



MAJOR PROGRAMS AND PROJECTS, FY 2021

I. REGULAR FUND

A. Research and Development (R&D)

Division/Title of Programs/Projects/Activities

AGRICULTURAL MECHANIZATION DIVISION
On-Going Projects
1. Pilot Testing of the Developed Rolling Corn Mill for Village-Level of Operation
2. Design and Prototyping Services Unit
3. Field Testing of CVS-based Mango Sorting Machine
4. Field Testing of Mungbean Sheller in Small-Scale Farmer Cooperatives and Associations (FCAs)
5. Adapatability Testing of Hydraulic man-lift for spraying, bagging and harvesting of Mango in Philippine Condition
6. Improvement and Field Testing of PHilMech-developed Coffee Moisture Meter
7. PHilMech-KAMICO Collaborative Program - Technology Performance Verification and Adaptation of Mechanize Onion Production System
New Projects
8. Design and Development of Manually Drawn Onion Seeder in Bongabon, Nueva Ecija
Completed Projects
9. Field Testing of Micro- Impeller Brown Rice Huller
10. Establishment of Rubber Sheet Processing System for Farmers of Kidapawan City, North Cotabato
11. Establishment of Abaca Fiber Processing System for Farmers of North Cotabato
12. Development of Hybrid Shallow-Tube Well and Solar Powered Irrigation System (STW-SPIS)
BIO-PROCESS ENGINEERING DIVISION
New Projects
13. 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
Completed Projects
14. Profiling and Characterization of Precursors Responsible for Flavor and Aroma Development in Local Cacao Beans
SOCIO-ECONOMICS AND POLICY RESEARCH DIVISION
On-going Projects
15. Enhancing the Socio- Economic Viability of Mechanized Rice-Based Farming Systems in the Philippines: Baseline and FCA Model Establishment
16. Updating the Status of Rice Mechanization in the Philippines
Completed Projects
17. Establishment of Abaca Fiber Primary Processing System for Farmers of North Cotabato (Establishment of Baseline Information and Pilot testing)
18. Establishment of Rubber Sheet Primary Processing System for Farmers of Kidapawan City, North Cotabato (Establishment of Baseline Information and Pilot testing)
19. Level of Awareness and Extend of Adoption of Farm Mechanization Technologies in Rice Production
20. Comparative Economic Evaluation of Drying System
FOOD PROTECTION DIVISION
New Projects
21. Biobanking of Stored Product Arthropods
On-going Projects
22. Molecular Identification of Insects and Mites
23. Field Testing of Ethanol Vapor Releasing System in Extending the Shelf-life of Broccoli
LABORATORY SERVICES DIVISION
Continuing Projects
24. Implementation of Quality Assurance Program in LSD: Chemistry Laboratory Section
25. Provision of Regular Analytical Services
26. Implementation of Quality Assurance in Microbiological Laboratory
27. Cataloguing of Microbial Culture Collection
Completed Projects

28. Development of Digital Image-based Cultural-Morphometric Technique for Fungal Species Identification
ON-GOING PROJECTS in Support of 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 Vegetables
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 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 of Easy-to-Access Information Materials on Postharvest and Mechanization
6. Process Documentation and Packaging of PHilMech Success Stories
7. PHilMech's 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 Corn and Cassava Mechanization and Postharvest Technology
13. Enhancing the Technical Capability of the Industry Stakeholders on Mechanization and Postharvest Technology for Rice
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
<i>Continuing Projects/Activities</i>
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. Gender and Development
<i>On-going Projects</i>
21. Development of Rice Pre-cleaner as Integral Part of the PHilMech's Impeller Rice Mill Technology
22. Technical Assistance Towards the Development of Mango Pectin-Based Enterprises
<i>Completed Projects</i>
23. Rice Processing Enterprise for Farmers: Sustainability of KOICA- RPCs in the Philippines (RiPEFarm)

II. RICE COMPETITIVENESS ENHANCEMENT FUND (RCEF)

Division/Title of Programs/Projects/Activities

FACILITY MANAGEMENT AND FIELD OPERATIONS DIVISION
<i>On-going Program</i>
1. RCEF Mechanization Component/Program
APPLIED COMMUNICATION DIVISION
<i>On-going Sub-Program</i>
1. Strategic Communication Services (a.k.a, Communication Support for the Rice Mechanization Program)
ENTERPRISE DEVELOPMENT DIVISION
<i>On-going Sub-Program</i>
2. Enterprise Development and Sustainability Support
TECHNOLOGY MANAGEMENT & TRAINING DIVISION
<i>On-going Sub-Program</i>
3. Technical Capability Enhancement