BAR No. 1

QUARTERLY PHYSICAL REPORT OF OPERATION

as of 4th Quarter 2024

Department: DEPARTMENT OF SCIENCE AND TECHNOLOGY
Agency: INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE
Operating Unit:
Organization Code: 190050000000

x	Current Year Appropriations
	Supplemental Appropriations
	Continuing Appropriations
	Off-Budget Account

Particulars	UACS CODE	Physical Targets					Physical Accomplishments					Variance as of Q4	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	8	9	10	11	12	13	14
I. Industrial Technology R&D Program **Outcome Indicators** 1. Number of partnerships with public and private stakeholders and international organizations		5	5	5	5	20	4	8	7	9	28	+8	Q4 partnerships: 1. **SAMAKANA** (R&D: Development of Fish Powder from Arroyo Fish, Tilapi and Bidbid) 2. **SOYJOY Soya Foods** (R&D: Development of Soya Milk in PET Bottle stored in Chilled Temperature) 3. **RAMGO International Cooperation** (Raw Material Supplier) 4. **H&C Vegetarian Products** (R&D: Formulation of Skin Care Products with Skin Lightening and Anti-Ageing Ingredients) 5-9 **DOST Regional Office III, IVA, IX,X, XI** (Capability Building) Q3 partnerships: 1. **University of Sto Tomas** (Technical Collaboration) 2. **UP Diliman** (Technical Collaboration) 3. **Dehusk Inc.** (R&D: Development of Fortified Coconut Milk Powder as alternative Dairy Milk through the DOST-ITDI MMIC Facilities) 4. **Instalimb Solutions Phil. Inc** (Technical Collaboration) 5. **Bestwin Multi-Enterprises Corporation** (R&D:Migration Study Program) 6. **Puentespina Cacao Farm** (R&D: Development of bioactive compounds for cosmetics) 7. **Philia Coffee** (R&D: Development of bioactive compounds for cosmetics) Q2 partnerships: 1. **Nehemiah Gabros NPC** (R&D: Development of Herbal Tablets from Locally-Sourced Organic Powders using MMIC Equipment) 2. **DOST-ASTI** (R&D: Virology Project 1,2 & 3) 3. University of the Philippines- Los Baños (R&D: Program for Zoonotic Disease) 4. Shimadzu Asia-Pacific Pte. Ltd. (SAP) (R&D: Method Validation and Determination of PFAS in Locally-Available Paper-based Food Packaging using LCMSMS) 5. Shimadzu Philippines Corporation (SPC) (R&D: Method Validation and Determination of PFAS in Locally-Available Paper-based Food Packaging using LCMSMS) 6. Mitutoyo Philippines (MOU) 7. MakersLab Electronics (R&D: Stereolithography-Fabricated all Ceramic Dental Crown using Locally Available Material) 8. Transform3d PH (R&D: Stereolithography-Fabricated all Ceramic Dental Crown using Locally Available Material

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													Q1 partnerships: 1. UERMMMC (Technical Collaboration: Prosthetic Socket Development using Renewable Materials) 2. Xavier University (R&D: Cooperation on the Development and Testing of Energy Materials and Fuel Cell Components) 3. Manila Catering Corporation (R&D: Utilization of Banana Peel Wastes from Agro-Industrial Processing as Alternative Flour and Dietary Fiber and its Applications) 4. Hi-Las Marketing Corporation (Supplier of Agricultural Waste as Raw Materials for Project CLAIM)
2. Amount of revenue generated from partnerships		25 M	75 M	40 M	10 M	150 M	63,330,854.86	120,350,471.00	45,362,312.69	134,622,243.79	363,665,882.34	+213,665,882.34	**Received funds from DOST and attached agencies and other government agencies for the conduct of assisted projects.**
Output Indicators 1. Number of projects completed		2	2	1	20	25	4	5	1	29	39	+14	**Q4 Completed Projects:** 1. Development and validation of tertiary pH measurement system based on Cell V of IUPAC Recommendation 2002 (NMD) 2. Method validation of electrolytic conductivity measurement, production of EC reference material, and characterization of reference materials for toxic elements in food (NMD) 3. Development of Food Standards for Philippine Ethnic Food Products – Lechon Sauce (FPD) 4. Prototyping of Isochoric Freezing Equipment for Food Application (FPD) 5. Ultrasonic Assisted Extraction and Microencapsulation of Virgin Coconut Oil (VCO)/ Phase 3; Microencapsulated VCO Prototype Testing and Validation in Relevant Environment (FPD) 6. Development of Chicken and Beef-Based Soup Mixes Through Freeze Drying (FPD) 7. Application of Sous-vide Technology in Selected Traditional Filipino Meat Dishes (FPD) 8. Extraction and Characterization of Protein from Yardlong Bean/ Sitaw Bean (FPD) 9. Market testing of Shelf-stable INtermediate Moisture (IM) Chevon Meat products (FPD) 10. Prototype Development of self-heating Packs for Food Application (FPD) 11. Preliminary study on the application of retort pouch packaging technology in the development of shelf stable ready to eat adlai (Coix-lacryma-jobi L.) products (Phase 1) (PTD) 12. Method Development and Validation of Total UV-Absorbing Contaminants Migrating from Monolayered Polyethylene and Polypropylene Films to Food Simulants (PTD) 13. Anti-Insect (Ants) Biodegradable Packaging: Chitosan/Polyvinyl Alcohol-Based Packaging Film for Packaged Food Products (PTD) 14. Development of Biodegradable Packaging from Locally Produced Mango Peel-Based Pectin (PTD) 15. Profiling and Designing of Packaging on Consumers using Survey Method (PTD) 16. Design of Sodium-Ion Battery using Renewable Materials for Solar PV System Energy Storage(CED) 17. 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 (EBD) 18. Validation of the Test Method for the Determination of Insoluble Dietary Fiber, Soluble Dietary Fiber and Total Dietary Fiber in Rice (STD)

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													19. Application of 3D Printing in Arts and Designs for Creative and Handicraft Industries: 3D Printing Application for Bespcke Designs in Food Products (Phase 2) (MSD) 20. 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) (MSD) 21. Bioceramic Research and Innovation (BRain) Performance Testing of Nano-Zinc Doped Calcium Phosphate Bioceramic Implant using Local Calcium Carbonate (MSD) 22. Bioceramic Research and Innovation (BRain) Project 2: Development of Customizable Ceramic Femoral Prostheses through the aid of 3D Printing and Slip Casting Method (MSD) 23. Nano Tio2 Coating System for Solar Panel Application (MSD) 24. Extend Producers Responsibiltiy (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 (MSD) 25. Extend Producers Responsibiltiy (EPR) Innovative Solution Program Project 2: Development of Monolayer Polyethylene Nanoclay Composite for Non-Food Packaging Application (MSD) 26. Extend Producers Responsibiltiy (EPR) Innovative Solution Program Project 3: Nanoclay-Loaded Cellulose-based Film for Packaging Application (MSD) 27. Application of Intelligent Data Analysis System (IDAS) for Oxidation State Analysis of Copper (Cu) Leadframe using Auger Electron Microprobe (MSD) 28. Facile Sythesis of Carbon Microsphere from Polypropylene Plastic Wastes for Wastewater Treatment (MSD) 29. Stereolithography-Fabricated all Ceramic Dental Crown using Locally Available Materials (MSD) Q3 Completed Projects: 1. Bioactive Substances from Actinomycetes Isolated from Different Sources Phase 3. Production, purification and characterization of the bioactive substances (EBD) Q2 Completed Projects: 1. Development of a Laboratory Scale Process for the Monolaurin Synthesis using Various Basic Catalysts (CED) 2. Qualitative and Quantitative Assessment of Microplastics along the key sites of Laguna de Bay, Philippines (EBD) 3. Operation of the DOST Sewage Treatment Plan (STP) and Development of Strategies for Water Reuse (EBD) 4. Design and Development of an Excel-based Calculation Software for Thermal Validation Studies (FPD)

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													5. Development of Packaging cushion made of Coconut husk as Transport packaging material for non-food products (PTD) Q1 Completed Projects: 1. Method Validation and Determination of Per/Polyfluoroalkyl Substances in Locally-Available Paper-Based Food Packaging using LCMSMS (PTD) 2. Field Testing of RTE Retort Foods (chicken corn soup and ginisang munggo) as Disaster Relief Foods Phase 2 (PTD) 3. Thermal Processing Applications in Plant-based Meat Alternative Food Products (FPD) 4. Utilization of Coffee Beans Waste for Enzyme Production Using Isolated Fungal Strains (EBD)
2. Percentage of projects implemented within the approved timeframe		100%	100%	100%	100%	100%	100% 51/51	100% 49/49	100% 44/44	100% 42/42	100%	0%	Not cumulative
3. Percentage of projects completed which are published in peer-reviewed journals, presented in national and/or international conferences, or with IP filed or approved		5%	5%	5%	5%	5% (7/138)	2.90% (4/138)	5.07% (7/138)	10.14% (14/138)	11.59% (16/138)	11.59%	+6.59%	* **16 out of 138** completed GAA projects from the last 5 years (2019-2023) were published/ presented/ filed for IP as of Q4 2024. Not cumulative
II. Industrial Technology Transfer Program **Outcome Indicators** 1. Percentage of clients that rate the technology transfer as satisfactory or better		90%	90%	90%	90%	90%	-	-	-	-	-	-	*No technology transfer scheduled for completion in Q1, Q2, Q3 and Q4 2024, thus no client to rate the technology transfer as satisfactory or better Not cumulative

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Output Indicators 1. Number of knowledge/technologies diffused		15	25	25	25	90	36	29	27	10	102	+12	**Q4 2024: 10 knowledge/technologies were diffused through different online platforms and media:** 1. RTE Sweet Potato 2. Salt Evaporating Setup 3. High Dietary Fiber from Calamansi Waste 4. Pickled Mango 5. Banana Sauce 6. Banana Strings 7. Guyabano Juice 8. Packaging and Labeling 9. Resource Efficient and Cleaner Production 10. Salt Iodine Fortification **Q3 2024: 27 knowledge/technologies were diffused through different online platforms and media:** 1. RTE Chicken Arrozcaldo 2. RTE Smoked Fish meal 3. RTE Cassava in Syrup 4. RTE Mighty Camote 5. RTE Bangus Sisig 6. RTE Chicken Adobo 7. RTE Chicken Afritada 8. RTE White Rice 9. RTE Beef Curry 10. RTE Mixed Veggies 11. RTE Potato Carrot Soup 12. RTD Isotonic Drink 13. Eucalyptus Essential Oil 14. Dalandan Concentrate 15. RTD Dalandan Q2 2024: 29 knowledge/technologies were diffused through different online platforms and media: 1. Waste Water Treatment System ver. 2 2. Squash Soup 3. Randang Sauce 4. Halal Spa Products: Essential Oil (Ylang-ylang) 5. Halal Spa Products: Essential Oil (Lemongrass) 6. Halal Spa Products: Essential Oil (Calamansi Peels) 7. Halal Spa Products: Massage Oil 8. Halal Spa Products: Body Cream 9. Halal Spa Products: Gel Cleanser 10. Halal Spa Products: Serum 11. Halal Spa Products: Bromelian 12. Rainwater Harvester with Hollow Fiber Membrane 13. Bio-composites from Agricultural by-products 14. Gourmet Salt: Seagrapes 15. Gourmet Salt: Shrimp head 16. Gourmet Salt: Shiitake mushroom 17. RTE Chicken Corn Soup 18. RTE Ginisang Munggo 19. Drum Dried Fruit Flakes: Mango 20. Drum Dried Fruit Flakes: Makapuno 21. Drum Dried Fruit Flakes: Banana 22. Nipa Sap Sugar 23. Smoked Salt: Guava 24. Smoked Salt: Tamarind 25. Smoked Salt: Mango 26. Abaca Composite: Boat 27. Halal Lipstick28. Halal Shampoo 29. Halal Soap

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													Q1 2024: 36 knowledge/technologies were diffused through different online platforms and media: 1. RTE Quail Egg 2. Calamansi Puree 3. Calamansi Juice (RTD) 4. SafeWTRs Emergency Disinfection System 5. RTE Chicken Egg 6. Vacuum Frying Technology 7. Thermal Processing Technology 8. Spray Drying Technology 9. Freeze Drying Technology 10. RTD Tablea 11. RTE Beef-filled Suman 12. RTD Rice Milk 14. Modular Rainwater Collection System 15. Collapsible Toilet 16. Powerback Up System 17. Biocomposite Board (Techclinic) 18. Green Packaging Technlogy (Techclinic) 19. Pyrolysis (Techclinic) 20. Fuel Cell (Techclinic) 21. Sagip Nutriflour 22. DOST Tablea 23. Cacao Roaster 24. Cacao Grinder 25. Cacao Desheller26. Bioreactor 27. Styro-Plastic Densifier 28. Hand Sanitizer 29. Liquid Hand Soap 30. Household Tumbling Composter 31. Vinegar Acetator Kit 32. Coconut Flour 33. Dual Drum Composter 34. Liquid Laundry Detergent 35. Soapmaking 36. Calamansi Concentrate
2. Number of technologies transferred/ commercialized through technology transfer agreement		1	2	2	2	7	0	2	4	1	7	0	Q4 technologies transferred: 1. DOLE Philippines (Production of Drum Dried Banana Powder) Q3 technologies transferred: 1. Pangasinan State University (Thermal Processing Validation) 2.Nutricare Healthfoods Corp. (RTD Mungbean Coconut) 3-4. NSB Engineering Design and Fabrication (Salt Iodizing Machine and Salt Spin Dryer) Q2 technologies transferred: 1. Dr. Quail Farm (Market Testing of RTE Boiled Quail Egg)
3. Percentage of request for technology transfer that have been provided within the required time frame		95%	95%	95%	95%	95%	-	-	-	-	-	-	*No request for technology transfer for Q1, Q2, Q3 and Q4 2024 Not cumulative

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III Industrial Technology Technical Services Program **Outcome Indicators** 1. Percentage of customers that rate the technical services as satisfactory or better		90%	90%	90%	90%	90% (3,600/4,000)	99.77% (877/879)	98.91% (1,084/1,096)	100% (725/725)	99.87% (765/766)	99.57% (3,451/3,466)	+9.57%	*3,451 out of 3,466 clients rated the technical services as satisfactory or better as of Q4 2024 Not cumulative
Output Indicators 1. Number of technical services rendered		5,000	7,000	6,000	5,000	23,000	34,555	30,318	24,061	18,353	107,287	+84,287	
2. Percentage of request for technical services that have been provided within the required time frame		90%	90%	90%	90%	90% (20,700/ 23,000)	100% (34,555/34,555)	100% (30,318/30,318)	100% (24,061/24,061)	100% (18,353/18,353)	100% (107,287/107,287)	+10%	*107,287 out of 107,287 of technical services were provided within the required timeframe Not cumulative
3. Number of clients benefitting from technical services		1,000	1,000	1,000	1000	4,000	2,196	1,848	813	872	5,729	+1,729	

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