li> <li>Local Government Units (LGUs)</li> <li>Hospitals</li> </ul>
Project 4. Strengthening the Physical Metrology Capabilities of the National	Industrial Technology Development Institute	

Project Title	Implementing Agency	Beneficiaries
Project 1. Design, Prototyping of Salt Processing Equipment (Washer, Dryer, Iodizer, Crystallizing Pan, Furnace, Concentrator (Ion exchange membrane)	Industrial Technology Development Institute (ITDI)	Small and Medium Scale Salt Producers in Region I
Project 2. Development of Gourmet Salt Products and Micro-sized Salt in Laboratory Scale	Industrial Technology Development Institute (ITDI)	
Design and Development of Processing Machineries for Honeybee Products and Intermediate Products	Don Mariano Marcos Memorial State University (DMMMSU)	Philippine Beekeeping Industry
Development of An Automated Multi- Commodity Heat Pump Dryer	Adventist University of the Philippines (AUP)	<ul> <li>Health enthusiasts within the university communities</li> <li>Adapted barangays of Silang, Cavite and the whole province</li> </ul>
Strengthening of DOST Regional Metrology Laboratory Services - Phase II	DOST Regions from CAR to CARAGA	<ul> <li>Hospital</li> <li>Rural health units</li> <li>Doctor's clinics</li> <li>Medical laboratories</li> <li>Drugstores and other health service providers</li> <li>General public</li> <li>Small and Medium Enterprises (MSMEs) and other industrial firm</li> </ul>
Characterization and Separation of Heavy Minerals in the Alluvial and Beach Sands in San Vicente, Northwestern Palawan	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Locals of the project site</li> <li>DENR – Mines and Geosciences Bureau (MGB)</li> <li>Palawan Council for Sustainable Development (PCSD)</li> <li>Local Government Units (LGUs)</li> </ul>
Establishment of Common Service Facility (CSF) for Artisanal Small- Scale Gold Mining in Northern Mindanao	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	<ul> <li>Mining Industries</li> <li>All small-scale mining</li> <li>Local and National government</li> </ul>
Enhancement of the Competence and Philippines Metrology	d Capability of the Nationa	al Metrology Laboratory of the
Project 1. Chemical Metrology for Organic Contaminants in Foods and Water	Industrial Technology Development Institute (ITDI)	<ul> <li>Producers/Exporters</li> <li>Testing and calibration laboratories</li> <li>Standard developers</li> <li>Regulatory agencies Accreditation bodies</li> </ul>
Project 2. Chemical Metrology for Inorganic Toxic Elements in Food and Water	Industrial Technology Development Institute (ITDI)	Local testing laboratories

Project Title	Implementing Agency	Beneficiaries
Project 3. Biological Metrology for Microorganisms in Food	Industrial Technology Development Institute (ITDI)	Microbiological laboratories accredited by Philippine Accreditation Bureau
Modular Innovation Center for Oils, Blends, and Sauces	Industrial Technology Development Institute (ITDI)	<ul><li>Food</li><li>Pharmaceuticals</li><li>Cosmetics</li></ul>
Project 6. Processing and Utilization of Senile and Unproductive Rubberwood (Hevea braziliensis) Trees for High Value Furniture, Mouldings and Joinery Products	Forest Products Research and Development Institute (FPRDI)	<ul> <li>People in Zamboanga Sibugay</li> <li>Municipalities of Zamboanga Sibugay</li> <li>DepEd Schools in Region IX and nearby Regions</li> <li>General public in Region IX</li> </ul>
Natural Dyes and Colorants R&D Pro	gram	
Project 1. Commercial Scale Verification of Natural Dyes for Textiles	Philippine Textile Research Institute (PTRI)	<ul> <li>Local textile industry particularly the textile dyeing and silkscreen printing industries</li> <li>Farmers/producers of natural dye-yielding plants</li> <li>Textile and allied product manufacturers</li> <li>Entrepreneurs</li> </ul>
Project 2. Development of Natural Colorants for Cosmetics	Industrial Technology Development Institute (ITDI)	<ul> <li>Producers of gumamela, dragonfruit, indigo, ube, turmeric and coffee</li> <li>Personal Care Industry</li> </ul>
Project 3. Extraction, Characterization, and Application of Natural Colorants in Nutritional Food Products	Food and Nutrition Research Institute (FNRI)	<ul> <li>Food processors/ manufacturers</li> <li>Policy makers – Food and Drug Administration (FDA)</li> </ul>
Project 4. Natural Food Colors from Local Source as Food Additive	Industrial Technology Development Institute (ITDI)	<ul> <li>Farmers</li> <li>Food industries (confectionary, beverages, packaged foods, dairy products, frozen foods, condiments &amp; dressings, functional food), including artisan makers of food products</li> <li>Pet food manufacturer</li> <li>Micro, Small, and Medium Enterprises (MSMEs)</li> </ul>
Standards & Testing Automated Modular Platform (STAMP)	UP Diliman	<ul> <li>Public calibration laboratories in the regions</li> <li>Regional Standards and Testing Laboratories (RSTL)</li> </ul>
Processing of Bio-based Polyols and	Polyurethanes for Indust	
Project 1. Production of Bio-based Polyols from Lignocellulosic Biomass	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	Manufacturing companies to produce biomass-based polyols for rigid polyurethane (PU) foam application

Project Title	Implementing Agency	Beneficiaries
Project 2. Development of Polyurethane-based Packing Materials and Anti-corrosive Coatings from Vegetable Oil	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	Manufacturing companies to produce used/waste vegetable oil-based semi- flexible PU packing materials
Polyhydroxyalkanoate (PHA) Production from Agricultural Residues	UP Los Banos	<ul><li>Environment</li><li>Philippine Market</li><li>Academe</li></ul>
Development of Design Prototypes for Government Agencies' Uniforms to Promote Mainstreaming of Natural Fibers and Local Weaves	Philippine Textile Research Institute (PTRI)	Government Agencies' personnel
Comparison of Different Enzyme Preparations for the Production of Oligofructose and Inulin from Sugarcane Juice	Cavite State University (CvSU)	Sugar producers
Design and Development of a PLC- Based High Capacity Tissue Culture Growth Chamber	Cavite State Univeristy (CvSU)	<ul> <li>Tissue culturists</li> <li>Coffee and makapuno stakeholders who want to venture in seedling production</li> <li>General public who are direct or indirect consumers of coffee and coconut</li> <li>Industry players for both machines and microcontrollers</li> </ul>
Quality Assurance of Lambanog and Nipanog for Consumer Safety and Sustainable Industry	UP Diliman	<ul> <li>Consumers of alcoholic beverages</li> <li>Small and medium enterprises engaged in the production of alcoholic beverages</li> </ul>
Development of a Shelf-Stable Fermented Heirloom Rice "Binubudan"	Bicol State University (BSU)	<ul> <li>Food processors in the area that are in line into fermentation or into promotion and production of ethnic foods</li> <li>Researchers</li> <li>Food service establishment owners</li> <li>Homemakers</li> </ul>
Development of Freeze-Dried Local Alternative Flavors for Ice Cream	Bicol State University (BSU)	<ul> <li>Academe</li> <li>Interested entrepreneurs</li> <li>Women's organization to venture on livelihood activities</li> </ul>
Jolt: A Stackable Multi-Functional Battery Energy Storage for Household Solar and Emergency Applications	UP Diliman	<ul> <li>Government and Local Government Units (LGUs)</li> <li>Private Sector</li> <li>Academe and Scientific Community</li> <li>Filipino Households</li> </ul>
Field and Market Testing of a Cost- effective Camera Rig System Biomass	UP Diliman	<ul> <li>Academe</li> <li>Department of Environment and Natural Resources (DENR)</li> <li>Local Government Units (LGUs)</li> <li>Private Organizations (POs)</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Non-Government Organizations (NGOs) who are monitoring, evaluating, managing Marine Protected Areas</li> </ul>
Enhancement of Prototype and Market Readiness of R-TAP (an advanced pressure management system for water utilities)	Hiraya Technology Solutions, Inc.	Water districts
Prototype Development and Field Testing of Mosquito-Repellent Textile	Philippine Textile Research Institute (PTRI)	<ul> <li>Students and families living in areas with high incidence of dengue hemorrhagic fever (DHF)</li> <li>Sports and nature enthusiasts (mountain climbers, hikers and campers)</li> <li>Healthcare and wellness manufacturers</li> </ul>
Enhancing Operational Capability of Bicol University Fabrication Laboratory (Fablab Bicol)	Bicol University (BU)	<ul> <li>Micro-, Small, and Medium Enterprises (MSMEs)</li> <li>Start-ups</li> <li>Academe</li> <li>Creative talents among the public</li> </ul>
Establishment of the Technology Management System and Structure of the Ateneo de Manila University	Ateneo De Manila University (ADMU)	<ul> <li>University researchers/ academe</li> <li>Department of Science and Technology (DOST)</li> <li>DOST – Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD)</li> <li>Industry</li> <li>Consumer/General Public</li> </ul>
Geophysical Exploration Instruments with Micro-seismic Imaging and Tomography for Energy Exploration in the Philippines	Tekton Geometrix, Inc.	<ul> <li>Energy exploration companies</li> <li>Department of Energy (DOE)</li> <li>Communities in the vicinity of the exploration areas</li> <li>Filipino exploration industry and Filipino exploration service providers</li> <li>Students of geology and physics</li> </ul>
Technology Business Incubator (TBI) at DLSU-STC Campus	De La Salle University (DLSU)	<ul> <li>Students in the Colleges of Engineering, Computer Studies, Engineering, Science, Education and Business of DLSU and other DLS universities</li> <li>Students in Industrial Design at College of Saint Benilde – DLS</li> <li>Alumni of the above</li> <li>Faculty researchers</li> <li>Universities</li> <li>Companies located at the neighboring industrial parks</li> </ul>

Project Title	Implementing Agency	Beneficiaries
InteliSENSE: A Progress Monitoring Tool for Children with Special Needs	De La Salle University (DLSU)	Clients of InteliSENSE include schools, clinics/ hospitals, therapists and teachers, and parents
Establishment of the AIM-Dado Banatao Incubator	Asian Institute of Management (AIM)	<ul> <li>Filipino scientists and engineers, regardless of university affiliation</li> <li>Filipino SMEs and Large Local Companies, such as Integrated Micro Electronics, Ionics, etc.</li> <li>Filipino investors, whether based in the Philippines or living abroad</li> <li>AIM students, faculty members, and alumni</li> </ul>
Pilot Implementation of ITDI's Pre- Commercialization Tools/ Strategies for Effective Transfer and Commercialization of Generated Technologies and Intellectual Properties	Industrial Technology Development Institute (ITDI)	<ul> <li>Industrial Technology Development Institute (ITDI) researchers</li> <li>Technology transfer officers</li> </ul>
Smart Vision: Al-Guided Vision System for the Blind	Grayscale Marketing Consultancy	Blind and visually impaired persons in the Philippines and in other English- speaking countries
One Expert (1E): A One-Stop Portal for Science and Technology Consultancy and Technical Services	DOST Regional Offices; Technology Application Promotion Institute (TAPI); National Research Council of the Philippines (NRCP)	<ul> <li>Micro-, Small, and Medium Enterprises (MSMEs) from horticulture/agriculture aquaculture and marine, food processing, metals and engineering, gifts and holiday decors, fashion accessories, natural fibers and dyes, handicrafts, furniture, ICT and health/ pharmaceutical</li> <li>Local Government Units (LGUs)</li> <li>Higher Education Institutes (HEIs)</li> <li>Non - government Organizations (NGOs)</li> <li>People's Organizations and similar organizations that provide critical support to MSMEs</li> </ul>
Upgrading the PNRI Neutron Laboratory for Neutron Physics and Dosimetry Research	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Philippine Nuclear Research Institute (PNRI)</li> <li>Nuclear regulators</li> <li>Universities</li> <li>Radiation workers</li> <li>Secondary Standards Dosimetry Laboratory (SSDL)</li> </ul>
PUP College of Engineering Sensors and Mechatronics Laboratory	Polytechnic University of the Philippines (PUP)	<ul> <li>Instructors handling mechatronics related subject</li> <li>Students enrolled to mechatronics related subjects</li> <li>Research enthusiasts whose researches are in-line with mechatronics</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Faculty and students from branches and campuses that offer engineering program</li> <li>Clients from other State Universities and Colleges (SUCs)</li> </ul>
Strengthening SLSU's Capability in GIS Technologies in Support of Southern Leyte's Competitiveness and Development	Southern Leyte State University (SLSU)	<ul> <li>Southern Leyte State University (SLSU) faculty, staff, and students</li> <li>Southern Leyte LGU officials and employees</li> <li>DepEd Teachers in Southern Leyte</li> <li>Southern Leyte citizens</li> <li>Funding Agencies and Stakeholders</li> </ul>
PHL-MICROSAT Project 1. Microsatellite BUS Development for Philippine Microsat	UP Diliman	<ul> <li>Department of Science and Technology (DOST)</li> <li>Engineers, scientists, and researchers who depend on satellite data for remote sensing and earth observations</li> <li>Government and civilian organizations involved in disaster risk management and response planning</li> <li>Academe and local electronics industry</li> </ul>
Establishment of Renewable Energy Laboratory and Demonstration Park	Isabela State University (ISU)	<ul> <li>Farmers</li> <li>Local Government Unit (LGU)</li> <li>Development practitioners/workers Students and Researchers</li> <li>Higher Education Institutes (HEIs)</li> </ul>
Development of Future Building Materials and Structures (FBMS) Laboratory	Northwest Samar State University (NwSSU)	<ul> <li>Philippine Government</li> <li>Region VIII (Samar – Leyte Provinces)</li> <li>Local Communities</li> <li>Neighboring Universities/ Industries/ Research Institutions</li> <li>Northwest Samar State University</li> <li>Students/ Researchers</li> </ul>
Establishment of a Pampanga State Agricultural University (PSAU) Bio- energy Laboratory	Pampanga State Agricultural University (PSAU)	<ul> <li>Faculty</li> <li>Researchers</li> <li>Extensionists</li> <li>Investors</li> <li>Students</li> <li>Other interested clients</li> </ul>
Development of Geographic Information System (GIS) Innovation Laboratory (GIS InnoLab)	University of Cordilleras	<ul> <li>Philippine Government</li> <li>Geographic Information System (GIS) Scientists</li> <li>Student and Faculty Researchers</li> <li>Local Communities</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Establishment of CvSU SiMM (Simulation, Modeling and Measurement) Laboratory	Cavite State University (CvSU)	<ul> <li>Students and faculty researchers from CvSU and other Universities and institutions</li> <li>Inventors or private individuals</li> <li>Small and Medium Enterprises (SMEs) and other industries</li> </ul>
Enhancing the Natural Science Research Center Laboratories of Central Mindanao University	Central Mindanao University (CMU)	<ul> <li>Local communities</li> <li>Cosmetic industries</li> <li>Pharmaceutical industries</li> <li>Graduate students</li> <li>Young researchers</li> </ul>
PCIEERD NSRI Research Grant	UP Diliman	National Science Research Institute's (NSRI's) grantees
Establishment of the USJ-R Center for Energy Harvesting Materials Research	University of San Jose Recoletos (USJ-R)	<ul> <li>Cebu City transportation support</li> <li>Private or public industries in need of energy-harvesting related technology to capture waste energy</li> <li>Academe</li> </ul>
Learning at Scale Vol. I Data Science Track	MOOCSX PH	<ul><li>Researchers</li><li>Academe</li></ul>
Capability Building on Energy Efficiency and Conservation (EE&C) for State Universities and Colleges (SUCs) in Six (6) Regions as Demonstration Sites formerly Capability Building on Energy Efficiency and Conservation (EE&C) for State Universities and Colleges (SUCs) in Five (5) Regions as Demonstration Sites	Industrial Technology Development Institute (ITDI)	<ul> <li>State Universities and Colleges (SUCs)</li> <li>Local Government Units (LGUs)</li> <li>Government Offices and Buildings</li> <li>Local industries and Enterprises</li> <li>SUCs faculty and staff</li> </ul>
DOST - SEI - Newton Fund Scholarships	Science Education Institute (SEI)	PhD degree grantees
Development of Municipal e- Governance Systems through ICT	Camarines Sur Polytechnic Colleges (CSPC)	<ul> <li>Local Government Units (LGUs)</li> <li>Citizens of Nabua and Bula</li> </ul>
Establishment of QBO Innovation Hub	Ideaspace Foundation, Inc.	<ul><li>Entrepreneurs</li><li>Startup community members</li></ul>
Support to the Commercialization of 500 DOST-Generated Technologies (Phase 2): Strengthening the Intellectual Property and Technology Portfolios of the DOST	Technology Application Promotion Institute (TAPI)	<ul> <li>Higher Education Institutions (HEIs)</li> <li>Non-academic Organizations</li> <li>Private firms</li> <li>Individual inventors</li> </ul>
2017-2019 DOST Technology Transfer Day (TTD)	Technology Application Promotion Institute (TAPI)	<ul><li>Stakeholders</li><li>Private Sectors</li><li>Researchers</li></ul>
Communicating Science for the People		
Leveraging the Power of Broadcast and Web Media to Promote Science for the People (DOSTv)	Science and Technology Information Institute (STII)	<ul><li>Academe</li><li>Researchers</li><li>Stakeholders</li></ul>

Project Title	Implementing Agency	Beneficiaries
Content Development for S&T Academic and Research-based openly-operated Kiosks (STARBOOKS)	Science and Technology Information Institute (STII)	Media     General Public
Doubling the Reach through Information, Education and Communication (IEC) Campaign	Science and Technology Information Institute (STII)	
Enhanced S&T Experience using Leading-Edge Learning Additions and Realities (STELLAR)	Science and Technology Information Institute (STII)	
Strengthening the Core	Science and Technology Information Institute (STII)	
The DOST Media Awards	Science and Technology Information Institute (STII)	
Diwata - 1: Interactive Exhibit at Museo Pambata	Museo Pambata	<ul><li>Academe</li><li>Students</li><li>General Public</li></ul>
Project 1. Space Adventure Traveling Exhibition	Mind Museum	• Filipino scientists working on space
Project 2. Permanent Exhibition at the Universe Gallery of the Mind Museum	Mind Museum	<ul> <li>tech</li> <li>Students from across the country</li> <li>General public</li> </ul>
Intensified Promotion of FPRDI - developed Technologies and Service	Forest Products Research and Development Institute (FPRDI)	Micro-, and small enterprises engaged in forest-based products utilization
Development and Application of Isotope and Elemental Provenance- Based Methodologies for Authenticity Testing of Vinegar, Soy Sauce, and other Major Condiments in the Philippines	Philippine Nuclear Research Institute (PNRI)	<ul> <li>Food manufacturers</li> <li>Food and Drugs Authority (FDA)</li> <li>Department of Health (DOH)</li> <li>Department of Trade and Industry (DTI)</li> <li>Consumers</li> </ul>
Portable Potable Water Equipment During Emergencies (PWEDE)	UP Diliman	<ul> <li>General public in Baguio City</li> <li>Schools</li> <li>Parks</li> <li>Government institutions Hotels</li> </ul>
COMPLETED		
Development of Functional Nanocarbon-Based Catalysts for Biomass Conversion Processes	De La Salle University (DLSU)	<ul><li>Researchers</li><li>Academe</li></ul>
Development, Characterization and Performance Evaluation of Polymeric Separation Membrane for Industrial Applications using Local Materials (Phase 1)	Industrial Technology Development Institute (ITDI)	<ul> <li>Backyard farm hog owners without installed biogas system</li> <li>Existing backyard farm anaerobic digester operators</li> <li>Small scale to commercial biogas owners</li> </ul>

Project Title	Implementing Agency	Beneficiaries
		• Researchers in the field of membrane technologies for carbon dioxide (CO <sub>2</sub> ) capture
TiO <sub>2</sub> based Nanomaterials and Nanoo Sensing of Synergistic and Organic I		trocatalysts for the Removal and
Project 1. Preparation of Imprinted poly (phenylenediamine)/ poly(thiophene)-TiO2 Nanoparticle Functionalized Electrodes for the Photoelectrochemical Sensing of Organophosphorus Pesticides	UP Diliman	<ul> <li>Academe</li> <li>Researchers</li> </ul>
Project 2. Synthesis of TiO2 – Conducting Polymer Nanospheres for the Photocatalytic and Photo- electrocatalytic Degradation of Organic Pollutants	UP Diliman	Academe     Researchers
Project 3. Preparation and Properties of Transition Metal- and Nitrogen-Doped Titania Photocatalysts by Hydrothermal Methods	UP Diliman	<ul> <li>Academe</li> <li>Researchers</li> </ul>
Efficacy of copper-based hollow kapok fiber nanocomposite for environmental purification	UP Diliman	<ul><li>Academe</li><li>Researchers</li></ul>
Production of Nanocellulose from Indigenous Natural Fibers and Agricultural Wastes	Ateneo De Manila University (ADMU)	<ul> <li>Ateneo De Manila University (ADMU)</li> <li>Industry Stakeholders</li> <li>Government</li> </ul>
ANEEME: Synthesizing and Sharing Animation Building Blocks for Rapid creation of 3D Motion Scenes	UP Diliman	<ul> <li>Local animation industry</li> <li>Game developers</li> <li>Creators of computer generated movies</li> <li>Education sector</li> <li>Visual storytellers</li> </ul>
Capability Building in Artificial Intelligence through Training and Acquisition of High Performance Computing Device	Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD)	<ul> <li>Philippine government (DOST and related departments)</li> <li>Selected Philippine universities</li> <li>Philippines Business Process Outsourcing (BPO) industry and related private sector markets</li> </ul>
Development of Interactive Software and Teaching Guides for Grades 7-10 Mathematics	Ateneo De Manila University (ADMU)	Students and teachers in Public and Private Schools
Project Tick-Tock Tech Talk	UP Diliman	<ul> <li>Students</li> <li>Young professionals</li> <li>Technical professionals</li> </ul>
Cartography of Old Informs the New (COIN)	UP Diliman	Local Government Units (LGUs) and Agencies mandated to issue building permits

Project Title	Implementing Agency	Beneficiaries
		<ul> <li>Property developers</li> <li>Building and home owners</li> <li>National Archives of the Philippines (NAP)</li> </ul>
PNRI Graduate Student Research Grant Program	Philippine Nuclear Research Institute (PNRI)	Graduate students who will be awarded with the grant
PHIL-LIDAR-1.A.1. Data Acquisition Component (DAC)	UP Diliman	<ul> <li>Department of Science and Technology (DOST) <ul> <li>Philippine Atmospheric, Geophysical and Astonomical Services Administration (PAGASA)</li> <li>Philippine Institute of Volcanology and Seismology (PHIVOLCS)</li> </ul> </li> <li>Department of Environment and Natural Resources (DENR) <ul> <li>National Mapping and Resource Information Authority (NAMRIA)</li> <li>Forest Management Bureau (FMB)</li> <li>Mines and Geosciences Bureau (MGB)</li> </ul> </li> <li>Department of Agriculture (DA) <ul> <li>Bureau of Agricultural Statistics</li> <li>PhilRice</li> </ul> </li> <li>Department of Public Works and Highways (DPWH)</li> <li>Department of Energy (DOE) <ul> <li>Renewable Energy Bureau</li> </ul> </li> </ul>
PHL-MICROSAT Project 3. Development of a Data Processing, Archiving and Distribution Sub- System for the Ground Receiving Station of the Philippines Scientific Earth Observation Micro-Satellite	UP Diliman	<ul> <li>Department of Science and Technology (DOST) <ul> <li>Philippine Atmospheric, Geophysical and Astonomical Services Administration (PAGASA)</li> <li>Philippine Institute of Volcanology and Seismology (PHIVOLCS)</li> </ul> </li> <li>Department of Environment and Natural Resources (DENR) <ul> <li>National Mapping and Resource Information Authority (NAMRIA)</li> <li>Forest Management Bureau (FMB)</li> <li>Mines and Geosciences Bureau (MGB)</li> </ul> </li> <li>Department of Agriculture (DA) <ul> <li>Bureau of Agricultural Statistics</li> <li>PhilRice</li> </ul> </li> <li>Department of Public Works and Highways (DPWH)</li> <li>Department of Energy (DOE) <ul> <li>Renewable Energy Bureau</li> </ul> </li> </ul>
Detection and Identification of Legitimate Public Utility Vehicles	UP Diliman	Motorists     Commuters

Project Title	Implementing Agency	Beneficiaries
(PUVs) Along various road netWorks (DILAW)		<ul> <li>Traffic Bureaus</li> <li>Land Transportation Franchising and Regulatory Board (LTFRB)</li> </ul>
Modification of Road Train Energy Storage System Using Lithium Ion Batteries	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Metro Manila Development Authority (MMDA)</li> <li>Department of Transportation (DOTr)</li> </ul>
Development of a Commercial Prototype Automated Guide-way Transit System in UP Diliman	Metals Industry Research and Development Center (MIRDC)	Transportation Sector
Development and Improvement of a Novel Rain Acoustic Sensor	Ateneo De Manila University (ADMU)	<ul> <li>National government agencies (PAGASA, OCD among others) and Local government units (LGUs)</li> <li>Private industries/ businesses</li> <li>Researchers</li> </ul>
Regional Scales of Variability in Precipitation (RSVP)	UP Diliman	<ul> <li>Science community</li> <li>PAGASA and other weather-related government agencies</li> <li>Local government units (LGUs)</li> </ul>
Utilization of Industrial By-product Currimao Steel Slag as Green Concrete - ICIEERD	Mariano Marcos State University (MMSU)	<ul><li>Contractors</li><li>Industrial community</li></ul>
Development of Sewing Machine for Softbroom and Other Commodities	Don Mariano Marcos Memorial State University (DMMMSU)	Softbroom makers of region I
Disaggregated Electricity Consumption Baseline Measurement of Micro, Small, and Medium Enterprises in the Philippines and Behavioral Response Analysis to an Intelligent Energy Management Platform using Real-Time Electricity Monitoring with Integrated Analytics and Recommendation Engine	WattSmart Philippines, Inc	<ul> <li>Micro-, small- and medium- enterprises (MSMEs)</li> <li>Academe</li> <li>Government agencies like the Department of Energy</li> <li>Policy makers</li> <li>Industry stakeholders</li> </ul>
Field-testing of the Integrated Gold- Copper Mineral Processing Pilot Plant in the Regions (Benguet)	UP Diliman	<ul> <li>Small-scale Mining (SSM) Industry</li> <li>SSM operators in CAR</li> <li>Academic Institutions</li> </ul>
Development of a Compact Wastewater Treatment System Enhanced with Bio-augmentation Technology for Quick Service Restaurants (QSRs)	Industrial Technology Development Institute (ITDI)	Quick Service Restaurants (QSRs)
Tempospatial Distribution and Transboundary Transport of Atmospheric Fine Particles across Bashi Channel, Taiwan and South China Sea	UP Diliman	Citizens of the Philippines and Taiwan

Project Title	Implementing Agency	Beneficiaries
Field Testing of Eco-Friendly Septic System (Eco-Sep) for the Tourism Sector in Siargao Island, Surigao del Norte (Project FRESH)	DOST Region CARAGA	<ul> <li>Resort owners</li> <li>LGU for their public toilets, schools, public market, and household at tourism and environmentally compromised areas</li> </ul>
Tailings - Cement Bricks Reinforced with Coco Fiber - CSU	Surigao State College of Technology (SSCT) - Del Carmen	<ul> <li>Households</li> <li>Construction company</li> <li>Businessmen/ entrepreneurs</li> <li>Coconut farmer</li> <li>Mining Companies</li> </ul>
Product Development of Talisay Nut Delights	Surigao State College of Technology (SSCT) - Del Carmen	International and local tourists visiting Surigao province
Archimedean Screw Micro Hydropower System For Small Scale Industry Application	Surigao State College of Technology (SSCT) - Del Carmen	<ul> <li>Communities that are at a considerable distance from the national electrical network</li> <li>Cooperatives and individuals in the community engaged in small scale processing industry</li> </ul>
Radiation-induced Grafting of Non- woven Fabrics for Wastewater Treatment to Meet Class C Effluent Heavy Metal Standards	Industrial Development Institute (ITDI) Manly Plastic Inc.	<ul> <li>Industries that have water treatment facilities</li> <li>General public</li> <li>Environment</li> </ul>
Dried Cassava Grates Processing and System Optimization	Visayas State University (VSU)	<ul> <li>Joji's Bakeshop</li> <li>Bohol Cassava Farmers</li> <li>Bakeries and Food Processors</li> <li>Institutional and other markets</li> <li>Related ancillary sectors in Bohol</li> <li>Machine Shop fabricating the processing machines</li> </ul>
Harmonization of Food Safety Training Modules for Food Manufacturing	DOST Region IV-A	<ul> <li>DOST Food Safety Teams</li> <li>Food MSMEs</li> </ul>
Design and Optimization of Austenitic Manganese Steel Liner for Philippine Aggregate and Mineral Processing	Metals Industry Research and Development Center (MIRDC)	<ul> <li>Philippine foundries</li> <li>Philippine aggregates and mineral processing industry</li> </ul>
Exploratory Characterization of Scandium and Rare Earth Elements in Palawan, Zambales and Surigao del Sur Nickeliferous Laterite Deposits	UP Diliman	<ul> <li>Government</li> <li>Private Mining Companies</li> <li>Academe</li> </ul>
Design, Fabrication and Performance Evaluation of Black Sand	Isabela State University (ISU)	<ul> <li>Coastal residents</li> <li>Small scale miners</li> <li>Fisher folks</li> <li>LGU/workers</li> <li>Students and Researchers Higher Education Institutions (HEIs)</li> <li>Metal fabricators</li> </ul>

Project Title	Implementing Agency	Beneficiaries
Research and Development Project to Rehabilitate and Enhance Productivity in Lahar and Ash-Laden Areas in Central Luzon	Central Luzon State University (CLSU)	Rural Household in Lahar laden areas in Tarlac, Pampanga, and Zambales
Pilot Testing and Technology Validation of NanoZeolite Processes	Industrial Development Institute (ITDI)	<ul> <li>Mining Industry</li> <li>Polymer and plastic industry</li> <li>Chemical industries Environment industries</li> <li>Agricultural industries</li> </ul>
Development, Testing, and Market Validation of an Industrial Grade Prototype of Smart Surface	UP Diliman	<ul><li>Educational institutions</li><li>Advertising agencies</li></ul>
Department of Science and Technology Partnership with the University of the Philippines Cebu Fabrication Laboratory (UP Cebu FabLab)	UP Cebu	<ul> <li>Registered business enterprises</li> <li>Freelance designers / emerging entrepreneurs / students</li> </ul>
Establishment of BatStateU Center for Technopreneurship and Innovation (Technology Business Incubation)	Batangas State University (BatStateU)	<ul> <li>BatStateU Students</li> <li>BatStateU faculty members and personnel</li> <li>BatStateU alumni</li> <li>Industries and business establishments within the Province of Batangas</li> </ul>
Innovation Hub: Diliman	UP Diliman	<ul> <li>Research and Development institutions (RDIs)</li> <li>Students and academe</li> <li>Startups</li> <li>Technology Business Incubators (TBIs)</li> <li>Industry partners/private sector particularly SMEs, investors, government and non-government organizations, local and national government agencies</li> </ul>
Capacity Building, Community Outreach and Diffusion of DOST- PCIEERD Supported Food Technologies through ENTREPRENEURSHIP at the University of Caloocan City	University of Caloocan City (UCC)	College Students at University of Caloocan City
IP Management (From Disclosure to Strategy) of DOST-PCIEERD Projects	UP Diliman	<ul> <li>R&amp;D proponents</li> <li>University</li> <li>Government Agencies</li> <li>Investors</li> <li>Industry partners/private sector</li> </ul>
Commercial Evaluation and Product Design of Eight nanotechnology Products of UPLB	UP Los Banos	Technology transfer office

Project Title	Implementing Agency	Beneficiaries
Technology Piloting of the FPRDI Flattening Equipment	Forest Products Research and Development Institute (FPRDI)	Furniture, handicrafts and construction industries
Bio-Oil Production from Agricultural Waste	UP Los Banos	<ul> <li>Policy makers</li> <li>Government institutions</li> <li>Law makers</li> <li>Biojet fuel industry</li> </ul>
Strategic Communication Approaches to Boost the Philippine Textile Research Institute Promotions	Philippine Textile Research Institute (PTRI)	<ul> <li>Textile and Garments Manufacturers</li> <li>Artisan Market</li> <li>General Public and Private Sectors</li> </ul>
Science on the Move: A Travelling Science Centrum for Region XII and ARMM	Philippine Foundation for Science and Technology (PFST)	Students and Academe in Region XII and ARMM