



MAJOR PROGRAMS AND PROJECTS, FY 2022

I. REGULAR FUND

A. Research and Development (R&D)

Division/Title of Programs/Projects/Activities

AGRICULTURAL MECHANIZATION DIVISION
<i>On-Going Projects</i>
1. Design and Prototyping Services Unit
2. Field Testing of Mungbean Sheller in Small-Scale Farmer Cooperatives and Associations (FCAs)
3. Adaptability Testing of Hydraulic man-lift for spraying, bagging and harvesting of Mango in Philippine Condition
4. Design and Development of Manually Drawn Onion Seeder in Bongabon, Nueva Ecija
5. Improvement and Field Testing of PHilMech-developed Coffee Moisture Meter
6. PHilMech-KAMICO Collaborative Program - Technology Performance Verification and Adaptation of Mechanize Onion Production System
7. Enhancing Local Capability to Design, Develop and Manufacture Agricultural Machineries to Accelerate Mechanization of Philippine Agriculture
BIO-PROCESS ENGINEERING DIVISION
<i>On-Going Projects</i>
8. Development of Vacuum Evaporator and Processing Protocol for Small-Scale Production of Coconut Water Concentrate
9. Development of Biodegradable Fruit Bag for Mango, Cacao, and Banana During the Fruit Development Stage
<i>New Project</i>
10. Development of Biodegradable Fruit Bag for Mango, Cacao, and Banana during the Fruit Development Stage
<i>Completed Project</i>
11. Design and Development of Small -Scale Farm -Level Copra Dryer as Improvement Over "Tapanan" Study 1 - Design and Development of Computer-modeled Simulation-Driven Virtual Prototype
FOOD PROTECTION DIVISION
<i>On-Going Projects</i>
12. Field Testing of Ethanol Vapor Releasing System in Extending the Shelf-life of Broccoli
13. Biobanking of Stored Product Arthropods
14. Hazard Assessment on Imported Milled Rice
15. Bioactivities of Cymbopogon Citrus Extracts Against Postharvest Diseases of Mango (Module 1 In-Vitro and Module 2 In-Vivo)



New Project
16. Anti-Fungal Activities of Citrus Peel Extracts for the Management of Postharvest Disease of Banana (Phase 1: In-vitro; Phase 2: In-vivo)
Completed Projects
17. Field Testing of Ethanol Vapor Releasing System in Extending the Shelf-life of Broccoli
OFFICE OF THE DIRECTOR
On-Going Projects
18. Accelerating the Development and Adaptation of Brown Rice Micro Mill for the Filipino Rice Farmers
19. Gender and Development
20. Establishment, Documentation, Implementation and Certification Facilitation of a Quality Management Program through an Integrated Management System IMS: ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007
21. Development of Palay Micro-Cleaner with Brown Rice Grader as Integral Part of the Brown Rice Impeller Micro Mill (BRIMM)
Completed Projects
22. Development of Rice Pre-Cleaner as Integral Part of the PHilMech's Impeller Rice Mill Technology
SOCIO-ECONOMIC POLCY RESEARCH DIVISION
On-Going Projects
23. Updating the Status of Rice Mechanization in the Philippines
24. Enhancing the Socio-Economic Viability of Mechanized Rice-based Farming System in the Philippines: RCEP Baseline and Impact Assessment
LABORATORY SERVICES DIVISION
25. Implementation of Quality Assurance Program in LSD: Chemistry Laboratory Section
26. Provision of Regular Analytical Services
27. Implementation of Quality Assurance in Microbiological Laboratory
28. Cataloguing of Microbial Culture Collection
ON-GOING PROJECTS in Support f the Government's Efforts to COVID Response (Collaborative projects of different R&D and ESETS divisions of PHilMech)
29. Improvement and Integration of Fluidized Bed Dryer to the Two-stage Grain Drying Strategy of Small-Scale Rice Farmer Cooperatives and Associations (FCAs)
30. Improvement and Integration of Greenhouse Solar Dryer with Biomass Furnace and Multi-Tray Drying Cabinets to the Processing System of Small-scale Agribusiness Enterprises
31. Pilot Adaptation of the PHilMech- KAMICO Designed Corn Mill for Village-Level Application
32. Establishment of pilot briquetting enterprise for cacao pod husks and other related biomass
33. Establishment of Small-Scale Fruit-/ Vegetable-Blended Coconut Water Processing Enterprise (Performance Testing and Validation)



34. Application of PHilMech Mango Pectin-based Edible Coating to Extend the Shelf-life of Fresh Mango
35. Establishment of Pilot Sugarcane Wastes Silage and Pelleted Feeds Processing Enterprise
36. Piloting of Modules for the Provision of Mechanized Planting of Onion and Other Vegetable
37. Accelerating the Development and Adaptation of Brown Rice Micro Mill for the Filipino Rice Farmers

B. Extension Support, Education, and Training Services (ESETS)

Division/Title of Programs/Projects/Activities

APPLIED COMMUNICATION DIVISION
<i>Continuing Projects/Activities</i>
1. Creating Awareness on Postharvest and Mechanization Through Print and the Audio-visual Media
2. Publishing Journals and Other Technical Publications of PHilMech
3. Public Awareness Campaign on Postharvest Technology
4. Strengthening of the PHilMech-Scientific Literature Services
5. Development of Easy-to-Access Information Materials on Postharvest and Mechanization
6. Process Documentation and Packaging of PHilMech Success Stories
7. PHilMech Visitor's Bureau
8. Improving Access of Grassroots to Information and Technologies on Postharvest and Mechanization
TECHNOLOGY MANAGEMENT & TRAINING DIVISION
<i>Continuing Projects/Activities</i>
9. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for High Value Commodities
10. Technical Support to Intellectual Property Rights (IPR) Services
11. PHilMech Industrial Promotion (PIP)
12. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for Rice
13. Enhancing the Technical Capability of the Industry Stakeholders on Corn and Cassava Mechanization and Postharvest Technology
14. Intensifying the Promotion and Adoption of PHilMech Generated Technologies aka Technology Forum/ Demonstration of PHilMech Generated Technologies
15. Technical Support to Industry Manpower Development on Mechanization and Postharvest Technology
16. Establishment and Operationalization of the PHilMech Regional Technology Management and Demonstration Center (PRTMDC)



ENTERPRISE DEVELOPMENT DIVISION

Continuing Projects/Activities

17. Enhancing Entrepreneurial Capability of Postharvest and Mechanization Adopters/Investors through the Provision of Business Development Services Cycle 2
18. Provision of Technical Assistance for Postharvest Enterprise Development Project
19. Empowerment of Women as Frontliners in the Establishment of Sustainable Multi-Commodity Solar Tunnel Dryer (MCSTD) Based Enterprises in selected areas in the Philippines
20. Building Viable Community-Based Coffee Processing Enterprise Models (Cycle II)

II. RICE COMPETITIVENESS ENHANCEMENT FUND (RCEF)

Division/Title of Programs/Projects/Activities

FACILITY MANAGEMENT AND FIELD OPERATIONS DIVISION

On-going Program

1. RCEF Mechanization Component/Program

APPLIED COMMUNICATION DIVISION

On-going Sub-Program

2. Strategic Communication Services (a.k.a Communication Support for the Rice Mechanization)

ENTERPRISE DEVELOPMENT DIVISION

On-going Sub-Program

3. Enterprise Development and Sustainability Support

TECHNOLOGY MANAGEMENT & TRAINING DIVISION

4. Technical Capability Enhancement

III. COCONUT FARMERS AND INDUSTRY DEVELOPMENT PLAN

Division/Title of Programs/Projects/Activities

Coconut Trust Fund - Field Management and Operations Division

On-going Project

Program Component 5: Integrated Coconut Processing and Downstream Products (Shared Facilities)