

INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE
Project Beneficiaries as of Q4 2021

No.	Project Title	Date Started	Completion Date		Project Leader	Beneficiaries
			Original	Revised		
CHEMICALS AND ENERGY DIVISION						
1	RDR-CED-2019-01 Natural Hydrocolloid as Alternative Emulsifier and Stabilizing Agent from Okra (<i>Hibiscus esculentus</i>) Pods	01-Jan-20	31-Dec-20	31-Mar-21	OC Evangelista	1. Okra farmers 2. Food manufacturers 3. Okra importers
2	RDR-CED-2020-02 Processing of Anti-freezing Agent for Biodiesel	17-Feb-20	31-Dec-20	31-Mar-21	CA Bulan	1. Coconut farmers 2. Biodiesel manufacturer
3	RDR-CED-2020-03 Development of Uninterruptible Power Back-Up System Using Motor Control for Lighting Applications as Sample Electrical Load	17-Feb-20	01-Jan-21	31-Mar-21	FE Del Pozo Jr.	1. MSMEs 2. Facilities that need power back-up system
4	RDR-CED-2020-04 Catalytic Hydrogenation and Transesterification of Highly Unsaturated Fatty Acids from Rubber Seed Oil	17-Feb-20	31-Dec-20	31-Mar-21	VFR Ablang	1. Rubber Industry 2. Biodiesel Industry 3. Energy Sector 4. Academe and researchers
5	RDR-CED-2020-05 Bench-scale Production of Curcumin from Philippine Turmeric using Different Extraction Methods	01-Jan-20	31-Dec-20	31-Mar-21	EA Ongo	1. Food Processing Industry 2. Pharmaceutical Industry 3. Chamber of Herbal Industries of the Philippines Inc.
6	RDR-CED-2021-01 Isolation, characterization and utilization of waste lignin in biobased adhesives	01-Jan-21	31-Dec-21		CAG Bilbao	1. Adhesives manufacturer 2. Industries using adhesives 3. Industrial chemicals sector
7	RDR-CED-2021-02 Scale Up of Power Back-Up System for Large	01-Jan-21	31-Dec-21		FE Del Pozo Jr.	1. MSMEs 2. Facilities that need power back-up system
8	RDR-CED-2021-03 Development of Microcontroller & Minicomputer Applications for Selected Equipment units of the MMIC and a Bench-Scale Hydrothermal Carbonization Equipment of the CED Laboratory	01-Jan-21	31-Dec-21		JL Herrera	1. MMIC 2. MSMEs using MMIC facilities
9	RDA-CED-2020-02 Design and Prototyping of Salt Harvesting Machine	1-Mar-2020	28-Feb-2022		OC Evangelista	1. Salt Producers
10	RDA-CED-2020-03 Nanostructured Herbal Extract of <i>Momordica charantia</i> (Bitter melon/Ampalaya), <i>Allium sativum</i> (Garlic) and <i>Curcuma longa</i> L. (Turmeric) as Antidiabetic Agents	1-Aug-2020	31-Jul-2021		EA Ongo	1. Farmers 2. Pharmaceutical industries 3. General public
11	RDA-CED-2021-01 Deployment of Energy Monitoring Application and Network at DOST (DEMAND) as Demonstration Sites	08-Feb-21	08-Aug-22		AVO Bawagan	1. DOST agencies
ENVIRONMENT AND BIOTECHNOLOGY DIVISION						
12	RDR-EBD-2020-01 Development of a Fermentation Product (Kimchi-Filipino adaptation) from locally-grown vegetables using indigenous LAB isolates as starter culture	1-Jan-2020	31-Dec-2020	31-Mar-21	EG Panerio	1. MSMEs 2. Vegetable farmers
13	RDR-EBD-2020-03 Bioactive Substances from Actinomycetes Isolated from Different Sources Phase 1. Isolation and Screening of Actinomycetes from soil, soil/ plant litter and soil/ compost mixtures	1-Jan-2020	31-Dec-2022		UG Bigol	1. Pharmaceutical Industry 2. Student and Professional researchers
14	RDR-EBD-2020-04 Development of an Improved In-vessel Composting System	17-Feb-2020	31-Dec-2022		DL Herrera / JT Tuazon	1. LGUs & cluster barangays 2. Establishments with MRF 3. Machine shops 4. Communities
15	RDR-EBD-2020-05 Development of Air Biofilters for the Control of Ammonia	17-Feb-2020	31-Dec-2021		CS Valdecanas	1. Small and large scale livestock and poultry houses in the Philippines 2. EIP Layer Farm
16	RDR-EBD-2020-06 Dissolved Copper Removal from Semiconductor Wastewater Effluent by Electrowinning Process	17-Feb-2020	31-Dec-2021		JC Tezano	1. Semi-conductor Industry 2. Copper Plating Industry 3. Mining Industry 4. Fertilizer Industry 5. Battery Industry
17	RDR-EBD-2020-07 Upgrading of the Emergency Waster Disinfection System	1-Mar-2020	31-Dec-2021	30-Jun-2021	DC Vergara	1. Inhabitants of areas prone to natural disasters; 2. Communities in rural areas with limited access to safe drinking water; 3. Evacuation centers; 4. LGUs
18	RDR-EBD-2021-01 Development of an Algal-Bacterial (ALBA) Wastewater Treatment System	1-Jul-2021	31-Dec-2021		PF Margarito	1. Local Swine Farms
19	RDR-EBD-2021-02 Surface-Modified Zeolite Adsorbent System for VOC Pollutants in ITDI Indoor Air Laboratories	1-Jan-2021	31-Dec-2022		JC Tezano	1. Industrial Technology Development Institute Laboratories
20	RDR-EBD-2021-03 Biofilm inhibitory activity of Talisay (<i>Terminalia catappa</i> L.) leaf extract against shrimp pathogen <i>Vibrio</i> sp. and its potential as feed supplement	1-Jan-2021	31-Dec-2021		JD Guzman	1. Shrimp Farmers 2. Farmers of Talisay plant 3. Women Cooperatives and Feed Producers
21	RDA-EBD-2020-01 Integrated Mapping, Monitoring, Modelling and Management System for Manila Bay and Linked Environments (IM4ManilaBay) Project 3: Management of Dredge Material: Characterization, Treatment and Disposal (CharTed DreaM)	1-Jul-2020	31-Jan-2021		RL Esguerra	1. Local Government Units (LGUs) 2. Department of Public Works and Highways (DPWH) 3. Department of Environment and Natural Resources (DENR) 4. Laguna Lake Development Authority (LLDA)
22	RDA-EBD-2020-02 Cataloging Possible Philippine Strains of Zika and African Swine Fever Viruses and Coconut Cadang-Cadang Viroid through Genome Sequencing	1-Jul-2020	1-Mar-2021	12/1/2021 For approval of PCHRD	GM Sikat	1. Government 2. Researchers 3. Swine raisers 4. Epidemiologists

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23	RDA-EBD-2019-05 Support to the Sustainable Environmental Managment in Malay, Aklan Project 2: Development of a Compact Wastewater Treatment System for Restaurants in Boracay Island	15-Jul-2019	15-Jul-2020	30-Jun-2021	RL Retamar	1. Restaurants in Boracay 2. General public
FOOD PROCESSING DIVISION						
24	RDR-FPD-2020-01 Development of Alternative Techniques for Okra Flakes/Sheets Processing	1-Apr-2020	31-Dec-2020	30-Jun-2021	MEM Falco	1. Food manufacturing industry (local food processors, exporters and importers) 2. Farmers 3. Food trade organizations/association
25	RDR-FPD-2020-03 Establishment of Food Safety System for High Risk Bakery Products for Public Consumption	1-Jan-2020	31-Dec-2020	30-Jun-2021	LS Montevirgen	1. MSMEs involved in bakery products 2. Policy makers/regulatory agencies
26	RDR-FPD-2020-05 Improving the Quality of Deep-Fat Fried Cassava Chips	1-Sept-2020	30-May-2021		JC Ocsala	1. Cassava farmers 2. Manufacturers of cassava chips
27	RDR-FPD-2020-06 Natural Flavorings from Local Sources as Food Additive Study 1: Optimization of Spray Drying of Flavors from Fermented Fish and Shrimps	1-Apr-2020	31-Dec-2020	30-Jun-2021	MDL Villasenor	1. Food industry
28	RDR-FPD-2021-01 Modified Texturization Procedures of Restructured Fruits for Thermal Processing Applications	1-Jan-2021	31-Dec-2021		JC Ocala	1. Food Industry 2. Farmers
29	RDR-FPD-2021-02 Thermal Process Validation of Traditional and Ethnic Bottled Products- Acidified-Pasteurized Vegetables (<i>Ubod</i> , Ampalaya and Mixed Vegetables)	1-Jan-2021	31-Dec-2021		ME. Evaristo	1. MSMEs 2. Farm -based producers 3. Restaurateurs 4. Food safety specialists
30	RDR-FPD-2021-03 Antimicrobial Activity of Natural Food Ingredients (PDS)	1-Jan-2021	31-Dec-2021		MEM FALCO	1. Food Industries manufaturing meat and meat-based products
31	RDR-FPD-2021-04 Improvement of Functional Components of Existing Horizontal Water Spray Retort	1-Apr-2021	31-Dec-2021		RT Barcala	1. MSMEs using the pilot plant facilities 2. R&D and/or Thermal team of FPD
32	RDR-FPD-2021-05 Ultrasonic Assisted Extraction (UAE) and Microencapsulation of Virgin Coconut Oil (VCO): Study 1: Development of UAE and Microencapsulation Processes Study 2: Bench Scale Production of Three Processes	1-Mar-2021	31-Dec-2022		MDL Villasenor	1. Coconut farmers 2. Coconut Industry
33	RDR-FPD-2021-06 Development of New Shelf Stable Food Products from Fruits, Grains and Vegetables (GAD Project Phase 3)	1-Jan-2021	31-Dec-2021		MBA Macaraeg	1. LGUs 2. SMEs 3. Areas affected by calamities and are in emergency situations
34	RDA-FPD-2018-03 Establishment of Halal Assurance System for Processing Selected Banana Products (Banana Chips, Banana Catsup, and Frozen Banana)	1-Aug-2018	1-Aug-2018	31-Jan-2021	MEM Falco	1. Banana farmers and processors 2. Muslim community
35	RDA-FPD-2018-06 Development of Emulsified Meat Products (Sausage, Nuggets and Burgers) for Halal Market	1-Aug-2018	1-Aug-2018	1-Jul-2021	ME Evaristo	1. Producers of meat products 2. Muslim community
36	RDA-FPD-2020-11 Plant Protein Products from Local Sources	1-Jul-2020	30-Jun-2022		MME Falco	1. Farmers 2. MSMEs involved in food processing
37	RDA-FPD-2021-01 Development of Halal Compliant Dehydrated Food Products from Selected Food Materials (Fruits, Vegetables and Rootcrops)	1-Jan-2021	31-Dec-2023		MME Falco	1. Muslim community 2. Food Manufactures of Halal Food
38	RDA-FPD-2021-02 Establishment of Halal Assurance System For Selected Food Ingredients (Dried and Powdered Onions, Garlic, BlackPepper and Chili)	1-Jan-2021	31-Dec-2021		LS Montevirgen	1. Muslim Community 2. Food Manufacturers/processors 3. Food Consumers 4. Food Exporter/importer of Halal food
39	RDA-FPD-2021-03 Development of Draft Standards and Recommended Code of Practice for Processing of Peanut Butter	1-Oct-2020	30-Sept-2021		MDL.Villasenor	1. Consumers 2. Peanut Butter Processors
40	RDA-FPD-2021-04 Developing the Capability of Micro-and Small-Scale Processors on the Evaluation and Manufacture of Quality Food Products from Philippine Cocoa Beans	1-Nov-2020	31-Oct-2021	1-Feb-2021	NG Ambagan and MDL Villasenor	1. Consumers 2. Cacao Farmers 3. Food Industry
41	RDA-FPD-2021-05 Technical Support for DOST Regional Food Innovation Centers (rFICs) with 3 Sub-Projects/Studies	1-Mar-2021	1-Dec-2022		MDLVillasenor	1. Consumers 2. MSMEs 3. Farmers
42	RDA-FPD-2021-06 Sub Project : 03 Development of Competence on Establishment and Validation of Adequate Processes for Thermally Processed Food	1-Mar-2021	1-Dec-2022		MDLVillasenor	1. Consumers 2. Food processors
43	RDA-FPD-2021-08 Thermal Processing of Selected Materials Using Agitated-Type Retort	1-Jan-2021	1-Dec-2022		NG Ambagan	1. Consumers 2. Food processors
44	RDA-FPD-2021-09 Production of Dietary Fiber using Sugarcane Bagasse from Raw Sugar Manufacturing	1-Apr-2021	31-Mar-2023		RM Gomez	1. Sugar manufacturers 2 Farmers
MATERIALS SCIENCE DIVISION						
45	RDR-MSD-2021-01 3D-Printed Carbon-based Flexible Piezoresistive Wearable Sensor for Smart Device Gesture to Speech Applications - Year 1	1-Jan-2021	31-Dec-2021		MCO Que / JR Celorico	Local industry sectors such as production/manufacturing industries
46	RDR-MSD-2021-02 Porous Nanocarriers for Drug Delivery Applications - Year 2	1-Jan-2021	31-Dec-2021		JR Celorico / AK Collera	1. Mining Industry. 2. Local industry sectors such as production and manufacturing industries
47	RDR-MSD-2021-03 Superparamagnetic Iron Oxide Nanoparticles (SPIONS) from Natural Mineral Deposits for Industrial and Biomedical Applications - Phase 2	1-Jan-2021	31-Dec-2021		PAN de Yro	1. Local Magnetite miners for added value product from local resource 2. Contribute to science particularly to cancer treatment research

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48	RDR-MSD-2021-04 Development of an Antimicrobial Wound Dressing from Bacterial Cellulose-Nanoclay composite	1-Jan-2021	31-Dec-2021		CS Emolaga / MA Paglicawan	1. Medical practitioners (Hospitals and Community Health Service Centers) 2. Bacterial Cellulose Producers 3. Nanoclay Producers 4. Local government Units 5. Manufacturers for wound dressings 6. Researchers (i.e. academic, institutional) in the biomedical field
49	RDR-MSD-2021-05 Development of Bioinspired Composite Membrane Separators for Advanced Rechargeable Lithium-ion Batteries - Phase 1: Fabrication of Bioinspired Composite Membrane Separators from Abaca Fibers	1-Jan-2021	31-Dec-2021		MT Margarito	1. Automotive industry 2. Academe
50	RDA-MSD-2019-01 Program: Advanced Additive Manufacturing R & D Project 1: Development of Multiple Materials Platform for Additive Manufacturing (MATDEV)	1-Jan-2018	31-Dec-2021		BA Basilia	1. Automotive Industry 2. Manufacturing industry 3. Researchers in the field of materials, design, fabrication and construction
51	RDA-MSD-2018-02 Environment, Health and Safety Research on the Risk Assessment of Nanomaterials	1-Jun-2018	31-Mar-2021	31-May-2021	BA Basilia	1. Manufacturers 2. End-users of nanotechnology-based materials and products.
52	RDA-MSD-2021-01 ADMATEL Expansion towards Long Term Competitiveness and Sustainability- Phase 2: ADMATEL geared for PHL Industry 4.0	1-Jan-2021	31-Dec-2021		AM Monsada	1. Semiconductor Industries 2. Chemical Industries 3. Allied Industries 4. Academe 5. Government Institutions
PACKAGING TECHNOLOGY DIVISION						
53	RDR-PTD-2019-06 Development of Intelligent Packaging Colorimetric Sensor as Total Volatile Base Nitrogen (TVBN) Indicator	1-Jun-2019	31-Dec-2019	30-Jun-2021	RAG Garalde	1. End users/general public 2. Packaging traders 3. MSMEs
54	RDR-PTD-2020-01 Development and Assessment of bacterial cellulose derived from fruit waste as a bio-based plastic film	1-Jan-2020	31-Dec-2020	30-Jun-2021	CT Saldaña	1. Philippine community in general
55	RDR-PTD-2020-02 Establishment of Shelf Life and Safety of Chilled Ready to Heat and Freshly Cooked Ready to Eat Foods Sold in Convenience Stores and Delivery Service	1-Jan-2020	31-Dec-2020	31-Mar-2021	C Bihis	1. Consumers/general public 2. Producers/manufacturers of chilled RTH meal 3. Owners of convenience stores and supermarkets
56	RDR-PTD-2020-03 Shelf life extension of Fresh-cut pineapple application of alginate-based edible coating with lemongrass essential oil	16-Jan-2020	15-Jan-2021	17-Jul-2021	DJI Ortiz	1. Crop producers/farmers 2. MSMEs, specially food companies in the fresh-cut industry
57	RDR-PTD-2020-04 Development of anti-oxidant film based on chitosan containing spent ground coffee extract (Y1)	1-Jan-2020	30-Jun-2021	30-Sep-2021	MJP Paico	1. Packaging manufacturers 2. MSMEs engaged in meat industry or other related products prone to lipid oxidation
58	RDR-PTD-2020-05 Exposure assessment of Filipino Consumers to benzophenones migrated from paper and paperboard used as packaging for food and beverages (Y1)	1-Jun-2020	31-Oct-2021	30-Nov-2021	DJ Alcarde, Jr.	1. General public 2. Food packaging manufacturers, MSMEs and dealers
59	RDR-PTD-2021-01 Application of Eye-Tracking Technology for evaluating packaging design impact on consumers	1-Apr-2021	31-Dec-2021		KJR Dizon	1. PTD 2. PTD customers
60	RDR-PTD-2021-02 Development of random vibration test procedures/methods using Acquired shock and vibration data in the last leg delivery of small products within Metro Manila	1-Apr-2021	31-Dec-2021		ET Nolasco	1. Transport delivery service / logistics companies 2. General Public
61	RDR-PTD-2021-03 Quality and Safety Monitoring of Chilled Ready to Heat/Eat Foods Using Intelligent Packaging with Time Temperature Indicators	1-Apr-2021	31-Mar-2022		C Bihis	1. Local food manufacturers 2. Consumers
62	RDR-PTD-2021-04 Development of Three (3) New RTE Disaster Relief Foods for Vulnerable Groups (elderly and children)	1-Apr-2021	31-Mar-2023		GD Noceja	1. Survivors and service providers of any calamity might it be natural, man-made and pandemic. 2. Local food manufacturers
63	RDR-PTD-2021-05 Utilization of Mango and Calamansi Peel for the Production of Biofilms and its Application on Fresh Produce	1-Jul-2021	31-Dec-2022		MJP Paico	1. Packaging manufacturers 2. General Public 3. MSMEs
64	RDR-PTD-2021-06 Preliminary Study on Epoxidized Soybean Oil Migrating from Metal Closure into Bottled Spanish-Style Sardines	1-Jul-2021	28-Feb-2023		HE Armario	1. Manufacturers and distributors of metal closures 2. Manufacturers of bottled sardines and bottled bangus in oil 3. Consumers
65	RDR-PTD-2021-07 Effect of Shock and Vibration on the Quality and Shelf Life of Mangosteen Sourced from Davao (Phase 2)	1-Jul-2021	Dec.31, 2022		ES Orendain	1. Mangosteen farmers/growers in the Philippines 2. Wholesalers/retailers/exporters of fresh fruits
66	RDA-PTD-2016-04 Upgrading and Enhancing the Capacity of the Packaging Technology Division in Packaging Research and Innovation	1-Dec-2016	30-Nov-2017	31-Jul-2021	DET Tañafrañca	1. Manufacturing Industries 2. Packaging Industry
67	RDA-PTD-2021-01 Development and Field Testing of Retort Foods as Food Ration for Men in Uniform during Combat Operations and Other High Risk Operations	1-Feb-2021	31-Jan-2023		FV Loberiano	1. Philippine Army soldiers and/or trainees 2. Philippine National Police
68	RDA-PTD-2021-02 Pilot Testing of Packaging Technology Developed for Frozen Durian using Locally Produced Packaging Materials	16-Apr-2021	15-Feb-2023		DET Tañafrañca	1. Durian growers/processors
69	RDA-PTD-2021-03 Upgrading of capability of distribution centers/ trading posts in the delivery of fresh and semi-processed agricultural products in the supply chain: Focusing on packaging technology and logistics	1-May-2021	30-Apr-2023		DET Tañafrañca	1. Farmers/growers in Benguet, Nueva Viscaya, Tarlac and Davao 2. Consumers

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PLANNING AND MANAGEMENT INFORMATION SYSTEMS DIVISION						
70	LFP-2020-PMISD-01 ITDI Information Technology Capability Enhancement and Sustainability	1-Jan-2020	31-Dec-2022		ZV Ang	1. DOST-ITDI employees 2. DOST-ITDI clients
71	RDA-PMISD-2021-01 Development of FIC Competency in Moving New Products from Concept to Market Launch	1-Jan-2021	30-Jun-2022		ZV Ang	1. DOST Regional Offices 2. MSMEs
TECHNOLOGICAL SERVICES DIVISION						
72	RDR-TSD-2020-01 Market Testing of FIC Technologies/Products through collaboration with existing adopters	1-Jan-2020	31-Dec-2020	30-Jun-2021	CL MOICO	1. MSMEs 2. Food Processing Industry
STANDARDS AND TESTING DIVISION						
73	RDR-STD-2021-01 Development and Validation of HPLC Methods for Food Samples	1-Jan-2021	31-Dec-2021		MRV Parcon	1. Food Manufacturing Companies 2. Research and Development Sectors - the R&D Sectors from different government (DOST, DOH, FDA) and private institutions 3. Academe 4. Department of Health 5. Food and Drug Administration
74	RDR-STD-2021-02 Development of Soil Quality Control Material for As, Cd, Hg, and Pb	1-Jan-2021	31-Dec-2021		ARC Dablio	1. Inorganic Chemistry Section, Chemistry Laboratory, Standards and Testing Division, DOST-ITDI 2. Private Laboratories and DOST Regional Testing Laboratories
75	RDA-2019-STD-01 Upgrading of ITDI-Laboratory Animal Facilities in Support for Tuklas Lunas and Other DOST Programs, and Industry Needs	4-Nov-2019	30-Sep-2021		CM Ochona	1. Industries, academe and other stakeholders in need of biological testing 2. Department of Science and Technology Programs
76	RDA-2021-STD-02 Towards Leveling-up OneLab for Research, Development and Innovation	1-Feb-2021	31-Jan-2022		DOST IX AR Dablio (Coordinator)	1. Micro, small and medium enterprises (MSMEs) 2. State Universities and Colleges (SUCs) 3. Local Government Units (LGUs) 4. Construction Industry 5. Local Cassava Farmers 6. Food Processing Innovation Centers 7. Academe
77	RDA-2021-STD-03 Scale-up Production, Stability, and Application of Natural Colorants for Cosmetics	1-Jan-2021	Dec 31, 2021		RC Torres	1. Local Producers of Beet Root, Dragon Fruit and Blue Ternate/Pea 2. Cosmetics/Personal Care Industry
NATIONAL METROLOGY DIVISION						
Enhancement of the Competence and Capabilities of the National Metrology Laboratory of the Philippines						
78	RDRD-2017-NMD-01 Project 1 : Chemical Metrology for Organic Contaminants in Food and Water	1-Jan-2017	31-Dec-2021		Dr. Benilda S. Ebarvia	1. Regional Metrology Laboratories 2. Testing Laboratories (use of Reference Materials)
79	RDRD-2017-NMD-02 Project 2 : Chemical Metrology for Inorganic Toxic Elements in Food and Water	1-Jan-2017	31-Dec-2021		Alleni B. Tongson	1. Regional Metrology Laboratories 2. Testing Laboratories (use of Reference Materials)
80	RDRD-2017-NMD-03 Project 3 : Biological Metrology for Microorganisms in Food	1-Jan-2017	31-Dec-2021		Marlon S. A. Antonio	1. Regional Metrology Laboratories 2. Testing Laboratories (use of Reference Materials)
81	RDRD-2017-NMD-04 Project 4: Strengthening the Physical Metrology Capabilities of the National Metrology Laboratory (NML)	1-Jan-2017	31-Dec-2021		Kiveen P. Suycano	1. DOST Regional Metrology Laboratories and Private Calibration Laboratories 2. R & D Laboratories and Academia 3. Manufacturing Industries 4. Regulatory Bodies / Agencies 5. The Consumers and the General Public