

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







Philippine Center for Postharvest Development and Mechanization PROGRAMS/ACTIVITIES/PROJECTS (PAPs), FY 2020

I. REGULAR FUND

A. Research and Development (R&D)

Areas of Concern/Title of Programs/Projects/Activities

AGRICULTURAL MECHANIZATION AND INSTRUMENTATION **On-Going Projects** 1. Establishment of Rubber Sheet Processing System for Farmers of Kidapawan City, North Cotabato 2. Establishment of Abaca Fiber Processing System for Farmers of North Cotabato 3. Pilot Testing of the Developed Rolling Corn Mill for Village-Level of Operation 4. Design and Prototyping Services Unit 5. Field Testing of Micro- Impeller Brown Rice Huller 6. Field Testing of CVS- based Mango Sorting Machine New Projects 7. Development of Hybrid Shallow-Tube Well and Solar Powered Irrigation System (STW-SPIS) 8. Field Testing and Performance Evaluation of Village-Level Corn Milling Machine **BIO-PROCESS AND FOOD ENGINEERING** On-Going Projects 9. Improvement and Optimization of the KIPA- PHilMech Designed Oil Extractor for Citronella and Lemon Grass 10. Profiling and Characterization of Precursors Responsible for Flavor and Aroma Development in Local Cacao Beans 11. Banana (Cavendish var.) Powder Derived From Vacuum Microwave **Drying Method Completed Projects** 12. Improvement of Tablea Processing System SOCIO-ECONOMICS AND POLICY RESEARCH **On-going Projects** 13. Level of Awareness and Extend of Adoption of Farm Mechanization Technologies in Rice Production 14. Comparative Economic Evaluation of Drying System 15. Establishment of Abaca Fiber Primary Processing System for Farmers of North Cotabato 16. Establishment of Rubber Sheet Primary Processing System for Farmers of Kidapawan City, North Cotabato



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- 17. Effects of Mechanization to the Postproduction Losses of White Corn Used as Food
- 18.
- 19. Establishment of Baseline Information and Organization of Technology Used in the Production and Postproduction of High Value Crops
- 20. Enhancing the Socio- Economic Viability of Mechanized Rice-Based Farming Systems in the Philippines: Baseline and FCA Model Establishment

Completed Projects

- 21. Effects of Mechanization to the Postproduction Losses of Yellow Corn Used as Feed
- 22. Adaptability of Multi- Row Mechanical Onion Seeder in Iloilo Province

FOOD PROTECTION AND SAFETY

On-going Projects

- 23. Establishment of Museum for Insects Associated with Stored Products
- 24. Molecular Identification of Insects and Mites
- 25. Field Testing of Ethanol Vapor Releasing System in Extending the Shelf-life of Broccoli

Completed Projects

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

LABORATORY SERVICES

Continuing Projects

- 27. Implementation of Quality Assurance Program in LSD: Chemistry Laboratory Section
- 28. Provision of Regular Analytical Services
- 29. Implementation of Quality Assurance in Microbiological Laboratory
- 30. Cataloguing of Microbial Culture Collection

On-going Projects

31. Verification of Different Preservation Techniques on the Viability and Stability of Short and Long-Term Storage of Microorganisms

NEW PROJECTS in Support of the Government's Efforts to COVID Response (Collaborative projects of different R&D and ESETS divisions of PHilMech)

- 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



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- 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 Small-Scale Fruit/Vegetable-blended Coconut Water Processing Enterprise(Performance Testing and Validation)
- 7. Establishment of Pilot Sugarcane Wastes Silage and Pelleted Feeds Processing Enterprise
- 8. Piloting of Modules for the Provision of Mechanized Planting of Onion and Other Vegetables
 - 9. Accelerating the Development and Adaptation of Brown Rice MicroMill for the Filipino Rice Farmers

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

Division/Title of Programs/Projects/Activities

APPLIED COMMUNICATION DIVISION

Continuing Projects/Activities

- 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. Communication Support for the Rice Mechanization Program
- 8. Access Information Materials on Postharvest and Mechanization
 - 9. Process Documentation and Packaging of PHilMech Success Stories
 - 10. PHilMech's Visitor's Bureau
 - 11. Improving Access of Grassroots to Information and Technologies on Postharvest and Mechanization

TECHNOLOGY MANAGEMENT & TRAINING DIVISION

Continuing Projects/Activities

- 12. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for High Value Commodities
- 13. Technical Support to Intelelctual Property Rights (IPR) Services
- 14. PHilMech Industrial Promotion (PIP)
- 15. Enhancing the Technical Capability of the Industry Stakeholders on Corn and Cassava Mechanization and Postharvest Technology
- 16. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for Rice



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- 17. Intensifying the Promotion and Adoption of PHilMech Generated Technologies aka Technology Forum/Demonstration of PHilMech Generated Technologies
- 18. Technical Support to Industry Manpower Development on Mechanization and Postharvest Technology
- 19. Establishment and Operationalization of the PHilMech Regional Technology Management and Demonstration Center (PRTMDC)

ENTERPRISE DEVELOPMENT DIVISION

Continuing Projects/Activities

- 20. Enhancing Entrepreneurial Capability of Postharvest and Mechanization Adopters/Investors through the Provision of Business Development Services Cycle 2
- 21. Provision of Technical Assistance for Postharvest Enterprise Development Project
- 22. Empowerment of Women as Frontliners in the Establishment of Sustainable Multi-Commodity Solar Tunnel Dryer (MCSTD) Based Enterprises in selected areas in the Philippines
- 23. Technical Assistance Towards the Development of Mango Pectin-Based Enterprises
- 24. Gender and Development

Extension-Related Project

- 25. Building Viable Community-Based Coffee Processing Enterprise Models (Cycle II)
- 26. Rice Processing Enterprise for Farmers: Sustainability of KOICA- RPCs in the Philippines (RiPEFarm)

II. RICE COMPETITIVENESS ENHANCEMENT FUND (RCEF)

Areas of Concern/Title of Programs/Projects/Activities

PROGRAM MANAGEMENT AND FACILITY MANAGEMENT AND FIELD OPERATIONS

On-going Program

1. RCEF Mechanization Component/Program

APPLIED COMMUNICATION DIVISION

On-going Project

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

ENTERPRISE DEVELOPMENT DIVISION

On-going Project

3. Enterprise Development and Sustainability Support

TECHNOLOGY MANAGEMENT & TRAINING DIVISION

On-going Project

4. Technical Capability Enhancement