



Philippine Center for Postharvest Development and Mechanization PROGRAMS/ACTIVITIES/PROJECTS (PAPs), FY 2022

I. REGULAR FUND

A. Research and Development (R&D)

Areas of Concern/Title of Programs/Projects/Activities

AGRICULTURAL MECHANIZATION AND INSTRUMENTATION
<i>On-Going Projects</i>
1. Design and Prototyping Services
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
<i>New Projects</i>
8. Development of Portable Moisture Meter for Copra
9. Development of Palay Micro-Cleaner With Brown Rice Grader as Integral Part of the Brown Rice Impeller Micro Mill (BRIMM)
10. Modification and Performance Evaluation of a Four-Wheel Tractor-Mounted Cassava Planter
11. Development of Sugarcane De-trasher Ex-Ante Evaluation of Sugarcane De-Thrasher and Harvester
<i>Completed Projects</i>
12. Development of Rice Pre-cleaner as Integral Part of the PHilMech's Impeller Rice Mill Technology
BIO-PROCESS AND FOOD ENGINEERING
<i>New Projects</i>
13. Development of Vacuum Evaporator and Processing Protocol for Small-Scale Production of Coconut Water Concentrate
14. Development of Biodegradable Fruit Bag for Mango, Cacao, and Banana During the Fruit Development Stage
15. Utilization of By-Products and Wastes from Sweet Potato Production for Industrial Applications



Completed Projects
16. Design and Development of Small -Scale Farm -Level Copra Dryer as Improvement Over "Tapahan" Study 1 - Design and Development of Computer-modelled Simulation-Driven Virtual Prototype
SOCIO-ECONOMICS AND POLICY RESEARCH
On-going Projects
17. Enhancing the Socio- Economic Viability of Mechanized Rice-Based Farming Systems in the Philippines: RCEF Baseline and Impact Assessment
Completed Projects
18. Updating the Status of Rice Mechanization in the Philippines
19. Assessment on the Postproduction Losses of Mango, Cardava Banana, Calamansi and Bulb Onions in Major Producing Areas
FOOD PROTECTION AND SAFETY
New Projects
20. Hazard Assessment on Imported Milled Rice
21. Bioactivities of Cymbopogon Citratus Extracts Against Postharvest Diseases of Mango (Module 1 InVitro and Module 2 InVivo)
22. Anti-Fungal Activities of Citrus Peel Extracts for the Management of Postharvest Disease of Banana (Phase 1: Invitro; Phase 2: In-vivo)
23. Field Efficacy of the Warehouse Pirate Bug <i>Xylocoris flavipes</i> (Reuter) (Hemiptera: Anthocoridae) for the Management of Insect Pests in Storage
On-going Projects
24. Biobanking of Stored Product Arthropods
Completed Projects
25. Field Testing of Ethanol Vapor Releasing System in Extending the Shelf-life of Broccoli
LABORATORY SERVICES
Continuing Projects
26. Implementation of Quality Assurance Program in LSD: Chemistry Laboratory Section
27. Provision of Regular Analytical Services
28. Implementation of Quality Assurance in Microbiological Laboratory
29. Cataloguing of Microbial Culture Collection
ON-GOING PROJECTS in Support of the Government's Efforts to COVID Response (Collaborative projects of different R&D and ESETS divisions of PHilMech)
1. Improvement and Integration of Fluidized Bed Dryer to the Two-stage Grain Drying Strategy of Small-Scale Rice Farmer Cooperatives and Associations (FCAs)
2. Improvement and Integration of Greenhouse Solar Dryer with Biomass Furnace and Multi-Tray Drying Cabinets to the Processing System of Small-scale Agribusiness Enterprises



3. Pilot Adaptation of the PHilMech- KAMICO Designed Corn Mill for Village-Level Application
4. Establishment of pilot briquetting enterprise for cacao pod husks and other related biomass
5. Application of PHilMech Mango Pectin-based Edible Coating to Extend the Shelf-life of Fresh Mango
6. Establishment of Pilot Sugarcane Wastes Silage and Pelleted Feeds Processing Enterprise
7. Piloting of Modules for the Provision of Mechanized Planting of Onion and Other Vegetables
COMPLETED PROJECTS in Support of the Government's Efforts to COVID Response <i>(Collaborative projects of different R&D and ESETS divisions of PHilMech)</i>
8. Establishment of Small-Scale Fruit-/ Vegetable-Blended Coconut Water Processing Enterprise (Performance Testing and Validation)
9. 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 General Awareness on Postharvest Mechanization Through Print and 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 Support communication on Postharvest and Mechanization
6. Development of Easy-to-Access Information Materials on Postharvest and Mechanization
7. Process Documentation and Packaging of PHilMech Success Stories
8. PHilMech's Visitor's Bureau
9. Improving Access of Grassroots to Information and Technologies on Postharvest and Mechanization
TECHNOLOGY MANAGEMENT & TRAINING DIVISION
<i>Continuing Projects/Activities</i>
10. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for High Value Commodities
11. Technical Support to Intellectual Property Rights (IPR) Services
12. PHilMech Industrial Promotion (PIP)



13. Enhancing the Technical Capability of the Industry Stakeholders on Corn and Cassava Mechanization and Postharvest Technology
14. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for Rice
15. Intensifying the Promotion and Adoption of PHilMech Generated Technologies aka Technology Forum/Demonstration of PHilMech Generated Technologies
16. Technical Support to Industry Manpower Development on Mechanization and Postharvest Technology
17. Establishment and Operationalization of the PHilMech Regional Technology Management and Demonstration Center (PRTMDC)
ENTERPRISE DEVELOPMENT DIVISION
<i>Continuing Projects/Activities</i>
18. Enhancing Entrepreneurial Capability of Postharvest and Mechanization Adopters/Investors through the Provision of Business Development Services Cycle 2
19. Provision of Technical Assistance for Postharvest Enterprise Development Project
20. Empowerment of Women as Frontliners in the Establishment of Sustainable Multi-Commodity Solar Tunnel Dryer (MCSTD) Based Enterprises in selected areas in the Philippines
<i>Completed Extension-Related Project</i>
21. Building Viable Community-Based Coffee Processing Enterprise Models (Cycle II)

II. RICE COMPETITIVENESS ENHANCEMENT FUND (RCEF)

Areas of Concern/Title of Programs/Projects/Activities

PROGRAM MANAGEMENT AND FACILITY MANAGEMENT AND FIELD OPERATIONS
<i>On-going Program</i>
1. RCEF Mechanization Component/Program
2. Establishment and Upgrading of Rice Processing Systems (RPS) under the RCEF Mechanization Program (funded under Regular Fund)
3. Intensify Adoption of Crop Establishment Technologies: A Holistic ESETs Approach (funded under Regular Fund)
APPLIED COMMUNICATION DIVISION
<i>On-going Project</i>
4. Strategic Communication Services (a.k.a, Communication Support for the Rice Mechanization Program)
ENTERPRISE DEVELOPMENT DIVISION
<i>On-going Project</i>
5. Enterprise Development and Sustainability Support



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Department of Agriculture
Philippine Center for Postharvest Development and Mechanization
Science City of Muñoz, Nueva Ecija
www.philmech.gov.ph
ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED



TECHNOLOGY MANAGEMENT & TRAINING DIVISION
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<i>On-going Project</i>

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| 6. Technical Capability Enhancement |
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III. COCONUT FARMERS AND INDUSTRY TRUST FUND

Areas of Concern/Title of Programs/Projects/Activities

CTF- FACILITY MANAGEMENT AND OPERATIONS
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<i>New Program</i>

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| 1. Coconut Farmers and Industry Development Program – Shared Facilities for Processing |
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