

Quarterly Physical Report of Operation
As of 30 September 2021

Department: Department of Science and Technology (DOST)


Agency: Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD)

Operating Unit:

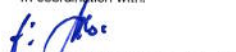
Organization Code (UACS): 19_013_00000000

Particulars	UACS Code	Physical Targets					Physical Accomplishments					Variance as of 4th Quarter	Remarks
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total		
1	2	3	4	5	6	7=(3+4+5+6)	8	9	10	11	12=(8+9+10+11)	13	
Program: National Industry, Energy and	31 010 0000000000												
Organizational Outcome: Increased benefits													
Output Indicators													
Number of projects funded		32	34	32	12	110	33	61	43		137	-27	The total disbursed budget for the Forty Three (43) newly funded projects amounts to P106.85M . Meanwhile, the total disbursement for the 3rd Quarter is P136.31M . Fourteen (14) of the funded projects were not included in the quarter's total physical accomplishment since they have already been reported from the previous quarters.
Number of projects monitored		32	43	55	50	180	38	84	86		208	-28	As of 3rd Quarter , the Council monitored 86 projects based on the progress and/or financial reports submitted by the Implementing Agency or through field evaluation visit/report conducted by PCIEERD Project Managers both funded by PCIEERD-GIA and DOST-GIA.
Percentage of projects completed which are published in peer-reviewed journals, presented in national and/or international conferences, or with IP					55%	55%			<i>to be reported in the 4th Qtr</i>		0%	55%	to be reported in the 4th Quarter
Outcome Indicators													
Percentage of priorities in the Harmonized National R&D agenda (HNRDA) addressed					90%	90%	100%	100%	100%		100%	-10%	The Council has ongoing projects in relation to its seven (7) main priorities in the HNRDA, which are enumerated in the attached document.
Number of partnerships with public and private stakeholders and international organizations		10	20	10	10	50	25	39	19		83	-33	Please see attached list of Implementing Agencies (IAs). Please take note that DOST attached agencies with projects monitored/assisted by the Council are excluded in the report because based on the definition set by the Department, only (IAs) outside of DOST should be reported.

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**Number of Projects Funded
(July - September 2021)**

	Program Title	Project Title	Implementing Agency
1		Valorization of Mining Wastes by Green Nano-hydrometallurgy: Application of Green-mediated Leaching Process and Innovative Magnetic Nano-separations for the Recovery of (Precious) Metals	Caraga State University
2		Production and Improvement of Construction Materials using Bacterial Calcite Precipitation	UP Diliman
3		Fabrication and characterization of plasma sprayed nanostructured TiO ₂ -based coatings for photocatalytic applications	Mindanao State University - Iligan Institute of Technology
4		IMPACT: Catalyzing Thomasian IP Generation and Utilization	University of Santo Tomas
5		From Pest to Valued Commodity: Black-Chin Tilapia (<i>Sarotherodon melanotheron</i>) for the Development of Surimi-Based Products Processing	Bataan Peninsula State University
6	Valorization of Coal Fly Ash: Resource Recovery of Critical and Strategic Elements, and Environmental Applications (VAL-CREE)	Recovery of Rare Earth Elements and Strategic Elements from Coal Fly Ash by Hydrometallurgical Techniques	Mindanao State University-Iligan Institute of Technology
7		DOST-CITEM INNOVATIVE FOOD PRODUCTS UNDER THE VALUE FOOD INNOVATION PROGRAM FOR IFEX 2021	Industrial Technology Development Institute (ITDI)
8	Ships Ballast Water and Biofouling Treatment Systems for Marine Vessels (SAILS) Program	Project 1. Port And Ballast Water Baselines Using Ecological, Microbiological And Edna Approaches (PORTEC)	University of the Philippines Manila
9		Development of Food Reference Materials for Nutrition Labeling for Use of Local Testing Laboratories (Phase 3) Implementation of ISO 17034:2016 Quality Management System in the Development of Rice Flour Reference Materials	Food and Nutrition Research Institute (FNRI)
10		Plant Protein Products from Local Sources	Industrial Technology Development Institute (ITDI)
11	Previous DOST-JSPS	Prediction of Long-Period Ground Motion in Megacities of the Philippines Critical to Seismic Safety of High-Rise Buildings	Philippine Institute of Volcanology and Seismology (PHIVOLCS)
12	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: Establishment of Iloilo Science and Technology University Technology Transfer Processes	Iloilo Science and Technology University
13	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	IMPACT: SPRINGBOARD - Supporting Potential and Relevant IP as Next Generation Business Opportunities towards Acceleration of Research and Development	Batangas State University

14	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: Establishment of Knowledge, Innovation and Technology Transfer Processes of the Holy Angel University	Holy Angel University
15	Startup Development Program	STARTUP: Enhancement and Market Validation of ROBIN (A reverse vendo machine for collecting PET bottles and aluminum cans)	Robin Machine Manufacturing
16	FASTRAC (Funding Assistance for Spin-Off and Translation of Research in Advancing Commercialization)	FASTRAC: Enhancement and Market Validation of TITAN Vision-based Traffic Information & Analysis	De La Salle University
17	FASTRAC (Funding Assistance for Spin-Off and Translation of Research in Advancing Commercialization)	FASTRAC: Application of Geopolymer Technology as Eco-innovative Composite Products	De La Salle University
18	Startup Development Program	STARTUP: Enhancing the MSME Supply Chain Experience by Integrating Cold Chain Solutions in DeliverE 2.0	InsightSCS Corp.
19	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	Enhancing the Technology Transfer Processes of the TUPV Intellectual Property and Technology Transfer Office (TIPTTO)	Technological University of the Philippines - Visayas
20	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	IMPACT: The Enhancement of USTPs Intellectual Property Management and Establishment of Technology Commercialization Systems and Standards	University of Science and Technology of Southern Philippines
21		Thermal Processing of Selected Materials Using Agitated-Type Retorts	Industrial and Technology Development Institute (ITDI)
22		Recovery of Nickel, Cobalt, Iron and Rare Earth Elements from Low Grade Philippine Laterite Ores using Atmospheric Leaching with Reduction Pretreatment	Mines and Geosciences Bureau (MGB)
23		Parallel Testing of the Traditional Gold Extraction Process versus CLINN-GEM Technology of UP-DOST Characterization of Tailings and Monitoring of the Gold-Copper Pilot Plant in Jose Panganiban, Camarines Norte	DOST - Region V
24		CAPPS: Development of an Alternative Ceramic Armor Plates from Philippine Silicates for Philippine Armed Personnel	Mindanao State University - Iligan Institute of Technology
25		SUGPo: Sustainable mine waste management Using modified hydrothermal carbon from prawn shells, and Geochemical modelling of Pathways of contaminants from mine tailings	Mindanao State University - Iligan Institute of Technology
26	PH UK Newton Agham Joint Cooperation Program on Understanding the Impacts of Hydrometeorological Hazards in South East Asia	Catchment Susceptibility to Hydrometeorological Events: Sediment Flux and Geomorphic Change as Drivers of Flood Risk in the Philippines	UP Diliman

27		Specific Earthquake Ground-Motion Levels to Help Increase the Seismic Resiliency of Government Infrastructures, Residential and Medium-to-High Rise Buildings in Pangasinan, Tarlac, Metro Iloilo-Guimaras, Cauayan City, Butuan City and Mati City	Philippine Institute of Volcanology and Seismology (PHIVOLCS)
28		Liquefaction Hazard Assessment for Resilient Schools in GMMMA: A Liquefaction Probabilistic Model using Non-Invasive Geophysical Techniques and Limited Probe Hole	Philippine Institute of Volcanology and Seismology (PHIVOLCS)
29		Development of a Smart Polymer Meta-Material for Wearable Biosensors	De La Salle University
30	Terahertz Research and Innovation Program Leading to Commercially-Viable THz Time Domain Spectroscopy Systems	Project 4. THz Spectroscopic Fingerprinting of Controlled Substances Relevant to Human Health and Security	UP Los Baños
31		Chemical Synthesis and Characterization of Conducting Polymer/Metal Nanoparticles Composites, and their Application as a Chemiresistive Gas Sensor Array for H ₂ S and CO ₂	University of Santo Tomas
32	Higher Education Institution Readiness for Innovation and Technopreneurship (HEIRIT)	HEIRIT: Establishment of Technology Business Incubation Facility of Mapua University	Mapua University
33	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: Establishment of Knowledge, Technology Transfer and Business Development Processes and Services in West Visayas State University	West Visayas State University
34	FASTRAC (Funding Assistance for Spin-Off and Translation of Research in Advancing Commercialization)	FASTRAC: VISSER: REFRESH (Redesigning for Remote Education, in School and at Home)	UP Diliman
35	FASTRAC (Funding Assistance for Spin-Off and Translation of Research in Advancing Commercialization)	Establishment of A Spin-Off Facility and Pilot Plant for Fruitect Coatings for Shelf-Life Extension of Fresh Fruit Produce	UP Los Baños
36	FASTRAC (Funding Assistance for Spin-Off and Translation of Research in Advancing Commercialization)	Establishment of A Spin-Off Facility and Pilot Plant for Hormogroe Nanoformulated Plant Growth Regulator for The Production of High Value Crops	UP Los Baños
37	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: IMPACT: Enhancing of the DOST-FNRI's Technology Transfer Office Policies and Processes	Food and Nutrition Research Institute (FNRI)
38	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: TRUE IMPACT: Technology and Research of USEP Enhanced through IMPACT	University of Southeastern Philippines
39	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	IMPACT: Establishment of Technology Transfer and Utilization Processes and Services in Bulacan State University	Bulacan State University
40	Higher Education Institution Readiness For Innovation & Technopreneurship (HEIRIT)	HEIRIT: Adamson University Neo Science and Technology Incubation Center (AduNEST-INC)	Adamson University

41	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: Teknoy InACT - Teknoy Innovation Advancement through Commercialization and Technology Transfer	Cebu Institute of Technology - University
42	KTTO-IMPACT (IP Management Program for Academic Institutions Commercializing Technologies) Program	IMPACT: Strengthening Bicol University's IP Management Programs and Commercialization Strategies (BU-IPCom)	Bicol University
43	Startup Development Program	STARTUP: An Agriculture Technology Platform automated logistics booking for farmers and fisherfolks.	Agrabah Ventures Inc.
44		Human Resource Development Program (HRDP)	Multiagency
45	Regional Research Institution (RRI)	Development of Halal Compliant Restructured Goat Meat Products and Freeze-Dried Mango-Yogurt	Sultan Kudarat State University-Tacurong Campus
46	Regional Research Institution (RRI)	Design, Development, Testing and Implementation of Fuzzy-Proportional Plus Integral (PI) Power Factor Correction Controller (PFCC) for 10 kW Load.	Iloilo Science and Technology University
47	Regional Research Institution (RRI)	Utilization of Banana Peel, Canistel Fruit and Brown Rice in the Development of Composite Flour	Iloilo Science and Technology University
48	Regional Research Institution (RRI)	Application of Blockchain Technology to the Guimaras Mango Supply Chain	Iloilo Science and Technology University
49	Regional Research Institution (RRI)	Development of Optimized Pineapple Fiber Scraping Machine	Capiz State University
50		Regional S&T Consortia	Multiagency
51		PCIEERD Human Resource Development	Multiagency
52		Impact Assessment of DOST/PCIEERD Funded Projects	Multiagency
53		Young Innovators Program	Multiagency
54		Financial Support for the Information Dissemination and Promotion of Technologies	Multiagency
55		Project Management/Assessment and Policy Development Program	Multiagency
56		Balik Scientist Program	Multiagency
57		Total Quality Management Enterprise System	Multiagency

Already reported in 1st or 2nd Qtr

**Number of Projects Monitored
(July - September 2021)**

	Program Title	Project Title	Implementing Agency
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1	FASTRAC (Funding Assistance for Spin-Off and Translation of Research in Advancing Commercialization)	Establishment of A Spin-Off Facility and Pilot Plant for Hormogroee Nanoformulated Plant Growth Regulator for The Production of High Value Crops	UP Diliman
2		BRAVE: Bomb Removal Automated Vehicle	De La Salle University
3	Higher Education Institution Readiness For Innovation & Technopreneurship (HEIRIT) Development Program for Starting TBIs	Establishment of DOST-BulSU BARAS TBI (Business Assistance for Research Acceleration and Sustainability Technology Business Incubator)	Bulacan State University
4		Development of a Smart Polymer Meta-Material for Wearable Biosensors	De La Salle University
5		Secured Command and Control (C2) Communication System	Holy Angel University
6	Science for Change (S4C): Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness	Implementation of the R&D RDLead Program	National Research Council of the Philippines (NRCP)
7	Analyzing CORDEX - SEA Regional Climate Simulations for Improved Climate Information over the Philippines: SST Influence, Variability and Extremes, Tropical Cyclone Activity	Project 1. Analysis of the influence of sea surface temperature representation in downscaled regional climate using the SEACLID/CORDEX-Southeast Asia simulation	Manila Observatory
8	Analyzing CORDEX - SEA Regional Climate Simulations for Improved Climate Information over the Philippines: SST Influence, Variability and Extremes, Tropical Cyclone Activity	Project 2. Multitemporal and Extremes Analysis of Modeled Climatology over the Philippines in the SEA Cordex Domain	Manila Observatory
9	Analyzing CORDEX - SEA Regional Climate Simulations for Improved Climate Information over the Philippines: SST Influence, Variability and Extremes, Tropical Cyclone Activity	Project 3. Detecting Tropical Cyclones in a Downscaled Regional Climate Model for CORDEX-SEA	Manila Observatory
10	e-Asia Joint Research Program	Fundamental study of the physical properties of metal-oxide single nanowires and nanoparticles for bio-nano-sensing	De La Salle University
11	Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness: Niche Centers in the Regions for R&D (NICER) Program	Establishment of Niche Center on Environmental Informatics for Central Visayas	UP Cebu
12	Integrated Food Safety Program	Risk Profiling of Hazards in Philippine Food to Support National Risk Management	UP Diliman
13		Kapok fibers absorbent with customizable hydrophobicity/hydrophilicity for oily water and wastewater treatment	UP Diliman
14		Understanding Lightning and Thunderstorms for Extreme Weather Monitoring and Information Sharing (ULAT)	Advanced Science and Technology Institute (ASTI)

15	Sustained Support for Local Space Technology & Applications Mastery, Innovation and Advancement (STAMINA4Space)	Project 4. Ground Receiving Archiving, Science Product Development and Distribution (GRASPED)	Advanced Science and Technology Institute (ASTI)
16	PH UK Newton Agham Joint Cooperation Program on Understanding the Impacts of Hydrometeorological Hazards in South East Asia	Catchment Susceptibility to Hydrometeorological Events: Sediment Flux and Geomorphic Change as Drivers of Flood Risk in the Philippines	UP Diliman
17		Technology Innovations for Mathematical Reasoning, Statistical Thinking and Assessment	Ateneo De Manila University
18	Collaborative Research and Development to Leverage Philippine Economy (CRADLE)	CRADLE: Development of a Design Guideline Using Finite Element Analysis for Semiconductor and Electronics Packaging Systems for Automotive Applications (FEA2)	De La Salle University
19	R&D Block Grant: S&T Fora Resilient Community Against the Pandemic (STRAP)	Nanocellulose Self-Disinfecting (NACS) Filter: R & D Validation of an Innovative Low-Cost Nanotech-based Face Masks	Caraga State University
20		Determination of Optimal Placement of Electric Vehicle Charging Stations in a Local Public	UP Diliman
21	Science, Technology and Innovations for Productivity and Competitiveness Program	Nurturing Interest in STEM Among Filipino Learners Using Minecraft	Ateneo De Manila University
22	STRAP (S&T for a Resilient Community Against the Pandemic)	iJuanderer: An Augmented Reality-based Gamified Local Tourism and Cultural Heritage Promotion and Preservation	DOST - Philippine Science High School (Central Luzon)
23	STRAP (S&T for a Resilient Community Against the Pandemic)	Haynayan AR: An Augmented Reality-Based Lesson for the Improvement of Learning Achievement in Cell Biology for the STEM Curriculum	DOST - Philippine Science High School (Central Luzon)
24		Chemical Synthesis and Characterization of Conducting Polymer/Metal Nanoparticles Composites, and their Application as a Chemiresistive Gas Sensor Array for H2S and CO2	University of Santo Tomas
25	Integrated Application for Transport Efficiency Development (INTEGRATED)	System for Optimized Routing for Transport (SORT)	De La Salle University
26	Scaling Up Climate Information Services for Societal Benefits (CLIM'UP)	Project 2. Development of Prediction and Warning System on Sub-Seasonal Scale of Extreme Events Associated with Monsoon in the Philippines (Monsoon@Ph)	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)
27	Scaling Up Climate Information Services for Societal Benefits (CLIMUP)	Project 1. Development of high-resolution observation-based gridded sub-daily climate data for the Philippines (ClimGridPh)	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)
28	Science and Technology for a Resilient Community against the Pandemic (STRAP) R&D Block Grant	Helmet-Integrated Medium-Range IR Thermal Scanner	San Carlos College
29		PAVE-Prototype Automated Visual Survey Equipment	UP Diliman
30	R&D Block Grant: S&T for a Resilient Community Against the Pandemic (STRAP)	A Game-based Mobile Learning Platform for Social Studies	Mariano Marcos State University

31	Infrastructure Development Program	Establishment Of A Solid Freeform Fabrication Research Laboratory (SoFFReI)	Pangasinan State University
32	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	Establishment of Technology Management System at University of the Philippines Mindanao	UP Mindanao
33	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	IMPACT: The Enhancement of USTPs Intellectual Property Management and Establishment of Technology Commercialization Systems and Standards	University of Science and Technology of Southern Philippines
34	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	IMPACT: Establishment of Technology Transfer and Utilization Processes and Services in Bulacan State University	Bulacan State University
35	IP Management Program for Academic Institutions Commercializing Technologies (IMPACT)	IMPACT: Establishment of Knowledge and Technology Transfer Processes for University of the Cordilleras	University of the Cordilleras
36	Infrastructure Development Program	Center for Green Nanotechnology Innovations for Environmental Solutions (CGNIES)	University of Mindanao
37		ADMATEL Expansion Towards Long Term Competitiveness and Sustainability – Phase 2 : ADMATEL Geared for PHL Industry 4.0	Industrial Technology Development Institute
38	Mindanao Renewable Energy R&D Center (MREC)	Design and Performance Evaluation of an Ocean Renewable Energy System	Ateneo de Davao University
39	Mindanao Renewable Energy R&D Center (MREC)	Design and Performance Evaluation of a Micro-Scale Concentrated Solar Power Technology	Ateneo de Davao University
40		Photoluminescent Metal Nanocluster to Detect, Disinfect, and Suppress the Spread of Coronavirus and other Microorganisms	De La Salle University
41		AQUADRONE: UAV Assisted Deployment System for Water Quality Monitoring	University of Santo Tomas
42	SEA-EU (Southeast Asia-Europe Joint Funding Scheme)	Metal Oxide Hybrid Structured Barriers for Stable Energy Devices	De La Salle University
43	CRADLE 2020	Diachronic Representation and Linguistic Study of Filipino Word Senses Across Social and Digital Media Contexts	De La Salle University
44	Artificial Intelligence Program	Design and Development of Intelligent Traffic Control and Management System	Caraga State University
45	Artificial Intelligence Program	Development of a CNN and RNN topology for Impedance Spectroscopy Analysis	UP Los Baños
46	Artificial Intelligence Program	Cost-effective Technology for Monitoring and Quantifying Benthic Area Covered by Marine Litter in Shallow Coastal Areas	UP Mindanao
47	8th e-Asia Joint Research Program	eAsia: Development of Innovative Nanobiodevices Based on Hybrid Materials by Combination of Endemic South Asian Biomolecules and Nanocarbons	Mindanao State University - Iligan Institute of Technology
48		PATURO: Platform for Assessment and Tracking of Urbanization-Related Opportunities	Asian Institute of Management (AIM)

49	CRADLE 2019	Reworking of Processed Meat Using a Combined Acidification-Heat Treatment Process	Eastern Visayas State University
50	Advanced Additive Manufacturing R&D Program (AMCen)	Development of Multiple Materials Platform for Additive Manufacturing (MATDEV)	Industrial and Technology Development Institute (ITDI)
51	DOST-JSPS	Radiation damage investigations on functional materials: Material development, analysis, and informatics	Technological Institute of the Philippines
52	Decision Support Tools for Intelligent Transport System (ITS)	Enhancement of Transportation Management Software (E-TraMS)	UP Diliman
53		Project BUHAWI (Automated Gun Mount for Browning 0.50 Caliber Machine Gun, M2, Heavy Barrel)	Metals Industry Research and Development Center (MIRDC)
54	Severe Wind Hazard and Risk Assessment for Cebu City	Enhanced Vulnerability Curves for Different Building Types in the Philippines	UP Diliman
55	Enhancement of the Competence and Capability of the National Metrology Laboratory of the Philippines	Project 1. Chemical Metrology for Organic Contaminants in Foods and Water	UP Diliman
56	Enhancement of the Competence and Capability of the National Metrology Laboratory of the Philippines	Project 2. Chemical Metrology for Inorganic Toxic Elements in Food and Water	Forest Products Research and Development Institute
57		Development of Nanosilica-based Anti-Corrosion Coating Formulations for Carbon Steel Reinforcement Used in Farm Structures	UP Los Baños
58	Smart Plant Production in Controlled Environments (SPICE)	Project 1. Standalone Urban Farm	UP Diliman
59	Smart Plant Production in Controlled Environments (SPICE)	Project 2. Sensor-based Monitoring and Analytics for Smart Hydroponics (SMASH)	UP Diliman
60	Smart Plant Production in Controlled Environments (SPICE)	Project 3. Establishment of Soilless Culture Technology for Urban Food Production	UP Diliman
61	Smart Plant Production in Controlled Environments (SPICE)	Project 4. Ex-Situ Conservation through Micropropagation Cryopreservation of Native Plant Species	UP Diliman
62		Image Mapping of Energy Conversion Efficiency and Other Parameters Across Solar Cell Active Areas using Photoexcitation and Photothermal Effects	UP Cebu
63		CATfish: A Modular Mini-Autonomous Underwater Vehicle System	UP Diliman
64		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)
65	Integrated Food Safety Program	Development of Food Safety Guidelines for the Food Service Sectors	Food and Nutrition Research Institute (FNRI)
66	Transforming the Philippine MSMEs through Industry 4.0 Technologies	Establishment of Advanced Mechatronics, Robotics, and Industrial Automation Laboratory (AMERIAL) in Support of the Metals and Engineering Industry	Metals Industry Research and Development Center (MIRDC)

67	Integrated Food Safety R&D Program	Exposure Assessment of Food Chemical Contamination in Metro Manila: A Pilot Total Diet Study Approach	Food and Nutrition Research Institute (FNRI)
68	Fishery By-product Processing for Food Application: Towards Commercialization	Project 1 : Collagen and Gelatin from By-products of Fish Processing Industry	Central Luzon State University
69	Fishery By-product Processing for Food Application: Towards Commercialization	Project 2. Fish Oil, Proteases and Protein Hydrolysate from By-products of Fish Processing	Central Luzon State University
70		Liquefaction Hazard Assessment for Resilient Schools in GMMMA: A Liquefaction Probabilistic Model using Non-Invasive Geophysical Techniques and Limited Probe Hole	PHIVOLCS
71	NovaSAR Imaging Capacity Share Programme	Synthetic Aperture Radar (SAR) and Automatic Identification System (AIS) for Innovative Terrestrial Monitoring and Maritime Surveillance	Advanced Science and Technology Institute (ASTI)
72	Sustained Support for Local Space Technology & Applications Mastery, Innovation and Advancement (STAMINA4Space)	Project 1. Optical Payload Technology In-depth Knowledge Acquisition and Localization (OPTIKAL)	UP Diliman
73		Weather and Climate Science for Service Partnership for South East Asia: Building Safer Community to Weather and Climate Variability through Science and Innovation (WCSSP)	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)
74	PH UK Newton Agham Joint Cooperation Program on Understanding the Impacts of Hydrometeorological Hazards in South East Asia	Philippines - Quantitative Lahar Impact and Loss Assessment under changing Land Use and Climate Scenarios	PHIVOLCS
75	PH UK Newton Agham Joint Cooperation Program on Understanding the Impacts of Hydrometeorological Hazards in South East Asia	Philippine Groundwater Outlook (PhiGO)	Ateneo De Manila University
76	PH UK Newton Agham Joint Cooperation Program on Understanding the Impacts of Hydrometeorological Hazards in South East Asia	SCaRP: Simulating Cascading Rainfall-triggered Landslide Hazards in the Philippines	Mapua University
77	Natural Fibers as Nanostructured Scaffolds for Biomedical Applications	Project 2. Nanostructured Scaffolds from Natural Fibers as Platforms for Stem Cell Growth and Differentiation	UP Diliman
78	Upgrading the PNS for Virgin Coconut Oil (VCO) and the Philippine VCO Industry	Project 1. Physico-chemical factors which affect the quality of VCO	Ateneo De Manila University
79	Upgrading the PNS for Virgin Coconut Oil (VCO) and the Philippine VCO Industry	Project 3. Investigation of Factors Affecting the Sensory Properties and Acceptability of VCO	UP Diliman
80	Collaborative Research and Development to Leverage Philippine Economy (CRADLE)	DRIVER.PHs Drivers Roadworthiness Improvement Verification Education & Readiness for the Philippine logistics industry	Technological institute of the Philippines - Quezon City Campus

81	NICER: Program Boondock: A Mountain Engineering Center Towards Sustainable Infrastructure and Upland Water Security	Project 3. Upland River and Spring Water Assessment and Management	University of the Cordilleras
82	NICER: Program Boondock: A Mountain Engineering Center Towards Sustainable Infrastructure and Upland Water Security	Project 1. Slope Stability Analysis and Engineering Intervention for Rice Terraces and Road Infrastructures in Terrain Areas	Kalinga State University
83		Development of FIC Competency in Moving New Products from Concept to Market Launch	Industrial Technology Development Institute (ITDI)
84		Integrated Flood and Water Resources Management in ASEAN Basins for Sustainable Development	Isabela State University
85		Advanced Surface Coatings for Lightweight Alloys Used in Aerospace Applications	UP Diliman
86		Unmanned Aerial System (UAS) with Passively Rotating Spherical Shell for Close-proximity Inspection of Infrastructure	Mindanao State University-Iligan Institute of Technology
87	DOST-PCIEERD Block Grant: S&T for a Resilient Community Against the Pandemic (STRAP) Program	SpaceBetweenUs: A Computer Vision Application for Physical Distancing Monitoring in Public Areas	University of Science and Technology of Southern Philippines
88		Handum: The Design, Implementation, and Analysis of a Digital/Mobile Game-based Learning Tool for Primary and Secondary Education	UP Diliman
89	Good Governance Through Data Science And Decision Support System (GODDESS) Program	Development of Data Analytics and Information System: Support on Social Welfare Services for Senior Citizens of Butuan City	Father Saturnino Urios University
90		Imahe Labs: An Educational Game for Chemistry in the Senior High School and Junior High School sectors of Baguio City	University of the Cordilleras
91		Pilot Study for Integrating Microgrid and Distributed Renewable Energy Sources for an Electric Cooperative	UP Diliman
92	3D Philippines: 3D Visualization and Analysis of Surface and Sub-surface Data in the Philippines	Optimization of the GeoRiskPH Integrated System through Risk Assessments, Site Suitability Models and 3D Visualizations to Aid Policy and Decision-Making (3D Earth Risk)	Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)
93	R&D Block Grant: S&T for a Resilient Community Against the Pandemic (STRAP)	Printed Electronic Devices for the New Normal: Temperature Sensor Patch, Electrochemical Sensor Array Patch for Face Masks and Air Circulators, and Antiviral Nanotech for Air Circulator Filters	Ateneo De Manila University
94	CRADLE Challenge 2020:	CYANanobot: Miniaturized Boat-assisted Data Acquisition for Automated Cyanide Monitoring in Wastewater using Optical Nano-sensor	Caraga State University
95		Resilient Education Information Infrastructure for the New Normal	Advanced Science and Technology Institute (ASTI)

96		Pilot Testing and Deployment of Automated Quarantine Control Checkpoint Mechanism in Support of National COVID - 19 Initiatives	DOST - NCR
97		Mass Production and Distribution of Face Shields	Metals Industry Research and Development Center (MIRDC)
98	Collaborative Research and Development to Leverage Philippine Economy (CRADLE)	Application of Natural Antioxidants Derived from Sugarcane for Food, Food Supplement and Cosmetics Production Formulations	UP Los Baños
99	Artificial Intelligence Program	Development of Multi-lingual Chatbot for Health Monitoring of Public School Children	De La Salle University
100	Collaborative Research and Development to Leverage Philippine Economy (CRADLE)	Enhanced Forecasting Model for Complex Water Supply Systems of the East Service Area of Metro Manila	Asian Institute of Management (AIM)
101	MECO-TECO: VOTE	Landslide Investigations on Geohazards for Timely Advisories in the Philippines (LIGTAS)	UP Los Baños
102	Infrastructure Development Program	Establishment of the Additive Manufacturing Center for Industrial Ceramics (AMCeram)	Adamson University
103	Advanced Additive Manufacturing R&D Program (AMCen)	Research on Advanced Prototyping for Product Innovation and Development using Additive Manufacturing Technologies (RAPPID-ADMATEC)	Metals Industry Research and Development Center (MIRDC)
104	CRADLE 2018	Design and Development of a Semi-Automated Garlic Slicer for Delicacies Manufacturers	Holy Angel University
105	Higher Education Institution Readiness For Innovation & Technopreneurship (HEIRIT) Development Program for Starting TBIs	UMasenso: Establishment of University of Mindanao Technology Business Incubation Facility and Services for Environmental Solutions	University of Mindanao Philippines
106	8th e-Asia Joint Research Program	eAsia: Development of Innovative Nanobiodevices Based on Hybrid Materials by Combination of Endemic South Asian Biomolecules and Nanocarbons	Mindanao State University - Iligan Institute of Technology
107		Electrochemical and Quantum Mechanical Investigation of Various Small Molecule Organic Compounds as Corrosion Inhibitors in Mild Steel	De La Salle University
108		Characterization and Resource Estimation of Valuable Rare Earth Elements (REEs) and Natural Radionuclides in the Philippine Coal and Feldspar Deposits	Philippine Nuclear Research Institute (PNRI)
109		Establishing an Environment-Friendly Chromium Plating Process using New Generation Ionic Liquids	UP Diliman
110		Optimization of Virtual Reality Kit (VR Kit) for New Media Technology and Commercial Competitiveness	Mataverse Incorporated
111		Environmental, Health and Safety Research in the Risk Assessment of Nanomaterials (Phase 1)	Industrial Technology Development Institute (ITDI)

112		Fabrication and Characterization of Hydrophobic Nanocomposite Plated Abaca Fabric for Enhanced Electromagnetic Interference Shielding (EMI-SE) and Thermal Resistance (TR) for Spacesuits Application	De La Salle University
113	DLSU-AKP-DOST CRADLE	Integrated Flywheel Energy Storage Management System	De La Salle University
114	Collaborative Research and Development to Leverage Philippine Economy (CRADLE)	Development of Plasma Coating Processes for the Furniture Industry	UP Diliman
115		Development of a Gamma Computed Tomography Imaging Device for Industrial Applications (GAIA)	Philippine Nuclear Research Institute (PNRI)
116		Utilization of Expanded Perlite produced from Philippine mines as Partial Fine Aggregate Replacement for Concrete Hollow Blocks and Masonry Mortar for Non-Load Bearing Walls	UP Diliman
117	3D Philippines: 3D Visualization and Analysis of Surface and Sub-Surface Data in the Philippines	Project 1. Geotechnical Mapping of Metro Manila Subsoil (GEMMMS)	De La Salle University
118	Value-Addition of Philippine Iron and Iron Rich Mineral Resources	Project 1. Technical Study on the Use of Synthesized Laterite-Iron Sand as Feed Material for Shaft Furnace Ironmaking Technology	Mines and Geosciences Bureau
119	Value-Addition of Philippine Iron and Iron Rich Mineral Resources	Project 2. Recovery of Scandium from Laterite-based Pig Iron Slag by Dry Digestion and Precipitation Methods	Mines and Geosciences Bureau
120	Value-Addition of Philippine Iron and Iron Rich Mineral Resources	Project 3. Refining Laterite-based Crude Pig Iron for Specific Product Applications	Metals Industry Research and Development Center
121		Valorization of Mining Wastes by Green Nano-hydrometallurgy: Application of Green-mediated Leaching Process and Innovative Magnetic Nano-separations for the Recovery of (Precious) Metals	Caraga State University
122	R&D Block Grant: S&T for a Resilient Community Against the Pandemic (STRAP) Program	Stunt Science: A Physics Simulator Mobile Game	Western Institute of Technology (WIT)
123		SUGPo: Sustainable mine waste management Using modified hydrothermal carbon from prawn shells, and Geochemical modelling of Pathways of contaminants from mine tailings	Mindanao State University-Iligan Institute of Technology
124		Characterization and Resource Estimation of Valuable Rare Earth Elements (REEs) and Natural Radionuclides in the Philippine Coal and Feldspar Deposits	Philippine Nuclear Research Institute (PNRI)
125		A Link-Up of Geomatics and Social Science Research for the Development of Smart Cities (LUNGSOD) Project	UP Diliman
126	CRADLE 2020	baTID: RFID-band for personalized body temperature monitoring	Ateneo De Manila University

127	CRADLE 2020	Systematized Mining Operations using Automation and Real-Time Telematics Platform towards a Paradigm Shift in Surface Mines of Caraga Region (SMART Mines)	Caraga State University
128	CRADLE 2020	SMART MINE: Development of Sediment Monitoring and Analysis for Rehabilitation Tool in a surface MINE area	Central Mindanao University
129		Development of Biodegradable Nanofiber Filters As An Active Material For Medical-Grade Facemask	University of San Carlos - Talamban Campus
130		Development of Theoretical and Computational Models Based on Percolation Theory Leading Towards Durable Material Design	Mapua University
131	Artificial Intelligence Program	Intelligent Structural Health Monitoring via Mesh of Tremor Sensors (meSHM)	De La Salle University
132		Development of Inkjet CMYK Digital Printing Inks from Philippine Natural Dyes	Philippine Textile Research Institute (PTRI)
133	Securing Water Resources in Tourist Destinations in the Philippines: Pilot Study in Boracay Island (Comprehensive Water Resources Assessment and Management Plan for Nabaoy River Watershed and Boracay Island)	Project 1. Water for Tourism: A Science-Based Water Resource Monitoring and Management Planning Guide for Tourist Destinations in the Philippines	Ateneo de Manila University
134		Plant Protein Products from Local Sources	Industrial and Technology Development Institute (ITDI)

Already reported in 1st or 2nd Qtr

**2018 - 2020 Completed Projects with Publications/Conference Presentations/IP Filed or Approved
(July - September 2021)
to be reported in the 4th Quarter**

**Priorities in the Harmonized National R&D Agenda (HNRDA)
(July - September 2021)**

	Topics/Areas	With Ongoing Projects
1	Food and Nutrition Security	X
2	Countryside Development	X
3	Competitive Industries	X
4	Delivery of Social Services	X
5	Intelligent Transportation Solutions	X
6	Renewable Energy and Energy Storage Solutions	X

7	Human Security	X
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**List of Partners/Implementing Agencies
(July - September 2021)**

NO DUPLICATION (with previous quarters)

1	Adamson University	Adamson University
2	Agrabah Ventures Inc.	Agrabah Ventures Inc.
3	Asian Institute of Management	Bulacan State University
4	Ateneo de Davao University	Capiz State University
5	Ateneo De Manila University	Central Luzon State University
6	Bataan Peninsula State University	Central Mindanao University
7	Batangas State University	Eastern Visayas State University
8	Bicol University	Father Saturnino Urios University
9	Bulacan State University	InsightSCS Corp.
10	Capiz State University	Kalinga State University
11	Caraga State University	Mariano Marcos State University
12	Cebu Institute of Technology - University	Mataverse Incorporated
13	Central Luzon State University	Robin Machine Manufacturing
14	Central Mindanao University	San Carlos College
15	De La Salle University	Sultan Kudarat State University-Tacurong Campus
16	Eastern Visayas State University	University of Science and Technology of Southern Philippines
17	Father Saturnino Urios University	UP Manila
18	Holy Angel University	West Visayas State University
19	Iloilo Science and Technology University	Western Institute of Technology
20	InsightSCS Corp.	
21	Isabela State University	
22	Kalinga State University	
23	Manila Observatory	
24	Mariano Marcos State University	
25	Mataverse Incorporated	
26	Mindanao State University-Iligan Institute of Technology	
27	Mines and Geosciences Bureau (MGB)	
28	Pangasinan State University	
29	Robin Machine Manufacturing	
30	San Carlos College	
31	Sultan Kudarat State University-Tacurong Campus	
32	Technological Institute of the Philippines	

33	Technological institute of the Philippines - Quezon City Campus
34	Technological University of the Philippines - Visayas
35	University of Mindanao
36	University of San Carlos - Talamban Campus
37	University of Santo Tomas
38	University of Science and Technology of Southern Philippines
39	University of Southeastern Philippines
40	University of the Cordilleras
41	UP Manila
42	UP Cebu
43	UP Diliman
44	UP Los Baños
45	UP Mindanao
46	West Visayas State University
47	Western Institute of Technology
48	DOST-UKRI-NERC (UK Research and Innovation - Natural Environment Research Council / Philippines Minerals & Mining DOST-PCIEERD Joint Programme)
49	SEA-EU (Southeast Asia-Europe Joint Funding Scheme)
50	e-Asia Joint Research Program
51	PH UK Newton Agham Joint Cooperation Program
52	MECO-TECO (Manila Economic and Cultural Office - Taipei Economic Culture Office)
53	DOST-MOST (Ministry of Science and Technology) China
54	DOST-JSPS (Japan Society for the Promotion of Science)