

**INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE**

2024 Implemented Projects with Targeted Beneficiaries

No.	Project Title	Date Started	Completion Date		Status	Beneficiaries
			Original	Revised		
<b>CHEMICALS AND ENERGY DIVISION</b>						
1	<b>RDA-CED-2021-02 Green Oils and Phytochemicals from Cashew, Pili, Tomato seeds and Rubber Seeds</b>	16-May-2021	15-May-2023	15-May-2024	Completed	1. Growers and processors of cashew
2	<b>RDA-CED-2021-04 Development of a PCR-based detection kit for Philippine Tomato Yellow Leaf Curl Virus (TYLCV) strains</b>	01-Sep-2021	31-Aug-2024	31-Aug-2025	Ongoing	1. Agriculture sector 2. Farmers producing tomatoes, beans, pepper, tobacco, cucumbers, and other important crops
3	<b>RDA-CED-2021-05 Establishment of Fuel Cell R&amp;D and Testing Facility</b>	1-Sep-2021	13-Nov-2024	31-Mar-2025	Ongoing	1. Transportation sector 2. General public
4	<b>RDA-CED-2023-03 Chemical Residue Profiling of Milkfish using XRF Technology</b>	1-Jan-2023	31-Dec-2023	31-May-2024	Ongoing with year 3	1. Policy makers 2. Small scale aquaculture sector 3. Local barangays 4. Fish consumers
5	<b>RDA-CED-2023-04 Upscaled Production of Pectin from Calamansi Wastes</b>	1-Mar-2023	29-Feb-2024	30-Sep-2025	Ongoing	1. Food industry 2. Calamansi producers
6	<b>RDA-CED-2023-05 Innovative Approach in Delivering Syringic Acid Using Metal Organic Framework as Drug Carrier</b>	18-Jul-2023	17-Jul-2025		Ongoing	1. Chemists 2. Pharmacists/pharmacologists 3. Academicians 4. Clinicians 5. Pharmaceutical industries 6. Government agencies
7	<b>RDA-CED-2023-06A VRV Biobanking P1: Biorepository of Human Respiratory Virus with Risk Group Level 2 Infections in selected tertiary hospitals in Luzon</b>	29-May-2023	28-May-2025	28-May-2025	Ongoing	
8	<b>RDA-CED-2023-06B VRV Biobanking P2: Molecular Profiles and Biobanking of Vector-Borne Viruses in Selected Hospitals in Luzon</b>	1-May-2024	28-May-2025	28-May-2025	Ongoing	
9	<b>RDA-CED-2023-07 Mycobacterium Tuberculosis EA12-Manila Strain-Derived Immunogenic Protein Subunits for TB Vaccine Development</b>	11-Jun-2023	10-Oct-2024		Completed	1. Clinicians 2. Scientists 3. People of the Philippines and the global community
10	<b>RDA-CED-2023-08 Valorization of Post-Processing By-Products Generated from Industrial-Scale Production of Peanut Butter</b>	1-Oct-2023	30-Sep-2024		Completed	1. Blessed Pamana Peanut Butter Manufacturing 2. Large-scale manufacturers with concerns on wastes and by-products 3. Food organizations and cooperatives 4. Peanut industry 5. Government R&D agencies involved in food processing 6. Academic institutions
11	<b>RDA-CED-2024-01 Bench-Scale Monolaurin Production for Food Application</b>	18-Dec-2023	31-Mar-2025	17-Jun-2025	Ongoing	1. Food industries
12	<b>RDA-CED-2024-02 Utilization of Banana Peel Wastes from Agro-Industrial Processing as Alternative Flour and Dietary Fiber Source and Its Applications</b>	1-Jan-2024	31-Dec-2024		Completed	1. Large-scale food manufacturers and other stakeholders in the agro-industrial processing industry
13	<b>RDR-CED-2023-04 Development of a Laboratory Scale Process for the Monolaurin Synthesis using Various Basic Catalysts</b>	1-Jul-2023	31-Jun-2024		Completed	1. Coconut farmers 2. Coconut industry 3. Pharmaceutical and food industry
14	<b>RDR-CED-2024-01 Synthesis of Nano-cellulose Fiber from Okara as Potential Component for Proton Exchange Membrane (PEM) in Fuel Cell</b>	1-Jan-2024	31-Dec-2024		Ongoing	Local taho/tofu producers, soybean/soymilk industry, formulation chemist, academe, research and development institutes and LGUs
15	<b>RDR-CED-2024-02 Fabrication of Paper-based Microfluidic Colorimetric Sensor for Citronella Oil</b>	1-Jan-2024	31-Dec-2024		Ongoing	1. Lemon juice industries 2. Pharmacists, chemists and other formulators 3. Scientists, Researchers
16	<b>RDR-CED-2024-03 Development of Sustained Release Essential Oil Based Polymeric Patch Formulation from Wastes of Citrus Limon and Citrus Grandia (L.) Osbeck (Rutaceae) Peels as Mosquito Repellent</b>	1-Jan-2024	30-Jun-2025		Ongoing	1. Businessmen and women of the essential oils' producers and exporters in the country 2. Farmers and land owners 3. Paper-based microfluidic colorimetric sensor fabricators

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17	RDR-CED-2024-05 Laboratory Scale Production of Chemically Activated Carbon from Peanut and Coconut Shell	1-Aug-2024	31-Sep-2025		Ongoing	
18	RDR-CED-2024-04 Design of Sodium-Ion Battery using Renewable Materials for Solar PV System Energy Storage	1-Jan-2024	31-Dec-2024		Completed	1. Local battery manufacturers 2. Solar PV providers 3. Local communities
<b>ENVIRONMENT AND BIOTECHNOLOGY DIVISION</b>						
19	LFP-EBD-2021-01 Isolation and Purification of Philippine Common Viruses with Medical Importance and Pandemic Potential for Antigen-Antibody Studies	1-Jul-2021	30-Jun-2022	30-Jun-2024	Completed	1. General Public 2. Pharmaceutical companies 3. Hospitals 4. Government regulators 5. Poultry Farmers
20	LFP-EBD-2021-02 Combination Therapy: Lytic Bacteriophages and Plant Extracts against Multidrug-Resistant Bacteria	1-Jul-2021	28-Feb-2025		Ongoing	1. Medical Institutions and pharmaceuticals 2. Female and male researchers working on phage therapy
21	LFP-EBD-2021-03 Detection of food and water-borne bacterial pathogens using phage-based diagnostics	1-Jul-2021	28-Feb-2025		Ongoing	1. Public Health 2. Research/ Academe
22	LFP-EBD-2021-04 De novo synthesis of a non-Infective Flaviviridae pseudovirus: Initial development of a template for a safer conduct of Zika-related diagnostics research in the Philippines	1-Jul-2021	28-Feb-2025		Ongoing	1. Diagnostics and vaccines developers. 2. Male and female researchers are focused on the control and management of Flavivirus infections. 3. The child-bearing population
23	LFP-EBD-2021-05 Development of a Real Time Polymerase Chain Reaction for Point of Need Detection for African Swine Fever Virus (ASFV)	1-Jul-2021	30-Jun-2024	30-Mar-2025	Ongoing	1. Philippine Pig Farmers 2. Regulatory Agency like BAI
24	RDA-EBD-2022-01 Comparative Study Between Standard Methods and Philippine Made PM and CO Measuring Devices	17-Jan-2023	16-Jan-2024	15-Jan-2025	Ongoing	1. Filipino researchers working on air quality sensors and device development 2. DENR and DTI 3. Emission testing centers and industries
25	RDA-EBD-2022-02 Deployment of Drinking Water Treatment System for Selected Indigenous People (IP) Communities in the Province of Tarlac	31-Jan-2022	31-Jan-2023	Revision 1: 31-July-2023 (approved) Revision 2: 31-January-2024 (approved)	Completed	1. LGUs in Tarlac
26	RDA-EBD-2023-01 Mitigating Tannery Pollution in Meycauayan	1-Jan-2023	31-Dec-2023	31-Oct-2024	Completed	1. Identified tanneries in Meycauayan
27	RDA-EBD-2023-02 Virtual Screening of Secondary Metabolites Derived from Philippine Medicinal Plants for Potential Antiviral Activity Against Pathogenic Swine Viruses	January 1, 2024	31-Dec-2024		Completed	1. Pig farmers 2. Swine industry stakeholders 3. Veterinary drug developers
28	RDA-EBD-2023-3 Computational Design of Multi-epitope Subunit Vaccines for Protection against Pathogenic Swine Viruses	1-Feb-2023	31-Jan-2025		Completed	1. Pig farmers 2. Swine industry stakeholders 3. Veterinary vaccine developers
29	RDA-EBD-2023-05 Improving Sustainability & Ensuring Safety of DOST-Developed Solid Waste Management Technologies Adopted by CEST Communities in the NCR through Assessment of Composting Operation and Product Quality	1-Jul-2023	30-Jun-2024		Completed	Fourteen (14) CEST Community Beneficiaries of DOST-ITDI Composting Technologies
30	RDA-EBD-2024-03 Generation of a Plant Virus Vector for Protein Expression and Functional Gene Analysis in Abaca and Banana  RDA-CED-2023-01 (for year 1)	1-Jan-2023	31-Dec-2024		Ongoing  with year 3	1. Researchers 2. Farmers producing Abaca and Banana 3. Abaca Breeders 4. Industry stakeholders
31	RDA-EBD-2024-06 Biological Control Potential of Bacteriophage Cocktails for Bacterial Diseases of Papaya  RDA-CED-2023-02 ( for Y1 up to Y2 (Q2) )	1-Jan-2023	31-Dec-2025		Ongoing  with year 3	

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32	<b>RDA-EBD-2023-06 Establishment of the Biodegradability, Eco-toxicity, and Compostability Testing Facility in the Philippines (BEC-lab)</b>	1-Dec-2023	30-Nov-2024		Ongoing with year 3	<p>Packaging Industry, Plastic Manufacturers, Local Government Units, and Research Institutions</p> <p>The potential beneficiaries of this project are as follows:                      manufacturers of oxo-biodegradable, bio-based packaging products, food packaging and household industries (biodegradable plastics), agriculture/crop industry (corn starch and agricultural wastes), solid waste management sector (minimization and utilization of solid waste), and plastics industries (production of biodegradable packaging materials).</p>
33	<b>RDA-EBD-2024-04 Development of a Vector-Based African Swine Fever Virus Vaccine Using a Hepatitis E Virus Nano Particle Platform Y1</b>	1-Apr-2024	30-May-2025		Ongoing	<p>1. Philippines swine industry                      2. Potential for regional (and maybe global) distribution                      3. Bioassets (Potential technology taker)</p>
34	<b>RDA-EBD-2024-05 Implementation of an Integrated Solid Waste Management in DOST</b>	1-Oct-2024	30-Sep-2025		Ongoing	
35	<b>RDR-EBD-2020-03 Bioactive Substances from Actinomycetes Isolated from Different Sources Phase 2. Production, purification and characterization of the bioactive substances Phase 3</b>	1-Jan-2020	31-Dec-2022	30-Jun-2023 31-March-2024 31-Jul-2024	Completed	1. Drug companies
36	<b>RDR-EBD-2023-02 Utilization of Coffee Beans Waste for Enzyme Production Using Isolated Fungal Strains</b>	01-Jan-23	31-Dec-23	31-Mar-2024	Completed	1. Enzyme manufacturers 2. Coffee producers
37	<b>RDR-EBD-2023-05 Development of Algal-Bacterial (ALBA) Wastewater Treatment System for Swine Industry (Phase 2)</b>	1-Jul-2023	30-Jun-2024	31-Mar-2025	Ongoing	1. Hog raising industry
38	<b>RDR-EBD-2023-06 Implementation of an Effective Solid Waste Management Program for ITDI: Part II - Formulation of SWM Plan and Site Identification and Design of Materials Recovery Facility</b>	01-Oct-23	31-Dec-24		Completed	1. DOST and its attached agencies 2. Other NGAs 3. Other stakeholders on waste management and recycling
39	<b>RDR-EBD-2022-07 Qualitative and Quantitative Assessment of Microplastics along the key sites of Laguna de Bay, Philippines</b>	1-Jan-2024	30-Jun-2024		Completed	1. General public 2. LGU officials and policy makers 3. Fisherfolk of Laguna de Bay 4. Researchers
40	<b>RDR-EBD-2022-06 Operation of the DOST Sewage Treatment Plan (STP) and Development of Strategies for Water Reuse</b>	1-Jan-2024	30-Jun-2024		Completed	DOST Community and Stakeholders of Laguna Lake, Pasig River and Manila Bay
41	<b>RDR-EBD-2024-01: Determination of prevalence of Per- and polyfluoroalkyl substances (PFAS) in groundwater resources in selected household communities in Laguna</b>	1-Jan-2024	31-Dec-2024	31-March-2025	Ongoing	<p>1. <b>Community</b>- awareness in the consumption of food and water contaminated with PFAS                      2. <b>Researchers</b>- provide baseline information on the presence of PFAS in groundwater resources within Calabarzon. Data can be the basis of other researchers in finding the solution to treat PFAS                      3. <b>LGU and government agencies</b>- as reference in developing environmental policies and pollution management strategies; and if possible with the awareness of its sources, responsible production and consumption can be promoted.</p>
42	<b>RDR-EBD-2024-02: Detection and Monitoring of Chlorinated Ethenes and Organohalide Respiring Bacteria in the Philippine Water Bodies</b>  Year 1: Method validation of VOC determination in water samples using GCMS coupled with Headspace trap sampler	1-Jan-2024	31-Dec-2025		Ongoing	The Laguna Lake sub-basins municipalities City Environment and Natural Resources Offices (CENRO), River Parks Authority (RPA) and Laguna Lake Development Authority (LLDA, Pasig River Rehabilitation Commission, Maynilad, Manila Water and the local government units and the locals residing in the study area )
43	<b>RDR-EBD-2024-03: Utilization of Coffee Beans Waste for Xylanase Production Using Isolated Fungal Strains Year 2: Developing Xylanase Micro Bioreactor for Enzymatic Conversion of Coffee Beans Waste</b>	1-Jan-2024	31-Dec-2024	31-March-2024 With approved request for suspension	Suspended	1. Manufacturing/Pharmaceutical Industry Di-Catalyst, B Meg, San Miguel Brewery, local Starbucks (also as possible partners/cooperators/ adopters) 2. Student and Professional researchers

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44	<b>RDR-EBD-2024-04:</b> Improvement of Long-Term Preservation Protocols for Industrially Important EBD-ITDI Microbial Isolates	1-Jan-2024	31-Dec-2025		Ongoing	1. Universities, industries and institutes that has culture collection
45	<b>RDR-RBD-2024-05: Effects of Microplastics Colonization by Biofilm-forming Microorganisms: A Potential Biodegradation Activity or Risk of Antibiotic Resistance Genes Accumulation</b>	1-Jan-2024	31-Dec-2024	30-June-2024 (With approved request for deferment)	Deferred	<b>1. Researchers-</b> provide baseline information on the abundance of different types of microplastics present in key sites of Laguna de Bay <b>2. LGU and government agencies-</b> as reference in developing environmental policies and pollution management
46	<b>RDR-EBD-2024-07: Development of Solar Powered Standalone Desalination System for Coastal Areas: Integration with SAFEWATRS and Reverse Osmosis Technology</b>	15-Apr-2024	14-Oct-2025		Ongoing	
47	<b>RDR-EBD-2024-08: Updating of Chemical and Hazardous Waste Management System of ITDI</b>	15-Apr-2024	14-Apr-2025		Ongoing	
48	<b>RDR-EBD-2024-06: Evaluate the Effectiveness of Different Constructed Wetland Systems in the Removal of Organic Matter from the Effluent coming from the DOST Sewage Treatment Plant (STP) to Improve its Potential for Reuse</b>	1-Jul-2024	31-Dec-2025		Ongoing	1. <b>DOST Agencies-</b> particularly ITDI, FNRI, TAPI, STII, PCIEERD, SEI, DOST-CO, DOST-NCR, Heritage, DOST-PCHRD 2. Public and private company/individual that will adopt the system
<b>FOOD PROCESSING DIVISION</b>						
49	<b>RDA-FPD-2021-08</b> Thermal Processing of Selected Materials Using Agitated-Type Retort	16-May-2021	31-Dec-2021	20-Jul-2023 5-Nov-2024	Completed	1. Consumers 2. Food Processors
50	<b>RDA-FPD-2023-01 (TECHNICOM Program):</b> Scale-up Production and Technology Validation of DOST-ITDI Ready-to-Eat Boiled Quail Eggs	23-Mar-2023	22-Mar-2024		Completed	1. Egg producer
51	<b>RDA-FPD-2023-02 (PCIEERD GIA):</b> Stability and Extraction Yield Enhancement of Anthocyanin Pigments from Roselle and Cooked Ube Peels through the Ultrasound Assisted Extraction (UAE) Method	1-Apr-2024	31-Mar-2025		Ongoing	1. Y.E.S Export and Import Corporation 2. CustomMade Crafts Center, Inc (CMCC)
52	<b>RDR-FPD-2023- 06</b> Prototyping of an Isochoric Freezing Equipment	1-Jan-2023	31-Dec-2024		Completed	1. Frozen Food Industry
53	<b>RDR-FPD-2023- 02</b> Thermal Processing Applications in Plant-based Meat Alternative Food Products	1-Apr-2023	31-Mar-2024		Completed	1. Food manufacturing industry 2. Food consumers 3. Farmers 4. Food and trade organizations/ associations
54	<b>RDR-FPD-2023- 04</b> Development of Food Standards for Philippine Ethnic Food Products - Lechon Sauce	1-Jan-2023	31-Dec-2024		Ongoing	1. Local Processors/ Manufacturers of Lechon sauce
55	<b>RDR-FPD-2024- 01</b> Ultrasonic Assisted Extraction (UAE) and Microencapsulation of Virgin Coconut Oil (VCO) (Phase 3: Microencapsulated VCO Prototype Testing and Validation in Relevant Environment	1-Jul-2024	31-Dec-2024		Completed	1. Consumer 2. Coconut producing regions 3. VCO manufactures
56	<b>RDR-FPD-2024- 04</b> Design and Development of an Excel-based Calculation Software for Thermal Validation Studies	1-Jan-2024	30-Jun-2024		Completed	1. Food Manufacturer 2. Fabricator
57	<b>RDR-FPD-2024- 05</b> Application of Sous-Vide Technology in Selected Traditional Filipino Meat Dishes	1-Jan-2024	31-Dec-2024		Completed	1. Restaurant/ Food Service Industry 2. Food manufacturing 3. Hospital Kitchen
58	<b>RDR-FPD-2024- 06</b> Extraction and Characterization of Protein from Yardlong Bean/ Sitaw Bean ( <i>Vigna unguiculata</i> subsp. <i>Sesquipedales</i> (L.) Verdc)	1-Apr-2024	30-Sep-2024	31-Dec-2024	Completed	1. Food manufacturer
59	<b>RDR-FPD-2024- 07</b> Design and Development of a Batch Spray-type Pasteurizer	1-Jan-2024	31-Dec-2025		Completed	1. Local Fabricator 2. Food Manufacturers
60	<b>RDR-FPD-2024- 08</b> Process Improvement, Automation, and Upscaling of ITDI-Developed Acetator	1-Jan-2024	31-Dec-2025		Ongoing	1. Processors/ MSMEs
61	<b>RDR-FPD-2024- 09</b> Market Testing of Shelf Stable Intermediate Moisture (IM) Chevon Meat Products	1-Jan-2024	31-Dec-2024		Completed	1. Processors/ MSMEs
62	<b>RDR-FPD-2024-02</b> Development of Chicken and Beef-based Soup Mixes Through Freeze Drying	1-Jan-2024	31-Dec-2024		Completed	
63	<b>RDR-FPD-2024-03</b> Prototype Development of self-heating Packs for Food Application	1-Jan-2024	31-Dec-2024		Completed	
<b>MATERIALS SCIENCE DIVISION</b>						
64	<b>RDA-MSD-2022-02</b> 3D-ABI: Development and Performance Evaluation of Biocompatible Materials and Pore Design Structure for 3D Printed Artificial Bone Implants	9-Nov-22	8-Nov-23	8-Nov-25	Ongoing	Industries: biomedical (bone implants, tissue engineering) Academe: development: development of technologies and expertise on 3D printing

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65	<b>RDA-MSD-2023-01</b> Development, Characterization and performance Evaluation of polymer-coated and Uncoated Aluminum and titanium Alloy Powder for Selective Laser Sintering , Selective Laser melting and Electron Beam Melting (DOST Assisted /PH – India)	25-Jan-23	24-Jan-25		Ongoing	The target beneficiary of the research is the wide adoption of metal 3D printing particularly for stakeholders in the biomedical, aerospace and tooling industry.
66	<b>RDA-MSD-2023-02</b> Method Optimization of Digestion and Extraction of Microplastics in Milkfish (Chanos Chanos) (PCAARD)	1-Jan-23	31-Dec-24		Completed	Small-scale aquaculture sectors, Local Barangays, and everyday Filipino fish consumers
67	<b>RDA-MSD-2023-03</b> Modernization of Microplastics and Heavy metals testing in Milkfish using Thermogravimetry – Gas Chromatography /Mass Spectrometer (TG-GC/MS) and X-ray Fluorescence (XRF) (PCAARD)	1-Jan-23	30-Apr-24		Completed	Small-scale aquaculture sectors, Local Barangays, and everyday Filipino fish consumers
68	<b>RDA-MSD-2023-04</b> Biocomposite from waste Vetiver Roots and Thermoplastic for Industrial Application (CRADLE)	1-Feb-23	31-Jan-25		Ongoing	1. iba botanical/agricultural/crop sectors 2. Plastic Industries 3. Solid waste management sectors 4. Housing and Construction industry 4. Industry/Household consumer.
69	<b>RDA-MSD-2023-06</b> Project 2: Materials for Application-Specific Technologies for 3D/4D Printing R&D (MAST3R) (under the program: Central Hub for Advanced Manufacturing R&D in the Philippines - CHAMP)	1-Apr-23	31-Mar-25		Ongoing	Manufacturing industry, medical field, Construction industry, consumer sector, researcher, Product developer, and The country.
70	<b>RDR-MSD-2023-01</b> Application of 3D Printing in Arts and Designs for Creative and Handicraft Industries: 3D Printing Application for Bespoke Designs in Baked Products (Phase 2)	1-Jan-2024	31-Dec-2024		Completed	Micro SME: Local food artisans
71	<b>RDR-MSD-2023-02</b> Application of 3D Printing in Arts and Designs for Creative and Handicraft Industries: 3D Printing Application in Designing Products for the Pottery Industry (Phase 2)	1-Jan-2024	31-Dec-2024		Completed	Mining Industry, Pottery industry, Handicraft and Hobbyists
72	<b>RDR-MSD-2024-03</b> Bioceramic Research and Innovation (BRain) Performance Testing of Nano-Zinc Doped Calcium Phosphate Bioceramic Implant using Local Calcium Carbonate	1-Jan-2023	1-Dec-2024		Completed	All Patients in need of Implants especially children and adults under the Philhealth Mobility Package Plan.
73	<b>RDR-MSD-2024-04</b> Bioceramic Research and Innovation (BRain) Project 2: Development of Customizable Ceramic Femoral Prostheses through the aid of 3D Printing and Slip Casting Method	1-Jan-2024	1-Dec-2024		Completed	Researcher (academe, other institution), 3D printing industries (academy and hobbyists), Prosthesis manufacturer
74	<b>RDR-MSD-2024-05</b> Nano Tio2 Coating System for Solar Panel Application	1-Jan-2024	1-Dec-2024		Completed	Local government officials, Solar power project developers, Policy makers including government and Regulatory Commissions, Community groups, Households and Businesses, Educational Institutions
75	<b>RDR-MSD-2024-06</b> Extend Producers Responsibilities (EPR) Innovative Solution Program Project 1: Recycling of Postconsumer Multiplayer Plastics Packaging (PMPP) Phase 2 Production and Performance Testing of Plastic Boards from Waste Multilayer Plastic Packaging	1-Jan-2024	1-Dec-2024		Completed	Researcher (academe, other institution), Prospective manufacturer, MMDA, DENR, PPIA, PARMS.
76	<b>RDR-MSD-2024-07</b> Extend Producers Responsibilities (EPR) Innovative Solution Program Project 2: Development of Monolayer Polyethylene Nanoclay Composite for Food Packaging Application	1-Jan-2024	1-Dec-2024		Completed	Particular sectors that will benefit from this research are those in packaging and Plastic industries.
77	<b>RDR-MSD-2024-08</b> Extend Producers Responsibilities (EPR) Innovate Solution Program Project 3: Nanoclay-Loaded Cellulose-based Film for Packaging Application	1-Jan-2024	1-Dec-2024		Completed	The project aims to partner with small and Medium-sized enterprises (SMEs) that are in the packaging industry.
78	<b>RDR-MSD-2024-09</b> Application of Intelligent Data Analysis System (IDAS) for Oxidation State Analysis of Copper (Cu) Leadframe using Auger Electron Microprobe	1-Jan-2024	1-Dec-2024		Completed	semiconductors and electronics (S&E) Industries Laboratory testing facilities that can utilize IDAS toll
79	<b>RDR-MSD-2024-10</b> Facile Sythesis of Carbon Microsphere from Polypropylene Plastic Wastes for Wastewater Treatment	1-Jan-2024	1-Dec-2024		Completed	Resecreher, Prospective Manufacturers
80	<b>RDR-MSD-2024-11</b> Stereolithography-Fabricated all Ceramic Dental Crown using Locally Available Materials (Year 2)	1-Jan-2023	1-Dec-2024		Completed	Dental Industries/Laboratories

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81	RDA-MSD-2023-07 Post-radiation Reactive Extrusion of Plastic Waste (PREX Plastic)	1-Jul-2023	30-Jun-2025	31-Dec-2025	Ongoing	
<b>NATIONAL METROLOGY DIVISION</b>						
82	RDA-NMD-2022-01 Development and Provision of Proficiency Test Scheme in Shrimp Product for Local Microbiological Laboratories	1-Nov-2021	31-Oct-2023	31-Jan-2024	Completed	Local microbiological laboratories involved in food testing
83	RDA-NMD-2022-02 Capability Enhancement of Local Laboratories in the Determination of Inorganic Toxic Elements in Aquacultured Milkfish through Proficiency Testing Scheme	1-Oct-2021 1-Dec-2021 (approved)	30-Nov-2023	30-May-2024	Completed	1. Bureau of Fisheries and Aquatic Resources – (particularly: BFAR National Fisheries Laboratory Division and BFAR Region VI - Regional Fisheries Laboratory) 2. DOST-ITDI Standards and Testing Division (STD) 3. DOST Regional Laboratories (particularly: DOST Region IX Regional Standards and Testing Laboratory) 4. National Food Authority-Food Development Center 5. Private laboratories 6. Other member laboratories of ONELAB
84	RDA-NMD-2022-03 Design And Development Of A Subsonic Wind Tunnel System For Airspeed Realization And Calibration	1-Oct-2022	30-Sep-2023	30-Sep-2024	Completed	1. Testing laboratories 2. Energy and construction industries 3. R&D laboratories 4. Metrology laboratories 5. DOST-PAGASA
85	RDA-NMD-2023-01 Enhancing the Quality of Measurement of Local Testing Laboratories in the Philippines for the Analysis of Toxic Elements in Mussels through Proficiency Testing Scheme	1-Jan-2023	30-Dec-2024	30-Jun-2025	Ongoing	1. Local testing laboratories 2. NML
86	RDA-NMD-2023-02 Aligning The Capabilities of Metro Manila's Local Legal Metrology Authorities to the Asean Guidelines for Non-Automatic Weighing Instruments (NAWI) and Fuel Dispensers	1-Jul-2023	30-Jun-2024 (Y1) 31-12-2024 (Y2)		Ongoing with year 3	1. Metro Manila LGUs
87	RDR-NMD-2024-01: Development and validation of tertiary pH measurement system based on Cell V of IUPAC Recommendation 2002	1-Jan-2024	1-Dec-2024		Completed	1. Local testing laboratories 2. NML
88	RDR-NMD-2022-02: Performance Evaluation of the NML's Developed 1 Mega Newton Force Transducer Calibration System using a Master Load Cell and Force Generating Machine	1-Jan-2024	1-Dec-2024		Ongoing	1. Industry 2. RCTLs 3. NML
89	RDR-NMD-2024-02: Method Validation of electrolytic conductivity (EC) measurement using conductivity meter and production of EC reference material	1-Jan-2024	1-Dec-2024		Completed	1. Local testing laboratories 2. NML
90	RDA-NMD-2024-01 Facility of Optimized Calibration of Infusion Systems (FOCuS)	1-Apr-2024	1-Mar-2026		Ongoing	
<b>PACKAGING TECHNOLOGY DIVISION</b>						
91	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	31-Aug-2024	Completed	1. Farmers/growers in Benguet, Nueva Viscaya, Tarlac and Davao 2. Consumers
92	RDA-PTD-2024-01 Application of Retort Pouch Packaging Technology in the Development of Shelf Table Ready to Eat Adlai Products (Coix-lacryma-jobi L.)	18-Dec-2023	17-Dec-2025		Ongoing	Food manufacturers/MSMEs Farmers Consumers
93	RDA-PTD-2024-02 Migration Studies on Hazardous Contaminants from Locally-Available Food Contact Materials and Articles	1-May-2024	30-Apr-2026		Ongoing	Food manufacturers/MSMEs Farmers Consumers
94	RDR-PTD-2023-01 Method Validation and Determination of Per/Polyfluoroalkyl Substances (PFAS) in Locally-Available Paper-Based Food Packaging using LCMSMS	03-Jan-2023	31-Dec-2023	29-Feb-2024	Completed	General public Regulatory Bodies and Business under Packaging, Food and Beverage and Research and Testing Industries
95	RDR-PTD-2023-02 Development of Packaging cushion made of Coconut husk as Transport packaging material for non-food products	03-Jan-2023	31-Dec-2023	30-Jun-2024	Completed	Agricultural cooperatives and farmers Manufacturing industries of non-food product intend to use packaging foam made of coconut husk as value addition of their product line
96	RDR-PTD-2023-03 Field Testing of RTE retort foods (chicken corn soup and ginisang munggo) as disaster relief foods – Phase 2	03-Jan-2023	31-Dec-2024	31-Dec-2023 31-Mar-2024	Completed	Survivors and service providers of any calamity might it be natural, man-made and pandemic. Local food manufacturers
97	RDR-PTD-2024-01 Preliminary study on the development of adlai (Coix-lacryma-jobi L.) as alternative staple food (Phase 1)	1-Jan-2024	1-Dec-2024		Completed	Food manufacturers/MSMEs Farmers Consumers

**INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE**

2024 Implemented Projects with Targeted Beneficiaries

No.	Project Title	Date Started	Completion Date		Status	Beneficiaries
			Original	Revised		
98	RDR-PTD-2024-02 Method Development and Validation of Total UV-Absorbing Contaminants Migrating from Monolayered Polyethylene and Polypropylene Films to Food Simulants	1-Jan-2024	1-Dec-2024		Completed	Plastic Food Packaging Manufacturers and Distributors Food establishments using plastic packaging for takeout and delivery Filipino Consumers patronizing takeout and delivery Government Agencies (DOST, FDA, DTI, and DOH)
99	RDR-PTD-2024-03 Anti-Insect (Ants) Biodegradable Packaging: Chitosan/Polyvinyl Alcohol-Based Packaging Film for Packaged Food Products	1-Jan-2024	31-Dec-2024		Completed	Packaging manufacturers MSMEs Households
100	RDR-PTD-2024-04 Development of Biodegradable Packaging from Locally Produced Mango Peel-Based Pectin	1-Mar-2024	31-Dec-2024		Completed	Packaging manufacturers MSMEs General public
101	RDR-PTD-2024-05 Profiling and Designing of Packaging on Consumers using Survey Method	01-Apr-2024	01-Sep-2024		Completed	PTD PTD's customers for Graphic Designs DOST NCR Designers
<b>STANDARDS AND TESTING DIVISION</b>						
102	RDA-STD-2022-02 Validation and Standardization of Chemical Test Methods on Allergens and Preservatives Food Safety Parameters Among DOST Laboratories	October 2022	September 2025		Ongoing	1. DOST RSTLs - III Pampanga, IV-A Calabarzon, X CDO, XI Davao 2. FDA
103	RDA-STD-2022-03 Smarter OneLab for Industry 4.0 through Testing and Calibration, Education, and Discovery (OneLab for TED)	1-Jan-2023	31-Dec-2024	31-Dec-2025	Ongoing	1. MSMEs 2. LGUs 3. Manufacturing Industries 4. Export Firms 5. Hospitals 6. Academe
104	RDA-STD-2024-01: Green Extraction of Philippine Agricultural Wastes for the Development of Cosmetic Lyophilized Active Ingredients in Microcapsules (CLAIM) against Skin Oxidative Stress	Jan 2024	Dec 2025		Ongoing	1. Local manufacturers of cosmetics ingredients
105	RDR-STD-2024-01: Validation of the Test Method for the Determination of Insoluble Dietary Fiber, Soluble Dietary Fiber and Total Dietary Fiber in Rice	1-Jan-2024	1-Dec-2024		Completed	1. Industry 2. RSTLs 3. ITDI-STD
106	RDR-STD-2024-02: Development of 3D-Printed Polyactic Acid (PLA) Internal Quality Control Material (IQCM) for Tensile and Elongation Test (TRC 1C)	1-Jan-2024	1-Dec-2024		Ongoing	1. Industry 2. RSTLs 3. ITDI-STD
<b>TECHNOLOGICAL SERVICES DIVISION</b>						
107	RDA-2021-TSD-02 Development of Mobile Modular Food Processing Facility (MMFPF)	1-May-2021	30-Apr-2023	30-Apr-2024	Completed	1. Food processors 2. Entrepreneurs
108	RDR-TSD-2024-01: DOST-ITDI Support in the Establishment of Social Enterprises (SEs) Program to Identified Communities/Groups/Organizations thru Technology-based Livelihood Trainings	1-Jan-2024	1-Dec-2024		Terminated	1. LGU taguig 2. Brgy Lower Bicutan Solo Parents
109	RDR-TSD-2024-02: Design and Development of Training Materials for M-Learning (Phase 1)	1-Jan-2024	1-Dec-2024		Terminated	1. Calibration Laboratories
<b>PLANNING AND MANAGEMENT INFORMATION SYSTEMS DIVISION</b>						
110	RDA-PMISD-2023-01 Technical Services Certificates Verifiable Credentials Using Blockchain Technology	1-Jun-23	31-May-24		Completed	1. Regional FICs