#### Philippine Center for Postharvest Development and Mechanization MAJOR PROGRAMS AND PROJECTS, FY 2019

### DIVISION/ TITLE OF PROGRAMS/PROJECTS/ACTIVITIES

#### PLANNING, MANAGEMENT AND INFORMATION TECHNOLOGY DIVISION (PMITD)

Monitoring and Evaluation of Agency Programs, Projects and Related Activities

Physical and Financial Plan, Technical Evaluation Group Review and Planning Workshops

Agricultural Mechanization and Postharvest Research, Development and Extension Agenda Formulation

Management and Maintenance of the PHilMech's Postharvest and Agricultural Machineries Databases

Establishment of the Agricultural and Fisheries Mechanization Engineering Resource Network (AfMechERN)

Establishment and Operationalization of the Agricultural and Fisheries Mechanization Research, Development and Extension Network (AFMechRDEN)

Information System and Database Development, and ICT Facilities Upgrading and Maintanance

Audio-Visual Maintenance

### FACILITY MANAGEMENT AND FIELD OPERATIONS DIVISION (FMFOD)

New

PHilMech Communication Support for the RCEF Mechanization Program

Enhancing the Technical Capability of the Stakeholders on Rice Mechanization: RCEF Extension Services Component

Enterprise Development Support for the Rice Mechanization Program

Facility Distribution of the Rice Competitiveness Enhancement Program Mechanization

On-going

Sustainability Program and Provision of Technical Assistance for the Mechanization and Postharvest Facilities/Equipment Distributed Nationwide in Support to Rice Mechanization Program, Organic Agriculture and Tramline

Mechanized Rice Farming System in North Cotabato

APPLIED COMMUNICATION DIVISION (ACD)

**Continuing Projects** 

Creating Awareness On Postharvest And Mechanization Through Print, Electronic, And Social Media

Publishing Postharvest Journals and Other Technical Publications of PHilMech

DSC for Postharvest Mechanization Technologies

Public Awareness Campaign on Postharvest Technology

Strengthening of the PhilMech Scientific Literature Services

Communication Support for the Rice Mechanization Program

Development of Easy to Access IEC Materials on Postharvest and Mechanization Technologies

Media Relations in Support to the National Postharvest Mechanization Program

Process Documentation, Packaging and Dissemination of PHilMech Success Stories

PHilMech's Visitor's Bureau

Improving Access of Grassroots to Information and Technologies on PH Mechanization through Techno Gabay Program

# TECHNOLOGY MANAGEMENT AND TRAINING DIVISION (TMTD)

**Continuing Projects** 

Curriculum & Instructional Materials Development and Packaging

Provision of Technical Assistance to other Agencies on Training related Matters

Techno-talakayan on Mechanization & Postharvest Technologies

Technical Symposium/Conference on Mechanization and Postharvest Technologies

Technical Support to Industry Manpower Development - Accreditation & Certification of PHilMech Training Programs

Technical Support to Industry Manpower Development Assessment & Technology Monitoring on the Status of Trained Participants on Postharvest & Mechanization

Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technologies for HVCs

Technical Support to Intellectual Property Rights (IPR) Services

PHilMech Industrial Promotion Program (PIPP)

Enhancing the Technical Capability of the Industry Stakeholders on Rice Postharvest Technologies and Mechanization

Enhancing the Technical Capability of the Industry Stakeholders on Corn & Cassava Postharvest Technologies and Mechanization

Intensifying the Promotion and Adoption of PHilMech Generated Technologies a.k.a. Technology Forum/ Demonstration of PHilMech Generated Technologies

Technical Support to Industry Manpower Development on Mechanization and Postharvest Technology

Establishment and Operationalization of the PHilMech Regional Technology Management and Demonstration Center (PRTMDC)

ENTERPRISE DEVELOPMENT DIVISION (EDD)

**Continuing Projects** 

Enhancing Entrepreneurial Capability of Postharvest and Mechanization Adopters/Investor Through the Provision of Business Development Services (Cycle 2)

Provision of Technical Assistance to PH Enterprise Development

Empowerment of Women as Frontliners for a Sustainable Multi-Commodity Solar Tunnel Dryer (MCSTD) Based Enterprises in the Philippines

Techncial Assistance Towards the Development of Mango Pectin-based Technology at Commercial Level of Operation

On-going

Buliding Viable Community-Based Coffee Processing Enterprise Models (Cycle II)

Rice Processing Enterprise for Farmers: Sustainability of KOICA-RPCs in the Philippines

Brown Rice Processing Enterprise Showcasing PHilMech Impeller Rice Mill Technology

Corn Grits Processing Enterprise Showcasing PHilMech Corn Mill Technologies

Completed

Development of Selected Rice Processing Centers into Model Agribusiness Enterprise AGRICULTURAL MECHANIZATION DIVISION (AMD)

New

Field Testing of CVS-based Mango Sorting Machine

Field Testing of Micro Impeller Brown Rice Huller

Pilot Testing of the Developed

Design and Development of Engine-Driven Bailing Machine

On-going

Design and Development of a Cassava Planter

Establishment of Rubber Sheet Primary Processing System for Farmers of Kidapawan City, North Cotabato

Development of Groundut Digger/Combine

Establishment of Abaca Fiber Primary Processing System for Farmers of North Cotabato

Development of Hole Digger for Selected Plantation Crops

Development of Mungbean Sheller with Drudgery Reduction for Rural Women

Design and Development of Fish Sorting Machine for Milkfish in Region I

Design and Prototyping Services Unit

Design and Development of GreenHouse Solar Dryer for Food Grade Cassava Dryer

# Completed

Development of Commercial-Scale Belt-type Dryer with combination Far-Infrared and convection heating for Rapid Drying of Mango Slices

**BIO-PROCESS ENGINEERING DIVISION (BPED)** 

New

Development and Dissemination of Agricultural Products Processing Technologies

**On-going** 

Utilization of Sugarcane Crop Waste (Field Trash) for Fuel Briquette and Animal Feed Production

Microencapsulation of Moringa Leaf Extracts by Spray Drying for Food and Nutraceutrical Applications

Improvement and Optimization of the KIPA-PHilMech Designed Oil Extractor

Hydrochar Production from Biomass by hydrochar Carbonization Process

Improvement of Tablea Processing System

Profiling and Characterization of Precursors Responsible for Flavor and Aroma

Banana (Cavendish var.) Powder Derived From Vacuum Microwave Drying Method

Production of Moringa (Moringa oleifera) Powder Using Multi-Commodity Solar Tunnel Drye

Completed

Stability of Pasteurized Pure and Fruit/Vegetable-Blended Coconut Water During Storage Using Different Packaging Materials

SOCIO-ECONOMIC POLICY RESEARCH DIVISION (SEPRD)

New

Enhancing the Socio-Economic Viability of Mechanized Rice-Based Farming Systems in the Philippines: Baseline and FCA Model Establishment

Establishment of Baseline Information and Organization of Technology Used in the Production and Postproduction of High Value Crops

On-going

Value Chain Analysis and Improvement of Tablea Processing System in the Philippines Effects of Mechanization to the Postproduction Losses of Yellow Corn Used as Feed Establishment of Abaca Fiber Primary Processing System for Farmers of North Cotabato (Value Chain Analysis)

Establishment of Rubber Primary Processing System for Farmers of Kidapawan City (Value Chain

Assessment of Corn Used as Food: A Gender Responsive Value Chain Approach

Effects of Mechzanization to the Postproduction Losses of Corn as Food

Assessment of Rice Milling System

Adaptability of Multi- Row Mechanical Onion Seeder in Iloilo Province

Pilot Testing of Integrated Soybean Production-Processing Technologies towards Accelerating the Development of Local Soybean Industry in the Philippines (Nueva Ecija, Nueva Vizcaya, Tarlac, pampanga, Manila, Leyte and Mindanao - Phase III

Completed

Impact of the Adoption of Mechanical Rice Transplanter in the Philippines

Socio-economic Dimensions of the Adoption and Use of Rice Combine Harvester in the Philippines

Assessment of Yellow Corn Used As Food: A Gender Responsive Value Chain Approach

Assessment of Yellow Corn Used As Feed: A Gender Responsive Value Chain Approach

Pilot Testing of 12-Row 4W Tractor-Driven Onion Mechanical Seeder

Pilot Testing of Coconut Water Processing Enterprise in Selected Areas of the Philippines

# FOOD PROTECTION DIVISION (FPD)

**Continuing Project** 

Establishment of Museum for Insects associated with Stored Products

On-going

Field Treatment Using Microbial Control Agents Against Anthracnose Infecting Mango Fruits

Development of an Acoustic Detection Instrument for the Identification and Monitoring of Stored-Grain Insects in the Philippines

Molecular Identification of Stored Product Insects and Mites

Population Augmentation Releases of Predator Xycoloris Flavipes for the Control of Residual Infestation of Insect Pests in Empty Warehouses

Completed

Screening of Plant Botanical Extracts Against Postharvest Diseases (Phase 1-In-Vitro Assay) LABORATORY SERVICES DIVISION (LSD)

Continuing

Implementation of Quality Assurance Plans in Laboratory Services: Chemistry Laboratory

Provision of Regular Analytical Services

Implementation of Quality Control Procedures in Microbiological Laboratory

Cataloguing of Microbial Cultures and Collections

On-going

Development of Digital Image-based Cultural-Morphometric Technique of Fungal Identification

Verification of Different Preservation Technique on the Viability and Stability of Short and Long Term Storage of Microorganisms