

**INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE**

2024 Implemented Projects with Targeted Beneficiaries

No.	Project Title	Date Started	Completion Date		Beneficiaries
			Original	Revised	
<b>CHEMICALS AND ENERGY DIVISION</b>					
1	<b>RDA-CED-2021-02</b> Green Oils and Phytochemicals from Cashew, Pili, Tomato seeds and Rubber Seeds	16-May-2021	15-May-2022	15-May-2024	1. Growers and processors of cashew
2	<b>RDA-CED-2021-04</b> Development of a PCR-based detection kit for Philippine Tomato Yellow Leaf Curl Virus (TYLCV) strains	01-Jul-2021	31-Aug-2022	31-Aug-2024	1. Agriculture sector 2. Farmers producing tomatoes, beans, pepper, tobacco, cucumbers, and other important crops
3	<b>RDA-CED-2021-05</b> Establishment of Fuel Cell R&D and Testing Facility	1-Sep-2021	31-Aug-2023	31-Aug-2024	1. Transportation sector 2. General public
4	<b>RDA-CED-2023-01</b> Generation of a Plant Virus Vector for Protein Expression and Functional Gene Analysis in Abaca and Banana (Year 1 of 3)	1-Jan-2023	31-Dec-2023	31-May-2024	1. Researchers 2. Farmers producing Abaca and Banana 3. Abaca Breeders 4. Industry stakeholders
5	<b>RDA-CED-2023-02</b> Biological Control Potential of Bacteriophage Cocktails for Bacterial Diseases of Papaya (Year 1 of 3)	1-Jan-2023	31-Dec-2023	31-May-2024	1. Industry stakeholders 2. Farmers producing Papaya 3. Phage researchers
6	<b>RDA-CED-2023-03</b> Chemical Residue Profiling of Milkfish using XRF Technology	1-Jan-2023	31-Dec-2023	31-May-2024	1. Policy makers 2. Small scale aquaculture sector 3. Local barangays 4. Fish consumers
7	<b>RDA-CED-2023-04</b> Upscaled Production of Pectin from Calamansi Wastes	1-Mar-2023	31-Mar-2023	29-Feb-2024	1. Food industry 2. Calamansi producers
8	<b>RDA-CED-2023-05</b> Innovative Approach in Delivering Syringic Acid Using Metal Organic Framework as Drug Carrier	18-Jul-2023	17-Jul-2024		1. Chemists 2. Pharmacists/pharmacologists 3. Academicians 4. Clinicians 5. Pharmaceutical industries 6. Government agencies
9	<b>RDA-CED-2023-06</b> Molecular Characterization & Biobanking of Vector-Borne and Respiratory Viruses for the Virology and Vaccine Institute of the Phil.(VRV-Biobanking)	Revised: 30-April-2023 to 1-May-2024 (approved)	31-Mar-2024	1-May-2024	1. Healthcare sectors 2. Medical and Virological Researchers 3. Local Government Units 4. National Government Authorities 5. Department of Health
10	<b>RDA-CED-2023-07</b> Mycobacterium Tuberculosis EA12-Manila Strain-Derived Immunogenic Protein Subunits for TB Vaccine Development	11-Jun-2023	10-Oct-2024		1. Clinicians 2. Scientists 3. People of the Philippines and the global community
11	<b>RDA-CED-2023-08</b> Valorization of Post-Processing By-Products Generated from Industrial-Scale Production of Peanut Butter	1-Oct-2023	1-Oct-2024		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
12	<b>RDA-CED-2024-01</b> Bench-Scale Monolaurin Production for Food Application	18-Dec-2023	31-Mar-2025	17-Jun-2025	1. Food industries
13	<b>RDA-CED-2024-02</b> Utilization of Banana Peel Wastes from Agro-Industrial Processing as Alternative Flour and Dietary Fiber Source and Its Applications	1-Nov-2023	31-Oct-2025	31-Dec-2025	1. Large-scale food manufacturers and other stakeholders in the agro-industrial processing industry
14	<b>RDR-CED-2023-04</b> Development of a Laboratory Scale Process for the Monolaurin Synthesis using Various Basic Catalysts	1-Jul-2023	31-Jun-2024		1. Coconut farmers 2. Coconut Industry 3. Pharmaceutical and food industry

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15	<b>RDR-CED-2024-01</b> Synthesis of Nano-cellulose Fiber from Okara as Potential Component for Proton Exchange Membrane (PEM) in Fuel Cell	1-Jan-2024	31-Dec-2024		Local taho/tofu producers, soybean/soymilk industry, formulation chemist, academe, research and development institutes and LGUs
16	<b>RDR-CED-2024-02</b> Fabrication of Paper-based Microfluidic Colorimetric Sensor for Citronella Oil	1-Jan-2024	31-Dec-2024		1. Lemon juice industries 2. Pharmacists, chemists and other formulators 3. Scientists, Researchers
17	<b>RDR-CED-2024-03</b> 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	1-Jan-2024	31-Dec-2024		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
18	<b>RDR-CED-2024-04</b> Design of Sodium-Ion Battery using Renewable Materials for Solar PV System Energy Storage	1-Jan-2024	31-Dec-2024		1. Local battery manufacturers 2. Solar PV providers 3. Local communities
<b>ENVIRONMENT AND BIOTECHNOLOGY DIVISION</b>					
19	<b>LFP-EBD-2021-01</b> 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	1. General Public 2. Pharmaceutical companies 3. Hospitals 4. Government regulators 5. Poultry Farmers
20	<b>LFP-EBD-2021-02</b> Combination Therapy: Lytic Bacteriophages and Plant Extracts against Multidrug-Resistant Bacteria	1-Jul-2021	30-Jun-2022	30-Jun-2024	1. Medical Institutions and pharmaceuticals 2. Female and male researchers working on phage therapy
21	<b>LFP-EBD-2021-03</b> Detection of food and water-borne bacterial pathogens using phage-based diagnostics	1-Jul-2021	30-Jun-2022	30-Jun-2024	1. Public Health 2. Research/ Academe
22	<b>LFP-EBD-2021-04</b> De novo synthesis of a non-Infective Flaviviridae pseudovirion: Initial development of a template for a safer conduct of Zika-related diagnostics research in the Philippines	1-Jul-2021	30-Jun-2022	30-Jun-2024	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	<b>LFP-EBD-2021-05</b> Development of a Real Time Polymerase Chain Reaction for Point of Need Detection for African Swine Fever Virus (ASFV)	1-Jul-2021	30-Jun-2022	30-Jun-2024	1. Philippine Pig Farmers 2. Regulatory Agency like BAI
24	<b>RDA-EBD-2022-01</b> Comparative Study Between Standard Methods and Philippine Made PM and CO Measuring Devices	17-Jan-2023	16-Jan-2024	Jan-2025 (for approval)	1. Filipino researchers working on air quality sensors and device development 2. DENR and DTI 3. Emission testing centers and industries
25	<b>RDA-EBD-2022-02</b> 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)	1. LGUs in Tarlac
26	<b>RDA-EBD-2022-05</b> Pilot Testing of the UpEDS	1-Sep-2021	30-Aug-2022	31-May-2023	1. Communities in Brgy. Sitio Bakal
27	<b>RDA-EBD-2023-01</b> Mitigating Tannery Pollution in Meycauayan	1-Jan-2023	31-Dec-2023	31-Jul-2024 with approved extension	1. Identified tanneries in Meycauayan
28	<b>RDA-EBD-2023-02</b> Virtual Screening of Secondary Metabolites Derived from Philippine Medicinal Plants for Potential Antiviral Activity Against Pathogenic Swine Viruses	January 1, 2024	31-Dec-2024		1. Pig farmers 2. Swine industry stakeholders 3. Veterinary drug developers
29	<b>RDA-EBD-2023-3</b> Computational Design of Multi-epitope Subunit Vaccines for Protection against Pathogenic Swine Viruses	1-Feb-2023	31-Jan-2024		1. Pig farmers 2. Swine industry stakeholders 3. Veterinary vaccine developers
30	<b>RDA-EBD-2024-02</b> Computational Design of Multi-epitope Subunit Vaccines for Protection against Pathogenic Swine Viruses - Year 2	1-Feb-2024	31-Jan-2025		1. Pig farmers 2. Swine industry stakeholders 3. Veterinary vaccine developers

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31	<b>RDA-EBD-2023-05</b> 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		Fourteen (14) CEST Community Beneficiaries of DOST-ITDI Composting Technologies
32	<b>RDA-EBD-2024-03</b> Generation of a Plant Virus Vector for Protein Expression and Functional Gene Analysis in Abaca and Banana	1-Jan-2024	31-Dec-2024		1. Researchers 2. Farmers producing Abaca and Banana 3. Abaca Breeders 4. Industry stakeholders
33	<b>RDA-EBD-2023-06</b> Establishment of the Biodegradability, Eco-toxicity, and Compostability Testing Facility in the Philippines (BEC-lab)	1-Dec-2023	30-Nov-2024		Packaging Industry, Plastic Manufacturers, Local Government Units, and Research Institutions  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).
34	<b>RDA-EBD-2024-04</b> Development of a Vector-Based African Swine Fever Virus Vaccine Using a Hepatitis E Virus Nano Particle Platform Y1	1-Apr-2024	15-Dec-2028	31-Mar-2029	1. Philippines swine industry 2. Potential for regional (and maybe global) distribution 3. Bioassets (Potential technology taker)
35	<b>RDR-EBD-2020-03</b> Bioactive Substances from Actinomycetes Isolated from Different Sources Phase 2. Production, purification and characterization of the bioactive substances Phase 3	1-Jan-2020	31-Dec-2022	30-Jun-2023 31-March-2024 (approved)  For extension until July 2024 (waiting for approval)	1. Drug companies
36	<b>RDR-EBD-2023-02</b> Utilization of Coffee Beans Waste for Enzyme Production Using Isolated Fungal Strains	01-Jan-23	31-Dec-23	31-Mar-2024	1. Enzyme manufacturers 2. Coffee producers
37	<b>RDR-EBD-2023-05</b> Development of Algal-Bacterial (ALBA) Wastewater Treatment System for Swine Industry (Phase 2)	1-Jul-2023	30-Jun-2024	30-Jun-2024	1. Hog raising industry
38	<b>RDR-EBD-2023-06</b> 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	01-Oct-23	30-Dec-24		1. DOST and its attached agencies 2. Other NGAs 3. Other stakeholders on waste management and recycling
39	<b>RDR-EBD-2022-07</b> Qualitative and Quantitative Assessment of Microplastics along the key sites of Laguna de Bay, Philippines	1-Jan-2024	30-Jun-2024		1. General public 2. LGU officials and policy makers 3. Fisherfolk of Laguna de Bay 4. Researchers
40	<b>RDR-EBD-2022-06</b> Operation of the DOST Sewage Treatment Plan (STP) and Development of Strategies for Water Reuse	1-Jan-2024	30-Jun-2024		DOST Community and Stakeholders of Laguna Lake, Pasig River and Manila Bay

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41	<b>RDR-EBD-2024-01:</b> Determination of prevalence of Per- and polyfluoroalkyl substances (PFAS) in groundwater resources in selected household communities in Laguna	1-Jan-2024	31-Dec-2024		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.
42	<b>RDR-EBD-2024-02:</b> Detection and Monitoring of Chlorinated Ethenes and Organohalide Respiring Bacteria in the Philippine Water Bodies  Year 1: Method validation of VOC determination in water samples using GCMS coupled with Headspace trap sampler	1-Jan-2024	31-Dec-2024		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:</b> 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	1-Jan-2024	31-Dec-2024		1. Manufacturing/Pharmaceutical Industry Di-Catalyst, B Meg, San Miguel Brewery, local Starbucks (also as possible partners/cooperators/ adopters) 2. Student and Professional researchers
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		1. Universities, industries and institutes that has culture collection
45	<b>RDR-RBD-2024-05:</b> Effects of Microplastics Colonization by Biofilm-forming Microorganisms: A Potential Biodegradation Activity or Risk of Antibiotic Resistance Genes Accumulation	1-Jan-2024	31-Dec-2024		1. <b>Researchers</b> - provide baseline information on the abundance of different types of microplastics present in key sites of Laguna de Bay 2. <b>LGU and government agencies</b> - as reference in developing environmental policies and pollution management
46	<b>RDR-EBD-2024-06:</b> 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	1-Jul-2024	31-Dec-2025		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>					
47	<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	1. Consumers 2. Food Processors
48	<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		1. Egg producer
49	<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		1. Y.E.S Export and Import Corporation 2. CustomMade Crafts Center, Inc (CMCC)
50	<b>RDR-FPD-2023- 06</b> Prototyping of an Isochoric Freezing Equipment	1-Jan-2023	31-Dec-2024		1. Frozen Food Industry
51	<b>RDR-FPD-2023- 02</b> Thermal Processing Applications in Plant-based Meat Alternative Food Products	1-Apr-2023	31-Mar-2024		1. Food manufacturing industry 2. Food consumers 3. Farmers 4. Food and trade organizations/ associations
52	<b>RDR-FPD-2023- 04</b> Development of Food Standards for Philippine Ethnic Food Products - Lechon Sauce	1-Jan-2023	31-Dec-2024		1. Local Processors/ Manufacturers of Lechon sauce

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53	RDR-FPD-2024- 01 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		1. Consumer 2. Coconut producing regions 3. VCO manufactures
54	RDR-FPD-2024-02 Determination of the Impact of Freeze Drying Conditions on the Physico-Chemical, Microbiological and Nutritional Properties of Freeze Dried Filipino Soup Mixes	1-Jan-2024	31-Dec-2024		1. Food Manufacturer
55	RDR-FPD-2024- 03 Development of Shelf Stable Food Products with Self-Heating Bags	1-Jan-2024	31-Dec-2024		1. Military personnel 2. emergency responders 3. Convenience store
56	RDR-FPD-2024- 04 Design and Development of an Excel-based Calculation Software for Thermal Validation Studies	1-Jan-2024	30-Jun-2024		1. Food Manufacturer 2. Fabricator
57	RDR-FPD-2024- 05 Application of Sous-Vide Technology in Selected Traditional Filipino Meat Dishes	1-Jan-2024	31-Dec-2024		1. Restaurant/ Food Service Industry 2. Food manufacturing 3. Hospital Kitchen
58	RDR-FPD-2024- 06 Extraction and Characterization of Protein from Yardlong Bean/ Sitaw Bean (Vigna unquiculata subsp. Sesquipedales (L.) Verdc)	1-Apr-2024	30-Sep-2024		1. Food manufacturer
59	RDR-FPD-2024- 07 Design and Development of a Batch Spray-type Pasteurizer	1-Jan-2024	31-Dec-2025		1. Local Fabricator 2. Food Manufacturers
60	RDR-FPD-2024- 08 Process Improvement, Automation, and Upscaling of ITDI-Developed Acetator	1-Jan-2024	31-Dec-2024		1. Processors/ MSMEs
61	RDR-FPD-2024- 09 Market Testing of Shelf Stable Intermediate Moisture (IM) Chevron Meat Products	1-Jan-2024	31-Dec-2024		1. Processors/ MSMEs
62	RDR-FPD-2024- 10 Enzymatic Approach for Sugar Production: Glucose Syrup from Rice Bran	1-Jan-2024	31-Dec-2024		1. Food manufacturers 2. Farmers 3. Researchers
<b>MATERIALS SCIENCE DIVISION</b>					
63	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-24	Industries: biomedical (bone implants, tissue engineering) Academe: development: development of technologies and expertise on 3D printing
64	RDA-MSD-2023-01 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)	1-Jan-23	1-Jan-25		The target beneficiary of the research is the wide adoption of metal 3D printing particularly for stakeholders in the biomedical, aerospace and tooling industry.
65	RDA-MSD-2023-02 Method Optimization of Digestion and Extraction of Microplastics in Milkfish (Chanos Chanos) (PCAARD)	1-Jan-23	30-Jun-24		Small-scale aquaculture sectors, Local Barangays, and everyday Filipino fish consumers
66	RDA-MSD-2023-03 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		Small-scale aquaculture sectors, Local Barangays, and everyday Filipino fish consumers
67	RDA-MSD-2023-04 Biocomposite from waste Vetiver Roots and Thermoplastic for Industrial Application (CRADLE)	1-Feb-23	31-Jan-25		1. iba botanical/agricultural/crop sectors 2. Plastic Industries 3. Solid waste management sectors 4. Housing and Construction industry 4. Industry/Household consumer.
68	RDA-MSD-2023-06 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-24		Manufacturing industry, medical field, Construction industry, consumer sector, researcher, Product developer, and The country.
69	RDR-MSD-2023-01 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		Micro SME: Local food artisans

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70	<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		Mining Industry, Pottery industry, Handicraft and Hobbyists
71	<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-2024	1-Dec-2024		All Patients in need of Implants especially children and adults under the Philhealth Mobility Package Plan.
72	<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		Researcher (academe, other institution), 3D printing industries (academy and hobbyists), Prosthesis manufacturer
73	<b>RDR-MSD-2024-05</b> Nano Tio2 Coating System for Solar Panel Application	1-Jan-2024	1-Dec-2024		Local government officials, Solar power project developers, Policy makers including government and Regulatory Commissions, Community groups, Households and Businesses, Educational Institutions
74	<b>RDR-MSD-2024-06</b> Extend Producers Responsibilities (EPR) Innovate 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		Researcher (academe, other institution), Prospective manufacturer, MMDA, DENR, PPIA, PARMS.
75	<b>RDR-MSD-2024-07</b> Extend Producers Responsibilities (EPR) Innovate Solution Program Project 2: Development of Monolayer Polyethylene Nanoclay Composite for Food Packaging Application	1-Jan-2024	1-Dec-2024		Particular sectors that will benefit from this research are those in packaging and Plastic industries.
76	<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		The project aims to partner with small and Medium-sized enterprises (SMEs) that are in the packaging industry.
77	<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		semiconductors and electronics (S&E) Industries Laboratory testing facilities that can utilize IDAS tool
78	<b>RDR-MSD-2024-10</b> Facile Synthesis of Carbon Microsphere from Polypropylene Plastic Wastes for Wastewater Treatment	1-Jan-2024	1-Dec-2024		Reserecher, Prospective Manufacturers
79	<b>RDR-MSD-2024-11</b> Stereolithography-Fabricated all Ceramic Dental Crown using Locally Available Materials (Year 2)	1-Jan-2024	1-Dec-2024		Dental Industries/Laboratories
<b>NATIONAL METROLOGY DIVISION</b>					
80	<b>RDA-NMD-2022-01</b> Development and Provision of Proficiency Test Scheme in Shrimp Product for Local Microbiological Laboratories	1-Nov-2021	31-Oct-2023	31-Jan-2024	Local microbiological laboratories involved in food testing
81	<b>RDA-NMD-2022-02</b> 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-Sept-2023	30-May-2024	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
82	<b>RDA-NMD-2022-03</b> Design And Development Of A Subsonic Wind Tunnel System For Airspeed Realization And Calibration	1-Oct-2022	30-Sep-2023	30-Sep-2024	1. Testing laboratories 2. Energy and construction industries 3. R&D laboratories 4. Metrology laboratories 5. DOST-PAGASA

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83	<b>RDA-NMD-2023-01</b> 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	31-Dec-2023	30-Dec-2024	1. Local testing laboratories 2. NML
84	<b>RDA-NMD-2023-02</b> 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)		1. Metro Manila LGUs
85	<b>RDR-NMD-2024-01: Development and validation of tertiary pH measurement system based on Cell V of IUPAC Recommendation 2002</b>	1-Jan-2024	1-Dec-2024		1. Local testing laboratories 2. NML
86	<b>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</b>	1-Jan-2024	1-Dec-2024		1. Industry 2. RCTLs 3. NML
87	<b>RDR-NMD-2024-02: Method Validation of electrolytic conductivity (EC) measurement using conductivity meter and production of EC reference material</b>	1-Jan-2024	1-Dec-2024		1. Local testing laboratories 2. NML
<b>PACKAGING TECHNOLOGY DIVISION</b>					
88	<b>RDA-PTD-2021-03</b> 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-2022	30-Apr-2024	1. Farmers/growers in Benguet, Nueva Viscaya, Tarlac and Davao 2. Consumers
89	<b>RDA-PTD-2024-01</b> 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		Food manufacturers/MSMEs Farmers Consumers
90	<b>RDA-PTD-2024-02</b> Migration Studies on Hazardous Contaminants from Locally-Available Food Contact Materials and Articles	1-Apr-2024	31-Mar-2026		Food manufacturers/MSMEs Farmers Consumers
91	<b>RDR-PTD-2023-01</b> 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	General public Regulatory Bodies and Business under Packaging, Food and Beverage and Research and Testing Industries
92	<b>RDR-PTD-2023-02</b> 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	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
93	<b>RDR-PTD-2023-03</b> 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	Survivors and service providers of any calamity might it be natural, man-made and pandemic. Local food manufacturers
94	<b>RDR-PTD-2024-01</b> Preliminary study on the development of adlai (Coix-lacryma-jobi L.) as alternative staple food (Phase 1)	1-Jan-2024	1-Dec-2024		Food manufacturers/MSMEs Farmers Consumers
95	<b>RDR-PTD-2024-02</b> 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		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)
96	<b>RDR-PTD-2024-03</b> Anti-Insect (Ants) Biodegradable Packaging: Chitosan/Polyvinyl Alcohol-Based Packaging Film for Packaged Food Products	1-Jan-2024	31-Dec-2024		Packaging manufacturers MSMEs Households
97	<b>RDR-PTD-2024-04</b> Development of Pectin-Based Biodegradable Packaging from Mango Peel	1-Mar-2024	31-Dec-2024		Packaging manufacturers MSMEs General public
98	<b>RDR-PTD-2024-05</b> Profiling and Designing of Packaging on Consumers using Survey Method	01-Apr-2024	01-Sep-2024		PTD PTD's customers for Graphic Designs DOST NCR Designers

**STANDARDS AND TESTING DIVISION**

**INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE**

2024 Implemented Projects with Targeted Beneficiaries

No.	Project Title	Date Started	Completion Date		Beneficiaries
			Original	Revised	
99	<b>RDA-STD-2022-02</b> Validation and Standardization of Chemical Test Methods on Allergens and Preservatives Food Safety Parameters Among DOST Laboratories	October 2022	September 2025		1. DOST RSTLs - III Pampanga, IV-A Calabarzon, X CDO, XI Davao 2. FDA
100	<b>RDA-STD-2022-03</b> Smarter OneLab for Industry 4.0 through Testing and Calibration, Education, and Discovery (OneLab for TED)	January 2023	December 2025		1. MSMEs 2. LGUs 3. Manufacturing Industries 4. Export Firms 5. Hospitals 6. Academe
101	<b>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</b>	Jan 2024	Dec 2025		1. Local manufacturers of cosmetics ingredients
102	<b>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</b>	1-Jan-2024	1-Dec-2024		1. Industry 2. RSTLs 3. ITDI-STD
103	<b>RDR-STD-2024-02: Development of 3D-Printed Poly(lactic Acid (PLA) Internal Quality Control Material (IQCM) for Tensile and Elongation Test (TRC 1C)</b>	1-Jan-2024	1-Dec-2024		1. Industry 2. RSTLs 3. ITDI-STD
<b>TECHNOLOGICAL SERVICES DIVISION</b>					
104	<b>RDA-2021-TSD-02</b> Development of Mobile Modular Food Processing Facility (MMFPF)	1-May-2021	30-Apr-2023	30-Apr-2024	1. Food processors 2. Entrepreneurs
105	<b>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</b>	1-Jan-2024	1-Dec-2024		1. LGU taguig 2. Brgy Lower Bicutan Solo Parents
106	<b>RDR-TSD-2024-02: Design and Development of Training Materials for M-Learning (Phase 1)</b>	1-Jan-2024	1-Dec-2024		1. Calibration Laboratories
<b>PLANNING AND MANAGEMENT INFORMATION SYSTEMS DIVISION</b>					
107	<b>RDA-PMISD-2023-01</b> Technical Services Certificates Verifiable Credentials Using Blockchain Technology	1-Jun-23	31-May-24		1. Regional FICs