

FY 2025 PCAARRD LIST OF GRANTS-IN-AID PROGRAMS/PROJECTS

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024'	Total Project Cost	2025 PCAARRD GIA
COLLABORATIVE RESEARCH AND DEVELOPMENT TO LEVERAGE PHILIPPINE ECONOMY (GRADLE)	Agricultural Waste to Food: Improving SuperCompost Fertilizer from Agricultural Wastes for Banana Yield Increase and Potential Disease Control	Rapid, inclusive and sustained economic growth	The project aims to increase banana yield by 10-30% using the enhanced SuperCompost from agricultural wastes. Specifically, it aims to: Explore and enhance the potential of DTBC SuperCompost from agricultural wastes; Test the efficacy of DTBC SuperCompost on the growth and yield of banana in Davao region; Test in vitro the bioefficacy of DTBC SuperCompost; and Facilitate product registration as biofertilizer for bananas for easy distribution and marketing to banana growers and plantation owners.	Publication: 3 publications published in a peer-reviewed scopus-indexed journal Patent: 1 patent application filed for the improved SuperCompost (DTBC SuperCompost registered at FPA: SuperCompost microorganism tested in vitro for biocontrol activity) Product: 1 DTBC SuperCompost tested and proven effective for banana: 1 enhanced or modified SuperCompost cum patent biocontrol agent in vitro People: 10 students involved in the laboratory procedure and field trials 5 academicians engaged in project implementation and management 3 scientists/experts engaged as external consultants to validate and/or feedback on the results 3 farmers involved for the field trials 4 DTBC personnel and other stakeholders capacitated on the advantages, use and application of the tested SuperCompost from agricultural waste Place: 4 MOU/MOA with partner industry: DTBC and cooperating agencies (DA, UseP, JMCFI) Policy: 1 policy recommendations to Davao Provincial Office regarding the use and/or patronage of SuperCompost from agricultural wastes with potential as biocontrol agent against Foc TR4	Rizal Memorial Colleges, Inc. (RMC)	12 local government units— 10 colleges and universities— 3 solid organic wastes processing units— 100 women and 100 men small-scale farmers— 10 women and 10 men academicians and scientists— 4 banana industry stakeholders— Supply chain players- Farmer-traders, middlemen, assembler/consolidator— Cooperatives and companies: Uni Frutti tropical Phils. Inc.; DOLE Stanfilco, Sumifu Philippines Corp, Lapanday Foods Corp.; Tagum Agricultural Development Company, Die Monte Fresh Produce	01-Oct-25	30-Sep-27	ONGOING	5,000,000	2,277,586
Developing soil knowledge, information and capacity to improve the productivity and sustainability of key cropping systems in the Philippines	Project 1. Scaling up of yield and profitability of diverse cropping systems: Rubber-based systems through soil fertility management and soil information system	Rapid, inclusive and sustained economic growth	The project aims to develop fertilizer management programs for yield and quality of high value crops (cacao, banana, coffee, calamansi, rice) in rubber-based system in Agusan del Sur. Specifically, it aims to: Determine the optimum fertilizer for the yield and profitability of perennial intercrops (cacao, banana, coffee, calamansi,) in rubber based system in Agusan del Sur; Determine growth and yield performance of perennial intercrops (cacao, coffee, banana, calamansi) in rubber based systems in Agusan del Sur; Develop cost-efficient fertilizer program for (cacao, banana, coffee, calamansi, and rice) in rubber-based system in Agusan del Sur; and Develop a sustainable pest and disease management protocol for selected crops in a rubber based cropping system.	Publications 3paper submission for publication 6 copies IEC Materials produced for rice, cacao 3paper submission for publication 6 copies IEC Materials produced for banana, coffee, calamansi 3paper submission for publication 3paper submission for publication 3paper submission for publication 3paper submission for publication 1 paper submission for publication on management protocols for pest and diseases of rubber based cropping system of rice, cacao, banana, coffee, calamansi Total: 16 paper submission for publication 12 IEC materials	Agusan del Sur State College of Agriculture and Technology (ASSCAT)	— Farmers — Agricultural Cooperatives — Agricultural Extension Services — Government Agencies — Researchers and Scientists — Environmental Conservation Organizations — Educational Institutions — Technology Developers — Local Communities — NGOs and Development Agencies	01-Nov-24	31-Oct-29	ONGOING	8,258,324	1,753,331
Developing soil knowledge, information and capacity to improve the productivity and sustainability of key cropping systems in the Philippines	Project 2. Enhancing the productivity of rice-based cropping systems in selected provinces of Luzon through soil health management	Rapid, inclusive and sustained economic growth	The project aims to enhance productivity of rice-based cropping systems in selected provinces of Luzon namely, Ilocos Norte, Tarlac and Bataan through soil health management. Specifically, it aims to: Evaluate the effectiveness of different nutrient management practices to increase production for rice-garlic, rice-rice and rice-vegetable cropping systems; and Develop yield-calibrated soil health indices for rice-garlic, rice-rice and rice-vegetable cropping systems.	Publication: 3Patent: 12Product: 17People: 31Place: 43Policy: 48	Mariano Marcos State University (MMSU)	Farmers of Ilocos Norte, Tarlac and Bataan LGUs (Agriculture Extension Workers), Students Researchers Policy Makers	01-Nov-24	31-Oct-29	ONGOING	6,643,919	1,430,584
Developing soil knowledge, information and capacity to improve the productivity and sustainability of key cropping systems in the Philippines	Project 3. Development of yield-calibrated soil health indices for rubber-based cropping systems in Southern Philippines	Rapid, inclusive and sustained economic growth	The project aims to establish yield-calibrated soil nutrient indices for the development of a comprehensive, soil health assessment index. Specifically, it aims to: Develop yield-calibrated soil nutrient indices for rubber and its intercrops (coffee, cacao, carabava banana, lanzones, and calamansi); Establish minimum datasets for soil health indicators in rubber-based cropping systems; and Develop a weighted soil health assessment framework for rubber-based cropping systems in Southern Philippines.	Publication: 1Patent: 10Product: 14, 20People: 31; 32; 37Place: 38Policy: 48	Agusan del Sur State College of Agriculture and Technology (ASSCAT)	Farmers, Soils Laboratory Workers/Soil technicians, Agricultural Extension Workers, LGUs, Policy Makers, other government and private stakeholders such as PRRI, POC and Nestle—c Philippines (Industry)	01-Nov-24	31-Oct-29	ONGOING	6,671,667	1,382,333
Developing soil knowledge, information and capacity to improve the productivity and sustainability of key cropping systems in the Philippines	Project 4. Assessment of the existing knowledge on soil health in different farming systems for the capacity building needs and policy support in the Philippines	Rapid, inclusive and sustained economic growth	The project aims to develop nutrient management program for yield and quality for cacao under Type 2 climate of Agusan del Sur. Specifically, it aims to: Determine the optimum fertilizer program for cacao under Agusan del Sur condition; Determine cacao varieties that performs under Agusan del Sur condition; Recommend fertilization methods and varieties of cacao under Agusan del Sur condition; and Determine cost efficient fertilizer program for bearing cacao.	Publication: 1Patent: 7Product: 14People: 37Place: 38Policy: 48	University of Southern Mindanao(USM)	Cacao Farmers in Agusan del Sur	01-Nov-24	31-Mar-28	ONGOING	9,047,180	2,339,945
Developing soil knowledge, information and capacity to improve the productivity and sustainability of key cropping systems in the Philippines	Project 5. Development of Philippine agricultural soil information system for selected regions in the Philippines (PHASS)	Rapid, inclusive and sustained economic growth	The project aims to develop a simple, understandable, and precise map-based online soil information system. Specifically, it aims to: Gather and integrate on-site and historical data on soil properties, topography, and relevant environmental attributes; Conduct soil sampling across the study area to validate and calibrate the spatial soil nutrients mapping; Develop a precise spatial mapping for soil nutrient levels; and Provide recommendations for precision agriculture practices through the online information system.	Products: 4 Set up for base maps for 4 provinces; One (1) Draft information system ; 4 set up for base maps for 4 provinces; One (1) Draft information system ; Minimum of four (4) GIS maps transferred to provincial office; One (1) information system available for community access (R&D Leading to Extension) People Services 400 extension beneficiaries trained Patent One (1) copyright application for the GIS Maps Places and Partnerships Minimum of four (4) MOA or MOU sealed Partnership with at least four (4) agencies for community-based collaborations; Publications One (1) paper submission for publication to ISI and/or SCOPUS indexed scientific journals; One (1) paper submission for publication to ISI and/or SCOPUS indexed scientific journals; Policy One (1) policy recommendations crafted for the use of the information system	Agusan del Sur State College of Agriculture and Technology (ASSCAT), Mariano Marcos State University (MMSU)	Farmers Agricultural Extension Services Government Agencies Researchers and Scientists Environmental Conservation Organizations Educational Institutions Technology Developers Local Communities NGOs and Development Agencies	01-Nov-24	31-Oct-27	ONGOING	6,186,960	2,120,720
Strategic Postharvest Research for Innovative and Novel Technologies for Horticultural Industry Development (SPRINT-Hort)	Project 1. Postharvest Systems Improvement of Selected Horticultural Value Chains	Rapid, inclusive and sustained economic growth	The project aims to reduce postharvest losses in selected horticultural value chains through postharvest systems improvement. Specifically, it aims to: Determine the extent and nature of losses in horticultural commodities in selected value chains; Identify critical loss points where value can be added through appropriate postharvest interventions; Determine the costs and benefits of technologies appropriate for specific commodities and sites; and to evaluate the social acceptability and environmental effects of these technologies; and, Recommend best practices and technologies for upscaling or industry mainstreaming.	Publications— 2 articles in refereed scientific journals— 1 Patent/Intellectual Property- no patent only, document on loss assessment protocol— 1 Draft (2) and poster papers (2) for presentation in scientific conferences—Products— 4 Training modules (1 each for partner SUC (for farmer-cooperators, for trader-cooperators, and for SUC partner experts and URAs)— 7 IEC materials on proper postharvest handling of selected commodities— Commercialization protocol for industry uptake— 7 Value Chain maps for selected horticultural crops—People and services— Trained co-operators and personnel— Addition to scientific workforce by graduating postharvest science majors through the project (BS/MS/PhD)— Provision of services such as trainings or seminars conducted or organized—Places and partnerships — Forged 5 MOAs or MOUs between UPLB and SUC partners and at least 7 supplemental MOA with industry partners— Established collaboration between and among UPLB multidisciplinary team (postharvest technologists, physiologists, bio-system engineers, socio-economists)— Established collaborations with key agricultural research universities (BSU, CLSU, NVSU, VSU and CMA), Department of Agriculture Regional Offices, and industry partners: private companies, Farmers' associations, etc. and LGUs—Policies— Policy briefs on postharvest loss reduction— inputs to proposed policies—Social impact- The project will advance knowledge and evidence-based improvement of horticultural value chains as prioritized in DOST's HRDA 2017-2022 for AARR and mainstream multi-location trials and innovative technology transfer for various technologies through established collaborations and partnerships between and among the academe (research and extension) and the industry. Economic Impact - With the increase of marketable, competitive and safe commodities using postharvest technologies that could also provide increased income/profit to industry stakeholders in a more sustained manner.	Benguet State University (BSU), Nueva Vizcaya State University (NVSU), Central Luzon State University (CLSU), Camarines Norte State College (CNSC), Visayas State University (VSU), University of the Philippines Los Baños (UPLB)	€ Food industry stakeholders such as farmers, traders and processors who will be knowledgeable about the natural preservation systems for fresh horticultural produce. € Researchers, academic staff, and public sector representatives for technology verification and promotion	16-Mar-23	15-Mar-26	ONGOING	35,069,242	10,237,711

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Strategic Postharvest Research for Innovative and Novel Technologies for Horticulture Industry Development (SPRINT-Hort)	Project 2. Development of Low-Cost Cooling and Storage Systems for Horticultural Produce	Rapid, inclusive and sustained economic growth	The project aims to develop low-cost cooling and storage systems for priority fruits (mango, banana, citrus and pineapple), vegetables (tomato, eggplant, bitter melon and okra) and cutflowers (mums and roses). Specifically, it aims to: Determine the present handling and storage practices and requirements of potential users (e.g. farmers, traders, vendors, wet market administrators) of the technologies; Develop coolbox cold storage for horticultural produce; Develop commercial-scale evaporative cooler for horticultural produce; Develop integrated storage management systems for priority fruits, vegetables and cutflowers; and Assess the socioeconomic viability of the developed storage systems.	Products: prototype of grid and solar powered coolbox cold storage with oneton capacity; 1 prototype of grid and solar powered storage evaporative cooler with oneton capacity; Interactive spreadsheet-based mathematical model of evaporative cooler; 10 commodity-specific integrated storage management systems (mango, banana, pineapple, citrus, tomato, eggplant, bitter melon, okra, mums, roses); People and Services: at least 3 students taking part in research activities for their thesis; informed and/or educated food industry stakeholders such as producers, food handlers, marketers, processors, policy makers and other development partners through information dissemination (e.g. attendance in conferences, symposia, IEC, etc.); Places and Partnerships: collaboration and partnerships within and outside UPLB; consulting services within and outside UPLB; team teaching of short courses on postharvest handling, storage and systems improvement; inclusion as subject matter of relevant horticulture and postharvest subjects in undergraduate and graduate program; Publications: at least 3 papers in refereed scientific journals, at least 3 conference papers; at least 10 IEC materials; Policy: at least 2 policy briefs on postharvest loss reduction strategy, postharvest research and development strategy, and storage systems for horticulture industry development; Patent: 2 utility models, 1 each for Coolbox storage, and evaporative cooler prototypes; Potential Social Impact: The development and subsequent industry mainstreaming of low-cost storage technologies will contribute to: €€ more effective control of postharvest quality and shelf life of fresh produce; €€ reduction of postharvest losses and increase in supply of and profits from fresh produce; €€ promotion of renewable energy use as grid power substitute; €€ increase in market engagement and competitiveness of horticulture smallholders; €€ enhanced environmental sustainability through reduced carbon footprint of postharvest losses and energy consumption; Potential Economic Impact: The project's outcomes will ultimately lead and contribute to poverty alleviation and income security, food and nutrition security, and environmental sustainability.	University of the Philippines Los Baños (UPLB)	— Producers' groups/cooperatives, food handlers, marketers, and other stakeholders in the horticulture industry— Researchers/scientists, educators, policy makers and other development actors to adopt low-cost storage systems in research, education, training and policy making for horticulture industry development.	16-Mar-23	15-Mar-26	ONGOING	12,885,000	3,698,000
Strategic Postharvest Research for Innovative and Novel Technologies for Horticulture Industry Development (SPRINT-Hort)	Project 3. Development of Natural Preservation Systems for Fresh Horticultural Produce	Rapid, inclusive and sustained economic growth	The project aims to develop simple, natural, eco-friendly, and sustainable preservation techniques for maintaining the quality and ensuring the safety of selected fresh horticultural produce for human consumption. Specifically, it aims to: Develop antimicrobials, coatings, and postharvest dips as preservation treatments and shelf-life enhancers; Formulate nano-based products or preservation technologies from natural resources; Optimize the treatment protocols (concentration, method of application, treatment duration) on a laboratory scale; Assess the efficacy of these optimized preservation technologies as applied to selected fresh produce and stored under storage systems developed in Project 2; and Determine the economic benefits and social acceptability of the developed preservation technologies through handling trials under Project 1.	Products— 6 knowledge products: information on safe, natural, eco-friendly, and sustainable preservation techniques— 3 actual products: natural antimicrobial, postharvest dip and non-chlorine sanitizer, nano-based postharvest preservatives; Patent— One patent application of nano-encapsulated seaweed-derived waste products, oil or plant-based compound (or a combination thereof) for shelf-life extension; People and Services— Informed and/or educated food industry stakeholders such as farmers, traders or processors through information dissemination (e.g. attendance to conference, symposia, IEC, etc. - at least 50)— Increased number in scientific workforce by graduating science majors through the project (at least 3 BS and MS degree holders); Places and Partnerships— Enhanced research collaborations and established network coordination among PHTRC multidisciplinary team, iCropS, CAFS, UPLB, BIOTECH, UPLB; IPB, UPLB; Publications— Publish at least one article in refereed journal (Scopus or ISI-indexed journal publication)— Present at least 4 technical paper and poster abstracts in scientific conferences— Prepare/publish at least 2 IEC materials (brochures, posters/infographics or flyers)— 1 short instructional video on how to perform the postharvest treatments; Policy— Drafted policy recommendation on natural preservation system for fresh produce in the horticulture industry which will provide baseline information for the generation of a policy brief for food loss and waste reduction which will be done in cooperation with the funding agency and research collaborators; Potential Social Impact: The project will advance postharvest knowledge by providing science-based and ecofriendly technologies on preservation systems using plant derived extracts and oils, and food waste-based products; Potential Economic Impact: With the increase of marketable, competitive and safe commodities for a longer period of time through the use of the developed green postharvest preservation systems, stakeholders in the supply chain handling these selected commodities will have greater profit as well as confidence in	University of the Philippines Los Baños (UPLB)	— Food industry stakeholders such as farmers, traders, and processors will be knowledgeable about the natural preservation systems for fresh horticultural produce.— Researchers, academic staff, and public sector representatives for technology verification and promotion	16-Mar-23	15-Mar-26	ONGOING	14,525,654	3,645,578
SUGARCURE: Sustainable and Unified Gains through Agroecological Responses and Control Using Resilient Eco-solutions	Project 1. Utilizing Entomopathogenic Fungi and Biopesticides for the Biological Control of Red-striped Soft Scale and Grubs in Sugarcane	Rapid, inclusive and sustained economic growth	The project aims to identify an effective biological control approach, specifically targeting the new pest red-striped soft scale and grubs, which pose significant threats to sugarcane production leading to their possible integration into sustainable pest management. Specifically, it aims to: Determine the virulence of indigenous and common isolates of entomopathogenic fungi against various life stages of red-striped soft scale insect and grubs; Identify potential entomopathogens against red-striped soft scale insect and grubs, and identify effective biopesticides against red-striped soft scale insect and grubs.	Publications: Paper presentation leading to Wot-and/ or SCOPUS-indexed publications (Y1 - 1; Y2 - 1); Submission Patent: None; Products: Virulent EPN against insect pests of sugarcane (Y2 - 1); Virulent EPN against insect pests of sugarcane (Y2 - 1); EPN application protocol for field use (Y2 - 1); Improved EPN in vitro mass production protocol (Y2 - 1); People Services: GREAT scholar and/or undergraduate thesis student (Y1 - 2; Y2 - 2); Staff/ Members of SRA regional field offices, planter federations, and sugar miller trained (Y2 - 20); Extension material (Y2 - 1); Places and Partnership: Collaborative agreements with 2 SRA regional field offices (Y2 - 2); Policy: -	University of the Philippines Los Baños (UPLB)	SRA regional field offices, planter federations, and sugar miller trained, thesis students	01-Aug-25	31-Jul-27	ONGOING	6,424,213	3,355,856
SUGARCURE: Sustainable and Unified Gains through Agroecological Responses and Control Using Resilient Eco-solutions	Project 2. Development of Entomopathogenic Nematode (EPN)-Based Pest Management Strategy Against Sugarcane Insect Pests	Rapid, inclusive and sustained economic growth	The project aims to generate an efficient application technique using EPN for the management of major insect pests of sugarcane. Specifically, it aims to: Identify the most virulent EPN strain against major insect pests of sugarcane; Identify the virulence of the symbiotic bacterium of EPN against insect pests of sugarcane; Improve the in vitro mass culture system for EPN; and Formulate an efficient insect pest management protocol for field use.	Publications: Paper presentation leading to Wot-and/ or SCOPUS-indexed publications (Y1 - 1; Y2 - 1); Submission Patent: None; Products: Virulent EPN against insect pests of sugarcane (Y2 - 1); Virulent EPN against insect pests of sugarcane (Y2 - 1); EPN application protocol for field use (Y2 - 1); Improved EPN in vitro mass production protocol (Y2 - 1); People Services: GREAT scholar and/or undergraduate thesis student (Y1 - 2; Y2 - 2); Places and Partnership: Collaborative agreements with 2 SRA regional field offices (Y2 - 2); Policy: None	University of the Philippines Los Baños (UPLB)	SRA regional field offices, planter federations, and sugar miller trained, thesis students	01-Aug-25	31-Jul-27	ONGOING	6,500,531	3,588,653
SUGARCURE: Sustainable and Unified Gains through Agroecological Responses and Control Using Resilient Eco-solutions	Project 3. Development of predictive models, risk maps and management strategies against major diseases of sugarcane.	Rapid, inclusive and sustained economic growth	The project aims to mitigate the risks brought by major sugarcane diseases in the Philippine sugarcane industry by developing disease management products and systems, prediction models and risk map against major disease of sugarcane particularly leaf scorch, pokkah boeng, and leaf scald. Specifically, it aims to: Develop predictive models and risk maps for pokkah boeng, leaf scorch, and leaf scald diseases of sugarcane; Screen the effectiveness of fungicides; potential plant extract and biological control agents against sugarcane diseases under laboratory experiments; Identify fungicides, plants as a source of fungicide/bactericide, and biological control agents effective against sugarcane diseases under screenhouse conditions; and Integrate the potential management products and strategies to reduce sugarcane disease infection screenhouse conditions.	Publication: ISI- and/or SCOPUS-indexed publications submitted (Y1 - 2; Y2 - 2) Patent: Copyrights on predictive models and risk maps for pokkah boeng, leaf scorch, and leaf scald (Y2 - 6) Products: Predictive models and risk maps for pokkah boeng, leaf scorch, and leaf scald diseases (Y2 - 3); Identified potential disease management strategies/products (Y2 - 3) People Services: Graduate and/or undergraduate thesis student (Y1 - 1; Y2 - 1); Staff/ Members of SRA regional field offices, planter federations, and sugar miller trained (Y2 - 10); Extension material (Y2 - 1) Places and Partnership: Collaborative agreements with Philsurin RCPCLs, PAO, MAO (Y2 - 2) Policy: Policy advisory on emerging sugarcane diseases (Y2 - 1)	University of the Philippines Los Baños (UPLB)	Sugarcane farmers; students interested to conduct thesis on sugarcane diseases; researchers/faculty members whose research geared in sugarcane production, local government units (LGUs) from sugarcane producing municipalities; policy and decision makers from sugarcane producing district	01-Aug-25	31-Jul-27	ONGOING	6,574,298	3,922,054
SUGARCURE: Sustainable and Unified Gains through Agroecological Responses and Control Using Resilient Eco-solutions	Project 4. Development of Weed Management Strategies for Major Grass Weed Problems in Sugarcane	Rapid, inclusive and sustained economic growth	The project aims to evaluate various cultural practices, herbicide options, and combinations of different tactics that can effectively manage weeds. The findings obtained from this project will serve as a basis for developing integrated weed management and herbicide resistance management recommendations that could potentially reduce sugarcane yield loss and increase the income of sugarcane growers. Specifically, it aims to: Assess the weed management practices and most problematic weeds in Batangas, Laguna, and Pampanga; Assess presence of herbicide resistant weeds in sugarcane in Batangas, Laguna, and Pampanga; and Evaluate different weed management strategies in sugarcane.	Publication: article (Y2 - 1); presentation in scientific conference (Y2 - 1); training manual (Y2 - 1) Patent: Copyrighted training manual (Y2 - 1) Products: inventory of weed management practices (Y2 - 1); inventory of weed resistant sugarcane (Y2 - 1); weed management recommendation (Y2 - 1); herbicide resistance management recommendation (Y2 - 1) People Services: sugarcane growers/millers, AEW, SRA personnel trained (Y2 - 50) Places and Partnership: Partnership with MAO/PAO and SRA-LAREC (Y1 - 2) Policy: draft of policy recommendation on herbicide resistance (Y2 - 1)	University of the Philippines Los Baños (UPLB)	Sugarcane growers/millers, AEW/MAO, and SRA personnel	01-Aug-25	31-Jul-27	ONGOING	6,206,526	3,760,803
A Unified Agricultural and Fisheries Mechanization Industry Roadmap in Support of Agricultural and Fisheries Mechanization Law		Rapid, inclusive and sustained economic growth	The project aims to analyze the agricultural and fisheries mechanization industry for the formulation of a strategic roadmap in support of the AFMech Law. Specifically, it aims to: Evaluate the status of agricultural and fisheries mechanization industry in terms of technology availability, utilization, and accessibility, including gaps, challenges, and opportunities for agricultural mechanization components; Identify key targets and milestones for the agricultural and fisheries mechanization industry for the next ten (10) years in the short, medium, and long term; Develop a comprehensive agricultural and fisheries mechanization industry roadmap that outlines strategies, targets, and an implementation and monitoring plan; and Provide policy recommendations for the implementation of the roadmap.	Publication: information, Education and Communication (IEC) materials; At least 1 journal article for publication and presentation of output to a scientific conference for AFMech Law; AFM Industry Roadmap copyrightable and patentable; Comprehensive and unified Philippine agricultural and fisheries mechanization industry roadmap (2025-2034) People: National Stakeholders consultation for the comprehensive and unified Philippine agricultural and fisheries mechanization industry roadmap (2025-2034); ABE students who will be engaged in the project. Places/Partnership: Collaborations involving the direct target beneficiaries; Policy: Comprehensive and robust national policy framework for AFM in support to AFMech roadmap implementation.	University of the Philippines Los Baños (UPLB)	The target beneficiaries of the proposed program are as follows: Department of Agriculture and other agencies involved in Agricultural and Fisheries Mechanization industry Major national priority commodity programs National government and LGU agencies involved in AFMs Machinery manufacturers, dealers, and distributors Farmers, Farmers organizations and other end-users and stakeholders of AFMs. Researchers, Agricultural and Biosystems Engineers (ABEs), and ABE Students Academe Agricultural and Fisheries Mechanization Research Development and Extension Network Members of the AFMech Law	01-Jul-25	30-Jun-26	ONGOING	4,000,000	4,000,000

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	Adaptability Trial and Performance Evaluation of Promising Sugarcane Hybrids in Different Agro-ecological Growing Conditions of the Philippines	Integrity of the environment and climate change adaptation and mitigation	The project aims to evaluate the promising hybrids/clones of sugarcane in different locations across the sugarcane growing areas in the country and to select the most stable high yielding genotypes. Specifically, it aims to: Characterize the performance of the promising genotypes of sugarcane in various environments while being breeders to those promising genotypes; Select the most adapted and stable variety in the farmers' field across different environments; Assess variance components of the major quantitative traits relative to yield components and estimate the importance of GE interactions; Study relationships existing between environments in terms of genotypic response; and Identify the potential areas for optimizing the current multilocation trial program.	Publication: At least 1 full paper in ISI Journal At least 2 posters in scientific conference Patent: sugarcane variety for NSIC registration Product: promising sugarcane varieties People: students to be included in the project Farmers to be involved in selector Place: University of Southern Mindanao, Kabacan, Sugar Regulatory Administration (SRA), La Granja (SRA LaGAREC) Policy: none	University of the Philippines Los Baños (UPLB)	Sugarcane farmers researchers, other interested users	01-Jul-23	30-Jun-26	ONGOING	20,358,482	6,011,292
	Assessment and management of plant essential heavy metals (PEHM), nutrients and pathogens in vegetable production to enhance soil health and food safety in the Philippines (Managing heavy metals and soil contaminants in vegetable production to ensure food safety and environmental health in the Philippines)	Integrity of the environment and climate change adaptation and mitigation	The project aims to assess the short- and long- term constraints to vegetable production on upland acidic soils in the Philippines and develop management strategies to ensure food safety and environmental health. Specifically, it aims to: Evaluate the biophysical characteristics and constraints in vegetable production on acidic soils in Luzon (Benguet, Visayas (Cabanitan, Leyte) and Mindanao (Claveria)); Characterize the impact of excessive PEHM accumulation on vegetable crop productivity and develop strategies to manage risks to crop production; Identify the impact of limitations or deficiencies of nutrients on acidic soil vegetable production; Develop options for improved pathogen management in vegetables to mitigate excessive PEHM input and productivity losses; Evaluate and develop crop management strategies to optimize nutrient inputs, reduce PEHM loading, improve soil quality and mitigate offsite environmental impacts; and Provide training, mentoring and skill development for junior and mid-career scientists and technical staff.	Publication: Minimum of 1 Scopus or ISI-indexed publication paper publication; IEC materials like press releases, information bulletins, instructional or training materials and modules Patent: None Product: Databases and management protocols. Database on soil properties, levels of nutrients and PEHM, pests and disease incidence in major vegetable growing regions in the Philippines Proper nutrient and pesticide recommendations to mitigate impact of excessive PEHM and nutrient deficiencies/toxicities on vegetable production Soil, crop, pest and disease management to mitigate PEHM accumulation, ensure food safety and environmental health People: Trained personnel through workshop/trainings for the protocols on management practices in heavy metal-contaminated soils; Minimum of 1 training/workshop to be conducted; Minimum of 4 undergraduate/graduate students to conduct their thesis studies under the program. Place: Partner institutions, SUCs, LGUs, and concerned stakeholders of vegetable farming: Visayas State University (VSU) University of Science and Technology of Southern Philippines (USTSP) Benguet State University (BSU) Policy: Policy recommendation for strengthening of partnership among key stakeholders in vegetable production and for knowledge/ info pathway of key stakeholders of vegetable production.	University of the Philippines Los Baños (UPLB), University of Science and Technology of Southern Philippines (USTSP), Visayas State University (VSU)	Primary beneficiaries --> selected vegetable production sites in Claveria, Leyte, and Benguet Secondary beneficiaries --> researchers, students, farmers and LGUs	01-Nov-23	31-Oct-27	ONGOING	14,953,090	3,770,833
	Deployment of a Data-Driven Assessment System (M3DAS) of the Mechanization Resources of the Sugarcane Industry for Improved Mechanization and Field Productivity	Rapid, inclusive and sustained economic growth	The project aims to deploy the enhanced M3DAS as a data driven-driven system to assess the mechanization status of the industry in order to craft a strategic and sustainable mechanization plan for further improvement of the sugarcane industry sector. Specifically, it aims to: Incorporate enhancements in the M3DAS system (database and web map) as identified in the previous phases of the project; Determine mechanization resource profiles of the different mill districts in three phases; Determine specific mechanization resource plans for the different mill districts and consolidate into a national plan; Develop and install a management plan for sustainable use of the system acceptable to all stakeholders; and Train operators in the use and maintenance of the M3DAS system for deployment of the system to SRA.	Publication: - One (1) oral/poster presentation on the results of the project at a local/international conference - One (1) journal publication - One (1) M3DAS User Manual - One (1) M3DAS Training Manual - Two (2) Audio-Visual materials Patent: - Two (2) Copyright registrations for the M3DAS information system. - Pipelines Survey Apps. Methodology of M3DAS for data acquisition, storage, and analysis - Two (2) copyright registration for IEC materials: 1 user manual and 1 training manual copyrights - One (1) trademark for M3DAS logo Product: - One (1) enhanced optimized M3DAS System People and Services: - Trained 30 personnel of SRA and 20 Mill District Officers on M3DAS System i.e. Users App; data acquisition, storage, and analysis; information portal (e.g. custom operators, custom rates, etc.) Places and Partnerships: 2 MOA/MOU/Letter of Commitment on collaboration with SRA, MDDCs, and Custom Providers Policy: - Policy recommendations on data-driven planning and monitoring, incorporation of geospatial analysis for strategic planning for mechanization interventions for a productive sugarcane industry.	University of the Philippines Los Baños (UPLB)	Sugar Regulatory Administration, Mill District Development Councils, Custom Service Operators, Farmer and Planter in General Based on the discussion in the validation workshop there was some sort of consensus that the SRA should work hand in hand with the mill districts as every mill district has a management organization which looks after the affairs of the specific locality. SRA being the regulatory office can house the main server but each mill district should have an access to the data and the infographics that is generated. These they will use for their specific localized mechanization planning and monitoring. With each of the mill districts completely profiled SRA then can consolidate the different specific plans to come up with a comprehensive national plan. This will harmonize the data for the whole industry and allow more accurate information across different levels in the industry. The whole farming and milling population will be poised to benefit from employing the system.	01-Jun-23	31-May-26	ONGOING	15,539,090	4,789,403
	Development of Bio-based Engineered Post-harvest Storage and Shelf-life Extension Packaging Films	Rapid, inclusive and sustained economic growth	The project aims to develop a food packaging film from agro-waste materials in the Philippines. Specifically, it aims to: Survey potential and sustainable agro-waste materials, isolate, purify, and characterize natural polymers from various agro-waste resources; Optimize and produce pure, enhanced, and/or blended type bio-based packaging films; Conduct initial physicochemical characterizations of bio-based packaging films product; and Test the performance of bio-based films in selected commodities (e.g. vegetable, plantation crop and root crop).	Publication: 3 Patent: 12 Product: 14 People: 31 Place: 44 Policy: 48	University of the Philippines Los Baños (UPLB)	These are the groups of beneficiaries, foreseen to benefit from this proposed project. Farmers and post-harvest commodity producers Commodity sellers Packaging industries Export industries End-users and consumers State Universities	01-Apr-25	31-Mar-27	ONGOING	5,000,000	3,650,978
	Development of Microbial and Plant-Microbial Combinations for Bioremediation of Pesticide Contaminated Vegetables Areas in Selected Provinces	Rapid, inclusive and sustained economic growth	The project aims to develop soil and endophytic bacteria and fungi formulations, as well as soil microbe and plant combinations that can degrade organophosphate pesticides for bioremediation of pesticide contaminated vegetable areas in Benguet Province. Specifically, it aims to: isolate and identify chlorophytos and methanotrophs tolerant endophytes, soil bacteria and fungi from farm areas highly contaminated with POP pesticides in Benguet; Assess organophosphate pesticide-degrading capacity and plant growth promoting characteristics of soil bacteria, endophytes and soil fungal populations from pesticide contaminated vegetables area in Benguet; Develop microbial culture formulation for the bioremediation of soils contaminated with persistent organic pollutant (POP) pesticides; Assess biological degradation of pesticide residues in soil using microbial inoculants and plant-microbial combinations under controlled conditions; Assess biological pesticide degradation and economic benefit of the developed products under actual farm conditions in Benguet; and Establish a Microbial Remediation Laboratory devoted to the discovery and development of microbial formulations for the remediation of contaminated vegetable farm soils in Benguet and Cebu.	Publications 3 Research article/s, IEC on research outputs Patent/IP 2 Pesticide degrading microbe/s and plant-microbial consortia: formulation, application Products 3 Microbial formulation of pesticide degrading bacteria People/Services 6 Seminar-workshop on soil ecological methods for researchers/ research data dissemination 200 Participants/ trainees (stakeholders e.g. researchers, farmers and LGU officials) 5 Undergraduate/ graduate students research assistance Places and Partnerships 3 MOA with institutions (RSU, farmers/ farmer associations) Partnership on possible bioremediation of farms Cebu Technological University Policy 1 Proposal draft/ policy brief for responsible use of pesticide and soil management to be incorporated in local legislation	Benguet State University (BSU), Cebu Technological University (CTU)	Farmers, whose farm soils can be restored to health; Ordinary consumers of farm produce, which is basically everyone; The health of the general populace consuming farm products and the health of the environment.	01-Apr-23	31-Mar-26	ONGOING	21,451,592	3,475,716
	Development of Solar Powered Off-grid Cold Thermal Energy System (CTES) for Mobile Cold Storage of Multi-commodity Crops	Rapid, inclusive and sustained economic growth	This project aims to develop an off-grid cold storage system using thermal energy storage that could cater multi-commodity crops and can be deployed to remote areas. Specifically, it aims to: Design and install an off-grid cold storage system; Evaluate the cost-effectiveness and reliability of the cold storage; and Conduct training and promotion of the new off-grid cold storage.	Publication: Patent: Product: People: Place: Policy:	DOST-Metals Industry Research and Development Center (DOST-MIRDC)	Metals and Engineering Sector	01-Jul-25	31-Dec-26	ONGOING	4,994,295	3,415,749

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Ecoluminator: A Smart Solar-Powered UV Light Trap for Early Detection, Monitoring, and Mapping of Rice Black Bugs (<i>Scotinophara coarctata</i> , Fabricius) powered by AI and IoT	Rapid, inclusive and sustained economic growth	The project aims to elevate pest management practices in rice farming communities in Isabela through the development, deployment, and capacity building associated with solar-powered UV-light traps integrated with an early warning system, IoT, AI, and cloud-based decision support systems. Specifically, it aims to: Develop a solar-powered RGB UV-light trap incorporating IoT technology; Develop and deploy a cloud-based decision support system incorporating artificial intelligence, real-time data analysis, mapping, and timely notification delivery to farmers; Conduct field testing of the smart UV trap and decision support pest management system to validate the performance and further enhance the developed smart technologies; Determine the economic and technical viability of the developed smart technologies; and Train and familiarize farmers in the operation and maintenance of the developed smart technologies.	Year 1 Six portable smart solar-powered UV light traps installed One interactive cloud-based decision support system and early warning system Year 2 One capacity-building activity for DA, LGUs, and Farmers on Smart solar-powered UV light trap utilization with at least 100 participants Publications submitted and presented and IEC materials produced Patent filed and <u>interacted system copyright registered</u>	Isabela State University (ISU)	At least 100 rice farmers in the province of Isabela. At least three DA-RFOs and DA Regional Crop Protection Centers (RPCCs) technicians. One Local Government Unit farmer technician. One Isabela Rice Grains Cooperative.	01-Nov-25	31-Oct-27	ONGOING	8,198,511	4,549,238
	Establishing the Research, Development and Extension-Academe and Local Agri-fisheries Machinery Assembly and Manufacturing (LAMM) Industry Network in Region IV-A towards a Sustainable, Competitive and Productive Industry	Rapid, inclusive and sustained economic growth	The project aims to establish and strengthen the research, development, and extension, academe, and Local Agri-fisheries Machinery Assembly and Manufacturing Industry Network in Region IVA towards a sustainable, competitive, and productive industry. Specifically, it aims to: Identify local manufacturing needs in Region IV-A through the conduct of needs and design assessment survey; Establish a RDE-academe and local manufacturers/industry linkage through RDE collaboration in Region IV-A, identifying agreements, members roles and responsibilities; Establish an organized LAMM network in Region IV-A identifying agreements, roles and responsibilities of the members; Conduct benchmarking in 1 country with advanced local machinery manufacturing industry to document best practices and strategies for local assembly and manufacturing (including part specialization); Modify 1 priority technology (for rice and/or corn) and components for adoption, promotion, and commercialization for Region IV-A through the network, collaboration, and exchange of knowledge systems; and Identify priority technologies (at least 3 for rice and/or corn) for adoption, promotion, utilization, and commercialization of local agri-machinery suitable.	Publication: 2; 3Patent: 7Product: 22People: 37Place: 44; 46Policy: 48	University of the Philippines Los Baños (UPLB)	Local Agri-fisheries Machinery Assembly and Manufacturing (LAMM) Industry in Region IV-A Implementer of the LAMMP Roadmap (2022-2036) DA-BAFE for the establishment of other LAMM Industry Network in other regions SUCs/IEUs can be tapped in the other regions to conduct similar strategies in the establishment of LAMM Industry Network in other regions. Project outputs can be used as guide for the succeeding Regional LAMM Network Researchers, Extension workers and agricultural engineers Agricultural mechanization sector (farmers and machinery users) for the availability of agri-machinery suitable in Region IV-A	01-Jul-25	31-Dec-26	ONGOING	5,000,000	3,632,370
	PERFORMANCE VALIDATION AND OPTIMIZATION OF SEAWEED FARMING MECHANIZATION TECHNOLOGIES	Rapid, inclusive and sustained economic growth	The project aims to pilot test and optimize the existing seaweed mechanization technologies (planting table with line straw inserter, aquatic utility vehicle with mechanical harvester, and seaweed dryer) and assess the acceptability of these technologies among the seaweed farmers-cooperators. Specifically, it aims to: Fabricate and optimize the existing seaweed mechanical technologies for maximum utilization; Conduct field testing with selected seaweed farmer cooperators to identify possible modifications needed to further enhance or fine-tune the technologies; Train and familiarize farmers in the operation and maintenance of the developed technologies; and Determine the economic viability of these technologies.	Publication: 2; 3Patent: 7Product: 22People: 37Place: 44; 46Policy: 48	Palawan State University (PSU)	Seaweed Farmers and the Barangay and Municipal LGUs	01-Jan-25	31-Dec-26	ONGOING	5,000,000	3,619,498
	Precision Agriculture for Improving the Productivity and Economic Profitability of Cabbage and Potato in Benguet	Rapid, inclusive and sustained economic growth	The project aims to develop precise and smart crop management practices with the use of optical sensors, the GreenSeeker® and chlorophyll meter to improve the productivity and profitability of potato and cabbage in Benguet. Specifically, it aims to: assess the health and productivity of the selected crops using the NDVI values obtained from the optical sensor; develop sensor-based algorithms for estimating optimal rates of nitrogen fertilization of potato and cabbage; develop E-abono application and guide for sensor-based nitrogen rate calculation; and determine the farm-level profitability of using sensor-based nitrogen fertilizer for potato and cabbage productionTo capacitate the researchers and the stakeholders on the use of E-abono application of the sensor-based nitrogen rate calculation, algorithms and other support applications.	Publications:Two (2) nitrogen guidesAt least one (1) journal articleTwo (2) flyers (GreenSeeker® and chlorophyll meter) Patents:One (1) patent for mobile app filedOne (1) patent application for website for fertilization guidelines for potato and cabbage field-specific nitrogen filed Products:One (1) mobile application for nitrogen rate calculation developedOne (1) website for fertilization guidelines for potato and cabbage field-specific nitrogen developed People:Two (2) farmer cooperators capacitatedTwo (2) undergraduate/ graduate student assistancesix (6) researchers trainedTen (10) farmers capacitated Partnerships:Four (4) local partnerships (LGUs and farmers from Atok and Manayon)One (1) international partnership Policy:One (1) policy brief pitched in support of the promotion of sensor-based nutrient management in local government units	Benguet State University (BSU)	Researchers/Research Agencies/SUC/Farmers, StudentsAgriculture sector	01-May-24	30-Apr-26	ONGOING	4,999,619	2,349,452
	Smart Indoor Farming System for Hot Pepper and Tomato Production in the Philippines	Integrity of the environment and climate change adaptation and mitigation	The project aims to construct a fully automated smart indoor-farming system for optimum production of hot pepper and tomato. Specifically, it aims to build a Smart Glasshouse that will serve as the protective structure for commodities powered by Solar Energy promoting sustainable crop production and efficient energy utilization; design and develop an Indoor Farm Monitoring and Control system equipped with an SMS notification alert system; and produce hot pepper and tomato by optimizing their conducive growth conditions using smart greenhouse operations.	Publication: At least 1 (one) publication in scientific journalPatent: 1 (one) patent applicationProduct: One product, People: at least 4 (four) undergraduate student and 2 (two) graduate student of agriculture, soil sciences, crop protection, and, agricultural engineeringPlace: 1 (one) partnership (with Chungbuk National University)Policy: None	Central Luzon State University (CLSU)	The target beneficiaries for the project are: CLSU and Chungbuk National University researchers through the partnership and benchmarking; Other researchers and students who will pursue further research on indoor farming based on the resulting publication and patent from this project; and Farmers and extension workers, who will be learning the technology thru field day and visits.	01-Aug-23	31-Jan-26	ONGOING	5,000,000	852,578
	Boosting the Taro Industry and Indigenous Crops of the Bicol Region	Rapid, inclusive and sustained economic growth	The project aims to revitalize the industry of selected indigenous crops in the Bicol Region. Specifically, it aims to: Document the interspecific and intraspecific diversity, utilization, maintenance, and seed supply of indigenous crops in selected municipalities/barangays with history of traditional production, utilization, and consumption of the indigenous crop; Compile available printed and electronic information on the indigenous crops of Region 5 from all accessible sources; and Promote indigenous crops of the Bicol Region through information, education, communication development.	Publications- Publication of 10 popularized pamphlets, 2 articles - 1 paper presentation Products- At least 5 indigenous crops for Project 3 People Services- 1 training Places and Partnership- IPs, taro producers, DA practitioners Patents- pamphlets copyrighted/SSN Social Impact: Increased utilization of indigenous crops Provide additional healthy food for consumption by local communities Economic Impact: increase production and yield of taro and indigenous crops Increase income of farmers More products for commercialization	Central Bicol State University of Agriculture (CBSUA)	Taro farmers and processors, Indigenous crops growers	01-Mar-23	31-Aug-25	COMPLETED	3,313,395	495,318
	Boosting the Taro Industry and Indigenous Crops of the Bicol Region	Rapid, inclusive and sustained economic growth	The project aims to enhance the developed preharvest and postharvest technologies for taro through sustainable production, utilization and innovative development for both the leaves and corms of taro. Specifically, it aims to: establish a germplasm collection of taro, demo farms and morphologically characterize the endemic cultivars in the region; Develop, sustainable, production schemes for, taro leaves and corms through, optimization of fertilizer application and effective pest control; Conduct and evaluate ten (10) selected local cultivars with excellent quality of foliage and corms and subject for multination trials for NSIC registration; Develop IEC materials on the products developed for dissemination; and Conduct physico-chemical characterization of taro corn starch grown in different cropping methods and recommend possible utilization.	Publication: Developed a sustainable production schemes for taro leaves and corms. conducted chemical and physical properties of taro corn starch grown in different cropping method A, A, Patent: Conducted multilocation trials of potential cultivars for NSIC registrationProduct: IEC materials on the products developed for disseminationPeople: Stakeholders - rural and urban dwellersPlace: Established germplasm collection, demo farms and morphologically characterize of local/indemic cultivars; Other SUCs, International Organizations, NCCIPolicy: Conservation of germplasm	Central Bicol State University of Agriculture (CBSUA)	Taro leaves / laing processors, Taro farmers, students, New entrepreneurs, Science community and food industry.	01-Mar-23	31-Aug-25	COMPLETED	4,780,944	892,734

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Boosting the Taro Industry and Indigenous Crops of the Bicol Region	Project 3. Utilization, and Product Development of Selected Indigenous Crops in Region 5	Rapid, inclusive and sustained economic growth	The project aims to document, improve and develop technologies for selected indigenous crops in the Bicol region through product development to insure food security and livelihood, and improve economic potential of these crops. Specifically aimed to: Improve the viability of the value chains of selected indigenous crops through continuing R&D for innovations in product development; Determine appropriate technology for food products; Formulate and develop food products utilizing taro and indigenous crops identified; and Develop IEC materials to promote developed products derived from selected indigenous crops in the Bicol Region.	Publication: Publications- Results of this project will be transformed into publishable materials for publication still, subject to IP registration for proper protection and handling of intellectual outputs. A, A, Patent: Any process or outputs from this research will be subject to IP registration as patent, utility model or copyright as how the gathered information will be documented. A, A, A, Product: Products- For Taro leaves, the thermally processed product will be produced identifying suitable taro leaves variety and the drying characteristics of the taro variety while for taro corms, extraction method, formulation and processing of taro milk will be explored. This plant based product will be appreciated by the health conscious consumers. Indigenous crops will be subjected to determination of its drying parameters and suitability to food application as flour, powders or additives. These outputs will be used in the production of bakery goods, snacks, flavoring and ready-to-eat items. A, A, A, A, People: People Services: The intended beneficiaries of this project will be benefited through increase of their knowledge on the consumption of these crops to food, create livelihood, increase the utilization of these commodities, and establish protocols for food processing. A, A, A, Place: Places and Partnership: The study as to the collection and production, will be conducted mainly in Camarines Sur. Sourcing of these raw materials will be done in nearby municipalities of Camarines Sur and Bicol region depending on availability of these commodities. A, A, A, A, Policy: The project will propose possible and applicable, protocol for handling these indigenous crops on the processing, into food products. A,	Central Bicol State University of Agriculture (CBSUA)	rural farmers and settlers community researchers business enthusiasts	01-Mar-23	31-Aug-25	COMPLETED	3,076,298	249,341
Enhanced Diagnosis and Management of Major and Emerging Insect Pests and Diseases to Sweetpotato in the Philippines	Project 1: Innovative technological approach in detection, diagnosis, and monitoring of important sweetpotato insect pests and diseases using semiochemicals and nanobiosensor technologies	Poverty reduction and empowerment of the poor and vulnerable	The project aims to enhance the management of major and emerging sweetpotato pest and diseases through innovative monitoring, detection, and management technologies and strategies. Specifically, it aims to: assess the efficiency of combined sex pheromone and oviposition trapping systems on the monitoring of SPW; assess the infestation level of insect vectors of sweetpotato viruses using developed application utilizing image processing and machine learning technique; develop a nanobiosensor kit prototype for colorimetric detection of Fusarium oxysporum sp. batatas (Fob) and sweetpotato viruses; map pest infestation and disease incidence in farmer fields using the acquired data; and perform cost-benefit analyses of the developed technologies for monitoring, detection, and surveillance.	Publication: Two (2) papers submitted in refereed journals. Patent: Utility model filed for the semiochemical-based trapping system; Patent application filed for the developed nanobiosensor Patent application filed for the developed mobile application. Product: Bait/trap impregnated with lure Prototype nanobiosensor kit specific for Fob and viruses. Prototype mobile application for the vectors of viruses. People: 2 Master's students. Place: Sweetpotato farmers in Regions V, III, VIII, VI, CAR, VII and XIII DA-BPI LGUs. Policy: Policy brief on the inclusion of pheromone-based control system as a component of the integrated pest management for sweetpotato	De La Salle University (DLSU)	Sweetpotato industry including farmers, extension workers, researchers, other stakeholders, decision makers	01-Sep-24	31-Aug-26	ONGOING	4,920,028	2,997,073
Enhanced Diagnosis and Management of Major and Emerging Insect Pests and Diseases to Sweetpotato in the Philippines	Project 2: Management of the sweetpotato insect pests and diseases through biological approaches	Poverty reduction and empowerment of the poor and vulnerable	The project aims to manage the infestation of the sweetpotato weevil and insect vectors and the infection of diseases of sweetpotato using biological approaches. Specifically, it aims to: assess the effectiveness of semiochemicals for mass trapping and/or mating disruption of SPW; evaluate biological control agents (BCAs) and microbial control agents (MCAs) against the major insect pests and diseases of sweetpotato; manage SPW and insect vector populations in the field using particle film technology; and conduct economic analysis (or cost-benefit analysis) to determine the feasibility of the different control and management strategies against sweetpotato pests and diseases.	Publication: Patent: Product: People: Place: Policy:	De La Salle University (DLSU)	Sweetpotato industry including farmers, extension workers, researchers, other stakeholders, decision makers	01-Sep-24	31-Aug-26	ONGOING	12,407,938	7,548,990
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopterous Insect Pests Using Science and Technology	Project 2. Community-based mass production and utilization of biological control agents against armyworm of sugarcane, corn and onion	Poverty reduction and empowerment of the poor and vulnerable	The project aims to capacitate farmers and promote adoption of community-based production of biological control agents in the sugarcane growing areas for sustainable management of armyworm infestation. Specifically, it aims to: Mass produce and determine the efficacy of <i>Euborellia</i> spp. against armyworm in sugarcane, corn and onion; Upscale the biological control application of the egg parasitoid <i>Teleasius remus</i> against armyworm in sugarcane, corn and onion; Mass produce and determine the efficacy of <i>Trichogramma parasitoid</i> s against armyworm in sugarcane, corn and onion; Determine the efficacy of the field release strategies of <i>Euborellia</i> , <i>T. remus</i> , and <i>Trichogramma</i> to effectively manage armyworm in sugarcane, corn and onion; and Establish community-based production and utilization of biological control agents in Nueva Ecija, Pampanga, Batangas, Negros Occidental and Negros Oriental.	Publication: 6Product: 8People: 82Place: 9	University of the Philippines Los Baños (UPLB)	Sugarcane Growers, Agricultural Extension Workers, Researchers, and Policymakers	01-Jul-25	30-Jun-27	ONGOING	7,069,413	3,958,941
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopterous Insect Pests Using Science and Technology	Project 3. Optimization of Solid-state Cultivation of Armyworm Control Agent, <i>Metarhizium rileyi</i>	Poverty reduction and empowerment of the poor and vulnerable	The project aims to address optimization of cultivation methods of <i>M. rileyi</i> to improve production efficiency and at the same time, develop a scalable process technology (at least 10 kg/batch production) that is cost-effective and readily adaptable by small-scale or backyard farmers to produce massive effective <i>M. rileyi</i> inocula for field spray. Specifically, it aims to: Optimize substrate composition (carbon and nitrogen source, moisture content, pH, particle size and porosity); temperature, aeration, and mixing; Determine the insecticidal activity and stability of conidial powder; and Scale up of optimized mass production of <i>M. rileyi</i> .	Publication: 3Patent: 1Product: 1People: 23Place: 2	University of the Philippines Los Baños (UPLB)	16 Regional Crop Protection Centers and 4 Sugarcane Regulatory Administration staff	01-Jul-25	30-Jun-27	ONGOING	5,526,934	3,016,452
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopterous Insect Pests Using Science and Technology	Project 4. Enhancement of <i>Spodoptera Nucleopolyhedrovirus</i> Virulence to <i>Spodoptera frugiperda</i> (J.E. Smith) through Coocclusion Technology and Serial Passages	Poverty reduction and empowerment of the poor and vulnerable	The project aims to develop an NPV strain highly virulent to <i>S. frugiperda</i> and other lepidopteran species infesting sugarcane through variant selection and passages using native and exotic (if available) <i>Spodoptera</i> NPV isolates that can be used in integrated pest management programs. Specifically, it aims to: Generate the genetic profile of Philippine <i>Spodoptera</i> NPV isolate collection; Clone the genetic variants of the <i>Spodoptera</i> NPV isolates; Determine the host range of the <i>Spodoptera</i> NPV genetic variants; Screen for <i>Spodoptera</i> NPV variants most virulent to FAW and other lepidopteran pests; and Produce NPV variants with enhanced virulence against FAW and other lepidopteran pests.	Publication: 8Patent: 7Product: 8People: 8Place: 4Policy: 2	University of the Philippines Los Baños (UPLB)	Farmers, Researchers, Agricultural Extension Workers, Students, Consumers, Policymakers, Crop Protection Industry and Government institutions particularly BPI-DA and SRA	01-Jul-25	30-Jun-27	ONGOING	5,515,120	3,719,507
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopterous Insect Pests Using Science and Technology	Project 5. Comprehensive Awareness Campaign on the Sustainable Management of Fall Armyworm, <i>Spodoptera frugiperda</i> (J. E. Smith) and Onion Armyworm, <i>Spodoptera erigua</i> (Hubner) (Lepidoptera: Noctuidae) in Sugarcane, Corn, and Onion	Poverty reduction and empowerment of the poor and vulnerable	The project aims to educate corn, onion, and sugarcane growers by providing easily understandable information to help them comprehend the behavior and management strategies for controlling fall armyworms. Specifically, it aims to: Conduct awareness campaign seminar and training about armyworms and their management; Develop multilingual printed and digital information, education, and communication materials; and Disseminate multilingual printed and digital information, education, and communication materials.	Publication: 2Product: 12People: 245Place: 2	University of the Philippines Los Baños (UPLB)	Corn farmers, sugarcane growers/millers, private industry, AEW/M/PAO/MAQ, BPI, RCP, SRA	01-Jul-25	30-Jun-26	ONGOING	3,798,378	3,798,378
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopterous Insect Pests Using Science and Technology	Project 6. Evaluation of Pheromone and Light Trapping Systems for Monitoring and Controlling Fall Armyworm, <i>Spodoptera frugiperda</i> (J. E. Smith) (Lepidoptera: Noctuidae)	Poverty reduction and empowerment of the poor and vulnerable	The project aims to evaluate different trapping systems for the monitoring and control of fall armyworm. Specifically, it aims to: identify risks and develop strategies to mitigate the effects of environmental variability, non-target attraction, and deployment issues of lures and traps in the field. Assess the performance of pheromone lures and traps and the use of light trap (Zappfly insect trap) for FAW monitoring and control in sugarcane and other crops affected; and Train farmers and agricultural workers on the use of pheromone lures and light traps for an efficient monitoring system and control.	Publication: 3Product: 2People: 40Place: 2	University of the Philippines Los Baños (UPLB)	Sugarcane and corn farmers, agricultural technicians, LGUs	01-Jul-25	30-Jun-27	ONGOING	5,099,940	2,899,539
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopterous Insect Pests Using Science and Technology	Project 7. Evaluation and Development of Push-Pull Cropping System for Sustainable Management of Fall Armyworm (<i>Spodoptera frugiperda</i>) in the Philippines	Poverty reduction and empowerment of the poor and vulnerable	The project aims to determine the effectiveness of the push-pull system in the control of fall armyworm to increase sugarcane production of farmers. Specifically, it aims to: Determine the effect of oral secretions (OS) from <i>Spodoptera frugiperda</i> on plant physiological responses, specifically focusing on gene expression patterns of select plant defense-related genes; Investigate the transcriptomic responses of fall armyworm larvae, and assemble the transcriptome and analyze differential gene expression associated with feeding on different host plants; Identify and evaluate the susceptibility of host plants, alternate hosts, and weed species to fall armyworm in sugarcane plantation areas in Negros; Evaluate the impact of push-pull technology on the behavior and population dynamics of the Fall Armyworm (FAW) and its natural enemies in sugarcane plantations in Negros; and Identify key variables contributing to FAW development in sugarcane and to evaluate the cost-effectiveness of push-pull technology, ultimately leading to the development of a streamlined FAW monitoring system in sugarcane.	Publication: 6Product: 9People: >16Place: 6Policy: 1	University of the Philippines Los Baños (UPLB)	Farmers, Researchers, Agricultural Extension Workers, Students, Consumers, Policymakers, International Agricultural Organization, and Government institutions particularly BPI-DA and SRA	01-Jul-25	30-Jun-27	ONGOING	4,963,180	3,235,291

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopteran Insect Pests Using Science and Technology	Project 8. Biology and genetic diversity of sugarcane semi-looper, <i>Mocis frugalis</i> (Lepidoptera: Erebidae) and other potential, emerging, and transboundary lepidopteran pests in Negros Island	Poverty reduction and empowerment of the poor and vulnerable	The project aims to systematically study the biology of <i>M. frugalis</i> and offer practical solutions for managing this pest in sugarcane fields that integrate the utilization of hymenopteran biological control agents. Specifically, it aims to: Determine the life cycle, feeding behavior, and ecological interactions of <i>M. frugalis</i> in sugarcane ecosystems; Assess the genetic variation within and between populations of <i>M. frugalis</i> on Negros Island to understand its population structure and dynamics; Identify the bridging hosts of <i>M. frugalis</i> and other lepidopteran species infesting associated weeds that could be potential, emerging, re-emerging, or transboundary pests of this crop to anticipate their possible outbreaks in the country; Identify the hymenopteran parasitoids present in the area and assess their potential as biological control agents against <i>M. frugalis</i> ; and Provide a recommendation that will serve as a guide in the decision-making of sugarcane producers in integrating biological control and weed management into their current pest management practices.	Publication: 11Patent: 15Product: 12People:4Place>5Policy: 2	University of the Philippines Los Baños (UPLB)	Sugarcane farmers and planters on Negros Island, as well as the sub-industries that rely on this high-value crop	01-Jul-25	30-Jun-27	ONGOING	5,149,680	3,479,886
HARABUST: Harnessing Adaptive Responses and Best Practices against Armyworms and other Lepidopteran Insect Pests Using Science and Technology	Project 1. Field Screening and Bioefficacy of Insecticides for Management of Invasive Fall Armyworm, <i>Spodoptera frugiperda</i> (L. E. Smith) (Lepidoptera: Noctuidae) on Sugarcane	Poverty reduction and empowerment of the poor and vulnerable	The project aims to evaluate the efficacy of selected synthetic and botanical insecticides with different modes of action for insecticide resistance management and sustainable management of fall armyworm. Specifically, it aims to: Determine effective insecticide formulations with different modes of action against fall armyworm on sugarcane; Determine the magnitude of residues in sugarcane treated with insecticides against fall armyworm; and Develop monitoring and damage assessment protocols for fall armyworm-affected sugarcane crops.	Publication: 2Product: 4People: 10Place: 7Policy: 1	University of the Philippines Los Baños (UPLB)	Sugarcane Growers, Agricultural Extension Workers, Researchers, Crop Protection Industry, and Policymakers	01-Jul-25	30-Jun-27	ONGOING	5,059,076	2,642,314
Harnessing Abaca Genetic Resources: Integrating Molecular Strategies for Pest Management, Drought Resiliency, and On-site Detection Assays	Project 1. Profiling, genetic, and functional analysis of abaca (<i>Musa textilis</i> Nees) responses to drought and bunchy top disease stresses	Rapid, inclusive and sustained economic growth	The project aims to profile the physical and physiological mechanisms and analyze the genetic and functional basis of abiotic (drought) and biotic (ABTV/BBTV) stress responses of abaca. Specifically, it aims to: Analyze the physical and physiological response of selected abaca accessions to drought stress; Analyze the physical and physiological response of selected abaca accessions to bunchy top disease stress; Identify the genetic and functional bases underlying responses of abaca to drought stress; Identify the genetic and functional bases underlying responses of abaca to disease (ABTV/BBTV) stress; and Develop and validate molecular markers for drought and bunchy top disease resistance.	Publications: * At least 3 publications in refereed journal; 1 IEC material in the form of manuals or pamphlets Patent/Intellectual Property * Product/Technology Generated: Abaca accessions/varieties with resistance/tolerance to drought and ABTV, BBTV and BB/MV; Identified genes for resistance/susceptibility to drought, ABTV, BBTV and BB/MV for new breeding innovations. People * at least 3 people trained in molecular biology and plant virology techniques Place and Partnership * Collaboration with UP-NIMBB Policy: At least 1 draft policy recommendation for abaca health certification The sequencing and development of DNA fingerprints for abaca will pave the way to the revision of the antiquated policies on germplasm conservation and exchange. These include prioritization of stress-resilient abaca for commercial propagation and expansion of abaca planting areas using identified drought-resilient varieties.	Department of Agriculture - Philippine Fiber Industry Development Authority (DA-PhilFIDA)	Researchers and breeders Abaca Farmers Regulatory agencies Industry stakeholders (G&E, traders)	01-Oct-24	30-Sep-27	ONGOING	10,847,402	3,869,449
Harnessing Abaca Genetic Resources: Integrating Molecular Strategies for Pest Management, Drought Resiliency, and On-site Detection Assays	Project 2. Detection, characterization, and race identification of <i>Fusarium oxysporum</i> f. sp. cubense, and the response of selected abaca accessions to the causal organism of abaca wilt	Rapid, inclusive and sustained economic growth	The project aims to develop a comprehensive strategy for the identification, on-site detection, and evaluation of abaca responses against the causal pathogen for abaca Fusarium wilt. Specifically, it aims to: Confirm the identity of the causal organism of abaca Fusarium wilt through molecular and VGC analysis; Evaluate the reaction of abaca accessions for resistance to abaca Fusarium wilt; and Enhance, package and field validate LAMP detection technique for the prevalent <i>Fusarium oxysporum</i> affecting abaca.	Publication: Patent: Product: People: Place: Policy:	Department of Agriculture - Philippine Fiber Industry Development Authority (DA-PhilFIDA)	Researchers and breeders Abaca Farmers Regulatory agencies Industry stakeholders (G&E, traders)	01-Oct-24	30-Sep-27	ONGOING	10,404,527	4,072,990
Harnessing Abaca Genetic Resources: Integrating Molecular Strategies for Pest Management, Drought Resiliency, and On-site Detection Assays	Project 3. Development, packaging, and validation of a portable and ultrasensitive genotyping assay for identification of abaca (<i>Musa textilis</i> Nees) varieties	Rapid, inclusive and sustained economic growth	The project aims to develop, package and validate a portable genotyping assay for abaca varietal identification and fiber-source authentication. Specifically, it aims to: Identify and mine highly informative polymorphisms through genotyping-by-sequencing platforms; Optimize DNA extraction protocols for abaca fibers; Develop a LAMP assay for genotyping of abaca plant- and fiber-derived DNA; Package the developed genotyping assay for on-site variety and fiber identification; and Validate the packaged genotyping assay in the laboratory and for on-site application.	Publication: Patent: Product: People: Place: Policy:	Department of Agriculture - Philippine Fiber Industry Development Authority (DA-PhilFIDA)	Researchers and breeders Abaca Farmers Regulatory agencies Industry stakeholders (G&E, traders)	01-Oct-24	30-Sep-27	ONGOING	10,408,612	4,105,924
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 1: Climate-sensitive detection and management system against the invasive coconut scale insect, <i>Aspidiotus rigidus</i> (Reynie) (Hemiptera: Diaspididae)	Poverty reduction and empowerment of the poor and vulnerable	General Objective: To design climate-sensitive control of the invasive coconut scale insect. Specific Objectives: 1. To determine the effect of high temperature and drought on the physiology of coconut palm. 2. To relate the physiological changes of stressed host plants to the life history traits of <i>A. rigidus</i> and to the survival of its bacterial symbionts. 3. To determine the effect of drought stress grown <i>A. rigidus</i> in the parasitization of <i>C. calauanica</i> . 4. To incorporate the effects of drought and heat stress in a population dynamics model of <i>A. rigidus</i> and validate the improved model in field conditions	Publication: At least two (2) article submitted to refereed journals/At least two (2) poster presentation in scientific conferences/At least one (1) IEC material for early detection of drought stress coconut Patent: One (1) Copyright for dynamic model for predicting population dynamics of CSI as affected by various climatic factors Product: One (1) Protocol for early detection and monitoring of coconut scale insect People: Ten (10) Male and Female Coconut farmers (both under the CHP and non-CHP) will collaborate for the field testing of the predictive model/Place: Five (5) Partnerships with DA, PCA-CALABARZON and/or RFOs/At least One (1) Partnership to local coconut male and female farmer under the CHP/One (1) Partnership with existing DOST funded program such as SARAI for data collaboration/Policy: At least one (1) Policy Brief on the analysis of different data gathered for guidance of CHP	University of the Philippines Los Baños (UPLB)	Male and female Coconut farmers and exporters Philippine Coconut Authority Male and female researchers of R&D agencies LGUs and government agencies	01-Oct-25	30-Sep-28	ONGOING	16,980,112	4,054,920
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 2. Genetic Characterization of Philippine Populations of the Coconut Scale Insect (<i>Aspidiotus rigidus</i> Reynie), Its Parasitoid, <i>Comperiella calauanica</i> , and Associated Endosymbionts	Poverty reduction and empowerment of the poor and vulnerable	General Objective: Determine the genetic variability of onshore and offshore geographic populations of <i>Aspidiotus rigidus</i> in the Philippines, its parasitoid biocontrol agent, <i>Comperiella calauanica</i> , and associated endosymbionts. Specific Objective: Survey selected onshore and offshore areas in the Philippines predicted by the current bioclimate-based SDM to have a significant probability of occurrence (or habitat suitability) of <i>Aspidiotus rigidus</i> ; Assess and compare the genetic diversity of the coconut scale insect, <i>Aspidiotus rigidus</i> , from different populations in the Philippines using molecular markers and next-generation sequencing; Determine the genetic diversity of <i>Comperiella calauanica</i> and its associated endosymbionts; and Update the surveillance, monitoring, and biolo	Publication: At least five (5) papers presented in conferences and/or submitted to Web of Science or Scopus-indexed journal.— Genetic Diversity Analysis in Coconut Scale Insect (<i>Aspidiotus rigidus</i> Reynie) populations in the Philippines Detected by Microsatellite (SSR) Markers/PCA-ARC— Genetic Diversity Analysis of Populations of the Coconut Scale Insect (<i>Aspidiotus rigidus</i> Reynie) in the Philippines Impacted by Geographic Locations/PCA-ARC— Biodiversity Modelling Confirmation [DLSU]— Molecular Profiling of <i>Uromyza diaspodica</i> in <i>Aspidiotus rigidus</i> : Insights into Symbiotic Relationships and Potential Impacts on Pest Biology [UPLB]— Unravelling the Genetic Structure and Biocontrol Efficacy of <i>Comperiella calauanica</i> against <i>Aspidiotus rigidus</i> [UPLB]/At least one (2) IEC material (poster, flyer, bulletin, or AVP) on updated monitoring and IPM protocol for <i>Aspidiotus rigidus</i> Product: At least 140 nucleotide sequences uploaded to the GenBank/One (1) population structure of CSI that can be used for the management of the insect/One (1) bioclimate-based distribution model of the different <i>A. rigidus</i> One (1) GIS-aided monitoring and invasion risk forecasting protocol for <i>A. rigidus</i> haplotyping/Policy: At least five (5) undergraduate students and three (3) MS/PhD students (Biology, Applied Entomology, Molecular Biology and Biotechnology, Bioinformatics) will be invited to conduct their thesis within the project — 3 undergraduate, 2 MS students [DLSU] — 2 undergraduate and 1 GREAT Scholar [UPLB] One (1) PCA Staff will be trained on bioinformatics tools for statistical analysis [PCA-ARC]/Seven (7) research staff and technicians (field work support, capacity-building such as but not limited to) trainings on surveillance, monitoring, and biological control of <i>A. rigidus</i> — 3 research staff [PCA-ARC] — 4 research staff [DLSU]/Place: Collaboration with De La Salle University and the University of the Philippines Los Baños in the conduct of the project activities Collaboration with Philippine Coconut Authority (Provincial and Regional Offices and Research Centers) and Regional Crop Protection Centers for insect collection activities	PCA-Albay Research Center (PCA-ARC)	The proposed project will mostly benefit pest management practitioners by using the population structure of CSI as a guide in the deployment of management or control strategies against CSI. The project will co-optimize partner SUC researchers and faculty on how to conduct research in the field, and how to do a correct assessment of IPM. Ultimately, it will benefit coconut farmers who will be provided training on the conservation of biological control agents and the correct implementation of IPM in coconut farms	01-Oct-25	30-Sep-28	ONGOING	31,931,542	12,071,908
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 3: Evaluation and Characterization of Coconut Germplasm for Resistance to Coconut Scale Insect (<i>Aspidiotus rigidus</i> Reynie) Towards Insect Resistance Breeding	Poverty reduction and empowerment of the poor and vulnerable	General Objective: To evaluate coconut germplasm in the national genebank for tolerance and susceptibility to <i>Aspidiotus rigidus</i> to identify potential genetic sources of resistance for varietal improvement. Specific Objective: Establish a standardized screening protocol for assessing coconut tolerance and susceptibility to CSI under field and controlled conditions. Evaluate the phenotypic response of selected coconut accessions in the genebank against CSI infestation. Characterize physiological and morphological traits associated with CSI tolerance. Identify and recommend tolerant accessions for use in breeding and varietal development programs. Develop risk-mapping and decision-support protocols for early detection and monitoring in the national coconut field genebank.	Publication: — One (1) poster presented to local scientific conference with an informative title/ Evaluation of putative coconut population towards GIS-tolerant Breeding— One (1) article in a peer-reviewed scientific journal with an informative title/ Phenotypic and physiological screening of Coconut Germplasm for Tolerance to Coconut Scale Insect (<i>Aspidiotus rigidus</i> Reynie) in the Field Genebank of Zamboanga/ Patent— N/A/ Product: — One (1) Standardized CSI screening protocol for coconut germplasm— One (1) curated list of CSI-tolerant/resistant and susceptible coconut germplasm accessions— One (1) CSI Risk Index combining field, environmental, and historical variables as well as classified each block into risk zones— One (1) CSI risk map of the coconut field genebank/ People Services: — Trained at least two (2) entomologists in the control of Coconut Scale Insect using Integrated Pest Management for Coconut— Trained at least 10 Technical Staff for the interpretation of GIS-based CSI risk maps, and their application in integrated pest management/ Place: — N/A/ Policy: — One (1) Recommendations regarding the selection of parental materials for CSI resistance. — One (1) consolidated supporting document as input for the refinement of integrated Pest Management (IPM) strategies for <i>A. rigidus</i> in coconut.	Philippine Coconut Authority - Zamboanga Research Center (PCA-ZRC)	Researchers Plant Breeders Coconut Farmers Coconut Industry Stakeholders	01-Oct-25	30-Sep-28	ONGOING	14,067,575	5,012,810

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 4: Innovative Control Strategies for the Sustainable Management of Coconut Scale Insect, <i>Aspidiotus rigidus</i> (Reyne)	Poverty reduction and empowerment of the poor and vulnerable	General Objective: To develop and evaluate innovative control strategies and create recommendations for their practical application in managing infestations caused by the coconut scale insect, <i>Aspidiotus rigidus</i> Reyne. Specific Objective: 1. To evaluate and compare the efficacy and phytotoxicity of selected oil-based formulations against <i>A. rigidus</i> under controlled laboratory and field conditions; 2. To investigate the capacity of selected surfactants and deep eutectic solvents (DES) to disrupt the waxy protective armor of <i>A. rigidus</i> for enhanced formulation penetration and increased insect mortality; 3. To develop and optimize a semiochemical lure for <i>Comperiella calaunica</i> , and evaluate its efficacy and host specificity.	Publication: Patent: Product: People: Place: Policy:	University of the Philippines Los Baños (UPLB)	Coconut farmers AC, -Co men and women Government officers AC, -Co Regional Crop Protection Centers; Agricultural technicians SUCs/HEU/ Research Centers AC, -Co students and researchers	01-Oct-25	30-Sep-28	ONGOING	13,658,613	3,965,150
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 5. Formulation of a Comprehensive Fertilizer Regimen for Coconut Scale Insect (CSI) Devastated Coconut Palms	Poverty reduction and empowerment of the poor and vulnerable	General Objective: To enhance coconut palm health through the development and implementation of a comprehensive integrated nutrient management for Coconut Scale Insect (CSI) Infestation. Specific Objective: Evaluate and establish the nutrient status of coconut palms with varying degrees of CSI infestation to understand the nutritional deficiencies associated with infestation severity; Develop, monitor and assess tailored fertilizer recommendations using inorganic and biostimulants to optimize coconut palm health and resilience; and Establish the effect of fertilizer treatments on the chemical and physical properties of coconut leaf and soil in relation to CSI infestation.	Publication: Patent: Product: People: Place: Policy:	Philippine Coconut Authority-Davao Research Center (PCA-DRC)	Coconut farmers with CSI-infested palms Coconut farmers highly vulnerable to CSI infestation	01-Oct-25	30-Sep-28	ONGOING	11,047,593	3,326,325
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 6: Identification of Alternate Hosts, Evaluation of Other Potential Natural Enemies, Entomopathogens, and Biorationals for Sustainable CSI Mitigation	Poverty reduction and empowerment of the poor and vulnerable	General Objective: To package a biocontrol-based pest management strategy for Coconut Scale Insect. Specific Objective: To identify alternate host plants to CSI; (PC 1) To develop a management strategy based on biological control by predators and parasitoids; (PC 2) To identify and evaluate entomopathogens against CSI, and develop microbial formulations and delivery system for biocontrol against CSI; (PC3) and, To recommend effective biorationals to manage CSI	Publication: Patent: Product: People: Place: Policy:	Visayas State University (VSU)	Women and men coconut farmers Coconut researchers Philippine Coconut Authority LGU Agricultural Technicians and Extension Workers Students	01-Oct-25	30-Sep-28	ONGOING	11,457,171	4,482,837
Leveraging Science, Technology, and Innovation for the Management of the Invasive Coconut Scale Insect	Project 7. Enhancing Information Dissemination and Capacity Building for Sustainable Coconut Scale Insect Management	Poverty reduction and empowerment of the poor and vulnerable	General Objective: To strengthen the individual and collective capability of the various stakeholders of the coconut industry to manage risks associated with the invasive species of the Coconut Scale Insect (CSI). Specific Objective: To equip the men and women coconut farmers, community development officers (CDO) of PCA regional offices, and LGU extension workers with practical knowledge and skills to detect CSI early and accurately, promote the use of reporting systems for the timely communication of new CSI infestations and facilitate the adoption of effective management practices for CSI To increase awareness and knowledge on the presence, risks, and impacts of CSI infestation in the coconut industry	Publication: Patent: Product: People: Place: Policy:	University of the Philippines Los Baños (UPLB)	Both Year 1 and Year 2 will consist of participants from different PCA personnel from the 12 regional offices and LGU personnel. It will be equally divided between men and women.	01-Oct-25	30-Sep-28	ONGOING	7,997,636	2,350,924
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 1. Surveillance, Mapping, and Development of Early Detection Sensor Device for Asiatic Palm Weevil in Coconut Plantations	Poverty reduction and empowerment of the poor and vulnerable	The project aims to enhance the management of the Asiatic Palm Weevil (<i>Rhynchophorus</i> spp.) in coconut plantations through the development and implementation of an integrated surveillance and mapping system featuring an early detection acoustic sensor device. Specifically, it aims to: Design and prototype an acoustic sensor device that can accurately detect early signs of the Asiatic Palm Weevil infestation by monitoring acoustic signals related to tree physiological changes; Implement a system that combines data from the acoustic sensors with Geographic Information System (GIS) technology to create detailed maps of infestation patterns in coconut plantations; Optimize acoustic sensor device accuracy integrated with Geographic Information Systems (GIS) technology; and Investigate other mortality factors or secondary infections that contribute to the death of the palm rather than the physical damage caused by the pest.	Publication: 2Patent: 12Product: 16People: 37Place: 43Policy: 48	Philippine Coconut Authority - Davao Research Center (PCA-DRC)	The project will benefit coconut farmers through improved pest detection and management, enhancing yields and income stability. It will also support local agricultural communities, the Philippine Coconut Authority, consumers, and environmental advocates by promoting sustainable practices and reducing pesticide use.	01-Mar-25	28-Feb-27	ONGOING	9,398,336	4,357,767
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 2. Molecular Characterization of Asiatic Palm Weevil in the Philippines and Tracing of Distribution Using Species Distribution Model	Poverty reduction and empowerment of the poor and vulnerable	The project aims to explore the molecular characterization and phylogenetic relationships among <i>Rhynchophorus</i> spp. haplotypes in the Philippines and predict distribution using a Maxent Modeling. Specifically, it aims to: Characterize APW haplotypes in the Philippines based on COI gene of DNA and amino acids (AAs) levels; Compare the molecular characterization results with the published haplotypes in Saudi Arabia, Egypt, and Indonesia; and Predict and monitor the potential occurrence and establishment of confirmed haplotypes and species using the Maxent Species Distribution Modeling.	Publication: 3Product: 1People: 24Place: 6	De La Salle University - Laguna (DSLU-Laguna)	Philippine Coconut Authority Regional Crop Protection Center National Crop Protection Center Selected SUCs	01-Mar-25	28-Feb-27	ONGOING	16,586,779	6,929,411
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 3. Development and Assessment of Innovative Trapping Technologies for Enhanced Management of Asiatic Palm Weevil (<i>Rhynchophorus</i> spp.) in Coconut Plantations in the Philippines	Poverty reduction and empowerment of the poor and vulnerable	The project aims to develop and assess effective trapping technologies for Asiatic palm weevil. Specifically, it aims to: Design and develop novel trapping systems for Asiatic Palm Weevil, incorporating improved attractants, trapping materials, and smart monitoring technologies; Evaluate the efficiency and economic feasibility of different trapping combinations under field conditions; and Explore the potential integration of trapping into IPM strategies, reducing chemical pesticide dependence.	Publication: 2Patent: 11Product: 21People: 37Place: 43Policy: 48	Philippine Coconut Authority - Davao Research Center (PCA-DRC)	AC* Coconut farmers - men and women AC* Researchers and Research institutions AC* SUCs/HEUs and Students AC* LGUs and other government agencies	01-Mar-25	28-Feb-27	ONGOING	6,064,900	3,319,712
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 4. Enhancing the Chemical Control Measure to Manage the Asiatic Palm Weevil, <i>Rhynchophorus</i> spp. (Coleoptera: Curculionidae) Infestation in Philippine Coconut Farms	Poverty reduction and empowerment of the poor and vulnerable	The project aims to develop and optimize cost-effective curative and preventive chemical treatments that are accessible to farmers of APW-infested coconut farms. Specifically, it aims to: Characterize specific physical traits of young and old coconut trees, such as xylem density, tissue structure, pH, and vascular porosity, which affect the absorption, movement, and retention of selected organic and inorganic insecticides; Evaluate the efficacy of organic and inorganic insecticides against different life stages of laboratory-reared APW via dose-response bioassay techniques; Identify the most suitable and effective delivery system of selected insecticides against APW in young and old coconut trees; Assess the field effectiveness of selected insecticides and optimized delivery systems in young and old coconut trees; and Develop early detection protocols by integrating the results of laboratory and field trial toxicological studies to improve the efficiency and timeliness of APW management efforts.	Publication: 1Patent: 10Product: 14People: 37Place: 43Policy: 48	University of the Philippines Los Baños (UPLB)	Coconut farmers (male and female) and exporters Researchers of R&D agencies Agrochemical companies SUCs/HEUs/Students LGUs and government agencies	01-Mar-25	28-Feb-27	ONGOING	6,356,436	3,374,021
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 5. Mass Production and Field Release Strategies for Effective Biocontrol Agents of Asiatic Palm Weevil (<i>Rhynchophorus</i> spp.)	Poverty reduction and empowerment of the poor and vulnerable	The project aims to establish biological control strategies for the APW through selection, mass production and development of feasible delivery systems, targeting all life stages of the pest. Specifically, it aims to: Optimize an efficient and reliable protocol for mass rearing <i>R. ferrugineus</i> and its natural enemies; Identify effective biological control agents by voracity and virulence screening; Design and implement delivery systems for effective BCAs; and Evaluate delivery systems and determine performance of BCA under field conditions.	Publication: 1Patent: 12Product: 14; 17People: 37Place: 38Policy: 48	Philippine Coconut Authority - Davao Research Center (PCA-DRC)	Coconut farming communities and various stakeholders	01-Mar-25	28-Feb-27	ONGOING	7,610,308	3,617,210
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 6. Evaluation and Development of Polyhedrosis Virus Against the Asiatic Palm Weevil	Poverty reduction and empowerment of the poor and vulnerable	The project aims to detect and evaluate polyhedrosis virus isolated from palm weevils from mainland and island provinces in the Philippines and develop a microform for biocontrol. Specifically, it aims to: Determine incidence of Polyhedrosis Virus infections among APW and other palm weevil populations in the Philippines; Characterize Polyhedrosis Virus isolate/s and infected APW populations in the Philippines using genetic markers; Determine the virulence of Philippine PV and EPV isolates against APW; and Design a method of delivery for PV and EPV as biocontrol agent for APW.	Publication: 1Patent: 10Product: 14People: 37Place: 43Policy: 48	Visayas State University (VSU)	Coconut farmers especially partner hybrid coconut farmers in Leyte SUCs for research collaborations on coconut pests and its biocontrol agents PCA for use of developed biocontrol agents Students (undergraduate and graduate for thesis assistance)	01-Mar-25	28-Feb-27	ONGOING	6,107,845	2,742,350
S&T Interventions to Manage Asiatic Palm Weevil (APW) Affecting Coconut in the Philippines (STAMP)	Project 7. National Asiatic Palm Weevil Training Program for Coconut Farmers	Poverty reduction and empowerment of the poor and vulnerable	The project aims to enhance the knowledge, skills, and capacity of target participants on the biology, ecology, behavior, monitoring, and management of the Asiatic Palm Weevil (APW) to mitigate its impact on coconut production. Specifically, it aims to: Build the capacity of CDOs, farmer leaders, and field officers to train and educate farmers and other stakeholders on APW management; Develop the skills of participants in recognizing APW symptoms, assessing damage levels, and implementing effective management strategies; Increase the knowledge of coconut farmers on the proper recognition and accurate management of APW; and Design potential livelihood projects that can be adapted by coconut-producing communities.	Publication: 1Patent: 4Product: 14People: 37Place: 43Policy: 48	Visayas State University (VSU)	This training program will benefit the trained PCA CDOs, Extension Workers, Field Officers, and hybrid and non-hybrid coconut farmers.	01-Mar-25	28-Feb-27	ONGOING	8,205,019	2,341,662

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Application of Cellulose Nanocrystals Extracted from BANDALA Fiber as Reinforcement Material in Starch-Based Bioplastic Film	Rapid, inclusive and sustained economic growth	The project aims to produce abaca nanocellulose-reinforced starch-based bioplastic film reinforced with nanocellulose from BANDALA fibers. Specifically, it aims to: Determine the effect of pulping and bleaching on the properties of extracted cellulose pulp from BANDALA fibers; Characterize the properties of extracted cellulose nanocrystal (CNC); Evaluate the effect of loading on the properties of CNC-reinforced starch-based bioplastic film; and Determine the production cost of CNC and CNC reinforced starch-based bioplastic film.	Publication: One (1) submitted journal article on application of nanocellulose from abaca as reinforcement material in starch-based bioplastic film Patent: One (1) Patent application filed on the abaca CNC reinforced starch-based bioplastic film/ product: High alpha cellulose bleached pulp from abaca (BANDALA) (Year 1) Cellulose nanomaterials (Year 1) Starch-based bioplastic reinforced with nanocellulose (bioplastic film) (Year 2) People: Technical seminar on the properties of BANDALA pulp, derived cellulose nanocrystals and CNC reinforced TPS bioplastic film/Places and Partnership: Memorandum of Agreement with DOST-FPRDI, Visayas State University (source of BANDALA), ALINDECO (Benchscale production of abaca pulp), and Colport Group, Inc. (Camarines Sur/Policy: At least one (1) draft policy recommendation on the use of BANDALA nanocellulose as filler in bioplastic	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	Plantation grower Pulp and paper industries Scientific communities Plastic manufacturers General public	01-Jul-24	30-Jun-26	ONGOING	4,999,217	1,293,433
	Chemical and Biological Management of Fungal Species Complex Inciting Onion Anthracnose-Twister	Poverty reduction and empowerment of the poor and vulnerable	This project aims to provide chemical and biological management options for sustainable management of onion anthracnose. Specifically, it aims to: Assess disease management practices of onion growers in Nueva Ecija; Assay fungicides with different modes of action against anthracnose pathogens in vitro, greenhouse, and field conditions; Identify biological control agents against anthracnose pathogens; and Identify alternative hosts of anthracnose pathogens.	Publication: at least 2 journal articles and 2 pamphlets/patent: none/Products: at least two (2) fungicides with different modes of action and at least one (1) biological control agent identified effective against anthracnose pathogens/People: 100 onion growers, 2 RCPC III staff, 5 MAO, and 1 PAO Nueva Ecija/Place: 5 letters of commitment with onion growers association in Nueva Ecija/Policy: none	University of the Philippines Los Baños (UPLB)	100 onion growers, 2 RCPC III staff, 5 MAO, and 1 PAO Nueva Ecija	01-Jan-24	30-Jun-26	ONGOING	5,000,000	1,432,773
	Development of Improved Control and Management Measures for Banana Fusarium Wilt Disease Through Advanced Molecular Approaches	Poverty reduction and empowerment of the poor and vulnerable	The project aims to develop, evaluate and validate different control and management measures for banana FW disease through advanced molecular approaches for utilization in banana industry. Specifically, it aims to: Develop and evaluate soil-based, plant-based and tissue culture-based control and management measures for banana FW disease in collaboration with private and government entities; Verify and confirm the effectiveness of control and management measures for banana FW disease through advanced molecular techniques using DNA Probe kit in dPCR or qPCR; and Validate the control and management measures for banana FW disease in banana farms, plantations or nurseries.	Publication: €€At least 2 paper presentation in conferences/€€At least 1 scientific paper/€€At least 1 leaflet on control or management measures/€€At least 2 utility models for products/protocols/Products: €€At least 2 control measures/formulations/People: €€ Undergraduate students: €€ 2 MS graduate students €€ Capacity building of at least 6 banana growers/ association or companies/Place: €€ At least 6 partnerships and MOUs from private and government entities/Policy: €€ At least 1 policy recommendation	University of Southern Mindanao (USM)	The beneficiaries of the project primarily are the banana individual farmers, associations, cooperatives, national corporations, multi-national companies, tissue culture facility owners, other stakeholders and banana industry.	01-Oct-24	30-Sep-27	ONGOING	19,943,769	4,570,172
	Development, Genotyping and Preliminary Evaluation of Genetically Stable Planting Materials of the Philippine Priority Medicinal Plants (PPMP)	Rapid, inclusive and sustained economic growth	The project aims to develop, characterize and evaluate genetically stable germplasm that could be used and serve as genotypic standards for future research and development of nine priority medicinal plant species. Specifically, it aims to: Develop at least one accession per selected medicinal plant species that is genetically stable or approaching genetic stability; Preliminarily evaluate agronomic yield, yield components, and phytochemical composition of the genetically stable accessions; Identify promising germplasm that would serve as genetically stable reference specimen for future researches; and Genotype selected accessions of the selected medicinal plants through chloroplast genome sequencing.	People — 2 master's/PHD student thesis work on medicinal plants; — 2 bachelor's student thesis work on medicinal plants; — 30 students trained on genetic resources conservation and management of medicinal plants (10 through internship; 20 through plant genetic resources conservation and management courses offered) — 10 staff trained on cultivated medicinal species identification/genetic resource conservation and management Products — At least 50 propagules/seedlings of the three (7) asexually propagated medicinal plant (ginger, elemi, banaba, balbas-pusa, oregano, takip-kuhol) — At least 3,000 seeds of genetically stable seed-propagated medicinal plants (tawa-tawa, ampalaya) Publications — At least 3 journal articles — At least 2 posters presented in national/international conference(s) — 1 germplasm book/reference of genetically stable medicinal plants — At least 1 drafted standard on authentication of one (1) medicinal plant species Partnerships — At least 1 drafted collaboration project with at least one industry partner for the evaluation the genetically stable lines on their respective farm(s) — At least 1 drafted collaboration project with College of Veterinary Medicine, UPLB and/or BIOTECH, UPLB for the evaluation the genetically stable lines using pre-clinical assay (12)	University of the Philippines Los Baños (UPLB)	Research organizations, men and women researchers, scientists, students, farmers, pharmaceutical companies, consumers, and the general public will benefit from a promising and genetically stable source of planting materials of medicinal crop species.	01-Jan-24	30-Jun-26	ONGOING	4,995,136	2,016,656
	Enhancement of Ubi (Dioscorea alata L.) Production through Trials and Demonstrations of S&T-based Farm Practices to Support Industry Development in Bohol	Poverty reduction and empowerment of the poor and vulnerable	The project aims to enhance the ubi (Dioscorea alata L.) production through trials and demonstrations of S&T-based farm propagation and production practices to support industry development in Bohol. Specifically, it aims to: Increase the efficiency of planting material production by at least 300% through introducing the minisett propagation technique of the selected ubi varieties; Identify the ubi varieties appropriate for year-round planting/production through a trial using the materials from minisett; Enhance the adoption of the S&T-based farm practices for ubi to increase yield from 5 t/ha to at least 20 t/ha; and Measure the economic benefits of the adoption of minisett propagation technique and S&T-based production practices for ubi over the conventional practices.	Publication: Regarding Publication, this project will develop and reproduce one (1) IEC material on S&T-based farmers practices as well as one (1) IEC material for the minisett propagation technique. At least 100 pieces of the cultural management and propagation technique IECs will be distributed to the beneficiaries and stakeholders. At least one (1) article highlighting the results of the trials and demonstrations will also be submitted to a scientific journal. Two (2) training modules will be developed to aid in the technology transfer activities. Patent: Copyrights of IECs and Manuals/Product: For the Products, this project will identify at least one (1) quality, high-yielding, adaptive to local conditions and year-round production of ubi varieties for Bohol. It will also increase the availability of quality ubi planting materials and raw material supply in the target areas. At least 10,000 ubi planting materials will be distributed by the project in the different areas of Bohol including those used in the demonstration farms. People: For People and Services, this is going to serve farmers, LGUs, and other concerned stakeholders involved in the ubi industry in Bohol. The project can benefit, especially the collaborating farmers, researchers, and stakeholders that will be involved directly in the implementation. This project is going to serve at least 50 farmer-beneficiaries to be trained on the ubi production and minisett propagation techniques. Place: In terms of Places and Partnerships, this is going to revitalize and expand ubi production in Bohol and engage cooperation among the different stakeholders through formal partnerships. At least 4 demonstration partners and at least 1 marketing linkage will be established by the project. The project will have collaboration with the Bohol Island State University, Bohol Provincial Agriculture Office, Bohol Experiment Station - DA Region 7, and the Alturas Group of Companies. Policy: For the Policy, one (1) draft policy recommendation on the use and promotion of quality and high-yielding ubi varieties per agro-ecozone in Bohol; minisett propagation technique; and recommended S&T-base farm practices for products.	Visayas State University (VSU) Bohol Island State University (BSU)	Ubi farmers Processors Extension workers Policymakers	01-Jul-24	30-Jun-26	ONGOING	4,999,021	1,516,578
	Enhancing Post-Rice Peanut and Mungbean Productivity using Improved S&T Interventions in Three Major Agro-Ecological Zones of Central Luzon	Poverty reduction and empowerment of the poor and vulnerable	General Objective: The project mainly aims to enhance post-rice peanut and mungbean productivity by 20% using improved S&T intervention through the development of a Package of Technology (POT) for each commodity in major agro-ecological zones of Central Luzon. Specifically, it aims to: Optimize the yield potential of peanut and mungbean through the use of proper planting month and suitable variety, optimal cropping pattern, planting method, row spacing, and tillage practices under major agro-ecological zones in the region; Enhance the yield of peanut and mungbean through strategic nutrient management resulting in increased crop yield, reduced utilization of mineral fertilizer, and enhanced soil fertility; Reduce disease infection and insect pest damage resulting in improved productivity of peanut and mungbean using improved IPM; Develop and promote the POT for peanut and mungbean through establishment of techno-demo farms, conduct of training and field days for eventual farmer's adoption; and Determine the benefit cost ratio of the developed POT of peanut and mungbean.	Publications: At least six (6) draft articles for possible publication/At least two (2) Draft Bulletin of information (one per commodity)/Patents/PA: At least one (1) draft Utility Models (UM)/copyright for application (ICM)/Product: At least two (2) package of technology (POT) Established 126 field experimental sites/People Services: At least two (2) trainings (one per commodity to capacitate a total of 70 growers/farmers/students/technicians/extensionsists, and other clientele)/Five (5) students/ Undergraduate and graduate/Provided technical assistance to at least 3 farmer's association/At least 2 Field Days (one per commodity)/Places and Partnerships/MOU/MOA with at least 2 LGUs and 3 farmer's associations/cooperatives	Pampanga State Agricultural University (PSAU)	Farmers/Consumers/researchers/Students/Extensionist and Agricultural Technicians/Other Stakeholders	01-Oct-25	30-Sep-27	ONGOING	12,500,000	6,964,614
	Evaluation of Nanofertilizers in Increasing the Production of Aster (Aster ericoides L.) in Laguna	Poverty reduction and empowerment of the poor and vulnerable	This project aims to develop an application protocol for nanofertilized (nF) fertilizers in aster (Aster ericoides L.). Specifically, it aims to: Evaluate the yield and growth response of aster to the application of nanofertilized fertilizers; Assess the profitability of aster production using nanofertilized fertilizer compared to conventional fertilizer; Conduct capacity building activities on aster production; Co-create policy recommendations on improving aster production in Los Baños, Laguna.	Publication: 3 Product: 2 People: 100 ; 2 ; 1 Place: 3 Policy: 1	University of the Philippines Los Baños (UPLB)	Aster Farmers (both women and men)/Florists, events organizers, gig economy (e.g., wedding planners) (women and men)/Academia and researchers (female and male researchers)/Agricultural development workers (both men and women)/Policy makers and Local Government Unit of Los Baños (both female and male officials)/Agricultural input suppliers (men and women entrepreneurs)	01-Jul-25	31-Dec-26	ONGOING	5,000,000	3,151,319

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Evaluation of Selected Musa Accessions and Disease Management Strategies Against Bugtok (Ralstonia solanacearum) Disease of Banana	Poverty reduction and empowerment of the poor and vulnerable	The project aims to determine the reaction of selected Musa accessions against bugtok-causing Ralstonia solanacearum, and to evaluate the efficacy of selected disease management strategies against bugtok. Specifically, it aims to: Evaluate greenhouse reactions of selected Musa accessions to R. solanacearum infection through drenching method; Evaluate field reactions of selected Musa varieties/accessions by planting the plants in areas of high disease pressure, and Generate information on statistics-based effectiveness of selected control practices (bagging of bunches, early debudding, and regular sterilization of farm tools), and Determine the optimal combination of management strategies that will require the minimum operational cost.	Publication: At least two (2) articles in an ISI-indexed journal/Patent: N/A/Product: N/A/People: 1. At least one (1) thesis student anchored to the project 2. One (1) training on diagnosis, detection, and management of bugtok disease 3. One (1) IEC material on control of bugtok disease/Place: N/A/Policy: 1. One (1) policy recommendation for control of bugtok	University of the Philippines Los Baños (UPLB)	Banana growers Banana breeders Non-government organizations Researchers Students	01-May-24	30-Apr-26	ONGOING	5,000,000	1,548,949
	Exploring the Efficacy of RNA Interference (RNAi) as a Biopesticide for Managing Sweetpotato Weevil, Cylas formicarius (Fabr.)	Poverty reduction and empowerment of the poor and vulnerable	The project aims to develop an RNAi-based biopesticide for enhanced resistance of sweetpotato against sweetpotato weevil. Specifically, it aims to: Generate a bacterial expression vector that drives constitutive expression of dsRNA from the cDNA clone of the laccase2 gene; Compare efficacy of biopesticide formulations with dsRNA-expressing bacteria by treating planting materials through immersion and feeding methods; Using in-vivo assays and real-time quantitative polymerase chain reaction, examine the molecular and phenotypic changes in sweetpotato weevils following delivery of dsRNA; and Optimize bioformulation of bacteria-expressing dsRNA for treatment of sweetpotato planting materials.	Publication: Three People: 3 Undergraduate, 2 Graduate students (MS and PhD),1 University Researcher, 1 Laboratory Aide, 9 Research internship/Place: Three places and partnerships. Sweetpotato R&D Center in Tarlac Agricultural University; We will get the insects from them and will have consultation meetings with their staff with regards to the SPW infestations they monitor in the field. Our contact person is Ms. Bheg Calua. We are also in contact with Prof. Lilibeth Bajit Larang, a retired professor of TALJ who is now the president of Mayantok Sweetpotato Farmers' Group in Camiling, Tarlac ; Insect Ecosanoid Physiology Laboratory, Andong National University South Korea through Prof. Yonggyun Kim who will provide us with the RNAi vector and control plasmid DNA. Institute for Agro-Environmental Sciences, NARO, Tsukuba Japan, will serve as our consultant with regards to the SPW genomic sequencing through Dr. Hiraku Yoshitake.	University of the Philippines Los Baños (UPLB)	Farmers, RCPC workers, students, researchers, academics	16-Jun-24	15-Jun-26	ONGOING	4,999,984	1,032,026
	Functional Genomics of Morphogenic and Oil Synthesis Genes from Coconut (Cocos nucifera L.) in a Model Monocot Zea mays L.	Poverty reduction and empowerment of the poor and vulnerable	The project aims to characterize the function of selected coconut morphogenic and oil synthesis genes using the coconut-maize transgenic expression model system. Specifically, it aims to: Identify, clone, and characterize four (4) target coconut genes for the construction of at least three (3) transformation cassettes; Transfer the transformation cassettes containing morphogenic and oil synthesis coconut genes into a selected corn inbred line using the gene gun (microparticle bombardment and/or Agrobacterium-mediated); Regenerate transformed corn tissues into plantlets and select putative transformants under contained laboratory and greenhouse conditions; and Analyze the expression of the different transgenes in GM corn by molecular, microscopic, and biochemical analyses.	Publication: At least 2 ISI publications submitted for publication/Product: - 3 transformation cassettes containing the 4 target genes (i.e., WUS-BBM, Oleosin, and WR1) - Optimized transformation and regeneration protocol - At least 10 putative transgenic maize lines (at least 3 putative transgenic maize lines per transformation cassette) - At least 10 regenerated transgenic maize lines in B2 greenhouse containment - At least 10 transgenic lines with functional analysis data for transformation efficiency and regeneration for morphogenic genes and oleosin mechanisms in oil body distribution/People/Services: - 2 BS/MS students supported (i.e., BS Biology, BS ASAT, BS Agriculture, MS Genetics, MS MB) - 1 hands-on training for partner PCAARRD UPLB (at least 2 participants) - 1 training for morphogenic vectors and transformation in maize at UH Manoa/Places and Partnerships: Possible linkages with Corteva with material transfer agreement (MTA) for utilization of BBM and WUS constructs and Thymine negative Agrobacterium - Possible linkage through a Memorandum of Understanding (MOU) with the University of Hawaii at Manoa for maize transformation	University of the Philippines Los Baños (UPLB)	Direct beneficiaries will be male and female plant physiologists and agronomists/agriculturists who will adopt the developed tissue culture, maize model, and transformation protocols for other related studies such as further improvement/enhancement of coconut and other Philippine crops of interest. It will also generate knowledge and development of techniques for enhanced gene expression studies for male and female students both in undergraduate (BS Agricultural Biotechnology/Biology/Agriculture) and graduate levels (MS and PhD in Molecular Biology and Biotechnology/Genetics). There is also equal opportunity for industry stakeholders who might have an interest in investing in the maturation of the technology developed for the production of coconut oil and other products derived from corn grains for food and industrial applications.	01-Oct-24	30-Sep-27	ONGOING	17,619,275	3,359,039
	Geographic Distribution and Genetic Diversity Analysis of Ralstonia solanacearum PhytoType II causing Banana Bugtok in the Philippines	Poverty reduction and empowerment of the poor and vulnerable	The project aims to provide up-to-date information on the distribution and genetic diversity of Ralstonia solanacearum PhytoType II causing Banana Bugtok in the Philippines using advanced molecular approaches such as sequencing technology. Specifically, it aims to: Determine the current incidence and distribution of Ralstonia solanacearum PhytoType II causing Bugtok in the Philippines; Examine the virulence, genetic diversity and structure, and whole genome of Ralstonia solanacearum PhytoType II causing Bugtok in the Philippines; and Optimize a molecular detection protocol specific for Ralstonia solanacearum PhytoType II causing Bugtok in the Philippines.	Publication: 1 IEC material on Bugtok One (1) peer-reviewed article published in a scientific journal Patent: N/A/Product: N/A/People: One (1) thesis student anchored to the project Training on the diagnosis, detection, and management of Bugtok, (Target number of participants: 20) Place: N/A/Policy: Policies on the safe movement and trade of bananas between localities in the country Policy recommendation on the control and management of Bugtok	University of the Philippines Los Baños (UPLB)	Banana growers Agricultural officers/technicians Non-government organizations Researchers Students	01-May-24	30-Apr-26	ONGOING	5,000,000	1,536,959
	In Planta Transformation of Abaca (Musa textilis Née) with a Visual Reporter: A Proof of Concept	Poverty reduction and empowerment of the poor and vulnerable	The project aims to establish a standardized protocol for in planta transformation of abaca utilizing the pigment betanin as a visual marker. Specifically, it aims to: Test the utility of tobacco as a testbed species for transformation with the constructed plant expression vectors; Evaluate and optimize various methods for in planta transformation of abaca; and Assess the stability and inheritance of the introduced genetic traits in transformed abaca lines to ensure their reliability and suitability for commercial cultivation.	Publication: One (1) publication outlining a transformation pipeline for abaca plants Patent: none/Product: €€ Three binary vectors, containing either the RUBBY, WUS2/PT, or WUS2/ASTM cassettes/€€ One plant virus expression vector/€€ Optimized in planta transformation protocol for tobacco/€€ Optimized in planta transformation protocol for abaca/€€ At least three (3) regenerated transformed tobacco/€€ At least one (1) transformed abaca, either stably or transiently transformed/People: One (1) undergraduate thesis student from NIMBB-UPLD Place: Collaboration with PhilFIDA on the collection of the abaca varieties from the PhilFIDA Fiber Regional Research Stations/Policy: none	University of the Philippines Diliman (UPD)	Philippine Fiber Industry Development Authority (PhilFIDA), and; —Other institutes and organizations involved in abaca research, breeding, and cultivation.	16-Apr-25	15-Apr-27	ONGOING	5,000,000	3,016,464
	Investigating the role of RNA-binding proteome in selected Philippine open-pollinated tomatoes for fungal and bacterial wilt resistance (OAI Title: Uncovering the role of RNA-binding proteome on Philippine open-pollinated tomato varieties for the identification of novel components of economically important agricultural traits)	Poverty reduction and empowerment of the poor and vulnerable	The project aims to profile the different RBProte of selected Philippine open-pollinated tomato, eggplant and pepper as affected by biotic and abiotic stresses. Specifically, it aims to: Identify the RBProte of selected Philippine OP tomato varieties; Profile the bacterial (R. solanacearum) & fungal pathogen (F. oxysporum) - responsive RBProte of selected Philippine OP tomato varieties for disease resistance; Generate the fundamental information on the putative RNA-Binding Domain, enzymatic active sites, and functional annotation of selected RBProte from the selected Philippine OP tomato varieties; and Introduce the potential of post-transcriptional research for crop improvement in the country.	Publication: At least 2 papers submitted for peer reviewed journal - The potential paper for publication will be based on biotic/stress-responsive RBP against bacterial/€€ Ralstonia solanacearum and Fungal/€€ Fusarium oxysporum/At least 2 IEC material submitted in Philippine National Library - This will be based on the protocol for plant RNA interactome capture and phenotypic assay/Product: Database of the RNA-Binding Proteome of Philippine open-pollinated tomato varieties Tomato germplasm €€ seed banking of the collected samples/People/Service: 3 Undergraduate students in Agriculture, Biology, Chemistry 2 Graduate students in Agriculture, Biology, Chemistry 20 Faculty/Staff for seminar/workshop/training introduced with post-transcriptional research Place and Partnership: University of the Philippines, Los Baños €€ Laguna Philippines Mariano Marcos State University, Ilocos Norte, Philippines Crop Biotechnology Center, Department of Agriculture University of Oxford, England United Kingdom/Social Impact: This collaborative project between and among Central Luzon State University, University of Oxford and Department of Science and Technology - PCAARRD is a pioneering work in combating up-to-date problems in the agricultural sector. Moreover, it will help capacitate the CLSU as the University of Oxford expands its different innovative research techniques to enhance the research community of developing countries for global competitiveness. In addition, the	Central Luzon State University (CLSU)	Agricultural Scientists/Researchers will be benefited as this approach is a cutting-edge technology. Professors and students may enhance their knowledge application on RNA Biology and Omics Sciences as they will experience emerging techniques like RNA Interactome Capture Farmers are the ultimate target beneficiaries of this project that in the future increase their yield and profit as this project explore new strategies to improve economically important commodities	01-Oct-24	30-Sep-26	ONGOING	4,998,954	2,643,664
	Metabolic Analysis of Philippine Garlic Cultivars for Varietal Improvement towards the Enhancement of Garlic Nutritional Value	Poverty reduction and empowerment of the poor and vulnerable	This project aims to generate the metabolic profile of Philippine garlic cultivars towards varietal improvement for the enhancement of their nutritional value. Specifically, it aims to: Profile the metabolites present in five local cultivars and associate them with phenotypic characteristics; Identify the superior food value cultivars containing higher concentrations of compounds for flavor, aroma, and starch metabolism; Develop a prototype garlic oil as a base for food products; and Evaluate garlic oil extracts from the superior food value cultivars on their biological activity and targeted metabolomic assays for enhanced nutritional value.	Publication: At least one (1) scientific publication in a Scopus-indexed peer-reviewed journal/Patent: A patent draft for the prototype garlic oil preparation method and use thereof/Product: Metabolic profile of 5 local garlic cultivars/identified at least 2 garlic cultivars higher in compounds in each parameter (aroma, flavor, and starch metabolism) Two prototype garlic oils produced from two superior food value cultivars as base for food and medical products/Process of producing garlic oil/People: Assist at least two undergraduate students for their theses/Assist one PCAARRD scholar for his graduate thesis/At least 10 research staff will be trained on the following: Intensive training on processing untargeted metabolomics data (at least 2 participants) Training on extraction and quantification of biomolecules (5 participants) Training on transcriptomics (at least 3 participants)	Mariano Marcos State University (MMSU)	farmers, researchers, business entities, other garlic stakeholders	01-Jan-25	31-Dec-26	ONGOING	4,999,292	2,895,740

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Mining the Diversity of Philippine Traditional Rice Varieties through Whole Genome Sequencing and Bioinformatics	Rapid, inclusive and sustained economic growth	The project aims to assess the diversity and uniqueness of the Philippine TRVs through their genomes for their utilization as gene sources or donor parents in rice breeding programs and enhance the capacity on large scale crop genome sequencing, data analysis and curation, and database portal development. Specifically, it aims to: Generate whole genome sequence data of the Dinorado tropical japonica (reference genome-level quality) rice as well as medium quality sequences of 1000 traditional rice varieties; Generate expression data via RNA sequencing of roots, leaves, panicles, and seeds for use in annotation of the reference genome sequence; Assemble and annotate a draft genome sequence of Dinorado for use as a reference sequence and perform comparative analysis with published reference genomes; Identify structural variations, pan genomic core and adaptive genes, SNPs and small indels for each of the 1000 Ph TRVs against at least two publicly available platinum standard reference genomes and the reference genome generated by the project; and Establish the Philippine Rice Genome Database (Ph Rice GDB) and provide trainings on usage, data curation, and associated analytical tools.	Publications At least eight high quality research paper(s) in peer-reviewed journals/ IEC materials for the training modules (publication and video) Products: 1. Production of Dinorado standard reference genome with annotation 2. The Ph Rice GDB created for use by breeders and researchers 3. Structural variants and pan genomic core and adaptive genes 4. High quality genome variant calls of 1000 traditional rice varieties against multiple reference genomes (e.g., Azucena, IR 64, Nipponbare, and Dinorado) 5. New tools developed that will enhance the existing Application Programming Interface (API) frameworks of SNP-Seek in the Ph Rice GDB People and Services 1. At least 4 (four) MS and/or PhD students 2. At least 8 (eight) Undergraduate students 3. At least 30 training participants including PhRice staff who will be embedded in every step of the workflow Places and Partnerships 1. Philippine Genome Center, UP Diliman 2. Philippine Rice Research Institute, Maligaya, Muñoz, Nueva Ecija 3. International Rice Research Institute, Los Baños, Laguna 4. UPLB (Institute of Biological Sciences, Institute of Computer Science, Institute of Crop Science)	University of the Philippines Los Baños (UPLB)	1. Academe and research institutes ICT C* Strengthened bioinformatics capacity for the maintenance and continuous development and curation of the Ph Rice GDB. 2. Faculty and students C* Materials in teaching crop genomics, bioinformatics, and computer science/software engineering courses. Will provide a platform for great action/experiential learning of students, i.e., through internships and thesis studies. 3. Researchers, breeders, academe, and students C* Identification of genes/genomic regions and annotations of these for genome to phenotype trait discovery 4. Farmers as ultimate beneficiaries. These bioinformatics resources will accelerate the development and delivery of improved varieties by rice breeders, enabling farmers to obtain higher yields with improved varieties.	01-Feb-25	31-Jan-28	ONGOING	62,920,352	3,002,471
	Transcriptome Analysis of Philippine Mangos in Response to Anthracnose and Cecid Fly Damage	Poverty reduction and empowerment of the poor and vulnerable	The project aims to identify candidate genes involved in anthracnose and cecid fly resistance in selected Philippine mangos using RNA-seq technology. Specifically, it aims to: Generate a transcriptome dataset for "Carabao" and Huan mangos using RNA-seq technology; Identify differentially expressed genes associated with anthracnose disease and cecid fly resistance based on functional annotation and gene expression analysis; Validate the expression of candidate genes using quantitative qRT-PCR and evaluate their potential for use in the mango breeding program; and Develop molecular markers for the precise integration of anthracnose and/or cecid fly resistance genes in marker assisted breeding.	Publication: At least 1 scientific article submitted in a peer reviewed journal At least 1 paper presented in conference/Product: 1 RNA-seq pipeline 3 Transcriptome dataset At least 1 molecular marker for MAS People: Accommodate at least 1 BS/MS student	University of the Philippines Los Baños (UPLB)	Researchers Breeders Plant Scientists/Botanists Students	01-May-24	30-Apr-26	ONGOING	4,999,960	1,505,815
	UPLB Abaca Hybrid Textiles for Diverse Apparel Applications Towards Mainstream Adoption	Poverty reduction and empowerment of the poor and vulnerable	The project aims to showcase the viability of the UPLB abaca hybrid as a premium indigenous textile through capsule apparel collections and targeted industry promotions. Specifically, it aims to: Develop an apparel capsule collection using UPLB abaca hybrid textiles, subject to performance assessments and market validation from the industry stakeholders; Facilitate a textile innovation fashion presentation, showcasing the technical research findings from the DOST-PTRI projects on UPLB abaca hybrid fibers and textiles; and Implement strategic promotional initiatives and stakeholder engagements to encourage adoption among government agencies, designers, and textile manufacturers.	Publication: Patent: Product: 80 looks showcasing UPLB abaca hybrid textile applied to identified categories: 44 looks/resort wear, pre-sport, office uniform, functional wear, and Filipiniana couture. o 26 look* modern filipiniana and resortive gata. o 10 pieces of uniform for ushers (5 male and 5 female; 1 design each) People: Cc One (1) promotional activity for UPLB abaca hybrid textile application through KATHABI Fashion Innovation Show Place: Cc Six (6) Memoranda of Agreement (MOAs) with fashion brands, textile manufacturers, and eco-conscious entrepreneurs Policy: Cc One (1) coffee table book to be given out after the event with pictures of the 80 looks (initial print: 15 copies)	DOST-Philippine Textile Research Institute (DOST-PTRI)	The primary beneficiaries of this initiative include local fashion designers, textile manufacturers, and sustainability-focused entrepreneurs. In introducing BANDALA fibers as a viable alternative to conventional materials, the project offers an opportunity for designers to incorporate eco-friendly textiles into their collections. Textile manufacturers, on the other hand, stand to benefit from new business prospects, as the demand for sustainable fabric alternatives continues to grow in both the local and global markets. Additionally, indigenous weaving communities and local textile producers will gain from increased industry interest and potential upscaling of BANDALA fiber production. By fostering collaborations between scientific institutions and traditional artisans, the project ensures that local weaving heritage remains relevant in modern fashion innovations.	01-May-25	28-Feb-26	ONGOING	3,000,000	3,000,000
	Utilization of Interdisciplinary Strategies and Plant Breeding Innovations for the Development of Eggplant (Solanum melongena L.) Haploid and Doubled Haploid Lines	Poverty reduction and empowerment of the poor and vulnerable	The project aims to develop eggplant haploid and doubled haploid lines through plant breeding innovations involving in silico, in vivo and in vitro techniques. Specifically, it aims to: Develop an application or software for eggplant microspore characterization; Screen for eggplant genotypes with high microspore embryogenic response using established in vitro anther/microspore culture protocols for the generation of haploids/doubled haploids; Characterize candidate genes related to haploid induction such as DMP in eggplant; and Determine the function of these candidate genes in the production of haploid inducer lines through CRISPR/Cas-mediated knock-out.	Publication: At least one (1) poster/oral paper per year One journal article on the screening of eggplant genotypes with high microspore embryogenic response using established in vitro anther/isolated microspore culture protocols for the generation of haploids/doubled haploids; One journal article on the phenotyping app used to characterize microspores One journal article on the characterization of at least one candidate gene (DMP) and the effect of CRISPR/Cas-mediated knock-out on these genes. Patent: Appropriate IPR (copyright) for apps for phenotyping of microspore developmental stages in various eggplant germplasm. Appropriate IPR for the Haploid Inducing - RUBY Expressing-Dichytledonous (HIREDD) Crop System. Product: Haploid/ doubled haploid eggplant line A haploid inducer line for eggplant People: At least three (3) graduates of at least BS level, trained in computer science, plant tissue culture, plant transformation, and molecular biology and biotechnology Place: Prospective consultancy from Dr. Jose M. Seguí-Simarro, a professor from Universitat Politècnica de València (Polytechnic University of Valencia) in Spain, and author of numerous papers related to eggplant doubled haploids Policy: Information and products generated from the project will be presented to contribute in the discussions and policy decisions on products of New Breeding Techniques (such as CRISPR/Cas genome editing), and breeding programs of local	University of the Philippines Los Baños (UPLB)	Public and private sector institutions - academic and research institutes, enterprises involved in the eggplant industry Eggplant researchers - plant breeders, geneticists, molecular biologists Students interested in plant breeding, tissue culture, floral biology, plant transformation Farmers and consumers - long-term beneficiaries of improved varieties with shortened breeding periods.	01-May-24	30-Apr-26	ONGOING	5,000,000	2,019,630
	Characterization and Performance of Ten (10) Promising Varieties of Cacao in Different Agro Climatic Zones in the Philippines	Integrity of the environment and climate change adaptation and mitigation	The program aims to conduct adaptability trials on the performance of different cacao varieties, identify the recommended high yielding cacao varieties specific to various locations and environmental conditions of the country. Specifically, this program aims to: Evaluate the productivity and quality of cacao varieties; Characterize cacao varieties using morphological descriptors; Assess the reaction of cacao varieties to natural pests and diseases; Assess proximate composition and sensory profile of cacao varieties; Recommend for NSIC registration promising cacao varieties adaptable under different agro climatic zones; Conduct economic analysis; and Capacitate the farmers in cacao production and post-harvest technology through trainings and production of IEC materials.	1. Selected 1 or 2 cacao varieties with outstanding performance adaptable to high, medium and low elevation. 2. Identified varieties for combined elevation and climatic type- with resistance to pest and diseases and high productivity level. 3. Production of IEC materials. 4. Partial budget analysis for multilocation cacao trials 5. Capacity building and dissemination of new technologies to farmers	University of Southern Mindanao (USM), Sultan Kudarat State University (SKSU), Agusan del Sur State College of Agriculture and Technology (ASSCAT)	The beneficiaries of the project primarily include nursery owners, cacao farmers, cacao plantation growers, cacao bean processors, cacao breeders, cacao industry consumers and government agencies such as Bureau of Plant Industry	16-May-23	15-Nov-25	COMPLETED	2,760,000	168,181

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	Assessing the Environmental Footprint of Bamboo Textile Production: A Life Cycle Analysis (LCA) of the Bamboo Textile Fiber (BTF) Innovation Hubs	Rapid, inclusive and sustained economic growth	The project aims to conduct a comprehensive life cycle analysis of the bamboo yarn/textile processing stages at the Bamboo Textile Fiber (BTF) Innovation Hubs, to evaluate their environmental impact. Specifically, it aims to: Gather data from the Bamboo Textile Fiber (BTF) Innovation Hubs, i.e., from the transportation of raw materials to production facilities to yarn/textile production; Create a comprehensive understanding of the environmental impact of bamboo textile production in the Philippines from cradle to gate; and Design and implement a capacity-building program aimed at enhancing the skills and knowledge of employees and personnel of the Bamboo Textile Fiber (BTF) Innovation Hubs.	Publications Year 1One (1) Press Release from one of the BTF Innovation Hub for the environmental impact of the produced yarn/textileYear 2One (1) Technical paper One (1) Press Releases from the remaining BTF Innovation Hubs for the environmental impact of the produced yarn/textileOne (1) Product/Project BrochurePatent Year 2 One (1) copyright Product Year 1 One (1) Bamboo Textile Fiber (BTF) Innovation Hubs DatabaseYear 2 One (1) LCA framework for the Bamboo yarn/textile production from the BTF Innovation HubsPeople and Services Year 1Two (2) persons will be trained on how to perform the LCA analysis Year 2 Three (3) persons will be trained on how to perform the LCA analysis Three (3) persons trained on how to use Bamboo Textile Fiber (BTF) Innovation Hubs database	DOST-Philippine Textile Research Institute (DOST-PTRI)	This project aims to establish an environmental assessment scheme for bamboo yarn/textile production, which will have direct and indirect benefits. Through capacity building and the creation of a comprehensive LCA framework, the BTF Innovation Hubs will have the necessary knowledge and tools to carry out sustainable and effective environmental impact analysis. This will enable them to identify areas for improvement and opportunities for cost savings, leading to a more sustainable and efficient production process. In turn, this will benefit our local farmers and bamboo suppliers through effective marketing strategies and a more stable demand for their products. Overall, this project will contribute to the development of a more sustainable and circular economy for the Philippine textile industry, while also supporting the livelihoods of our local communities.	01-Jul-24	30-Jun-26	ONGOING	4,497,791	727,772
	Assessment, Characterization, and Containment Strategies for Buyo-buyo (Piper aduncum) in Davao Region: Toward Responsible Utilization and Policy Development	Rapid, inclusive and sustained economic growth	General Objective: To assess the ecological presence of Buyo-buyo (Piper aduncum) in the Davao Region and develop science-based strategies for its characterization, controlled utilization, and sustainable management, through informed policy recommendations. Specific Objective: To assess the distribution, ecological impact, and current status of natural Buyo-buyo stands in selected areas of the Davao Region; To characterize the morphological, ecological, and chemical characteristics of Buyo-buyo stands in selected areas of the Davao Region; To explore controlled product development from extracted Buyo-buyo materials—(such as charcoal briquettes, wood vinegar, essential oils, and wood pellets)—(as part of a sustainable management approach, without promoting its propagation; and To formulate local policy recommendations that guide the sustainable containment, monitoring, and management of Buyo-buyo at the community and government levels.	Expected Outputs (6 P; Metrics)6P/Year 1Year 2Publication1 Posters in scientific conferences2 ISI publication on the characteristic and property of buyo-buyo stands2 Poster presentations1 IEC material on the property of buyo-buyoPatent1 Patent filed on the process for product developmentProductsExtracts2L Wood vinegar20ml, Essential oils10 kg, Briquettes25kg, Biochar/People /Services3 Capacity building of communities2 Training/workshop on the production of charcoal and briquettes from buyo-buyo1 Seminar on the various properties of buyo-buyo3 Capacity building of communities 2 Training workshop on the extraction of essential oil2 Training/workshop on the production of herbal soaps and salves10 Seminar on the various properties of buyo-buyoPlaces andPartnership2 sites C* Davao de Oro1 site C* Davao del Norte2 sites C* Agusan del Norte1 site C* Surigao del NorteMemorandum of Agreement (MOA) Davao de OroOro EnergyCENRO/PENROLocal Government UnitPolicy1 Policy recommendation on the inclusion of management and conservation of buyo-buyoSocial Impact1. Empowered Communities through Capacity BuildingLocal residents, LGU staff, and community groups will gain knowledge and skills in environmental stewardship, sustainable resource use, and invasive species management, fostering a sense of collective responsibility and ecological awareness.2. Improved Environmental Awareness and Stewardship by integrating science-based information with community engagement, the project promotes informed decision-making and sustainable practices -csa	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	Davao Region Universities and State Colleges R&D Institutions	01-Jul-25	30-Jun-27	ONGOING	5,000,000	2,425,900
	Bamboo ACTIVE Ph: Activated Carbon Through Innovation for the Vulnerable Sectors and the Entrepreneurs in the Philippines	Integrity of the environment and climate change adaptation and mitigation	General Objective: To develop bamboo-based activated carbon from Philippine bamboo species for disaster response Specific Objectives: 1. To prepare and characterize bamboo-based activated carbon from local bamboo species; 2. To develop prototype products for bamboo hygiene products (shampoo & body soap, wound patch & water filter) for disaster response; 3. To determine the performance of the prototype products; 4. To provide/increase access to information for the men and women on bamboo-based activated carbon technologies; and 5. To determine cost and return analysis of bamboo activated carbon products.	Publication: Local Publicatio 1 IEC Material (10 brochures, flyers, videos, press releases, news and feature articles (tri-media, social media) oPoster oInstructional/Training materials/Modules Patent/Intellectual Property: Patent/utility model application file for bamboo activated carbon (1) Patent/utility model application file for bamboo activated carbon hygiene products (1) Patent/utility model application file for bamboo activated carbon water filter (1) Patent/utility model application file for bamboo activated carbon wound patch (1) Copy rights (10) brochures, flyers, videos, press releases, news and feature articles (tri-media, social media) oPoster oInstructional/Training materials/ModulesProduct:bamboo activated carbon (50)bamboo activated carbon hygiene products (50)bamboo activated carbon water filter (50)bamboo activated carbon wound patch (50)People and Services:Trainings/seminars/workshops conducted/organized (50 pax)Place and Partnership:Partner institutions and collaborating partners Project sitesMemorandum of Agreement/Understanding forged	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	Men and women in the disaster-prone areas in the country Bamboo plantation owner, bamboo industry and general public	01-Oct-23	31-Mar-26	ONGOING	4,999,408	1,153,576
	Bamboo LEAF Ph: Leaf Extracts Active Formulations from the Philippines	Integrity of the environment and climate change adaptation and mitigation	General Objective: To produce bamboo leaf polysaccharides and flavonoids and develop skincare products from leaf extracts of selected Philippine bamboo species. Specific Objective:1. To extract and characterize bamboo leaf polysaccharides or flavonoids. 2. To develop prototype skincare products specifically serums and lotions. 3. To evaluate the effectiveness/performance/efficacy of skincare products. 4. To determine the level of acceptability of the developed skincare products. 5. To determine the cost of production of the developed skincare products.	Publication: 1 Local publication for Year 2 1 IEC materials for serum and lotion for Year 1 and Year 2 (total of 10 IEC materials) brochures flyers videos press releases posters instructional / training materials / modules and newsletters Patent: 1 Patent / UM application filed for serum for Year 2 1 Patent / UM application filed for lotion for Year 2 1 Patent / UM application filed for process of producing bamboo flavonoids and polysaccharide for Year 2 5 Copyright for IEC materials for serum and lotion for Year 1 and Year 2 (total of 10 copyrights of IEC materials) Product: 50 pieces of serum for Year 2 50 pieces of lotion for Year 2 People: Training / seminars / workshops conducted / organized (50 pax) for Year 2 Place: Established laboratories for Year 1	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	Skincare consumers who are interested in eco-friendly and sustainable products—Skincare manufacturers and industry practitioners—Local communities and bamboo farmers who can potentially benefit from the production of bamboo leaf extracts as a value-added product—Government agencies and policymakers who may use the research findings to support sustainable and eco-friendly initiatives in the skincare industry.	01-Oct-23	31-Mar-26	ONGOING	4,999,816	940,051

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Bamboo LIQUOR Ph: Local Innovation for Quality Use as Organic Pesticide Resources in the Philippines	Integrity of the environment and climate change adaptation and mitigation	General: To develop and test the performance of bamboo pyroigneous liquid in treating and controlling onion armyworm (DAW) and cutworm infestation in local onion crops. Specific: 1. Produce and characterize bamboo PL from two (2) bamboo species: kauyayang tinik (Bambusa spinosa), and kauyayang killing (Bambusa vulgaris); 2. Develop and optimize the FRPD PL as an organic pesticide against OAW and cutworm in onion crops; 3. Conduct laboratory and field tests on the treatment performance of bamboo PL to onion crops; and	Publication -At least five (5) IEC materials for organic pesticide from bamboo PL (brochures, flyers, video/press releases, instructional and training materials) by the second year of the project Patent/Intellectual Property At least one (1) intellectual property right (patent, or utility model) related to the technology produced and subsequent modification, if necessary, at the end of Year 1 Copyright for IEC materials in Year 2 Product: Technology package of the bamboo PL for cutworm and OAW in Year 2 Pesticide for cutworm and OAW/People and Services At least 10 workers of the identified partner-cooperators shall be trained on how to make and apply the bamboo PL in Year 2/Place and Partnership: Agreement with partner cooperators that shall simulate the field conditions of applying the technology	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	Onion farmers Producers/Manufacturers of organic pesticides	01-Oct-23	30-Sep-25	COMPLETED	4,954,999	1,232,250
	Biodiversity Assessment of Riparian Zone in Ulot River in Samar Island Natural Park (SINP) Kaigangan	Rapid, inclusive and sustained economic growth	General Objective: This project aims to assess the biodiversity of Ulot River in Samar Island Natural Park (SINP) and come up with sustainable conservation and management practices for the reduction of adverse climate change impacts and flood risk to human communities and farms in the riparian zone. Specific Objective: 1. Determine the Ulot River morphology, tributaries and land use types (farm, forest, aquatic, residential) in the riparian ecosystem of the Samar; 2. Inventory biodiversity (flora and fauna) in various land-use types in the upper, middle, and downstream portions of the Ulot River; 3. Assess the ecological properties of biodiversity and the diversity indices of the upper, middle, and downstream stretch of Ulot River; 4. Analyze the factors influencing species data (natural and anthropogenic disturbance, soil, rainfall, temperature); and 5. Establish priority zones for conservation based on biophysical and social data gathered using GIS technology.	Publication: CEPA Materials Online press releases about the project 3 Webinar paper presentations 2 research articles published in refereed journals Patent: not applicable Product: 100 herbarium vouchers 2 maps showing profile of Ulot watershed and land cover 1 GIS generated map showing conservation priority areas/zones 1 enhanced Kaigangan nursery 1 enhanced database established in Phase 1 and 2 of Kaigangan Project People: Capacity building of 10 people each in local communities in Paras and Can-aid Training 10 PD leaders and park managers Places and Partnership Sustained partnership with POE's (BOSIS and TORPEDO) and local academic institutions (SSU and ESSU-Salcedo)	University of the Philippines Los Baños (UPLB)	Residents of the 2 municipalities, members of Peoples Organizations (POE's) general public, selected (*) Local Government Units (LGUs) located inside the towns of Can-aid and Paras.	01-Jan-24	31-Dec-25	COMPLETED	5,000,000	2,177,021
	Development and Standardization of Four-Sided Bamboo Slat Planning Machine for Small-Scale Enterprise Production of Engineered Bamboo	Rapid, inclusive and sustained economic growth	General Objective: Develop and standardize a scale-appropriate, locally manufacturable four-side strip-finish planing machine for small-scale enterprise production of engineered bamboo. Specific Objective: 1. Assess the design specifications of an existing, commercially manufactured four-side bamboo slat planing machine; 2. Identify materials and/or methods substitutable with locally available and lower cost alternatives; 3. Design a locally manufacturable four-side bamboo slat planing machine with consideration on efficiency, cost-effectiveness, safety factors and ergonomics; 4. Fabricate the designed four-side bamboo slat planing machine; 5. Evaluate the performance of the four-side bamboo slat planing machine; 6. Compare the performance of the developed four-side bamboo slat machine with the performance of existing machines and/or established standards; 7. Perform a cost-effectiveness analysis on the developed machine.	Publication: Results of the research will be submitted for publication in peer-reviewed or indexed journals. Patent: The developed machine will be applied for a patent or as utility model. Product: The developed machine will serve as a tangible product or prototype that can be replicated or mass produced for use by small-scale enterprises for their bamboo processing. People: The development of the proposed machine can help improve the lives of small scale bamboo enterprises. Opportunities for training in the operation and maintenance of the machine can also be provided to operators. Place: The development of the planing machine will establish the beginning of partnership between Central Mindanao University and small-scale bamboo enterprises in the region in terms of appropriately mechanizing the e-bamboo processing. Policy: This endeavor can result to possible policy and/or program by the government to address the specific needs of small-scale bamboo enterprises.	Central Mindanao University (CMU)	1. Small and Medium Scale Bamboo Enterprise 2. Local fabricators and machine operators 3. Craftsmen and women in the bamboo processing industry	01-Mar-23	31-Oct-25	COMPLETED	4,999,880	52,964
	Development of Site Quality and Soil Fertility Indices of Giant Bamboo (Dendrocalamus asper) Plantations in Northern Mindanao	Rapid, inclusive and sustained economic growth	General: To develop site quality index (SQI) and soil fertility index (SFI) for optimum clump productivity of the Giant Bamboo (Dendrocalamus asper) plantations in Northern Mindanao. Specific: 1. Characterize the soil and other edaphic factors in the growing areas of Giant Bamboo and classify it according to Fertility Capability Classification (FCC); 2. Development and validation of Site Quality Index (SQI) Soil Fertility Index (SFI) models; 3. Determine socio-demographic characteristics of the selected bamboo growers or plantation owners in the selected study sites; 4. Capacitate male and female farmers on the best practices for optimal Giant bamboo pole production through awareness seminars and/or seminars/workshops on the appropriate soil nutrient requirements and management; and 5. Recommend policy on best practices on soil fertility management for sustained Giant Bamboo production.	Publication: At least one (1) article produced in Y1 of the project implementation; At least one (1) article published in an ISI journal (Y2); presented at least one technical paper in symposia/conferences (Y2); At least one (1) IEC material on the nutrient management of the Giant Bamboo stand (Y2). Product: Partial and/or initial results of soil physicochemical analyses from the study sites; A soil fertility map of Giant Bamboo stands in Bukidnon (Y1). At least three (3) Site Quality Index/Soil Fertility Index were developed for optimum clump productivity; Developed criteria on site suitability for optimum productivity of giant bamboo plantation (Y2). Patent: At least one (1) copyright for the developed IEC material (Y2) People/Services: At least one (1) graduate/undergraduate student will undertake a study relative to developing a soil fertility index (Y1); At least two (2) students will be involved in the data collection as part of the MS/BS Forestry practicum on year 1. At least three (3) students will be involved in the data collection as part of the MS/BS Forestry practicum on year 2. Capacity building of at least 40 male and female bamboo farmers/growers on soil nutrient management for sustained Giant Bamboo production had been conducted (Y2) Partnership: at least one (1) memorandum of agreement (MOA) will be forged between DENR-X and the project team for technical from the ENGP Giant bamboo plantations in year 1 of implementation. Policy: At least one (1) science-based policy brief on soil nutrient management in a sustainable/productive Giant Bamboo plantation in Northern Mindanao will be developed (Y2).	Central Mindanao University (CMU)	1. Male/Female Giant bamboo farmers from the selected project sites. 2. Bamboo-based processing industries 3. Male/Female Student researchers 4. LGUs 5. Government agencies promoting and/or supporting the bamboo industry	01-Aug-25	31-Jul-27	ONGOING	4,994,473	2,665,632
	Development of technology and innovation model farm of indigenous and economically valuable species to support traditional industries for forest restoration and biodiversity conservation in Benguet	Rapid, inclusive and sustained economic growth	General Goal of the Project: The overall goal of this project is to develop the technical and socio-cultural protocols that cover the establishment and management of a model farm to provide a stable supply of raw materials for the production of desired products, and scale up these technologies as avenues for innovative forest restoration strategies consistent with the biodiversity objectives of the forest landscape in Benguet. Specific objectives: To achieve the general goal, the project has the following specific objectives: 1. Strategically identify areas that are suitable for the establishment of model farms of Banos (Cyrtoschloa sp.) and Ayusip (Vaccinium myrtoides) within Benguet; (Component 1) 2. Produce quality planting materials of these selected indigenous and economically important plant species in support of the local industries that use it as raw materials for Kayabang and local beverage; (Component 2) 3. Establish and manage a technology and innovation model farms of native plants as a demonstration site, germ plasm and a learning school for communities and local industries; (Component 3) 4. Involve community in the conservation and production of Banos (Cyrtoschloa sp.) and Ayusip (Vaccinium myrtoides) a culturally important native species that have high economic values. (Component 4)	Publication: 2 Publishable articles submitted 1 Manual on GIS mapping 1 Techno-guide for growing species of interest in local dialect/Products 2 Suitability maps 1 AWP on harvesting & manufacturing of Kayabang/Local beverage People/Services/2 Trainings for 2 LGU, NGA and others, for 30 professionals (2 GIS mapping events) 1 Training on clonal & nursery management practices, for 20 participants 1 Training on field crop management for local partners for 20 participants. Places and Partnership: 1 Partnership MOU with at least LGU and/or SUC 1 Partnership agreement w/ local cooperator for the model farm Policy 1 Policy brief on conservation of native plants raw materials for Kayabang/Local beverages	Benguet State University (BSU)	Local government units of Atok and La Trinidad Benguet farmers and local communities of Atok, and La Trinidad, Benguet Local industry workers/cooperators for bamboo crafts and local beverages PENRO-DENR, MENDRO, La Trinidad and Atok, and PENRO (PLGU)	01-Mar-23	28-Feb-26	ONGOING	4,999,898	1,194,456

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Development of Transparent Wood Composite as Substitute of Glass for Light Transmission and Thermal Energy Capture (LITZWood) (Old Title: Development of Transparent Ligno-cellulosic Composites as Glass Substitute for Light Transmission and Thermal Energy Capture (LITZWood))	Rapid, inclusive and sustained economic growth	General Objective: The main objective of the project is to utilize veneers from industrial tree plantation species, i.e. Falcatia (Falcataria moluccana (Miq.) Barney & J.W. Grimes) and Gmelina (Gmelina arborea Roxb.) for the development of transparent wood composite as substitute of glass for light transmission and thermal energy capture. . Specific Objective: Develop the protocol for the decolorization of wood via lignin removal or modification; Characterize the properties of the decolorized wood; Develop the protocol for the encapsulation of the modified wood with resin to form transparent wood, LITZWood; Determine the properties of the LITZWood; Determine the financial feasibility of producing LITZWood; and Demonstrate the developed technology to manufacturing companies and other interested stakeholders for possible adoption.	Publication: 3 IEC material i.e Information bulletin/brochure on the production of transparent wood "LITZWood"; Drafts of two scientific articles for possible publication in peer reviewed-journals;Patent:Invention disclosure application for the developed protocols for the production of transparent wood;Product:At least two protocols for the decolorization of wood and development of transparent wood; transparent wood with optimized properties to be used as windows/panels;People:One technical personnel trained; two graduate/undergraduate students with thesis on the transparent wood;Place:Improvement of the Forest Bio-Materials Research Laboratory; At least one manufacturing company/processor/other stakeholder as possible adopter;Policy: Policy brief or policy recommendation on the use of ITFS for transparent wood;Social Impact: the project aims to make Filipinos become more aware of the potential utilization of ITFS for non-traditional applications;Economic impact: the project situates itself as part of the plan that is geared towards the alleviation of the economic status of smallholding farmers. In addition, this project is expected to improve competitiveness of Philippine wood market by coming up with the innovative product using the lignocellulosic materials.	University of the Philippines Los Baños (UPLB)	The target beneficiaries of this project are forest -based industries using ITFS, tree plantation farmers, veneer and plywood industry, other related downstream industries and consumers who are willing to use sustainable and environmental-friendly products.	01-Dec-24	30-Nov-26	ONGOING	6,010,188	3,026,532
	Diversity, distribution and conservation status of Anuran species in Mananga and Korkot Watersheds, Cebu, Philippines	Rapid, inclusive and sustained economic growth	General Objective: The study aims to determine the current diversity, distribution, and conservation status of anuran species in Mananga and Korkot Watershed, Cebu, Philippines and document their conservation status traditional use and potential economic value. Specific Objective: Specifically, it deems to: 1. Survey the current population and diversity of anuran species and associated flora and fauna in Mananga and Korkot watersheds and classify them based on habitat (agricultural, forested and deforested areas); 2. Map the distribution of anuran species; 3. Assess the conservation status, traditional use and potential economic value of anurans in the watersheds; 4. Correlate environmental threats (i.e. anthropogenic activities, disturbances, etc.) with the current population and diversity of anurans in the watersheds; and 5. Formulate policy inputs and recommendations to local conservation policies for Mananga and Korkot watersheds and promotion of the economic use of anurans to communities.	Publications Year 1 IEC materials (brochures) on the diversity of anurans associated flora and fauna in Mananga and Korkot Watersheds At least 1 paper presented in a scientific conference Photo and video documentation of Anuran and life forms in the two watersheds. Year 21 Monograph of Species of Anurans in the two watersheds Paper for Publication on the impacts of watershed alteration on Anuran population Scientific paper submitted for publication Patents Year 2 Copyrights of Guidebook Products Year 1 Information on taxonomy, diversity, and ecology of Anurans and associated flora and fauna, GIS maps of the Anuran collection sites GIS maps (Resource / Location Map) of watersheds Database (content built-up) Year 2 Species listing of Associated flora and fauna associated with watersheds Zoning plan of watersheds reflective of research, gleaming, reserve and tourism areas Farmers Alternative Livelihood Plan Database (content build-up) People and Services Year 1 and 24 Personnel trained in collection of samples and laboratory work 6 undergraduate students mentored Places and Partnership Year 12 project sites Collaboration with DENR, DA and LGUs of Talisay City and Minginalin Year 22 project sites Collaboration with DENR, DA and LGUs of Liloan and Compostela Policies Year 2 Policy recommendation on watershed and anuran conservation Policy recommendation on the control of extraction of some valuable species in the watersheds for sustainability	Cebu Technological University (CTU)	1. Municipal Local Government Units and Barangay Local Government Units 2. Policymakers 3. Academe, researchers, and environmentalists 4. People 5. Organization and Local Communities, Women and Men and Youth Groups	01-Apr-23	30-Sep-25	COMPLETED	5,000,000	263,181
	Enhancing the conservation and breeding program of the Philippine spotted deer, Rusa alfredi using molecular-based approaches for natural resiliency	Integrity of the environment and climate change adaptation and mitigation	General Objective: This project seeks to develop and enhance the species conservation program and captive breeding protocol for the critically endangered Philippine spotted deer, Rusa alfredi using molecular-based approaches. Specific Objective: Specifically, this project aims to: To understand the genetic diversity and screen the vulnerability of the captive-bred stock of Philippine spotted deer, Rusa alfredi, in Negros-Panay Island by: a.) understanding the phylogenetic relationship of Rusa alfredi of the Negros-Panay Island using CO1, 16S, and Cytochrome B barcoding markers, b.) estimating the inbreeding frequency of Silliman University CENTROP captive-bred stock of Rusa alfredi using microsatellites markers, and c.) understanding the genetic diversity and natural selection mechanism of the MHC class II DRB exon 2 of Rusa alfredi in Negros-Panay Island. To review and/or amend existing breeding protocols at CENTROP and the national conservation program for the target species using the obtained genetic data, and To enhance the cell and molecular laboratory of Silliman University Biology department by setting up a DNA cloning facility that will aid in the acquisition of molecular data by separating MHC genes that undergoes duplication.	Publication brochure about the Philippine spotted deer generate at least two (2) scientific article drafts for possible publications Products protocols for DNA barcoding of the Philippine spotted deer produce DNA barcodes, microsatellite markers, protocols for identifying and analyzing the microsatellite markers of the Philippine spotted deer produce MCH profiles for target species, protocols for identifying and analyzing the MHC genes of the Philippine spotted deer Amended breeding protocol and conservation program of the Philippine spotted deer at CENTROP. People /Services Build capacity of at least 3 faculty & staff in molecular biology and bioinformatics possible mentorship of DOST - GREAT scholars on molecular biology and bioinformatics Build capacity of at least 10 faculty & staff, undergraduate and graduate student in molecular biology and bioinformatics possible mentorship of DOST - GREAT scholars on molecular biology and bioinformatics Build capacity of at least 10 faculty & staff, undergraduate and graduate student in molecular biology and bioinformatics possible mentorship of DOST - GREAT scholars on molecular biology and bioinformatics Places and Partnership Strengthen partnership with Department of Environment and Natural Resources	Silliman University (SU)	Filipinos " by preserving a Philippine natural heritage for present and future generations. DENR " by supporting their mandate of conserving & protecting wildlife for ecosystem integrity. Local academic institutions " by building the capacity of faculty & students to apply molecular-based approaches for conservation. Specific list of stakeholders and their roles a. DENR, PENRO, CENRO, Regional Executive Director (RED): Facilitation of necessary permits; policy development & implementation specific to PSD conservation program, development of plans for habitat suitability assessments, deer reintroduction, deer translocation, etc. b. Silliman University, Biology Department- implementing body- building the capacity of faculty and students to apply molecular-based approaches or conservation c. Silliman University " Center for Tropical Conservation Studies (CENTROP)- Conservation program amendment; provide deer samples. d. Mari-it Eco Park (West Visayas State University)- Conservation program amendment; provide deer samples. e. Talarak Foundation- Conservation program amendment; provide deer samples.	01-Oct-23	30-Sep-26	ONGOING	9,218,276	1,946,588
	Etiology, Detection and Management Strategies against Pestalotiopsis Disease of Rubber	Integrity of the environment and climate change adaptation and mitigation	General Objective: To determine the biology and epidemiology of Pestalotiopsis leaf fall disease in rubber, and eventually develop a DNA-based detection and effective management measures against the disease. Specific Objective: ... (7.3) OBJECTIVES, ... General: To determine the biology and epidemiology of Pestalotiopsis leaf fall disease in rubber, and eventually develop a DNA-based detection and effective management measures against the disease. Specific: 1. ... To determine the DNA sequences of the specific gene regions of Pestalotiopsis isolate infecting rubber trees 2. ... To determine host range and pathogenicity, and interaction/co-infection of Pestalotiopsis to major leaf pathogens of rubber. 3. ... To develop species-specific DNA-based detection of Pestalotiopsis sp. infecting rubber in the Philippines. 4. ... To evaluate the existing rubber clones in PRRI germplasm to Philippine Pestalotiopsis isolates. 5. ... To evaluate the effectiveness of biological and chemical-based test treatments for the control of Pestalotiopsis leaf fall disease of rubber.	Publication: At least 2 scientific papers At least 1 paper presentation in a conference Patent: Patent for the DNA-based diagnostic method Patent for the integrative management strategy Product: DNA-based diagnostic for Pestalotiopsis Effective and integrative management strategy for Pestalotiopsis People: 1 MS graduate student Awareness campaign to 100 rubber farmers in Regions 9 and 12 Place: Partnership with rubber farmer's associations, SUC, DA-PRRI and other government agencies Policy: Plant health certification of Pestalotiopsis free rubber planting material and plantation Policy brief for the status and management strategies for Pestalotiopsis leaf fall disease	Philippine Rubber Research Institute (DA-PRRI)	Local farmers/plantation owners Rubber cooperatives and association Local Government Units Researchers SUC	01-May-23	30-Apr-25	COMPLETED	5,000,000	1,080,154

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Improved Pollination Intensity for Increased Cacao Yields (Old Title: Enhancing Pollination of Cacao in the Philippines)	Rapid, inclusive and sustained economic growth	General: To enhance pollination of cacao in the Philippines; Specific: To conduct surveys of pollinators of cacao in the Philippines; To identify the most important pollinator species; To determine potential attractants for cacao pollinators; To develop formulations of potential pollinator attractant blends; To assess suitable habitats for important pollinators of cacao; To determine impact of pesticide application on pollinators; and To formulate management strategies/recommendations for enhancing cacao pollination	Publications One (1) IEC materials on the major insect pollinators of cacao in the Philippines; pictorial guide on pollinators of cacao; Two (2) papers submitted in refereed journals; diversity of cacao pollinators based on surveys potential pollinator attractants; management strategies People and Services One (1) PHD student; At least twelve (12) cacao farmers/stakeholders capacitated on the management of insect pollinators of cacao Product One (1) pollinator attractant blend; 1 set of protocols/recommendations for enhancing pollination in cacao; One (1) pictorial guide on the major insect pollinators of cacao in the Philippines Patent One (1) patent application filed for potential pollinator attractant One (1) copyright for IEC materials Places and Partnerships MOA with cacao farmers cooperatives in Regions II, IV-A, VI, VII, IX, XI DA-IPR (with existing MOA); Isabela State University (with existing MOA) Policies One (1) policy input/ recommendations on the proper management of cacao pollinators Social Impact With more information on the nature of cacao pollinators, farmers will be able to use management options geared towards conserving pollinator populations and increasing productivity. This could decrease reliance on harmful, synthetic pesticides that can harm pollinators and humans resulting in reduction of risk by 30%. Concerned agencies, on the	De La Salle University (DSU)	Cacao industry including farmers, extension workers, researchers, other stakeholders, and decision makers	01-Nov-24	31-Oct-26	ONGOING	5,000,000	2,532,949
	In vitro Mass Propagation of Three Economically Significant Philippine Bamboo Species	Rapid, inclusive and sustained economic growth	General Objective: To refine the in vitro mass propagation protocols for Kawayang tinik (Bambusa blumeana J.A. Schultes & J. H. Schultes syn. Bambusa spinosa Roxb.), Giant Bamboo (Dendrocalamus asper (Schult.) Becker x Heyne), and Bolo (Gigantochloa levis (Blanco) Merr.) Specific Objectives: Validate the seasonal response of B. blumeana, D. asper and G. levis to tissue culture; Optimize the media formulations and culture conditions for the in vitro multiplication and in vitro rooting of B. blumeana; Optimize formulations for bud initiation and in vitro multiplication and culture conditions for D. asper and G. levis; Verify the genetic fidelity of tissue-cultured plantlets of B. blumeana, D. asper and G. levis by comparing them with the mother stock; and Provide cost recommendations to produce tissue-cultured bamboo plantlets at the rooting stage	Year 1 1 Scientific poster presented to a conference 1 Partnership with Carolina Bamboo Gardens 1 Draft policy recommendation Year 2 1 Planting materials for the three bamboo species 1 Complete protocol developed 1 3 staff and 5 students trained on tissue culture techniques to produce bamboo planting materials 1 Partnership with Carolina Bamboo Gardens 1 Cost recommendation for bamboo plantlets derived from tissue culture	University of the Philippines Los Baños (UPLB)	The results of the study will benefit various stakeholders including the forestry sector, and the DENR, in designing and implementing conservation and sustainable management of bamboos in the country. The government's National Greening Program (NGP) and other forest rehabilitation program will also benefit through the availability of increased number of bamboo planting materials through tissue culture	01-Jun-25	31-May-27	ONGOING	5,000,000	3,364,899
	Production and Biodiversity Conservation of Wild Tea Plants in Mountain Province	Integrity of the environment and climate change adaptation and mitigation	General Objective: project aims to assess the diversity, ethnobotanical and economic importance of the wild tea plant species in Mountain Province and provide opportunities for its propagation for biodiversity conservation and development of Geisane products for potential technology adoption and commercialization. Specific objectives include: To determine the diversity, ethnobotanical importance and morphological characteristics of wild tea plant species, including their species distribution, habitat and site suitability assessment and mapping; To evaluate the propagation and management of selected wild tea plant species; To develop comprehensive quality standards and optimized processing procedures for tisane products derived from the selected wild tea plant species; and To conduct feasibility study on the development of Geisane in terms of market, technical, financial, and socio-economic.	1. Publication: - Draft IEC materials like technology guides for production of ceisane products and field guides on selected wild tea plants- 3 articles submitted for publication in the last year of the project such as the ethnobotanical assessment, morphological characterization and standardization of processing methods for quality selected wild teas. 2. Patent: - 3 copyrights of the research studies 2 copyrights of the 2 research studies specifically on the ethnobotanical assessment, morphological characterization and 1 copy copyright of the developed field guides of the selected wild tea plant species submitted. 3. Product: - 3 wild tea products developed on the last year, specifically the last quarter of the year 2.4. People and Services: - 1 capacity building training on processing and production techniques on year 2. - 1 capacity building activities on the propagation techniques of the wild tea plants on year 2.5. Place and Partnership: - 1 coordination with government agencies like DTI etc. for support in financing and regulation on year 2. - 1 partnership with LGUs for the conservation of the wild tea plants on year 1.6. Policy: - 1 policy recommendation regarding the wild tea conservation and management on year 2.	Mountain Province State Polytechnic College (MPSPC)	The target beneficiaries of this project are those who are organic tea drinkers especially the health-conscious ones and all other customers who will patronize the products. Tea growers who are willing to propagate the wild tea plant species, profit sharing for the distribution channels that will link our products to our customers (tea drinkers) and during the production of the product, employees that will be hired for the production management. Tea growers will be provided training on plant propagation and field management to enhance their knowledge of crop production while some will be trained in product development processing. These measures would not only enable the tea growers to meet the growing demand for products sourced from sustainable and responsible farming, but also improve the yields and productivity on their lands. Specifically, the beneficiaries include: - local government units of Mountain Province - MPSPC - Indigenous Peoples of Mountain Province - Micro Small and Medium Enterprises (MSME's) - DENR- PENRO	01-Dec-23	31-May-26	ONGOING	4,410,873	396,828
	Production of bamboo pellets for sustainable and alternative source of energy using commercial bamboo species in the Philippines	Rapid, inclusive and sustained economic growth	General Objective: To develop biomass pellets from economically relevant bamboo species in the Philippines (Dayag, kawayan tinik, kawayan kiling, bolo, buho and giant bamboo) with improved characteristics using torrefaction pretreatment for commercial application Specific Objective: To determine the effect of torrefaction/pyrolysis temperature (240°C, 280°C, 320°C) and the residence time to the chlorine and sulfur content of bamboo pellets; To determine the effect of residence time (30 min, 60 min, 90 min) to the chlorine and sulfur content of biomass pellets; To optimize the process conditions to determine the lowest temperature and the shortest residence time that can reduce the Cl and S contents of each bamboo pellets to meet existing wood pellet standards; To produce and characterize bamboo pellets from optimized torrefied samples; To conduct market validation with CS First Green Agri-Industrial Development, Inc. for piloting and possible commercialization; To assess the economic/financial viability of bamboo pellet production in the Philippines	Publication: Year 13 local publications 1 poster Year 2 3 local publications 1 poster 1 press release Patents Year 11 copyright filed Year 21 utility model filed Product: Year 16 bamboo pellet products (one for each species) Year 26 processes of optimized production of bamboo pellets (one for each species) People Services Year 15 student/on the job trainees Year 25 CS First Green AID personnel to be trained through a workshop Places and Partnership Year 11 partnership with a university (Laguna State Polytechnic University) Year 21 partnership with a private company (CS First Green AID)	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	The target beneficiaries of the project are industry partners especially bamboo industries, policy makers, government institutions, and biomass and renewable energy sectors.	01-Mar-23	31-Aug-25	COMPLETED	4,606,324	704,252
	Prospecting Natural Insecticides and Preservatives: Phytochemical Analysis, Insecticidal Activity and Preservative Potential of Extracts from Tropical Trees and Weedy Plant Species Against Powder Post Beetles (Dinoderus minutus Fabricius)	Rapid, inclusive and sustained economic growth	General Objective: This project aims to explore the potential of plant extracts from some tropical trees and weedy plant species for insecticidal action against PPB and possible preservative properties. Specific Objectives: To determine the bio-efficacy of extracts from leaves or other plant parts of selected tropical trees and weedy plant species. To characterize the phytochemicals from the extracts of selected tropical trees and weedy plant species for their potential insecticidal properties against PPB; To compare the potential of the effective plant extract(s) against PPB in vivo as bamboo preservatives. To examine the effectiveness of the formulations that show insecticidal and/or preservative properties in the field; To differentiate the metabolic profiles of the most effective extracts against PPB; To determine the stability of the formulated insecticides and/or preservatives developed; and To analyze the cost-benefits in producing the natural insecticide(s) or preservative(s) of bamboo against PPB	Publication: Year 1: 1 article submitted Year 2: 1 article submitted Year 3: 1 article submitted; 5 IEC materials regarding natural preservative Patent: By Year 3A, there should be at least 1 submitted utility model application (i.e., an effective plant extract as insecticide against PPB and/or as preservative) Product: In Year 1: Plant samples of 9 tropical trees and weedy plant species collected from around CMU and/or from farmers' areas with their permission and consent; Plant extracts with potential insecticidal activity against PPB; At least 50 individuals of reared PPBs Year 2: Data on bioefficacy of plant extracts; plant extract with insecticidal action against PPB screened for phytochemicals; 2 plant extracts tested for efficacy in vivo by partner local industry sector Year 3: 1 effective formulation of plant extract with high potential as insecticides and/or preservatives; 1 metabolomic profile of plant extract with effective insecticidal activity and/or preservative capability; 1 plant insecticide/preservative product subjected to stability testing People: In year 1, 5 students mentored. In year 2, 5 students mentored. In year 3, 5 students mentored. Place and Partnership: In year 1, 1 MOA forged with a local bamboo processing industry (Homebiz crafts in Iligan)	Central Mindanao University (CMU)	Researchers, students, bamboo products manufacturers (and consumers of bamboo products), LGUs of communities with the local bamboo industry. Any sexual orientation and gender identity will not hinder the involvement of the interested participants and beneficiaries of the project.	16-Jul-24	15-Jul-27	ONGOING	5,000,000	1,105,120

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Quality Assessment of Bamboo fibers from two economically important bamboo species for textile production	Rapid, inclusive and sustained economic growth	General: To assess the quality of bamboo fibers for textile production from the established Kawayan tinik (Bambusa blumeana Schultes) and giant bamboo (Dendrocalamus asper (Schultes) f. Backer ex Heyne) stands. Specific Objectives 1. To evaluate the influence of age and morphological sections (top, middle, bottom) of D. asper and B. blumeana on the bamboo textile fiber; 2. To establish the technical viability of bamboo textile fiber (BTF) properties from D. asper and B. blumeana; and 3. To determine the economic potential of bamboo textile fiber (BTF) from D. asper and B. blumeana.	Publication/Two (2) peer-reviewed technical papers Patents/IP One (1) IP/Utility model Products: Year 1/300 bamboo seedlings produced/Established bamboo plantation for D. asper and B. blumeana Year 2/Information on fiber yield of the 6 mos old D. asper and B. blumeana * At least 10 kilograms of fiber extracted/Information on fiber yield of 1 yr old D. asper and B. blumeana * At least 10 kilograms of fiber extracted/Year 3/Information on fiber yield of 1.5 yr old D. asper and B. blumeana * At least 10 kilograms of bamboo fiber extracted/Information on fiber yield of 2 yr old D. asper and B. blumeana * At least 10 kilograms of bamboo fiber extracted/Data on fiber and yarn properties of D. asper and B. blumeana People: At least 10 students/ Staff trained in bamboo fiber extraction technology Partnership: From D. asper and B. blumeana.	Central Mindanao University (CMU)	Farmers/farming communities Fiber Producers Garment manufacturers General Public Fashion design industry Government employees	16-Jan-23	15-Jan-26	ONGOING	5,000,000	1,629,799
	Real-time Carbon Flux Monitoring in Mangrove, Natural, and Plantation Forests in Mindanao, Philippines: An Eddy Covariance Approach	Rapid, inclusive and sustained economic growth	General This project aims to quantify the ecosystem-level carbon fluxes (sequestration and emission) from various forest ecosystems using the Eddy Covariance System that will serve as a reference point in any carbon-related inventories required by the Intergovernmental Panel on Climate Change (IPCC) and other worldwide carbon monitoring entities. It will also develop prediction models that capture the major controls on forest ecosystem functions through in-depth monitoring of the ecosystem-level carbon and hydrologic processes and extrapolate biogeochemical consequences across the three forest ecosystems (mangrove, plantation, and natural forests) in Mindanao. Specific 1. Quantify the carbon sequestration and emission potentials of three forest ecosystems (mangrove, plantation, and natural forests) using the eddy covariance system; 2. Determine the status of these forests as sources or sinks of carbon; 3. Determine the patterns and trends on ecosystem-level carbon cycling as affected by climate change and other ecological and anthropogenic disturbances;	Publications Prepare at least (3) manuscripts for publication to ISI/Scopus indexed journals Two manual guides prepared: 1. Manual guide for eddy covariance establishment 2. Manual for using the carbon-climate models Patents/IP - Submit at least one (1) IP protection (Copyright, Patent, etc) Products - One (1) portable tower (to be moved 3x in plantation, natural and mangrove forests) - Three (3) vegetative monitoring plots (plantation, natural, and mangrove) - One (1) database of carbon fluxes, climate data and supplemental vegetation data - One (1) GIS-based carbon storage map (with 500 copies for circulation) - One (1) website developed containing user-friendly online tools and information on carbon assessment in the Philippines People Services - Hire people (at least 2) 1 research assistant and 1 GIS and webpage developer - Train at least three (6) graduate students (5 MS and 1 PhD) - Training on carbon measurement, IEC drive on the importance of the project and project promotion (50 pax per event) x 5 events. These include: 1. Training on Eddy Covariance System 2. Seminar on Atmospheric and soil carbon measurements 3. IEC drive on promoting the enhancement of carbon sequestration potentials of forest ecosystems 4. Seminar on carbon storage mapping 5. Launching of Philflux Carbon Monitoring Website Places and Partnerships	DENR-Ecosystems Research and Development Bureau (DENR-ERDB)	Beneficiaries:1. Policy Makers/LGU leaders/Climate Change Commission (Can be provided with policy recommendation and decision support tools to enhance major forest ecosystems' carbon sequestration potentials). Results will aid in determining appropriate management intervention and measures to ensure a continuous flow of carbon data as NDC for UNFCCC and other carbon treaties. These beneficiaries can also be provided with updated and accurate National GHG inventory data)2. Researchers, Academe, local community (can be provided with publications, maps, a website with online tools, carbon data/information, and capacity building activities)3. Graduate Students/Young researchers (Mentorship and training, hired as research analysts)4. Carbon traders/investors (carbon data needed for negotiations, others)	01-Jul-24	30-Jun-27	ONGOING	13,971,917	1,065,966
	Rehabilitation and Streambank Stabilization of Catubig River Through Vegetation Engineering Systems Using Bamboo, Nipa, Annona glabra (pond apple), and Mangrove	Integrity of the environment and climate change adaptation and mitigation	General Objective: This project aims to rehabilitate Catubig River through vegetation engineering systems using bamboo, nipa, mangrove and Annona glabra that would ultimately transform the Catubig watershed into climate resilient watershed that can support sustainable development of the area, lessen the impact of climate-related disaster risk and support stable source of livelihood for the communities along the river system. The general objective is to assess the most effective bioengineering intervention to rehabilitate and stabilize the streambank of Catubig River. Specific Objective: To establish baseline data on the extent of streambank erosion and the biophysical characteristics of the different segment of Catubig river that will be under the rehabilitation and stabilization intervention; To determine the best practices for the establishments of mangrove, nipa, bamboo and Annona glabra (pond almond) through vegetation engineering systems to control erosion along the different segment of Catubig River systems; To quantify the environmental benefits of using mangrove, nipa, bamboo and Annona glabra through vegetation engineering systems in controlling streambank erosion and rehabilitation Catubig River.	Publications Year 1: 1 brochure and 2 press releases/articles about the project Year 2: 2 promotional materials published; 2 articles published (Data base on streambank status and impact different plantbase bioengineering strategies in stabilizing riverbanks and erosion prevention) Year 3: 1 paper for presentation in a seminar or symposium; 2 technical papers for publication in refereed journals; Manual on Bioengineering Protocol on Streambank Rehabilitation and Stabilization using the species used in the project and Training Manual on Nursery Establishment and Planting of the species used in the project Patents Year 3: 1 Patent for Bioengineering Protocol using bamboo, nipa, Annona glabra and mangrove; 1 Copyright of the Manual Published on Bioengineering using bamboo, nipa, Annona glabra and mangrove) Products Year 1: 3 temporary nurseries in strategic sites of the project established ; Established an equivalent of at least 2 hectares of bamboo, nipa, Annona glabra and pagatpat planted along the streambank of the river Year 2: 1Hard Copy of the Training Manual on the Establishment of Nursery for bamboo, nipa, Annona glabra and mangrove Year 3: 1Hard Copy of the Manual on Bioengineering Protocol on Streambank Rehabilitation and Stabilization using bamboo, nipa, Annona glabra and mangrove; Copyrights of all publications and manuals, and patent for bioengineering protocol People and Services Year 1 : Thirty (30) farmers trained on bamboo, nipa, Annona glabra and mangrove propagation; Thirty (30) LGU agricultural technicians trained ; Twenty (20) faculty researchers trained on the use of GIS;	University of Eastern Philippines (UEP)	Clients Expected Outcome / Effects Of The Project Output Thirty (30) trained farmers on bamboo, nipa, Annona glabra, and mangrove propagation and its use on streambank stabilization to prevent erosion along the Catubig River, Thirty (30) trained LGU agricultural technicians, Three (3) municipalities of Northern Samar, namely, Las Navas, Catubig and Laang. Rehabilitation and streambank stabilization of Catubig River through vegetative engineering systems using nipa, bamboo, Annona glabra, and mangrove. At least one (1) farm area will be identified as site for field trials and rehabilitation.	01-Jan-23	31-Dec-25	COMPLETED	4,967,592	835,696
	Smart Cocoa Budwood Nursery and Greenhouse for Production of High-Quality Planting Materials	Rapid, inclusive and sustained economic growth	General Objective: To establish smart cacao budwood nursery and greenhouse for authentic NSIC and Criollo varieties and other promising accessions as resources for QPMs, genetic improvement and application of improved cacao-based agricultural systems. Specific Objective: To assess at the genomic level the purity of the putative true Criollo cacao types for the production of QPMs To determine the percentage of Criollo incorporated in NSIC varieties at the genomic level for cacao bean quality varietal improvement To develop and evaluate smart and precision agriculture technologies in budwood nursery and greenhouse for data acquisition, analysis, and monitoring To develop strategies for mass production of cacao quality seedling materials	Publications: At least 1 scientific paper At least 2 paper presentations in conferences related to cacao genomics and smart cacao budwood nursery and smart cacao greenhouse Leaflets, brochures on true criollos in the Philippines, smart cacao budwood nursery and smart cacao greenhouse Patent: Utility model for molecular identification of true Criollo At least 2 utility models/ patents for apps	University of Southern Mindanao (USM)	The beneficiaries of the project primarily include cacao breeders, cacao farmers, cacao plantation growers, nursery owners, cacao bean processors, cacao industry, consumers, and government agencies such as the Bureau of Plant Industry and DOST-PCAARRD for the product and technology.	01-Jan-23	30-Jun-26	ONGOING	24,176,623	4,417,958

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Survey, Propagation, and Conservation of Philippine Native Taxus Species (Taxus wallichiana Zucc.)	Rapid, inclusive and sustained economic growth	General: Protection, conservation, and sustainable management of Himalayan yew (Taxus wallichiana Zucc.). Specific: 1. Determine the availability and distribution of the T. wallichiana in the Philippines; 2. Identify the associated flora of T. wallichiana in the project sites; 3. Develop propagation protocol for the mass production of T. wallichiana; and 4. Empower people's organization (POs) that will advocate on the protection, conservation, and management of T. wallichiana Zucc.	Publication 3 technical articles submitted for publication At least 1 printed IEC material Patent IP filing for the procedure/process of vegetative propagation of Taxus Products 1 hedge garden People/Services 10 PO members learned basic inventory procedure At least 15 PO members trained on propagation of Taxus At least 20 men and women capacitated on the protection, conservation, & management of Taxus Places and Partnership At least 3 MOAs At least 2 wildlife Gratuitous Permits Policy 1 policy recommendation on collection and harvesting of Taxus Social Impact Awareness of the government and the communities on the status and uses of Taxus wallichiana Zucc. Active participation of local communities on the conservation, protection, and management of Taxus Economic Impact Potential source of livelihood for the local community (Phase 2- Product Development) once the distribution and propagation protocol were established.	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	Department of Environment and Natural Resources Offices (DENR) Local Government Units (LGUs) Local Communities / People Organizations (PO) State University and Colleges (SUCs) Research and Development Agencies Native tree Enthusiasts	01-Aug-24	31-Jul-26	ONGOING	4,989,064	1,419,015
Genomic Technologies for Improved Production of Penaeus monodon	Project 1. Validation of genetic markers associated with body weight in the tiger shrimp Penaeus monodon	Integrity of the environment and climate change adaptation and mitigation	General: The project aims to generate genomic resources and identify putative molecular markers to enable genetic improvement of milkfish broodstock. Specific: 1. Profile gene expression associated with growth performance of hatchery-produced juveniles; 2. In-silico discovery of genetic variants putatively associated with growth performance of hatchery-produced juveniles; 3. Identify molecular markers for growth performance from transcriptome and genome sequence data.	Publication 1 scientific paper published in an international refereed journal Patent/Intellectual Property intellectual property application on genotypic markers for P. monodon body weight Product A set of genotypic markers for P. monodon body weight People Service Training of 1 MS student Place and Partnership Partnership with 1 P. monodon farm operator	University of the Philippines Diliman (UPD)	The direct target beneficiaries of the project are P. monodon farm operators who will be enabled by the genotyping technology to increase their production through selection and use of genetically higher-quality broodstock. The whole P. monodon-based industry (fisheries, aquaculture, processing, export) also stands to benefit from the increased production of the farms.	16-Sep-23	31-Dec-25	COMPLETED	8,440,919	2,428,650
Genomic Technologies for Improved Production of Penaeus monodon	Project 2. Targeting Essential Genes Utilizing RNA Interference to mitigate WSSV in Tiger shrimp	Integrity of the environment and climate change adaptation and mitigation	General: Develop an RNAi-based technology to prevent the expression of target genes in the WSSV genome to abrogate the ability of the virus to multiply and cause disease in P. monodon. Specific: 1. Identify at least 3 target genes with therapeutic potential for laboratory testing 2. Develop a DNA-based vector method for a more effective production of large amounts of dsRNA that targets specific genes of interest 3. Evaluate the efficacy of dsRNA-mediated gene silencing by rt-PCR 4. Test the efficiency of in vivo produced dsRNAs on shrimps challenged with White Spot Syndrome Virus (WSSV)	Publication 2 publications in an international- refereed journal 1-IEC material 1-Manual for dsRNA production Place and partnership MOA with MSU-IT People and Services 3 Undergraduate and 2 Graduate students supported Product/Process Low-cost dsRNA production system	University of Santo Tomas (UST)	Shrimp farmers, Biotech Laboratories, Aquaculture industry, Research students, Academic	16-Sep-23	15-Mar-26	ONGOING	8,475,864	1,325,888
S&T Intervention towards Conservation and Management of the Endemic Cyprinids of Lake Lanao	Project 6. Sociocultural and Economic Dimension of Resource Conservation and Management of Endemic Cyprinids in Lake Lanao	Rapid, inclusive and sustained economic growth	General: This project aims to assess the interplay among environmental, sociocultural, and economic factors in the conservation and management of endemic cyprinids in Lake Lanao. Specific: 1. Undertake environmental scanning of the Lake Lanao communities applying the PESTLE (Political, Economic, Social, Technological, Legal, and Environmental) analysis; 2. Determine the SWOT (strengths, weaknesses, opportunities, and threats) facing the Lake Lanao Biodiversity, particularly the endemic cyprinids; 3. Develop and recommend appropriate policies and strategies towards the sustainable management of cyprinids in Lake Lanao. 4. Conduct IEC activities to strengthen the understanding of the stakeholders in the conservation and management efforts for endemic cyprinids. S. Craft management plan on endemic cyprinids for adoption by the concerned LGUs.	Publications 3 research papers for publication in refereed journals can be generated from this project; 2 policy brief and IEC materials/tracts on endemic cyprinids; 1 set of brochures; 1 Monograph on the socio-cultural practices of communities towards the management of Cyprinids. Patent/Intellectual Property 3 Copyright for IEC materials on endemic cyprinids. Modules, brochures. Product 1 set of Survey questionnaires : 1 Module on the conservation and management of endemic cyprinids of preserving endemic species.; 1 Community-based conservation and management Frameworks; Places and Partnership 1 MOA/MOU with; Provincial Government of Marawi City and 11 Local Government Units of Lanao del Sur; 1 MOA/MOU with MENRE; 1 MOA/MOU with MAMAR; 1 provincial LGU resolution ordinance towards the conservation and management of endemic cyprinids People Services 5 undergraduate students trained on the conduct of field work and data analysis; 1 forum to be conducted; Policy 1 Policy Brief; 1 Policy recommendation 1 Conservation and Management Plan	Mindanao State University - Marawi (MSU Main)	Mindanao State University, Marawi Campus2. Researchers/Conservation experts3. Policymakers4. Local communities, particularly the lakeshore communities5. Provincial and Local Government of Unit Lanao del Sur 6. Government and non-government agencies.	01-Mar-25	28-Feb-27	ONGOING	5,000,000	2,737,020
Accelerated Acclimation and Optimum Transport for Maximum Production of SPIN Tilapia (AACT-SPIN)		Poverty reduction and empowerment of the poor and vulnerable	General: This project aims to develop rapid acclimation and efficient high-density long-distance transport protocols for SPIN tilapia. Specific: 1. Develop optimized rapid acclimation protocols in the hatchery from freshwater to seawater for SPIN tilapia; 2. Optimize transport conditions in a closed-bag transport system for SPIN tilapia; and 3. Validate the cost-effectiveness of the developed rapid acclimation protocols and the optimized transport system.	Publication One (1) research article submitted in a peer-reviewed journal on the rapid acclimation for SPIN tilapia One (1) research article published in a peer-reviewed journal on the rapid acclimation and efficient high density long distance in a closed bag transport for SPIN tilapia Published manual on the rapid acclimation in high density culture Drafted manual on efficient high density long distance closed-bag transport protocols for SPIN tilapia Patent/IP One (1) intellectual property application will be submitted about rapid acclimation protocol for SPIN tilapia One (1) intellectual property application will be submitted about efficient high density long distance closed-bag transport protocol for SPIN tilapia Products Rapid acclimation protocol for SPIN tilapia High density long distance closed bag transport protocol for SPIN tilapia People	Zamboanga State College of Marine Sciences and Technology (ZSCMST)	Fishpond and cage owners in Zamboanga Peninsula	01-May-25	30-Apr-27	ONGOING	4,988,604	3,566,088

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	An investigation of biological and exogenous cues towards the upgrading of harvest efficiency and spatfall prediction of green mussel <i>Perna viridis</i> (CUE5-Musell)	Poverty reduction and empowerment of the poor and vulnerable	General: To enhance the production of mussel culture through the identification of factors influencing the meat quality and spatfall leading to the identification of ideal harvest period and spatfall patterns. Specific: 1. Determine the correlation between the condition index of green mussels to exogenous factors such as moon phases, water biological and physico-chemical factors. 2. Determine the correlation between the spatfall patterns to exogenous factors such as moon phases, water biological and physico-chemical factors. 3. Develop a strategy on the proper timing of harvesting green mussel to attain larger and better meat quality. 4. Determine the cost-benefit analysis of the recommended strategies.	Publications 1 Journal article drafted for submission to IS/Scopus indexed journal 2 technical papers presented in scientific conferences. Patents 1 IEC material submitted for copyright. People and Services 3 BS Students, 1 MS Student, 5 partners trained in data collection and analysis, 2 faculty mentees Places and Partnerships 4 MOU/MOA (with BFAR X, VI, LGU of Camiguin and Sapi-an Capiz, 2 Higher educational institution) Policy Recommendation Policy recommendation on mussel harvest and culture	Mindanao State University - Naawan (MSU Naawan)	Men and women mussel producers, Men and women Processors, LGUs, communities, fisherfolks, people's organization, students, researchers, national line agencies, academe, private sectors	01-Oct-24	30-Sep-26	ONGOING	4,999,702	2,308,536
	Antimicrobial resistance (AMR) in tilapia production environments and associated important piscine bacterial pathogens in the Philippines	Poverty reduction and empowerment of the poor and vulnerable	General: This project aims to evaluate the antibiotics use and residues in tilapia farms in the development of antimicrobial resistance among bacterial pathogens as mediated by various antibiotic resistance factors. Specific: 1. Determine and evaluate the different antibiotic residues and the associated piscine bacterial pathogens in tilapia production areas. 2. Determine the presence and expression of antibiotic resistance factors in tilapia, associated pathogens and tilapia production areas. 3. Evaluate drug resistance spectrum (drug resistance rate, multidrug resistance index, and drug resistance spectrum richness) of the bacterial pathogens.	Publication: One (1) Scientific Poster/ Oral Presentation One (1) Draft Scientific Journal Publication Two (2) Draft Scientific Journal Publications One (1) Protocol Manual on Rapid Detection of presence of Antibiotic Residues in Tilapia One (1) Protocol Manual for Metagenomic Analysis for Rapid Detection of Antibiotic Resistance Genes (ARGs) in Tilapia Patent: One (1) Utility model on Rapid Detection of presence of Antibiotic Residues in Tilapia Product One (1) Protocol on Rapid Detection of presence of Antibiotic Residues in Tilapia One (1) Protocol for Metagenomic Analysis for Rapid Detection of Antibiotic Resistance Genes (ARGs) in Tilapia People: At least 2 Graduate Students (1 PhD, 1 MSc), and 2 Undergraduate Students supported at least 2 Research Staff trained Place: One (1) MOA with National Fisheries Research and Development Institute (NFRDI) 4 Fisheries Biotechnology Center (FBC) and Brackishwater Fisheries Research and Development Center (BRRC) One (1) MOU with University of Siring Policy: One (1) Draft policy recommendation on the proper use of antibiotics, and detection of antibiotic resistance in fish production especially in tilapia aquaculture in the Philippines	Iloilo Science and Technology University (ISAT-U)	Aquaculture industry Fish consumers Male and Female Researchers Academe Health sector	01-Oct-24	30-Sep-27	ONGOING	8,995,676	1,242,599
	Assessment of Invasive Exotic Fish in Laguna de Bay	Rapid, inclusive and sustained economic growth	General: Produce an Atlas of invasive exotic fish in Laguna de Bay including their potential impact on their novel ecosystem. Specific: 1. Assess spatio-temporal distribution and habitat preference of invasive exotic fish in Laguna de Bay. 2. Evaluate prey item abundance and composition of invasive exotic fish in Laguna de Bay. 3. Determine reproductive parameters of invasive exotic fish in Laguna de Bay. 4. Conduct a mapping of invasive exotic fish in Laguna de Bay. 5. Assess the basic biology of invasive exotic fish in Laguna de Bay including their potential impact on their novel ecosystem.	Publication: 2 draft ISI journal article submitted for publication 1 IEC material (poster) Patent: N/A Product: Map of species distribution People: 2 Undergraduate Thesis Student Training/Workshop of Researchers/Place: 1 potential MOA/MOU with LLDA and BFAR Policy: Policy recommendation for management of alien invasive fish.	University of the Philippines Los Baños (UPLB)	Primary beneficiary of this project will be the fisherfolks relying on fish catch from Laguna de Bay for their source of income. Conservation efforts for endemic fish species of Laguna de Bay will benefit from more information on the potential threats posed by the presence of alien invasive aquatic species.	01-Aug-24	31-Jul-26	ONGOING	5,000,000	940,963
	Development of Natural Hatcheries for Green Mussel, <i>Perna viridis</i> , in Tagabuli Bay, Davao del Sur: A Model for Sustainable Production of Green Mussel	Poverty reduction and empowerment of the poor and vulnerable	General: Develop natural seedbeds/hatcheries for sustainable production of green mussel in Tagabuli Bay, Sta Cruz, Davao del Sur. Specific: 1. Determine potential areas in Tagabuli Bay for the enhancement of green mussel seedbeds; 2. Evaluate the performance of the natural hatchery in identified sites; 3. Develop a model for seedbed enhancement of green mussel in non-traditional culture areas.	Publications 2 paper presentation; 2 draft journal articles for submission; 2 paper presentation; At least one (1) IEC material (brochure/ pamphlet) on the results of the project. Patents 1 IEC material on the development of natural hatcheries copyright Products 1 Protocol for the enhancement of natural hatcheries for green mussels in non-traditional sites; Increase broodstock 200% People and Services 100 Local fisherfolk (both men and women), 2 graduate students, 3 Undergraduate students Places and Partnerships 2 MOU with BFAR Region; XI, LGU and Davao del Sur State College Policy Recommendation 1 Policy recommendation for harvesting and transport of green mussels and no take zone in natural hatchery sites	Mindanao State University - Naawan (MSU Naawan)	Bureau of Fisheries and Aquatic Resources (BFAR)-Region XI and Provincial Fisheries Office - Digos City Davao del Sur (Assist in the survey and site selection and implementation) Municipal Agriculturist Office, Municipality of Sta Cruz, Davao del Sur (Assist in the survey and site selection, assist in the acquisition of required documents and implementation)	01-Oct-24	30-Sep-26	ONGOING	4,999,304	2,427,297
	Development of protein and lipid-rich feed supplements from agro-industrial wastes by oleaginous yeast fermentation	Rapid, inclusive and sustained economic growth	General: To investigate the potential of the yeast <i>Rhodotorula</i> spp. as aquaculture feed supplement and potential alternative to fish meal and fish oil. Specific: 1. To evaluate the use of various agro-industrial wastes as substrates for the cultivation of oleaginous <i>Rhodotorula</i> spp. yeast strain based on biomass productivity and lipid yield, and to assess the nutritional quality of the yeast and extracted oil. 2. To investigate the use of anionic surfactants for enhancing extracellular oil secretion from oleaginous yeast and to monitor the activity of key lipogenic enzymes during fermentation (in collaboration with the University of Osaka). 3. To do tailoring of fatty acids suitable for aquaculture requirement through culture parameters manipulation or genetic engineering (in collaboration with the University of Osaka). 4. To develop aquaculture feeds incorporating whole yeast biomass and/or microbial oils to replace conventional fish meal and fish oil, and evaluate its nutritional profile. 5. To conduct in vivo digestibility assessments and/or toxicity testing of the prepared yeast-derived feed. 6. To conduct small-scale feeding trials to evaluate the effects of yeast-based feeds on growth performance, health, and nutrient utilization in target aquaculture species; and 7. To conduct a simple cost return analysis on the production of aquafeed incorporated with whole yeast biomass and/or microbial oil.	6PYear 1Year 2PublicationOne (1) scientific paper pertaining the oleaginous yeast biomass productionOne (1) IEC Material (News or Feature Article)One (1) scientific paper pertaining the oleaginous yeast biomass utilization as aquafeed ingredientPatent/Intellectual PropertyOne (1) Utility model for the <i>Rhodotorula</i> biomass productionOne (1) Utility model for aquafeed formulation using <i>Rhodotorula</i> sp. biomass as an alternative to fish meal/ fish oilProductNoneOne (1) <i>Rhodotorula</i> sp. biomass as an aquafeed ingredient alternative to fish meal/ fish oilOne (1) Formulated aquafeed utilizing <i>Rhodotorula</i> sp. biomass as an aquafeed ingredient alternative to fish meal/ fish oilPeopleServiceTwo (2) MS and one (1) PhD graduate student supported Two (2) trained and mentored research assistantsPlace and PartnershipOne (1) MOA with the University of Osaka	University of the Philippines Los Baños (UPLB)	1. Aquaculture farmers2. Aquafeeds manufacturers3. Academic community (faculty, researchers and students)	01-Sep-25	31-Aug-27	ONGOING	4,979,404	3,073,261
	Enhancement of captive <i>Scylla serrata</i> broodstock performance through optimization of light conditions and application of nanobubble oxygenation	Rapid, inclusive and sustained economic growth	General: Evaluate the effect of light intensity, spectrum, and nanobubble oxygenation in RAS holding system for <i>S. serrata</i> broodstock management. Specific Objective: 1. Evaluate the effect of nanobubble oxygenation on the reproductive performance of <i>S. serrata</i> broodstock. To evaluate the effects of light intensities on the reproductive performance of <i>S. serrata</i> 2. Evaluate the effect of various light spectra on the reproductive performance of <i>S. serrata</i> . To analyze the economic feasibility of the RAS set-up with optimum light conditions and nanobubble oxygenation.	Publication: Year 1: 1 Paper presented at local conference Year 2: 2 Papers submitted for publication in peer-reviewed indexed journals; 2 Papers presented at local/international conferencesPatent: Year 2: 1 Patent Application for improved broodstock protocol using RAS with optimum light conditions and nanobubble oxygenation; 1 Patent application for improved RAS designProduct: Year 1: 2 New RAS set-ups; 1 Modified RAS set-up; 1 Extended Broodstock Facility; Preliminary results on light conditions experiment Year 2: Technology on the use of RAS with optimum light conditions and nanobubble oxygenation; Quality mangrove crab broodstock; Improved protocol on the use of light intensity, spectrum, and nanobubble; Integrated RAS system design with optimum light conditions and nanobubble oxygenationPeople: Year 1: 1 MS Student assisted; 2 Technical staff trained Year 2: 2 MS Students assisted; 3 Technical Staff trainedPlaces and Partnership: 3 MOAs with USTP-Panapan, ISDA, and with mangrove crab growers	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	This project will be beneficial to the following: Aquaculture practitioners (hatchery operators, farmers, etc) Academe including students Researchers/Scientists Government agencies Businessmen and potential investors	01-Feb-25	31-Jan-27	ONGOING	4,998,136	3,198,512

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Enhancing Conservation of Native Catfish (Clarias macrocephalus) in Palawan Through Selective Breeding and Sustainable Propagation	Poverty reduction and empowerment of the poor and vulnerable	General: The primary goal of this conservation project is to maintain future broodstocks to produce substantial native catfish seedstock for native catfish aquaculture industry. Specific: 1. Identify and document the characteristics of native catfish breeders in Palawan. 2. Conserve the native catfish population in Palawan through broodstock development. 3. Produce substantial numbers of seedstock for the development of the native catfish aquaculture industry.	6PYear 1Year 2Publication1 project logo1 documentary/promotional video for native catfish fingerling production2 IEC materials (flyers) for native catfish production1 research publication submitted to reputable journal/Patent/FP1 trademark for project logo1 copyright for the protocol on native catfish development and productionProducts1,000 pcs. Selected C. macrocephalus first filial generation (F1) to be used for broodstock development and selection100,000 pcs. of 2 inches native catfish fingerlings1 hatchery production protocol for native catfish production1 nursery-grow out production protocol for native catfish production People Services30 participants – Awareness Seminar or promotional activity for native catfish production2 staff trained on native catfish production1 training for staff conducted or participated in30 participants for training of beneficiaries conducted10 LGU or farmers and Fisherfolks Cooperatives and Associations (FCAs) beneficiaries trained for field testing of native catfish1 MS Fisheries support/Places & Partnerships1 MOA with LGU of Aborlan, Palawan1 MOA with LGU of Quezon, Palawan2 MOAs with collaborator/partner organization/fisherfolk cooperatives and associations (FCA/Policy1 policy recommendation for the conservation of native catfish in Aborlan and Quezon, Palawan1 draft municipal ordinance/resolutions for the conservation of native catfish in Aborlan and Quezon, Palawan for LGU approval	Western Philippines University (WPU)	The proposed project target beneficiaries and early adopters of the technology and products that will be produced will be the entities with existing or planned aquaculture initiatives specifically: Local government units with ongoing and/or planned aquaculture livelihood programs (i.e. Municipality of Rizal, Municipality of San Vicente, Municipality of Nara, and City of Puerto Princesa) Farmers and fisherfolks cooperatives and associations, A, A, Potential investors and individuals interested in farming the species but are not able to proceed due to the unavailability of seeds, A, Non-government Organizations with alternative livelihood programs related to aquaculture- (f)	01-Feb-25	31-Jan-27	ONGOING	5,000,000	3,294,292
	Enhancing the natural population of green mussel in Taguines Lagoon, Camiguin: A strategy for sustainable seedstock production for expansion of the mussel industry in Northern Mindanao	Poverty reduction and empowerment of the poor and vulnerable	General: To improve mussel production in Taguines Lagoon as source of seedstocks for expansion of mussel farming in Northern Mindanao Specific: 1. Increase the efficiency of spat collection and improve the green mussel the production in Taguines Lagoon 2. Evaluate the suitability of areas in Northern Mindanao for expansion of green mussel culture. 3. Assess the social acceptability of mussel cultivation in identified expansion area/s.	Publications 1 draft journal publication; 1 paper presentation Patents 1 IEC material on the efficient mussel culture in Camiguin (local dialect) copyright Products Increase Taguines Lagoon production from 7.8MT to 10MT People and Services 2 students (1 MS and 1 PhD student); 30 men and women trained in mussel collection and culture Places and Partnerships 3 MOUs with Lagoons Shellfish Production (PO), LGU Camiguin and BFAR Rg X Policy Recommendation 1 Policy recommendation on the expansion of mussel culture in Region X	Mindanao State University - Naawan (MSU-Naawan)	Lagoons Seashells Production (Mussel Farmer's Association) C* primary collaborators in Camiguin LGU of Camiguin C* collaborator in the trial sites and primary adopter of the project LGU (e.g. Mercelagos, and Lanao) C* collaborators in the trial sites	01-Oct-24	30-Sep-26	ONGOING	4,999,928	2,440,750
	Field testing of hatchery and nursery production and development of broodstock transport protocols for the native catfish Clarias macrocephalus	Rapid, inclusive and sustained economic growth	General: To field test native catfish fry or juvenile production and its economic analyses. Specific: 1. Develop techniques in transporting native catfish spawners or pre-spawners through air or sea travel, acclimatizing them at destination sites (Pangasinan, Aklan and Iloilo); 2. Produce pure C. macrocephalus fry or juveniles and conduct economic analysis of hatchery production; and 3. Evaluate the rearing performance of native catfish fry in the nursery.	Publication: total of 3 journal publicationsPatent: 1 patent applicationProduct: Hatchery, nursery and transportation protocolsPeople: 2 MS Place: Linkages with Pangasinan State University and Aklan State UniversityPolicy: 1 policy recommendation	University of the Philippines Visayas (UPV)	Freshwater fish farmers, aquaculture researchers, feed manufacturers	01-Oct-23	31-Mar-25	COMPLETED	4,986,924	870,620
	Gut metagenomics and transcriptomics for rapid development of single cell protein (SCP) alternatives to fish meal and probiotics for Chanos chanos	Integrity of the environment and climate change adaptation and mitigation	General: Fast-track the development of SCP-based aquafeed for the milkfish Chanos chanos using microorganisms from its gut and advances in metagenomics, transcriptomics, and information management to match potential microorganisms to available substrates. Specific Objectives 1. Identify SCP-production microorganisms from the gut of milkfish from different types of rearing areas from the metagenome and microbial databases; 2. Select substrates to test for SCP development based on primary and secondary data from (1) transcriptomes, (2) scraping information on the web relating microorganism, (3) available data on nutrient profiles of materials readily available at no cost, and (4) literature searches; 3. Develop protocols for SCP production for at least 5 best combinations of waste product substrates (e.g. banana peels, water hyacinth, bermuda grass, soybean okara, etc.) and microorganisms, and determine nutrient profiles and amino acid composition and efficiency of production; and 4. Test at least 3 SCP protein alternatives on milkfish fry comparing them to the performance of the alternative vs. standard commercial feeds.	Publication: At least 3 journal publications . Patent: At least on patent/ utility model for feed development protocolProduct: At least one novel feed prototypePeople: Two (2) MS students substantially advanced to the completion of their programPlace: Collaboration with industry in the process of protocol development - Capiz Aquaculture Producers Cooperative - Santech Feeds Corp.Policy: White paper on SCP development,	De La Salle University (DSU)	Fish farmers Aquaculture industry Feed development industries Down stream/ value chain players to the industry	01-Aug-23	31-Jul-26	ONGOING	14,341,580	2,173,378
	HATCH: Heat-Assisted Temperature Control and Monitoring System for Hatchery Management of Milkfish	Poverty reduction and empowerment of the poor and vulnerable	General: Maintain the optimum water quality in the milkfish broodstock tank using a heater and Recirculating Aquaculture System (RAS). Specific: 1. Develop and install a heat pump, electric heater, and recirculating aquaculture system (RAS) with automated water quality control and monitoring in the broodstock tank in NFDIC; 2. Verify the cost-effectiveness and reliability of the heat pump versus the electric heater in maintaining the water temperature of the broodstock tank; 3. Promote recirculating aquaculture system (RAS) with automated temperature control and monitoring in hatcheries.	Publication One (1) scientific paper for the design and development of the system; One (1) developed operations manual; One (1) set of IEC materials (panphlets/flyers about the functions, features, and specifications of the automated system) Patent/ Intellectual Property One (1) Utility Model registration for the equipment Product One (1) water quality control and monitoring system for hatchery People Service Two (2) trained personnel to operate and maintain the system Place and Partnership One (1) MOA with DA-NFRDI and BFAR-NFDIC	DOST-Metals Industry Research and Development Center (DOST-MIRDC)	Aquaculture industry in the Philippines Consumers of milkfish Metals, Engineering and Allied Industry involved in aquaculture	01-Jan-24	31-Dec-25	COMPLETED	5,000,000	1,170,820
	Improvement of Milkfish larval rearing and nursery culture through Gut Metagenome, transcriptome analysis and gut microbial community manipulations	Integrity of the environment and climate change adaptation and mitigation	General: This study will elucidate using metagenomic and transcriptome techniques, the microbiotic factors and their roles in the physiology of milkfish larvae and juveniles. These information will be used to design appropriate rearing protocols to enhance the hatchery productivity of milkfish. Specific: 1. Utilize a metagenomics approach to differentiate the gut microbiota of wild milkfish larvae vs hatchery raised milkfish larvae 2. Identify microorganisms that have beneficial activity such as toxin reduction, phytin reduction, fibre degradation, and boosting of the immune responses, etc. 3. Identify potential probiotic strains to improve health and/or quality of cultured milkfish larvae 4. Differentiate gene expression profiles involved in survival, growth and physiology between hatchery reared and wild milkfish fry and in relation to the gut microbiota composition. Genes, associated to gut metagenomic profile, and are linked to enhanced survival, growth and overall yield of milkfish larvae and juveniles will be identified.	Publication 1 IEC material 2 Journal Article 1 Protocol manual on basic metagenomic and transcriptome analysis for fish larvae Patent: 1 protocol for milkfish larvae gut metagenomic analysis 1 protocol for milkfish larvae transcriptome analysis 1 protocol for probiotic application on milkfish hatchery and nursery operation Product At least 2 probiotic products1 process of improving milkfish hatchery and nursery productivity by application of microbial manipulation techniques People At least 1 graduate student Places and Partnerships 1 industry and 1 academic partner PolicyNone	University of the Philippines Visayas (UPV)	Hatchery operators, nursery growers, milkfish growers.	01-Jul-22	30-Jun-26	ONGOING	21,035,101	1,227,058

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	ISDAAN ni SARAI - Integrated Systems for the Sustainable Development and Advancement of Aquaculture Nationwide	Rapid, inclusive and sustained economic growth	General:: To develop a monitoring system for the FLAs using the SARAI technologies. Specific: 1. Provide a system for monitoring the status of FLAs. 2. Validate the developed system in terms of yield estimates. 3. Capacitate partner agency/ies related to the developed monitoring system. 4. Formulate policy recommendations for monitoring of FLAs.	Publication: 1 publication in Scopus or WoS 1 manual of operations Patent/Intellectual Property: Copyright of manual/Product: Developed monitoring system ^A , Manual of operations High-resolution maps showing the spatial distribution and extent of aquaculture activities with FLA in region IV-AA, Data sets for the monitoring ^A , People Service: At least 1 graduate student is capacitated. Trained BFAR personnel (Region IV-A)Place and Partnership: MOU with DA-BFARPolicy: 1 draft policy brief related to monitoring of FLAs	University of the Philippines Los Baños (UPLB)	BFAR, DA-NFROD, Aquaculture sector	01-Oct-24	30-Sep-25	COMPLETED	5,000,000	1,609,062
	Local Probiotic Discovery, Development and Application to Improve the Hatchery Production of Freshwater and Saline-tolerant Tilapia	Poverty reduction and empowerment of the poor and vulnerable	General: This project intends to isolate, characterize and apply Lactic acid and Bacillus probiotics to prevent Aeromonas and Streptococci-associated mortalities of tilapia in the hatchery culture systems. Specific: 1. Isolate, identify, evaluate the probiotic activity and develop Lactic acid and Bacillus bacteria with long shelf life and inhibitory activity against Aeromonas hydrophila and Streptococci agalactiae, as a probiotic for tilapia in the hatchery rearing systems. 2. Optimize the application dose of the isolated probiotics to prevent bacterial infection in tilapia in the hatchery rearing systems. 3. Evaluate the physiological influence of the developed probiotics in terms of tilapia growth response, immunological activation, stress responses, feed conversion, gut metagenome, and body composition. 4. Develop a low-cost mass-production fermentation protocol for the developed probiotics.	Publication -At least 2 IEC materials (web-based article, etc.) -At least 2 paper presentations in conference (local and foreign) Patent/Intellectual Property -At least 1 IP protection filed for the improved MicroBead production Product/Process -One (1) established process of producing MicroBead probiotics using improved production protocol -One (1) refined and field-validated MicroBead probiotic product -One (1) documented farm-level MicroBead application protocol People Services -Engaged at least 5 students/researchers through thesis, internships, or project-based learning -Trained at least 5 tilapia farmer, farm technician, or farm operator on MicroBead application -Engaged at least 5 tilapia aquaculture stakeholders during technology pre-commercialization activities Places and Partnerships -Partnership Agreement with at least 1 farm owner as demo farm for MicroBead probiotic application -At least 1 demo farm site showcasing MicroBead probiotic application	University of the Philippines Visayas (UPV)	1. Local farmers engaged in aquaculture farming 2. LGUs and cooperatives 3. Feed manufacturers and compounders 4. Food industry 5. Academe	01-Jan-25	31-Dec-26	ONGOING	4,988,510	3,369,560
	Marker assisted selection of saline-tolerant Tilapia nilotica for enhanced growth and feed conversion efficiency	Poverty reduction and empowerment of the poor and vulnerable	General: This study will develop method to identify individuals that are fast growing and/or have better feed conversion efficiency using molecular markers Specific: 1. Identify molecular markers for fast growth available in tested strain 2. Identify molecular markers for improved feed conversion efficiency in tested strain 3. Multi-generational assessment of identified growth markers 4. Multi-generational assessment of identified improved feed conversion efficiency markers	PublicationsYear 1 -1- IEC material (pamphlet)Year 2 -	University of the Philippines Visayas (UPV)	Tilapia growers Fish cage culture operators Feed companies Consumers LGUs Entire Aquaculture industry A,	15-Jun-24	14-Jun-26	ONGOING	4,805,379	2,265,090
	Ma-Eye Fry Counter: An Innovative Machine Vision-based Precision Fry Counting Solution to Streamline Milkfish Fry Distribution	Rapid, inclusive and sustained economic growth	General: To improve the fry counting process in the local hatcheries through high-accuracy, fast counting, and cost-effective equipment utilizing machine vision and automation technologies. Specific: 1. Design and develop a machine vision-based milkfish fry counting equipment prototype to ease the operation of the hatchery. 2. Verify the effectiveness, reliability, and commercial viability of the machine vision technology in milkfish fry counting. 3. Promote the use of automated fry counters in hatcheries.	Publication: One (1) scientific paper for the design and development of the system; One (1) developed operations and maintenance manual; One (1) set of IEC materials (pamphlet/flyers about the functions, features, and specifications of the system)Patent: One (1) Utility Model registration for the equipmentProduct: One (1) Fry counter equipmentPeople: Five (5) trained personnel to operate and maintain the systemPlace: One (1) MOA with DA-NFROD, BFAR-NFDC, and UPVOne (1) MOA with Private Hatchery OperatorPolicy: None.	DOST-Metals Industry Research and Development Center (DOST-MIRDC)	Aquaculture industry in the Philippines; Milkfish hatchery operators and grow out farmers; System integrators and fabricator in the Metals, Engineering and Allied Industry involved in aquaculture.	01-Aug-24	31-Jan-26	ONGOING	5,000,000	1,732,831
	Molecular Detection of Pathogens in Mangrove Crab: A Step Towards Ensuring a Sustainable Mangrove Crab Aquaculture Industry	Rapid, inclusive and sustained economic growth	General: To detect pathogens of mangrove crab using conventional PCR as an early intervention in the management of the aquaculture industry of this species Specific: 1. To screen wild and cultured mangrove crab for the presence of the pathogens using conventional PCR 2. To optimize conventional PCR assays in the detection of pathogens in mangrove crab 3. To develop conventional PCR protocols in the molecular detection of mangrove crab pathogens suitable for resource-limited laboratories in the Philippines	Publications One (1) publishable research article for submission to reputable peer-reviewed scientific journal Patents/Intellectual Property At least two (2) conventional PCR protocols on molecular detection of common and emerging pathogens from mangrove crab Products At least two (2) primer sets that can be used for screening of common and emerging pathogens from mangrove crab People Services At least two (2) Fisheries/ Biology/ Environmental Science undergraduate or graduate students will be supported by the project Partnerships One (1) Memorandum of Agreement (MOA) with the Partner research institution and/or LGUs/BFAR Policy Policy/white paper to be submitted to BFAR on the importance of early detection of pathogens in mangrove crab as one of the approaches in health management	University of the Philippines Visayas (UPV)	Mangrove crab grow-out and hatchery operators A, C- Awareness of sending samples to the laboratories for routine diagnosis as part of the early intervention plan could mitigate future losses due to mortality by providing decision should the pathogen is detected in the facility Consumers A, C- The consuming will be assured of a healthy mangrove crab for consumption Aquaculture Researchers A, C- This underscores the importance of early detection of the diseases-causing pathogen and future researchers shall be crafted on prevention and treatment Fisheries extension workers A, C- The baseline information that they obtain from this study will be utilized in educating and creating awareness to the mangrove crab farmers on the importance of disease diagnostics on early intervention as part of the health management approaches in mangrove crab aquaculture Educators A, C- For those who are teaching Diseases of Aquatic Animals and Health Management, they incorporate in their lectures and laboratory activities the various techniques on molecular diagnostics and to create hands-on activities along that line, to better equip students on disease diagnostics. Policymakers A, C- This will provide data on drafting policy on routine diagnosis of infectious diseases particularly in the movement of live organisms within the	01-Apr-24	30-Sep-26	ONGOING	4,999,981	1,097,357
	Molecular Guided Techniques for Improvement of Reproduction Performance of Saline-Tolerant Tilapia	Poverty reduction and empowerment of the poor and vulnerable	General: To be able to breed saline-tolerant tilapia in brackishwater environment. Specific: 1. Evaluate and compare the reproduction-related gene expression levels of sexually mature saline-tolerant tilapia in brackishwater and freshwater through quantitative real-time PCR 2. Assess synthetic hormones for spawning induction of saline-tolerant tilapia in brackishwater environment 3. Compare the efficacy of different synthetic hormones for inducing the spawning of saline-tolerant tilapia in brackishwater environment 4. Evaluate the economic benefits of breeding saline-tolerant tilapia in brackishwater hatchery operation	Publication: at least two (2) publications in reputable/ISI journalPatent: At least one (1) IP of the protocol appliedProduct: at least one (1) protocol for spawning induction of saline tolerant tilapia in brackishwater environmentPeople: at least two (2) undergraduate and/or graduate students supported each yearPlace: one (1) terms of reference at the Philippine Genome Center Visayas in Miagao, IloiloPolicy: N/A	University of the Philippines Visayas (UPV)	Broodstock growers Hatcheries Consumers Tilapia industry Researchers	01-May-24	30-Apr-26	ONGOING	4,996,015	2,108,570

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Morpho-functional traits and eDNA metabarcoding of freshwater fishes and invertebrate communities in Panay Island	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>The project aims to strengthen the assessment, monitoring, and management framework and tools for the sustainable use and conservation of inland biodiversity in identified freshwater ecosystems in Panay Island.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Assess the current diversity of freshwater fishes and invertebrate communities on Panay Island in relation to the ecological health of their habitats 2. Construct a regional DNA barcode and trait library data base for the freshwater fishes and invertebrates of Panay Island 3. Improve standard biological monitoring methods by including phylogenetic and functional trait methods for freshwater bodies in Panay Island. Integrate project results in the drafting of policies and training of staff for LGUs to increase their capacity to assess monitor and manage inland water bodies and its biodiversity. 	<p>Publication: \checkmark Publication of at least two scientific articles in Web of Science or Scopus-indexed journals</p> <p>Patent: \checkmark Panay Freshwater DNA Reference Library</p> <p>\checkmark Panay Freshwater Biodiversity Reference Library</p> <p>Product: \checkmark A reference/protocol manual covering the protocols employed for biological monitoring of inland water bodies</p> <p>\checkmark Voucher specimens to be deposited in natural history museums</p> <p>People: \checkmark Training and mentoring of at least three students (one undergraduate and two graduate) and two research assistants</p> <p>\checkmark Capacity building of LGUs on watershed/inland waters assessment, management, and monitoring</p> <p>Place: Memorandum of Agreement (MOA) and/or Memorandum of Understanding (MOU) among the co-implementing agencies and local government units and other stakeholders (i.e. BFAR Region VI)</p> <p>Policy: Submission of at least one policy brief to LGUs and Provincial Governments</p>	University of the Philippines Visayas (UPV)	The project aims to help local government units, researchers, students, and other stakeholders in learning about better management and conservation of watersheds through integrated monitoring and assessment of terrestrial and aquatic biodiversity.	01-May-24	30-Apr-26	ONGOING	5,000,000	1,585,316
	Mycos Feeds for Freshwater and Saline Tilapia culture	Integrity of the environment and climate change adaptation and mitigation	<p>General: The general objective of this project is to develop a mycofeed using <i>Volvariella volucae</i> for freshwater and saline tilapia culture.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Evaluate the feed value of <i>Volvariella volucae</i> in freshwater and saline tilapia. 2. Develop a formulated diet for freshwater and saline tilapia containing optimized amounts of <i>Volvariella volucae</i> as a feed ingredient. 3. Evaluate the biochemical composition and sensory quality/acceptability of freshwater and saline tilapia fed with diets containing <i>Volvariella volucae</i>. 4. Assess the cost benefit analysis of using mycofeed as feed ingredient in the culture of tilapia. 	<p>Publications</p> <p>At least two (2) publications in reputable / ISI journals</p> <p>Product</p> <p>MycoFeed formulation with ingredient from macro fungi for freshwater and saline tilapia</p> <p>Patent</p> <p>One patent application of the developed MycoFeed</p> <p>People Services</p> <p>At least 2 MS students supported</p> <p>Places and Partnership</p> <p>MOU: Capiz State University and private sector (tilapia farm)</p> <p>Economic Impacts</p> <ol style="list-style-type: none"> 1. Develop another economic industry that produces myco meal for aquaculture feed use. 2. Increase economic gain in aquaculture production due to the lowering of feed cost. 3. Increase in the production (expansion) and creation of more jobs in aquaculture as an indirect effect of the lowering of the economic cost of the activity. <p>Social Impacts</p> <ol style="list-style-type: none"> 1. Develop attitude to utilize myco meal as an ingredient for tilapia feed. 	University of the Philippines Visayas (UPV)	Fishermen/traders/ feed industry; researchers/scientists, the general public and science in general	01-Jul-23	31-Dec-25	COMPLETED	4,999,997	1,194,999
	Pilot scale production of bioactive protein and lipid products from mussels	Rapid, inclusive and sustained economic growth	<p>General: The main objective of this study is to optimize the pilot-scale production of safe and high-quality mussel protein powder capsule and lipid softgel</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Verify the technology for the isolation and production of the developed bioactive products from mussel 2. Evaluate the quality and safety of the products through in-vivo and toxicity tests and allergen and heavy metal content analysis 3. Customize specifications of pilot scale equipment for fabrication and evaluate its functionality and efficiency 4. Develop protocols for the pilot scale production of mussel bioactive protein powder and lipid; and, determine the economic feasibility of the developed products 	<p>Publication</p> <p>1 draft manual on pilot scale production of mussel bioactive protein and lipid products</p> <p>Patents</p> <ol style="list-style-type: none"> 1 (Scaled Up design and process flow); 1 UM application (Optimized production protocol); 1 (copyright production manual); 1 trademark <p>Products:</p> <ol style="list-style-type: none"> 1 detailed market study; 1 prior art search report; 2 customized fabricated equipment; (supercritical fluid extraction machine, freeze dryer); 2 products (1 extracted bioactive protein and 1 extracted lipid in pilot scale production); 1 feasibility study/business plan; 1 consumer acceptability study; 2 production extraction protocol (1 bioactive protein and 1 bioactive lipid); <p>People and Services</p> <ol style="list-style-type: none"> 3 BS students supported; 2 trained research personnel; 3 BS students supported; <p>Places and Partnerships</p> <ol style="list-style-type: none"> 1 MOA with organization of mussel farmers (Cooperative in Roads) as source of raw materials 2 MOAs with ISUFST and CAPSU 1 upgraded laboratory 	University of the Philippines Visayas (UPV)	Both the mussel powder and the mussel oil can be sold as is in bulk packaging, or in the form of capsules and soft gels. The end products will be sold to pharmaceutical, nutraceutical, and food industry. Overall, the results of the project will be beneficial to the public consumers; mussel farmers, researchers, and food supplement industry partners. Mussel farmers' higher demand due to other applications aside from being food commodity. Biotech researchers - availability of optimized protocols for extraction and purification of bioactive peptides and lipids and their pilot scale production	16-Mar-24	15-Mar-26	ONGOING	12,975,300	1,482,576
	Pilot testing of the Integrated Multi-trophic Aquaculture (IMTA) Technology in Pond Systems to Enhance <i>Panaeus monodon</i> Production in Southern Philippines	Rapid, inclusive and sustained economic growth	<p>General: Pilot test the technology of Integrated Multi-trophic Aquaculture (IMTA) to enhance the commercial pond production of <i>P. monodon</i> in Southern Philippines</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Evaluate the economics of an IMTA system in <i>P. monodon</i> and verify its improvement in revenue and income by 5 to 10% on the farm level baseline pond production 2. Validate improvements in water and soil quality of an IMTA pond system 3. Refine IMTA technology towards intensive pond production 	<p>Publication:</p> <ol style="list-style-type: none"> 1 poster or paper presented in a scientific conference 1 bound BS thesis related to IMTA culture 1 paper submitted for publication 2 papers or posters presented in scientific conferences 1 bound BS thesis related to IMTA culture 1 manual (English and Bisaya) on intensive pond IMTA system for <i>P. monodon</i> <p>Patent: 2 IP applications:</p> <ol style="list-style-type: none"> 1 for IMTA intensive pond manual (English and Bisaya) for <i>P. monodon</i> 1 for IMTA pond system utility model <p>Product:</p> <p>Improved <i>P. monodon</i> IMTA technology protocol</p> <p>People:</p> <ol style="list-style-type: none"> 15 shrimp farmers trained on IMTA technology 1 BS thesis student trained and supported on IMTA technology 10 OJT students 1 BS thesis student trained and supported on IMTA technology <p>Place: 8 MOAs</p> <ol style="list-style-type: none"> 2 with BFAR X and BFAR XIII 2 LGUs 4 with private shrimp operators <p>Policy:</p> <ol style="list-style-type: none"> 1 policy recommendation of adopting an IMTA system to manage waste in shrimp culture 	Mindanao State University - Naawan (MSU Naawan)	Local shrimp farmers and other aquaculture practitioners LGUs and cooperatives Food industry Academe	01-Mar-24	28-Feb-26	ONGOING	4,969,100	2,354,560

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Production of all-male and fast-growing progeny using phytoandrogen for sustainable seedstock of giant freshwater prawn <i>Macrobrachium rosenbergii</i> (De Man, 1879)	Integrity of the environment and climate change adaptation and mitigation	General: The general goal of this study is to establish a breeding nucleus of the giant freshwater prawn, <i>Macrobrachium rosenbergii</i> in the hatchery selected from the different populations in the riverine systems in Mindanao for sustainable seed production. Specific: 1. Investigate the genetic diversity and structure among populations of <i>Macrobrachium rosenbergii</i> in Mindanao using microsatellite markers 2. Identify the best sources of broodstock for the production of genetically variable and fast-growing seeds of giant freshwater prawn 3. Refine seed production of <i>M. rosenbergii</i> through the production of fast growing all-male progeny stocks via hormonal manipulation using phytoandrogen (pine pollen) and 17 methyl testosterone.	Publication 1 paper submitted for publication in refereed journal 1 paper on hatchery production of <i>M. rosenbergii</i> for conservation and adaptive management Production of at least four (4) IEC materials, which include brochures, pamphlets among others that contain relevant information about the project, rearing protocols, technology generated and the like. Patents/Intellectual Property 1 IP disclosure for microsatellite markers developed 1 IP disclosure for the utilization of pine pollen as sex inversion and growth enhancer for <i>M. rosenbergii</i> Product/Process At least 10 sites for broodstock sources identified At least 50 Broodstock collected 20 Primer pairs sequenced Production of 80,000 quality <i>M. rosenbergii</i> post larvae At least 10 microsatellite (SSR) markers developed People Services At least 5 mentees and collaborators trained on the hatchery technology of <i>M. rosenbergii</i> At least 5 Undergraduate/ graduate students supported (3 Undergraduate, 2 graduate students) 5 Undergraduate/ graduate students trained (On-the-job Training and immersion) At least 10 mentees and collaborators trained At least 5 Undergraduate/ graduate students supported (3 Undergraduate, 2 graduate students) 10 Undergraduate/ graduate students trained (On-the-job Trainings and immersions)	Mindanao State University - Nawaan (MSU Naawran)	This is a science-based project which aims sustainability and food security for the benefits of various stakeholders – Fish farmers, people's organizations and NGO's – Local government units – Academic and research institutions/Researchers and students	01-Aug-23	31-Jan-26	ONGOING	4,999,883	1,462,263
	Reducing mortalities in crablet packaging and trading for better management of mangrove crab farms	Integrity of the environment and climate change adaptation and mitigation	General: This project seeks to derive information and improve existing technologies on the transport and trading of crablets to reduce mortality rates. Specific: 1. Develop an improved design for packaging to reduce the stress of crablets during transport; 2. Enhance the efficiency of the existing Alinmango algorithm through ground truthing; and to 3. Increase and improve awareness on coastal ecosystem conservation and management, and highlight best practices in sustainable mangrove crab capture, rearing, and farm management of men and women in fishing communities through citizen science efforts.	Publication: Year 1 - Training manual for citizen science activities on (1) water monitoring, (2) mangrove vegetation assessment, and (3) mangrove crab species monitoring Year 2 - 3 papers drafted for publication Patent: N/A Product: Year 1 - Preliminary set of markers for stress determination in crablets Preliminary design of improved crablet packaging Year 2 - Database of water parameters in target sites Design of an improved crablet packaging for transport Best practice in transporting crablets People: Year 1 - 30 additional coastal community members trained to collect information on the ground. Year 2 - 30 additional coastal community members trained to collect information on the ground. 3 MS students supported Place: Year 1 - 2 - MOUs with LGUs/ Government agencies in Regions 1, 2, 5, 8, and 10 Policy: Year 2 - 1 policy recommendation on improved management of mangrove habitats to help mitigate the impact of climate change and anthropogenic factors on the wild populations of mangrove crabs	De La Salle University (DSU)	Mangrove crab stakeholders, Youth groups, Women's groups with environmental concerns, Fishing communities, Philippine fisheries industry, local schools and state universities, environmental managers, LGUs, NGOs	01-Jan-23	31-Jan-26	ONGOING	4,994,792	1,254,948
	SMS in Aquafeeds: Development of an Alternative Aquafeed Ingredient Using Spent Mushroom Substrate (SMS)	Rapid, inclusive and sustained economic growth	General: The general objective of this project is to formulate and produce an effective aquafeed in tilapia aquaculture using locally derived ingredients, the spent mushroom substrate (SMS). Specific: 1. Characterize the nutritional value of spent mushroom substrate. 2. Formulate and develop aquafeed using SMS as an alternative ingredient. 3. Assess the nutritional and functional properties of the developed aquafeeds. 4. Conduct feeding trial and assess growth performance in tilapia. 5. Determine cost and return analysis of the developed aquafeeds. 6. Assess dietary intake of aquafeeds using metagenomics studies	Publication: At least 1 publication in ISI/Scopus Journal/At least 1 paper presentation in conference/At least 1 IEC material/Patent: At least 1 IP protection for the SMS Aquafeed Product: One (1) product (SMS aquafeed) People: Mentored/ Trained at least 4 researchers, 2 undergraduate students Place: MOA with UPLB, DA-RFOS, and Bicol Entrepreneurship Association for Mushroom (BEAM, Inc.) Policy: At least one (1) policy recommendation for potential use of SMS aquafeed in aquaculture farming.	Partido State University (ParSU)	Local farmers engaged in aquaculture farming LGUs and cooperatives Feed manufacturers and compounders Academe	01-Jan-24	30-Jun-26	ONGOING	4,953,897	2,506,879
	SMUG-UP: Sustainable Strategies for Mussel Glycogen Upscale Production	Poverty reduction and empowerment of the poor and vulnerable	General: Develop sustainable strategies for upscaling and commercialization of mussel glycogen Specific: 1. Optimize the different processes in medium-scale pilot production plant; 2. Determine the quality of the glycogen produced in pilot scale production; 3. Determine the stability of the product during storage; 4. Evaluate the potential of Philippine mussel glycogen as an ingredient for cosmetic product formulation such as soap, ointment and cream; 5. Determine the viability and profitability of mussel glycogen and its cosmetic products	Publication 1 draft article submitted to a peer-reviewed journal for possible publication Patent/Intellectual Properties 1 optimization process, and 1 improved quality of the glycogen product. Product 1 improved Philippine mussel glycogen product from pilot-scale production 1 prior art search report 1 Feasibility study (consumer acceptability study, detailed market study) 1 optimized glycogen extraction protocol on pilot scale production Place and Partnership 1 MOU partnership with a LGU (Jiabong, Samar) and various mussel farmers' organizations in Jiabong and the Bureau of Fisheries and Aquatic Resources 1 MOU with cosmetic industries which will utilize the glycogen or business group who will adopt the technology on mussel glycogen production People Service 3 undergraduate students to be part of the project Policies 1 Policy recommendation on the harvesting of green mussel used for non-food applications during red tide	University of the Philippines Tacloban College (UP Tacloban)	Mussel farmers - value addition of their produce, Industry - to produce glycogen which will be used in the development new cosmetic products	01-Jun-24	28-Feb-26	ONGOING	4,999,530	929,347
	Technology Refinement and Field Application of MicroBead® Microencapsulated Probiotics for Tilapia Aquaculture	Poverty reduction and empowerment of the poor and vulnerable	General Objective: The general objective of this project is to assess the field applicability, production scalability, and economic viability of Philippine mussel probiotic technology for farm-scale tilapia aquaculture Specific Objectives: 1. To refine and optimize the scalability of the MicroBead probiotic technology for large-scale production 2. To conduct on-farm trials and evaluate growth, feed efficiency, and overall performance in tilapia 3. To establish regulatory and compliance strategy for MicroBead® probiotics 4. To evaluate the economic viability and technology adoption potential of MicroBead probiotics	Publication -At least 2 IEC materials (web-based article, etc.) -At least 2 paper presentations in conference (local and foreign) Patent/Intellectual Property -At least 1 IP protection filed for the improved MicroBead production Product/Process -One (1) established process of producing MicroBead probiotics using improved production protocol -One (1) refined and field-validated MicroBead probiotic product -One (1) documented farm-level MicroBead application protocol People Services -Engaged at least 5 students/researchers through thesis, internships, or project-based learning -Trained at least 5 tilapia farmer, farm technician, or farm operator on MicroBead application -Engaged at least 5 tilapia aquaculture stakeholders during technology pre-commercialization activities Places and Partnerships -Partnership Agreement with at least 1 farm owner as demo farm for MicroBead probiotic application -At least 1 demo farm site showcasing MicroBead probiotic application Reproductive and growth performance data of improved CL native pigs Trade name/mark applied for registration at IPO Established feeding and healthcare management protocols Conducted techno-promotional activities Trained 40 farmer co-operators on production and management of CL native pig Established 4 private techno-demo farms Developed techno-guide on production of CL native pig	University of the Philippines Los Baños (UPLB)	1. Local farmers engaged in aquaculture farming 2. LGUs and cooperatives 3. Feed manufacturers and compounders 4. Food industry 5. Academe	01-Sep-25	31-Aug-27	ONGOING	4,999,983	2,544,821
Conservation, Improvement and Production of Central Luzon Native Pig	Project 3: Performance Evaluation of Selected Native Pigs following the Most Common Feeding and Management Practices in the Area	Rapid, inclusive and sustained economic growth	Evaluate the production performance of selected Central Luzon native pigs	At least 1 demo farm site showcasing MicroBead probiotic application Reproductive and growth performance data of improved CL native pigs Trade name/mark applied for registration at IPO Established feeding and healthcare management protocols Conducted techno-promotional activities Trained 40 farmer co-operators on production and management of CL native pig Established 4 private techno-demo farms Developed techno-guide on production of CL native pig	Central Luzon State University (CLSU)	a. Native pig raisers b. Researchers and development workers c. Students d. Consumers e. Market agents f. Local government	01-Jul-22	30-Jun-26	ONGOING	4,177,066	1,912,718

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Novel Approaches in African Swine Fever Diagnostics, Genomics, and Proteomics (Old Title: MEGA ERADICATE ASF (Molecular Epidemiology, Genomic Analysis, Epitopes of Recombinant Antigenic Determinants, and Immunologic Characterization for Total Elimination of African Swine Fever)	Project 3. Discrimination of Immune Epitopes against African Swine Fever Virus (DIE-ASF) (Development of an Immunohistochemical Assay for the Diagnosis of African Swine Fever in the Philippines)	Rapid, inclusive and sustained economic growth	General: Develop diagnostic tools for the detection of African Swine Fever and determination of immunological characteristics of ASF virus in the Philippines. Specific: 1. Isolate and characterize African Swine Fever virus and other swine related viruses using viral culture adaptation; 2. Determine the genomic strains circulating in the Philippines using portable third-generation sequencing technology, and to perform phylogenetic analysis on local strains against ASFV isolates worldwide; 3. Discriminate important antigenic determinants of locally circulating ASFV isolates relevant to immunological characterization and diagnostics development, and 4. To determine the molecular responses mediating ASF pathogenesis, ASFV-pig interactions and host immune responses against ASF isolates circulating in the Philippines.	1. Characterization of major epitopes map among common ASFV isolates circulating in the Philippines. 2. Locally produced recombinant peptides for ASFV immune studies 3. Enhanced capability in ASFV diagnostics through development of assays specific and validated for the country.	University of the Philippines Manila (UPM), De La Salle Araneta University (DSAU)	1. Outputs from the project will aid government organizations such as the Department of Agriculture and the Bureau of Animal Industry for policy recommendations such as control and prevention strategies against ASF. 2. Published data can help scientists in the development of potential diagnostic methods, drug and vaccine candidates. 3. Veterinarians will be guided in their evidence-based decision making in the epidemiological surveillance and implementation of effective control and eradication strategies against ASF. 4. Farm owners will be benefited by the improved diagnostic efforts, policy recommendations, and control and eradication strategies which will help alleviate the socioeconomic consequences caused by the ASF	01-Jan-24	31-Dec-25	COMPLETED	19,130,592	4,734,168
Assessment of the Production Performance and Profitability of Raising ItikPINAS (IP Kayumanggi) at Bureau of Corrections (BuCor), Muntinlupa City	Integrity of the environment and climate change adaptation and mitigation	General Objective: The general objective of the project is to test the production performance and profitability of raising ItikPINAS Kayumanggi. Specific Objective: establish population of IP-Kayumanggi at BuCor, Muntinlupa; monitor and evaluate the production performance of IP-Kayumanggi; determine the profitability of IP-Kayumanggi through selling of primary products like balut and salted eggs in a small-scale production setup; promote livelihood for persons deprived of liberty (PDLs) at BuCor; and develop information, education and communication (IEC) materials.	Publication: At least 1, copyrighted IEC materials/promotional materials. Patent: N/A/Product: Performance Data of IP-Kayumanggi, established farm at BuCor Muntinlupa, No. of balut and salted eggs sold. People: Technical guidance and training provided to: 4 BuCor Personnel ... -100 PDL trained on IP-Kayumanggi management and egg processing. Place: BuCor and Cavite State University. Policy: N/A	DOST Region VI	LGUs, PDLs, researchers, students, IP raisers, Native duck industry, balut and salted eggs vendors	01-Jul-23	30-Jun-25	COMPLETED	5,900,000	260,490	
Creating Stable Supply of Duck and Duck Eggs in Camarines Sur Through ItikPINAS Production	Rapid, inclusive and sustained economic growth	General Objective: Create a stable supply of duck and duck eggs in Camarines Sur through ItikPINAS production. Specific Objective: 1. Establish ItikPINAS multiplier farm in Central Bicol State University of Agriculture and in Camarines Sur; 2. Produce pure ItikPINAS and IP-Kayumanggi; 3. Evaluate the performance of both lines in Camarines Sur; and 4. Capacitate and encourage duck raisers in breeding and egg production.	Publication: € IEC materials (brochures, fliers, techno guides and other marketing paraphernalia) using local dialects € Business model/plan € Scientific publication to accredited journal € Research presentation € Audio visual presentation. Patent: € Technical improvement to management systems of ItikPINAS in the region. Product: € ItikPINAS breeder multiplier farms € 10,000 male and female IP-Kayumanggi produced in the CBSUA and partner multiplier farms € Egg produced by CBSUA and partner farm producers. People: € 50 farmers trained in IP-Kayumanggi production € 3 technology adopters to sustain the production € 15 capacitated single parents and PWD € % in duck farming. Place: € MOA with PCAARRD regarding implementation of the project € € MOU with other schools, government institutions, associations, and private farmers. € MOU with Learning Sites for Agriculture. Policy: € Promotion of locally produced ItikPINAS pure and IP-Kayumanggi € Sustainability of duck industry in the Bicol region € Promotion of duck meat as alternative to chicken € Local legislative passed resolution on the use of IP breeds by raisers	Central Bicol State University of Agriculture (CBSUA)	€ Existing layer duck farmers € Learning Sites for Agriculture € Potential duck farmers € Local government units € Balut and salted egg vendors € Balut and salted egg processors € Consumers of duck eggs and (culled or male) duck meat € Agriculture Technicians, researchers, teachers and students in layer duck breeding, production, and marketing	01-Jun-24	31-May-26	ONGOING	4,992,895	1,430,134	
Developing Feed Formulations for "Bagu Ivatan" using Locally-Available Feeds and Forages in Batanes	Rapid, inclusive and sustained economic growth	General Objective: To develop formulated feeds for Batanes native pig using locally available feed resources. Specific Objective: 1. To characterize locally-available feeds given to native pigs; 2. To determine the agronomic characteristics and cultural management of locally-available forages given to the native pigs; 3. To optimize forage fermentation and formulate feeds using the locally available feedstuffs; 4. To determine the proximate analysis and cost of formulated feeds using the locally available feedstuffs; 5. To determine the growth performance of Bagu using the formulated feed ration	Publication: At least 1 paper on feeds and feeding of Bagu Ivatan native pig; At least 2 IEC material on basic feed formulation and traditional feedstuff ratios; 1 Training Module. Patent: 1 Utility Model Registration for the formulated feeds for Batanes Native Pig; 1 IP application (trademark and utility model) for Ivatan feeds; 1 copyright of training module. Product: 2 Formulated Feeds for Bagu Ivatan; Established feedstuff data and their proximate analysis. People and Services: Technical guidance and training provided to: 30 Farmers and young agripreneurs and students trained; 5 LGU and local agriculture office personnel; 2 Technical project personnel trained on recommended feed formulation. Policy: Policy recommendation for LGU support, establishment of production area, mass production and processing of forages for Bagu Ivatan. Places and Partnerships: 2 partnership agreements with LGUs in Batanes Province	Batanes State College (BSC)	Researchers, professors, students, and swine breeding practitioners. Native pig Farmers. Native pig consumers. Institutional markets	01-Mar-25	29-Feb-28	ONGOING	5,000,000	2,445,725	
Development of an Efficient Hog Distribution and Marketing Model for an Improved Disease Management in Luzon, Philippines	Rapid, inclusive and sustained economic growth	General Objective: Develop an Efficient Hog Distribution and Marketing Model for an Improved Disease Management in Luzon, Philippines. Specific Objective: 1. Understand and analyze the existing hog distribution system in selected provinces of Luzon, Philippines; 2. Assess the risk of spreading disease from farm to farm; and, 3. Develop an improved hog distribution and marketing model for policy making.	Publication: 1 article submitted for publication in scientific journal. Patent: N/A. Product: Model for distribution and marketing of hogs. People: Consumers will have traceability of their pork and its by-products. Place: Private-Public Partnership (government, hog producers, accredited slaughterhouses, local government of Batangas and private investors). The government will fund the establishment of the facility to be operated by the private-sector to ensure sustainability. Research linkages established with hog industry stakeholders. Policy: Policy Recommendations to support: 1) implementation of improved live hog marketing and distribution system (establishment of designated road/highway for transport of live hogs) and 2) establishment of integrated facility for slaughtering, meat cutting and cold storage of pork.	Bureau of Animal Industry (DA-BA)	Farmers- There will be a ready market for the hogs produced by the commercial farmers and there is no need to transport the hogs to the neighboring provinces. This will save logistic cost, transport loss, and incidental expenses, among others thus, profit. A. Consumers- Improved efficiency of distribution and marketing of pork thus, fair price for consumers. Also, consumers can be assured of quality pork because of a better traceability system. A. Batangas LGU- After the assessment of the disease management system of Batangas, policy recommendations to address the gaps and weaknesses in the system will be formulated. Perhaps, there will be policy recommendations that can be applicable at the national level that would help minimize the risk of spreading the disease. A.	01-May-24	30-Apr-26	ONGOING	4,159,410	887,009	
Development of Antibodies Against African Swine Fever Virus Intended for Feed Fortification to Prevent Farm-to-Farm Transmission	Rapid, inclusive and sustained economic growth	The general objectives of the project is to develop antibodies against African Swine Fever (ASF) virus and incorporate into feeds to prevent farm-to-farm transmission. Phase 1: The general objective of this phase is to develop antibodies against African Swine Fever virus and determine its efficacy in preventing infection via oral route in a controlled challenge trial in piglets. More specifically, to: 1. To isolate ASF virus from the field, characterize their growth properties and select suitable virulent strains for in vitro propagation; 2. To generate antibodies against ASF virus in poultry eggs; 3. To generate antibodies against ASF virus in poultry eggs; 4. To profile the in vivo neutralization activity of the chicken anti-ASF antibodies in a controlled trial in piglets using virulent ASF virus as challenge strain.	The project aims to deliver the following output: 10 project members trained for BSL3 protocol; 2. samples collected from infected pigs; 3. viral material isolated and inoculated onto cell lines; 4. Verified ASF virus; 5. Isolation pens established; 6. Successful inoculation in chicken; 7. Anti-ASF antibodies have been quantified from poultry.	De La Salle University (DSLU)	Swine Farmers, Feed manufacturers, Research community, Researchers and graduate students.	01-Jan-23	31-Dec-26	ONGOING	21,828,595	898,024	

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Development of Forage-Targeted Starter Culture for Ensilaging Forage Feeds for Native Chickens and Ducks	Integrity of the environment and climate change adaptation and mitigation	General Objective: The general objective of this project is to establish an improved backyard fermentation protocol using starter culture as a sustainable feed resource for livestock. Specific Objective: Specific Objectives: To screen, isolate, and characterize suitable lactic acid bacteria as a starter culture for the fermentation of selected forages such as Trichanthera, Azolla and Duckweed To develop a liquid starter culture and establish its storage parameters To formulate a mixed ration containing fermented forages and evaluate its nutritive value To assess the influence of feeding fermented forages in the performance of native chicken and ducks To conduct economic feasibility assessment of the developed fermentation protocol including the usage of silage products in the native chickens and duck/c- production systems.	Publication: 1. IEC materials for improved fermentation protocol 2. Substrate specific starter culture for improved fermentation. 3. Nutritional composition of fermented forage. 4. Nutritional Composition of Formulated Feeds mixed with fermented forage. Patent: 1. Starter Culture 2. Lactic Acid Bacteria for improved fermentation protocol utilizing starter culture. 3. Formulated feeds mixed with fermented forage. Product: 1. Starter culture 2. Improved fermentation protocol utilizing developed starter culture 3. Fermented feeds mixed with fermented forage 4. People: Training on improved fermentation protocol: 15 MSU employees 60 Subudhis 15 Farmers/Place: 1. MOA to LUPA 22 MOA to Farmer Adopters Policy: Starter culture developed to specific forage may be a policy recommendation to the barangay for the adoption and utilization and thereby requiring farmers to plant or culture these forages for sustainability of the technology.	Western Mindanao State University (WMSU)	Local farmers engaged in aquaculture farming LGUs and cooperatives Feed manufacturers and compounders Food industry Academe	01-Nov-23	31-Oct-26	ONGOING	4,999,745	1,634,469
	Development of Philippine Signature Muscovy Duck Breed	Integrity of the environment and climate change adaptation and mitigation	The general objective of this study is to develop a Philippine signature Muscovy duck breed. Specifically, this project aims to: 1. Develop breeding and selection protocol 2. Develop sustainable breeding, production and distribution systems 3. Establish phenotypic and genotypic characteristics 4. Evaluate production performance and sensory characteristics of products 5. Evaluate the profitability of breeder and slaughter duck production enterprises	At the end of four years, the project is expected to deliver the following: —2,000 stable breeding true-to-type Philippine Muscovy ducks with predictable production performance and consistent product quality (Y2 and Y3); —Quality breeder duck production and distribution systems developed (Y3 and Y4) —At least 2 private breeder farms engaged in breeder Muscovy duck production (Y4) —Nutrient composition and sensory characteristics of Muscovy duck meat (Y4)	Iligao State University (ISU), Bureau of Animal Industry (DA-BAI)	—Iligao and Quizon local farmers —Day-old duckling, slaughter and ready to lay pullet producers —Researchers	01-Jan-22	31-Dec-25	COMPLETED	19,707,422	2,844,101
	EGGIOTYPE: Non-invasive in-egg sex identification of IRIKIPINAS Eggs	Rapid, inclusive and sustained economic growth	General Objective: The general objective of this project is to design and develop a non-invasive duck egg sexing device for Irik Pinas Kayumanggi duck eggs using spectroscopy. Specific Objective: To design and develop a prototype non-invasive duck egg sexing device utilizing imaging technology and machine learning algorithm for analysis. To optimize the device parameters and validate its accuracy in determining the sex of Irik Pinas Kayumanggi duck embryos. To evaluate the economic viability and potential impact of the non-invasive duck egg sexing device in the duck egg industry. To disseminate the findings of the study through publications and presentations at scientific conferences and seminars.	Publication: A peer-reviewed journal article and conference proceedings paper detailing the design, development, and validation of the non-invasive duck egg sexing device. Patent: An IP application for the non-invasive duck egg sexing device. Product: A fully functional non-invasive duck egg sexing device prototype. People: Not Applicable. Place: Establishing partnerships with hatcheries and breeders to pilot test the device. Policy: Not Applicable.	Technological Institute of the Philippines (TIP)	The target beneficiaries are the following: 1. Breeders and commercial farms involved in the production of Irik Pinas Kayumanggi ducks. 2. Researchers and scientists involved in the development of animal welfare and sustainable agriculture practices. 3. Government agencies responsible for the regulation of animal welfare and sustainable agriculture practices.	01-Jun-24	31-May-26	ONGOING	5,000,000	1,347,716
	Enhancing the Productivity and Sustainability of Benguet Native Pig Production	Rapid, inclusive and sustained economic growth	General Objective: The general objective of the project is to enhance the productivity and sustainability of Benguet native pig production. Specific Objective: Improve productivity and production efficiency of Benguet native pig through artificial insemination, molecular selection techniques, enhanced biosecurity and health care management; Develop feeding and management guide for Benguet native pig production; Evaluate the production performance of Benguet native pigs at farmer/c level; and Promote Benguet native pigs through the conduct of seminars, trainings, and exhibits	Publication: 1. One (1) techno-guide on Benguet native pig production. Patent: 1. One (1) trademark registration of Benguet native pig 2. Feeding guide for Benguet native pigs. Product: 1. Forty (40) Benguet native pig breeder animals 2. One (1) nucleus herd established at BSU 3. Developed breeding system and mating plan for the improvement of Benguet Native Pig 4. Techno-guide on improved native pig production system in Benguet. People: 1. Technical guidance and training provided to the following: 60 farmers trained 15 LGU extension workers 5 technical project personnel trained on breeding and selection of pigs Place: 1. At least two (2) MOA forged with farmer cooperators and MLGU/ PLGU in Benguet. Policy: 1. Consolidated results of research conducted as inputs to policy on local genetic resource conservation, improvement and profitable utilization of Benguet native pigs	Benguet State University (BSU)	Researchers, professors, students, and swine breeding practitioners Native pig farmers Native pig consumers Institutional markets	01-Jul-24	30-Jun-27	ONGOING	5,000,000	1,379,758
	Establishment of a breeding population of Markaduke Native Pig in the Province of Romblon as a strategy to widen its production and distribution	Rapid, inclusive and sustained economic growth	General Objective: To establish a breeding population of Markaduke Native Pig in Romblon province as a strategy to widen its production and distribution. Specific Objective: Establish a breeding farm for Markaduke native pigs in Romblon Establish forage area and profile other feed resources available in Romblon for native pigs Evaluate the reproductive and productive performance of Markaduke NP in Romblon Evaluate the profitability of Markaduke native pig production in Romblon Promote the production and utilization of Markaduke NP in Romblon	Publication: Publications A's: Journal article A's: Annual Reports A's: Terminal Report A's: Promotional videos A's: IEC materials (brochure and A, pamphlet) Patent: Patents/IP A's: Copyrighted Brochures and/ or Pamphlets A's: Patent (UM)/Product: Products Breeding farm Forage area Piglet People: People Services - Capability and skills training programs - Number of native pig growers trained - Technical assistance to possible adopters of the new technology. Place: Places and Partnerships MOA/MOU signed: One each for MSC and NSPRC-BAI MOA/MOU signed: One for each of the organized native pig growers A, Policy: Policy A's: Provincial ordinance on the utilization of Markaduke NP piglet in hog raising A's: Drafted policy for LGU to A, provide support services to NP piglet growers	Romblon State University (RSU)	Native pig growers Farmers Community organization Out-of-school youth Entrepreneurs Policy makers Women association, cooperatives, etc. LGUs, OFWs, APs, TUPAD Single mother/single father Faculty/Students researcher	01-May-24	30-Apr-27	ONGOING	4,999,380	1,547,460
	Establishment of an Economically Viable and Sustainable IRIKIPINAS Breeder Farm in Mabini, Davao de Oro	Rapid, inclusive and sustained economic growth	General Objective: To evaluate the technical and economic feasibility of an IRIKIPINAS (IP) breeder farm operation in Davao Region. Specific Objective: Sustainable production of quality IP breeder stocks in the region; Evaluate the egg production performance and hatching egg quality of IP; Evaluate the efficiency of day-old duckling production; and Promote the adoption of IP among men and women duck breeders and growers in the Davao region.	Publication: 1. publication on the technical and economic feasibility of an IRIKIPINAS Breeder Farm Operation. Patent: 1. patent for IP duck egg smart incubator. Product: 1 IP duck egg smart incubator 1 IEC material. People: 1 training conducted. Place: 1 institutional partner. Policy: None	University of Southeastern Philippines (USEP)	Duck industry stakeholders IP Multiplier Farms in Davao region Academe Researchers Students	01-Jul-24	30-Jun-26	ONGOING	5,000,000	1,502,764

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Improving Growth and Reproductive Performance of Caraga Black Native Chicken through Selection and Breeding	Rapid, inclusive and sustained economic growth	General Objective: The study's general objective is to improve the reproductive traits and performance of the Caraga black native chicken through breeding and selection. Specific Objectives: Specifically, the study aims to: 1. Establish the data on the egg quality of the Caraga black native chicken; Establish data on the reproductive traits and performance of the Caraga black native chicken, such as egg production, egg quality, hatchability, fertility, and viability. 2. Evaluate the semen quality of rooster in terms of physical characteristics (sperm motility, sperm count, color, odor, pH, viscosity, sperm morphology) 3. Establish data on the breeding, selection, and hatchery management technologies suited to the Caraga black native chicken and the most common farming systems in the Caraga region. 4. Development of print media and production of IEC materials for the promotion of Caraga Black Native Chicken.	Publication: Two (2) scientific journal publications (SI/CHED refereed). Patent: Copyright of IEC materials developed (Y2) and Trademark registration of Caraga black native chicken (Y2). Product: 500 breeders of purified Caraga black native chickens with high reproductive performance. (Y2) in each station. People: 100 farmer entrepreneurs trained in handling, breeding, and health management of the Caraga black native chicken. 500 students from BS Agriculture Major in Animal Science, Bachelor of Agric. Technology, BS agro-forestry and other related courses/discipline will be benefited on this project through instruction, Research, and OJT/Practicum 10 Faculty from CSU and outside Caraga will be benefited from their instruction and research activities Kindergarten schools and learners serve as their exposure through field trip/Place: 100 farmer entrepreneurs trained in handling, breeding, and health management of the Caraga black native chicken. Policy: Formulate policies with regard to the preservation and recognition of Black Native Chickens as the endemic chicken of Butuan City.	Department of Agriculture Regional Field Office XIII (DA RFO XIII), Caraga State University (CaSU)	The project beneficiaries are the following: Native chicken raisers in Caraga Region and other Regions Native chicken domestic and institutional consumers Farmer Entrepreneur Tourist Destinations sites Faculty, researchers, students, NGOs, Cooperatives and other organizations who wish to engage in native chicken production Women Empowerment Organization (at least 50 women) Local Government Units (LGU's) Youth Development Programs	16-May-24	15-May-26	ONGOING	4,994,600	1,346,064
	Operationalization of the Swine Breed Registry System in the Philippines	Rapid, inclusive and sustained economic growth	General Objective: To operationalize the swine breed registry system in the Philippines. Specific Objective: 1. To standardize animal performance records to be encoded in the system 2. To validate protocol for registering swine in the system 3. To improve the swine breed registry software 4. To promote the breed registry system to swine breeders and pork producers for wider distribution of superior breeder animals.	Publication: Publish at least 1 improved Breed Registry User Manual. Patent: Possibly produce a copyrighted software Product: Breed Registry System Web Application/People: People and Services: Train a minimum of 3 swine breeder farm representatives on the use of the improved Swine Breed Registry Software Places and Partnerships: Build partnership with the Association of Accredited Swine Breeder Farms in the Philippines (ASBAP). Policy: Recommend a policy in aid of BAI-Swine Breeders Farm Accreditation Program	University of the Philippines Los Baños (UPLB)	(1) Association of Accredited Swine Breeder Farms in the Philippines (ASBAP) members who can use the certificates as means of promoting quality breeders in the market. (2) Academe and students (3) Multiplier and commercial swine farms that buy breeder animals for their specific purpose.	01-Jun-24	30-Nov-25	COMPLETED	4,008,503	861,918
	Rapid Enzymatic Fermentation and Nutrition Enhancement of Corn Stover and Rice Straw Silages	Rapid, inclusive and sustained economic growth	General Objective: The study aims to increase the rate of corn stover and rice straw silage fermentation and enhance their nutritive value through the application of enzymes and the formulated microbial starter culture as silage additives. Specific Objective: To optimize the hydrolysis of corn stover and rice straw substrates using cellulase and xylanase enzymes; To determine the effect of the enzyme additives on the nutritive, chemical, and microbial quality of corn stover and rice straw silage; To isolate lactic acid bacteria from silage and formulate a microbial starter culture intended for silage production; To determine the efficacy of the formulated starter culture and enzyme additives on the rate and quality of corn stover silage; To determine the scalability of the developed enzyme protocol and microbial starter culture via large-scale silage production.	Publication: At least two (2) papers ready for submission to reputable, peer-reviewed, and SCOPUS-indexed scientific journals. Patent: Patent and/or utility model draft on enzymatic protocol for silage for submission to UPLB-TTBO; patent and/or utility model draft for a microbial starter culture for silage. Product: Enzymes (Cellulase and Xylanase) Microbial starter culture formulation for silage. Enhanced corn stover and rice straw silage end products. People: At least one (1) seminar/training on the application of the developed enzyme protocol and microbial inoculant for silage. Place: Partnership with local farmer cooperatives for trial runs. Policy: None	University of the Philippines Los Baños (UPLB)	Corn and rice farmers Livestock farmers Dairy industry Consumers	01-May-24	30-Apr-26	ONGOING	4,997,555	2,391,815
	Strengthening the Thriving Duck Egg Industry in Negros through the Introduction of ItikPINAS	Poverty reduction and empowerment of the poor and vulnerable	General Objective: Creating stable supply of duck eggs for balut production through the introduction of IP kayumanggi to duck raisers in Negros Oriental. Specific Objective: Establish a 200-hd Itik PINAS breeder farm to create stable stock supply system in Negros Oriental capable of producing 18,000 female IP Kayumanggi per year. Test production performance of IP kayumanggi in institutional and private farmers farms. Promote and encourage adoption of IP Kayumanggi among existing and potential duck farmers in Negros Oriental. Assess current management practices and develop farm specific layer duck management system tailor-fitted to the needs and capabilities of farmers and local conditions. Develop Marketing and distribution systems for ItikPINAS products (hatching eggs, table eggs (fresh, balut, salted), culls, RTI, day-old ducklings)- document marketing and distribution systems Evaluation of the feasibility of production, marketing, and distribution of ItikPINAS products in Negros Oriental.	Publication: IEC materials (technique and brochures) for Duck egg production and marketing, and costs and returns. 1 paper on IP management in Negros Oriental 1 paper on value chain analysis of the duck industry in Negros Oriental. Product: 18,055 female IP Kayumanggi produced in the breeder farm. Database of duck farmers in Negros Oriental. Profile of Negros Oriental duck farmers and their practices. People: 15 capacitated women in Duck production/30 farmers trained in Duck production/15 capacitated women in making Balut/15 capacitated women in making salted eggs/15 capacitated women in entrepreneurial activities related to Itik PINAS/15 capacitated women in using IP eggs for baking. Place: MOA with PCAARRD regarding implementation of the project/MOU with other schools, government institutions, associations, and private farmers. MOU with LGU, -s for training of farmers (men, women, youth). Policy: Promotion of locally produced IP products	Foundation University (FU)	1. Existing layer duck farmers. 2. Potential duck farmers. 3. Balut and salted egg vendors. 4. Balut and salted egg processors. 5. Consumers of duck eggs and (culled) duck meat. 6. Agriculture Technicians, researchers, teachers and students in layer duck breeding, production, and marketing.	01-Mar-24	28-Feb-26	ONGOING	4,998,052	1,328,256
	Varietal Improvement and Innovative Production of Alfalfa (Medicago sativa) to Augment Feed Resources for Dairy Animals	Rapid, inclusive and sustained economic growth	General Objective: Assess the feasibility of introducing alfalfa varieties to revitalize dairy farming in the Philippines. Specific Objective: Evaluate the growth and yield performance of the different alfalfa varieties grown under mid-elevation condition; Identify promising alfalfa cultivars adaptable for mid-elevation agro-ecological conditions; Analyze the cost and return of growing alfalfa under local conditions; and Develop strategies for disseminating research findings to local farmers, agricultural extension services, and relevant stakeholders.	Publication: Publish at least one research output to scientific journal. Patent: N/A. Product: Production of seeds (seed increase) and silage. People: Engage BS Agriculture students major in Animal Science and Dairy Science. Place: Forge MOA/MOU with PeopleAc, -cs Organization, Local Government Unit and Farmer Cooperators. Policy: N/A	University of Science and Technology of Southern Philippines Claveria Campus (USTP-C)	Local dairy farmers Livestock industry Research community Local government units	01-Aug-24	31-Jul-26	ONGOING	5,000,000	1,155,183
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 1. Biology and fisheries of cephalopod resources around Panay Island and in Talon Strait	Rapid, inclusive and sustained economic growth	General: To determine the status of local cephalopod stocks and to provide inputs to their management. Specific: To provide estimates of local catch and effort for cephalopods in study sites. To determine fishing mortality & exploitation of local stock. To examine their growth & reproductive development. To identify harvest control reference points and corresponding measures to attain resource sustainability	Publications: Scientific peer-reviewed journal publications or popular publications. Patents: IPN/A. Products: Fisheries profiles for LGUs. Fisheries monitoring scheme. Annual catch estimate. Population parameters. Ramp; exploitation rate. Harvest control indicator. People: Services: Undergraduate/graduate students. Project staff of partner institutions. Places and Partnerships: Local government units. H/Ets in different areas in the regions. BFAR regional offices. Policy: Guidelines for local fisheries specific to cephalopods. Harvest control reference points, rules and measures for management plans in fisheries management areas. Inputs to National Cephalopod Fisheries Management Program	University of the Philippines Visayas (UPV)	Local commercial (small) and municipal fisheries sector. Fisheries stakeholders & consumers. LGUs within the FMAs. Regional BFAR & NSAP Academe	01-Jun-25	31-May-27	ONGOING	10,237,069	5,159,913
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 2. Biology and fisheries of cephalopod resources in Ragay Gulf, Lagonoy Gulf & Asid Gulf	Rapid, inclusive and sustained economic growth	General: To determine the status of local cephalopod stocks and to provide inputs to their management. Specific: To provide estimates of local catch and effort for cephalopods in study sites. To determine fishing mortality & exploitation of local stock. To examine their growth & reproductive development	Publications: Guide to catches of cephalopod fisheries in the study sites. To Fisheries profiles for LGUs. Fisheries monitoring program. People Services: 6 project staff/students trained in the following: fisheries monitoring, market surveys, repro bio/histological techniques. 2 OJT/BS students. Places and Partnerships: 2 MOAs for BFAR and LGUs, 3 academe partners. Policy: Guidelines for local fisheries specific to cephalopods. Harvest control reference points, rules and measures for management plans in fisheries management areas	Bicol University (BU)	Local commercial (small) and municipal fisheries sector. Fisheries stakeholders & consumers. LGUs within the FMAs. Regional BFAR & NSAP Academe	01-Jun-25	31-May-27	ONGOING	6,376,522	3,521,374

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 3. Biology and fisheries of cephalopod resources in Sulu Archipelago	Rapid, inclusive and sustained economic growth	General: To determine the status of local cephalopod stocks and to provide inputs to their management. Specific: To provide estimates of local catch and effort for cephalopods in study sites; To determine fishing mortality & exploitation of local stock; To examine their growth & reproductive development; To identify harvest control reference points and corresponding measures to attain resource sustainability	Publications Scientific peer-reviewed journal publications or popular publications Products Fisheries profiles for LGUs Fisheries monitoring scheme Annual catch estimates Population parameters & exploitation rates Harvest control indicators People Services Undergraduate/graduate students Project staff of partner institutions Places and Partnerships Local government units HEIs in different areas in the regions BFAR regional offices Policy Guidelines for local fisheries specific to cephalopods Harvest control reference points, rules and measures for management plans in fisheries management areas Inputs to National Cephalopod Fisheries Management Program	Mindanao State University - Tawi-Tawi College of Technology and Oceanography (MSU-TCTO)	Local commercial (small) and municipal fisheries sector; Fisheries stakeholders & consumers; LGUs within the FMAs; Regional BFAR & NSAP Academe	01-Jun-25	31-May-27	ONGOING	8,089,330	4,626,953
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 4. Biology and fisheries of cephalopod resources of Antique	Rapid, inclusive and sustained economic growth	General: To determine the status of local cephalopod stocks and to provide inputs to their management. Specific: To provide estimates of local catch and effort for cephalopods in study sites; To determine fishing mortality & exploitation of local stock; To examine their growth & reproductive development; To identify harvest control reference points and corresponding measures to attain resource sustainability	Publications Scientific peer-reviewed journal publications or popular publications Products Fisheries profiles for LGUs Fisheries monitoring scheme Annual catch estimates Population parameters exploitation rates Harvest control indicators People Services Undergraduate/graduate students Project staff of partner institutions Places and Partnerships Local government units HEIs in different areas in the regions BFAR regional offices Policy Guidelines for local fisheries specific to cephalopods Harvest control reference points, rules and measures for management plans in fisheries management areas Inputs to National Cephalopod Fisheries Management Program	University of Antique (UA)	Local commercial (small) and municipal fisheries sector; Fisheries stakeholders; consumers; LGUs within the FMAs; Regional BFAR; NSAP ; Academe	01-Jun-25	31-May-27	ONGOING	5,721,622	3,540,336
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 5. Biology and fisheries of cephalopod resources of Honda Bay and Busuanga, Palawan	Rapid, inclusive and sustained economic growth	General: To determine the status of local cephalopod stocks and to provide inputs to their management. Specific: To provide estimates of local catch and effort for cephalopods in study sites; To determine fishing mortality & exploitation of local stock; To examine their growth & reproductive development; To identify harvest control reference points and corresponding measures to attain resource sustainability	Publications Scientific peer-reviewed journal publications or popular publications Products Fisheries profiles for LGUs Fisheries monitoring scheme Annual catch estimates Population parameters exploitation rates Harvest control indicators People Services Undergraduate/graduate students Project staff of partner institutions Places and Partnerships Local government units HEIs in different areas in the regions BFAR regional offices Policy Guidelines for local fisheries specific to cephalopods Harvest control reference points, rules and measures for management plans in fisheries management areas Inputs to National Cephalopod Fisheries Management Program	Western Philippines University (WPU)	Local commercial (small) and municipal fisheries sector; Fisheries stakeholders; consumers; LGUs within the FMAs; Regional BFAR; NSAP ; Academe	01-Jun-25	31-May-27	ONGOING	6,882,661	4,046,831
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 6. Biology and fisheries of cephalopod resources of Surigao del Norte & Surigao del Sur	Rapid, inclusive and sustained economic growth	General: To determine the status of local cephalopod stocks and to provide inputs to their management. Specific: To provide estimates of local catch and effort for cephalopods in study sites; To determine fishing mortality & exploitation of local stock; To examine their growth & reproductive development; To identify harvest control reference points and corresponding measures to attain resource sustainability	Publications Scientific peer-reviewed journal publications or popular publications Products Fisheries profiles for LGUs Fisheries monitoring scheme Annual catch estimates Population parameters exploitation rates Harvest control indicators People Services Undergraduate/graduate students Project staff of partner institutions Places and Partnerships Local government units HEIs in different areas in the regions BFAR regional offices Policy Guidelines for local fisheries specific to cephalopods Harvest control reference points, rules and measures for management plans in fisheries management areas Inputs to National Cephalopod Fisheries Management Program	North Eastern Mindanao State University (NEMSU)	Local commercial (small) and municipal fisheries sector; Fisheries stakeholders; consumers; LGUs within the FMAs; Regional BFAR; NSAP ; Academe	01-Jun-25	31-May-27	ONGOING	7,459,400	3,994,700
Assessment of Cephalopod Fisheries in Various Regions in the Philippines	Project 7. Value Chain Analysis of Cephalopod Fisheries in Selected Areas towards Enhanced Profitability of Small-scale Fishers and Sustainable Governance	Rapid, inclusive and sustained economic growth	General: This study aims to understand the industry, to identify the key actors, examine economic performance of the key actors and value addition to the value chain, map the market channels and identify issues and their probable solutions of selected fishing areas with extensive market chain as key inputs for policies that promote the profitability of small fishers through reduced number of links and the equitable distribution of values added to the marketed products among the actors for the sustainable utilization and governance of the fishery resource. Specific: Identify the actors in the fresh and processed cephalopod value chains in selected fishing areas Examine and describe the cost and revenue structure of each actor in the fresh and processed cephalopod value chains in selected fishing areas Determine the values associated with each process/values added by actors and the number of links in the value chain that could be reduced to enhance profitability of small fishers Describe the market channels of fresh and processed cephalopods in selected fishing areas Determine the issues, constraints confronting each actor in the value chain and solutions to these issues and constraints as well.	Publications Scientific peer-reviewed journal publications or popular publications Social Impact: The results should provide insights to formulating policies that will ensure the long-term sustainability of the livelihood even in face of the need to limit harvesting from the resource. Economic Impact: The results of the study should contribute to shortening the value chain and improving the efficiency of the fishery, with the end result of increasing income of fishers even as regulations on fishing effort are being implemented.	Partido State University (ParSU)	Actors in allied sectors of the fishery-Exporters-Policy makers-Academe -LGUs & Government agencies	01-Jun-25	31-May-27	ONGOING	6,169,510	3,134,755

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024'	Total Project Cost	2025 PCAARRD GIA
Attaining sustainability in the fisheries for sardines and other small pelagic fish off the Zamboanga Peninsula (v. 2021)	Proj. 3. Spatial patterns in the fisheries for sardines, their fry, and associated small pelagic fish off the Zamboanga Peninsula	Integrity of the environment and climate change adaptation and mitigation	Generally, this research project aims to determine the spatial patterns in the fisheries for sardines, their fry, and associated small pelagic fish. Specifically, it aims: To characterize the species composition and catch distribution of fry along the northern and western coasts of the Zamboanga Peninsula; To estimate total fry fisheries production; To determine the marketing channels of sardine fry which include its primary activities (e.g., inbound logistics, operations, outbound logistics) and support activities (infrastructure of the micro-business, human resource management); and To determine stage-specific (i.e., fry, juveniles & adults) spatial distribution of the stock and their fisheries.	Baseline information on the composition, distribution, abundance of fry caught by various gear types will be established and will be used to polish the existing FAO of the sardines fishing ban in Zamboanga Peninsula. Marketing channels of sardine fry will be determined, as well as issues involved can be addressed. Options for interventions in flow of material from fishers to market. Ecologically important areas for different life stages of the small pelagic resources are determined and will be used to polish the existing FAO of the sardines fishing ban in Zamboanga Peninsula.	Jose Rizal Memorial State University (JRMSU)	Local commercial and municipal fisheries sector, fisheries stakeholder and consumers, regional BFAR and NSAP, and academe	01-Apr-22	30-Sep-25	COMPLETED	11,484,492	626,470
Attaining sustainability in the fisheries for sardines and other small pelagic fish off the Zamboanga Peninsula (v. 2021)	Proj. 1 Early Life Dynamics and Reproductive Capacity of Sardinella lemuru and Associated Small Pelagic Fish off the Zamboanga Peninsula (Life history, recruitment and trophic role of Sardinella lemuru off the Zamboanga Peninsula)	Rapid, inclusive and sustained economic growth	The overall objective is to determine growth, development and reproductive capacity of local sardine stocks and to project the impact of their management on stocks of associated small pelagic species in the area by means of trophic modeling. The specific objectives are:— To evaluate the accuracy of ageing and growth based on otolith microstructure analysis and to determine its possible effect on current assessments of local sardine stocks;— To examine the relationship between larval dynamics of sardines and characteristics of the spawners during major and minor spawning seasons in northern and southern Zamboanga;— To characterize the reproductive status of local stocks of sardines and associated small pelagic species and to determine how these vary within and between years;— To employ ecosystem trophic modeling to simulate the effects of a range of management scenarios to the small pelagic fisheries in the area; and— To facilitate the integration of results of parallel studies on the spatial structure of small pelagic stocks and their fisheries, trophic structure, and other related information in formulating measures that will ensure sustainability of the sardine-dominated small pelagic fisheries off the Zamboanga Peninsula.	—Science-based harvest control reference points for the dominant species of sardines and key small pelagic species off the Zamboanga peninsula—Evaluation of length-based growth models (e.g. age based) and applications to management of other stocks in the country—MS Biology/Fisheries graduate specializing on sardine population biology—Research staff with expertise on fisheries biology and management—Enhanced understanding of the reproductive capacity of the stock as basis for management—Management scenario options for the small pelagic fisheries off Zamboanga Peninsula—Ecosystem model that may be applied to other fishing grounds in the country	University of the Philippines Visayas (UPV)	Local commercial and municipal fisheries sector, fisheries stakeholder and consumers, regional BFAR and NSAP, and academe	01-Apr-22	30-Sep-25	COMPLETED	11,474,842	1,074,886
Attaining sustainability in the fisheries for sardines and other small pelagic fish off the Zamboanga Peninsula (v. 2021)	Proj. 2 Trophic Role of Sardinella lemuru off the Zamboanga Peninsula	Rapid, inclusive and sustained economic growth	The overall objective is to employ trophic modeling in simulating the effects of a range of management scenarios to small pelagic fisheries in the area. In particular, this project aims:•C To determine trophic relations between S. lemuru and other key pelagic species in the area;•C To provide quantitative predator-prey and competitive relationships of ecosystem components necessary for simulation modeling; and•C To characterize how these trophic interactions vary with monsoonal seasons and with ontogenetic stages of the key pelagic species.	Science based information as input to policy on:• Food web of sardine and other component small and large pelagic species• The protection of feeding or nursery grounds of sardines in Northern Zamboanga Peninsula MS Marine Biology graduate specializing on the role of sardines in food webs off Northern Zamboanga Peninsula- Research staff with expertise on trophic analysis in Philippine pelagic ecosystem using C, N and O stable isotope and stomach content analysis, and predator-prey and pelagic ecosystem Ecopath with Ecosim (free software) simulation modeling. Enhanced understanding of sardine feeding interactions (predator-prey and competitive relationships)- Management scenario options for the small pelagic fisheries off Northern Zamboanga Peninsula	Mindanao State University - Iligan Institute of Technology (MSU-IIT)	Regional and National BFAR, NSAP, NFRD/Local commercial and municipal fisheries sector/Fisheries stakeholders/Sardine run tourism industry/Academic institutions offering marine sciences/Sardine and mackerel canning and bottling industries/Sardine and small pelagic fisher folks/Marine Science and Fisheries Students (BS/MSc/PhD)	01-Apr-22	30-Sep-25	COMPLETED	9,923,747	693,723
Driving the Philippine Sea Cucumber Industry Forward: sustainable production and processing approaches for value-added collagen and fine chemicals	Project 1. Establishing post-harvest processing approaches for production of sea cucumber collagen and fine chemicals	Rapid, inclusive and sustained economic growth	General Objective: The primary goal of this project is to translate chemical and physical data obtained in the project to discovery of high value biomolecules from the sea cucumber Stichopus spp. into tangible outputs that can be used as is or as a basis for more complex products. We will develop specific extraction and purification methods. Priority compounds for product development will include collagen, sulfated lipids, sphingolipids, and fatty acids. In addition, we will examine current post-harvest processing methods to maximize quality and yield of sea cucumber products. The general objectives are as follows: Determine the effect of post-harvest processing techniques on quantity and quality of processed sea cucumber and extracts Generate protocols for production of high-quality sea cucumber collagen Generate protocols for production of sea Specific Objective: The specific objectives are:	Publication: At least 2 Scopus or ISI publications At least 2 poster presentations in conferences 1 publication or handbook on sea cucumber processing Patent: May file utility model or TA for extraction and purification of sea cucumber collagen and fine chemicals Product: Purified and semi-purified fine chemicals Purified Collagen extracts and Collagen products Protocols on compound purification and processing	University of the Philippines Diliman (UPD)	Sea cucumber fishing industry (collectors, processors, gleaners/divers) and communities Cosmetics, Personal Care, and nutraceutical industries Polymer/Plastics and biopharma Industry	01-Dec-25	30-Nov-28	ONGOING	11,351,594	4,221,783
Driving the Philippine Sea Cucumber Industry Forward: sustainable production and processing approaches for value-added collagen and fine chemicals	Project 2. Understanding Stichopus cf. horrens ecology, reproductive biology, and culture for sustainable production	Rapid, inclusive and sustained economic growth	General Objective: The study aims to examine aspects of the biology and ecology of Stichopus cf. horrens relevant to the improvement of culture technology and production of high-value biomolecules. Specific Objective: The specific objectives of the project are: 1. Examine ecology, phylogenetic diversity, and reproductive biology of Stichopus cf. horrens; 2. Develop methods for scaling up hatchery production of S. cf. horrens.	Publication: Generate at least 4 scientific publications on the biology, ecology, and culture of Stichopus; Information, Education, and Communication (IEC) materials on Stichopus biology, ecology and culture Patent: n/a/Product: Methods for scaling up hatchery production of Stichopus cf. horrens Knowledge products on Stichopus species People: At least 3 graduate students trained; Training/information dissemination workshops on Stichopus culture technology Place: Research collaboration: University of the Philippines Diliman, Silliman University, and Mindanao State University-TCTO Ace* Research sites in Luzon (Bolinao, Pangasinan), Visayas (Negros Oriental) and Mindanao (Bonga, Tawi-Tawi)	University of the Philippines Diliman (UPD), Silliman University (SU), Mindanao State University - Tawi-Tawi College of Technology and Oceanography (MSU-TCTO)	The research/scientific community, as results generated from the abovementioned studies and observations will open doors for further researchable areas bearing on mariculture, fishery stock management (e.g. culture-based restocking and stock enhancement), and development of bioactive natural products from Stichopus sp.; Stakeholders in sea cucumber fishery and processing (fishers, traders, processors), as improved culture technology and profiling of species abundance and value for high-value bioactive products will generate greater value for the industry; LGU and local resource managers will have science-based information to improve sea cucumber fisheries management.	01-Dec-25	30-Nov-28	ONGOING	20,086,838	6,565,094

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Driving the Philippine Sea Cucumber Industry Forward: sustainable production and processing approaches for value-added collagen and fine chemicals	Project 3. Exploring the molecular diversity and overall potential of Philippine sea cucumber species through streamlined mass-spectrometry pipeline	Rapid, inclusive and sustained economic growth	<p>General Objective:</p> <p>Key goals of this project are to investigate the metabolomic profiles of <i>S. horrens</i> from different sites (Silliman and Iligan), and extend the analysis to different sea cucumber species collected in the Philippines. Specifically, we want to investigate if a) there is variation in the presence and abundance of metabolites in <i>S. horrens</i> dependent on the collection site, and if b) there are other sea cucumber species, which produce a common metabolite as <i>S. horrens</i> at significantly higher or comparable concentrations. An in-house database constructed during the Phase 1 of the program will be used as reference for the quick annotation of putative compounds. Relative intensities observed in LC-MS experiments will serve as a guide for the relative concentrations of metabolites, and absolute quantitation of priority compounds will be done as needed, and pending the availability of standard compounds.</p> <p>Specific Objective:</p> <p>The specific objectives are as follows:</p> <ol style="list-style-type: none"> 1. Profile and quantify high-value small molecules from wild <i>Stichopus cf. horrens</i> from various sites. <ul style="list-style-type: none"> a. Establish collaborations with key habitats and culturing sites of <i>Stichopus cf. horrens</i> b. Obtain the metabolic profiles of sea cucumbers in different sampling sites c. Identify and quantify, relatively or absolutely, key discriminating metabolites unique or high abundance compounds of <i>Stichopus cf. horrens</i> from different sampling sites, and integrate the metadata in the existing database 	<p>Publication:</p> <ul style="list-style-type: none"> At least 1 Scopus or ISI publication <p>Patent:</p> <ul style="list-style-type: none"> Potential IP for the small molecule database from <i>S. horrens</i> and related species. <p>Product:</p> <ul style="list-style-type: none"> Knowledge products Expanded database including geographical metadata and incorporate additional species Extended protocols for sampling other species of sea cucumbers <p>People:</p> <ul style="list-style-type: none"> Trained personnel on: a) handling and sampling different species of sea cucumbers b) LC-MS operation and data analysis Mentoring of graduate and undergraduate students Conduct MS training workshops <p>Place:</p> <ul style="list-style-type: none"> Continue to foster UPD MSI and IC collaboration Form collaborations with different sea cucumber culturing laboratories/hatcheries <p>Policy:</p> <ul style="list-style-type: none"> Support policy on sustainability of sea cucumber in order to support local product development to increase value chain. 	University of the Philippines Diliman (UPD)	Sea cucumber fishing industry (collectors, processors, gleaners/divers) and communities Research/Scientific Community - expand the current interest and provide key areas in sea cucumber research especially on natural product discovery, biomaterials, and biomolecule discovery.	01-Dec-25	30-Nov-28	ONGOING	8,425,182	2,793,168
Ecological factors affecting mesophotic coral reef ecosystems: potential refuge from disturbances	Proj. 1 Biodiversity in Mesophotic Coral Reef Ecosystems	Rapid, inclusive and sustained economic growth	The project aims to assess the potential of mesophotic reefs as refugia for reef communities from the global-climate-change-induced thermal stress. The specific objectives are to: 1. Assess the biodiversity of mesophotic coral ecosystems and explore the occurrence of precious corals 2. Investigate the structure of coral communities (e.g., coral cover, abundance, and genetic richness) and susceptibility to coral bleaching at shallow and mesophotic reefs 3. Examine the response and recovery of selected communities (e.g., <i>Diplastraea heliopora</i> and <i>Seriatopora hystrix</i>) in mesophotic coral reef ecosystems from thermal stress events	Biodiversity of coral, including precious corals, and reef fish communities in selected mesophotic sites in the Philippines Differential susceptibility of the shallow and mesophotic reefs to thermal stress-induced coral bleaching, based on the presence of coral taxa that are susceptible to thermal stress Trained at least five staff in technical diving (mesophotic diving) Training workshop (at least one at each of the five sites) on biodiversity survey and thermal stress impact assessment Engage MS and/or PHD DOST-PCAARRD scholars who intend to do their research on mesophotic coral ecosystem Information, Education, and Communication (IEC) materials distributed and biodiversity role of mesophotic coral ecosystems as refuge from disturbances At least two (2) manuscripts prepared for publication on mesophotic coral ecosystems Handbook on mesophotic coral ecosystems in the Philippines Video production summarizing the output of the Program Science-based inputs to policy recommendations on biodiversity conservation and climate change adaptation	University of the Philippines Diliman (UPD), Mariano Marcos State University (MMSU), Holy Name University (HNU)	Local communities, local government units (LGUs), fishers, research/scientific community and students	01-Nov-22	30-Apr-26	ONGOING	40,847,667	4,538,576
Ecological factors affecting mesophotic coral reef ecosystems: potential refuge from disturbances	Proj. 2 Investigating the Genetic Basis of Adaptive Capacity in Mesophotic Organisms	Rapid, inclusive and sustained economic growth	The main objective of the project is to provide a global view of genetic changes in the holobiont (corals and sponges) mediated reference transcriptomic sequences for at least one species of coral and sponge from selected mesophotic reefs/evaluated gene expression responses of at least one species of coral and sponge transplanted at different depths At least two (2) manuscripts prepared for publication on mesophotic coral ecosystems Information, Education, and Communication (IEC) materials distributed and biodiversity role of mesophotic coral ecosystems as refuge from disturbances Trained at least 2 staff in microbiome and transcriptome analysis Training workshop (at least one at each of the three sites) on adaptive capacity of organisms in mesophotic coral ecosystems Engage MS and/or PHD DOST-PCAARRD scholars who intend to do their research on mesophotic coral ecosystem Science-based inputs to policy recommendations on biodiversity conservation and climate change adaptation	Characterized microbial symbiont diversity in at least two species of mesophotic corals and sponges Generated reference transcriptomic sequences for at least one species of coral and sponge from selected mesophotic reefs/evaluated gene expression responses of at least one species of coral and sponge transplanted at different depths At least two (2) manuscripts prepared for publication on mesophotic coral ecosystems Information, Education, and Communication (IEC) materials distributed and biodiversity role of mesophotic coral ecosystems as refuge from disturbances Trained at least 2 staff in microbiome and transcriptome analysis Training workshop (at least one at each of the three sites) on adaptive capacity of organisms in mesophotic coral ecosystems Engage MS and/or PHD DOST-PCAARRD scholars who intend to do their research on mesophotic coral ecosystem Science-based inputs to policy recommendations on biodiversity conservation and climate change adaptation	University of the Philippines Diliman (UPD)	Local communities, local government units (LGUs), fishers, research/scientific community and students	01-Nov-22	30-Apr-26	ONGOING	26,163,174	2,876,478
Ecological factors affecting mesophotic coral reef ecosystems: potential refuge from disturbances	Proj. 3 Examining Population Connectivity between Euphotic and Mesophotic Coral Reef Ecosystems	Rapid, inclusive and sustained economic growth	The main objective of the study is to evaluate the potential of mesophotic coral reefs as refugia and source of propagules for reseeding shallow-reef habitats along the western Luzon coast. The specific objectives are: 1. Model population connectivity among shallow-water and mesophotic reef populations parameterized for depth-generalist coral species with varying dispersal potentials, using biophysical modeling approaches 2. Characterize genetic connectivity among shallow-water and mesophotic reef populations of coral species along the western Luzon coast using genotyping-by-sequencing approaches.	Short read sequences and single nucleotide polymorphism markers generated for two depth-generalist coral species collected from western Luzon populations. Characterized spatial patterns and degree of genetic connectivity between MCEs and shallow-water reefs along the western Luzon coast based on single nucleotide polymorphism (SNP) markers/ inferred spatial patterns and scales of population connectivity between MCEs and shallow-water reefs along the western Luzon coast based on biophysical modelling approaches Trained at least 3 staff in analysis of population connectivity Training workshop (at least one at each of the three sites) on population connectivity in mesophotic coral ecosystems Engage MS and/or PHD DOST-PCAARRD scholars who intend to do their research on mesophotic coral ecosystem Information, Education, and Communication (IEC) materials produced and distributed (Handbook on mesophotic coral ecosystems, videos and other reference and training materials) Science-based inputs to policy recommendations on biodiversity conservation and climate change adaptation	University of the Philippines Diliman (UPD)	Local communities, local government units (LGUs), fishers, research/scientific community and students	01-Nov-22	30-Apr-26	ONGOING	17,570,647	1,455,337
Establishment of the Center for Mollusc Research and Development	Development of Spawning and Hatchery Techniques for the Blood Cockle (<i>Anadara granosa</i>) for sustainable aquaculture	Rapid, inclusive and sustained economic growth	The main objective of the proposed project is to develop spawning and hatchery techniques for the blood cockle (<i>A. granosa</i>) in order to support the expansion of this commodity for high-value export. As an initial focus for the project, current and potential culture beds will be identified and characterized. The natural biology and spawning patterns of <i>A. granosa</i> under Philippine conditions will also be investigated in order to support the further development of spawning and hatchery technologies under more controlled conditions.	<p>Products</p> <ul style="list-style-type: none"> Hatchery protocols and design with potential for pilot testing to target Fisherfolk association (KASAMA Inc) <p>Publication</p> <ul style="list-style-type: none"> At least 2 papers on hatchery techniques and grow-out (ranching type) potential of blood cockles <p>People and Services</p> <ul style="list-style-type: none"> Promote and disseminate the need for hatchery interventions in maintaining wild stocks of mollusks EC at least 1 Training-Workshop on hatchery supported restocking techniques among stakeholders (LGU Aklan, LGU Capiz, Fisherfolk associations) EC trained personnel (At least 10) EC Graduate students (At least 3 supported) <p>Places and Partnerships</p> <ul style="list-style-type: none"> EC Partnership with Kalibo Save the Mangroves Inc. (NGO) and Aklan State University on the potential of setting up a cockle hatchery in Aklan EC MDA/IMOU with KASAMA and NFMIC <p>Patent</p> <ul style="list-style-type: none"> EC Potential utility model for hatchery protocols of rearing blood cockles (pending results of prior art search) <p>Policy</p> <ul style="list-style-type: none"> EC S&T based information that will input into policies or guidelines on the implementation of ranching techniques for the blood cockle fishery in selected sites 	University of the Philippines Visayas (UPV)	1. Cockle harvesters - Improved income due to increased production 2. LGU - Improved livelihood for fisherfolk through sustainable strategies 3. Export partners - improved and constant supply of cockles for export	01-Dec-21	30-Nov-25	COMPLETED	9,497,344	764,841
Ploidy-dependent physiological and chemical traits of <i>Kappaphycus</i> cultivars	Project 1. Prevalence and ploidy-dependent physiological responses in farmed cultivars and novel strains of <i>Kappaphycus</i>	Integrity of the environment and climate change adaptation and mitigation	General Objective: Determine the prevalence and ploidy-dependent physiological and biochemical responses in farmed cultivars and novel strains of <i>Kappaphycus</i> . Specific Objective: 1. Assess the occurrence and prevalence of different life history stages and corresponding ploidy of commercially cultivated and novel strains of <i>Kappaphycus alvarezii</i> , and commercially cultivated <i>K. striatus</i> ; 2. Evaluate the growth performance of representative cultivars of specific life history phase and ploidy of <i>K. alvarezii</i> (and <i>K. striatus</i>) cultivated in selected farms and land-based hatchery; 3. Evaluate the corresponding chemistry (e.g., carbohydrate, protein, and carrageenan yield and quality) of the cultivated biomass of specific ploidy and life history phase of <i>K. alvarezii</i> (and <i>K. striatus</i>); 4. Identify high performing cultivars of specific ploidy and life history phase of <i>K. alvarezii</i> (and <i>K. striatus</i>) for distribution to seaweed farmers for cultivation to improve harvest yield and sustain their livelihoods.	Publication: At least 2 published papers in ISI journal Patent: None for this phase Product: Well-characterized robust cultivar(s) for distribution and cultivation by seaweed farmers People: The project will support at least two graduate students' theses Place: Establish collaboration with seaweed farmers/cooperatives/associations in Palawan, Samar, and Sorsogon Policy: Contribute to national seaweed research and utilization agenda.	University of the Philippines Diliman (UPD)	Seaweed farmers, policy makers, national and global scientists.	01-Jun-23	31-May-26	ONGOING	11,374,188	3,519,878

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Ploidy-dependent physiological and chemical traits of Kappaphycus cultivars	Project 2. Development of Genetic and Chemical Markers for Identifying Tetrasporophytes, Male Gametophytes and Female Gametophytes of Kappaphycus alvarezii and K. striatus	Integrity of the environment and climate change adaptation and mitigation	General Objective: The general objective of this project is to develop genetic and biochemical markers, and a technique based on these markers, that can be used to determine the life-history phase or sex of a specimen of selected species of Kappaphycus. Specific Objective: Identify the genomic (including transcriptomic) features that differ among life-cycle phases and sexes of K. alvarezii, K. striatus. Based on the identified genomic features, develop a PCR-based assay to identify the phase/sex (tetrasporophytes, male gametophytes, female gametophytes) of any samples of the target Kappaphycus species. Identify metabolic components of the genotyped seaweeds that exhibit association with, and can be used as chemical markers for, phase (i.e., ploidy) or sex of a Kappaphycus specimen. Establish the breadth of applicability of the developed genetic markers among the red algae and consider its utility as an additional criterion for selection of broadly applicable markers, using species of Gracilaria as representative examples	Publication: 5 scientific papers published in international refereed journal/Patent: None for this phase/Product: genetic markers for phase (ploidy) and sex for Kappaphycus species/biochemical markers for phase (ploidy) and sex for Kappaphycus species/genetic markers for phase (ploidy) and sex for Gracilaria species/biochemical markers for phase (ploidy) and sex for Gracilaria species/technique for using these markers to determine the phase (ploidy) and sex of a given specimen of Kappaphycus/Gracilaria/People: potential training of seaweed researchers in government or academe interested in a training on the application of the diagnostic techniques developed by this study/Places and Partnership: potential linkage with BFAR or NFRDI or academic institutions for the sharing/transfer of the techniques	University of the Philippines Diliman (UPD)	The eventual target beneficiaries of the project are those involved in the seaweed industry (seaweed farmers and traders, carrageenan/agar manufacturers).	01-Jun-23	31-Aug-26	ONGOING	12,287,333	2,001,796
Supporting Our Seas Through Automated and Integrated Networks (SUSTAIN): Strengthening Ocean Observation and Management of Risks to Coastal Ecosystems	Project 1. Applying coastal observation and modeling systems to address different use cases in Philippine coastal waters	Rapid, inclusive and sustained economic growth	Enhance ocean observation systems by improving an existing water quality monitoring system (the Portable Automated Water Quality Monitoring System) and its deployment in various target sites; Provide local-scale ocean hydrodynamic and biogeochemical models that provide pertinent parameters for marine spatial planning, productivity and fisheries, and water quality; Enhance technical capacity in the development and use of ocean observation and models; and Co-design and implement fit-for-purpose data and model output infrastructure with partner stakeholders.	Publication 1 manuscript for publication in an ISI journal Products: New PAWQMS version and units produced Hydrodynamic models for target sites Biogeochemical models for target sites Oceanographic information infrastructure system Use cases where ocean models are applied to local concerns People Services At least 10 researchers and practitioners trained in ocean observation systems; representation from women is targeted to be at least half. At least 10 researchers and practitioners trained in ocean modeling; representation from women is targeted to be at least half At least 30 stakeholders trained in the deployment and use of ocean observation systems, and application of model outputs 3 graduate students supported Places and Partnerships Partnership with LGUs, relevant government agencies, mariculture company (ASIN) with Memorandum of Agreements. Policy Use of use cases and data as inputs into coastal resource management plans and risk assessments Inputs into national coastal/ocean observation efforts National contribution to the UN Decade of Ocean Science for Sustainable Development	University of the Philippines Diliman (UPD)	LGUs and local communities at the target sites Relevant government agencies e.g. LGU, BFAR, DENR Private industry stakeholders such as ASIN and tourism industry SUCs/researchers and practitioners for capacity-building Other countries/stakeholders with similar contexts that can learn through the link with CoastPredict	01-Sep-24	31-Aug-27	ONGOING	23,521,240	5,229,118
Supporting Our Seas Through Automated and Integrated Networks (SUSTAIN): Strengthening Ocean Observation and Management of Risks to Coastal Ecosystems	Project 2. Current and Emerging Chemical Threats to Coastal Ecosystems Health in the Philippines	Rapid, inclusive and sustained economic growth	Reinforce the biosurveillance of current and emerging toxin threats in different areas in the Philippines; Identify persistent (polycyclic aromatic hydrocarbons) and emerging (steroids) organic pollutants in the target sites and in benthic organisms (i.e., oysters); and Strengthen the technical capacity for community-based harmful algal bloom (HAB) monitoring.	Products 1-2 Guidebook/Manual on HAB-causing organisms, BATT deployment (retiree) Publication 3-6 publications People and Services 4-6 MSc/PhD students ; 10-15 trainees/interns; Trainings on HAB-ID using new and emerging methods (molecular and CLSM) Training for field sampling of pollutants and laboratory analyses Training on BATT deployment and use Partnerships Partnership with LGUs, relevant government agency (BFAR), mariculture industry Policy Inputs into national coastal/ocean observation efforts National contribution to the UN Decade of Ocean Science for Sustainable Development	University of the Philippines Diliman (UPD)	LGUs and local communities at the target sites Relevant government agencies e.g. LGU, BFAR, DENR Private industry stakeholders such as ASIN and tourism industry SUCs/researchers and practitioners for capacity-building Other countries/stakeholders with similar contexts that can learn through the link with CoastPredict	01-Sep-24	31-Aug-27	ONGOING	5,446,328	1,556,876
Supporting Our Seas Through Automated and Integrated Networks (SUSTAIN): Strengthening Ocean Observation and Management of Risks to Coastal Ecosystems	Project 3. Cultivating people-centered risk knowledge building with coastal communities through citizen science	Rapid, inclusive and sustained economic growth	Increase community e.g., self-assessment capacities for coastal ecosystem threats (conditions, hazard, vulnerability, capacities) through participatory risk assessment and knowledge-building; Develop a toolkit for enhancing community-based/citizen science framework in coastal ecosystem risk management focused on coastal issues such as pollution, toxins, water quality and water resource management, and coastal development that would help fill a gap in citizen science capacities; Pilot a community-based monitoring mechanism for selected coastal ecosystem parameters (to complement automated monitoring and ocean model data); Develop response plans for priority coastal ecosystem risks (including food security enhancement and mitigation of livelihood displacement impacts); and Strengthen community-based organizations and multi-stakeholder collaboration for sustainable coastal ecosystem management.	Publication 1 manuscript for publication in a peer-reviewed journal Products: One (1) Toolkit for Enhancing Community-based/citizen science framework in coastal ecosystem risk management Hydrodynamic models for target sites; Profile of at-risk populations in the partner communities; Community-based monitoring frameworks and plans; Livelihoods impact mitigation plans and advocacy plans; People Services Three Trainings on coastal ecosystem threats for 80 participants; Participatory profiling of at-risk population; Three Trainings on participatory research and citizen science for 80 participants; Three Advocacy planning workshops for 80 participants Places and Partnerships Partnership with local community-based organizations and LGUs of Pagbilao, Puerto Galera, relevant government agencies (BFAR and DENR), mariculture company (such as ASIN), and SUCs with Memorandum of Agreements; Policy Community-based policy recommendations; One Toolkit for Enhancing Community-based/citizen science framework in coastal ecosystem risk management; Recommendations for community-based monitoring and warning protocols; Risk reduction plans. May include: food and livelihood plan, Disaster Preparedness plans	University of the Philippines Diliman (UPD)	LGUs and local communities at the target sites Relevant government agencies e.g. LGU, BFAR, DENR Private industry stakeholders such as ASIN and tourism industry SUCs/researchers and practitioners for capacity-building Other countries/stakeholders with similar contexts that can learn through the link with CoastPredict	01-Sep-24	31-Aug-27	ONGOING	13,545,538	2,419,976
Application of the Single-laboratory Validated Radio-Receptor Assay to Support Environmental Risk Assessment (ERA) on Ciguatera Poisoning		Rapid, inclusive and sustained economic growth	The project aims to address the urgency on method availability for ciguatera quantification to be used by the monitoring body. Specifically, it aims to: Conduct inter-laboratory comparisons between PNRI and BFAR in adopting to RBA for Ciguatera analysis on fish samples using collaborative studies guidelines; Capacity building of Region 6 BFAR laboratory: sampling specifics and sample treatments, process flow of a network to complement CFP management; and Disseminate project information and outputs.	Publication: Scientific publication People Services: Trained personnel on RBA from BFAR laboratories Places and Partnerships: BFAR Central Region 6; health institutes such as the Epidemiological Bureau	DOST-Philippine Nuclear Research Institute (DOST-PNRI)	Bureau of Fisheries and Aquatic Resources, Region 6 and Central Office Provincial and Municipal Agricultural offices of Region VI Health institutions in Region 6	16-Nov-24	15-Nov-26	ONGOING	12,144,717	2,993,627
Assessment and monitoring of Philippine marine mammals combining visual and acoustic surveys		Rapid, inclusive and sustained economic growth	The project aims to assess the ecology of Philippine marine mammals by combining visual and acoustic surveys for proper marine mammal conservation. Specifically, it aims to: Conduct visual and acoustic field surveys for dugongs and cetaceans in five sites in the Philippines: Calawit Island, Tazon Strait, Sarangani Bay, Lingayen Gulf, and San Miguel Bay; Collect and analyze marine mammal sightings and sound data; and integrate relevant results for policy recommendations on spatial and temporal marine planning for marine mammal conservation and protection.	Publication At least 1 peer-reviewed publication Products Updated data on the ecology (acoustics plus distance sampling data) of marine mammals in the Philippines particularly in Calawit Island, Tazon Strait, Sarangani Bay, Lingayen Gulf, and San Miguel Bay People and Services One (1) mentored MS student Start research study of one (1) PhD student Places and Partnerships Partnership with IPs in Calawit Island, and LGUs in Tazon Strait, Sarangani Bay, Lingayen Gulf, and San Miguel Bay Partnership with BFAR and C3-PH Policy Results of the study can be used as input in crafting policy related to the conservation of Philippine marine mammals in Calawit Island, Tazon Strait, Sarangani Bay, Lingayen Gulf, and San Miguel Bay	University of the Philippines Diliman (UPD)	The main beneficiaries are the Local Government Units (LGUs) of Calawit Island, Tazon Strait, Sarangani Bay, Lingayen Gulf, and San Miguel Bay, local communities and indigenous peoples (IPs), the Bureau of Fisheries and Aquatic Resources (BFAR), and Department of Environment and Natural Resources (DENR).	01-Feb-21	31-Jan-27	ONGOING	5,000,000	3,000,000

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	CHARMS Mindanao: Capacity-building and Human Resource Development (HRD) for the Advancement of Research in Marine Science in Mindanao	Rapid, inclusive and sustained economic growth	General Objective: The CHARMS Mindanao Project aims to provide the biophysical data needed in select understudied areas. The project will produce information on the status of reef fish communities and their habitats with the involvement of academic institutions and national government agencies in the study areas to facilitate knowledge diffusion. Specific Objective: The specific objectives are: Continue the specimen-based inventory and DNA barcoding of marine fishes and understudied reef invertebrates in Mindanao; Assess the fish and benthic community assemblages of the study areas; Facilitate knowledge transfer among collaborating state universities and colleges (SUCs), and national government agencies (NGAs) through skills training and capacity building activities (e.g., specimen-based inventory, DNA barcoding, and coral reef assessment).	Publication: 1 Patent; 10 Product; 16, 26; 27 People; 32; 37 Place; 45 Policy; 48 University of the Philippines Mindanao (UPMin)	University of the Philippines Mindanao (UPMin)	Given that the proposed CHARMS Mindanao Project is aligned with the EAFM, as listed below shows the target stakeholder groups who will benefit from the science and knowledge diffusion that the project will produce and facilitate. The cyclical approach of the CHARMS Mindanao Project showing the various stakeholders that will be part of the project Fisheries stakeholders (Coastal communities, fishers and fish processors, boat owners, traders) National Government Agencies (NGAs) (Department of Environment and Natural Resources [DENR], Ministry of Environment, Natural Resources and Energy [MNER]) External agents (Academe, researchers, Development Partners, Media, General Public, Donors, Private Sectors and NGOs) Non-Fisheries Stakeholders (Peoples Organizations, Tourism, Ports, and Transport Industry) Local Government Units (LGUs) (Dapitan, Zamboanga del Norte, Jolo, Sulu, Davao Occidental; Mabini, Davao de Oro; Lianga, Surigao del Sur), cf	01-Jan-25	31-Dec-25	COMPLETED	4,983,391	4,983,391
	DeepFish 2.0: Mesophotic Depth Fish Surveys using an ROV-mounted 360-degree Imaging System	Rapid, inclusive and sustained economic growth	General Objective: This project aims to upgrade the design of the ROV of the DeepFish360 project, test, and deploy a Remotely Operated Vehicle-mounted 360-degree imaging system for collecting fish video data at mesophotic depths and train researchers in the use of this system. It is an upgrade of the previous DeepFish360 project where conventional cameras with smaller field of view were used. The new design will employ fewer cameras and collect more information compared to the previous one. Field testing of the old design was not conducted due to the pandemic. In this project, we will conduct field tests of both old and new designs to determine their advantages and disadvantages. Specific Objectives: Upgrade the design of the imaging system of our previous DeepFish360 project, test, deploy the ROV-mounted 360-degree imaging system for collecting data at mesophotic depths (30 m to 100 m) and compare the old and new designs; Develop and test ROV motion planning protocols for mesophotic fish visual census and collect fish abundance data and videos to form a database of fish species found at target mesophotic coral reef ecosystems; Train researchers on the use of the ROV system	Publication: 1 paper describing the system for presentation in a local/international conference Patent: Filed 1 Patent or Utility Model or Copyright for 360-degree camera set up and survey protocol Product: 2 ROV-based Mesophotic Fish Survey System (one for conventional cameras and one for 360 degree cameras) (Note: 360-degree cameras can only be deployed at upper mesophotic depths (up to 40 m) due to limitations of camera casing) People: Technical training and knowledge on the use of the ROV system for at least 5 researchers	University of the Philippines Diliman (UPD)	Marine science researchers in the different Philippine universities LGUs and NGOs tasked with monitoring the marine ecosystem	01-Jun-24	31-May-26	ONGOING	13,939,174	2,512,446
	Developing Sustainable Macroalgal Feeds to Enhance Production of Sea Cucumber Culture	Integrity of the environment and climate change adaptation and mitigation	This project aims to develop an alternative, sustainable, and affordable macroalgal feed in the hatchery and grow-out culture of <i>H. scabra</i> and <i>S. cf. horrens</i> . Specifically, to improve hatchery culture by evaluating the effectiveness of different macroalgal juice as an early juvenile feed and medium for enhanced diatom culture with the characterization and quantification of nutritional content and potential anti-nutritional factors; To improve ocean nursery and grow-out systems through sediment enrichment with macroalgae; conduct field trials on sediment enrichment using mono and mixed species of macroalgal debris; determine macroalgal detritus seasonality to assess availability for sediment enrichment trials; To refine the culture of <i>S. cf. horrens</i> and conduct training for other institutions to diversify culture of sea cucumbers	End of the Program Outputs/Products At the end of the project, it is anticipated that an alternative/supplemental macroalgal feed for <i>H. scabra</i> and <i>S. cf. horrens</i> will be developed. Anti-nutritional factors (ANFs) are characterized, and threshold concentrations determined. Publications: At least one paper submitted for publication/Paper/poster presentations in regional/local conference/Patent/Intellectual Property/Process of sediment enrichment/People and Services In this 2-year project, researchers and graduate students will be mentored and trained in hatchery production and ocean nursery rearing of two sea cucumber species. In addition, at least 2 research assistants/ides will be trained. Places/ Partnerships/interdisciplinary collaboration with researchers specializing in seaweeds including private and academic institutions/Policy/S&T-based recommendations on management of sea cucumber and seaweed resources, focused on <i>S. cf. horrens</i> and <i>H. scabra</i> for LGUs and DA-BFAR	University of the Philippines Diliman (UPD)	The research/scientific community, as results generated from the aforementioned studies and observations will open doors for further researchable areas on sustainable mariculture feeds and practices and fishery stock management (e.g., culture-based restocking and stock enhancement). Local fisher partners in pilot demo sites. GU and local resource managers will have science-based information to improve sea cucumber fisheries management	01-May-23	31-Jul-25	COMPLETED	4,988,589	1,310,190
	Development of qPCR Assay for the Detection and Quantification of Harmful Kareniacean Dinoflagellates in Selected Coastal Waters of Central Luzon	Rapid, inclusive and sustained economic growth	The general objective of the study is to develop a robust quantitative polymerase chain reaction (qPCR) assay for the detection and quantification of harmful kareniacean dinoflagellates, aiming to enhance monitoring strategies for harmful algal blooms (HABs) in marine environments. Design specific qPCR primers Targeting conserved regions of the kareniacean dinoflagellate genome and validate primer specificity and efficiency through <i>in silico</i> analyses and laboratory testing cultured dinoflagellates. Develop standard curves using known concentrations of target kareniacean dinoflagellate DNA or synthetic DNA standards. Apply the validated qPCR assay to environmental samples collected from with occurrence of Kareniacean dinoflagellates in selected coastal areas of Central Luzon.	Publications At least 2 International Scopus Indexed Publications Presentation in local and international conferences Products Culture of small kareniacean dinoflagellates species Protocol in using qPCR for identification of kareniacean dinoflagellates EAC materials on kareniacean dinoflagellates Infographics about kareniacean dinoflagellates People and Services Training of fisheries technician and BFAR monitoring personnel in the use of qPCR in quantification of small dinoflagellates 4 Undergraduate Thesis Students; 2 Master Students; 5 On the Job Trainings Places and Partnerships Local collaboration with Aurora State College of Technology (ASCOT), President Ramon Magaysay State University (PRMSU), Bulacan State University (BULSU) International collaboration with University of Malaysia Sarawak and University of Tokyo Policy S&T based information that will input recommendation/s in drafting policies.	Central Luzon State University (CLSU)	Academic and research institutions/BFAR monitoring personnel/Fish farming operator/LGUs Academe	01-Aug-24	31-Jul-26	ONGOING	5,000,000	1,155,819
	Diversity, prevalence and virulence of the Ostreid Herpesvirus-1 (OshV-1) to enhance sustainability of oyster production in the Philippines (VirDOs)	Rapid, inclusive and sustained economic growth	General Objective: To understand the diversity, prevalence, and virulence of oyster-infecting viruses in the Philippines, and test the susceptibility and factors driving infections in oysters to enhance sustainability of the oyster industry in the Philippines. Specific Objective: Recognizing these limitations and gaps in knowledge, a systematic and holistic investigation of the viruses-c ecology is proposed. The very basic requirement to understand possible mitigation and prevention strategies is to detect and identify the pathogens involved. This project aims to: 1. Component 1: Establish the diversity of Ostreid Herpesviruses in the Philippines. a. Conduct field surveys and baselining of ostreid herpesvirus diversity in the Philippines. b. Identify and explore phylogenetic diversity of Crassostrea (proposed Magallana) in the Philippines. c. Establish library of sequences of the viruses useful for ecological and evolutionary studies. d. Determine possible local populations or strains of the herpesvirus. e. Develop a rapid assay for the detection of the target viruses. 2. Component 2: Understand susceptibility and response of local oysters to herpesviruses. a. Culture and isolate select herpesvirus from infected local oysters. b. Conduct bioassays and exposure experiments to investigate physiological response during infection. c. Use -omics approaches to understand underlying molecular mechanisms of host-parasite interactions. 3. Component 3: Investigate factors that may be driving their virulence. a. Conduct bioassays to determine environment factors that may affect infectivity and virulence of the virus in oysters. b. Use modeling and deep learning to further understand possible prevention and mitigation strategies to prevent spread of virus.	Publication: Due to the novelty of the proposed work, several scientific ISI publications are expected, including but not limited to: diversity of ostreid viruses in the Philippines, genome characterization of ostreid viruses, factors driving the virulence of ostreid viruses, susceptibility of different oysters to various ostreid viruses, host-virus specificity and interactions, among others. The project will also be able to come-up with protocol guidelines for the 1.) isolation, 2.) rapid detection, and 3.) possible methods to mitigate the effect or control of infections. Patent: N/A/ Product: Improved techniques and protocols on detecting the virus using rapid assay (LAMPS), and also mitigation guidelines to control the spread of viruses in oyster farms. People: This research will protect the consumers and growers. It will also lead to a more resilient oyster industry, safeguarding food security and the livelihood of families dependent on oyster growing. Place: Active collaboration between communities of oyster growers, national agencies, academic institutions, and industry partners in collating data in occurrence of OshV-1. The project will also further strengthen the partnership initially established during the SCDSOS project between the private, NGA and academe, and even expanded it by including UST in one of the cooperating institutions. The Laboratory to be built in BFAR NFBTC will help enhance and build the capacity of NGAs and local SUCs in the use of molecular methods, and can even be a training and demo hub for the technologies to be developed. Policy: Since there are no studies yet of viruses in the Philippines, results of this work will help in crafting of management and strategic plans to avoid or lessen spread of these parasites in Philippine oysters. Specifically, this will aid in crafting policies regarding translocation of virus free spats and broodstocks which is one of the gaps identified in the oyster roadmap.	University of the Philippines Diliman (UPD)	The project will benefit various stakeholders of the oyster industry. Consumers will have access to safe and virus free oysters. Oyster growers will be guided in managing environmental risks factors OshV1. This will prevent mass mortality events which will affect their livelihood. Oyster hatcheries will be able to refine the prescribed hatchery protocols to account for OshV1. This will reduce mortality and increase production. Local government units will be able to propose and implement appropriate policies guided by the results of this study. Government agencies will have the capacity to monitor the occurrence of OshV1 with the assistance of higher educational institutions and DGST-PCAARRD. Higher educational institutions will be able to contribute to the body of knowledge specially on the effects of OshV-1 to the local oyster population, specifically Crassostrea iriodales.	01-Apr-24	31-Mar-27	ONGOING	37,000,000	6,966,782

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	EMBRACE MaBIDA: Empowering Mindanao Biodiversity Research, Awareness, and Conservation Efforts through Marine Biodiversity Database Phase 2	Rapid, inclusive and sustained economic growth	The main objective of the project is to improve and populate the MaBIDA database, capacitate young Filipinos on the importance of marine biodiversity, and capacitate partners on statistical analysis tools. Specifically, the project seeks to: Retrofit the web-based app to the partner's needs; Automate the responses to client queries by integrating a chatbot feature into the app; Integrate a fish identification system with photo or video as input; Populate the database with data from partners; Populate the database with more 3D models of marine flora and fauna, and aerial and underwater views of reefs; Build the capacities of elementary and high school students on the importance of marine biodiversity through exhibits; and Train partners in applicable statistical analysis tools.	Publication: One (1) Research Article submitted to ISI or Scopus-indexed journal Product: One (1) web app improved Fifty (50) printed 3D Models of Flora and Fauna Ten (10) 3D Models of underwater/aerial views of reefs People: Trained thirty (30) faculty and staff on statistical models Five hundred (500) elementary, high school, and college students capacitated through exhibits Place: At least ten (10) institutions partnered with the project through MOU/MOA/Letter of Support	University of the Philippines Mindanao (UPMin)	SUCs, Students, and Line Government Agencies	01-Jan-25	31-Dec-25	COMPLETED	4,999,981	4,999,981
	Enhancing production of sandfish, <i>Holothuria scabra</i> (Jaeger, 1833) through pond culture and sea pen farming	Rapid, inclusive and sustained economic growth	General Objective: To mass produce sandfish, <i>Holothuria scabra</i> (Jaeger 1833) and develop learning centers for pond culture, ocean nursery and grow-out systems in the region. Specific Objective: To develop protocols for the culture of sandfish in earthen ponds for mass production To improve operation of community-based ocean nursery, and sea pen grow-out systems for sandfish To train local partners in the culture management and post-harvest protocols for sandfish To conduct seeding of hatchery reared sandfish juveniles for stock enhancement in the natural habitat To conduct impact assessment on the status of project sites implementation to the community	Publication: at least 1 paper published in recognized scientific journals; 2 technical papers presented in scientific conferences; Patent: Manual for the culture of sandfish in fishpond; and A, enhanced version of the manual on community-based sandfish farming; Product: Better quality of farm produced thru proper post-harvest, handling and processing; A, improved protocols on sea ranching with local community; A, B, Natural stocks of sea cucumber enhanced; and mass production of sea cucumbers in fishpond; People: LGUs as local partners trained on sandfish production and post-harvest technology, including at least 4 neighboring LGUs; A, B, Thesis students in both undergraduate (4) and graduate (2) students will be assisted by the project in the A, conduct of different experiments on sandfish; Place: partnership with at least 2 HEIs and with the local government units within the region enhanced; Policy: Policy brief on stock enhancement and harvest of sea cucumbers	Mindanao State University - Naawan (MSU Naawan)	LGUs, local communities, A, fishermen, A, Peoples organization, Students, Researchers, national line agencies, A, Academe, private investors	01-Jan-24	31-Dec-25	COMPLETED	5,000,000	2,089,952
	Fisheries and Reproductive Biology of the Gold-lip Pearl Oyster <i>Pinctada maxima</i> (Jameson, 1901) in the Philippines	Rapid, inclusive and sustained economic growth	This research generally aims to provide information on fishery and reproductive biology of pearl-oyster <i>Pinctada maxima</i> in the Philippines. Specifically, this research aims to: (1) determine the fishery status of gold-lip pearl oyster <i>P. maxima</i> ; (2) develop a standard protocol for stock assessment and reproductive biological studies; (3) determine the catch per unit effort (CPUE) in select sites; and (4) compare the gonadal maturation, size at first maturity, sex ratio, fecundity, gonado-somatic index (GSI) and spawning pattern of <i>P. maxima</i> in Guimaras, Tawi-Tawi, and Palawan.	Products: One (1) Protocol for reproductive analysis of <i>P. maxima</i> ; Knowledge Products (Fisheries Profile Characterization of <i>Pinctada maxima</i>) Publication: One (1) Scientific Publication (The fishery of <i>P. maxima</i> and Reproductive Biology of <i>P. maxima</i>); People and Services: Three (3) Undergraduate and graduate students; One (1) Trained personnel for histological processes; Places and Partnerships: One (1) Partnership with SUC (MSU Tawi-Tawi); Two (2) Potential partnership with study sites (Palawan and Guimaras); Policy: One (1) Policy based information that may be inputted into policies or policy recommendations on the management and conservation of <i>Pinctada maxima</i> ; Social Impact: Provide an in-depth understanding of the fishery and reproductive biology of <i>P. maxima</i> that will aid in the formulation of protocols and policies to improve production and community involvement to better conserve and manage this resource. Economic Impact: The project will be offering techniques and protocols which will help improve the production of pearl oysters in the country. Potential improvement in the production will provide additional income to all members of the industry and may possibly provide jobs and develop more innovative and diversified business opportunities.	University of the Philippines Visayas (UPV)	(1) National Government Agencies Personnel (e.g. BFAR); (2) Local Government Units; (3) Partnered Universities; (4) Fishermen; (5) Researchers	01-Aug-24	31-Jul-26	ONGOING	4,999,998	1,429,643
	Impacts of Marine Heatwaves in select West Philippine Sea Reefs	Integrity of the environment and climate change adaptation and mitigation	1. Determine the impact of Marine Heat Waves (MHW) to coral reef ecosystems (Lead: Philippines); 2. Identify the occurrences of MHW in the western Pacific Ocean i.e., the seas of Philippines, Indonesia and Japan (Lead: Indonesia); 3. Find the generating mechanisms of MHW in terms of atmospheric and oceanic aspects (Lead: Japan)	Information on the MHW occurrence in the western Pacific in broader-scale and finer-scale in the Philippines, Indonesia and Japan. Information on the mechanisms of MHW generation in the Philippines, Indonesia and Japan. Coral reef monitoring sites in West Philippine Reefs; Bali, Indonesia and Okinawa, Japan. Standardized coral bleaching monitoring protocol	University of the Philippines Diliman (UPD)	Scientists and students (UPD MSI, Batangas State University, Diponegoro University, Tohoku University) and local stakeholders (LGU Bolinao and Anda, Pangasinan, Zambales, Batangas and Puerto Galera) and, NGOs (DENR and BFAR)	01-Nov-22	31-Jan-26	ONGOING	13,251,380	1,627,055
	Iron, Nickel, and Nitrate from Aerosol Deposition and their Influence on Growth and Toxin Production of Harmful Algal Bloom Species (IRON-HAB)	Rapid, inclusive and sustained economic growth	General Objective: Harmful algal blooms are ecologically- and economically-relevant phenomena due to the disruptions these cause on coastal communities and the general population. The major goal of this project is to investigate the influence of iron and nickel availability on the growth of model HAB species <i>Alexandrium minutum</i> and <i>Pyrodinium bahamense</i> . Further, because iron and nickel are important in nitrogen metabolism, the interactive effects of these metals with nutrient availability will be investigated with specific focus on toxin production. Specific Objective: The proposed project is aimed towards improving our knowledge on the contribution of aerosol deposition to the occurrence of harmful algal blooms with emphasis on model HAB species <i>Alexandrium minutum</i> and <i>Pyrodinium bahamense</i> . The objectives of the project are: determine the levels of iron, nickel, and nitrate in field-collected filters for aerosol deposition; elucidate the contribution of aerosol deposition on the availability of iron, nickel, and nitrate for phytoplankton growth specifically <i>Alexandrium minutum</i> and <i>Pyrodinium bahamense</i> ; and evaluate the effect of iron, nickel, and nitrate from aerosol deposition on the growth and toxin production of <i>Alexandrium minutum</i> and <i>Pyrodinium bahamense</i> .	EC Publications: results will be used for publications (estimated 3) and for presentations in conferences (estimated 2-3) EC Products: Contribute information into the HABhub Informatics System (DOST-PCAARRD funded project headed by Dr. ATYáigue) EC People and Services: support for graduate students and researchers (2 graduate students); short-term interns (about 2 per year); and visiting students/researchers (about 2 per year) EC Places and Partnerships: Strengthened collaboration with other HAB scientists (Research Collaboration Agreement with NFRDI) and community organizations in the Bolinao-Anda municipalities EC Policy: Come up with recommendations in drafting regulations pertaining to air pollution and aerosol quality improvement	University of the Philippines Diliman (UPD)	The project will benefit various stakeholders from academic sector to communities living close to areas with persistent or intermittent occurrences of harmful algal blooms. The scientific community will benefit from new knowledge generated from the work as well as through increasing the number of researchers and scientists that will earn their degrees resulting from the research support provided by the project. The community in general will benefit by understanding the environmental factors contributing to the occurrence of harmful algal blooms in coastal areas that provide their main source of livelihood.	01-Oct-24	30-Sep-26	ONGOING	9,792,496	2,840,936
	Piloting Sea Cucumber Fisheries Management through Species-Specific Size Regulation and Sustainable Trade in Selected Areas in Mindanao	Rapid, inclusive and sustained economic growth	General Objective: To improve and sustain the management of sea cucumber fishery using species-specific regulation of the top three commercial species in two municipalities. Specific Objective: To initiate species-specific sea cucumber management, using the, top three commercially harvested species To develop a local ordinance and a management plan to manage sea cucumber resources To document and monitor harvesting and processing practices in relation to the type and volume of discards for future livelihood interventions	Publication: Two papers/posters presented in scientific fora Two papers submitted for publication; in A, scientific journals Patent: N/A Product: N/A People: Trained 40 local sea cucumber fishers/gatherers on line transect survey (20 individuals from each LGU) A, B, Supported two thesis students A, B, Place: 4 MOA (2 LGUs, 2 Regional BFAR offices) Policy: 2 ordinances 2 management plans	Mindanao State University - Naawan (MSU Naawan)	Sea cucumber gatherers/fishers and processors LGUs BFAR thesis students	01-Jan-24	31-Dec-25	COMPLETED	4,991,154	2,455,310

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Population Genetics and Molecular Characterization of Pearl and Other Commercially Important Oysters Using Multigene DNA Analysis	Rapid, inclusive and sustained economic growth	General: To determine the molecular characteristics and population genetics of pearl and other commercially important species for conservation, sustainability and management. Specific objectives: 1. To characterize the genetic make-up of pearl and other commercially important oyster species; 2. Investigate the genetic diversity within and between populations to understand their population structure, level of connectivity and gene flow; 3. Utilize the generated genetic data as input for the development of data-driven conservation, sustainability and management practices for pearl and other commercially important oyster species.	End of the Project Outputs: Publications: At least 2 ISI-indexed publications: (1) molecular characterization and (2) population genetics of pearl and other commercially important oysters based on multigene DNA analysis; Field Guide on Philippine pearl oyster and other commercially important oyster species; Oyster multigene DNA analysis Manual: sample collection, DNA extraction, amplification and data analysis; Patents: Intellectual property rights for the data to be cited coming from the project once deposited in public database; Products: cDNA sequence for species level identification of oyster specimens; Map showing the population structure based on genetic data of pearl and other commercially important oysters; People and Services: 5-10 Personnel trained in molecular genetics methods and analyses, including faculty and students at other ISUFST and partner SUCs; 1-2 Holding seminars and workshops (morphological-molecular characterization and population genetics); 1-4 undergraduate/graduate students; Places and Partnerships: Establish a shared-use molecular genetics laboratory for graduate students and other researchers; Partnerships with SUCs and LGUs and People Organizations i.e. oyster fisherfolk association; Collaboration between local communities, pearl and other oyster farmers and the research team; Policies: Generate science-based information that can serve as input for policy recommendations for the conservation, sustainability and management pearl and commercially important oyster species. Social Impact: Community Engagement and Awareness; Policy and Advocacy; Economic Impact; Sustainable Oyster Management; Diversified and Enhanced Livelihoods	Iloilo State University of Fisheries Science and Technology (ISUFST)	Local fisherfolk, fisheries managers, resource planners (from LGUs, DENR, BFAR, and people's organizations), academics, and researchers (local and global), contributing to improved oyster management and sustainability.	01-Aug-24	31-Jul-26	ONGOING	5,000,000	844,508
	Prevalence and Genetic Diversity of Cetacean morbillivirus (CeMV) in Cetaceans Stranded in the Philippines	Rapid, inclusive and sustained economic growth	Detect CeMV in cetaceans stranded in the Philippines; Determine significant association between the presence of CeMV and stranding event parameters (cetacean species, sex, age group, stranding season, stranding site, and source tissue); and Compare the genetic diversity of CeMV circulating in cetaceans found in the Philippines to those found worldwide based on deposited genetic sequences in international databases.	Publications: Publication of manuscripts (2) Oral/poster paper presentations in a national/international scientific conference (2) Patents: Developed/optimized method for CeMV detection (possible patent) Products: Manual on collection and transport of tissues Marine mammal repository (cetacean tissues and genetic material) People and Services: At least 10 government veterinarians (DA-BFAR) trained on advanced medical management of stranded cetaceans for detecting viral diseases/pathogens At least 5 Filipino research associates and graduate students trained on protocols and assays used in the study Places and Partnerships: Bureau of Fisheries and Aquatic Resources (BFAR), Department of Agriculture (DA) Philippine Marine Mammal Stranding Network (PMMSN) Asian Marine Mammal Stranding Network (AMMSN) LGUs in stranding sites Policy: The project will come up with a green paper (for crafting of policy) presenting findings and courses of action on the rehabilitation and medical management of stranded cetaceans with CeMV infection and other infectious diseases. Specifically, it will consider: (1) availability of resources (2) disease severity and prognosis (3) practicality of continuing with rehabilitation	University of the Philippines Diliman (UPD)	Researchers (e.g., microbiologists, geneticists) and government agencies (DOH, DOST) that will be needing access to upgraded marine mammal tissue repository. City and provincial veterinarians under BFAR or LGUs and Filipino and graduate students that will use the training manual and will attend the workshop on advanced medical management of stranded cetaceans for detecting viral diseases/pathogens. City and provincial veterinarians under BFAR or LGUs and members of PMMSN, and AMMSN that will use the manual detailing the protocol for collection of biological specimens from marine mammals during stranding events as well as local and international transport of tissues for sharing of expertise and practices in the Asian region. Researchers, Department of Health (DOH), and Department of Science and Technology (DOST) that will use the developed method for monitoring CeMV in Philippine waters. Researchers and DOH that will use the scientific information on detected strains/genotypes of CeMV in Philippine waters for cetacean health surveillance and predicting zoonotic risks for CeMV infection in the Asian region. BFAR, PMMSN, and AMMSN that will use the upgraded marine mammal stranding database for crafting policies and recommendations relevant to the conservation and management of H. fuscoglyva. This is a science-based project which aims sustainability and food security for the benefits of various stakeholders. Fisherfolk and people's organizations Local government units Academic and research institutions Researchers and students	01-Apr-24	31-Mar-26	ONGOING	5,000,000	693,510
	Refinement and pilot testing of technology for the White Teatfish <i>Holothuria fuscoglyva</i> (Cherbonnier 1980) hatchery for sustainable production and adaptive management	Rapid, inclusive and sustained economic growth	General Objective: This research project aimed to refine the hatchery protocol on white teatfish <i>H. fuscoglyva</i> towards the development of sustainable mariculture and stock enhancement. Specific Objective: To refine techniques and protocols in spawning induction in <i>H. fuscoglyva</i> through on-site spawning; To refine larval and juvenile rearing protocol of <i>H. fuscoglyva</i> ; To establish technology for stock enhancement and grow-out production of <i>H. fuscoglyva</i> ; and To capacitate the faculty and strengthen the ties of partners and collaborators for sustainable research	Publications: Three technical papers presented in scientific forums and Three submitted in Scopus/ISI Publication Patent: 1 IP Disclosure Product: Production of <i>Holothuria fuscoglyva</i> juveniles and adults. People: Trained 4 collaborators and at least 2 local assistants in each implementation sites for the on-site breeding activity, assist six students (2-PhD-3-MS-1-BS) on the conduct of their theses/dissertation related to the project. Place: Science & Technology based information that will input into policy or guidelines for conservation and management of <i>H. fuscoglyva</i>	Mindanao State University - Naawan (MSU Naawan)	This is a science-based project which aims sustainability and food security for the benefits of various stakeholders. Fisherfolk and people's organizations Local government units Academic and research institutions Researchers and students	01-Jan-24	31-Dec-25	COMPLETED	4,992,786	2,478,392
	Seaweed Waste Biomass from the Carrageenan Industry (SWBC) as Phyco-biostimulants	Integrity of the environment and climate change adaptation and mitigation	General: To investigate seaweed waste biomass from the carrageenan industry (SWBC) as feedstock for the extraction of biostimulants Specific: 1. Determine the nutrient composition and amount of plant growth regulating substances in SWBC 2. Extract and characterize specific oligosaccharides / bioactive compounds derived from SWBC 3. Evaluate the efficacy of SWBC and its derivatives in promoting <i>Kappaphycus</i> growth in micropropagation and field cultivation	Publication: Academic Publications, -at least total of 1: Year 2: Growth-promoting potential of SWBC in Alvarozil; Biochemical profiles and nutrient composition of SWBC Patent: None People: People and Services: Year 1: 1 undergraduate student supported Year 2: 1 undergraduate and 1 MS student supported; dissemination of improved methodologies (e.g., application of extracts from SWBC) in field cultivation of <i>Kappaphycus</i> to seaweed farmers. Place: Partnerships: Years 1, -at least 2-3 Collaborators: probably with 1-2 seaweed farmers associations, 1 seaweed processing industry partner (Shemberg Marketing Corp., Marcel Trading Corp.) Policy: None	University of the Philippines Visayas (UPV)	Seaweed farmers / coastal communities Seaweed processing industry, -at least adequate supply of raw materials and continuity of supply chain issues stable/ continued commercialization, both for domestic and export demand; promotion of -at least zero-waste, -in the process of carrageenan production Researchers in seaweed ecophysiology and aquaculture -at least Through these studies, innovative approaches in production and propagation of <i>Kappaphycus</i> in Philippine waters may be developed to further increase seaweed production amid the challenges brought about by global climate change. Findings from this research could also be used to support projects for funding studies on the application of extracts from SWBC as innovative farming strategy for other cultivated seaweed species of commercial interest (e.g., <i>Asparagopsis</i> , <i>Porphyra</i> , <i>Halymenia</i> , <i>Gracilaria</i> , <i>Sargassum</i> , <i>Codium</i>). This study could likewise stimulate researches on new methods of extraction or production of untapped seaweed metabolites for their value-added potential.	16-Jan-24	15-Jan-26	ONGOING	5,000,000	2,398,460
	Spatio-temporal Monitoring and Rehabilitation Technology for the Enhanced Recovery of Coral Reefs (SMARTER-Corals)	Rapid, inclusive and sustained economic growth	General: To develop a management system based on current theoretical insights and empirical information to improve coral reef resilience in Apo Reef Natural Park. Specific: 1. Describe the long-term community structure trend of benthic invertebrates and the associated reef fish of ARNP. 2. Conduct initial population connectivity studies of select reef-associated species through genetic profiling. 3. Build and monitor a scaled-up stabilized coralline substrate adopting the protocol of SMART Corals 4. Provide strong science-based inputs for policy formulation and spatial management plan development 5. Strengthen established partnerships between SUCs, NGOs, DENR ARNP-PAMO, and Sablayan LGU through technical assistance and capacity building activities.	ARNP ecology, particularly processes that contribute to stability, resilience, and recovery. Genetic structure of COT population to help managers gain initial insights and understand future outbreaks. Capacitated personnel and volunteers on coral reef community monitoring and restoration work to help ARNP-PAMO and other stakeholders in monitoring the reef complex. Production of a habitat map with a minimum of four classes (i.e., live coral dominated, dead coral with algae, sand, rubble) and with an overall accuracy of no less than 50%, to be used in change detection and spatial planning. The production of an ARNP ecosystem vulnerability model to show sections of ARNP that are most vulnerable to disturbance and those that have the highest potential for recovery. Establishment of	University of the Philippines Los Baños (UPLB)	Managing bodies ARNP PAMO/MENRO Fishing community of Sablayan and neighboring municipalities Tourism sector of Sablayan SUCs and HEIs	16-Jan-23	15-Jan-26	ONGOING	19,306,775	5,137,024

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Species Distribution, Abundance, and Ecology of Pearl Oysters (Pteridae) of the Philippines	Rapid, inclusive and sustained economic growth	General: To determine the biology and ecology of pearl oyster species for management of fisheries and stock sustainability. Specific: 1) Survey the pearl oyster species present in selected sites of the Philippines and determine their size, abundance, and density; 2) Establish the habitat type of each pearl oyster species identified; and 3) Develop a distribution map of pearl oysters of the Philippines based on selected sites.	Publications—1 peer reviewed publication Products C1 map of pearl oyster species distribution and habitat in 3 selected sites People and Services C2 Research Assistants trained on pearl oyster taxonomy and habitat characterization C1-2 MSc graduates/undergraduate trained on pearl oyster taxonomy and habitat characterization C2 Project Staff trained on pearl oyster taxonomy and habitat characterization C2 Field Assistants or Project Staff trained on pearl oyster taxonomy and habitat characterization Partnerships C3 Collaboration/Partnerships through MOU with 1) MSU-Tawi-Tawi as co-researcher and coordinator for FGD and KI and 2) NGO (Palawan) as LGU and stakeholders coordinator for FGD and KI Policies C4 CS&T based information that will input into possible policies, guidelines or policy recommendations on the fisheries management and stock sustainability of pearl oysters in sampling sites Social Impact C5 A participatory-based management involving all the capacitated stakeholders is projected resulting to well-equipped and knowledgeable stakeholders on sustainable fishing/farming practices that sustaining, improving, and/or creating more livelihoods for Philippine pearling industry. Economic Impact C6 The development of protocols and techniques will result to the improvement of the pearl oyster production, promotion of investments in product development, strengthening the hold of current markets and exploration/diversification to new markets.	University of the Philippines Visayas (UPV)	Small-scale fishers Pearl farm industry Shellcraft industry Aquaculture industry LGUs, BFAR, DENR, NGOs	01-Aug-24	31-Jul-26	ONGOING	4,990,047	1,415,586
	Stock Assessment and Reproductive Biology of Siganids in Calatagan, Batangas: Inputs to Species Management Plan	Rapid, inclusive and sustained economic growth	General: To assess the current fishery and biological aspects of siganids in Calatagan, Batangas and develop management strategies for the sustainable harvest of the siganid stocks. Specific: 1. Assess the current fishery of siganids in Calatagan, Batangas 2. Examine reproductive biology of siganid stocks 3. Investigate early-life history of siganids through otolith microstructure 4. Develop management strategies for siganid stocks in Calatagan, Batangas	Publication: One (1) scientific paper published in an international journal (peer-reviewed and ISI/Scopus index); IEC materials i.e., brochure, flyers, video Patent: N/A People: Ten (10) trained faculty, research assistants, fishery manager Place: MDA with Municipality of Calatagan, Collaboration with BFAR 4A and Bicol University Tabaco Campus Policy: Policy brief for the conservation and management of siganid stocks in Calatagan, Batangas.	Batangas State University (BatState-U)	The target beneficiaries of the proposed project are the following: Research Staff of VIP CORALS Faculty members of Batangas State University Government Agencies Fishing communities along Calatagan, Batangas Other stakeholders involve in siganid fishery	01-Jun-24	31-May-26	ONGOING	4,995,136	2,171,068
	Value Chain Analysis of Pearl Oyster (Pteridae) Towards Sustainable and Competitive Pearling Industry in the Philippines	Rapid, inclusive and sustained economic growth	General: To examine the pearl oyster (Pteridae) industry in the Philippines based on its governance, socio-economic, and ecological performance. Specific: 1. Provide an overview of the current state of the pearl oyster industry in the Philippines; 2. Map the pearl oyster value chain that will address the: a) key customers and product requirements; b) key players and activities; c) product, information, and payment flows; d) logistic issues, and e) external influences; 3. Analyze the performance of the pearl oyster value chain in terms of efficiency, flexibility, and overall responsiveness; and 4. Develop the key intervention models and upgrading strategies with the desired characteristics of inclusiveness, resiliency, and sustainability for pearl oyster.	Products C1 Value chain map of Philippine pearling industry Cone (1) training module for pearl oyster key stakeholders produced in three (3) different local languages/dialects Publications Cone (1) ISI publication on pearl oyster industry C2 at least four project personnel (includes early career researchers, graduate, and undergraduate) will be trained on quantitative and qualitative research using value chain, SWOT, and root cause analyses Places and Partnerships C3 Partnership with the pearl oyster industry, research and academic institutions, government (LGUs, NGAs) through MOUs/NOAs Patent C4 Two (2) copyright of value chain maps developed, including training module and/or policy briefs Policy C5 CS&T based information that will input into policies or guidelines for all stakeholders across the pearl oyster value chain that is focused on human well-being, good governance, and stock sustainability of the pearl oysters. Social Impact C6 Assessment of the Philippine pearling industry through fisheries value chain that will help build and integrate co-management and participatory approaches, improving human well-being and their capacities needed for the promotion of sustainability and good governance. Economic Impact C7 The identification of the strengths and gaps in the Philippine pearl oyster industry and the creation of a value chain map that will serve as a baseline to develop programs and policies that will increase value and volume production as well as global market share of Philippine pearling industry.	University of the Philippines Visayas (UPV)	1. Stakeholders a. Input suppliers b. Pearl oyster farm operators; workers; small-scale divers/fishers c. Pearl oyster processors and processing companies d. Pearl oyster traders, distributors, and exporters 2. Local communities within pearl oyster farm sites 3. Enabling environment (e.g., NGAs, RIs, academe) and supporting markets	01-Jul-24	30-Jun-26	ONGOING	5,000,000	1,307,768
	VISMO: Visayan Sea Model for Operational Oceanography	Integrity of the environment and climate change adaptation and mitigation	General: To determine mechanisms or processes that may explain the high primary productivity in the Visayan Sea. Specific: 1. Develop a nested high resolution relocatable ocean model of the internal seas of the Philippines from coarse resolution global or regional models 2. Describe tidal characteristics and propagation through the different small basins in the Visayas 3. Determine sources of energy for vertical mixing in the Visayas and map out location of shallow sea fronts 4. Characterize temporal and spatial variability of chlorophyll in the Visayas and correlate with environmental variables from remote sensing and model results 5. Develop biogeochemical model to simulate observed primary productivity patterns 6. Establish a web site of the Visayan Sea model and make available model results for future research on fisheries, larval transport, and policies regarding fisheries management.	1. Publications (1) Three Research Articles/Journal Publications 2. Product (3 Knowledge Products) 3. A website providing near-real-time high-resolution ocean current maps of the Visayan Sea from Structured and Unstructured grid Relocatable Ocean Platform for Forecasting, Nucleus for European Modelling of the Ocean (SURF-NEMO) output 4. Places and Partnerships 5. Policy Science-based information that will serve as inputs for crafting policies.	University of the Philippines Diliman (UPD)	BFAR and SUC™s who need surface current maps and productivity information for maritime enforcement, oceanographic research and fisheries management.	01-Jun-23	30-Jun-25	COMPLETED	4,999,368	1,022,705
AGRI-INNOVATE: Development and Piloting of Supply/Value Chain Solutions for Excess Supply and Resource Recovery of Vegetables in the Cordillera Administrative Region	Project 1. Development and Piloting of Supply Chain Coordination for Vegetables in Cordillera Administrative Region	Rapid, inclusive and sustained economic growth	General: To develop and pilot a supply chain coordination system for selected highland vegetables in Cordillera Administrative Region. Specific: 1. Establish and update the baseline production and marketing conditions for selected vegetables; 2. Evaluate the status, constraints, and opportunities of Benguet Agri-Pinoy Trading Center as supply chain coordination unit; 3. Develop and pilot a supply chain coordination system for vegetables in the Cordillera Administrative Region; 4. Strengthen the capability of selected vegetable farmer-groups to contribute to the supply chain management; 5. Provide a continuing research and technical support to the BAPTC as supply chain manager; and 6. Develop a monitoring, evaluation, and learning system for the pilot vegetable supply chain coordination system.	Publications — Two (2) draft journal articles Products — One (1) updated supply chain map — One (1) developed database of key players, their role, demographics, capacity, and requirements, among others, in the vegetable supply chain in Cordillera — One (1) developed sampling and online data collection system for supply outlook estimate — One (1) conceptual model of an inventory monitoring system — One (1) developed operational manual for supply chain management for cluster FCAs People/Services — At least 100 farmers benefiting from the pilot supply chain management system; — At least 10 composed of farmer leaders and BAPTC personnel capacitated on supply chain management — At least five (5) identified markets for linking Places and Partnerships — At least seven (7) partnerships/agreements with LGUs, producer groups, value chain actors, institutional buyers, and other enabling players Policies — 1 policy supporting the development of vegetable supply chain management unit Economic Impact— Increased producer shares and reduced marketing costs, and potentially increased income for vegetable farmers from the improved supply chain efficiency — Reduced transaction costs are expected to result in more stable profits for farmers Advisories to farmers may result in less oversupply and less price volatility— Actionable insights from the documented innovations may result in increased direct marketing models with FCAs as major players — Strengthened industry positioning and fostering sustainability may contribute to long-term growth and resilience in the highland vegetable industry — Collaborative partnerships and technology advancements may improve the competitive landscape for the highland vegetable industry Social Impact — More empowered FCAs and increased confidence of farmers in negotiating with food retailers and institutional buyers, and other vegetable stakeholders — Enhanced social networks, trade relationships, conflict resolution, and communication patterns among farmers and FCAs in the vegetable industry as a result of the comprehension of the group dynamics in themarketing innovations,	Benguet State University (BSU)	Farmers, farming households, and farmer cooperatives and associations (FCAs) Traders Consumers Local Government Units, including AEWs Policymakers, including line agencies	01-Jun-25	31-May-27	ONGOING	4,000,000	2,764,208

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
AGRI-INNOVATE: Development and Piloting of Supply/Value Chain Solutions for Excess Supply and Resource Recovery of Vegetables in the Cordillera Administrative Region	Project 2. Development and Piloting of Waste to Value Agriculture to Manage the Excess Supply of Vegetables	Rapid, inclusive and sustained economic growth	General: To develop and support the vegetable industry in the Cordillera Region through transforming the excess supply of vegetables into various value-added products using sustainable methods and available S&T technologies to reduce the level of food waste. Specific: 1. Assess the feasibility of converting vegetable waste into valuable products like juices, biofertilizer, and vermicompost; 2. Develop and pilot vegetable wastes-to-value products/technologies; 3. Capacitate women and men farmers and other stakeholders with entrepreneurial and technical competencies for the development of vegetable value-added products and enhanced operation management; 4. Promote the waste-to-value agriculture and developed products; 5. Establish market linkage with the potential markets of the vegetable wastes-to-value products/technologies; and 6. Develop policy recommendations supporting the promotion of waste-to-value agriculture	Publications — At least one (1) draft journal article showcasing the result of the project — At least five (5) IEC materials for the developed products and waste-to-value agriculture Patent — Three (3) utility model applications for ready-to-drink juices, and biofertilizer, and vermicompost Products — Three developed products (i.e., ready-to-drink vegetable juices vermicompost and formulated biofertilizer utilizing Black Soldier Fly Larvae) — One (1) vegetable processing guide for ready-to-drink juices — One (1) processing guide for production of vermicompost — One (1) biofertilizer formulation standard protocol/guide — One (1) investment brief People Services — At least seventy-five (75) women and men participants, 50 farmers, 10, entrepreneurs/food processors, and 15 LGU extension workers, capacitated in vegetable processing Places and Partnerships — At least eight (8) Memorandum of Understanding (MOU) with farmer cooperators, with potential markets, and partner agencies Policies — Policy Recommendation to support waste-to-value agriculture Social Impacts — Leveraging on the adaptation of technology to maximize resources by reducing the wastage of vegetables, results of the study may create a more dynamic and innovative culture that fosters growth and development for all farmer stakeholders Economic Impact — Additional income streams for the farmers from converting agricultural waste into valuable resources such as juice biofertilizer, and vermicompost — Rejuvenation of soil health leading to more profitable production of crops and the integration of a sustainable native swine production in the vegetable farming systems may result in an improved economic status for farmers	Benquelet State University (BSU)	Vegetable women and men growers Policymakers and local government units	01-Jun-25	31-May-27	ONGOING	3,910,000	2,611,223
AGRI-INNOVATE: Development and Piloting of Supply/Value Chain Solutions for Excess Supply and Resource Recovery of Vegetables in the Cordillera Administrative Region	Project 3. Development of Pre- and Postharvest Protocols for Selected Highland Vegetables to Improve Quality and Reduce Losses	Rapid, inclusive and sustained economic growth	General: To develop pre- and postharvest protocols for selected highland vegetables. Specific: 1. Assess the current pre- and postharvest practices for selected highland vegetables. 2. Develop pre- and postharvest protocols for selected highland vegetables to mitigate excess vegetable supply in the market 3. Develop and implement a technology transfer and promotion program to train women and men farmers and supply chain stakeholders in best practices for handling, storage and logistics; 4. Assess the economic, environmental, and social outcomes of the improved pre- and postharvest practices on the vegetable supply chain in CAR.	Publications — At least one (1) draft journal article — At least one (1) IEC material developed on pre- and postharvest production management practice Patent — At least one (1) utility model on pre-harvest production management practice and post-storage cooling protocol Products — Pre- and postharvest management processes People Services — At least one (1) faculty/industry staff provided support for continuing professional development — At least three (3) extension workers of the partner LGUs trained on the pre- and post-harvest management and other technical skills — At least fifty-five (55) women and men trained on pre-harvest and post-harvest management practices Places and Partnerships — At least three (3) MOUs with selected LGU's Policies — At least one (1) policy recommendation to promote the developed pre- and postharvest protocols. Social Impact — Improved smallholder farmers' livelihoods by reducing post-harvest losses and increasing access to institutional markets — Improved collaboration with the marginalized farmers — Supported farmers Economic Impact — Reduced post-harvest losses, ensuring more marketable produce and better prices. — Improved supply chain efficiency, cutting costs related to spoilage and logistics	Benquelet State University (BSU)	Women and men farmers Traders Professors Students Legislators	01-Jun-25	31-May-27	ONGOING	3,270,000	2,089,049
AGRI-INNOVATE: Development and Piloting of Supply/Value Chain Solutions for Excess Supply and Resource Recovery of Vegetables in the Cordillera Administrative Region	Project 4. Development and Piloting Nutrient Return Program-An Innovative Solution for Managing Vegetable Wastes and Excess Supply	Rapid, inclusive and sustained economic growth	General: To develop and pilot a nutrient return program as an innovative solution for managing vegetable waste and excess supply towards policy formulation. Specific: 1. Design protocols for transforming vegetable waste and excess vegetable supply into green manure and biofertilizers 2. Assess the different effects of nutrient return program on the agricultural system (on soil physical, chemical, and microbial characteristics as well as crop yield, quality, and pest/disease resistance in the subsequent growing cycle) 3. Implement and pilot the nutrient return program 4. Evaluate the economic feasibility, performance, and sustainability of the nutrient return program 5. Formulate evidence-based policy framework for incentivizing and scaling up the nutrient return program	Publications — At least two (2) draft journal articles — At least two (2) IEC materials regarding green manuring and biofertilization — At least (1) policy brief on green manuring and biofertilization incentive Products/Processes — Package of technology on the utilization of brassica and other vegetables waste and excess vegetable supply as a green manure as a biofertilizer for soil-borne diseases and insect pests — Baseline data in the recommendation/implementation of policies and crafting of interventions on the utilization of vegetable waste and excess vegetable supply for green manure and biofertilization People Services — At least two (2) stakeholder meetings with men and women policymakers (DA, DOST, LGU, Sangunian etc) for the farmer incentive and subsidy proposal — At least one (1) MS student — At least two (2) GS students as partner researchers — At least thirty (30) trained on the nutrient return program Places/Partnerships — At least six (6) established partnerships with the government unit, state universities, and farmer associations Policies — At least one (1) policy framework — At least one (1) policy document/ordinance for incentivizing green manuring or crop-soil incorporation (based on the findings of the research)Economic Impact — Reduced usage of synthetic inputs by 20% thereby reducing input costs — Improved coordination between producers and buyers leads to more stable income for farmers — Reduced post-harvest losses increase overall market efficiencySocial Impact — Improved usage of sustainable agricultural practices — Promoted safety of human health and consumers through utilization of synthetic inputs (fertilizers and pesticides)	Benquelet State University (BSU)	The target beneficiaries of the project include the following: Vegetable farmers in Benguet, Mt. Province and Ifugao; LGU Policymakers for crafting policy on incentivizing farmers with environment-friendly and sustainable practices; research and extension workers from academe and RDIs	01-Jun-25	31-May-27	ONGOING	3,820,000	2,354,430
Bamboo Resources Inventory and Technology-Enabled Mapping in the Philippines (BRITEMAP)	Project 1. Community-based Inventory and Mapping of Bamboo Resources in the Philippines Aided by a Mobile Application (COM-APP BRITEMAP)	Rapid, inclusive and sustained economic growth	General: To scale-out the harmonized community-based bamboo inventory in the Philippines and capacitate bamboo stakeholders to come up with a reliable and updatable national bamboo resources information system. Specific: 1. Scale out the harmonized community-based bamboo inventory system in 11 regions (CAR, R3, 4A, 4B, 5, 7, 8, 9, 11, 12, and 13); 2. Develop the knowledge and skills of the representative staff members of the SUCs, bamboo convergence agencies (DENR, DTI and DA, DILG), PSA, private industries, community of bamboo farmers/traders/processors and other stakeholders on the harmonized, remote-sensing enhanced participatory inventory system for bamboo resources; 3. Document lessons learned and experiences gained in all activities toward scaling out the bamboo inventory system to serve as benchmark for project monitoring and evaluation of the project; and 4. Facilitate the finalization of the harmonized bamboo inventory system and protocol guidelines.	Products/ICT-enabled data/ database for the inventoryPublications ECA at least one (1) article submitted for publication in indexed journals/ICT-enabled manual for the harmonized inventory protocolICT-enabled manualPeople ServicesCapacitated stakeholders in conducting the actual inventory (At least 20 participants per region)Places and PartnershipsCPartnerships with SCUs, DENR, DA, DTI, LGUs, PSA, GAs and Private Sector, Bamboo Farmers/ Traders, ManufacturersPolicy/Policy recommendations/inputs to the proposed policy document, specifically the parameters and the aspects to be coveredEconomic—Evisioned to boost the bamboo industry through steady and reliable supply of bamboo poles & products, growth of the bamboo manufacturing/processing sector — Contribute substantial revenues for farmers, manufacturers, and government agencies — Established bamboo enterprises for local and foreign marketsSocial — Poverty alleviation among bamboo growers/farmers/traders — Strengthening of local partnership among bamboo stakeholders (government, POs, community) — Inclusiveness and increased engagement of the community in the inventory and management of bamboo resources — Natural resource conservation and sustainable utilization of bamboo resources	University of the Philippines Los Baños (UPLB)	— farmers and communities engaged in growing bamboo based farming and livelihood — potential investors in bamboo plantation development and bamboo-based enterprises — operators of enterprises and manufacturing plants using bamboo as raw materials — local government units with bamboo resources — National and regional government agencies such as DENR, DA, DTI, local government units (DENR, DA, DTI, LGUs), Philippine Bamboo Industry Development Council (PBIDC), PSA, — Researchers and scientific community	01-Feb-24	31-Jan-27	ONGOING	10,729,260	4,633,736
Bamboo Resources Inventory and Technology-Enabled Mapping in the Philippines (BRITEMAP)	Project 2. Mapping Bamboo Resources and Mobile Application and Dashboard Development in the Philippines (MAP-APP BRITEMAP)	Rapid, inclusive and sustained economic growth	General: To facilitate the enhancement and roll-out of the mobile application and web dashboard for the harmonized bamboo inventory protocol. Specific: 1. Enhance the mobile application for the bamboo inventory protocol to provide holistic, reliable, and up-to-date statistics on bamboo resources in the country; 2. Generate bamboo distribution maps and estimates of available bamboo resources in 11 regions of the country using geospatial technology and inventoried data; 3. Develop a web application dashboard to facilitate management, retrieval, and visualization of data and information on bamboo resources in the Philippines; and 4. Provide recommendations on the institutionalization of mobile application and web dashboard.	ProductsECA mobile app that people in the field can use to record and collect dataECA web application dashboard that will facilitate management, retrieval, and visualization of bamboo resources in the 11 regions of the PhilippinesProjected distribution map of bamboo resources in the 11 regions of the PhilippinesPublications ECA at least one (2) articles submitted for publication in indexed journalsEVideo and/or user manual on how to use the web dashboard and the mobile applicationPeople ServicesCTrained partners and local bamboo farmers in the use of the mobile app for bamboo resourcesCTrained partners on the use of web application dashboard (at least 20 per region)Places and PartnershipsCPartnerships with SCUs, DENR, DA, DTI, LGUs, PSA, GAs and Private Sector, Bamboo Farmers/ Traders, ManufacturersPolicy/Policy recommendations/inputs in terms of the use or application of the mobile app and web dashboardSocial Impact — Poverty alleviation among bamboo growers/farmers/traders — Strengthening of local partnership among bamboo stakeholders (government, POs, community) — Inclusiveness and increased engagement of the community in the inventory and management of bamboo resources — Natural resource conservation and sustainable utilization of bamboo resourcesEconomic Impact — Evisioned to boost the bamboo industry through steady and reliable supply of bamboo poles & products, growth of the bamboo manufacturing/processing sector — Contribute substantial revenues for farmers, manufacturers, and government agencies — Established bamboo enterprises for local and foreign markets	University of the Philippines Los Baños (UPLB)	a. farmers and communities engaged in planting bamboo b. potential investors in bamboo plantation development and bamboo-based enterprises c. operators of manufacturing plants using bamboo as raw materials d. national government for policy formulation and local government units with bamboo resources for utilization such as DENR, DA, DTI, local government units, and Philippine Bamboo Industry Development Council (PBIDC), PSA, — Researchers and scientific community	01-Feb-24	31-Jan-27	ONGOING	7,127,963	2,942,249

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Bamboo Resources Inventory and Technology Enabled Mapping in the Philippines (BRITEMAP)	Project 3. Imperatives of Policy and Leveraging Stakeholders and National Entities towards Institutionalizing BRITEMAP (IMPLEMENT BRITEMAP)	Rapid, inclusive and sustained economic growth	General: To institutionalize a policy that will mandate a regular inventory and mapping of bamboo resources at the national level. Specific: 1. Conduct consultations and forums to enable the broad participation of the stakeholders ensuring that their interests and concerns are recognized and addressed in the formulation of the draft policy; 2. Formulate a JAO or JMC (DENR-DA-DILG-DTI) that will mandate the implementation of community-based bamboo inventory among communities and local government units on a regular and coordinated basis so as to maintain an internet-based bamboo data collection and analysis system for the country; 3. Advocate for the adoption of the proposed policy	Publications €At least one (1) article submitted for publication in indexed journals€3-5 minute video explainer €Policy brief€People Services€Trained project staff (3) on conducting policy formulation€National policy forum€Stakeholder consultation workshops€Places and Partnerships €Partnerships with SUCs, DENR, DA, DTI, LGUs, PSA, GAS and Private Sector, Bamboo Farmer/ Traders, Manufacturers€Formation of TWG for the formulation of the policy document to be endorsed to relevant agency€Policy document endorsed and adopted€Economic Impacts€ Envisioned to boost the bamboo industry through steady and reliable supply of bamboo poles & products, growth of the bamboo manufacturing/processing sector € Contribute substantial revenues for farmers, manufacturers, and government agencies € Established bamboo enterprises for local and foreign markets Social Impacts€ Poverty alleviation among bamboo growers/farmers/traders € Strengthening of local partnership among bamboo stakeholders (government, PDS, community) € Inclusiveness and increased engagement of the community in the inventory and management of bamboo resources € Natural resource conservation and sustainable utilization of bamboo resources	University of the Philippines Los Baños (UPLB)	a. Farmers and communities engaged in growing bamboo-based farming and livelihood. b. Potential investors in bamboo plantation development and bamboo-based enterprises. c. Operators of enterprises and manufacturing plants using bamboo as raw materials. d. Local government units with bamboo resources. National and regional government agencies such as DENR, DA, DTI, and Philippine Bamboo Industry Development Council (PBIDC), PSA, I. Researchers and scientific community	01-Feb-24	31-Jan-27	ONGOING	7,036,683	2,270,786
Socio-Ecological Assessment of the Invertebrate Gleaning Fisheries in the Philippines Towards Evidence-Based Sustainable Resource Governance (GleanPhil Program)	Project 1: Gleaning Fisheries as a Valuable Food System: Socio-demographics, Fisheries Production, Food Security, and Nutrition of Coastal Communities	Rapid, inclusive and sustained economic growth	General: To provide a comprehensive socio-economic and demographic profile of fishing communities dependent on gleaning fisheries. Specific: 1. Describe the demographic, sociocultural, and economic profile of gleaners in selected sites in Luzon, Visayas, and Mindanao island groups; 2. Determine the degree of dependence of coastal households on gleaning as a local food system and livelihood source; 3. Obtain reliable estimates of gleaning effort, catch rates, catch composition, and revenues from invertebrate fisheries; 4. Determine relative contribution of invertebrate fisheries to the household food security, nutrition, and economy; and 5. Recommend appropriate management measures at both local and national levels that can be used towards evidence-based sustainable resource governance on gleaning fisheries.	Publication—2 journal publications in national or international indexed journals—1 program manual on gleaning fisheries research methods—1 field guide/photobook on the most commonly gleaned invertebrates in the Philippines —7 policy briefs/notes —2 undergraduate/graduate thesis manuscripts/Patents/Intellectual Property/Not applicable Products—1 set of demographic, sociocultural, and economic profile data to be shared to other researchers and partners People Services—At least 350 gleaner respondents engaged and capacitated (increased awareness and participation in managing gleaning fisheries)—7 trained local field enumerators for fisheries catch monitoring—2 undergraduate/graduate students conducted their thesis under the project—6 collaborating SUCs trained on demographic, sociocultural, and economic surveys, fisheries catch monitoring, and household nutrition surveys—4 LGUs provided technical advice towards gleaning fisheries governance—4 meetings with LGUs with regards to project updates—1 multi-stakeholder validation workshop involving LGU representatives, DA-BFAR representatives, program members, 4 staff from DOST-PCAARRD SERD, and 3 national experts on gleaning fisheries/Places and Partnerships—6 Memorandum of Agreement with collaborating agencies or member institutions of Top Big To be Ignored (TBTI)-Philippines—7 coastal barangays trained on gleaning fisheries survey and monitoring methods, and informed on resource use impacts—7 Partnership with DA-BFAR (National and Regional Offices) and DENR through MOA/MOU/Letter of Support—1 Partnership with Palawan Council for Sustainable Development (PCSD) and other similar bodies as needed through MOA/MOU/Letter of support Policy—Policy recommendations on management measures for sustainable gleaning fisheries governance for at least 6 local fisheries ordinances —input to formulation of a national policy on gleaning fisheries management (e.g., Fisheries Administrative Order) Social Impact—Heightened awareness by women and men gleaners on the importance of coastal marine resources and the need to sustain	Mindanao State University - Naawan (MSU Naawan)	Results of this project shall benefit the following stakeholders: Local government units and their staff at the MAO, MENRO, and MPDO Members of the local Sangguniang Bayan in crafting fishery ordinances Gleaning community (both full-time and part-time gleaners) Fisherfolk Organizations (including Women's Associations) Municipal Fisheries and Aquatic Resource Management Councils (MFARMCs) University faculty and graduate students NGOs and other civil society groups	01-Jan-25	30-Jun-26	ONGOING	6,561,945	1,792,010
Access and Benefit Sharing Policy Options for the Sustainable Management of Batanes Protected Landscapes and Seascapes (ABS Batanes)	Access and Benefit Sharing Policy Options for the Sustainable Management of Batanes Protected Landscapes and Seascapes (ABS Batanes)	Rapid, inclusive and sustained economic growth	General: To explore policy options that will ensure the social, economic, and environmental sustainability of the Batanes Protected Landscapes and Seascapes (BPLS). Specific: 1. Examine the BPLS declaration and other related policies, and their implementation; 2. Profile the distributional effects of the declaration of BPLS among key stakeholders through access benefit sharing outcome; 3. Assess policy options based on social safeguards, access, and benefit sharing; and 4. Recommend policy options that will ensure the sustainable management of BPLS and other protected areas in the Philippines.	Publication€At least two (2) articles ready for publication in refereed journals €At least one (1) Policy Brief€One (1) video explainer of policy brief/Product €Science-based policy interventions, access and benefit sharing framework for protected areas/Places and Partnerships€Partnership with ISC in project implementation (Collaborative Research Agreement)€Partnership through MOU with PAMB, DENR, LGU and other agencies within the protected area People Services€Roundtable discussions or stakeholder consultation workshop/seminars €Capacitated at least ten (10) staff of LGU, DENR/PAMB, NGO, PDS and academe on the use of valuation tools in collaboration with VALUES Lab€At least two (2) trained undergraduate (BS) and two (2) graduate (MS/PhD) students.€Involvement and train at one (1) GREAT scholar Policy €Policy recommendations for BPLS management Social Impact: — Awareness of rights on the sustainable use and conservation of natural and cultural resources — Promote social inclusion particularly access to benefits derived from PA declaration.— Preservation of cultural practices of the Ivatan€Economic Impact: —Improved welfare of men and women through sustainable livelihood in BPLS—Inclusive growth among Ivatan communities.—Conservation of resources of the BPLS—Equitable sharing of benefits from the BPLS	University of the Philippines Los Baños (UPLB)	Policy and decision makers, academe (students, faculty members, researchers), local government units, government agencies (DENR), PDS, island communities (men and women).	01-Jun-24	31-May-26	ONGOING	5,000,000	1,214,757
Advocating for the Institutionalization of Payment for Water Ecosystem Service (P-WES) in the Philippines	Advocating for the Institutionalization of Payment for Water Ecosystem Service (P-WES) in the Philippines	Rapid, inclusive and sustained economic growth	General: To educate and collaborate with local and national stakeholders for the institutionalization of P-WES in the Philippines. Specific: 1. Raise awareness of the significance of P-WES in the Philippines and the different local-level P-WES initiatives; 2. Provide the P-WES and PESO SWAp projects' stakeholders platform to improve the proposed National P-WES policy draft; 3. Implement a parallel effort to institutionalize P-WES at the provincial level; and 4. Institutionalize the implementation of P-WES as a natural resource conservation strategy in the country through a proposed legislation.	Publication€One (1) advocacy kit which contains the following:€One (1) Brochure on the National P-WES Policy€Two (2) IEC materials regarding P-WES in the Philippines and its role in addressing water related issues in the country€Science Policy Dialogue Proceeding€People Services€100 participants learning about the status and significance of P-WES mechanisms in the Philippines€100 participants with improved knowledge, understanding, and appreciation of P-WES as an environmental management approach in the Philippines/Places and Partnerships€Memorandum of Agreement with DENR-RBCO and DENR-FMBC€Memorandum of Agreement with future partner institutions in Nueva Vizcaya€Community of practice to advance and ensure continuity of efforts for P-WES institutionalization in the country€Policy€One (1) P-WES Policy Brief€€One (1) Draft National P-WES Policy€One (1) Provincial Ordinance in Nueva Vizcaya. Economic Impacts a. Poverty alleviation in communities who manage water sources b. Better provision of water ecosystem services, which bring about improvements to other ecosystem services and institutions that are connected with it. For example, higher quality and quantity of water can lead to more business in ecotourism areas and farmlands. 2. Social Impacts a. Improved water quality and quantity in different areas of the country b. Sustainable development of different communities in water source areas. c. Empowerment of communities who manage water sources d. Enhancement of water services can tackle other issues such as food insecurity	University of the Philippines Los Baños (UPLB)	The target participants of the Science Policy Dialogue are the different stakeholders of the P-WES and PESO SWAp projects. These stakeholders come from various agencies, institutions, and organizations. The heads or representatives of different government agencies, provincial and local government units, CSO/NGOs, and academe will be invited. A minimum of 100 participants from the following agencies/ institutions/ organizations are expected to attend: — Senate — House of Representatives — Local Government Units — Water Districts — Protected Area Management Boards — Private Sectors — Civil Society Organizations — Academe — National Government Agencies	01-Jun-24	28-Feb-26	ONGOING	5,000,000	1,325,890

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Analyzing the Effectiveness of Awareness Interventions for the Protection and Conservation of the Philippine Tamaraw	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To assess the overall impact of different awareness and action interventions for attitudinal and behavioral changes of community residents in selected rural and urban provinces in the Philippines to foster community-based and biodiversity protection and conservation to ensure sustainable protection and management of threatened species such as the Philippine Tamaraw.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Conduct non-use valuation estimation that will provide the baseline attribution of non-use importance attached by residents at the target sites for the Philippine tamaraw; 2. Estimate the economic value of the Philippine tamaraw that will be the basis for the information intervention of the project; 3. Determine a baseline key awareness intervention provided to communities and key stakeholders and their relation to willingness to pay to protect values; 4. Determine the effectiveness of awareness interventions in rural and urban settings at short and mid-term impact analyses in increasing awareness and how these affect WTP to protect the Philippine Tamaraw; 5. Determine if knowledge about the economic value of the Philippine tamaraw increases the community's willingness to protect it; 6. Evaluate strategies that utilize non-use values in designing sustainable biodiversity protection and conservation plans; 7. Analyze the local policies and legal framework to assure the incorporation of economic, environmental, and social (i.e. including gender and indigenous practice) safety nets while protecting biodiversity; and 8. Establish a mechanism to incorporate economic value-based approaches in the overall planning of local governments derived from insights of key stakeholders and local communities. 	<p>Publications: Effective and potential IEC strategies (social media and radio advertisements; general assembly) IEC-One (1) Journal article/Product IEC-At least three (3) educational materials IEC-An assessment framework designed to help stakeholders understand the importance of natural resource protection and conservation IEC-Strategic action plan that integrates the use of IEC materials (e.g., suggested creative theme and content for TV and radio, social media, and infographics), suggested IEC campaign, communications strategy, specifying the potential roles and responsibility of key stakeholders including government agencies, NGOs, corporate organizations, LGUs, and national government. IEC-Database of policies that specifically caters to environmental conservation and protection measures of localities in the Province IEC-Calculation of the economic value of the Philippine tamaraw. People Service IEC-Capacity building and information education skills to at least 15 key stakeholders in each project site to empower and ensure that everyone is aware of the importance of conserving the Philippine Tamaraw. The 15 key stakeholders can re-echo the knowledge and skills gained to others and further expand the reach and impact of conservation education. Place and Partnership IEC-A formal partnership and collaboration in the form of a Memorandum of Understanding (MOU) or letter of commitment is secured from the LGUs involved, the DENR, or at least two leading NGOs (possible candidates being: Mindoro Conservation Foundation, Inc; DE'Abonville Foundation and Demo Farm, Inc.; UNDP BIODIV, HARBON Foundation) at the forefront of Tamaraw conservation. The signed MOU between these stakeholders aims to foster cooperation, combine resources, and expertise to achieve the common goal of protecting the Philippine Tamaraw. Policies IEC-Policy recommendation of environmental conservation and protection in the locality. Social impacts: — Improved community-based approaches for conservation and protection — Increased stakeholder engagement with initiatives to conserve wildlife — Increased Publication IEC-Two policy briefs, which may cover topics on: Raising awareness and accelerating the implementation of SSF Guidelines IEC-The SSF Guidelines Implementation Strategies in the Philippines IEC-Policy, legal, and institutional frameworks relevant to the SSF in the Philippines IEC-Video Explainer that will present the main results of the study. Product IEC-Enabling implementation framework for SSF Guidelines Places and Partnerships IEC-Partnership with Tokai University and TBTI Japan, and stronger collaboration among members in TBTI Philippines IEC-Partnership with the local government units of 10 study sites IEC-Partnership with the four SUCs that are member-organizations of the National Small-scale Fisheries Research and Development Consortium (aka TBTI Philippines), Partido State University, Batangas State University ARASOF-Nasugbu, Mindanao State University at Naawan, and Zamboanga State College of Marine Sciences and Technology. A Letter of Cooperation or a MOA will be forged with ParSU, BatStateU-ARASOF-Nasugbu, MSU at Naawan, and ZCSMST since the project is approved. People Services: At least 100 participants in online roundtable discussions, including 5-8 participants from member organizations of TBTI Philippines IEC Included insights of at least 50 participants in the formulation of plans as results of FGDs IEC 150 participants provided with information on SSF guidelines and its guiding principles, as participants of validation workshops IEC Provide technical services in the 10 study sites, particularly in incorporating study results in their local initiatives to implement SSF Guidelines Policy IEC Policy recommendations on enhancing the adoption of SSF Guidelines IEC Inputs to amendment of RA 10654 amending Philippine Fisheries Code of 1998 Social Impact: — Better understanding of SSF in the country — Respect for the rights of the SSF in the country —</p>	University of the Philippines Los Baños (UPLB)	<p>— National government — Local Government Units — Local Community — Other stakeholders</p>	01-Jan-24	31-Mar-26	ONGOING	5,000,000	2,434,703
	Assessing and Accelerating: Towards the Full Implementation of the FAO Small-Scale Fisheries Guidelines in the Philippines	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To recommend enabling policy and institutional mechanisms to enhance and accelerate the adoption of Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (aka SSF Guidelines).</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Assess the alignment of SSF Guidelines with national and local fisheries policies; 2. Examine the current policies and institutional mechanisms of the country in sustainably managing SSF and relate this with the goals and guiding principles proposed in the SSF Guidelines; 3. Assess the awareness of the SSF Guidelines and their guiding principles by the fishers, fishworkers, fishery managers, national and local policy makers, and other stakeholders; 4. Identify the facilitating and hindering factors in the implementation of the SSF Guidelines; and 5. Develop policy and institutional mechanisms that will enable the adoption of SSF Guidelines for piloting and advocacy. 	<p>Publication or a MOA will be forged with ParSU, BatStateU-ARASOF-Nasugbu, MSU at Naawan, and ZCSMST since the project is approved. People Services: At least 100 participants in online roundtable discussions, including 5-8 participants from member organizations of TBTI Philippines IEC Included insights of at least 50 participants in the formulation of plans as results of FGDs IEC 150 participants provided with information on SSF guidelines and its guiding principles, as participants of validation workshops IEC Provide technical services in the 10 study sites, particularly in incorporating study results in their local initiatives to implement SSF Guidelines Policy IEC Policy recommendations on enhancing the adoption of SSF Guidelines IEC Inputs to amendment of RA 10654 amending Philippine Fisheries Code of 1998 Social Impact: — Better understanding of SSF in the country — Respect for the rights of the SSF in the country —</p>	University of the Philippines Visayas (UPV)	<p>Fishers, policy makers, government agencies, researchers, development workers, fisheries managers</p>	01-Jul-24	30-Jun-26	ONGOING	5,000,000	1,256,008
	Assessing the Adoption of Biofertilizer Technologies in the Philippines: Extent, Influencing Factors, and Barriers	Rapid, inclusive and sustained economic growth	<p>Objectives: General Objective: To evaluate the adoption of selected biofertilizer technologies—specifically Bio-N, Oryzinc, and VAMRI— among Filipino farmers, and to identify the key factors influencing their uptake, in order to inform strategies that can support wider and more effective use. Specific Objectives: 1. Assess the current level of awareness, knowledge, and use of Bio-N, Oryzinc, and VAMRI among farmers in selected agricultural regions; 2. Identify and analyze socio-economic, behavioral, and institutional factors associated with the adoption or non-adoption of the selected biofertilizers using appropriate statistical models; 3. Evaluate farmers' perceptions, attitudes, and willingness to adopt biofertilizers, including perceived benefits and risks, through survey and qualitative data; 4. Assess the role of extension services, government programs, and private sector engagement in promoting and supporting biofertilizer adoption; 5. Formulate practical and evidence-informed recommendations to enhance farmer uptake, improve policy and extension frameworks, and support product accessibility and market development.</p>	<p>Publication — One (1) draft journal article for publication on factors influencing biofertilizer adoption in the Philippine agriculture. Products — Two (2) informational tools: (1) farmer guide booklet; (2) mobile-accessible FAQ on biofertilizer use. People Services — Two (2) research groups trained in conducting adoption study. Places and Partnerships — Two (2) MOUs with DA offices, LGUs, and private firms to support field implementation; these entities will provide logistical support, facilitate access to farmer groups, assist in the coordination of field level survey and data collection activities. Their role is instrumental in ensuring smooth implementation of household surveys and stakeholder interviews in the selected regions. Policy — One (1) draft policy brief recommending biofertilizer support under national and LGU agrifish programs. Economic impact: The project will lower production costs, boost farmer incomes, and improve food security by promoting wider biofertilizer adoption, while fostering environmentally sustainable agricultural practices.</p>	University of the Philippines Los Baños (UPLB)	<p>1. Smallholder Farmers IEC Primary beneficiaries who will gain access to biofertilizers, training, and support for sustainable farming practices. 2. Commercial Farmers IEC Large-scale producers who can integrate biofertilizers into their existing nutrient management programs. 3. Agricultural Cooperatives IEC Farmer organizations that can facilitate bulk purchasing, knowledge sharing, and distribution of biofertilizers. 4. Agricultural Extension Officers IEC Government and private sector field officers who will be equipped with technical knowledge to promote biofertilizer use. 5. Local Government Units (LGUs) IEC Entities responsible for implementing agricultural programs and providing support to farmers. 6. Department of Agriculture (DA) and Related Agencies IEC Policymakers and program implementers who will use project findings to improve biofertilizer policies and initiatives. 7. Private Sector Biofertilizer Producers and Distributors IEC Companies involved in manufacturing, marketing, and selling biofertilizers, benefiting from market expansion. 8. Academic and Research Institutions IEC Universities and research centers that can use project data for further studies on biofertilizers and sustainable agriculture. 9. Consumers IEC Indirect beneficiaries who will benefit from increased food security and safer, environmentally friendly agricultural practices.</p>	01-Oct-25	31-Mar-27	ONGOING	5,000,000	3,567,788
	Carbon Neutral Chocolate Hills Natural Monument: Leading The Way in Sustainable Tourism	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To develop a policy framework that promotes carbon neutrality, environmental stewardship, social responsibility, and economic viability towards sustainable tourism in the Chocolate Hills Natural Monument (CHNM).</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Review policies governing the management of CHNM 2. Assess the carbon emission trends of CHNM 3. Estimate the tourism value for a carbon offset, reduction, and avoidance (CORA) program of CHNM 4. Design a carbon offset, reduction, and avoidance (CORA) program for CHNM 5. Analyze policy options to improve the management of CHNM for sustainable tourism 6. Develop a policy instrument that promotes sustainable tourism and carbon neutrality in the CHNM 	<p>Publications — At least two (2) journal articles ready for submission in any ISI- and/or SCOPUS-indexed publications. — At least one (1) policy brief. — At least one (1) explainer video — Products — At least one (1) portfolio of projects and activities of the CORA Program — Patent — At least one (1) utility model crafted from the methodology of designing a CORA Program for CHNM — People and Services — At least five (5) PAMB/CHNM Management Council members engaged in the implementation of selected project activities. — At least five (5) faculty, researchers, and students from a local academic university and another five (5) LGU and DENR personnel trained on biomass and carbon stock assessment and time series analysis. — Places and Partnerships — At least one (1) agreement for a research project implementation with one or few of the following institutions: a. Provincial Government of Bohol, through its Bohol Provincial Environment Management Office (BPEMO) and Bohol Tourism Office (BTO); b. College of Forestry and Environmental Science, Bohol Island State University IEC Bilal Campus; c. Municipal LGUs of Bilal, Bittan, Carmen, Sagbayan, Sierra Bullones, and Valencia surrounding the Chocolate Hills Natural Monument; d. Department of Environment and Natural Resources Region 7, PENRO Bohol, CENRO Tagbilaran, and CENRO Talibon; e. Department of Tourism-Region 7; and f. Private stakeholders surrounding the Chocolate Hills Natural Monument — Policy — At least one (1) resolution for adoption of the CORA program endorsed to PAMB. — At least one (1) draft local ordinance on the adoption of the CORA program. — At least one (1) policy recommendation offered and submitted to the CHNM management council for adoption. Social impacts: — Strengthened the spirit of collaboration among officers and members of the CHNM Management Council, PAMB, concerned LGUs, the business sector, and other stakeholders in the management and sustainable tourism of CHNM; and — Improved management of CHNM resulting in new opportunities for partnership and collaboration among local, national, and even international stakeholders. Economic</p>	University of the Philippines Los Baños (UPLB)	<p>-Provincial Government of Bohol -Bohol Island State University -Municipalities/Cities surrounding the Chocolate Hills Natural Monument -Private stakeholders surrounding the Chocolate Hills Natural Monument -Tourist Visitors of the Chocolate Hills Natural Monument -Department of Environment and Natural Resources-Region 7, PENRO Bohol, CENRO Tagbilaran and Talibon -Department of Tourism-Region 7</p>	01-Sep-25	28-Feb-27	ONGOING	5,000,000	3,217,810

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Carrying Capacity of Major Agricultural Growing Areas in Misamis Oriental: Basis for Model Development and Policy Recommendation to Enhance Food Security	Rapid, inclusive and sustained economic growth	General: To determine the current carrying capacity and develop a model to understand the relationship between carrying capacity and its determining factors. Specific: 1. Determine the extent of agricultural area conversion over the past five years. 2. Determine the current carrying capacity of major agricultural growing areas in Misamis Oriental. 3. Assess the factors affecting carrying capacity, especially the role of agricultural technologies. 4. Develop a model to project the carrying capacity of major agricultural growing areas in Misamis Oriental. 5. Review existing policies and programs governing agricultural land use. 6. Formulate actionable policy recommendations for local and provincial governments	1. Publications a. 3 publishable manuscripts b. Draft policy brief 2. Products a. 1 model to project carrying capacity of major agricultural growing areas in Misamis Oriental 3. Places and Partnerships a. MOA with LGUs b. MOA with Academic institutions c. MOA with Government agencies d. Partnership with other key stakeholders 4. People and Services a. At least 2 undergraduate students capacitated b. At least 1 graduate student capacitated c. Conduct of seminar/forum to disseminate and validate results/ findings with at least 50 stakeholders 5. Policy a. Policy recommendations to enhance food security in Misamis Oriental Social impacts: — Sustainable resource use enhances community resilience by ensuring consistent access to essential resources, thereby reducing vulnerability to scarcity and environmental changes. — Optimized land use management improves living conditions by utilizing land more effectively for agriculture, housing, and recreation, contributing to community well-being. — Informed policy and planning raise public awareness of sustainable practices, fostering community engagement in resource management and environmental stewardship. — Active community participation in land use management and climate adaptation strengthens social ties and promotes a shared sense of responsibility among residents. Economic impacts: — Sustainable resource use and optimized land management increase agricultural yields, boosting local economies and food security. — Informed policies promote efficient resource allocation, reducing waste and costs from resource depletion. — Climate adaptation can attract investments in green technologies and sustainable agriculture, creating economic opportunities. — Transitioning to sustainable resource management can generate jobs in sustainable agriculture, conservation, and environmental management.	University of Science and Technology of Southern Philippines Claveria Campus (USTP-C)	— Policymakers — Farmers, farm owners, extension workers — LGUs — NGOs — Academe — Private sector stakeholders	16-Dec-24	15-Jan-26	ONGOING	5,000,000	3,639,800
	Co-producing Forest Management: Advancing Sustainable, Gender-Inclusive Practices with Indigenous Communities	Rapid, inclusive and sustained economic growth	General: To co-produce sustainable, gender-inclusive forest management strategies with Indigenous Peoples (IPs) by integrating traditional ecological knowledge, participatory governance, and gender-responsive approaches to strengthen forest conservation and community resilience. Specific: 1. To analyze the gender roles, power dynamics, and decision-making structures within indigenous forest management practices, ensuring equitable participation of women and men in governance. 2. To document and integrate Indigenous Knowledge Systems (IKS) from both women and men in the Ifugao, Panay Bukidnon, and Higaonon communities into formal conservation policies and sustainable forest management strategies. 3. To co-produce sustainable, gender-inclusive forest management strategies with Indigenous Peoples (IPs) by integrating traditional ecological knowledge, participatory governance, and gender-responsive approaches to strengthen forest conservation and community resilience. 4. Explore policy recommendations and advocacy approaches to support the integration of gender-inclusive, community-driven forest management into local and national policies.	Publication Three (3) IS-and/or SCOPUS-indexed publications with equitable contributions from both male and female researchers.Product One (1) GAD Bulletin/Policy One (1) gender-inclusive policy brief/One (1) policy recommendation to update the natural resources management plans/People Services Two (2) faculty members (1 man and 1 woman) provided support for graduate studies/Two (2) faculty/research staff (1 man and 1 woman) provided support for continuing professional development. 100 (100) extension beneficiaries, with gender parity: 50 women and 50 men trained, and extension materials produced. Three (3) community-based collaborators with equal male and female representation. Three (3) IS-Disaggregated Data coming from the three sites/Places and Partnerships Three (3) LGUs* as community-based collaborators/Patent One (1) patent application filed for a Decision-Support System for Gender-Responsive Indigenous Forest Management/Social Impact: — Strengthen the leadership capacities of women alongside men in forest governance to foster greater community resilience. — Improved resource stewardship, and the preservation of biodiversity. — Create lasting impacts that benefit the environment, enhance community resilience, preserve shared cultural heritage, strengthen local economies, and inform inclusive policy-making frameworks that recognize the essential roles of both women and men. — Develop gender-responsive policies that offer a replicable model for inclusive forest management, ensuring that future forest management efforts remain both culturally rooted and ecologically effective.Economic Impact:— Women are included in decision-making processes leading to more sustainable use and conservation of forest resources. — By fostering greater involvement in governance and decision-making, women will gain increased empowerment, recognition, and livelihood opportunities, while men will benefit from more inclusive and collaborative resource management strategies.	Visayas State University (VSU)	— Women and men of indigenous communities — Local Government Units — Non-governmental organizations (NGOs) — National Commission on Indigenous Peoples (NCIP) — Academic Institutions	01-Jul-25	30-Jun-27	ONGOING	5,000,000	3,131,518
	Decision Support System for Effective Lake Governance of the Twin Lakes of Sibulan, Negros Oriental, Philippines	Rapid, inclusive and sustained economic growth	General: To develop a decision support system for effective lake governance of Lakes Balinsaya and Danao in Sibulan, Negros Oriental, Philippines. Specific: 1. Describe the transformations in the resource utilization of the lakes; 2. Characterize the change in land use surrounding the lake communities; 3. Identify major human-induced stressors in the twin lakes; 4. Discuss the evolution of the policies and institutional arrangements; 5. Identify and evaluate the potential socio-institutional and bio-physical scenarios based on major stressors and changes in local governance systems; and 6. Develop a knowledge-sharing platform for stakeholder utilization.	Publications/Two (2) draft scientific journal articles/€One (1) IEC material/€One (1) DSS user manual/€One (1) policy brief/€One (1) video explainer (3-5 minute)/Products/€Decision support system/€Knowledge sharing platforms (website)/Places and Partnerships/€CMOU with relevant stakeholder groups (PAMB, LGUs, PO/People Services/€Training-workshop with LGU representatives and other stakeholder groups on the use of the decision support system and the knowledge-sharing platform/Policy/€Policy inputs for the updating of the current development and management plans of the twin lakes/€Policy draft for the adoption of DSS/Social Impact:— Strengthening of local partnership among lake stakeholders (government and community) — Conservation of lakes' water quality and their resources. — Better organization and management of the national park's environment and its flora and fauna/Economic impact:— Improvement of the livelihood of the people within the twin lakes	University of the Philippines Los Baños (UPLB)	— Municipal local government units (Sibulan, San Jose, Valencia) — Provincial Government of Negros Oriental — Lake FARMCS — Relevant local people's organizations — Department of Environment and Natural Resources (DENR) — Protected Area Management Board of Balinsayaoo Twin Lakes National Park (BTLNP PAMB) — Scientific community	16-Jun-24	15-Jun-26	ONGOING	5,000,000	1,830,110
	Developing and Piloting LGU-based Natural Capital Accounting for Improved Governance and Management of Community Natural Assets	Integrity of the environment and climate change adaptation and mitigation	General: To develop a downscaled NCA Framework based on the UN Framework that the NEDA-DENR-PSA can use for the National NCA Roadmap. Specific: 1. Establish an inventory of the existing natural resources, collective benefits, and natural resource accounts; 2. Assess the physical characteristics, supply, and users of the different ecosystem services; 3. Assess the technical capabilities, financial resources, availability of secondary sources, and the feasibility of conducting primary data collection; 4. Develop a simple calculator or other tool to assist the LGU in creating the natural capital accounts; and 5. Capacitate local governments in the creation of ecosystem accounts	1. Publications a. Journal article b. Discussion paper c. Policy Brief/2. Products a. Localized NCA framework b. NCA calculator c. Ecosystem accounts for selected ecosystems d. Inventory of natural assets in the community/3. Places and Partnerships a. MOU on the adoption of the localized framework. People and Services a. Trained representatives of LGUs and other stakeholder groups. Policy a. Policy inputs for the adoption of the localized framework/Social impacts: — Strengthening of local partnership among stakeholders (government and community)/Economic impacts: — Improvement of livelihood of the people within the locality through data-driven ecosystem-based development planning	University of the Philippines Los Baños (UPLB)	— Local Government Units — National government (PSA, DENR, NEDA) — Laguna Lake Development Authority — Private local organizations — People's Organizations	01-Nov-23	28-Feb-26	ONGOING	4,996,364	1,359,510
	Development of a Coherent Policy Framework to Incentivize the Adoption of Circular Economy Among MSMEs in the Philippine Food System	Rapid, inclusive and sustained economic growth	General: To develop a coherent policy framework to support the adoption of circular economy (CE) practices among MSMEs in the local agrifood system. Specific: 1. Document existing practices in resource utilization, waste management, and sustainability measures across the value chain, highlighting lessons learned, challenges encountered, and best practices among MSMEs within the local agrifood system; 2. Identify factors affecting the adoption of CE principles by MSMEs; 3. Review related programs and policies governing the adoption of CE among MSMEs; 4. Identify opportunities and formulate targeted strategies to support MSMEs in transitioning toward more sustainable and circular practices; 5. Raise awareness and promote the adoption of CE principles among MSMEs; 6. Provide policy recommendations and strategies to incentivize and to effectively mainstream the adoption of CE among MSMEs in the local agrifood sector.	Publications: — At least one (1) draft paper to be published in a refereed journal — At least one (1) policy brief — At least one (1) video explainer to complement the policy framework for the adoption of the circular economy for MSMEs — A comprehensive guidebook (training module / guidebook) for MSMEs outlining practical strategies for adopting CE practices within the food system Products/Processes: — One specialized training program designed to equip MSMEs with knowledge and skills on adopting circular economy principles and practices — Database of the circular economy including resource flows, material usage, waste generation, and circular practices, which includes the visualization and illustration of these complex interrelationships — Documentation of practices and ways of existing practices related to resource utilization, waste management, and sustainability measures across the entire value chain — One (1) Process Documentation: People Services: — At least 15 relevant agencies (e.g. DTI, DOST, DA, DENR, LGUs, SUCs, and MSME-support institutions) informed/capacitated through one (1) knowledge sharing — At least 45 stakeholders engaged in (1) stakeholder consultation in developing the circular economy policy framework and mode Places and Partnerships: — At least one (1) strategic partnership forged with key institution supporting MSMEs in the agrifood sector (e.g. SUC, LGU, etc.) — At least three (3) signed MOUs with stakeholders such as farmer cooperative, local government unit, state university or college, and other institutions or groups to support the implementation and dissemination of CE practices Policy: — Coherent policy framework and strategies (incentive mechanism or system) for adopting economy models for MSMEs Social Impact — Improved food security by promoting sustainable food production and reducing waste. — Stronger community resilience through environmentally responsible MSME practices. — Better quality of life in rural and agriculture-dependent areas by supporting inclusive and sustainable development. — Increased awareness and behavior change toward sustainability	University of the Philippines Diliman (UPD)	— MSMEs within the agrifood sector value chain in the study sites (rice, hog, and sardines) — Government agencies, NGOs, local government units (LGUs), and academic institutions involved in supporting or regulating MSMEs	01-Jul-25	31-Dec-26	ONGOING	5,000,000	4,409,825

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Development of a Policy Coherence Framework for Access and Benefit Sharing and Fostering Equitable and Sustainable Lake Resource Management in Lake Sebu and Lake Seloton	Rapid, inclusive and sustained economic growth	General: To develop a policy framework for access and benefit sharing and fostering equitable and sustainable development in aquaculture across Lake Sebu and Lake Seloton. Specific: 1. Review existing aquaculture-related policies and programs in the Municipality of Lake Sebu and the Philippines 2. Determine the factors affecting the current enforcement of aquaculture-related programs and policies in Lake Sebu and Lake Seloton 3. Assess opportunities and challenges for policy coherence of aquaculture-related policies in Lake Sebu and Lake Seloton 4. Develop policy framework and options for the coherence of aquaculture policies and programs in Lake Sebu and Lake Seloton 5. Advance the policy agenda through the implementation of an advocacy plan and building partnerships with relevant agencies and stakeholders	Publications: €COne (1) publication-ready paper €COne (1) policy brief €COne (1) 3€3€5-minute video explainer €COne (1) advocacy kit including IEC materials tailored for specific audiences/Products: €COne (1) compilation of the existing national, regional, and local aquaculture-related policies, laws, regulations, and programs related to Lake Sebu/€COne (1) documentation of the facilitating factors and issues/challenges of the current enforcement of aquaculture-related programs and policies in Lake Sebu and Lake Seloton. €COne (1) conceptual framework on the identified themes and their impact on enforcement effectiveness €COne (1) screening matrix of the various aquaculture-related policies in Lake Sebu and Lake Seloton €COne (1) policy coherence framework for access and benefit sharing and fostering equitable and sustainable development in aquaculture across Lake Sebu and Lake Seloton. €COne (1) advocacy plan outlining key messages, target audiences, communication channels, and strategies for influencing policy change. €COne (1) process documentation of advocacy Places and Partnerships; €COne (1) Memorandum of Understanding (MOU) with the Local Government Unit (LGU) of Lake Sebu, South Cotabato.€COne (1) Technical Working Group to lead the drafting of the sustainable aquaculture-related ordinance/People Services: €CAt least one (1) graduate student (MS or PhD) working on the development of a policy coherence framework €CAt least one (1) undergraduate student working on the development of a policy coherence framework €CAt least one (1) seminar and workshop conducted with not less than 30 participants per session. €CAt least one (1) roundtable discussion/Policy: €COne (1) draft ordinance on the coherence of aquaculture-related policies for access and benefit sharing and fostering equitable and sustainable development in Lake Sebu and Lake Seloton endorsed to the Local Government Unit of Lake Sebu endorsed €CAt least two (2) policy recommendations on enhancing the coherence of aquaculture-related policies for access and benefit sharing and fostering equitable and sustainable development in Lake Sebu and Lake Seloton	Mindanao State University - General Santos City (MSU-GSC)	The target beneficiaries of the project are the: — Local Government Unit of Lake Sebu— Bureau of Fisheries and Aquatic Resources — Department of Environment and Natural Resources-Protected Area Management Bureau — National Commission on Indigenous People — People of Lake Sebu, South Cotabato	01-Sep-24	31-Aug-26	ONGOING	5,000,000	2,210,819
	Enhancement of Sabu Banana Production through S&T-based and Pesticide-free Agroforestry Cropping System in Barangay Bagong Silang, Los Baños, Laguna	Rapid, inclusive and sustained economic growth	General Objective: In general, the project aims to achieve positive impacts such as higher farm income, environmental protection, market diversification, higher production and marketing efficiency, and improved well-being of farmers through the strategic approach of enhancing banana production using S&T-based and pesticide-free agroforestry. Specifically, it aims to: 1. Develop the capacity of banana farmers to use S&T-based production practices and innovations; 2. Develop a site-specific rehabilitation plan to enhance banana production; 3. Provide disease-free meriplants as part of enhancing the banana production of Brgy. Bagong Silang; 4. Develop a conservation agriculture sustainable natural resource management (CASNRM) plan in collaboration with key institutions and stakeholders; 5. Develop a gender-responsive, community-based model for sustainable banana production and marketing; and 6. Develop a Monitoring, Evaluation, and Learning (MEL) Plan for the S&T-based production of banana. Beneficiaries	Publication: — At least one (1) Scopus or ISI-indexed paper drafted for publication (Title: Integrated Crop Management and Conservation Approaches for Agroforestry Cropping System) — At least one (1) poster presented in conferences (Title: Unlocking the Potential: Enhancing Banana Production in Bagong Silang, Los Baños through Integrated Crop and Conservation Management Strategies) Product/ Processes: — At least 17,500 meriplants produced and provided to banana farmers — At least one (1) informational brochure drafted, reproduced, and distributed to at least fifty (50) farmers on ICM Banana — At least twenty-five (25) banana farmers provided with informational material on sustainable AANR and smart tech — At least twenty-five (25) banana farmers provided with farm inputs — One (3) report on site characteristics drafted — One (1) protocol for conservation agriculture sustainable natural resource management (CASNRM) developed — One (1) gender-responsive, community-based model for sustainable banana production and marketing developed — One (1) baseline profile dataset — One (1) MEL Plan developed — One (1) turnover and scaling-up plan developed. People Services — At least one (1) training conducted (Training on Integrated Crop Management for Banana: Sustainable Solutions for Bagong Silang) — At least twenty-five (25) banana farmers trained on ICM Banana — At least one (1) farmer group engaged in training on ICM Banana — At least one (1) training conducted on BanaTech and SPIDTECH — At least twenty-five (25) banana farmers trained on BanaTech and SPIDTECH — At least one (1) farmer group engaged in training on BanaTech and SPIDTECH — One (1) (MS/PHD) Student and (1) Undergraduate Student supported Economic impact Capacity-building initiatives, engagement in agroforestry activities, development of market linkages, and using a collective and participatory approach will strengthen the skills and knowledge of farmers, local leaders, and agricultural workers, contributing to economic and environmental impacts like higher farm income, market diversification, and higher production and marketing efficiency	University of the Philippines Los Baños (UPLB)	Male and female banana farmers of Barangay Bagong Silang, Los Baños, Laguna	01-Nov-25	31-Oct-27	ONGOING	5,000,000	3,213,731
	Enhancing the Sustainability, Profitability, and Inclusiveness of Coffee Value Chains Involving IP Communities: The Case of Kiangán, Ifugao and Patikul, Sulu	Poverty reduction and empowerment of the poor and vulnerable	General: To enhance the sustainability, profitability, and inclusiveness of coffee value chains involving indigenous people (IP) communities in Kiangán, Ifugao and Patikul, Sulu. Specific: 1. To characterize the economic, ecological and social values and KSPs in Kiangán and Patikul related to coffee inclusive value chain; 2. To map out the existing coffee value chains in Kiangán and Patikul showing the a) key customers and their product requirements; b) key players and their roles; c) activities and processes involved; d) flow of product, payment, and information; e) logistic concerns; and f) external influences 3. To identify the roles of indigenous men and women in coffee IV; C 4. To examine the current levels of the sustainability, profitability, and inclusivity of the coffee value chains of Kiangán and Patikul; 5. To design an intervention model using the IV; C framework to develop sustainable, profitable, and inclusive coffee value chains involving IP communities; and 6. To pilot-test the coffee value chain intervention model in the identified IP communities.	Publication:€CAt least three (3) draft journal articles in Scopus-indexed journals prepared regarding IISP and its role toward sustainable and inclusive coffee value chain development, situation of Kiangán, Ifugao's coffee industry, and Patikul, Sulu/€COne coffee industry/€CAt least one (1) policy paper on coffee value chain and preserving culture and IISP considering identified gender issues, goals and equal benefits/empowerment/Product: €CIndigenous People-based intervention/Strategy models/People Services/€CAt least twenty (20) Indigenous people trained on data collection (conducting surveys), enumeration, and data management/record keeping/€CAt least twenty (20) CVC players from each community (farmers, producers, sellers and cooperatives) trained on best practices in coffee production/€CTwo (2) coffee communities linked with markets and relevant institutions Places and Partnerships/€CAt least ten (10) linkages established, including the Hinluyasirib Arabica Producers and Roasters Cooperative and Hinlu Coffee Producers Cooperative in Kiangán, Ifugao; the GoRDI Coffee Consumers Cooperative, Cordillera Indigenous Coffee Producers Cooperative, and other coffee cooperatives in Ifugao; Mindanao State University - Sulu; the Sulu Coffee Industry Federation; the Federation of Sulu Coffee Industry Cooperative; the Federation of Sulu Coffee Producers Cooperative; the People's Alliance for Progress Multi-Purpose Cooperative; and the Kantilap Consumers Cooperative Social Impact — Enhanced inclusion of IP in coffee value chain — Improved understanding of the current context of IP coffee communities Economic Impact — Improved economic status of IP coffee communities — Increased financial benefits — Improved livelihood of IP communities through interventions implemented	University of the Philippines Open University (UPOU)	The project's target beneficiaries are the indigenous coffee producers, other value chain players (e.g. processors, traders, roasters, sellers, farmer cooperatives, RBOs, consumers, and relevant stakeholders) in Kiangán, Ifugao and Patikul, Sulu; and relevant government agencies who identify and develop policies and programs for the Philippine coffee industry. Indirect beneficiaries include women and children.	01-Sep-24	31-Aug-26	ONGOING	5,000,000	1,194,922
	Estimating the Net Carbon Impact of DOST-PCAARRD Programs and Projects on Climate Change Mitigation	Rapid, inclusive and sustained economic growth	General: To estimate the carbon impact of DOST-PCAARRD projects on climate change mitigation. Specific: 1. To establish a system to track and estimate ex-ante the reduction of GHG emissions and/or increase of carbon capture and storage 2. To estimate carbon sequestration through enhancing the capacity of carbon sinks and/or the reduction of greenhouse gas emissions through the introduction/development of technologies that reduce GHGs 3. To estimate the economic value of the climate change mitigation impacts of the select PCAARRD-funded projects 4. To develop policy recommendations to promote and advance efforts that incorporate climate change co-benefits into the evaluation of overall project benefits funded by PCAARRD	— Publications o 1 draft journal o 1 policy brief o 1 video explainer— Products o A system to track and estimate ex-ante the reduction in GHG emissions and/or increase of carbon storage and capture— People and Services o Around 20 staff capacitated on carbon accounting and valuation— Places and Partnerships o At least 2 MOUs, or letter of commitment, etc. with implementing agencies (e.g. UPLB, SLSU, MSU)— Policy o Policy recommendations/Social Impacts — There is potentially enhanced climate resilience wherein the communities benefit from projects that mitigate climate risks, and reduce vulnerability to extreme weather events — This may lead to the adoption of climate-smart technologies that can boost agricultural productivity and income/economic impacts — Climate-smart technologies and innovations may open up new economic sectors and green job opportunities — Demonstrating climate co-benefits can attract funding from both public and private sectors, aligning with global trends in sustainable financing — Valuing the benefits of carbon sequestration and emission reductions highlights the economic gains from environmental conservation, supporting informed decision-making	University of the Philippines Los Baños (UPLB)	— DOST-PCAARRD and DOST-attached agencies — National Economic and Development Authority (NEDA) — National Government Agencies (NGA) with NDC targets — Local Government Units (LGUs) — Research institutions and researchers	01-Feb-25	31-Jan-27	ONGOING	5,000,000	2,679,664

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Gender Analysis of AANR Technology Development and Transfer Processes Towards Gender-responsive Standards, Protocols and Assessment Tools	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To create enabling mechanisms towards gender-responsive technology development processes.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Conduct gender analysis of AANR technology development processes (benchmarking and conceptualization, protocol and standards, testing and refining, deployment and diffusion); 2. Review commonly-used standards, protocols or assessment tools in AANR technology development processes and categorize whether they are gender-blind, gender-neutral, gender-sensitive or gender-responsive; 3. Identify gender gaps and entry points for gender mainstreaming in AANR technology development processes; 4. Make recommendations for revision of various TNA tools in order to improve their gender-responsiveness; and 5. Pilot-test selected improved and more gender-responsive standards, protocols and assessment tools for technology projects in AANR 	<p>Publications: ECAT least one article for journal publication ECAT least one conference paper/Product ECAT least one Gender Analysis Report for selected AANR technology development processes/ECAT least one gender-responsive technology protocols and assessment tool/ECAT least one GAD Bulletin detailing the importance of mainstreaming gender in technological processes.</p> <p>People: Services/ECAT least one draft MOU for researchers / proponents of technology projects per TFPD modality/ECAT least one draft MOU for researchers and each of the identified LGUs that will serve as study sites.</p> <p>Policy: ECAT least one policy brief on how to make AANR technology development processes more gender-responsive.</p> <p>Social Impact: ECAT least one policy brief on how to make AANR technology development processes more gender-responsive.</p> <p>Economic Impact: ECAT least one policy brief on how to make AANR technology development processes more gender-responsive.</p> <p>The project will ensure that gender sensitivity is mainstreamed even in AANR technology processes, thus contributing overall to the country's commitment to gender equity and equality goals. Economic Impact: developing gender-responsive technologies using this proposed project's output will redound to wider and more inclusive technological utilization in the AANR, which will in turn positively impact productivity in these sectors.</p>	University of the Philippines Visayas (UPV)	The target beneficiaries of this proposed research will be female and male prospective proponents of AANR technology projects, as well as the female and male end-users of developed AANR technologies.	16-Jun-24	15-Jun-26	ONGOING	5,000,000	2,350,917
	Harvesting Tomorrow: Envisioning the Futures of the Luzon Semi-Temperate Vegetable Industry by 2050 through Strategic Foresight	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To develop a long-term plan for a future-proof semi-temperate vegetable industry in the next 25 years.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Describe the current situation and landscape surrounding the Luzon semi-temperate vegetable industry; 2. Identify driving forces, trends, weak signals, and emerging issues, that have shaped, are shaping, or have the capacity to shape the semi-temperate vegetable industry of Luzon; 3. Analyze the interactions among the influential forces of change and their implications on the futures of semi-temperate vegetable farming in Luzon; 4. Assess the policy environment and its responsiveness to the developments and challenges in the semi-temperate vegetable industry; and 5. Develop a roadmap for a future-proof Luzon semi-temperate vegetable industry 	<p>Publications: ECOne (1) Foresight report about semi-temperate vegetable industry ECOne (1) Policy Brief/ECAT least one (1) journal article on the futures of Philippine vegetable industry/People Services/ECAT stakeholder engagement and consultations/ECAT least fifty (50) stakeholders tapped to take part in foresight activities ECThree (3) project team members attending the 10th Asia Pacific Futures Network Conference in September 2024 in Bangkok, Thailand/Places and Partnerships/ECAT least five (5) agencies or organizations engaged in the conduct of the foresight activities such as but not limited to presentation and dissemination of outputs. The partnership can be executed through a letter of understanding/Policy ECAT recommendations for specific preferred future scenarios for the Philippine vegetable industry/Product/ECOne (1) roadmap toward a future-proof vegetable industry endorsed to DOST-PCAARRD ISP manager and other relevant agencies/Policy/ECAT Application for copyright on all project reports and publications/Social Impact: — The participatory process enjoins stakeholders to a collaborative process, therefore ownership of the vision for the vegetable sector. This can result in a more sustainable and equitable impact from programs and policies/Economic Impact: — Potential impacts include being able to prepare the necessary preparatory steps to fully maximize the benefits of anticipated opportunities, mitigating losses from adverse events by identifying risks early, and increasing the potential for innovations</p>	University of the Philippines Los Baños (UPLB)	The semi-temperate/highland vegetable industry in the country, farmers, input suppliers, markets, local government units, national government agencies, and industries linked to the vegetable industry.	01-Nov-24	30-Apr-26	ONGOING	5,000,000	2,471,172
	Impact Assessment of the PCAARRD-funded Program on Improved Grow-out Technology for Sustainable Mussel Industry	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To assess the impact of the PCAARRD-funded program titled Improved Grow-out Technology for Sustainable Mussel Industry.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Describe the processes and dynamics involved in the conceptualization, formulation, and implementation of the program; 2. Describe the different component projects of the program in terms of inputs, activities, and outputs; 3. Track the status and/or subsequent use of the outputs produced 4. Identify the adoption pathways (e.g., commercialization, capacity building, communication, regulation) and track related projects and collaborators that facilitated the adoption of outputs 5. Determine the economic, socio-institutional, and environmental impacts of the program at the micro (i.e., farm), meso (i.e., community), and macro (i.e., industry) levels 6. Provide policy recommendations that can improve the design and implementation of future R&D and technology transfer programs for mussel 	<p>Publication: — At least one (1) draft for IA bulletin-one (1) draft for the journal article Policy: Policy recommendations for the improvement of the design and implementation of future R&mp/D People Services: — At least 3 researchers capacitated in impact assessment/Social Impact: — Improved employment opportunities because of improved grow-out technology for sustainable mussel industry Economic Impact: — Increased production and efficiency thereby increasing income for mussel farmers — increased competitiveness of the mussel industry</p>	Pangasinan State University (PSU)	Researchers, R&D funding and implementing agencies, policy makers/identified LGUs, farmers, processors/traders, coastal communities, and other stakeholders in the mussel industry	01-Jan-25	30-Jun-26	ONGOING	5,000,000	3,390,581
	Impact Assessment of the Program on Advancing the Philippine Mango Industry through Production of Export Quality Mangoes	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To assess the impacts of the DOST-PCAARRD-funded program titled Advancing the Philippine Mango Industry: Production of Export-quality Mangoes.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Describe the processes and dynamics involved in the conceptualization, formulation, and implementation of the program; 2. Describe the different component projects of the program in terms of inputs, activities, and outputs; 3. Track the status and/or subsequent use of the outputs produced; 4. Identify the adoption pathways (e.g., commercialization, capacity building, communication, regulation) and track related projects and collaborators that facilitated the adoption of outputs; 5. Determine the economic, socio-institutional, and environmental impacts of the program at the micro (i.e., farm), meso (i.e., community), and macro (i.e., industry) levels; and 6. Provide policy recommendations that can improve the design and implementation of future R&D and technology transfer programs for mangoes in the Philippines. 	<p>Publication: — Draft Impact Assessment Bulletin — Journal article Product: — Integrated and used market, customer/user trade, system requirements information in the R&mp/D People Services: — At least 3 research members provided with training for professional development Policy: — At least 1 policy recommendation passed/Social Impact: — Improved farmer livelihoods, more community involvement, improved knowledge and skills through training, and better gender inclusion and empowerment in farming communities. Economic Impact: — Greater market accessibility, lower production costs, higher farmer income, and increased competitiveness of mango products in both domestic and international markets.</p>	University of Southern Mindanao (USM)	The results of this study will hold significant value in formulating science-based policies that align with the national agenda for mango research, which has an impact on economic growth, people's well-being, and long-term agricultural sustainability, benefiting various sectors of society across all genders. The primary beneficiaries of the results of this impact assessment include R&D and technology transfer program planners, populations dependent on mango production, local and multinational mango plantation owners, producers of mango-derived products, and rural communities that depend on mango	01-Apr-25	30-Sep-26	ONGOING	5,000,000	3,556,490
	Impact Assessment of the Program on Improving Productivity and Local Utilization of Mungbean	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To assess the impacts of the program titled "Improving Productivity and Local Utilization of Mungbean."</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Describe the processes and dynamics involved in the conceptualization, formulation, and implementation of the program; 2. Describe the different component projects of the program in terms of inputs, activities, and output; 3. Track the status and/or subsequent use of the outputs produced; 4. Identify the adoption pathways (e.g., commercialization, capacity building, communication, regulation) and track related projects and collaborators that facilitated the adoption of outputs; 5. Determine the economic, socio-institutional, and environmental impacts of the program at the micro (i.e., farm), meso (i.e., community), and macro (i.e., industry) levels; and 6. Provide policy recommendations that can improve the design and implementation of future R&D and technology transfer programs for mungbean in the Philippines. 	<p>Publication: — At least one (1) draft journal article — At least one (1) draft manuscript of IA Bulletin</p> <p>People Services: — At least one (1) graduate student involved in the project (as part of his/her thesis)</p> <p>Places and Partnerships: — At least two (2) MOUs between CLSU and selected LGUs, government agencies</p> <p>Policy: — At least one (1) Policy Brief</p>	Central Luzon State University (CLSU)	Farmers who benefit from developed technologies; Consumers who now have access to more affordable, high-quality mungbean; Researchers and research institutions conducting studies focused on crop improvement; Local government units (LGUs) sponsoring livelihood programs; and Policymakers designing policies for poverty alleviation and food security.	01-Aug-25	31-Jan-27	ONGOING	5,000,000	3,416,672

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Impact Assessment of the Program on Refinement of Mangrove Crab Hatchery Technology	Rapid, inclusive and sustained economic growth	General: To assess the impact of the program on the refinement of mangrove crab hatchery technology. Specific: 1. To describe the processes and dynamics involved in the conceptualization, formulation, and implementation of the program on refinement of the mangrove crab hatchery technology 2. To describe the different component projects of the program on refinement of the mangrove crab hatchery technology in terms of inputs, activities, and outputs 3. To track the status and subsequent use of the outputs produced from the program on refinement of the mangrove crab hatchery technology 4. To identify the adoption pathways (e.g., commercialization, capacity building, communication, regulation) and track related projects and collaborators that facilitated the adoption of outputs of the program on refinement of the mangrove crab hatchery technology 5. To determine the economic, socio-institutional, and environmental impacts of the program on refinement of the mangrove crab hatchery technology at the micro (i.e., farm), meso (i.e., community), and macro (i.e., industry) levels 6. To provide policy recommendations that can improve the design and implementation of future mangrove crab hatchery technology transfer programs	Publication: At least one (1) draft for a journal article Product: Information about level of technology adoption and factors affecting technology adoption and the economic, social, and environmental impacts of the mangrove crab hatchery technology Service: At least two (2) researchers capacitated in impact assessment Policy: At least one (1) policy recommendation for improvement of the design and implementation of future mangrove crab hatchery technology transfer programs Social Impact: Improved employment opportunities because of improved mangrove crab-based enterprises Economic Impact: Increased income of mangrove crab hatchery operators, nursery farm operators, grow-out pond operators, and other participants in the mangrove crab industry Increased competitiveness of the mangrove crab industry.	Mindanao State University - Naawan (MSU - Naawan)	Mangrove Crab Hatchery Operators — Mangrove Crab Nursery Farm Operators — Mangrove Crab Grow-out Pond Operators — LGU supported FAs (possible shift from prawn to mangrove crab production) — State Universities and Colleges (SUCs) — Research institutions — Private Industries/SMEs	01-May-24	31-Jan-26	ONGOING	4,992,064	1,713,138
	Impact Assessment of the Project on Development of Sustainable Breeder Philippine Mallard Duck (PMD) Production System	Rapid, inclusive and sustained economic growth	General: To assess the impact of the Development of Sustainable Breeder Philippine Mallard Duck (PMD) Production System Project. Specific: 1. Describe the processes and dynamics involved in the conceptualization, formulation, and implementation of the PMD project; 2. Describe the different component of the PMD project in terms of inputs, activities, and outputs; 3. Identify the techno-transfer modalities and track the status and/or subsequent use of the outputs produced; 4. Identify the adoption pathways (e.g., commercialization, capacity building, communication, regulation) and track related projects and collaborators that facilitated the adoption of outputs; 5. Determine the economic (change in productivity, change in income), socio-institutional (e.g., social cohesions, value chain enhancement), and environmental impacts of the PMD project at the micro (i.e., farm), meso (i.e., consumer), and macro (i.e., industry) levels; 6. Document lessons learned (hindering and facilitating factors); and 7. Provide policy recommendations that can improve the design and implementation of future R&D and technology transfer programs for the development of the PMD industry in the Philippines.	Publication: At least one (1) draft journal article Product: Information on the project's impact on stakeholders particularly duck farmers, women, and youth Places and Partnerships: i-Linkage and collaboration with stakeholders in 10 implementation sites (Zaragoza, Nueva Ecija, Muñoz, Nueva Ecija, Candelaria, Quezon, Taegon, Quezon, Calamba, Laguna, Iloilo City, Zamboanga City, Trento, Agusan del Sur, Compostella, Davao del Oro, and Davao City) Policy: Identification of areas that requires further policy intervention, policy recommendations on sustainability (e.g., institutionalization of the program introduced practices that are proven to be effective), policy recommendation to complement and support changes in outcomes caused by the program Social Impact: Increase production capacities of duck farms in the country Economic Impact: Increase in the contribution of the sector to the overall economic development of the country	University of Southeastern Philippines (USEP), Partido State University (PaSU)	Policy and decision-makers, national R&D system, and R&D funding agencies Researchers and development workers DOST-PCAARRD Evaluators of R&D programs Academe Duck farming networks across the country	01-Jan-24	30-Jun-25	COMPLETED	4,997,079	1,425,475
	Improving Agricultural Productivity and Competitiveness of Women Livelihood Operators through Gender-Responsive S&T Strategies	Integrity of the environment and climate change adaptation and mitigation	General: To document and enhance the specific roles of women livelihood operators in selected municipalities through gender-responsive S&T strategies. Specific: 1. Identify the typology of women livelihood operators in the AANR sectors 2. Assess current performance and status of women livelihood operators in the AANR sectors 3. Identify the constraints related to the performance of the women livelihood operators 4. Assess if the constraints related to the performance of the women livelihood operators are gender-related 5. Recommend gender-responsive S&T strategies to address the constraints faced by women livelihood operators and to enhance their productivity and competitiveness	Publication: One publication in a refereed journal Product: GAD Information Bulletin on gender roles and issues of women livelihood operators People and Services: Provide six (6) capability building and training to ninety (90) women and men stakeholders and/or project participants. Each training will have fifteen (15) women and men participants Places and Partnerships: Form a link or establish a Memorandum of Understanding (MOU) with six (6) LGUs and with six (6) people's organizations, including women livelihood operators and women-led enterprises Policy: Recommend policies that would help in the development of and improving women's access to more gender-responsive S&T strategies to enhance their productivity and competitiveness Social Impact: The gender-responsive science and technology strategies can close the gender gaps and eliminate the disparities between men and women livelihood operators. Economic Impact: Improved agricultural productivity and competitiveness will also increase the possibility of earning more relative to their previous condition.	University of the Philippines Los Baños (UPLB)	Women livelihood operators, Women-led Enterprises, Women and Men Researchers, Women and Men Policy Makers, Local Government Units	01-Oct-23	30-Sep-25	COMPLETED	5,000,000	789,565
	Institutionalizing Integrated Crop Monitoring and Forecasting (ICMF) towards a Smarter Philippine Agriculture	Integrity of the environment and climate change adaptation and mitigation	General: To facilitate the institutionalization of the Integrated Crop Monitoring and Forecasting (ICMF) system established by the SARAI Project towards a smarter Philippine agriculture. Specific: 1. Advance the advocacy agenda by building partnership with the DA, DOST, DILG, Congress, and other concerned agencies; 2. Improve appreciation of the SARAI ICMF system among key stakeholders (including DA, legislative staff, Regional Research Development Councils, State University and Colleges, etc.); 3. Develop the policy instruments (e.g., draft executive order, legislative bill, memorandum, resolution) towards institutionalizing SARAI system as a national or local government program; and 4. Facilitate the endorsement of the policy instruments and sustainability plan that will institutionalize SARAI as a program.	Publications: One (1) advocacy plan developed b. One (1) advocacy kit developed i. One (1) policy paper/brief j. One (1) brochure about the policy reform i-Print and digital IEC materials i. One (1) Publication/success stories from SARAI partner institutions and communities c. One (1) video explainer on the SARAI ICMF developed People and Services: One (1) round table discussion and/or validation meeting with concerned NGOs, SUCs, and farmer's federations/cooperatives stakeholders b. One (1) legislative-executive forum on the institutionalization of SARAI ICMF conducted c. One (1) workshop with the Technical Working Group conducted Places and Partnerships: Policy Advisory Body (PAB) and Technical Working Group (TWG) established towards institutionalization of SARAI ICMF Partnership forged with at least three (3) key government agencies in the conduct of advocacy initiatives Policies: Policy instruments endorsed for the institutionalization of SARAI ICMF a. One (1) draft Executive Order b. One (1) draft Legislative Bill c. One (1) draft Memorandum from UPLB/UP System on the creation of SARAI ICMF Center Program: Patents, Trademark for SARAI and ICMF Social Impacts: Improved climate change resilience among well-being of farmers and their households — Decreased hunger incidence and food insecurity among Filipino communities Economics Impacts: Improved farm productivity increasing the total annual income of Filipino farmers — Positive growth in the economic performance of the Philippines agriculture industry	University of the Philippines Los Baños (UPLB)	Farmers, farmer entrepreneurs, farmers/agribusiness cooperatives LGUs where agriculture is an industry Regional Agricultural Officers Department of Agriculture (DA), Department of the Interior and Local Government (DILG)	01-Dec-23	28-Feb-26	ONGOING	5,000,000	968,165
	Integrating Blockchain Technology for Traceability in the Shrimp Industry's Food Supply Chain in Sarangani Province and General Santos City	Rapid, inclusive and sustained economic growth	General: To design, develop, and implement a blockchain-based system for the food supply chain of the shrimp industry in Sarangani Province and General Santos City. Specific: 1. Conduct a comprehensive value chain analysis of the shrimp industry (P. vannamei) in Sarangani and General Santos City to identify key stakeholders, processes, and value-adding opportunities from production to distribution 2. Design the overall blockchain architecture for the shrimp industry in Sarangani Province and General Santos City 3. Implement the decentralized application (dApp) through the development of smart contracts for traceability of P. vannamei shrimp from production to consumption. 4. Conduct system tests for the overall blockchain system to verify functionality and security.	Publication: — At least two (2) draft journal articles for submission to SCOPUS-indexed conference proceedings and/or journals Patent: — At least one (1) IPP application for the blockchain system to be prepared and submitted Product: — At least one (1) operational decentralized application to be tested and evaluated for functionality — At least one (1) user manual developed to include policies on data privacy and security, smart contract governance, and the consensus mechanism People: — Mentoring of at least seven (7) undergraduate students (men or women) and three (3) Master of Science students (men or women) — At least 50 women and men stakeholders (fisherfolk, fishing companies, fish traders, BFAR, local government units) trained on the traceability system and use of digital platform for food safety and sustainable production of shrimp — Plotting/training of at least 50 value-chain players and supporting institutions on the traceability tool/platform Place: — At least eight (8) partnerships with industry partners, government agencies, or other academic institutions Policy: — At least two (2) policy recommendations for the development of the shrimp industry and a policy for the institutionalization of the traceability system Social Impact: — Awareness of food safety in the region through stakeholder understanding of shrimp traceability Economic Impact: — Improved market competitiveness of food shrimp products. — Creation of knowledge and jobs	Mindanao state University - General Santos City (MSU-GSC)	Shrimp Industry (Shrimp Farmers, Processors, Distributors, Retailers and Wholesalers, Consumers) MSMEs/professionals in Region XII Technical Mentors/Coaches Students, faculty & alumni researchers/entrepreneurs Research and Innovations arm of the university Sarangani Province and General Santos LGU & other LGUs in Region XII Regulatory Authorities and other Government agencies like DA, BFAR, DTI, DENR, DOST, NEDA, etc Sarangani-General Santos Shrimp Stakeholders Association	01-Jun-25	31-May-27	ONGOING	5,000,000	2,819,250

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Integrating Gender in AANR Value Chains: The Case of Sardine in the Visayan Sea (Project GenSard)	Rapid, inclusive and sustained economic growth	General: To integrate GAD in the sardine value chain through the development of strategies that enhance livelihood sustainability and improvement of social and economic outcomes among small-scale fisherfolk Specific: 1. To conduct gender-responsive value chain analysis for Sardine among small-scale fisherfolk; 2. To analyze the informal and formal structures and the social norms that influence the gender dynamics of the value chain; 3. To evaluate the distribution of decision-making power and leadership roles across the value chain both at the community and intrahousehold levels; 4. To identify opportunities for both women and men small-scale fisherfolk and develop strategies for social value chain upgrading, aimed at enhancing equity, improving employment quality, and empowerment; and 5. To implement gender-responsive technical interventions in sardine fishing, processing, and trading bases for supporting livelihood diversification.	Publications:One (1) Preliminary result/Journal/ArticleOne (1) Publication-ready research output/Product/COEOne (1) GAD Bulletin/COEOne (1) Manual for Mainstreaming Gender in Sardine Value Chains/People and Services/COE/Capacitated 80 sardine small-scale fisherfolk (40 women and 40 men) on gender sensitivity training, with participants actively involved in the survey and focus group discussions/COE/Capacitated 80 sardine small-scale fisherfolk (40 women and 40 men) addressing skills and knowledge gap/Policy/COEAt least one (1) policy recommendation for gender inclusive sardine value chains/Places and Partnerships/COEEstablished at least two (2) partnerships with local sardine small-scale fisherfolk and enterprises/Social Impact/COEThe study focuses on analyzing and addressing gender dynamics, including decision-making power and leadership roles within the sardine value chain. By promoting gender-responsive strategies and equipping both women and men with gender sensitivity and technical skills, the study empowers marginalized groups, particularly women, to take on leadership roles and participate more actively in the value chain. This fosters greater gender equity, reduces social inequalities, and enhances community cohesion.COBy establishing partnerships with local fisherfolk and enterprises, the study builds stronger social networks and collaborative relationships within the community. Capacitating 80 small-scale fisherfolk (40 women and 40 men) in gender sensitivity and technical skills not only improves individual capabilities but also strengthens collective action and mutual support. This contributes to a more resilient community that is better equipped to address social and economic challenges, fostering long-term social progress and stability.Economic Impact/COBy addressing gender-based barriers and promoting gender-responsive strategies in the sardine value chain, the study aims to provide small-scale fisherfolk, with sustainable income opportunities. This reduces financial vulnerability during off-seasons and industry fluctuations. Equipping fisherfolk with technical skills and gender sensitivity enhances their Publications:Two (2) Journal articles/ Research briefTwo (2) Policy briefs on the recommendations of the project/Product/COEOne (1) Compendium of Indigenous Cultural Practices related to DRR response/ Coffee Table Book illustrating these practices/COEOne (1) training manual on the co-design and institutionalization process/People and Services/Two (2) Capacity-building workshops with at least 15 stakeholder group representatives each/Places and Partnerships/Partnership with LGUs and NCI/Policy/Two (2) draft ordinances for the institutionalization of NBS in the local development plans/Social impacts: — Promotion and protection of IK-based natural resource conservation practices, especially within the context of local agriculture sectors — Strengthening of the partnership between the IP communities and the local government units — Higher recognition of the vital role of the IP community in the management of natural resources Economic impacts: — Sustainability of the local agriculture sectors in the project sites	Bohol Island State University (BSU)	The target beneficiaries of the study on the Sardine value chain can be categorized into primary and secondary beneficiaries. Primary beneficiaries are the direct participants and stakeholders in the Sardine value chain who will benefit immediately from the study's findings and interventions. These include small-scale fisherfolk, Sardine value chain actors (e.g., processors and traders), and fishing communities. The study will provide them with insights into gender-specific roles, constraints, and opportunities, enabling targeted interventions to improve their income, working conditions, and decision-making power. Women, in particular, will benefit from the study's gender-responsive approach, which addresses barriers such as limited access to resources, cultural norms, and gender-based violence. Secondary beneficiaries, on the other hand, are groups or institutions that will benefit indirectly from the study's outcomes, often through improved systems, policies, or capacity-building. They play a critical role in scaling the study's impact to reach primary beneficiaries. These include government agencies (e.g., BFAR, DA, DOST, PSA, NEDA, PCW, LGUs), non-governmental organizations (NGOs), fisheries cooperatives and associations, training institutions (e.g., ATI, TESDA), and financial institutions. These entities will use the study's findings to design gender-responsive policies, programs, and services that support sustainable livelihoods. The outputs of the study are targeted to primarily benefit the following: Local government units National Commission on Indigenous People Department of Interior and Local Government National Economic Development Authority Department of Human Settlements and Urban Development Department of Agriculture Department of Environment and Natural Resources Indigenous peoples of the Philippines	01-Jul-25	30-Jun-27	ONGOING	5,000,000	3,000,819
	Integration of Indigenous Knowledge in Designing Nature-based Solutions for Climate- Smart Agriculture Sector in Selected Municipalities in Northern Philippines	Integrity of the environment and climate change adaptation and mitigation	General: To integrate the use of indigenous knowledge in the design of nature-based solutions to create climate-smart agriculture sectors in Sagada, Mountain Province and Bayombong, Nueva Vizcaya. Specific: 1. Dissect and document the cultural practices within the ICC to respond to climate hazards; 2. Understand the existing customary laws within the different ICCs; 3. Evaluate national and local policies to understand the institutional arrangements and support mechanisms in IK-based and nature-based solutions; 4. Co-design nature-based solutions to respond to various climatic hazards affecting the local agriculture sectors; and 5. Assist the local government units in the institutionalization of the co-designed NBS strategies	Publications:Two (2) Journal articles/ Research briefTwo (2) Policy briefs on the recommendations of the project/Product/COEOne (1) Compendium of Indigenous Cultural Practices related to DRR response/ Coffee Table Book illustrating these practices/COEOne (1) training manual on the co-design and institutionalization process/People and Services/Two (2) Capacity-building workshops with at least 15 stakeholder group representatives each/Places and Partnerships/Partnership with LGUs and NCI/Policy/Two (2) draft ordinances for the institutionalization of NBS in the local development plans/Social impacts: — Promotion and protection of IK-based natural resource conservation practices, especially within the context of local agriculture sectors — Strengthening of the partnership between the IP communities and the local government units — Higher recognition of the vital role of the IP community in the management of natural resources Economic impacts: — Sustainability of the local agriculture sectors in the project sites	University of the Philippines Los Baños (UPLB)	Local government units National Commission on Indigenous People Department of Interior and Local Government National Economic Development Authority Department of Human Settlements and Urban Development Department of Agriculture Department of Environment and Natural Resources Indigenous peoples of the Philippines	16-Mar-24	15-Mar-26	ONGOING	5,000,000	2,600,861
	Island ReGen: Assessment of the Resilience of Small Island Communities and Gender Roles towards Alleviating Climate Change Impacts (OH Title: Island ReGen: Assessment of the Resilience of Small Island Communities and Gender Roles towards Mitigating Climate Change Impacts)	Integrity of the environment and climate change adaptation and mitigation	1. Determine the current ecological landscape and seascape, biodiversity, and management of resources in relation to absorption and recovery from environmental stress; 2. Analyze agricultural systems, including commodities, wild food harvest, agricultural practices, and innovations in the small islands; 3. Identify existing knowledge systems between women and men that promote ecological island resilience and ecosystem-based adaptations; 4. Distinguish the role of women and men, opportunities and constraints in biodiversity conservation and climate disaster-preparedness; 5. Evaluate the local women and men's level of adaptive capacity specifically on governance, social equity, livelihood, and well-being; and 6. Recommend policy options and strategies to increase capacity towards island resilience based on generated trends from the community-based assessment	Publications:At least two (2) conference papers/ paper presentations/At least two (2) draft manuscripts for publications in refereed journals/Policy brief for the recommendations of the study/Community, Education and Public Awareness Materials on gender roles, biodiversity conservation and climate change action/Products/Training modules on gender sensitivity, resilience assessment and other climate-related topics/Places and Partnerships/Partnership obtained through a MOA or letter of support on the conduct of project activities such as capacity building with or from the following institutions: Marinduque State Colleges (MSC), Kingfisher Park (Private), LGUs and communities in Busuanga and Marinduque islands. Specifically, collaboration with MSC to implement and monitor the progress of the project in Marinduque/People and Services/At least 50 number of stakeholders participated in the stakeholder consultation workshop on resilience and climate change/At least 50 number of stakeholders capacitated through a gender sensitivity training and discussion of gender issues in small island communities/Policy/Policy recommendations of increasing adaptive capacity, strengthening disaster risk governance, and mainstreaming gender to climate change responsiveness/Social Impact: — Improved gender inclusivity in biodiversity conservation and climate preparedness plans and actions. — Improved capacity of the local community in monitoring the level of their resilience and in developing management and sustainable development plans. — Enhanced resiliency of small island communities and environmental sustainability Economic Impact: — Increased long-term economic gain from ecotourism and natural resource management activities as a result of recognizing the ecological importance of the areas for which the local community would be more conscious of the importance of the habitat conservation while generating non-destructive livelihood sources.	University of the Philippines Los Baños (UPLB)	Target beneficiaries are the women and men of local communities and various stakeholders such as Local Government Unit, Non-government service institutions, policy makers, natural resource managers, and academe.	01-Feb-24	31-Jan-26	ONGOING	5,000,000	2,322,973
	Management Effectiveness and Impact of the Locally Managed Marine Protected Areas in Zamboanga Peninsula: Basis for Management Enhancement and Policy Recommendations	Rapid, inclusive and sustained economic growth	General: To empirically assess the management effectiveness and impact of the locally-managed MPAs in Zamboanga Peninsula for management enhancement and policy recommendations. Specific: 1. Assess the management effectiveness of locally-managed MPAs in the Zamboanga Peninsula 2. Assess the impact of the locally-managed MPAs in terms of: a. Biophysical impacts on the coastal and marine ecosystem based on the previous/historical coastal and marine environment profile and the implemented management strategies of the MPAs. b. Economic and financial impact of the MPAs 3. Determine the level of access and benefit sharing on the protected coastal and marine resources covered by the MPAs. 4. Develop capacity building among the MPA implementers in conducting management effectiveness assessments; 5. Provide policy recommendations for the concerned government agencies and LGUs managing and implementing the MPAs.	Publications/COEOne (1) policy brief/COEThree (3) publications in international journals/COEOne (1) Environmental classes/module/COETwo (2) Poster designs/COETwo (2) Billboard design/Product/COEDatabase of the five (5) locally-managed MPAs provided to the Philippine Marine Protected Area Database/People Services/COEThe local partners, and MPA implementers are trained on the standard methods of assessment of the MPA. COEnvironmental classes are conducted to at least 100 male and female fisher folks that reside near the locally managed MPAs/Places and Partnerships/COEPartnerships between the five (5) LGUs managing and implementing the MPAs, DA, BFAR, DENR and Academe are created through an agreement/Policy/COESet of policy recommendations to improve management of MPAs/Social Impacts/COEStakeholders and the communities surrounding the locally-managed MPAs will develop greater awareness of the MPA, the marine ecology, and the coastal environment, which can significantly influence their acceptance of MPA. Having adequate knowledge about the marine ecosystem and its management processes is an important factor in understanding the importance of its conservation. Furthermore, being familiar with the features of the marine environment and sea resources may also develop greater concern over them. Thus the stakeholders may become more supportive of conservation efforts like the MPA. The community dependent on the area's marine resources will benefit from good marine water quality and increase fish catch as one of the major results after MPAs are effectively managed. Moreover, the MPA data, which will become accessible through the creation of a database, will benefit thousands of scholars, academicians, and government and non-government institutions who will be utilizing the information.Economic Impacts There will be a significant improvement of the income and livelihood of the fisher folks around the areas where MPAs are established. Since effectively-managed MPAs are expected to increase their conservation value resulting from increasing fish catch	Misamis University (MU)	— MPA Implementers — LGUs — Fisherfolks	01-May-24	30-Apr-26	ONGOING	5,000,000	985,559

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Participatory Approach in Assessing and Promoting Women-led Permaculture among Selected Permaculture Sites in the Agriculture, Aquatic, and Natural Resources (AANR) Sectors in the Philippines	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To assess and promote women-led permaculture practices and approaches among the AANR sectors towards social and environmental development and sustainability</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. To document the level of knowledge, attitude, and practices (KAP) in the production and promotion of permaculture by the community members within the AANR permaculture sites of Pilogo, Quezon, Compostela, Cebu, and Calape, Bohol; 2. To explore the role of both women and men in the production and promotion of permaculture in the municipality of Pilogo, Quezon, Compostela, Cebu, and Calape, Bohol; 3. To assess gender-sensitive and participatory approaches on the sustainability of permaculture initiatives in the AANR sector; 4. To examine the challenges and opportunities for the participation of both women and men in permaculture initiatives and decision-making process; 5. To identify gender-sensitive training programs and policy recommendations addressing the needs and constraints of women and local communities in permaculture; 6. To comprehensively design a gender-sensitive permaculture adoption framework emphasizing the unique and complementary roles of both women and men; and 7. To develop and offer localized and accessible Permaculture Design Courses (PDC) tailored to the Philippine context as ways to promote women-led permaculture. 	<p>Publication — The project will produce 5 news articles, 2 Journals, 1 scientific paper, 2 presentations on permaculture-related conferences (i.e. ISAS 2025, etc.) — Technical bulletins based on the study's findings can also be developed by DA as part of their future guidelines on permaculture adoption, as reference to the CaQuidence for Identifying and Developing Policy Output Under the DOST 6Ps Framework. Product — The project will create a document/ research paper based on the documentation and assessment of the approaches of women-led permaculture initiatives towards the development of the adoption framework. This will be drawn from the respondents' sex-disaggregated database using gender analysis tools. A document describing the training needs of participants and policy recommendations will also be developed to serve as part of a baseline for the adoption/promotion phase of the project. Open Educational Resources (OERs) will also be developed and integrated in selected courses under UPOU PMDS (CEP PSDT, PLUP, DPMW, DWD, and DSA) People/Services — The project will mobilize 10 from LGU/policymakers, 30 permaculture practitioners and leaders, 3 gender-focused organizations, youth, and elders during FGDs, KIs, and surveys, while 90-100 stakeholders from existing community-based gardens are hoped to participate during the capacity building in gender-sensitive training programs addressing their needs and constraints in permaculture production and promotion. These also include three SUCs which can learn from the research and can improve their agri-related courses. Places and Partnerships — The project will enable UPOU to establish linkages and possibly sign MOU with 3 LGUs (Municipal Governments of Pilogo, Compostela, and Dumaling), 2-3 women-led community-based organizations each within the study sites, 9-15 permaculture practitioners and people's organizations. The researchers also aim to collaborate with 3 SUCs that provide programs related to agricultural productivity such as Southern Luzon State University in Lucena, Quezon, Josefine H. Cerilles State College Dumaling, and Cebu Publication of Two (2) draft manuscript for journal article Product of information on technical efficiency, profitability, competitiveness, and value chain People Services EC40 capacitated stakeholders Places and Partnerships CThree (3) partnerships — CLSU with DOST, DA-RFOs (It, VI), PADs (Aurora, Iloilo) and LGUs (to be identified) Policy EC40 Policy recommendation to improve productivity, efficiency and competitiveness of cacao industry Social Impact This project will be advantageous to farmers, cacao growers and processors, LGUs, and other stakeholders to increase cacao production through the information to be generated and craft recommendations to increase productivity, efficiency and competitiveness of cacao. The potential social impact of the projects could be an increase in the number of cacao growers, cacao processors, distributors and other actors of the value chain. In addition, the economic impact could be improved cacao growers production efficiency, improved cacao competitiveness and share in the international market. Economic Impact — The economic impact could be improved cacao growers production efficiency, improved cacao competitiveness and share in the international market.</p>	University of the Philippines Open University (UPOU)	The project will benefit women as a sector in the Agriculture, Aquatic and Natural Resources as their roles and contributions will be recognized and highlighted, while addressing possible gender equality issues in the access and control of resources and benefits of permaculture practices. Ultimately, the project will benefit the communities, both people and the environment as a whole, when the benefits of the permaculture initiatives have been documented and while permaculture practices are institutionalized in those communities. In the process, the project will support the LGUs in the three municipalities, local and international permaculture practitioners, policymakers on basing gardening, and researchers on permaculture, women studies, and community development.	01-Mar-25	28-Feb-27	ONGOING	5,000,000	2,069,822
	Productivity, Technical Efficiency, and Competitiveness of the Cacao Value Chain in Luzon and Visayas	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To assess the productivity and technical efficiency of cacao production as well as the competitiveness of cacao as food in the Philippines.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Analyze the sources of growth and performance of the local cacao industry; 2. Analyze productivity in cacao producing areas and identify factors causing variation in productivity; 3. Estimate technical efficiency across producing areas and identify factors that could improve efficiency; 4. Analyze the profitability in production and identify measures to improve profitability; 5. Provide quantitative analysis of the competitiveness of cacao as food; 6. Analyze the cacao value chain and recommend specific measures for its improvement; and 7. Recommend reforms, policies and research agenda that can enhance and sustain the development of the cacao industry. 	<p>Publication — Prepare two (2) publishable research articles, targeted for submission to high-impact peer-reviewed journals Products/Processes — Develop a comprehensive manual for conducting public goods experiments (PGE) in fishing communities for managing common-pool fishery resources People/Services — Provide training/workshops to at least ninety (90) extension beneficiaries focused on fostering social capital, promoting cultural values, and developing cooperative behavior to enhance sustainable marine resource management practices Places/Partnerships — Prepare and finalize six (6) memoranda of understanding (MOUs) and/or memoranda of agreement (MOAs) with local government units (LGUs) and barangays to ensure strong institutional partnership, active engagement and collaboration Policies — Develop four (4) evidence-based policy recommendations on sustainable management of shared fishery resources, derived from the findings of the study, to be submitted to target LGUs/ barangays for informed decision-making and effective resource governance Social Impact — The study will elucidate the role of social capital and cultural values in fostering cooperative behavior within MPAs. By focusing on indigenous and local fishers, the research will enhance community engagement in resource management, reinforcing trust and reciprocity essential for effective collaboration. This increased participation is expected to strengthen social cohesion and collective action, leading to more resilient and self-sustaining communities. Furthermore, integrating traditional ecological knowledge into conservation strategies will preserve cultural heritage while aligning with modern management practices, thereby reinforcing community identity and resilience. Economic Impact — This study has the potential to improve the sustainability and productivity of marine resources, which are crucial to the livelihoods of coastal communities. By fostering effective MPA management through enhanced cooperation, the study aims to stabilize fish stocks and ensure long-term resource availability, directly benefiting local and indigenous fishers.</p>	Central Luzon State University (CLSU), University of the Philippines Los Baños (UPLB)	Cacao growers Researchers and development workers Students Consumers Market agents Local government	01-Dec-24	31-May-26	ONGOING	5,000,000	721,522
	Promoting Coastal Resource Conservation Activities by Local Communities through Fostering Social Capital: Approach Using Public Good Experiment	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To examine the factors influencing cooperative behavior among indigenous and local fishers in the Philippines for sustainable marine resource management.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. To measure and compare the cooperative behavior among indigenous and local fishers through the public goods experiment in the context of sustainable marine resource management. 2. To analyze the effect of social capital (levels of trust and reciprocity) on cooperative behavior among indigenous and local fishers in marine resource management. 3. To assess how cultural values (beliefs about communal responsibility, respect for nature, attitude towards marine resource sharing and management, etc.) of indigenous and local fishers influence their social capital and cooperative behavior in marine resource management. 4. To examine the influence of socio-economic factors (age, income, educational level, fishing experience, etc.) on social capital and cooperative behavior in marine resource management. 5. To provide recommendations for promoting sustainable marine resource management, especially within MPAs, by enhancing social capital and fostering cooperative behavior, considering the role of incentives and the influence of cultural values. 	<p>Publication — Prepare two (2) publishable research articles, targeted for submission to high-impact peer-reviewed journals Products/Processes — Develop a comprehensive manual for conducting public goods experiments (PGE) in fishing communities for managing common-pool fishery resources People/Services — Provide training/workshops to at least ninety (90) extension beneficiaries focused on fostering social capital, promoting cultural values, and developing cooperative behavior to enhance sustainable marine resource management practices Places/Partnerships — Prepare and finalize six (6) memoranda of understanding (MOUs) and/or memoranda of agreement (MOAs) with local government units (LGUs) and barangays to ensure strong institutional partnership, active engagement and collaboration Policies — Develop four (4) evidence-based policy recommendations on sustainable management of shared fishery resources, derived from the findings of the study, to be submitted to target LGUs/ barangays for informed decision-making and effective resource governance Social Impact — The study will elucidate the role of social capital and cultural values in fostering cooperative behavior within MPAs. By focusing on indigenous and local fishers, the research will enhance community engagement in resource management, reinforcing trust and reciprocity essential for effective collaboration. This increased participation is expected to strengthen social cohesion and collective action, leading to more resilient and self-sustaining communities. Furthermore, integrating traditional ecological knowledge into conservation strategies will preserve cultural heritage while aligning with modern management practices, thereby reinforcing community identity and resilience. Economic Impact — This study has the potential to improve the sustainability and productivity of marine resources, which are crucial to the livelihoods of coastal communities. By fostering effective MPA management through enhanced cooperation, the study aims to stabilize fish stocks and ensure long-term resource availability, directly benefiting local and indigenous fishers.</p>	Partido State University (ParSU)	— Indigenous and Local Fishers. The primary beneficiaries are the indigenous and local fishers in the Ilocos Region and Cagayan Valley. By enhancing understanding of social capital and cooperative behavior, the study aims to empower these fishers to engage more effectively in MPA management, leading to sustainable resource use and improved economic stability. — Community Leaders and Organizations: Local leaders and organizations involved in MPA management will benefit from actionable insights, enabling them to implement strategies that align with community dynamics and cultural values, thereby enhancing management effectiveness. — Policy-makers and Conservation Practitioners: The study will provide evidence-based recommendations for policy-makers and conservation practitioners at regional and national levels, supporting the development of policies that foster sustainable resource management and community resilience. — Academic and Research Institutions: The research will contribute to the academic literature on social capital and marine resource management, offering valuable data and insights for future studies and conservation initiatives.	01-Sep-25	31-Aug-27	ONGOING	5,000,000	2,728,241
	Salt Business Model Development for Small Island Economy	Rapid, inclusive and sustained economic growth	<p>General:</p> <p>To develop and pilot test a viable small island based business model for the salt value chain in Patnanungan Island.</p> <p>Specific:</p> <ol style="list-style-type: none"> 1. Select potential area and validate their suitability as salt production area based on previous area assessment 2. Establish salt demand requirements within the island and adjacent island 3. Establish the business entity through clustering and organization development (association, cooperative, etc.) 4. Capacitate those constituting the business entity with technical, entrepreneurial, and organizational skills 5. Operationalize the viable small island based business model for salt value chain 6. Institutionalize within the business entity a system for quality assurance, product packaging/ labelling, and branding as well as efficiency in production and logistics to ensure product competitiveness 7. Monitor and evaluate the developed business model in terms of performance and efficiency 8. Document the piloting process for purposes of further improvement and future replication 	<p>Publication: EC40 at least one (1) draft article regarding the salt industry EC40 at least one (1) information bulletin regarding the current status and prospects of the salt industry in Luzon Product: EC40 at least one (1) video documentation of the recommended salt production EC40 (1) database for salt farmers (includes among others production/area harvested, market trends/prospects of value-added products) in Patnanungan Island People Services: CThree (3) community-based salt farm business developed with at least 36 people capacitated Place and Partnerships: EC40 at least five (5) partnerships established on the farmer groups and local government units to be covered EC40 at least five (5) market linkages established Policy: EC40 at least one (1) policy recommendation for the sustained improved production of salt in Patnanungan Island, possible upscaling in other areas that could lead to reduced salt importation Social Impact — Enhanced relationships between the community through working together to meet the supply requirements — Engaged community to enter salt-related livelihoods — Improved situation of marginalized coastal household Economic Impact — Increased access to salt as input requirement for the fish drying industry — Improved livelihood of the coastal community — Increased production of local salt</p>	University of the Philippines Los Baños (UPLB), Cavite State University (CVSU)	Salt farmer-cooperators, the residents of Patnanungan Island, fish drying industry of Patnanungan, the salt farmers in the major growing areas, and the salt industry of the nearby area and in the country in general.	01-Jul-24	31-Dec-25	COMPLETED	5,000,000	611,769

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Strengthening Science-Based and Policy-Informed Industry Level Support to Boost the Viability of Bamboo-Based Enterprises in Laguna	Rapid, inclusive and sustained economic growth	General: To strengthen science-based and policy-informed industry-level support to boost the viability of bamboo-based enterprises. Specific Objective: Specific: 1. Establish a bamboo resource management plan to ensure a sustainable input market; 2. Develop training programs for local entrepreneurs to address issues on key enterprise components: production system, organization & management, and linkages; 3. Establish stable markets for bamboo products through local and national partnerships; 4. Promote gender equality by ensuring equal opportunities for women and men in all bamboo industry-related activities; 5. Develop and support the implementation of a provincial bamboo industry development plan; 6. Monitor and evaluate the immediate outcomes of the interventions in the Laguna bamboo industry; and 7. Develop a sustainability plan for the continuous advancement of the bamboo industry in Laguna.	Publication • Issue at least two (2) news articles about the project • One (1) promotional video to promote the bamboo industry of Laguna • One (1) draft policy brief providing actionable policy recommendations for the sustainability of interventions Patent/ Intellectual Property • One (1) copyright of IEC material Product • Sex-disaggregated database of bamboo enterprises and other stakeholders People Service • At least 40 men and women workers of bamboo processors and growers/ farmers trained according to the planned firm-based interventions • At least 10 technical staff from the LGUs trained on technical and managerial aspects Place and Partnership • Build partnerships with at least 15 industry players for the development of the Laguna bamboo industry through MOAs Policy • Policy recommendation/resolution for the continuous enhancement of the bamboo industry in Laguna • At least (1) draft provincial resolution based on the policy recommendation • Laguna Bamboo Industry Development Plan • Bamboo Resource Management Plan • Sustainability Plan Social Impact • Better quality of life for individual families, men, women, and communities engaged in the bamboo industry	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	• Women and men processors and producers of bamboo in Laguna • Local Government Units (MAO, Provincial Agriculturist, etc) • Other stakeholders of the Laguna Bamboo Industry Development Council	01-Nov-24	30-Apr-26	ONGOING	5,000,000	1,309,702
	The Role of Gender and Collective Action in Unlocking the Potential of the Philippine Dairy Industry	Rapid, inclusive and sustained economic growth	General: To understand the role of gender and collective action in unlocking the potential of the Philippine dairy industry. Specific: 1. To identify the role of gender along the dairy value chain; 2. To determine the role of collective action, such as the cooperatives, along the dairy value chain; 3. To analyze the intersectionality of sociological factors, particularly gender and collective action, within the Philippine dairy industry; and 4. To identify policy implications and suggest strategic recommendations for promoting gender roles, gender equality and empowerment in the Philippine dairy industry and cooperative sector.	Publication At least 1 journal publication At least 1 convention/conference presentation One (1) policy brief Product R&D Ideation informed by industry, consumer, community, or market needs aligned with needs of industry One (1) sex-disaggregated database (SDD) of the respondents People Services 315 female and 315 male dairy farmers are to be sensitized on gender Two faculty members will be working with the research team and providing support for graduate studies (MS) Thirty (30) female and male participants, representing different organizations/sectors namely cooperatives, private sector (i.e. AgriTerra), coop federation (i.e. NATCCO), national government agencies (i.e. DA, NDA, DTI, DSWD, PCCCL, social enterprise, local government units (i.e. RAO, PDLDO) and from the academe will be invited for a national dissemination and consultation workshop Places and Partnerships The project will build partnership with 9 dairy cooperatives, 6 LGUs, and NDA for data sharing and identification of project sites Policy At least one (1) policy recommendation on designing and planning Gender-Sensitive Training Programs and entrepreneurial schemes that incorporate best practices from both women and men farmers, tailored to their respective gender roles Economic impacts — More women engaged in cooperative enterprises, providing them with greater economic gains, stable livelihood, and more access to information-sharing platforms for knowledge and skills development related to dairy operations and management Social Impacts — Increased awareness of the importance and relevance of gender in dairy industry (gender conscientization) — Expanded networks and collaboration (maybe through being a member of another cooperative or federation and/or other forms of partnership with another dairy stakeholder/like government agencies, social enterprises), promoting access to the market and empowering women and men in dairy — Increased in the number of women with leadership roles at the organization (cooperative) and community level — Greater control and participation in decision-making in terms of productive and reproductive resources and activities Publication — At least 2 articles (including at least one policy brief) Product — Database of the calamansi industry players in Cabanatuan City — Value Chain Map of calamansi in Cabanatuan City — Training Manuals — Sustainability Plan — 1 Established nursery for quality planting materials People — Training conducted — At least 130 women and men calamansi farmers and nursery operators capacitated with knowledge and skills in producing and maintaining high-quality planting materials and in product development and post-harvest activities — 10 LGU personnel capacitated Place — At least five (5) partnerships established with industry partners, government agencies, and other calamansi stakeholders — At least two (2) market linkages established Policy — One (1) Policy recommendation for the improvement of the calamansi industry in Nueva Ecija Social Impact — Improved linkages between calamansi farmers and other players along the value chain — Strengthened relationships between the players of the value chain as well as its enablers (local government units and concerned agencies) — More individuals are attracted to entering calamansi-related livelihoods Economic Impact — More competitive calamansi industry in Nueva Ecija — Improved financial benefits for the calamansi growers and assured supply of raw materials for the buyers	University of the Philippines Los Baños (UPLB)	— Female and Male Dairy Farmers — Local Dairy Cooperatives — Philippine Dairy Industry	01-Apr-25	30-Sep-26	ONGOING	5,000,000	3,917,688
	Value Chain Development of Calamansi in Cabanatuan City, Nueva Ecija	Rapid, inclusive and sustained economic growth	General: To support the development and growth of calamansi farmer enterprises in Cabanatuan City, Nueva Ecija. Specific: 1. Provide an overview of the current situation of calamansi industry in Cabanatuan City; 2. Identify the challenges and opportunities being faced by the women and men calamansi farmers in the study area; 3. Develop and implement intervention strategies to address the specific needs of the enterprises to strengthen their position in the calamansi value chain; 4. Establish a nursery for the production of clean planting materials for calamansi; 5. Develop and operationalize a supply chain coordination unit; 6. Build partnerships between and among key stakeholders in the calamansi value chain and other potential partner agencies; 7. Monitor and evaluate the immediate outcomes of the implemented interventions; and 8. Develop a sustainability plan for the continuous implementation of activities and partnerships between farmers and other key stakeholders.	Publication — At least 2 articles (including at least one policy brief) Product — Database of the calamansi industry players in Cabanatuan City — Value Chain Map of calamansi in Cabanatuan City — Training Manuals — Sustainability Plan — 1 Established nursery for quality planting materials People — Training conducted — At least 130 women and men calamansi farmers and nursery operators capacitated with knowledge and skills in producing and maintaining high-quality planting materials and in product development and post-harvest activities — 10 LGU personnel capacitated Place — At least five (5) partnerships established with industry partners, government agencies, and other calamansi stakeholders — At least two (2) market linkages established Policy — One (1) Policy recommendation for the improvement of the calamansi industry in Nueva Ecija Social Impact — Improved linkages between calamansi farmers and other players along the value chain — Strengthened relationships between the players of the value chain as well as its enablers (local government units and concerned agencies) — More individuals are attracted to entering calamansi-related livelihoods Economic Impact — More competitive calamansi industry in Nueva Ecija — Improved financial benefits for the calamansi growers and assured supply of raw materials for the buyers	Nueva Vizcaya State University (NWSU)	(L3) TARGET BENEFICIARIES — Key players and stakeholders of the calamansi industry such as farmers, input service providers, traders, processors, and other entities providing support services along the value chain Policy/decision-makers — Researchers and development workers involved in technology transfer and agrifood development	01-Jan-25	31-Dec-26	ONGOING	5,000,000	3,434,848
Extending the reach and impact of the LIFE model in improving livelihoods and building peace in conflict-vulnerable communities in Mindanao	Project 1. Contributing to Peacebuilding through the LIFE Model in MILF Communities of Zamboanga Sibugay, South Cotabato and Maguindanao del Norte	Integrity of the environment and climate change adaptation and mitigation	General: 1. Validate and expand the LIFE Model to six MILF communities in South Cotabato, Maguindanao and Zamboanga Sibugay using the farmer and partner experiences of previous sites; 2. Validate and expand the LIFE model in UP Mindanao's land reservation area in Laak, Davao del Oro as well as with IP youth farmers in Talingod, Davao del Norte; 3. Improve food and poverty thresholds through improved livelihood opportunities of the identified farmer groups; and 4. Analyze the outcomes of the use of the LIFE model as an agro-extension strategy in this program relative to previous projects in terms of economic, social, gender and partnership aspects. Specific: 1. To validate and expand the LIFE model in MILF communities to contribute to peacebuilding efforts; 2. To improve food and poverty thresholds through livelihood opportunities that provide better incomes and increased social capital; and 3. To document and analyze the outcomes of the project in the selected MILF communities, including gender dynamics and the role of the youth.	Y1 - Products Three (3) demo farms established in 3 sites Y1 - People and Services Three (3) farmer groups organized/ at least one (1) cross-visit conducted Y1 - Publications Two (2) journal articles (working papers) Y1 - Places and Partnerships Three (3) MOAs drafted Y1 - Policies At least one (1) stakeholders' meeting initiated to discuss potential policies/sustainability mechanisms Y1 - Patents/M/AY1 - Social Impact increased participation in community increased participation of women and youth Y1 - Economic Impact Diversified livelihoods and improved food security Y2 - Products Three (3) demo farms established in three (3) new sites Y2 - People and Services Three (3) farmer groups registered At least three (3) capacity building activities conducted Ten (10) farmers learned about the LIFE model Eight (8) Filipinos shared their experiences in learning/using the LIFE model to Fiji partners Y2 - Publications One (1) journal article submitted to an international refereed journal One (1) video produced Y2 - Places and Partnerships Three (3) MOAs signed Y2 - Patents/M/AY2 - Policies Two (2) ordinances/resolutions passed Y2 - Social Impact increased participation in community increased participation of women and youth Y2 - Economic Impact Diversified livelihoods and improved food security Y3 - Productions One (1) journal article submitted to an international refereed journal Y3 - Places and Partnerships Three (3) MOAs signed Y3 - Policies Two (2) ordinances/resolutions passed Y3 - Patents/M/AY3 - Social Impact increased participation in community increased participation of women and youth Y3 - Economic Impact Diversified livelihoods and improved food security	University of the Philippines Mindanao (UPMin)	(L3) The project's target beneficiaries are the farmers in MILF communities specifically the following: Maguindanao: Barangay Banaba in Datu Abdullah Sangki; Barangay Kamasi in Ampatuan South Cotabato; Barangay Little Ragunan and Barangay Sepaka in Surallah; Zamboanga Sibugay: Barangay San Pedro and Barangay Santa Nito in Tungawan.	01-Aug-23	31-Jul-26	ONGOING	15,631,206	3,928,635

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Extending the reach and impact of the LIFE model in improving livelihoods and building peace in conflict-vulnerable communities in Mindanao	Project 2. Expanding the LIFE model to UP Mindanao's Land Reservation in Laak, Davao de Oro	Integrity of the environment and climate change adaptation and mitigation	General: 1. Validate and expand the LIFE Model to six MLF communities in South Cotabato, Maguindanao and Zamboanga Sibugay using the farmer and partner experiences of previous sites; 2. Validate and expand the LIFE model in UP Mindanao's land reservation area in Laak, Davao de Oro as well as with IP youth farmers in Talaingod, Davao del Norte; 3. Improve food and poverty thresholds through improved livelihood opportunities of the identified farmer groups; and 4. Analyze the outcomes of the use of the LIFE model as an agro-extension strategy in this program relative to previous projects in terms of economic, social, gender and partnership aspects. Specific: 1. To validate and expand the LIFE model in a conflict-vulnerable farming community in Laak land reservation area; 2. To improve food and poverty threshold of the selected farmer group in the Laak reservation area through livelihood opportunities that provide better incomes paying close attention to women and youth participation; and 3. To document and analyze the outcomes of the LIFE model in the Laak reservation area and compare with previous literature on the LIFE model.	Y1 - ProductsAt least one (1) demo farm establishedY1 - People and ServicesOne (1) farmer group organized One (1) cross-visit conductedY1 - PublicationOne (1) journal article (working paper)Y1 - Places and Partnerships One (1) MOA draftedY1 - PoliciesAt least one (1) stakeholders' meeting initiated to discuss potential policies/sustainability mechanismsY1 - PatentsY1 - Social ImpactImproved social capital Empowered women and youth participating in community activitiesY1 - Economic ImpactStable and diverse livelihoodsFood and poverty threshold reached and exceededY2 - ProductsOne Y2 - People and ServicesOne (1) farmer group registered At least three (3) capacity building activities conductedY2 - PublicationsOne (1) journal article submitted to an international refereed journalY2 - Places and Partnerships One (1) MOA signedY2 - PoliciesOne (1) ordinance/resolution passedY2 - PatentsY2 - Social ImpactImproved social capital Empowered women and youth participating in community activitiesY2 - Economic ImpactStable and diverse livelihoodsFood and poverty threshold reached and exceededY3 - ProductsOneY3 - People and ServicesOne (1) farmer group organizedAt least three (3) capacity building activities conducted in the new siteY3 - PublicationsOne (1) journal article draft ready for submission to an international refereed journalY3 - Places and Partnerships Two (2) MOAs draftedY3 - PoliciesOne (1) ordinance/resolution passedY3 - PatentsY3 - Social ImpactImproved social capital Empowered women and youth participating in community activitiesY3 - Economic ImpactStable and diverse livelihoodsFood and poverty threshold reached and exceeded	University of the Philippines Mindanao (UPMin)	The target beneficiaries of the project are the Talle Farmer's Association or a newly formed farmer's group located in Laak, Davao de Oro.	01-Aug-23	31-Jul-26	ONGOING	8,075,810	2,528,934
Extending the reach and impact of the LIFE model in improving livelihoods and building peace in conflict-vulnerable communities in Mindanao	Project 3. Reintegration of IP Youth Farmer Escuecos (BAKWITS): Contributing to Peacebuilding through the LIFE model in Talaingod, Davao del Norte through the LIFE Model	Integrity of the environment and climate change adaptation and mitigation	General: To contribute to peacebuilding in Barangay Sto. Niño, Talaingod, Davao del Norte by empowering the IP youths. Specific: 1. To capacitate the TATAG IP youth in forming their own People's Organization; 2. To strengthen and capacitate the People's Organization of the farmer parents of the TATAG IP youth; and 3. To improve food and poverty thresholds of the TATAG IP youth farmers and the two (2) People's Organization in Talaingod through increased income from livelihood opportunities.	Y1 - ProductionY1 - People and ServicesOne (1) People's Organization (PO) organized for the IP youth farmersY1 - PublicationsOneY1 - Places and Partnerships One (1) MOA drafted Y1 - PoliciesY1 - PatentsY1 - ProductsIn Talaingod, produce agriculture products, examples of possible produce are as follows: at least 1-hectare Cardava/Lakatan banana; at least 1 hectare of corn production; at least 1 rice-aquaculture production project; at least 1 vermicomposting project; at least 1 unit of solar powered irrigation system; at least 1 animal production project; at least 1 vegetable production projectY2 - People and ServicesOne (1) People's Organization (PO) established for the IP youth farmersCapacitated the existing (20) IP youth farmers who are part of the TATAG IP program Two (2) jobs createdY2 - PublicationsOneY2 - Places and Partnerships One (1) MOA signed Y2 - PoliciesY2 - PatentsY2 - Social ImpactLasting peace will be achieved because the IP youth farmers are empowered and capacitated to be productive and self-reliant through the agricultural knowledge and technologies transferred to them. This will further ensure that sustainable and productive agricultural practices are carried out in the Barangays where they are from.Y2 - Economic ImpactWith the Agricultural Livelihood component of the project, the IP youth farmers will be able to address and sustain their needs while they are part of the TATAG IP program. This will greatly reduce the financial burden faced by their family in providing for their needs while they participate in the program and pursuing their education.Y3 - ProductsIn second group in Talaingod, produce agriculture products, examples of possible produce are as follows: at least 1-hectare Cardava/Lakatan banana; at least 1 hectare of corn production; at least 1 rice-aquaculture production project; at least 1 vermicomposting project; at least 1 unit of solar powered irrigation system; at least 1 animal production project; at least 1 vegetable production project Y3 - People and ServicesAccommodated and capacitated an additional (82) IP youth farmer-parents from identified barangays in	University of Southeastern Philippines (USEP)	The project's target beneficiaries are the IP youth farmers of the three barangays of Talaingod, namely, Sto. Niño, Dagohoy, and Pluma Gil. The initial number of beneficiaries are 30 with an additional 82 IP youth farmers once the capacity of the TATAG IP Program has increased.	01-Aug-23	31-Jul-26	ONGOING	9,000,000	2,180,933
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands Enhancing Livelihood through S&T in the Great Sta. Cruz Island, Zamboanga City, Philippines	Project 1. Community Based Natural Resources Management and Health Improvement in the Great Sta. Cruz Island	Rapid, inclusive and sustained economic growth	General: To establish a community based natural resources management system and improve the health condition of the community in the Great Sta. Cruz Island. Specific: 1. To assess the levels of environmental vulnerability and resilience and health conditions of the island community; 2. To install of one (1) unit solar powered desalinations for the S&T interventions to SIC; 3. To strengthen partnerships among DOST-PCAARRD, DENR-IX, State Universities and Colleges (SUCS), LGUs and other stakeholders; and 4. To initiate policy development and recommendations to achieve sustainability in SIC.	Products: Established one (1) desalination system; Maintained one (1) desalination system; Established and maintained one (1) desalination system; People and Services Conducted three (2) capacity-building activities for SIC beneficiaries; Trained 100 beneficiaries; Conducted one (1) capacity-building activity for project implementers; Trained five (5) project implementer; Conducted one (1) capacity-building activity for SIC beneficiaries; Trained 100 beneficiaries; Conducted one (1) capacity-building activity for project implementers; Trained five (5) implementers; Conducted three (3) capacity-building activities for SIC beneficiaries; Trained 100 beneficiaries; Conducted two (2) capacity-building activity for project implementers; Trained five (5) project implementers; Place and Partnerships Conducted one (1) benchmarking activity; Forged one (1) MOA/MOU with individual SIC beneficiary; Forged two (2) MOA/MOUs with project collaborators; Forged one (1) MOA/MOU with individual SIC beneficiary; Forged one (1) MOA/MOUs with project collaborators; Conducted one (1) benchmarking activity; Forged two (2) MOA/MOUs with individual SIC beneficiary; Forged three (3) MOA/MOUs with project collaborators Publication Drafted one (1) operation manual; Drafted one (1) sustainability plan -	Western Mindanao State University (WMSU)	Beneficiaries of the project are the 426 male and female individuals who belong to the 86 families living at Great Sta. Cruz Island. The LGUs and other stakeholders are also expected to benefit from the said project.	01-Dec-24	30-Nov-26	ONGOING	3,070,893	1,497,867
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands Enhancing Livelihood through S&T in the Great Sta. Cruz Island, Zamboanga City, Philippines	Project 2. Establishment of Milkfish HDPE Fish Cage Livelihood Project in the Great Sta. Cruz Island	Rapid, inclusive and sustained economic growth	General: To establish a community-based natural resources management system and improve the health condition of the community in the Great Sta. Cruz Island. Specific: 1. To establish and operate one (1) unit of bangus HDPE fish cage livelihood project in the Great Sta. Cruz Island; 2. To produce 10,800 kg of fresh bangus annually that would provide a sustainable source of income for the Great Sta. Cruz Island community; 3. To increase the area of marine fish cage production in the region by maximizing the utilization of mariculture zones; 4. To capacitate and assist the Great Sta. Cruz Island People's Organization on bangus fish cage culture operation, management and value-adding technology; and 5. To showcase the viability of bangus fish cage culture as a sustainable alternative source of livelihood.	Products Established one (1) milkfish HDPE farm Procured 5,980 milkfish fingerlings - Produced 5,440 kg of milkfish - Maintained one (1) milkfish HDPE farm - Developed one (1) milkfish value-added product Established and maintained one (1) HDPE farm - Procured 11,880 milkfish fingerlings - Produced 10,800 kg milkfish - Developed one (1) milkfish value-added product People and Services - Conducted one (1) capacity-building activity on HDPE fish cage culture - Trained 30 beneficiaries Place and Partnerships - Forged one (1) MOA with People's Organization Publication - Drafted one (1) operational manual - Produced one (1) instructional video - Published one (1) article/IEC material - Developed one (1) operational manual - Submitted one (1) article in a reputable peer-reviewed journal - Published one (1) article/IEC material	Department of Agriculture - Bureau of Fisheries and Aquatic Resources - Regional Fisheries Office IX (DA-BFAR 9)	Members of the People's Organization of the Big Sta. Cruz Island, Zamboanga City, both men and women are interested in engaging in the project.	01-Dec-24	30-Nov-26	ONGOING	5,872,465	3,394,009
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands Enhancing Livelihood through S&T in the Great Sta. Cruz Island, Zamboanga City, Philippines	Project 3. Agriculture and Food Technology Production in the Great Sta. Cruz Island	Rapid, inclusive and sustained economic growth	General: To establish a ZamPen Native Chicken (ZNC) production unit at the Great Sta. Cruz Island. Specific: 1. To sustainably improve agricultural productivity through livestock's innovation technologies to meet increasing demand of the tourists in the island. 2. To improve the income-earning opportunities in Sta. Cruz Island inhabitants, and 3. To make food systems more efficient, inclusive, and resilient through food innovation processing.	Products 1 instructional video; 1 ZNC farm established, 1 operational manual drafted; 1 sustainability plan developed; ZNC farm established and monitored; 2 value-added ZNC products developed; 3,312 ZNC head grower produced People and Services 10 training/workshops conducted; 30 SIC partners/beneficiaries trained; 5 capacity-building participated by project implementers; 5 project implementers trained; 1 people's organization assisted; 10 training/workshops conducted; 30 SIC partners/beneficiaries trained; 5 capacity-building participated by project implementers	Western Mindanao State University (WMSU)	Residents of the Great Sta. Cruz Island Tourist and visitors of the Island Government agencies Academe Private industries Researchers and students	01-Dec-24	30-Nov-26	ONGOING	5,197,687	2,674,546

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands Enhancing Livelihood through S&T in the Great Sta. Cruz Island, Zamboanga City, Philippines	Project 4. Technology Integration through Knowledge Sharing in IMTA (TIKIMTA)	Rapid, inclusive and sustained economic growth	General: Establishment of an IMTA farm in the Great Sta. Cruz Island as an environment-friendly, culturally sound, and sustainable alternative livelihood. Specific: 1. Installation of bamboo cages, baskets, and rafts for the crab, mollusks, echinoderms, and seaweeds for the IMTA system; 2. Operationalization of the IMTA farm; 3. Evaluate the socio-economic benefits of the IMTA farm in the Great Sta. Cruz Island considering factors such as production costs, market prices, and revenue from harvested species; and 4. Capacitation of people's organization in managing the IMTA farm.	Products Established one (1) IMTA farm; Maintained one (1) IMTA farm People and Services Conducted one (1) capacity-building activity on IMTA system; Trained 30 beneficiaries; Conducted one (1) awareness seminars on lying-in hatcheries and on sustainable biodiversity conservation; Trained 30 beneficiaries; Conducted two (2) capacity-building activities; Place and Partnerships Forged one (1) MOA with partner collaborator; Assisted one (1) People's Organization; Forged one (1) MOA with partner collaborator; Assisted one (1) People's Organization Publication Developed one (1) IEC material in IMTA; Developed additional one (1) IEC material on IMTA; Developed two (2) IEC materials Patent Filed one (1) copyright for IEC material on IMTA; Filed one (1) copyright for IEC material on IMTA; Filed two (2) copyrights	Zamboanga State College of Marine Sciences and Technology (ZSCMST)	Residents/Tourists and visitors to the Island Government agencies/Academe/Private industries/Researchers and students	01-Dec-24	30-Nov-26	ONGOING	2,492,941	1,290,513
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands Enhancing Livelihood through S&T in the Great Sta. Cruz Island, Zamboanga City, Philippines	Project 5. SanTua Cruz Artificial Reefs (STAR) Project	Rapid, inclusive and sustained economic growth	General: To establish an artificial habitat to enhance coral settlement and fish stock and provide supplementary livelihood through underwater ecotourism. Specific: 1. To install and monitor coral recruitment and fish aggregation in the restoration site; 2. To conduct capacity building and technology training on coral settlement; and 3. To assess the social and economic impacts of the artificial habitat.	Products 1 Artificial Reef Restoration site established 1 Artificial Reef Restoration site maintained and monitored People and Services 1 People's Organizations assisted Places and Partnerships 1 MOA/MOU forged with individual SIC-partner/beneficiary and with project collaborators, partner-agencies; other public/private sectors Publication 3 IEC materials developed Policies 1 ISLA-related policy crafted and approved Patent 3 copyrights filed for the IEC materials	Zamboanga State College of Marine Sciences and Technology (ZSCMST)	Members of the People's Organization of the Big Sta. Cruz Island, Zamboanga City, both men and women are interested in engaging in the project.	01-Dec-24	30-Nov-26	ONGOING	3,366,014	2,348,214
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands: Livelihood Empowerment through Sustainable Climate-Resilient Agri-Aqua and Natural Resources Enhancement (LEIS CARE)	Project 1. KATHA: Social Transformations and Conditioning in Agri-Fishery Technology and Environmental Resources Engagement	Rapid, inclusive and sustained economic growth	General: To foster a sustainable community through environmental responsibility, entrepreneurial development, leadership in environmental. Specific: 1. To assess the current social dynamics and power structures within the barangays of Marupangdan and Astorga community that influence agri-fishery technology adoption and environmental resource management 2. To identify barriers and facilitators to the adoption of climate-resilient agri-fishery technologies among smallholder farmers and fishers in barangay Marupangdan and Astorga. 3. To facilitate participatory workshops, focus group discussions, and knowledge exchange sessions with local stakeholders to co-design contextually appropriate interventions 4. To pilot test innovative approaches, tools, and strategies for promoting social transformations and conditioning in agri-fishery technology adoption and environmental resources	Publication: Patent: 7; 10Product: 14; 16; 26People: 33Place: 38; 42; 46Policy: 48	Department of Science and Technology - Provincial Science and Technology Office Samar (DOST- PSTO Samar)	The KATHA initiative targets agri-fisheries-dependent communities, particularly focusing on small-scale producers such as agri-fish farmers, traders, and processors in Marupangdan and Astorga. These communities form the backbone of the local agricultural and fisheries sectors, yet often face barriers like limited access to markets and technology. By empowering them through tailored interventions, KATHA aims to enhance their resilience to environmental and socioeconomic challenges, unlocking economic opportunities and fostering broader social and environmental benefit.	01-Jan-25	31-Dec-26	ONGOING	3,443,684	1,996,576
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands: Livelihood Empowerment through Sustainable Climate-Resilient Agri-Aqua and Natural Resources Enhancement (LEIS CARE)	Project 2. AGHAM: Advanced and Geared Horing Agri-Fishery Management	Rapid, inclusive and sustained economic growth	General: To intensify the utilization of advanced and responsible agri-fishery technology management practices and interventions. Specific: 1. To facilitate the adoption of advanced agri-fishery technologies through comprehensive technology training and transfer programs to improve farm and fisheries management and productivity. 2. To implement Integrated Fish-Poultry-Vegetable Farming System practices to diversify aquaculture production and enhance the sustainability of farming and fishery activities. 3. To establish an Integrated Diversified Organic Farming System (IDDFS) to enhance agricultural productivity and promote organic farming practices. 4. To create mentorship and knowledge-sharing activities within the center, where community experts and Samar State University professionals actively pass on sustainable farming, fishing, and business practices to the next generation through hands-on training, workshops, and community projects.	Publications Submitted two (2) articles for publications are duly published in reputable peer-reviewed journals. Patents/IP -Two (2) technology for agriculture is submitted for Utility Model registration Two registered Utility Models (Products) -Submitted two (2) technology process, one for fisheries and one for agriculture Four (4) registered Utility Models Products -Develop three (3) fisheries value-added products coincide with other projects of the program -Develop three (3) agricultural value-added products coincide with other projects of the program Tested the developed six (6) products in year 1 Produced 6 products, two of which are promoted and marketed. People Services - Conduct two (2) training programs, each with three sessions, focused on fisheries activities to increase the number of beneficiaries to at least 30 fisherfolks, including participants from Marupangdan, Astorga, and other nearby island barangays. Conducted seven (8) training with three training sessions for each. Policy Crafted one (1) operational guide of the Resilient Islet Livelihood Education and Training Center (1) operational guide	Samar State University (SSU)	The project aims to support the marginalized community of fishers and farmers in Barangay Marupangdan and Astorga, Dararam, Samar, who are living below the poverty threshold of P 13,797.00 per month, as reported by the Philippine Statistics Authority in 2023 (Recuerdo, 2024). Among those surveyed in the preliminary assessment, 15 were identified as farmers and 48 as fishers. Their average monthly income was found to be P 3,633, with a standard deviation of P 243. This data highlights the specific needs and financial circumstances of the target beneficiaries, guiding the project's interventions towards effective poverty alleviation strategies.	01-Jan-25	31-Dec-26	ONGOING	5,202,464	3,082,936
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands: Livelihood Empowerment through Sustainable Climate-Resilient Agri-Aqua and Natural Resources Enhancement (LEIS CARE)	Project 3. BUHAY (Building Understanding for Habitat and Ecosystem Advancement and Yield)	Rapid, inclusive and sustained economic growth	General: To promote sustainable management and conservation alongside waste management solutions of the Marupangdan and Astorga coastal area ecosystem. Specific: 1. Conduct a comprehensive assessment of the Marupangdan and Astorga ecosystems' key species, resources, and health to inform management. 2. Establish a long-term coastal ecosystem monitoring program that focuses on water quality, habitat health, and fishery resources. 3. Engage and collaborate with local communities and stakeholders to promote sustainable practices and responsible resource utilization. 4. Develop and implement habitat management strategies to enhance coastal resilience. 5. Integrate climate resilience into conservation efforts, raise awareness, and manage waste effectively for the ecosystem's long-term sustainability. 6. Determine the Coastal Index of Vulnerability of the Marupangdan and Astorga coastal areas. 7. Educate and inform the community about the Marupangdan and Astorga land use plan, highlighting its role in sustainability, conservation, waste management, and the well-being of both the local community and the ecosystem. 8. Implement initiatives to diversify local income sources through the establishment of community-based enterprises focused on sustainable product development.	Products Drafted one (1) Report on the Ecosystem Profile of the Coastal Key Habitats of Marupangdan and Astorga; Finalized one (1) report on the Ecosystem Profile of the Coastal key habitats of Marupangdan and Astorga; People and Services Conducted three (3) capacity-building activities on Participatory Coastal Resource Assessment; Trained 75 beneficiaries; Conducted one (1) seminar on FARMC and FLET. Place and Partnerships Forged three (3) MOAs with partner agencies Publication Submitted two (2) articles in a reputable peer-reviewed journal publication Published two (2) articles; Developed two (2) IEC materials for the Marupangdan and Astorga Ecosystem Profile Policies Finalized and adopted two (2) local resolutions by the LGU on the sustainable management and conservation of the Marupangdan and Astorga ecosystem and natural resources Patent Filed two (2) copyrights for IEC materials for the Marupangdan and Astorga Ecosystem Profile	Samar State University (SSU)	The initiative targets the marginalized fisherfolk and farmers residing in Barangay Marupangdan and Astorga, Dararam, Samar, who are currently living below the poverty threshold. Specifically, the project aims to benefit 25 fishers, 25 processors, and 25 farmers from the community. By addressing their socio-economic challenges through a multifaceted approach, the project endeavors to uplift their livelihoods while concurrently fostering environmental conservation and sustainability.	01-Jan-25	31-Dec-26	ONGOING	4,239,382	2,373,418

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Inclusive Science for Livelihood in Agri-Aqua (ISLA) in Small Islands: Livelihood Empowerment through Sustainable Climate-Resilient Agri-Aqua and Natural Resources Enhancement (LESCARE)	Project 4. YAMAN: Agri-fishery Practices through Product Resource Management, Value Addition and Commercialization Enhancement Project	Rapid, inclusive and sustained economic growth	General: To enhance livelihoods and foster sustainability in Barangay Marupangan and Barangay Astorga, with a focus on empowering women and promoting gender equality through inclusive agricultural and fishery practices. Specific: 1. To promote the adoption of the recommended agricultural intercropping method technology production and other aqua products; 2. To produce raw products out of testing results preferable for agri-aqua production and establishment of Post-Harvest and Production Facility Center (PHFC) in Barangay Marupangan and Barangay Astorga; 3. To produce/create Value-added products (VAP) out of the raw materials through the utilization of Production and Processing Technology; 4. To market using E-Commerce Subscription System and promote value-added products in consonance with environment-friendly/food-grade packaging techniques with the help of technology 5. To enhance stakeholders' community engagement (women and men farmers, producers, merchandisers, etc.) by strengthening collaboration and profit enhancement through Agri-fishery processing and production.	Products Established one (1) demo farm; Established one (1) post-harvest facility and production center; Planted 150 sq.m. with crops (squash, corn, beans); Harvested 150 kilos of crops (squash, corn, beans); Cultured 300 pieces green mussel breeders and 300 seaweed cuttings (long-line method); Harvested 250 kg of green mussels and 100 kg seaweeds; People and Services Conducted two (2) capacity-building activities on knowledge and technology management and food product processing; Trained 75 beneficiaries; Conducted one (1) capacity-building activity on financial management; Trained 75 beneficiaries; Conducted three (3) capacity-building activities	Samar State University (SSU)	The target beneficiaries of the project are 25 processors, 25 fisherfolk, and 25 farmers, encompassing both male and female groups, residing in Barangay Marupangan and Barangay Astorga, Darain, Samar, who currently live below the poverty threshold. As the project advances, it is anticipated that these numbers will grow, with the aim of extending training and assistance to neighboring barangays such as Parasan, Samar. Through inclusive participation and targeted support, the project seeks to empower these individuals to improve their livelihoods, enhance their skills in agri-aqua production and processing, and ultimately uplift their socio-economic status.	01-Jan-25	31-Dec-26	ONGOING	3,371,932	1,736,118
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in Cagayan Valley through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	Component 1. Regional IPTBM General: To establish the Regional IPTBM in Cagayan Valley to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating CMIs; 2. Enhance and harmonize the IP policies of the participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; intensify linkages with various agencies to enhance activities on regional IPTBM; and 4. Manage the IPTBM network in the region. Component 2. Institutional IPTBM (SU IPTBM Phase 3) General: To enhance and sustain the on-going IP-TBM of Isabela State University (ISU) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley. Specific: 1. To effectively manage the technologies and Intellectual Properties of the University; 2. To provide capacity building on technology transfer to researchers and innovators; and 3. To develop and enhance the technology transfer programs of ISU.	IP:Regional IPTBMInstitutional IPTBM (SU IPTBM Phase 3)Publication3 Regional Training Reports5 ISU IEC Patents40 IP Applications (UM and Patent)22 Copyright Applications10 IP Applications (UM & Patent)only5 SU Copyright IEC(Products1 Regional list of Priority R&D Areas)commonly prepared and updated1 Regional technology and IP inventory prepared and updated1 Regional Sustainability Plan1 Consolidated regional report (IPs filed, tech commercialized, and others)Consolidated 40 PAS ReportsConsolidated 6 inventory of IP assets and technologies (potential IPs & IP Filed)Consolidated 6 inventory of knowledge resourcesConsolidated reports of 6 product enhanced or co-invented or market testedConsolidated reports of 6 technology commercializedidentified and consolidated 12 technologies pitchedConsolidated pre-commercialization reports of 6 technologies10 PAS Reports1 IP & Inventory Workshop2 CMI staff attended regional IP Policy/Tech Trans Protocol review2 CMI staff attended regional communication plan developed & implemented1 Tech Communication plan developed & implemented1 technology with pre-commercialization reports2 technologies pitched1 Technology CommercializedPeople and ServicesCoordinated & hosted 1 national IPAC (last module & graduation)Coordinated participation of 6 CMIs on national Training12 CMI Staff trained/attended the national IPAC12 CMI Staff trained/attended the national ABMS12 CMI Staff trained/attended the national TCM212 CMI Staff trained/attended the national IP Audit & Inventory Workshop conducted18 CMI Staff on IP Audit & Inventory Workshop1 Regional Policy/Tech Transfer Protocol review conducted18 CMI Staff on Policy/Tech Transfer Protocol1 Regional Echo IPAC Conducted18 CMI Staff on echo IPACParticipate in the content build-up & updating of RAISE RTMS1 Regional tech/business pitch day conducted1 Regional promotional activity conducted (e.g. exhibits, bootcamp, IP caravan, etc.)Participation to the National Pitch Fest12 staff trained in national IPAC12 CMI Staff trained in national ABMS2	Isabela State University (ISU)	Component 1. Regional IPTBMCAARRD CMI Researchers/Inventors (SU, NVSU, CSU, BSC, QSU, BFAR-RD)Technology adapters in Region 02Entrepreneurs in Region 02Component 2. Institutional IPTBM (SU IPTBM Phase 3)SU Researchers/InventorsTechnology AdaptersEntrepreneurs	01-Oct-23	30-Sep-25	COMPLETED	4,566,672	730,418
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 1A. Enhancement of the Intellectual Property and Technology Business Management Office (IP-TBM) in Nueva Vizcaya State University (NVSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To enhance and sustain the on-going IPTBM of Nueva Vizcaya State University through Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley. Specific: 1. To effectively manage the technologies and Intellectual Properties of the University; 2. To provide capacity building on technology transfer to researchers and innovators; and 3. To develop and enhance the technology transfer programs of NVSU.	Publication5 IEC Patents10 IP Applications (UM & Patent)only5 Copyright IEC(Products10 PAS Reports1 IPs & technologies inventory updated1 inventory of knowledge resources prepared and updated1 communication plan developed & implemented1 Tech Communication plan developed & implemented1 technology with pre-commercialization reports2 technologies pitched1 Technology Commercialized People and Services2 CMI staff trained in national ABMS2 CMI staff trained in national TCM2 CMI staff trained in national IPAC2 CMI staff attended regional IP Audit & Inventory Workshop2 CMI staff attended regional IP Policy/Tech Trans Protocol review2 CMI staff attended regional Communication Plan Workshop1 Institutional echo seminar conducted18 CMI staff on echo seminarsParticipate to content build-up of RTMSPlaces and Partnership1 Commitment Letter for the national trainings1 partnership agreement w/Business/Trade Institutions1 Commercialization AgreementPolicy/ful implementation of IP Policy and Technology Transfer Protocol (with internal memos, AOs)	Nueva Vizcaya State University (NVSU)	Technology and Business Incubator Office of NVSUIncubatees- Male and FemaleTechnology Business Incubator personnel and managerNVSU male and female Researchers/ InventorsTechnology adapters- Male and FemaleEntrepreneurs- Male and Female	01-Oct-23	30-Sep-25	COMPLETED	2,431,200	465,543
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 1B. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Batanes State College (BSC) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish IP-TBM of Batanes State College (BSC) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program. Specific: 1. To effectively manage the technologies and Intellectual Properties of the College; 2. To provide capacity building on technology transfer to researchers and innovators; and 3. To develop and enhance the technology transfer programs of BSC.	Publication3 IEC materialPatents5 IP Applications (UM & Patent)only3 Copyright IEC(Products5 PAS Reports1 IPs & technologies inventory updated1 inventory of knowledge resources prepared and updated1 BSC communication plan developed & implemented1 Tech Communication plan developed & implemented1 technology with pre-commercialization reports2 technologies pitched1 Technology Commercialized People and Services2 BSC staff trained in national IPAC2 BSC staff trained in National ABMS2 BSC staff trained in National TCM2 BSC staff trained in National IPAC2 BSC staff attended regional IP Audit & Inventory Workshop2 BSC staff attended regional IP Policy/Tech Trans Protocol review2 BSC staff attended regional CommPlan Workshop1 Institutional echo seminar conducted18 CMI staff on echo seminarsParticipate to content build-up of RTMSPlaces and Partnership1 Commitment Letter for the national trainings1 partnership agreement w/Business/Trade Institutions1 Commercialization AgreementPolicy/Crafting/enhancement of IP policy/Crafting/enhancement of technology transfer protocol	Batanes State College (BSC)	BSC Researchers/ InventorsTechnology adaptersEntrepreneurs	01-Oct-23	30-Sep-25	COMPLETED	3,068,100	499,985
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 1C. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Quirino State University (QSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish IP-TBM of Quirino State University (QSU) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program. Specific: 1. To effectively manage the technologies and Intellectual Properties of the University; 2. To provide capacity building on technology transfer to researchers and innovators; and 3. To develop and enhance the technology transfer programs of QSU.	Publication3 IEC materialPatents5 IP Applications 3 Copyright IEC(Products5 PAS Reports1 IPs & technologies inventory updated1 inventory of knowledge resources prepared and updated1 CMI communication plan developed & implemented1 Tech Communication plan developed & implemented1 technology with pre-commercialization reports2 technologies pitched1 Technology Commercialized People and Services2 CSU staff trained in national IPAC2 CSU staff trained in national ABMS2 CSU staff trained in national TCM2 CSU staff trained in national IPAC2 CSU staff attended regional IP Audit & Inventory Workshop2 CSU staff attended regional IP Policy/Tech Trans Protocol review2 CSU staff attended regional CommPlan Workshop1 Institutional echo seminar conducted18 CMI staff on echo seminarsParticipate to content build-up of RTMSPlaces and Partnership1 Commitment Letter for the national trainings1 partnership agreement w/Business/Trade Institutions1 Commercialization AgreementPolicy/Crafting/enhancement of IP policy/Crafting/enhancement of technology transfer protocol	Cagayan State University (CagSU)	CSU Researchers/ Inventors Technology adapters Entrepreneurs	01-Oct-23	30-Sep-25	COMPLETED	2,500,000	444,868
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 1D. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Quirino State University (QSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish IP-TBM of Quirino State University (QSU) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program. Specific: 1. To effectively manage the technologies and Intellectual Properties of the University; 2. To provide capacity building on technology transfer to researchers and innovators; and 3. To develop and enhance the technology transfer programs of QSU.	Publication3 IEC materialPatents5 IP Applications (UM & Patent) only3 Copyright IEC(Products5 PAS Reports1 IPs & technologies inventory updated1 inventory of knowledge resources prepared and updated1 Tech Communication plan developed & implemented1 Tech Communication plan developed & implemented1 technology with pre-commercialization reports2 technologies pitched1 Technology CommercializedPeople and Services2 CSU staff trained in national IPAC2 CSU staff trained in national ABMS2 CSU staff trained in national TCM2 CSU staff trained in national IPAC2 CSU staff attended regional IP Audit & Inventory Workshop2 CSU staff attended regional IP Policy/Tech Trans Protocol review2 CSU staff attended regional CommPlan Workshop1 Institutional echo seminar conducted18 CMI staff on echo seminarsParticipate to content build-up of RTMSPlaces and Partnership1 Commitment Letter for the national trainings1 partnership agreement w/Business/Trade Institutions1 Commercialization AgreementPolicy/Crafting/enhancement of IP policy/Crafting/enhancement of technology transfer protocol	Quirino State University (QSU)	QSU Researchers/ InventorsTechnology adaptersEntrepreneurs	01-Oct-23	30-Sep-25	COMPLETED	2,566,600	263,292

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 1E. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Bureau of Fisheries and Aquatic Resources Region 2 (DA-BFAR R2) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish IP-TBM of DA-Bureau of Fisheries and Aquatic Resources Region 2 (DA-BFAR2) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program. Specific: 1. To effectively manage the technologies and Intellectual Properties of the Agency; 2. To provide capacity building on technology transfer to researchers and innovators; and 3. To develop and enhance the technology transfer programs of BFAR-02.	Publication3 IEC materialsPatents5 IP Applications (UM & Patent only)3 Copyright (IEC)Products5 PAS Reports1 IP & technologies inventory updated; Inventory of knowledge resources prepared and updated1 Communication plan developed & implemented; Tech Communication plan developed & implemented; Technology with pre-commercialization reports2 Technologies pitched1 Technology Commercialized People and Services2 BFAR-02 staff trained in national IPMC2 BFAR-02 staff trained in national ABMS2 BFAR-02 staff trained in national TCM2 BFAR-02 staff trained in national TPMS2 BFAR-02 staff attended regional IP Audit & Inventory Workshop2 BFAR-02 staff attended regional IP Policy/Tech Trans Protocol review2 BFAR-02 staff attended regional Communication Plan WorkshopTrained 30 staff on echo seminarsParticipate to content build-up of RTMSPlaces and Partnership1 Commitment Letter for the national trainings1 partnership agreement w/Business/Trade Institutions; Commercialization AgreementPolicyCrafting/enhancement of IP policyCrafting/enhancement of technology transfer protocol	Bureau of Fisheries and Aquatic Resources Region 2 (DA-BFAR R2)	BFAR-02 Researchers/ InventorsTechnology adaptersEntrepreneurs	01-Oct-23	30-Sep-25	COMPLETED	2,500,000	447,497
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 2. Establishment of Regional Agri-business Hub (ABH) in Cagayan Valley through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish a regional agribusines hub in selected CMIs. Specific: 1. To build capacities of selected CMI staff on agribusines development through trainings and mentorship; 2. To assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. To assist the CMIs in the conduct of various pre-commercialization activities in the region; 4. To acquire partnerships with business companies for technology commercialization; and 5. To institutionalize the operation of the regional agribusines hub.	Publication3 Regional Training ReportsProduct10 Pre-commercialization services2 technologies with business plan2 technologies with feasibility study2 technologies with market study2 technologies with valuation2 technologies with enterprise plan (EP)1 Consolidated regional report on technology pre-commercialization People and ServicesCoordinated participation of 6 CMIs to national ABMS2 Coordinated participation of 12 staff to national ABMS 2 ISU Staff trained/attended the national ABMS1 regional echo ABMS conductedTrained 14 CMI Staff on ABMS (echo)1 Training on Agripreneurship for MSMEs or potential agripreneurs conductedTrained 20 of MSMEs on agripreneurshipParticipate in the content build-up & updating of RAISE RTMSParticipation to the National Pitch FestivalAssisted 2 CMIs in pre-comm services (e.g. FS, BP, MS, MT, Val, EP)Places and Partnership2 partnership agreements with Business/Trade Institutions	Isabela State University (ISU)	Technology and Business Incubator Office of ISUIncubatees- Male and FemaleTechnology Business Incubator personnel and managerISU male and female Researchers/ InventorsTechnology adapters- Male and FemaleEntrepreneurs- Male and Female	01-Oct-23	30-Sep-25	COMPLETED	3,149,964	607,491
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 3. Regional Agri-Aqua Technology Business Incubator (ATBI) in Cagayan Valley through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	Component A. Regional ATBI General: To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability-building on technology transfer to R&D partners in the region; 2. ATBI sustainability plan developed and implemented; ATBI communication plan developed and implementedPatentComponent A- Regional ATBI3 IP ApplicationsComponent B- Institutional ATBI (ISU-ATBI Phase 3)1 ATBI business plan revised as needed1 ATBI operations manual revised as needed2 basic/advanced incubation curricula revised as needed4 acceleration curricula developed or improved as needed2 IEC or promotional material for the ATBI produced1 promotional video for the ATBI developed18 IEC or promotional materials for the incubatees developed2 promotional videos for the incubatees developed; ATBI communication plan developed and implemented; ATBI communication plan developed and implementedPatentComponent A- Regional ATBI3 IP ApplicationsComponent B- Institutional ATBI (ISU-ATBI Phase 3)10 trademarks filed10 copyrights filedProductsComponent A- Regional ATBI2 Technologies co-incubated; Technology Commercialized with FOR / facilitated the commercialization of 1 CMI technology1 Consolidated regional reportComponent B- Institutional ATBI (ISU-ATBI Phase 3)10 technologies incubated/adopted by new incubatees10 technologies incubated/adopted by continuing incubatees3 technologies incubated/adopted by accelerates2 technologies co-incubated3 technologies commercialized with Issued Fairness Opinion ReportPeople and ServicesComponent A- Regional ATBI2 new incubatees enrolled in any of the existing ATBI2 CMI Staff trained/attended the national ATBI MCCoordinated participation on national TCM52 CMI Staff trained/attended the national TCM5Coordinated participation of 6 CMIs on regional ATBI MC echo trainingCoordinated participation of 6 CMIs on regional TCM5 echo trainingTrained 30 staff on TCM5 thru echo seminarTrained 30 staff on ATBI thru echo seminar1 regional tech/business pitch day conducted1 regional promotional activity conductedAssisted 2 CMIs in ATBI servicesParticipate in the content build-up & updating of RAISE RTMSParticipation to the National Pitch FestivalComponent B- Institutional ATBI (ISU-ATBI Phase 3)3 IP Applications1 Consolidated regional reportProduct 1 Regional Inventory KM Inventory1 Reg™ ComPlan prepared & updated1 consolidated CommPlan prepared & updated1 consolidated Tech CommPlan prepared & updated30 Agri-Aqua technology-based IEC materials collected for E-Lib updating1 Consolidated regional reportPeople and Services2 ISU Staff Trained in Knowledge ManagementCoordinated participation of 6 agencies to national TPMSCoordinated attendance of 12 project staff to national TPMS1 echo seminar on TPMSTrained 30 CMI staff in echo seminars; Reg1 Inventory of Knowledge Resources Workshop conductedTrained 30 CMI Staff on Reg1 Inventory of Knowledge Resources WorkshopParticipation to RTMS content build up trainingAssisted 6 CMIs in KM Mgt servicesFacilitate consolidation of knowledge resources for the E-LibFacilitate and coordinate content build-up of RTMS of the region1 regional tech business pitch day 1 regional technology fair/ promotion conducted 1 national pitch day participated Places & Partnership1 memorandum of agreement signed with partners for technology promotionPolicy Institutionalization of KM HubSocial Impact Provided the AANR sector with easy access to information and technologies.Economic Impact The utilization of R&D outputs will improve the productivity of agri-aqua industries.	Isabela State University (ISU)	The target beneficiaries in the project are: micro, small and medium entrepreneurs, existing incubatees, farmers association and cooperativesresearchers and technology generatorsindustries (agriculture-based and food industries.	01-Oct-23	30-Sep-25	COMPLETED	6,827,552	1,376,146	
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cagayan Valley	Project 4. Establishment of Regional Knowledge Management (KM) Hub in Cagayan Valley through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To enhance the Knowledge Management Services of CVAARRD through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program. Specific: 1. To improve inventory of Knowledge Resources in the region by developing one Information System; 2. To populate and publish the e-Library System and Real Time Monitoring System; 3. To capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. To promote matured technologies to potential users and partners.	Publication30 IEC30 Regional Training Reports3 Promotional MaterialsPatents1/IP 1 Application/1 copyrights (IP inventory, technology portfolio)Products 1 Regional Inventory KM Inventory1 Reg™ ComPlan prepared & updated1 consolidated CommPlan prepared & updated1 consolidated Tech CommPlan prepared & updated30 Agri-Aqua technology-based IEC materials collected for E-Lib updating1 Consolidated regional reportPeople and Services2 ISU Staff Trained in Knowledge ManagementCoordinated participation of 6 agencies to national TPMSCoordinated attendance of 12 project staff to national TPMS1 echo seminar on TPMSTrained 30 CMI staff in echo seminars; Reg1 Inventory of Knowledge Resources Workshop conductedTrained 30 CMI Staff on Reg1 Inventory of Knowledge Resources WorkshopParticipation to RTMS content build up trainingAssisted 6 CMIs in KM Mgt servicesFacilitate consolidation of knowledge resources for the E-LibFacilitate and coordinate content build-up of RTMS of the region1 regional tech business pitch day 1 regional technology fair/ promotion conducted 1 national pitch day participated Places & Partnership1 memorandum of agreement signed with partners for technology promotionPolicy Institutionalization of KM HubSocial Impact Provided the AANR sector with easy access to information and technologies.Economic Impact The utilization of R&D outputs will improve the productivity of agri-aqua industries.	Isabela State University (ISU)	Technology and Business Incubator Offices of Region 2 Incubatees- Male and FemaleTechnology Business Incubator personnel and managerISU male and female Researchers/ InventorsTechnology adapters- Male and FemaleEntrepreneurs- Male and Female	01-Oct-23	30-Sep-25	COMPLETED	2,652,800	550,700
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Caraga	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in Caraga through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	PROJECT 1 Component A: Regional IPTBM General: To establish the Regional IPTBM in Caraga to intensify the technology commercialization activities of participating CMIs. Specific: 1. Manage regional AANR technologies and intellectual properties by operationalizing IP-TBMs of the participating CMIs; 2. Support regional partners in developing their respective technology transfer programs; 3. Provide capacity building on technology transfer to R&D partners, through mentorship and technology transfer officers of the participating agencies; 4. Harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 5. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; 6. Intensify linkages with various agencies by providing a venue for convergence of regional AANR stakeholders from the academe, public, private sectors, NGOs and international partners; and 7. Facilitate the transfer and commercialization of technologies generated by the CMIs by managing the IP-TBM network in the region. Component B: Institutional IPTBM General: To sustain and enhance the operation of the Intellectual Property and Technology Business Management Office (IP-TBM) in Caraga State University (CSU).	Project 1 - Regional IP-TBM(IY2PUBLICATION)3 Regional Training Reports: 1 consolidated training report of all the CMI participants who attended to IPMC1 training report on reg™ IP Audit & Inventory Workshop1 training report on reg™ echo IPMC (including PAS)11 PATENT2 IP Applications (UM & Patent only)13 Copyright (IEC)3 PRODUCT 1 Consolidated list of CMI Priority R&D Areas/echo readiness prepared and updated11 Consolidated CMI Technology Inventory prepared and updated (IPs application status, tech commercialized, etc)11 Regional Sustainability Plan11 Consolidated regional report (IPs filed, tech commercialized, etc)XXPEOPLE & SERVICESCoordinated participation of 3 CMIs on national IPMC32 Staff trained/attended in national IPMC21 Reg™ echo IPMC conductedTrained 30 personnel on Reg™ echo IPMC201 Reg™ IP Audit & Inventory Workshop1Trained 2 Staff on IP Audit & Inventory Workshop21 Reg™ Policy/Tech Transfer Protocol review conductedTrained 2 Staff on IP Policy/TTP Review22 Staff trained in national TCM5qian style:font-size: 11pt; font-family: Arial; color: rgb(0, 0, 0); background-color: transparent; font-variant: normal; font-variant-east-asian: normal; font-variant-alternates: normal; vert	Caraga State University (CarSU)	researchers/scientists providing pre-commercialization services; regional partners like universities/research institutions looking to build capacity in agribusiness and agripreneurship; rural communities/farmers/fisherfolk benefiting from improved access to AANR resources, private sector organizations, business/trade institutions interested in utilizing AANR technologies to realize the agribusiness potentials of R&D outputs; policy makers creating a supportive environment for innovation and tech transfer, international partners collaborating with the project.	01-Oct-23	31-Mar-26	ONGOING	3,983,650	785,350

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in Central Luzon through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>Component A: Regional IP-TBM</p> <p>General: To establish the Regional IP-TBM in CLJAARRDEC to intensify the technology commercialization activities of participating CMIs.</p> <p>Specific: 1. Enhance and operationalize the IP-TBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IP-TBM; and 5. Manage the IP-TBM network in the region.</p> <p>Component B: Institutional IP-TBM</p> <p>General: To sustain and further strengthen the Intellectual Property and Technology Business Management (IP-TBM) operations of Pampanga State Agricultural University (PSAU) in order to enhance its technology commercialization activities</p> <p>Specific: 1. Further capacitate the IP-TBM personnel of PSAU on IP, agribusiness, technology commercialization, and promotion; 2. Improve the IP management of the University through effective management of its existing agri-aqua technologies and other IP assets; 3. Advance the technology promotion and network-building capabilities of the University to General.</p>	<p>Publication: Component A: Regional IP-TBM 1 consolidated training report of all the CMI participants who attended to IPMC 1 training report on reg-I echo IPMC (including PAS) 1 training report on reg-II IP Audit & Inventory Workshop Component B: Institutional IP-TBM 5 IECs</p> <p>Patent: Component B: Institutional IP-TBM 10 IP Applications (UM & Patent only) 5 Copyright (ECs)</p> <p>Product: Component A: Regional IP-TBM 1 Reg-III list of Priority R&D Areas/commodity prepared and updated 1 Reg-III technology and IP Inventory prepared and updated 1 Consolidated regional report (IPs filed, tech commercialized, etc.) 1 Regional Sustainability Plan</p> <p>Component B: Institutional IP-TBM 10 PAS Reports 1 IP & technologies inventory updated 1 technology pitched 1 IP & technologies inventory updated 1 inventory of knowledge resources prepared and updated 1 Technology Commercialized.</p>	Pampanga State Agricultural University (PSAU)	The project is intended for the stakeholders, technology generators and takers, and other makers of the CMIs involved. Specifically, the project directly and indirectly benefits the following: IP-TBM Personnel of CMIs involved Technology generators and other makers of participating CMIs R&D partners and the private sector	01-Oct-23	31-Mar-26	ONGOING	11,858,680	1,816,119
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1A. Enhancement of the Intellectual Property and Technology Business Management (IPTBM) in Central Luzon State University (CLSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To strengthen CLSU IP-TBM and intensify the intellectual property management and technology commercialization activities of CLSU.</p> <p>Specific: 1. Further capacitate the IP-TBM personnel of CLSU on IP, technology commercialization, and promotion; 2. Improve the IP management of the University through effective management of its existing agri-aqua technologies and other IP assets; 3. Advance the technology promotion and network-building capabilities of the University to intensify its technology commercialization efforts; and 4. Enhance and harmonize the existing IP policy and technology transfer protocol of CLSU with those of other CMIs in the region.</p>	<p>Publication: 1 IEC</p> <p>Patent: 10 IP applications 5 copyrights of IEC</p> <p>Product: 5 prior art search reports 1 updated IP inventory 1 inventory of matured technologies 1 inventory of knowledge resources 1 communication plan 1 technology pitched</p> <p>People: 2 IP-TBM staff attended Prior Art Search & IP Audit Workshop 2 IP-TBM staff trained in IP MasterClass 2 IP-TBM staff trained in Agri/business 2 IP-TBM staff trained in TCMS 2 IP-TBM staff trained in Tech Promotion Mentorship 2 IP-TBM staff attend Communication Plan Workshop</p> <p>Place: 1 commitment letter 1 partnership agreement with business/ trade institution 1 commercialization agreement</p>	Central Luzon State University (CLSU)	Target Beneficiaries: The project is intended for the stakeholders, technology generators and takers, and other makers involved. Specifically, the project directly and indirectly benefits the following: CLSU-IP-TBM personnel CLSU researchers, technology generators, and other makers Technology generators and other makers of CLSU IP-TBM R&D partners and the private sector	01-Oct-23	31-Mar-26	ONGOING	2,601,600	400,400
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1B. Enhancement of the Intellectual Property and Technology Business Management (IPTBM) in Philippine Rice Research Institute (PhilRice) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To establish the Regional IP-TBM in selected Consortium to intensify the technology commercialization activities of participating CMIs which include PhilRice.</p> <p>Specific: 1. Enhance and operationalize the IP-TBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IP-TBM; and 5. Manage the IP-TBM network in the region.</p>	<p>Publication: 5 IECs for IP-TBM awareness and PhilRice technologies/Patent - 10 IP Applications - Copyright of 5 IECs Product: - 10 Prior art search reports - 1 IP inventory - 1 inventory of matured technologies - 1 inventory of knowledge resources - 1 communication plan - 1 technology with pre-comm reports - 2 technologies pitched - 1 Technology Commercialized/People: - 2 PhilRice staff attended Prior Art Search & IP Audit Workshop - 2 PhilRice staff trained in IP MasterClass - 2 PhilRice staff trained in Agri/business MasterClass - 2 PhilRice staff trained in TCMS - 2 PhilRice staff trained in Tech Promotion Mentorship - 2 PhilRice staff attend Communication Plan Workshop - 1 Participate to content build-up of RTMS/Place: - 1 Commitment Letter - 1 partnership agreement w/Business/Trade Institutions - 1 Commercialization Agreements/Policy - Full implementation of IP policy and technology transfer protocol (with internal memos, AOs)</p>	Philippine Rice Research Institute (DA-PhilRice)	The project is intended for the stakeholders, technology generators and takers, and even PhilRice inventors. Specifically, the project directly and indirectly benefits the following: PhilRice IP-TBM personnel PhilRice researchers, technology generators, and other makers R&D partners and the private sector	01-Oct-23	31-Mar-26	ONGOING	2,500,000	492,492
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1C. Enhancement of the Intellectual Property and Technology Business Management (IPTBM) in Bataan Peninsula State University (BPSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To strengthen the capacities of Intellectual Property and Technology Business Management (IP-TBM) Office to enhance its commercialization activities</p> <p>Specific: 1. Improve the existing operations of the BPSU IP-TBM through the RAISE Program 2. Discover the emerging technological trends in mud crabs and recommend priority R & D programs through patent mining reports; 3. Enhance and harmonize the IP Policy and Technology Transfer Protocol through synchronized IP Management, and technology transfer activities of BPSU through IP-TBM Office; 4. Strengthen linkages with industry and community stakeholders for efficient and effective IP management and technology transfer; 5. Support the development of the IP-TBM real-time monitoring system.</p>	<p>Publication: 5 IECs</p> <p>Patent: 10 IP applications (5 patents /5 UMs) 5 Copyrights (IECs)</p> <p>Product: 10 PAS Reports 1 IP inventory updated 1 Patent Mining Report (Cashew) 2 technologies pitched 1 Tech Com plan developed and implemented 1 Technology commercialized 1 Sustainability plan,</p> <p>People: 2 CMI staff trained in national IPMC At least 2 IP-TBM Staff (plantilla) extensively trained in Patent Mining 2 CMI staff trained in national ABMC 1 technology taker adopter 2 CMI Staff trained in national TCMS 2 CMI Staff trained in national TPMS 2 IP-TBM Staff trained on IP Audit/inventory Participation in the Updating of RAISE RTMS</p> <p>Places and Partnerships</p>	Bataan Peninsula State University (BPSU)	Target Beneficiaries: BPSU IP-TBM Office Technology Transfer officers and staff BPSU Faculty and student researchers/inventors Community stakeholders External agencies (other universities, MSMEL, LGUs)	01-Oct-23	31-Mar-26	ONGOING	2,495,600	516,801

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1D. Enhancement of the Intellectual Property Technology Business Management (IPTBM) in Philippine Carabao Center (PCC) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To strengthen the capacities of Intellectual Property and Technology Business Management (IPTBM) operations of Philippine Carabao Center National Headquarters and Gene Pool through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program. Specific: 1. Strengthen the management of the Agency's technologies and intellectual properties; 2. Ensure the full implementation and harmonization of the Agency's IP Policies and Technology Transfer Protocol alongside participating CMIs in Central Luzon to synchronize IP management and technology transfer activities. 3. Mentor and capacitate the technology transfer officers of the Agency; 4. Intensify linkages with various agencies to enhance activities on intellectual property protection, management, and technology transfer and commercialization; and 5. Enhance and capacitate the technology promotion and commercialization activities of Philippine Carabao Center.	Publication 1 Information Education and Communication (IEC) materials Patent 10 IP applications (UM & Patent only) 5 Copyright applications (ECs) filed[1] Product 10 Prior-Art Search (PAS) Reports 1 IP Inventory of matured technologies 1 Inventory of knowledge resources prepared and updated 1 communication plan developed & implemented 1 Tech Comm plan developed & implemented 1 technology with pre-commercialization reports 2 technologies pitched 1 Technology commercialized People & Services 2 PCC staff attended in regional IP Audit & Inventory Workshop 2 PCC staff trained in national IP Masterclass 2 PCC staff trained in national Agribusiness Masterclass 2 PCC staff trained in national Technology Commercialization Mentorship Series (TCMS) 2 PCC staff trained in national Technology Promotion Mentorship 2 PCC staff attend reg™ IP Policy/ Tech Trans protocol review 1 Institutional echo seminar conducted	Philippine Carabao Center (PCC)	Target Beneficiaries: 1. PCC researchers2. Farmers & Dairy cooperatives3. Private entities4. Other consortium member institutions5. AANR stakeholders from the academe, public, and private sectors, non-government organizations (NGOs), and international partners 6. Potential	01-Oct-23	31-Mar-26	ONGOING	4,202,908	806,426
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1E. Enhancement of the Intellectual Property Technology Business Management (IPTBM) in Philippine Center for Postharvest Development and Mechanization (PHilMech) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To strengthen the Intellectual Property Management and Commercialization in PHilMech Specific: 1. Enhance and operationalize the IP-TBM of PHilMech; 2. Enhance and harmonize the IP policies of PHilMech to synchronize IP management and technology transfer activities; 3. Capacitate the PHilMech IP-TBM staff and researchers on IP management and technology transfer; 4. Intensify linkages with various agencies to enhance activities on IP-TBM; and 5. Manage the IP-TBM activities in PHilMech	Publication: 5 IEC/Patent: 10 IP applications, Copyright of training report Product: 10 Prior Art Search (PAS) Reports 1 IP Inventory 1 Inventory of matured technologies 1 Inventory of knowledge resources 1 communication plan 1 technology with pre-comm reports 2 technologies pitched 1 technology commercialized People: 2 Prior art Search & IP Audit Workshop 2 IP Masterclass, 2 Agribusiness Masterclass 2 Technology Commercialization Mentorship Series 2 Tech Promotion Mentorship 2 CommPlan Workshop Participate to content build-up of RTMS Place: 1 commitment letter	Philippine Center for Postharvest Development and Mechanization (PHilMech)	The project is intended for the stakeholders, technology generators and takers, and other makers of PHilMech and CMIs involved. Specifically, the project directly and indirectly benefits the following: PHilMech IP-TBM personnel PHilMech researchers, technology generators, and other makers IP-TBM Personnel of CMIs involved Technology generators and other makers of participating CMIs R&D partners and the private sector	01-Oct-23	31-Mar-26	ONGOING	2,307,800	444,400
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1F. Establishment of the Intellectual Property Technology Business Management (IPTBM) in Tarlac Agricultural University (TAU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish a self-sustaining IP-TBM that aims to commercialize matured technologies. Specific: 1. Foster and implement the IP Policy and Guidelines of the university and protect its generated technologies and owners. 2. Craft , manual of operations for the TAU IP-TBM. 3. Conduct pre-incubation and incubation activities. 4. Package customized business portfolios for incubatees. 5. Draft a sustainability plan for IP-TBM activities.	Publication: 3 IECs publishedPatent: 5 IP applications, 3 IECs (copyrighted) Product: 3 PAS Reports 1 IP Inventory 1 Inventory of matured technologies 1 Inventory of knowledge resources 1 communication plan 1 technology with pre-comm reports 2 technologies pitched 1 technology commercialized People: 2 CMI staff trained in national IPMC 2 CMI staff trained in national ABMC 2 CMI staff trained in national TCMS 2 CMI staff trained in national TPMS 2 CMI staff attended reg- J IP Audit and Inventory Workshop 2 CMI staff attended reg- J IP Policy/Tech Trans Protocol Review 2 CMI staff attended reg- J CommPlan Workshop 1 Institutional Echo Seminar conducted Trained at least 10 staff on echo seminars 2 CMI Staff participated in content build-up of RTMS Place: 1 Commitment Letter for national trainings 1 Partnership agreement with Business/Trade Institutions 1 Commercialization Agreement	Tarlac Agricultural University (TAU)	TAU IP-TBM personnel TAU researchers, technology generators, and other makers Technology generators/owners R&D partners and the private sector Sweetpotato, free range chicken, Kamlong, and Bamboo R&D and industry Students Faculty Researchers Entrepreneurs Start-Ups SMEs	01-Oct-23	31-Mar-26	ONGOING	2,647,520	479,361
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1G. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in President Ramon Magsaysay State University (PRMSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish an IP-TBM in PRMSU, Zambales. Specific: 1. Manage the institutionally developed agri-aqua technologies and intellectual properties 2. Enhance and harmonize the PRMSU IP Policies with the CMIs 3. Develop technology transfer programs for PRMSU 4. Capacitate innovators/ technology developers with technology transfer strategies and appropriate mechanisms through training 5. Innovate through convergence with various AANR agencies 6. Facilitate public-private access to agri-aqua technologies, and 7. Strengthen existing and forge new public-private partnerships for R&D results	Publication: IEC Material Institutional training report Patent: IP Application Copyright Product: Prior Art Search Communication plan Technology pitched Institutional inventory of matured technologies Inventory of knowledge resources Technology with pre-commercialization report Technology commercialized People and Services Staff attended the prior art search and IP audit workshop Staff trained in IP Master class Staff trained in the Agribusiness master class Staff trained in TCMS Staff trained in technology promotion mentorship Staff attend the commercialization plan workshop Participate in the content build-up of RTMS Place and Partnerships	President Ramon Magsaysay State University (PRMSU)	The project is intended for the stakeholders, technology generators and takers, and other makers of PRMSU involved. Specifically, the project, directly and indirectly, benefits the following: PRMSU IP-TBM personnel PRMSU researchers, technology generators, and other makers IP-TBM Personnel involved Technology generators and other makers of PRMSU R&D partners and the private sector	01-Oct-23	31-Mar-26	ONGOING	2,666,320	10,491

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1H. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Bulacan Agricultural State College (BASC) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish a gender-responsive BASC IP-TBM Specific: 1. Develop and activate the IP-TBM of BASC; 2. Capacitate the IP-TBM personnel of BASC; 3. Create or enhance IP-TBM related policies such as the IP Policy and Tech Transfer protocol which are equitable and gender-responsive; and 4. Establish linkages with various agencies for the activity enhancement of the IP-TBM.	Publication: 3 IECs, -toGender Responsive Information, Education and Communication materials;Patent: 5 IP Applications 1 Copyright of Gender Responsive IEC;Product: 5 PAS 1 IP Inventory with SDO of IP generators 1 Inventory of matured technology 1 Commercialization plan 1 Technology with pre-comm reports 2 Technologies pitched 1 Technology Commercialized;People: 2 Staff attended Prior Art Search & IP Audit Workshop 2 Staff trained in IP Masterclass 2 Staff trained in AgriBusiness Masterclass 2 Staff trained in TCMS 2 Staff trained in TechnoPromotion Mentorship 2 Staff attended CommPlan Workshop 2 Participate to content build-up of RTMS;Place: 1 Commitment Letter 1 Partnership agreement with Business/Trade Institutions 1 Commercialization Agreements;Policy: Full implementation of BOT-approved equitable, IP policy and technology transfer protocol (with internal memos, AOs)	Bulacan Agricultural State College (BASC)	BASC IP-TBM Personnel BASC stakeholders: researchers and extensionists, Technology generators and makers; and Group or individuals involved in rabbitry.	01-Oct-23	31-Mar-26	ONGOING	2,607,000	572,971
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1I. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Aurora State College of Technology (ASCOT) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish the IP-TBM office in ASCOT through the RAISE Program to assist the researchers and inventors in patent application, enhancement, and commercialization of products. Specific: 1. Establishment of an Intellectual Property office that will identify and protect the intellectual property of ASCOT researchers and inventors; 2. Mentor and capacitate the technology transfer officers of ASCOT; 3. Identify and protect the Intellectual Property Rights of the College to promote and embed quality, ingenuity and novelty in research and other scholarly works; and 4. Establish linkage with different agencies for the commercialization of matured technology of ASCOT.	Publication: 3 IECs;Product: 5 IP application;Product: 5 prior art search 1 IP inventory 1 Inventory of matured technologies 1 Inventory of knowledge resources 1 communication plan 1 technology with pre-comm reports 2 technologies pitched 1 technology commercialized;People: 2 CMI staff attended Prior Art Search and IP Audit Workshop 2 CMI staff trained in IP MasterClass 2 CMI staff trained in Agribusiness MasterClass 2 CMI staff trained in TCMS 2 CMI staff trained in TechnoPromotion Mentorship 2 CMI staff attend CommPlan Workshop;Place: 1 commitment letter 1 partnership agreement with business/trade institutions 1 commercialization agreement;Policy: Full implementation of IP and technology transfer protocol (with internal memos, AOs)	Aurora State College of Technology (ASCOT)	ASCOT, faculty, staff and student researchers., technology creator, and other makers, and R&D partners and private sector	01-Oct-23	31-Mar-26	ONGOING	2,650,600	508,245
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 1J. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Department of Agriculture Regional Field Office III (DA RFO III) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To effectively manage the technologies developed by the DA RFO III for technology transfer, extension and commercialization through the IPTBM. Specific: 1. Capacitate the CITBI and IPTBM personnel of DA RFO III on IP, agribusiness, technology commercialization, and promotion; 2. Strengthen the IP management of the DA RFO III through effective handling, supervision and management of its existing agri-aqua technologies and other IP assets; 3. Enhance the technology promotion and network-building capabilities of the DA RFO III to strengthen its technology commercialization efforts; 4. Improve the reliability and success of the matured technologies as agri-enterprises; and 5. Develop and harmonize the existing IP policy and technology transfer protocol of DA RFO III with those of other CMIs in the region.	Publication 3 IECs Patent 5 IP Applications 3 IEC copyright Product 5 PAS reports 1 IP & technologies inventory updated 1 inventory of knowledge resources prepared and updated 1 CMI communication plan developed & implemented 1 Tech with pre-comm reports 2 Technologies pitched 1 Technology Commercialized People and Services 2 CMI staff trained in National IPMC 2 CMI staff trained in National ABMC 2 CMI staff trained in National TCMS 2 CMI staff trained in National TPMS 2 CMI staff attended reg™ IP Audit & Inventory Workshop 2 CMI staff attended reg™ IP Policy/Tech Trans Protocol review 2 CMI staff attended reg™ Comm Plan Workshop 1 institutional echo seminar conducted Trained at least 10 staff on echo seminars Participate in content build-up of RTMS	Department of Agriculture Regional Field Office III (DA RFO III)	Target Beneficiaries:The project is intended for the stakeholders, technology generators and takers, and other makers of DA RFO III. Specifically, the project, directly and indirectly, benefits the following:DA RFO III CITBI and IP-TBM personnelDA RFO III researchers, technology generators, and other makersR&D partners and the private sector	01-Oct-23	31-Mar-26	ONGOING	2,696,600	572,900
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 2. Regional Agribusiness Hub (ABH) in Central Luzon through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish a regional agribusiness hub in Central Luzon. Specific: 1. Build capacities of selected CMI staff on agribusiness development through trainings and mentorships; 2. Assess and package various R&D outputs to support the development and operations of viable AANR-based enterprises; 3. Acquire partnerships with business companies for technology commercialization; and 4. Institutionalize the operation of the regional agribusiness hub.	Publication: 1 Regional Training Report;Patent: 1 Copyright of Training Report;Product: 1 Technology with value proposition report; business plan, Feasibility study, market study;People: 1 Regional Agribusiness Master Class 1 Trained CMI Staff;Place: 1 Partnership agreement with Business/Trade Institutions;Policy: 1 Regional Agribusiness Hub institutionalized	Philippine Carabao Center (PCC)	Ensure the full implementation and harmonization of the agribusiness hub with participating CMIs in Central Luzon. Develop a regional agribusiness hub Policy with consortia members from Central Luzon. Full implementation of policy (with internal memos). 1. PCC researchers 2. Farmers & Dairy Cooperatives 3. Private entities 4. other consortium member institutions 5. Stakeholders from the academe, public, and private sectors, NGO's and international partners 6. Potential entrepreneurs	01-Oct-23	31-Mar-26	ONGOING	2,583,848	640,962
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Luzon	Project 3. Regional Agri-Aqua Technology Business Incubation (ATBI) in Central Luzon through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	Component A: Regional ATBI General: To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation Specific: 1. Provide capability building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in Central Luzon; and 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs. Component B: Institutional ATBI General: To enhance the business performance of start-up incubatees through incubation program that are integrated, sustainable and innovative thereby improving the CLSU-ATBI incubation ecosystem. Specific: 1. To assist entrepreneur-clients in commercializing agriculture and food-based products through capacity-building, skills enhancement and linking them with the industry players; 2. To produce five (5) graduate and accept five (5) start-up incubatees from the program in the next two (2) years;	Publication: 2 Regional Training Reports 1 Regional ATBI Operations Manual crafted 1 Regional ATBI Business Plan crafted 1 Regional ATBI Service Offering prepared 1 Consolidated curricula of existing & new ATBIs 6 basic/advanced incubation curricula revised as needed 6 acceleration curricula developed or improved as needed 2 IEC or promotional material for the ATBI produced 1 promotional video for the ATBI developed 18 IEC or promotional materials for the incubatees developed 2 promotional videos for the incubatees developed 1 ATBI sustainability plan developed and implemented 1 ATBI communication plan developed and implemented Patent: 10 trademarks filed 10 copyrights filed Product: 3 Technology Commercialized with FOR / Facilitated the commercialization of CMI technology 1 Consolidated regional report 2 Technologies co-incubated 10 technologies incubated/adopted by new incubatees 6 technologies incubated/adopted by continuing incubatees 3 technologies incubated/adopted by accelerates	Central Luzon State University (CLSU)	Target Beneficiaries Benefits from the Project (1) State Universities and Colleges (SUC) (1) Empowered technology generators, and ATBI staff (2) Better ATBI staffing through hiring project staffs (3) Enhancement/formulation of effective incubation policies (4) More inclusive and responsive ATBI services (5) Increased number of ATBI clients served (6) Increased number of employment generated by incubatees/accelerates (7) Increased number of IPs protected (8) Increased number of partners/collaborators engaged in the program (9) Increased number of technologies transferred and	01-Oct-23	31-Mar-26	ONGOING	7,057,596	1,059,572

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in Central Visayas through the RAISE program	Integrity of the environment and climate change adaptation and mitigation	<p>Component A: Regional IPTBM</p> <p>General: To establish the Regional IPTBM in Central Visayas Agriculture, Aquatic, and Natural Resources Research and Development Consortium (CAARRDEC) to intensify the technology commercialization activities of participating CMIs.</p> <p>Specifics: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Conduct Regional IP assessment for partner CMIs to create regional list of IP Assets; 4. Mentor and capacitate the technology transfer officers of the participating agencies; 5. Intensify the technology promotion and commercialization activities of participating CMIs; 6. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; 7. Coordinate, monitor, and oversee the project implementation of the CMIs involved; 8. Manage the IPTBM network in the region.</p> <p>Component B: Institutional IPTBM</p> <p>General: To strengthen and enhance the capacities of Intellectual Property and Technology Business Management (IPTBM) operations in Bohol Island State University to intensify technology commercialization activities.</p> <p>Specifics:</p>	<p>PUBLICATION</p> <p>3 Regional Training Reports (1 consolidated training report of all the CMI participants who attended to Intellectual Property Master Class (IPMC); 1 training report on regional IP Audit & Inventory Workshop; 1 training report on regional echo IPMC)</p> <p>PRODUCT</p> <p>1 Regional list of Priority R&D commodity prepared and updated 1 Regional technology and IP inventory prepared and updated 1 Regional Sustainability Plan 1 Consolidated regional report (IPs filed, tech commercialized, etc.)</p> <p>PEOPLE & SERVICES</p> <p>Coordinated & hosted 1 national ABMS (last module & graduation) Coordinated participation of 5 CMIs on national IPMC 10 CMI Staff trained/attended the national IPMC 1 Regional IP Audit & Inventory Workshop conducted Trained 10 CMI Staff on IP Audit & Inventory Workshop 1 Regional Policy/Tech Transfer Protocol review conducted Trained 10 CMI Staff on Policy/TTP Review 1 Regionlecho IPMC conducted Trained 20 CMI Staff on echo IPMC Participate in the content build-up & updating of RAISE RTMS 1 Regional tech/business pitch day conducted 1 Regional promotional activity conducted (e.g. exhibits, bootcamps, IP caravan, etc.)</p>	Bohol Island State University (BSU)	The target beneficiaries of this project are the IP offices of each participating agency; in particular, the technology generators involved in IP management and technology commercialization activities; teaching and non-teaching staff and university students.	01-Oct-23	31-Mar-26	ONGOING	5,093,952	855,968
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 1A: Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Cebu Institute of Technology-University (CIT-U) through the RAISE program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To strengthen the capacities of Intellectual Property and Technology Business Management (IPTBM) operations in Cebu Institute of Technology University to intensify technology commercialization activities.</p> <p>Specific:</p> <p>1. Establish and operationalize the IPTBM of Cebu Institute of Technology University; 2. Establish and harmonize the IP policies of Cebu Institute of Technology University to synchronize IP management and technology transfer activities; 3. Intensify the technology promotion and commercialization activities; and 4. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization.</p>	<p>PUBLICATIONS</p> <p>IECPATENTS IP Applications (LUM & Patent only)3 Copyright (IECPRODUCTS Prior Art Search (PAS) Reports)1 IP & Ramp; technologies inventory updated1 Inventory of knowledge resources prepared and updated1 CIT-U IPTBM communication plan developed & implemented1 Tech Communication plan developed & implemented1 Technology Commercialized1PEOPLE & SERVICES2 Technologies pitched1 Technology CommercializedPEOPLE & SERVICES2 CIT-U staff trained in national IPMC2 CIT-U staff trained in national ABMS2 CIT-U staff trained in national IPMC2 CIT-U staff trained in national IPMS2 CIT-U staff attended regional IP Audit & Inventory Workshop2 CIT-U staff attended regional IP Policy/Tech Trans Protocol review2 CIT-U staff attended regional CommPlan Workshop1 Institutional echo seminar conducted1Trained 20 staff on echo seminarsParticipate to content build-up of RTMSPLACES & PARTNERSHPS1 Commitment Letter for the national training1 partnership agreement w/Business/Trade institutions1 Commercialization AgreementPOLICY/Crafting/enhancement of IP policy/Crafting/enhancement of technology transfer protocolsSOCO-ECONOMIC IMPACTContribute to the SDG Goals (8,9,17) and Global Innovation Index (GIIL)Contribute to the SUC leveling among participating agencies;influence a positive change in the Professional Level Point System for the local inventor;favorable operating conditions for local innovation;innovative mindsets as a game-changing asset for organizations as well as individuals;Active; fully-capacitated; and well-connected technology transfer offices.</p>	Cebu Institute of Technology-University (CIT-U)	The target beneficiaries of this project are the IP offices of each campus of the university; in particular, the technology generators involved in IP management and technology commercialization activities.	01-Oct-23	31-Mar-26	ONGOING	2,491,600	290,400
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 1B: Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Cebu Technological University (CTU) through the RAISE program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To strengthen the capacities of Intellectual Property and Technology Business Management (IPTBM) operations in Cebu Technological University to intensify technology commercialization activities.</p> <p>Specific:</p> <p>1. Establish and operationalize the IPTBM of Cebu Technological University; 2. Establish and harmonize the IP policies of Cebu Technological University to synchronize IP management and technology transfer activities; 3. Intensify the technology promotion and commercialization activities; and 4. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization.</p>	<p>6PSY1127TotalPUBLICATIONS3 IECL123PATENTS IP Applications (LUM & Patent only)2353 Copyright (IECL123PRODUCTS PAS Reports)2351 IP & Ramp; technologies inventory updated111 inventory of knowledge resources prepared and updated111 CMI communication plan developed & implemented111 Tech communication plan developed & implemented111 technology with pre-comm reports112 technologies pitched121 Technology Commercialized1PEOPLE & SERVICES2 CMI staff trained in national IPMC22 CMI staff trained in national ABMS2-q dir="ltr" style="line-height: 1.2; margin-left: 0.1pt; text-indent: -0.1pt; margin-top: 0pt; margin-bottom: 0pt;">1.2; margin-left: 0.1pt; text-indent: -0.1pt; margin-top: 0pt; margin-bottom: 0pt;</p>	Cebu Technological University (CTU)	The target beneficiaries of this project are the IP offices of each campus of the university; in particular, the technology generators involved in IP management and technology commercialization activities, including stakeholders, community, teaching and non-teaching staff, university students, and MSMEs.	01-Oct-23	31-Mar-26	ONGOING	2,491,600	572,900
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 1C: Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Holy Name University (HNU) through the RAISE program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To strengthen the capacities of Intellectual Property and Technology Business Management (IPTBM) operations in Holy Name University to intensify technology commercialization activities.</p> <p>Specific:</p> <p>1. Establish and operationalize the IPTBM of Holy Name University; 2. Establish and harmonize the IP policies of Holy Name University to synchronize IP management and technology transfer activities; 3. Intensify the technology promotion and commercialization activities; and 4. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization.</p>	<p>6PSY1127TotalPUBLICATIONS3 IECL123PATENTS IP Applications (LUM & Patent only)2353 Copyright (IECL123PRODUCTS PAS Reports)2351 IP & Ramp; technologies inventory updated111 CMI communication plan developed & implemented111 Tech communication plan developed & implemented111 technology with pre-comm reports112 technologies pitched121 Technology Commercialized1PEOPLE & SERVICES2 CMI staff trained in national IPMC22 CMI staff trained in national ABMS222 CMI staff trained in national IPMS2-q dir="ltr" style="line-height: 1.2; margin-left: 0.1pt; text-indent: -0.1pt; margin-top: 0pt; margin-bottom: 0pt;">1.2; margin-left: 0.1pt; text-indent: -0.1pt; margin-top: 0pt; margin-bottom: 0pt;</p>	Holy Name University (HNU)	The target beneficiaries of this project are the technology generators involved in IP management and technology commercialization activities; teaching and non-teaching staff and university students.	01-Oct-23	31-Mar-26	ONGOING	2,491,600	290,400
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 1D: Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Negros Oriental State University (NORSU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To strengthen the capacities of Intellectual Property and Technology Business Management (IPTBM) operations in Negros Oriental State University to intensify technology commercialization activities.</p> <p>Specific:</p> <p>1. Establish and operationalize the IP-TBM of Negros Oriental State University; 2. Establish and harmonize the IP policies of Negros Oriental State University to synchronize IP management and technology transfer activities; 3. Intensify the technology promotion and commercialization activities; and 4. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization.</p>	<p>6PSY1127TotalPUBLICATIONS3 IECL123PATENTS IP Applications (LUM & Patent only)2353 Copyright (IECL123PRODUCTS PAS Reports)2351 IP & Ramp; technologies inventory updated111 inventory of knowledge resources prepared and updated111 CMI communication plan developed & implemented111 Tech communication plan developed & implemented111 technology with pre-comm reports112 technologies pitched121 Technology Commercialized1PEOPLE & SERVICES2 CMI staff trained in national IPMC22 CMI staff trained in national ABMS2-q dir="ltr" style="line-height: 1.2; margin-left: 0.1pt; text-indent: -0.1pt; margin-top: 0pt; margin-bottom: 0pt;">1.2; margin-left: 0.1pt; text-indent: -0.1pt; margin-top: 0pt; margin-bottom: 0pt;</p>	Negros Oriental State University (NORSU)	The target beneficiaries of this project are the IP offices of each campus of the university; in particular, the technology generators involved in IP management and technology commercialization activities, including stakeholders, community, teaching and non-teaching staff, university students, and MSMEs.	01-Oct-23	31-Mar-26	ONGOING	2,491,600	572,900
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 2: Establishment of Regional Agri-business Hub (ABH) in Central Visayas through the RAISE program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To establish a hub for assessing, advancing, and supporting the pre-commercialization capacity of AANR R&D outputs in Central Visayas.</p> <p>Specific:</p> <p>1. To build capacities of selected CMI staff on agribusines development through trainings and mentorship; 2. To assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. To assist the CMIs in the conduct of various pre-commercialization activities in Central Visayas; 4. To acquire partnerships with business companies for technology commercialization; and 5. To institutionalize the operation of the regional agribusines hub.</p>	<p>6PSY1127TotalPUBLICATIONS3 Regional Training Reports13PRODUCT10 Pre-commercialization services2 technology with business plan2 technology with feasibility study2 technology with market study2 technology with validation2 technology with enterprise plan (EP)112122101 Consolidated regional report1PEOPLE & SERVICESCoordinated participation of 5 CMIs & Ramp; 10 CMI personnel on national ABMS510 CMI Staff trained/attended the national ABMS1010 Reg^n echo ABMS conducted1Trained 20 CMI Staff on ABMS (echo)20201 Training on Agripreneurship for MSMEs or potential agripreneurs conducted11Trained 10 MSMEs on agripreneurship1010Participate in the content build-up & Ramp; updating of RAISE RTMSXOOPParticipation to the National Pitch Fest<span style="font-size: 10pt; font-family: Arial; color: rgb(0, 0, 0); ba</p>	Bohol Island State University (BSU)	The output of this project is beneficial to all individuals involved in agriculture, aquatic and natural resources (AANR) commodities. Specifically, the IEC materials and the training/pitching activities that will be conducted, will be useful for researchers, innovators, entrepreneurs, LGUs, research institutions, and venture capitalists.	01-Oct-23	31-Mar-26	ONGOING	2,616,000	477,200

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 3. Regional Agri-Aqua Technology Business Incubator (ATBI) in Central Visayas through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>Component A: Regional ATBI</p> <p>General: To provide support to CMIs in Central Visayas and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation.</p> <p>Specific: 1. Provide capability-building on technology transfer to R&D partners in the central visayas; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs.</p> <p>Component B: Institutional ATBI</p> <p>General: To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation.</p> <p>Specific: 1. Provide capability-building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and</p>	<p>Component A: Regional ATBI</p> <p>Reports1121 Regional ATBI Operations Manual crafted221 Regional ATBI Business Plan crafted111 Regional ATBI Service Offering prepared111 Consolidated curricula of existing & new ATBIs1PARENT3 IP Applications33PRODUCT2 Technologies co-incubated311 Technology Commercialized with FOR / Facilitated the commercialization of 1 CMI technology111 Consolidated regional report11PEOPLE & SERVICES2 new incubatees enrolled in any of the existing ATBIs222 new incubatees under co-incubation program33rd style="border-width: 0.75pt; border-left-style: solid; border-color: rgb(0, 0, 0); border-right</p>	Cebu Technological University (CTU)	The beneficiaries will include those who are willing to adopt innovation in the AANR sector such as the technology adopters, generators, micro and small enterprises, cooperatives, associations, and other interested individuals/groups.	01-Oct-23	31-Mar-26	ONGOING	4,825,640	1,351,932
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 3A. Establishment of the Agri-Aqua Technology Business Incubator in Bohol Island State University (BISU) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>To effectively support the use and commercialization of mature technologies in the agriculture, aquatic and natural resources sector by establishing and developing viable agribusinesses through technology incubation.</p> <p>Specific: 1. To capacitate the BISU ATBI personnel; 2. To identify and establish partnership with the incubatees; 3. To identify and establish linkages among agencies, clients, markets, and funding sources to sustain the operation of the ATBI; 4. To provide technical assistance, business development services, marketing assistance, and administrative services to the incubatees; and 5. To enhance BISU's technology transfer and product promotion efforts.</p>	<p>Publication: 1 ATBI business plan develop 1 ATBI operations manual revised as needed 10 basic incubation curricula revised as needed 2 IEC or promotional material for the ATBI produced 1 promotional video for the ATBI developed 10 IEC or promotional materials for the incubatees developed 2 promotional videos for the incubatees developed 1 ATBI sustainability plan developed and implemented 1 ATBI communication plan developed and implemented Patent: 10 trademarks filed 5 copyrights filed Product: 10 incubatees incubated/adopted by incubatees/People: 10 incubatees assisted and enrolled under incubation program 6 trainings for the ATBI staff conducted or participated in 10 trainings for the incubatees conducted 10 business plans for incubatees developed 3 awareness seminars or promotional activities conducted 3 business pitching events, industry meetups, or networking events conducted or participated in 2 ATBI staff attended the national ATBI MC 2 ATBI staff attended the national TCMS 1 Institutional echo seminar conducted Trained 3 staff on echo seminars 2 benchmarking activities conducted ATBI operations fully integrated to PCAARRD's ATBI web-based M&E system</p>	Bohol Island State University (BISU)	The beneficiaries will include those who are willing to adopt innovation in the AANR sector such as the technology adopters, generators, micro and small enterprises, cooperatives, associations, and other interested individuals/groups.	01-Oct-23	31-Mar-26	ONGOING	4,732,992	960,552
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Central Visayas	Project 4. Establishment of Regional Knowledge Management Hub in Central Visayas through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>General: To enhance the knowledge management services of selected CMIs.</p> <p>Specific: 1. To facilitate the improvement of the Inventory of Knowledge Resources in the region by developing one information system; 2. To populate and publish the e-library system and the Real Time Monitoring System (RTMS) of the RAISE program; 3. To capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. To promote matured technologies to potential users and partners.</p>	<p>Inventory of Knowledge Resources11 Reg™ CommPlan prepared & updated 111 consolidated CMI CommPlan prepared & updated111 consolidated Tech CommPlan prepared & updated1100 Agri-aqua technology-based IEC materials collected for E-Lib uploading50501001 Consolidated regional report 11PEOPLE & SERVICESCoordinated participation of 5 CMIs on national TPMS5510 CMI Staff trained/attended the national TPMS10101 Reg™ Inventory of Knowledge Resources Workshop conductedspan style="font-size: 10pt; font-family: Arial; color: rgb(0, 0, 0); background-color: transparent; font-variant-numeric: normal; font-variant-east-asian: normal; font-variant-alters: normal; vertical-align: baseline; white-space: collapse</p>	Cebu Institute of Technology- University (CIT-U)	The output of this project is beneficial to all individuals involve in agriculture, aquatic and natural resources (AANR) commodities. Specifically, the IEC materials and the training/pitching activities that will be conducted, will be useful for researchers, innovators, entrepreneurs, LGUs, research institutions, and venture capitalists.	01-Oct-23	31-Mar-26	ONGOING	2,498,800	307,200
REGIONAL AGRI-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 1. Regional Intellectual Property And Technology Business Management (IPTBM) in Northern Mindanao Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>The project aims to establish the Regional IPTBM in NDMCAARRD to intensify the technology commercialization activities of participating CMIs. Specifically, it aims to: Enhance and operationalize the IPTBMs of the participating agencies;Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities;Mentor and capacitate the technology transfer officers of the participating agencies;Intensify linkages with various agencies to enhance activities on IPTBM; andManage the IPTBM network in the region.</p> <p>Component B:General Objective: To enhance and strengthen the capacity of CMU-IPTBM on IP management and to facilitate the wider opportunity for patent filings, technology transfer, and commercialization.Specifically, the project aims to:To sustain the smooth operation of CMU-IPTBMTo increase the patent filings from completed studies conducted by CMU faculty researchersTo intensify the capability of other CMU-IPTBM personnel through attendance in IP Masterclass and Technology Commercialization Mentorship SeriesTo capacitate more faculty researchers, thesis advisers, and students ing thesis proposals on patent mining and generate patent mining reportsTo facilitate technology transfer and commercializationTo strengthen partnerships and linkages with relevant stakeholdersTo establish extension services for non-CMU affiliated IP applicationsTo file at least one (1) ICT application</p>	<p>Expected Outputs of Component A:Project 1 - Regional IPTBM1Y2TOTALPUBLICATION1 consolidated training report of all the CMI participants who attended IPMC11 training report on regional echo IPMC (including PASJ111 training report on reg™ IP Audit & Inventory Workshop1IPATENTCopyright of training report21PRODUCT1 Reg™ list of Priority R&D Areas/commodity prepared and updated1121 Reg™ technology and IP inventory prepared and updated thru the RTMS1121 Regional Sustainability Plan (Separate from the CMI Sustainability plan; assist CMIs in drafting their sustainability plans)111 Consolidated regional report (IP filed, tech commercialized, etc.)112PEOPLE & SERVICESCoordinated participation of CMIs personnel in national IPMC888 CMI Staff trained/attended the national IPMC881 Reg™ IP Audit & Inventory Workshop conducted11Trained CMI Staff on IP Audit & Inventory Workshop2Dsp din™tr</p>	Central Mindanao University (CMU)	Target Beneficiaries:CMIs/Technology Transfer Officers/MSME/Entrepreneurs/Incubatees/Farmers, Investors/Technology Generators/Faculty/Researchers/University Graduates Technology Investors/VCS/Angels, other R&D & S&T PartnersThesis advisers and students preparing thesis	01-Oct-23	31-Mar-26	ONGOING	5,000,000	814,813
REGIONAL AGRI-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 1B. Establishment Of The Intellectual Property And Technology Business Management (IPTBM) In Mindanao State University At Naawan (MSUN) Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	<p>The project aims to establish and strengthen the capacity of the Intellectual Property and Technology Business Management (IPTBM) Operations of MSU at Naawan through the RAISE Program. Specifically, it aims to Establish and operationalize the IPTBM of MSU at Naawan; Enhance and harmonize the IP policy of MSU at Naawan to synchronize IP management and technology transfer activities; Capacitate the Technology Transfer Personnel of MSU at Naawan; and Identify and intensify linkages with various agencies to enhance activities on IPTBM.</p>	<p>Expected Outputs (OPS):Publication— 3 promotional IECsPatent/Intellectual Property— 5 IP Applications (IUM and Patent only)— 3 Copyright (IECs)/Product— 5 Prior Art Search Reports— 1 Ps & technologies inventory updated— 1 Inventory of knowledge resources prepared and updated— 1 CMI commercialization plan developed and implemented— 1 Technology Commercialization Plan developed and implemented— 1 Technology with pre-commercialization reports— 2 Technologies pitched— 1 Technology CommercializedPeople and Services— 2 CMI staff trained in national IPMC— 2 CMI staff trained in national ABMC— 2 CMI staff trained in national TPMAS— 2 CMI staff trained in national TPMAS— 2 CMI staff attended in regional IP Audit and Inventory Workshop— 2 CMI staff attended in regional IP Policy/Technology Transfer Protocol review— 2 CMI staff attended in regional Commercialization Plan Workshop— 1 Institutional echo seminar conducted— Trained 10 staff in echo seminars— Participated to content build-up of RTMSPlace and Partnership— 1 Commitment Letter for the national trainings— 1 Partnership agreement with Business/Trade Institutions— 1 Commercialization AgreementPolicy— 1 Institutional IP Policies reviewed/ crafted— 1 Technology Transfer Protocols reviewed/ crafted</p>	Mindanao State University - Naawan (MSU Naawan)	Target Beneficiaries:Students, Faculty, Staff, Stakeholders (Farmers, Fishermen, other partner organizations)	01-Oct-23	31-Mar-26	ONGOING	2,500,000	514,188

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
REGIONAL AGRI-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 1C. Establishment Of The Intellectual Property And Technology Business Management (IPTBM) In The University Of Science And Technology Of Southern Philippines Claveria Campus (USTP-C) Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	The project aims to establish the intellectual property and licensing capability and capacity of USTP-Claveria to facilitate technology transfer and commercialization of technologies generated by USTP-Claveria researchers through the Intellectual Property and Technology Business Management (IPTBM) program. Specifically, it aims to: Establish and operationalize the IPTBM of USTP-Claveria; Capacitate the Technology Transfer Personnel of USTP-Claveria; Enhance the technology promotion and adoption activities of USTP-Claveria; and, Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management, technology transfer, and adoption.	Publication: At least 2 promotional IECs for technologies/Patent: At least 4 IP (patent and utility model only) applications/Product: 1 inventory of IP assets At least 1 Technology Commercialized/People: At least 3 IPTBM faculty and staff extensively trained under the IP Master Class and Technology Commercialization Mentorship Series At least 3 IPTBM staff attended a local IP workshop/for, Commercialization with IPTBM staff as trainer/speaker At least 1 networking events and technology promotion conducted At least 1 technology taker/adopter Place: 1 IPTBM enhanced/established and institutionalized At least 1 adoption agreement executed 1 Memorandum of Agreement signed At least 1 partnership agreement with the Philippine Chamber of Commerce Inc./ Business Groups/ Marketing or Trade Institutions At least 1 commercialization agreement executed Policy: 1 Institutional IP Policies reviewed/ crafted 1 Technology Transfer Protocols reviewed/ crafted	University of Science and Technology of Southern Philippines Claveria Campus (USTP-C)	Target beneficiaries are: Farmers, SMEs, and other stakeholders.	01-Oct-23	31-Mar-26	ONGOING	2,500,000	462,046
REGIONAL AGRI-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 2. Establishment Of Regional Agri-business Hub (ABH) In Northern Mindanao Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	The project aims to establish a regional agribusiness hub in Region 10, Northern Mindanao. Specifically, it aims to: Build capacities of selected CMI staff on agribusiness development through trainings and mentorship; Assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; Assist the CMIs in the conduct of various pre-commercialization activities in the region; Acquire partnerships with business companies for technology commercialization; and institutionalize the operation of the regional agribusiness hub.	Publication: Three (3) Regional trainings Process documentation on the establishment of Agri/business Hub Patent: xxxxProduct: 10 Pre-commercialized services Technology with business plan	Central Mindanao University (CMU)	The target beneficiaries of this project are the institutional Researchers Faculty and Students and R&MO Project Leaders whose research work are already ready for pre-commercialization.	01-Oct-23	31-Mar-26	ONGOING	2,499,800	470,600
REGIONAL AGRI-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 3. Regional Agri-Aqua Technology Business Incubator (ATBI) In Northern Mindanao Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	The project aims to provide support to NDMCAARRD CMIs and ATBIs in the transfer of technologies through capacity building, technology business incubation and or co-incubation in the agriculture and aquaculture sector in the region. Specifically, it aims to: Provide capability building on technology transfer to R&D partners in the Region; Provide a venue for convergence of regional AANR stakeholders; Provide incubation services to potential adopters/incubatees/ co-incubatees; Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and Strengthen existing and forge new public-private for utilization of research outputs.	PUBLICATION 1 Regional Training Report; 1 Regional ATBI Operations Manual crafted; 1 Regional ATBI Curriculum/Service Prepared/Enhanced; At least 2 IEC or promotional materials for Regional ATBI developed; At least 1 promotional video for Regional ATBI developed and updated; At least 1 IEC or promotional materials for incubatees developed; At least 2 promotional videos for incubatees developed; 1 ATBI sustainability plan revised as needed; 1 ATBI communication plan developed and implemented; 1 journal article published; IP/PATENT 3 IP Applications; At least 1 copyrights filed; PRODUCTS 3 Technologies adopted/co-incubated At least 1 technologies adopted by new incubatees (with CMIs); 1 Reg.-I inventory of Mature Technologies; 1 technology with pre-commercialization, reports; PEOPLE AND SERVICES 1 Regional, workshop of ATBI/Curriculum Services; 1 Regional Technology Commercialization Mentorship Series; 1 business pitching, industry meet-up, networking; 3 Trained, CMI Staff; 2 Assisted CMIs in ATBI services; 3 Trained, ATBI Regional Staff; PLACES AND PARTNERSHIPS 3 MOAs w/ incubatees; 1 Commercialization Agreement; 1 partnership agreement with Business/Trade Institutions; 2 MOA,-s with existing and or new ATBI; POLICY 1 Recommend policy inputs to the Regional Council; Regional ATBI institutionalized	Central Mindanao University (CMU)	The target beneficiaries of this project are the technology adopters, technology generators, Agri-aqua start-ups, cooperatives, associations among others.	01-Oct-23	31-Mar-26	ONGOING	6,700,000	1,330,000
REGIONAL AGRI-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 3A. Establishment Of The Agri-Aqua Technology Business Incubator In Mindanao State University At Naawan (MSUN) Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	This project aims for a sustainable and robust CMU-ATBI which will provide services not only limited to the province where it is situated but to the whole of Northern Mindanao. Specifically, it aims to: Recruit potential incubatees among technology generators from the CMIs; Assist in the development of agri-aqua technology-based enterprises among CMIs; Elevate CMU-ATBI operations to the regional level as well as partnerships and linkages to the international level; Continue the ongoing operations of CMU-ATBI and assistance to existing incubatees; and Upgrade the ATBI service offering, protocols, and value-added services to continuously provide excellent service to the stakeholders.	Publication: 1 ATBI business plan revised as needed; 1 ATBI operations manual revised as needed; At least 6 basic curricula revised od developed; At least 1 advanced curricula revised od developed; At least 2 advanced curricula revised od developed; At least 2 acceleration curricula developed; At least 2 IEC or promotional materials for ATBI developed; At least 1 promotional video for ATBI developed and updated; At least 10 IEC or promotional materials for incubatees developed; At least 2 promotional videos for incubatees developed; 1 ATBI sustainability plan revised as needed; 1 ATBI communication plan developed and implemented; At least 1 journal article published Patent: At least 10 trademarks filed; At least 10 copyrights filed Products: At least 2 technologies adopted by new incubatees (CMIs); At least 4 technologies adopted by continuing incubatees; At least 2 technologies adopted by accelerates; At least 2 technologies commercialized with issued Fairness Opinion Report and signed Technology Licensing Agreement (with CMIs) People and Services At least 10 new incubatees enrolled at incubation program; At least 5 continuing incubatees enrolled at advance incubation program; At least 3 accelerates enrolled at acceleration program; At least 5 continuing incubatees graduated from incubation program; At least 10 startups or spinoffs registered and launched; At least 4 trainings for ATBI staff conducted or participated; At least 10 trainings for incubatees and accelerates conducted; At least 10 business plans or business model canvass for new incubatees developed; At least 6 business plans for continuing incubatees improved; At least 3 business plans for accelerates improved; At least 4 awareness seminars or	Mindanao State University - Naawan (MSU Naawan)	The target beneficiaries of this project are the men and women of CMIs and technology generators, aspirant private entrepreneurs, and technology adaptors.	01-Oct-23	31-Mar-26	ONGOING	3,957,280	952,600

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
REGIONAL AGRY-AQUA INNOVATION SYSTEM ENHANCEMENT (RAISE) PROGRAM IN NORTHERN MINDANAO	Project 4. Establishment Of Regional Knowledge Management (KM) Hub In Northern Mindanao Through The RAISE Program	Integrity of the environment and climate change adaptation and mitigation	This project aims to enhance the knowledge management services of selected CMIs. Specifically, it aims to: Facilitate the improvement of the inventory of Knowledge Resources in the region by developing one Information System; Populate and publish the e-Library system and the Real Time Monitoring System (RTMS) of the RAISE program. Capacitate consortium member institutions on Knowledge Management and Technology Promotion; and Promote matured technologies to potential users and partners.	Publications: IPs Expected Outputs Year 1 Year 2 Publications KM System Manual/User Guide 1	Central Mindanao University (CMU)	All individuals involved in agricultural, aquaculture, and natural resources (AANR) commodities will benefit from the project's results. In particular, LGUs, research institutes, entrepreneurs, scientists, and venture investors will benefit from the KMS.	01-Oct-23	31-Mar-26	ONGOING	2,500,000	497,730
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in SOCCSKSARGEN	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in SOCCSKSARGEN through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	The project aims to establish the Intellectual Property and Technology Business Management (IP-TBM) Operations in SOXARDEC Consortia agencies. Specifically, it aims to: Enhance and operationalize IPTBMs of the participating agencies; Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; Mentor and capacitate the technology transfer offices of the participating agencies; Intensify linkages with various agencies to enhance activities on IPTBM; and Manage the IPTBM network in the region.	Publication: 3 Regional Training Reports: 1 consolidated training report of all the CMI participants who attended to IPMC 1 training report on reg.-J IP Audit & Inventory Workshop 1 training report on reg1 echo IPMC (including PAS)Patent: copyright of training reportProduct: 1 Reg.-J list of Priority R&D Areas/commodity prepared and updated1 Reg.-J technology and IP inventory prepared and updated1 Regional Sustainability Plan1 Consolidated regional report (IPs) filed, tech commercialized, etc.)People: Coordinated participation of 8 CMIs on national IPMCS CMI Staff trained/attended the national IPMC1 Reg.-J IP Audit & Inventory Workshop conductedTrained # CMI Staff on IP Audit & Inventory Workshops Reg.-J Policy/Tech Transfer Protocol review conductedTrained # CMI Staff on Policy/TTP Review1 Reg.-J echo IPMC conductedTrained # CMI Staff on echo IPMCParticipate in the content build-up & updating of RAISE RTMS1 Reg1 tech/business pitch day conducted1 reg1 promotional activity conducted (e.g. exhibits, boothcamp, IP caravan, etc.)Participation to the National Pitch FestPlace: 4 CMIs assisted in the commercialization of technologies RAISE Advisory Council createdPolicy: 4 CMIs assisted in IP Policy Review	University of Southern Mindanao (USM)	Technology transfer personnel RAISE-12 IPTBM SUC mentees faculty/researchers with technologies potential for IP protection Agri-Aqua and natural resources graduates MSMEs Young entrepreneurs/start-up	01-Oct-23	31-Mar-26	ONGOING	6,217,228	1,222,466
Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Mindanao	Project 1. Regional Intellectual Property and Technology Business Management (IPTBM) in Western Mindanao through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish the Regional IPTBM in Western Mindanao to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region Component B: Institutional IPTBM Specific: 1. Harness and strengthen the capacities of WMSU-IPTBM; 2. Enhance the technology promotion and commercialization activities of WMSU-IPTBM; 3. Strengthen linkages with industry and community stakeholders to enhance activities on intellectual property management and technology commercialization; and 4. Provide support in the development of the IPTBM Real-time Monitoring System.	IPs & 2 16Year 1Year 2TotalPublicationsComponent A 2 Regional Training Reports1 Regional Training Report3 Regional Training ReportsComponent B2 IEC3 IEC5 IEC4PatentsComponent A Copyright of training reportCopyright of training reportComponent B 4 IP Applications (UM & Patent only) IP Applications (UM & Patent only)10 IP Applications (UM & Patent only)2 Copyrights filed3 Copyrights filed 5 Copyright (IECs)ProductsComponent A 1 Reg ^m list of Priority R&D Areas/commodity prepared and updated 1 Reg ^m list of Priority R&D Areas/commodity prepared and updated 1 Reg ^m list of Priority R&D Areas/commodity prepared and updated 1 Reg ^m technology and IP inventory prepared and updated 1 Reg ^m technology and IP inventory prepared and updated 1 Reg ^m technology and IP inventory prepared and updated 1 Regional Sustainability Plan1 Consolidated regional report (IPs) filed, tech commercialized, etc.) Component B4 PAS Reports6 PAS Reports10 PAS Reports1 IPs & technologies inventory updated1 IPs & technologies inventory updated1 inventory of knowledge resources prepared and updated1 inventory of knowledge resources prepared and updated1 WMSU IPTBM communication plan developed & implemented1 WMSU IPTBM communication plan developed & implemented1 WMSU IPTBM communication plan developed & implemented1 Tech Complan developed & implemented1 Tech Complan developed & implemented <span 481="" 513="" 948="" 959"="" data-label="Page-Footer" style="font-size: 9pt; font-family: Arial; color: rgb(0, 0, 0); background-color: transparent; font-weight: 700; font-variant: normal; font-variant-east-asian: normal; font-variant-alternates: normal; vertical-align: baseline; white-space: c</td> <td>Western Mindanao State University (WMSU)</td> <td>The target beneficiaries of this project are the following:
IP-TBM Personnel
Partner CMIs
Faculty Researchers
Students, researchers
Technology Adopters/Entrepreneurs

IP-TBM project can provide numerous benefits to our partner CMIs and other stakeholders, including investors, customers, consumers, and society. By effectively managing their IP assets, technology businesses can protect their innovations, generate revenue, and stay ahead of the competition. IP-TBM projects can provide numerous benefits to business, investors, governments, and society, and are an important tool for promoting innovation, protecting intellectual property, and driving economic growth.</td> <td>01-Oct-23</td> <td>31-Mar-26</td> <td>ONGOING</td> <td>2,311,400</td> <td>1,050,700</td> </tr> <tr> <td>Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Mindanao</td> <td>Project 1A. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in J. H. Cerilles State College (JHSC) through the RAISE program</td> <td>Rapid, inclusive and sustained economic growth</td> <td>General: To implement Intellectual Property and Technology Business Management (IPTBM) program of the institution in order to enhance their technology commercialization activities.
Specific:
1. Establish Intellectual Property-Technology Business Management Unit to jumpstart the technology promotion and commercialization activities of JH Cerilles State College
2. Capacitate the Technology Transfer Personnel & enhance the technology promotion and commercialization activities of institution and in the region; and
3. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection & management and technology transfer & commercialization.</td> <td>IPs & 2 16Year 1Year 2TotalPublicationsAt least 2 promotional IECsAt least 1 promotional IECAt least 3 promotional IECsPatentsAt least 2 IP (patent and utility model only) applicationsAt least 3 IP (patent and utility model only) applicationsAt least 5 IP (patent and utility model only) applicationsAt least 2 IEC materials copyrightAt least 1 IEC materials copyrightAt least 3 IEC materials copyrightIPProducts3 PAS Reports2 PAS Reports5 PAS Reports1 IPs & technologies inventory updated1 IPs & technologies inventory updated1 inventory of knowledge resources prepared and updated1 inventory of knowledge resources prepared and updated1 inventory of knowledge resources prepared and updated1 JHSC IPTBM communication plan developed & implemented1 JHSC IPTBM communication plan developed & implemented1 JHSC IPTBM communication plan developed & implemented1 Tech Complan developed & implemented1 Tech Complan developed & implemented1 technology with pre-comm reports 1 technology with pre-comm reports 1 technology pitched1 technology pitched2 technologies pitched1 Technology Commercialized 1 Technology Commercialized People and Services2 JHSC IPTBM staff trained in national IPMC2 JHSC IPTBM staff trained in national IPMC2 JHSC IPTBM staff trained in national ABMS2 JHSC IPTBM staff trained in national ABMS2 JHSC IPTBM staff trained in national TCMS2 JHSC IPTBM staff trained in national TCMS2 JHSC IPTBM staff trained in national TPMS2 JHSC IPTBM staff trained in national TPMS2 JHSC IPTBM staff attended reg1 IP Audit & Inventory Workshop2 JHSC IPTBM staff attended reg1 IP Policy/Tech Trans Protocol review2 JHSC IPTBM staff attended reg1 IP Policy/Tech Trans Protocol review2 JHSC IPTBM staff attended reg1 CommPlan Workshop</td> <td>J.H. Cerilles State College (JHSC)</td> <td>Intellectual Property and Technology Business Management (IPTBM) Team of the Institution and faculty researchersTechnology transfer officers/managers/UC/RDI Researchers/inventors</td> <td>01-Oct-23</td> <td>31-Mar-26</td> <td>ONGOING</td> <td>1,495,800</td> <td>517,900</td> </tr> </tbody> </table> </div> <div data-bbox=">Page 57 of 84							

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement Program in SOCCSKSARGEN	Project 1D. Establishment of the Intellectual Property and Technology Business Management (IPTBM) in Cotabato Foundation College of Science and Technology (CF CST) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To strengthen intellectual property and technology business management operations through regional agri-aqua innovation system enhancement. Specific: 1. Enhance capacity-building of the technology transfer unit of the Cotabato Foundation College of Science and Technology; 2. Enhance IP policies and technology transfer protocols of Cotabato Foundation College of Science and Technology to harmonize IP management and technology transfer activities; and 3. Intensify linkages with various agencies to enhance activities on intellectual property protection, management, and technology transfer and commercialization.	Publication: 3 IECs; Patent: 5 IP Applications (UM & Patent only) 3 Copyright (EC); Product: 5 PAS Reports 1 IPs & technologies inventory updated 1 inventory of knowledge resources prepared and updated 1 CMI communication plan developed & implemented 1 Tech Complan developed & implemented 1 technology with pre-comm reports 2 technologies pitched 1 Technology Commercialized, People: 2 CMI staff trained in national IPMC 2 CMI staff trained in national ABMC 2 CMI staff trained in national TCMS 2 CMI staff trained in national TPMS 2 CMI staff attended reg1 IP Audit & Inventory Workshop 2 CMI staff attended reg1 IP Policy/Tech Trans Protocol review 2 CMI staff attended reg1 CommPlan Workshop 1 Institutional echo seminar conducted Trained & staff on echo seminars Participate to content build up of RTMSPlace: 1 Commitment Letter for the national trainings 1 partnership agreement w/Business/Trade Institutions 1 Commercialization Agreement/Policy: Crafting/enhancement of IP policy Crafting/enhancement of technology transfer protocol	Cotabato Foundation College of Science and Technology (CF CST)	Technology transfer personnel CF CST faculty/researchers with technologies potential for IP protection Agri-Aqua and natural resources graduates MSMEs Young entrepreneurs/start-up	01-Oct-23	31-Mar-26	ONGOING	2,414,520	558,630
Regional Agri-Aqua Innovation System Enhancement Program in SOCCSKSARGEN	Project 2. Establishment of Regional Agri-business Hub (ABH) in SOCCSKSARGEN through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To establish a regional agribusiness hub that will facilitate the development and commercialization of agri-aqua enterprises in Region 12 through the provision of data-driven and evidence-based information and knowledge to be gained from the incubation and pre-commercialization phase. Specific: 1. Establish a venue for agribusiness hub supporting entrepreneurs and start ups in Region 12 To build capacity among entrepreneurs and start ups through the conduct of agribusiness master class; 2. Provide evidence based information and assistance in technology assessment, technology values, market research and enterprise development; 3. Provide coaching, mentorship and technical assistance on enterprise development; and 4. Provide assistance to PCAARRD on capacity building-related initiatives related to transfer of technologies and pre-commercialization activities in Region 12.	Publication: 3 Regional Training Reports 1 consolidated training report of all the CMI participants who attended to ABMC 1 training report on regional echo ABMC 1 training report on Agripreneurship Patent: Copyright of Training Report Product: 10 Pre-commercializations services 5 pre-comm for base agency (technology shall be owned by the base agency (prof. PCAARRD-funded), and shall be included in the list of tech offering for potential incubation/co-incubation) and 5 pre-comm for CMIs; Can either be 1 tech with all 5 pre-comm reports or different techs each with a pre-comm report; other precomm includes machine testing (MT) 2 technology with business plan 2 technology with feasibility study 2 technology with market study 2 technology with valuation 2 technology with enterprise plan (EP) 1 Consolidated regional report PEOPLE & SERVICES Coordinated & hosted 1 national ABMC (last module & graduation) Coordinated participation of 5 CMIs & 10_ CMI personnel on national ABMC CMI Staff trained/attended the national ABMC National ABMC will be conducted by APP	University of Southern Mindanao (USM)	The target beneficiaries of the project are as follows: Entrepreneurs, start ups Market researchers Consortia researchers and technology transfer officers Prospective adopters of technologies or product generated from the agri-aqua sector Government partners	01-Oct-23	31-Mar-26	ONGOING	2,480,800	537,700
Regional Agri-Aqua Innovation System Enhancement Program in SOCCSKSARGEN	Project 3: Regional Agri-Aqua Technology Business Incubator (ATBI) in SOCCSKSARGEN through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability-building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs.	Publication: 2 Regional Training Reports 1 consolidated training report of all the CMI participants who attended to TCMS 1 reg1 training report on national ATBI MC 1 Regional ATBI Operations Manual crafted 1 Regional ATBI Service Offering prepared 1 Consolidated curricula of existing & new ATBIs Consolidated curricula of existing & new ATBIs (For R3, R7, R10, R12); curriculum should be an output of the ATBI MC Patent: 3 IP Applications Copyright of Training Report Product: 2 Technologies co-incubated Techs to be co-incubated shall come from non-ATBI CMIs within or outside the region 1 Technology Commercialized with FOR / Facilitated the commercialization of 1 CMI technology Different from the reported commercialized techs under ATBI & IP-TBM subcomponent projects 1 Consolidated regional report PEOPLE & SERVICES 2 new incubatees enrolled in any of the existing ATBIs 2 new incubatees under co-incubation program	Sultan Kudarat State University (SKSU)	Target Beneficiaries: Agri-Aqua and natural resources graduates Member SUCs of SOXARRDEC MSMEs Young entrepreneurs	01-Oct-23	31-Mar-26	ONGOING	3,010,800	1,220,250
Regional Agri-Aqua Innovation System Enhancement Program in SOCCSKSARGEN	Project 3A. Enhancement of the Agri-Aqua Technology Business Incubator (ATBI) in University of Southern Mindanao (USM) through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: The USM-TBI aims to provide services for the incubatees for MSME development through technology business incubator. Specific: 1. Capacitate the prospective incubatees in the community on technology and business incubation in the community; 2. Enhance promotion of products to potential buyers and market; and 3. Establish linkage and partnership among USM-TBI clients, market and funding sources to sustain the operations.	Expected Outputs (6Ps): Publication: Version 11 ATBI business plan revised as needed 1 ATBI operations manual revised as needed 10 basic incubation curricula revised 1 needed6 advanced incubation curriculum developed 2 IEC or promotional material for the ATBI produced 1 promotional video for the ATBI developed 5 IEC or promotional materials for the incubatees developed 2 promotional videos for the incubatees developed 1 ATBI sustainability plan developed and implemented 2 ATBI communication plan developed and implemented 2 Patent: Version 110 trademarks filed 10 copyrights filed 10 technologies incubated/adopted by new incubatees 5 technologies incubated/adopted by continuing incubatees 2 technologies co-incubated 3 technologies commercialized with issued Fairness Opinion Report People: N/A 10 new incubatees enrolled at basic incubation program 6 continuing incubatees enrolled to the advanced incubation program 6 continuing incubatees graduated from the advanced incubation program 6 startups or spinoffs registered and launched 6 trainings for the ATBI staff conducted or participated in 10 trainings for the incubatees conducted 10 business plans for the new incubatees developed 6 business plans for the continuing incubatees improved 4 awareness seminars or promotional activities conducted 4 business pitching events, industry meetups, or networking events conducted or participated in 2 consortium member-agencies mentored on ATBI operations 2 ATBI staff attended the national ATBI MC 2 ATBI staff attended the national TCMS1 Institutional echo seminar conducted Trained # staff on echo seminars 1 benchmarking activity conducted ATBI operations fully integrated to PCAARRD's ATBI web-based MIS and e-system Place: Version 110 MOAs/MOUs with the new incubatees forged 6 MOAs/MOUs with the continuing incubatees renewed 5 MOAs/MOUs with organizations from the public and private sectors forged/renewed ATBI Advisory Board/Committee/Council created and convened Policy: N/A ATBI institutionalized with approved Board Resolution ATBI-related policies of the University revised as	University of Southern Mindanao (USM)	Target Beneficiaries: Version 1 Faculty Students Technology generators Cooperatives Researchers Local entrepreneurs Local companies	01-Oct-23	31-Mar-26	ONGOING	3,830,200	1,785,100

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Regional Agri-Aqua Innovation System Enhancement Program in SOCCSKSARGEN	Project 4. Establishment of Regional Knowledge Management (KM) Hub in SOCCSKSARGEN through the RAISE Program	Integrity of the environment and climate change adaptation and mitigation	General: To enhance the knowledge management services of selected CMIs. Specific: 1. To facilitate the improvement of the Inventory of Knowledge Resources in the region by developing an Information System; 2. To populate and publish the e-Library system and the Real Time Monitoring System (RTMS) of the RAISE program; 3. To capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. To promote matured technologies to potential users and partners.	Publication: 2 Regional Training Reports 1 consolidated training report of all the CMI participants who attended to TPMS Inventory of Knowledge Resources Workshop and Complan to be embedded in the national TPMS 1 reg1 training report on national TPMS 3 promotional materials (video, print/social media, RAISE calendar) developed Patent: 1 IP Application 1 TM for regional RAISE logo 2 copyrights filed for promotional materials developed Product: 1 Reg.-J Inventory of Knowledge Resources 1 Reg.-J ComPlan prepared & updated 1 consolidated CMI ComPlan prepared & updated 1 consolidated Tech ComPlan prepared & updated 25 Agri-Aqua technology-based IEC materials collected for E-Lib uploading 1 Consolidated regional report PEOPLE & SERVICES Coordinated participation of 5 CMIs on national TPMS 10 CMI Staff trained/Attended the national TPMS 1 Reg1 Inventory of Knowledge Resources Workshop conducted Trained 10 CMI Staff on Reg1 Inventory of Knowledge Resources Workshop 1 Reg.-J Complan conducted	University of Southern Mindanao (USM)	The target beneficiaries of the project are the following: Knowledge Management CMIs Representatives Consortium CMI researchers and technology generator Prospective adopters of technologies generated from this project Government partners/Private industry Students	01-Oct-23	31-Mar-26	ONGOING	2,528,000	619,500
Science for the Convergence of Agriculture and Tourism (SciCAT) Expansion Program	Project 1. Establishment of the Science for the Convergence of Agriculture and Tourism (SciCAT) Cluster-oriented Farms and Enterprises (SciCAT Cluster)	Rapid, inclusive and sustained economic growth	General: This collaborative project aims to expand the SciCAT concept into a POT-based tourism cluster area, which will effectively link all cluster components propelled by AANR technologies and guided by the desire to provide a total tourist experience leading to customer satisfaction. Specific: To assess and plan the tourism cluster area including key sites (production and processing) involved and identify areas for improvement towards their transformation into a SciCAT site that will kickstart the tourism cluster; To review and update the existing site and landscape plan of the proposed SUC and LGU SciCAT Farm site; To provide assistance in formulating and developing LGU policies in support of the SciCAT initiative; To study and prepare the SciCAT Farm Enterprise plan and Farm Master Plans; To conduct training programs and provide mentorship services to increase the probability of success of these SciCAT sites (production and processing); and To support the promotion of the SciCAT Sites through social media management.	EXPECTED OUTPUTS (8P/5YEAR 1YEAR 2YEAR TOTAL) Product: 2 Site and Landscape Plans reviewed and updated 2 Site and Landscape Plans reviewed and updated 4 Site and Landscape Plans developed 4 Site and Landscape Plans developed 8 Site and Landscape Plans developed 4 Site and Landscape Plans developed 2 AANR-based products assisted At least 4 AANR-based products supported and promoted At least 4 AANR-based products supported and promoted At least 10 AANR-based products assisted, supported and promoted 4 SciCAT Farm Enterprise Plans developed 4 SciCAT Farm Enterprise Plans developed 8 SciCAT Farm Enterprise Plans developed 1 SciCAT Farm Master Plan developed 1 SciCAT Farm Master Plan developed 1 SciCAT Program Brand Development and Communication Plan 1 SciCAT Program Brand Development and Communication Plan 4 sites assisted in their development of SciCAT Farms 4 sites assisted in their development of SciCAT Farms 8 sites assisted in their development of SciCAT Farms 1 SciCAT Guidebook for LGU and Institution-based sites 1 SciCAT Guidebook for LGU and Institution-based sites People and Services: SUC/LGU staff trained with entrepreneurial courses (2 pax x 4 sites) 8 SUC/LGU staff trained with entrepreneurial courses (2 pax x 4 sites) 16 SUC/LGU staff trained with entrepreneurial courses (2 pax x 8 sites) 8 SUC/LGU staff mentored and guided in their enterprise operations (2 pax x 4 sites) 16 SUC/LGU staff mentored and guided in their enterprise operations (2 pax x 4 sites) 16 SUC/LGU staff mentored and guided in their enterprise operations (8 sites) 8 SUC/LGU staff trained and mentored in social media management 8 SUC/LGU staff trained and mentored in social media management At least 1 training conducted At least 2 trainings conducted At least 3 trainings conducted Publications: At least 1 IEC template materials (brochures) 	University of the Philippines Diliman (UPD)	Eight (8) AANR Technology-based Farm Tourism sites	01-Oct-25	30-Sep-28	ONGOING	9,322,512	3,788,044
Science for the Convergence of Agriculture and Tourism (SciCAT) Expansion Program	Project 2. Transforming Magallanes Agri Tourism Hub into a Science and Technology-based Convergence of Agriculture and Tourism (Sci-CAT) Farm	Rapid, inclusive and sustained economic growth	General: To transform the Magallanes Agri Tourism Hub into a science and technology-based tourism site through sustainable farm development and technology application. Specific: Enhance the capabilities of Magallanes Agri-tourism hub and LGU officials, staff, farmers, and other stakeholders on agri-tourism management, with emphasis in S&T-based farm production, operation, and processing, through skills training; Transfer Package of Technologies (POTs) to Magallanes Agri Tourism Hub workers and farmers of LGU - Magallanes; Develop farm tourism activities focusing on the Package of Technologies; and Formulate and institutionalize relevant policies at the municipal level to ensure effective project implementation, evaluation, and sustainability.	EXPECTED OUTPUTS (8P/5YEAR 1YEAR 2YEAR 3YEAR 4YEAR 5YEAR) People and Services: Identified 3 potential technology adopters identified 3 potential technology adopters identified 3 Resort owners/ entrepreneurs trained 2 Resort owners/ entrepreneurs trained 5 Resort owners/ entrepreneurs trained 2 Tourism office personnel trained 2 Tourism office personnel trained 4 Tourism office personnel trained 2 MAO personnel trained 2 MAO personnel trained 4 Agri-tourism hub personnel trained 2 Agri-tourism hub personnel trained 1 Agri-tourism hub personnel trained 1 agricultural groups, cooperative, or association identified as potential POT adopter 1 agricultural groups, cooperative, or association identified as potential POT adopter 2 agricultural groups, cooperative, or association identified as potential POT adopter 2 jobs generated 2 jobs generated 4 jobs generated At least 1,200 farm visitors (100/mo x 12 mos) At least 1,200 farm visitors (100/mo x 12 mos) At least 2,400 farm visitors (100/mo x 12 mos x 2 yrs) 50 social media engagements 50 social media engagements 100 social media engagements 1 annual technology demonstration day conducted 1 annual technology demonstration day conducted 2 annual technology demonstration day conducted Products: At least 2 technologies showcased At least 3 technologies showcased 5 technologies showcased 1 Facebook page established and maintained 1 Facebook page maintained 1 Facebook page established and maintained 1 SciCAT farm tour map produced 1 SciCAT farm tour map produced At least 6 products produced and showcased At least 6 products produced and showcased At least 12 products produced and showcased 1 SciCAT-LGU-based logo created <td style="border-width: 0.5pt; border-color: rgb(0, 0, 0); border-right-style: ...>	Cavite State University (CSU)	The beneficiaries of the project are: farm workers; farmer cooperatives/organizations; farm owners and enthusiasts; farming communities in Magallanes, Cavite; processors; entrepreneurs; LGUs; and visitors who want to escape urban/city life and want to experience actual farm activities while appreciating the value of farm produce.	01-Oct-25	30-Sep-27	ONGOING	5,000,000	2,895,964
Science for the Convergence of Agriculture and Tourism (SciCAT) Expansion Program	Project 3. TALON: A Farm Tourism Model for Sustainable Development at MMSU	Rapid, inclusive and sustained economic growth	General: To develop the MMSU farms into farm tourism destinations to showcase, promote, and transfer MMSU-developed research innovations and agricultural technologies to stakeholders. Specific: Establish the T.A.L.O.N. as a recognized farm tourism destination that integrates leisure, recreation, education, and agri-business models; Promote awareness and deepen knowledge among tourists, interested individuals and local communities about MMSU-developed agricultural technologies and innovations; Strengthen the adoption of MMSU agricultural technologies by farmer, micro, small, and medium enterprises (MSMEs), and other stakeholders through exposure and engagement; and Facilitate the initial accreditation of the T.A.L.O.N. farm tourism site in coordination with the Department of Tourism (DOT), ensuring full compliance with tourism standards and regulatory requirements. Develop policies promoting sustainable farm tourism practices for the conservation of resources, minimizes environmental impact, and supports long-term land preservation.	EXPECTED OUTPUTS (8P/5YEAR 1YEAR 2TOTAL) Product: At least 1 social media page developed At least 1 social media page maintained At least 1 social media page developed and maintained At least 2 POTs showcased At least 3 POTs showcased At least 5 POTs showcased 1 SciCAT Tour map developed 1 SciCAT Tour map developed 1 SciCAT Farm established 1 SciCAT Farm established At least 6 products produced and showcased At least 6 products produced and showcased At least 12 products produced and showcased 1 technology needs assessment conducted 1 technology needs assessment conducted People and Services: 1 identified agricultural groups, cooperative or association as potential POT adopter 1 identified agricultural groups, cooperative or association as potential POT adopter At least 1200 farm visitors (100 visitors x 12 months) At least 1200 farm visitors (100 visitors x 12 months) At least 2400 farm visitors (100 visitors x 24 months) 1 job generated 1 job generated 2 potential technology adopters identified 3 potential technology adopters identified 5 potential technology adopters identified 3 SciCAT personnel trained and capacitated 1 SciCAT personnel trained and capacitated 1 annual technology demonstration day conducted 1 annual technology demonstration day conducted 2 annual technology demonstration days conducted 50 social media engagements conducted 50 social media engagements conducted 100 social media engagements conducted Places and Partnerships: 1 MDA signed 2 MOAs signed 3 MOAs signed Publications: 2 IEC materials produced <td style="border-width: 0.5pt; border-color: rgb(0, 0, 0); border-right-style: ...>	Mariano Marcos State University (MMSU)	Farmers, Municipal Agricultural Office (MAO) Personnel, Entrepreneurs, Agricultural Cooperatives, Farm Tourism Operators, Students, Researchers, Retirees	01-Oct-25	30-Sep-27	ONGOING	5,000,000	3,182,964

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Bicol (Phase 2)	Project 4 (Project 1C). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Sorsogon State University (SoSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project is to strengthen and intensify the implementation of Intellectual Property and Technology Business Management (IP-TBM) in Sorsogon State University through RAISE Program Phase 2. Specific: 1. Craft new and/or further develop existing training reports, program reports, and Information, Education, and Communication (IEC) materials. 2. Intensify the ideation, promotion, and protection of agri-aqua technologies in Bicol. 3. Consolidate and provide an inventory of reports including the IP filed institutional and regional agri-aqua technologies. 4. Coordinate, cooperate, and harmonized the regional participating agencies. 5. Conduct regional training and promotional activity, assist the participating agencies, engage in training and seminars, and build technology and business partnerships and agreements.	Publication: 10 IC Materials Patent: 20 IP Applications, 20 other Ips; 5 UM Registered Product: 20 Prior Art Search Report; 20 IP Education /Awareness caravan; 5 Patent Search Training; 5 Patent Drafting Training; 1 Technology and IP inventory prepared and updated; 1 CMI Communication plan developed/enhanced and implemented; 1 Tech Complan developed/enhanced and implemented; 1 Pre-commercialized report prepared; 4 technologies pitched; 1 technology commercialized; 1 Patent mining report prepared	Sorsogon State University (SoSU)	<ul style="list-style-type: none"> Consortium Member Institutions Research and Development Institutions Local Government Units MSMEs/Industries Private agencies students 	01-Oct-24	30-Sep-26	ONGOING	2,350,000	671,590
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Bicol (Phase 2)	Project 5 (Project 1D). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Catanduanes State University (CatSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project "Strengthening the Intellectual Property and Technology Business Management (IP-TBM) in Catanduanes State University under RAISE Program (Phase 2)" aims to enhance Catanduanes State University capabilities in pre-commercializing its matured technologies, directly contributing to the goals of the RAISE Bicol Program. Specific: 1. Provide tailored consultancy to CatSU-affiliated technology enterprises to identify target markets, establish effective distribution channels, and conduct competitive analyses, enhancing their ability to commercialize innovative technologies. 2. Launch a Phase 2 initiative focusing on equipping CatSU innovators with skills in prototype validation, market research, business modeling, and strategic partnership formation, utilizing the support and resources of the Technology Business Incubator (TBI) to prepare innovations for successful market entry and scalability. 3. Establish a robust capacity-building program at CatSU to empower stakeholders in validating technologies, conducting market assessments, and promoting innovations effectively, accelerating the transition from research to market adoption. 4. Organize Partnership Meetings and Industry Linkages to foster collaborations among CatSU-linked technology enterprises, government agencies, and private investors, supporting the Catanduan	Publication: 3Patent: 12Product: 22People: 37Place: 44Policy: 48	Catanduanes State University (CatSU)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,929,020
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Bicol (Phase 2)	Project 6 (Project 1E). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Central Bicol State University of Agriculture (CBSUA) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The general objective of this project is to enhance and intensify the implementation of Intellectual Property and Technology Business Management (IP-TBM) in Bicol Region through RAISE Bicol Program. Specific: 1. Craft new and/or further develop existing training reports, program reports, and Information, Education, and Communication (IEC) materials. 2. Intensify the ideation, promotion, and protection of agri-aqua technologies in Bicol. 3. Consolidate and provide an inventory of reports including the IP filed institutional and regional agri-aqua technologies. 4. Coordinate, cooperate, and harmonized the regional participating agencies. 5. Conduct regional training and promotional activity, assist the participating agencies, engage in training and seminars, and build technology and business partnerships and agreements.	Publication: 3Patent: 12Product: 22People: 36Place: 44Policy: 48	Central Bicol State University of Agriculture (CBSUA)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	3,046,166
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Bicol (Phase 2)	Project 7 (Project 1F). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology (DEBESMSCAT) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The general objective of this project is to strengthen and intensify the implementation of Intellectual Property and Technology Business Management (IP-TBM) in, DEBESMSCAT, through RAISE Bicol Program Specific: 1. Craft new and/or further develop existing training reports, program reports, and Information, Education, and Communication (IEC) materials. 2. Intensify the ideation, promotion, and protection of agri-aqua technologies in Bicol. 3. Consolidate and provide an inventory of reports including the IP filed institutional and regional agri-aqua technologies. 4. Coordinate, cooperate, and harmonized the regional participating agencies. 5. Conduct regional training and promotional activity, assist the participating agencies, engage in training and seminars, and build technology and business partnerships and agreements.	Publication: 3Patent: 12Product: 22People: 36Place: 44Policy: 48	Dr. Emilio B. Espinosa Sr. Memorial State College of Agriculture and Technology (DEBESMSCAT)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,907,399
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Bicol (Phase 2)	Project 8 (Project 2). Strengthening the Regional Agri-business Hub (ABH) in Bicol under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to strengthen the implementation and, operation of the regional agribusiness hub in Bicol. Specific: 1. To build capacities of selected CMI staff on agribusiness development through trainings and mentorship; 2. To assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. To acquire partnerships with business companies for technology commercialization; and 4. To institutionalize the operation of the regional agribusiness hub.	Publication: 3Patent: 12Product: 22People: 36Place: 44Policy: 48	Bicol University (BU)	NULL	01-Oct-24	30-Sep-26	ONGOING	4,100,000	3,322,889
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Bicol (Phase 2)	Project 9 (Project 3). Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Bicol under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General Objective: General: To provide support to CMI and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability-building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs.	Publication: 1; 2; 3Patent: 10; 12Product: 23People: 35; 36; 37Place: 38; 39Policy: 48	Bicol University (BU)	NULL	01-Oct-24	30-Sep-26	ONGOING	3,650,000	2,843,607

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 1. Strengthening the Regional Intellectual Property and Technology Business Management (IPTBM) Program in Cordillera Administrative Region under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Component A. Regional IPTBM The projects primary goal is to strengthen the Intellectual Property and Technology Business Management (IPTBM) within the Cordillera Consortium for Agriculture, Aquatic Resources Research and Development (CoCAARRD) to intensify the technology commercialization and IP-management-related activities among the participating CMIs. Component A. Regional IPTBM 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region Component B. Institutional (BSU) IPTBM Component B of the project is focused on enhancing the Intellectual Property and Technology Business Management (IPTBM) to intensify the technology commercialization and IP management-related activities of the University Specific: Component B. Institutional (BSU) IPTBM 1. Enhance the IPTBM/ IPR unit of the University; 2. Fully implement the IP policy and Technology Transfer Protocols of the University; 3. Mentor and capacitate IPTBM/PRO staff and technology generators; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the University.	Publication: 3Patent: 4; 11Product: 14; 19; 30People: 33Place: 46Policy: 48	Benquet State University (BSU)	CMIs technology generators from various CMIs technology users/takers/adopters IPTBM project teams Industry stakeholders	01-Oct-24	30-Sep-26	ONGOING	3,706,860	2,822,488
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 2 (Project 1A). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Ifugao State University (ISU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to strengthen the Intellectual Property-Technology Business Management (IPTBM) center of the Ifugao State University to enhance its services. Specific: 1. Enhance the capability of faculty and researchers on IP and technology commercialization; 2. Leverage IP assets generated by faculty innovators of the college; 3. Institutionalize the IP-TBM Office of Ifugao State University.	Publication: 1Patent: 4; 7Product: 26; 30People: 33; 37Place: 43; 46Policy: 48	Ifugao State University (ISU)	Ifugao State University its counterpart and the different stakeholders of the University	01-Oct-24	30-Sep-26	ONGOING	2,347,420	1,809,114
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 3 (Project 1B). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Apayao State College (ASC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to strengthen the Intellectual Property-Technology Business Management (IPTBM) center of the Apayao State College to enhance its services. Specific: 1. Enhance the capability of faculty and researchers on IP and technology commercialization; 2. Leverage IP assets generated by faculty innovators of the college; 3. Institutionalize the IP-TBM Office of ASC.	Publication: 1Patent: 7Product: 26People: 32; 33Place: 43; 46Policy: 48	Apayao State College (ASC)	Researchers/ Inventors Technology adapters Project Team Other stakeholders	01-Oct-24	30-Sep-26	ONGOING	2,177,400	1,759,780
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 4 (Project 2). Strengthening the Regional Agribusiness Hub (ABH) in Cordillera Administrative Region under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional Agribusiness hub in the Cordillera Administrative Region Specific: 1. To build capacities of selected CMI staff on agribusiness development through trainings and mentorship; 2. To assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. To assist the CMIs in the conduct of various pre-commercialization activities in the region; 4. To acquire partnerships with business companies for technology commercialization; and 5. To institutionalize the operation of the regional agribusiness hub.	Publication: 1Patent: 12Product: 26People: 32; 33; 37Place: 43Policy: 48	Benquet State University (BSU)	CMIs, CMI researchers/technology generators, technology adopters, MSMEs and startups, industry stakeholders	01-Oct-24	30-Sep-26	ONGOING	4,746,804	3,978,711
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 5 (Project 3). Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Cordillera Administrative Region under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Component A: Regional ATBI To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Component B: Institutional ATBI To enhance BSU ATBI capacity to provide support to consortia member institutions (CMIs), other ATBIs, its project team, and incubatees/acceleratees in the transfer of technologies through capacity building, networking, and technology business incubation or co-incubation, and internationalization. Specific: Component A: Regional ATBI 1. Provide capability-building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs. Component B: Institutional ATBI 1. Enhance the capacity of the ATBI, its project team, its incubatees, and acceleratees as it provides incubation services with due attention to gender and development; 2. Expand the ATBI innovation ecosystem through internationalization activities; 3. Strengthen existing and forge new Public-Private Partnerships for utilization of research outputs; 4. Disseminate information to enhance awareness about the project	Publication: 1Patent: 12Product: 26People: 32; 36Place: 39; 43Policy: 48	Benquet State University (BSU)	The target beneficiaries in the project are the technology users with their enterprise that will be incubated, the technology generators who will offer their protected technologies and serve as mentors, and the CMIs who will participate in the capacity building activities. Private and public partners in the national and international arena are also targeted to enhance the innovation ecosystem whilst they also fulfill their mandates.	01-Oct-24	30-Sep-26	ONGOING	7,120,938	5,565,792
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 6 (Project 3A). Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in Ifugao State University (ISU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Ifugao State University-Agri-aqua Technology Business Incubators capacity to increase the level of awareness of its personnel and incubates on technology transfer and commercialization through capacity development. Specific: 1. To capacitate the Technology and Business Incubator personnel and incubatees of the ISU-TBI; 2. To provide incubation services to potential adopters/incubatees/co-incubatees; and 3. To strengthen existing and new partnership among ISU-TBI clients, market and funding sources to sustain the operations.	Publication: 1Patent: 4; 10Product: 29People: 33; 36Place: 43; 46Policy: 48	Ifugao State University (ISU)	Technology and Business Incubator Office of ISU Technology Business Incubator personnel and manager ISU Researchers/ Inventors Technology adapters Incubatees	01-Oct-24	30-Sep-26	ONGOING	3,569,000	2,723,716
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Cordillera Administrative Region (Phase 2)	Project 7 (Project 4). Strengthening the Regional Knowledge Management (KM) Hub in Cordillera Administrative Region under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To enhance the Knowledge Management services of selected CMIs. Specific: 1. Facilitate the improvement of the Inventory of Knowledge Resources in the region; 2. Populate the e-Library system and the Real Time Monitoring System (RTMS) of the RAISE program; 3. Capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. Promote matured technologies to potential users and partners through various modalities i.e. Tech Demo/PIESTA/Technology Pitch Fest etc..	Publication: 1Patent: 12Product: 28People: 37Place: 43; 44Policy: 48	Benquet State University (BSU)	Consortium Member Institutions Men and women technology generators/ technology adopters/users	01-Oct-24	30-Sep-26	ONGOING	2,141,592	1,827,865

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 1. Strengthening the Regional Intellectual Property and Technology Business Management (IPTBM) in Eastern Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the Regional IPTBM in selected Consortium to intensify the technology commercialization and IP-management-related activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP Policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 1Patent: 5; 7; 10; 12; 13Product: 26People: 37Place: 46Policy: 48	Samar State University (SSU)	Researchers and Academic Institutions Faculty and Researchers: Enhanced skills and knowledge in IP management and technology commercialization. Students: Improved educational programs incorporating real-world innovation challenges, better preparing them for future careers. Institutions: Increased capacity for managing and commercializing research outputs, leading to higher institutional prestige and research funding. Startups and Entrepreneurs	01-Oct-24	30-Sep-26	ONGOING	5,355,688	4,707,632
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 2 (Project 1A). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Biliran Province State University (BIPSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project aims to strengthen the Intellectual Property-Technology Business Management (IPTBM) center of the Biliran Province State University to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM in Biliran Province State University; 2. Establish and enhance the IP policies of the university to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of the BIPSU; 4. Establish and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; 5. Actively participate and collaborate with the IPTBM network in the region.	Publication: 1Patent: 4Product: 26People: 37Place: 46Policy: 48	Biliran Province State University (BIPSU)	The project will target beneficiaries including technology transfer personnel, IPTBM staff, and the Innovation Office personnel of BIPSU. It will also focus on agri-aqua and natural resources graduates, as well as MSME cooperators of BIPSU involved in the development of AANR products.	01-Oct-24	30-Sep-26	ONGOING	2,309,152	1,853,166
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 3 (Project 1B). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Eastern Visayas Southern University (EVSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to strengthen the Intellectual Property-Technology Business Management (IPTBM) center of the Eastern Visayas State University to intensify its technology commercialization and IP-management-related activities, enhance its services. Specific: 1. Enhance and operationalize the IPTBM office in the Eastern Visayas State University 2. Establish and enhance the IP policies of the university to synchronize IP management and technology transfer activities; 3. Enhance the capability of faculty and researchers on IP and technology commercialization; 4. Intensify linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Publication: 1Patent: 4Product: 26People: 37Place: 46Policy: 48	Eastern Visayas State University (EVSU)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,331,216	1,817,456
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 4 (Project 1C). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Southern Leyte State University (SLSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to strengthen the Intellectual Property-Technology Business Management (IPTBM) center of the Southern Leyte State University to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM office in the Southern Leyte State University 2. Establish and enhance the IP policies of the university to synchronize IP management and technology transfer activities; 3. Enhance the capability of faculty and researchers on IP and technology commercialization; 4. Intensify linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Publication: 1Patent: 4Product: 26People: 37Place: 46Policy: 48	Southern Leyte State University (SLSU)	Innovators Faculty researchers and staff Regional collaborating agencies Local communities and Agri-Aqua sectors	01-Oct-24	30-Sep-26	ONGOING	3,161,716	1,849,108
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 5 (Project 1D). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in University of Eastern Philippines (UEP) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project aims to strengthen the Intellectual Property-Technology Business Management (IPTBM) center of the University of Eastern Philippines to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM in University of Eastern Philippines; 2. Establish and enhance the IP policies of the university to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of the UEP; 4. Establish and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; 5. Actively participate and collaborate with the IPTBM network in the region.	Publication: 1Patent: 4Product: 26People: 37Place: 46Policy: 48	University of Eastern Philippines (UEP)	The target beneficiaries are the faculty researchers of UEPAC ₁ -CS Colleges as well as personnel who will manage the universityAC ₁ -CS IP-TBM operations. Likewise, the potential cooperators of UEP who are into development of AANR products will benefit from this project.	01-Oct-24	30-Sep-26	ONGOING	2,333,216	1,166,608
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 6 (Project 1E). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Visayas State University (VSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Intellectual Property and Technology Business Management (IPTBM) in Visayas State University. Specific: 1. Enhance and operationalize the IPTBM office in VSU. 2. Enhance and harmonize the IP policies of VSU to synchronize IP management and technology transfer activities. 3. Mentor and capacitate the technology transfer officers in VSU. 4. Intensify linkages with various agencies to enhance activities on IPTBM.	Publication: 1Patent: 4Product: 26People: 37Place: 46Policy: 48	Visayas State University (VSU)	Technology transfer personnel, VSU faculty/researchers with technologies potential for IP protection and commercialization, Agri-Aqua and natural resources graduates MSMEs Young entrepreneurs/start-up	01-Oct-24	30-Sep-26	ONGOING	2,326,492	1,777,888
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 7 (Project 2). Strengthening the Regional Agri-Business Hub (ABH) in Eastern Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional Agribusiness in the Region Specific: 1. Build capacities of selected CMI staff on agribusiness development through trainings and mentorship; 2. Assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. Lead in the conduct of various pre-commercialization activities in the region; 4. Acquire partnerships with business companies for technology commercialization; and 5. Operationalize the regional agribusiness hub.	Publication: 1Patent: 4Product: 26People: 37Place: 46Policy: 48	Visayas State University (VSU)	The target beneficiaries are the following: The six RAISE Phase 1 CMIs (VSU, BIPSU, ESSU, EVSU, SLSU, SQU), Faculty/staff/researchers directly involved in the preparation of the precom activities MSMEs, entrepreneurs, agrpreneurs/ potential agrpreneurs & start ups, Consortia researchers and technology transfer officers, Prospective adopters of technologies or product generated from agri-aqua sector, Other HEIs/LGU/Govt Line Agencies	01-Oct-24	30-Sep-26	ONGOING	4,100,000	3,147,370

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 8 (Project 3). Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Eastern Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Eastern Visayas under the RAISE Program Phase 2 Specific: 1. Building up the capabilities of VICARP member CMIs on technology transfer and commercialization. 2. Enhancing the commercialization of technologies developed by VSU and VICARP member CMIs through co-incubation. 3. Providing thorough technical and business development support to VICARP member CMIs and Incubatees	Publication: Patent: 4Product: 26People: 37Place: 46Policy: 48	Visayas State University (VSU)	MSMEs/ Industry and value chain players VICARP member CMIs Non-VICARP member CMIs AANR students, graduates and other entrepreneurs	01-Oct-24	30-Sep-26	ONGOING	5,584,104	4,220,472
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Eastern Visayas (Phase 2)	Project 9 (Project 4). Strengthening the Regional Knowledge Management (KM) Hub in Eastern Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To enhance the knowledge management services of selected CMIs. Specific: 1. To facilitate the improvement of the Inventory of Knowledge Resources in the region; 2. To populate the e-Library system and the Real Time Monitoring System (RTMS) of the RAISE program; 3. To capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. To promote matured technologies to potential users and partners.	Publication: Patent: 4Product: 26People: 37Place: 46Policy: 48	Visayas State University (VSU)	The target beneficiaries of the project are the following: Knowledge Management CMIs Representatives Consortia CMI researchers and technology generator Prospective adoptors of technologies generated from this project Government partners/Private industry Students	01-Oct-24	30-Sep-26	ONGOING	2,248,352	1,651,066
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 1. Strengthening the Regional Intellectual Property and Technology Business Management (IPTBM) in Ilocos under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in the selected Consortium to intensify the technology commercialization and IP-management-related activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intently linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region. 6. Develop an Intellectual Property Management System (IPMS) as a Decision Support Tool. Institutional IPTBM To strengthen the IPTBM of the Mariano Marcos State University (MMSU) to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM in MMSU; 2. Establish and enhance the IP policies of MMSU to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of MMSU; 4. Intently linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Regional IPTBM Publications1 Regional Training Report on Patent Mining Mentorship1 Regional Training Report on Spinoff Policy Training1 Regional Training Report on echo Patent Mining/Spinoff2 Regional Consolidated RAISE Program report1 Regional IPTBM Operations Manual prepared, approved and implementedProducts: 2 Regional list of Priority R&D areas/commodity prepared and updated1 Regional Technology and IP inventory prepared and updated1 Regional Sustainability Plan prepared2 consolidated regional IPTBM reports (IPs filed, tech commercialized, etc)2 People and Services2 Regional Pitch Fest conductedCoordinated participation of 5 CMIs on national Patent Mining MentorshipCoordinated participation of 5 CMIs on National Spin-off Policy Training Coordinated participation of 5 CMIs on National Valuation TrainingCoordinated attendance of 5 CMI staff in the national Patent Mining MentorshipCoordinated attendance of 5 CMI staff in the national spin-off policyCoordinated attendance of 5 CMI staff in the IP valuation training1 Regional IP Audit and Inventory Workshop conductedTrained 10 CMI staff on IP Audit & Inventory Workshop (updating)1 Regional Policy/Tech Transfer Protocol review conducted Trained 10 CMI staff on Policy/TTP review1 Regional echo IPMC/ABMS/TCMS/TPMS conducted Trained 10 CMI staff on echo IPMC/ABMS/TCMS/TPMSParticipate in the content build-up & updating of RAISE RTMS1 Regional echo seminar on Patent Mining/Spin-off conductedTrained 10 CMI staff on Patent Mining/Spin-off1 Regional tech/business pitch day conducted1 Regional promotional activity (e.g., exhibit, boot camps, IP caravan, etc.)Places and Partnerships: CMIs assisted in the commercialization of technologies1 RAISE Advisory Council created (with BOR approval) and convened1 RAISE Advisory Council Resolution preparedPolicies1 Regional IPTBM Policy enhanced and implementedInstitutional IPTBM Publications5 Information, Education, and Communication (IEC) materials2 Training reports on Institutional echo on Publications 5 IEC2 training report on institutional echo on IPMC/ABMS/TCMS/TPMS/Spin-off (Patent Mining)Patents10 IP Applications (UM & Patent only)10 Other IPs filed (Copyright, Trademark, etc.)1 Patent granted4 UM registeredProducts1 DMMSU list of Priority R&D areas/commodity prepared and updated1 DMMSU IP and Technology inventory prepared and updated2 DMMSU Sustainability Plan prepared2 consolidated IPTBM report (IPs filed, tech commercialization, etc.)25 Prior Art Search2 inventory of knowledge resources prepared and updated2 DMMSU communication plan developed/enhanced & implemented10 Technology Communication plans developed/enhanced & implemented10 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared2 technologies pitched1 Technology Commercialized1 Patent Mining Report preparedPeople and Services1 DMMSU staff trained in Patent Mining1 DMMSU staff trained in Spin Off Policy2 DMMSU staff trained in IP Valuation Training1 DMMSU staff attended regional IP Audit & Inventory Workshop (updating)2 DMMSU staff attended regional IP Policy/Tech Trans Protocol review (updating)2 DMMSU staff attended regional Communication Plan Workshop (updating)4 DMMSU staff trained on Regional echo IPMC/ABMS/TCMS/TPMS2 institutional echo seminar on IPMC/ABMS/TCMS/TPMS/Spin-offPatent Mining conducted70 of researchers trained on echo seminarsParticipate to content build up of RTMS1 Pitching activity conductedPlaces and Partnerships2 Commitment letter for the national trainings2 Partnership agreements with Business/Trade Institutions2 Commercialization agreement2 Technology Licensing AgreementPolicies: IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 Spin-off policy crafted/enhancedinstitutionalization of the IPTBM in the CMI	Mariano Marcos State University (MMSU)	Consortium Member InstitutionsResearch and Development InstitutionsLocal Government UnitsMSMEs/IndustriesPrivate agenciesstudents	01-Oct-24	30-Sep-26	ONGOING	6,209,470	4,785,129
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 2 (Project 1A). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Don Mariano Marcos Memorial State University (DMMSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To advance IP-TBM offices IP protection and Commercialization Management through the RAISE Program. Specific: 1. Strengthen IP Audit System to effectively manage AANR technologies. 2. Upskill IP-TBM Offices on IP Management to increase IP Filings and Commercialization. 3. Heighten IP Awareness among CMIs and Local Government Units in La Union. 4. Promote IP protected technologies viable for commercialization 5. Develop an Intellectual Property Management System for Improved decision-making.	Publications: 5 IEC2 training report on institutional echo on IPMC/ABMS/TCMS/TPMS/Spin-off (Patent Mining)Patents10 IP Applications (UM & Patent only)10 Other IPs filed (Copyright, Trademark, etc.)1 Patent granted4 UM registeredProducts1 DMMSU list of Priority R&D areas/commodity prepared and updated1 DMMSU IP and Technology inventory prepared and updated2 DMMSU Sustainability Plan prepared2 consolidated IPTBM report (IPs filed, tech commercialization, etc.)25 Prior Art Search2 inventory of knowledge resources prepared and updated2 DMMSU communication plan developed/enhanced & implemented10 Technology Communication plans developed/enhanced & implemented10 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared2 technologies pitched1 Technology Commercialized1 Patent Mining Report preparedPeople and Services1 DMMSU staff trained in Patent Mining1 DMMSU staff trained in Spin Off Policy2 DMMSU staff trained in IP Valuation Training1 DMMSU staff attended regional IP Audit & Inventory Workshop (updating)2 DMMSU staff attended regional IP Policy/Tech Trans Protocol review (updating)2 DMMSU staff attended regional Communication Plan Workshop (updating)4 DMMSU staff trained on Regional echo IPMC/ABMS/TCMS/TPMS2 institutional echo seminar on IPMC/ABMS/TCMS/TPMS/Spin-offPatent Mining conducted70 of researchers trained on echo seminarsParticipate to content build up of RTMS1 Pitching activity conductedPlaces and Partnerships2 Commitment letter for the national trainings2 Partnership agreements with Business/Trade Institutions2 Commercialization agreement2 Technology Licensing AgreementPolicies: IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 Spin-off policy crafted/enhancedinstitutionalization of the IPTBM in the CMI	Don Mariano Marcos Memorial State University (DMMSU)	Consortium Member InstitutionsResearch and Development InstitutionsLocal Government UnitsMSMEs/IndustriesPrivate agencies	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,771,225
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 3 (Project 1B). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Ilocos Sur Polytechnic State College (SPSC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the IPTBM of SPSC to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM in SPSC; 2. Establish and enhance the IP policies of SPSC to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of SPSC; 4. Intently linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Publications: 5 IEC2 Training report in Institutional echo on IPMC/ABMS/TCMS/TPMS/Spin-off (Patent Mining)Patents:10 IP Applications (UM & Patent only)10 other IPs filed (Copyrights, Trademark, etc.)1 Patent granted4 UM RegisteredProducts:10 PAS Reports1 IP and technology inventory updated1 ISPSC communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared2 technologies pitched1 Technology commercialized1 Patent Mining Report preparedPeople and Services:1 CMI staff trained in Patent Mining1 CMI Staff trained in Spin Off Policy1 CMI Staff trained in IP Valuation training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on regional echo IPMC/ABMS/TCMS/TPMS2 CMI staff trained on regional echo seminar on Patent Mining/Spin-off2 institutional echo seminar on IPMC/ABMS/TCMS/TPMS/Spin-off (Patent Mining) conducted20% of researchers trained on echo seminarsParticipate to content build-up of RTMS1 Pitching activity conductedPlaces and Partnerships:1 Commitment Letter for the national trainings2 Partnership agreement w/ Business/Trade Institutions2 Commercialization Agreement1 Technology Licensing AgreementPolicies:1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 Spin-off policy crafted/enhancedinstitutionalization of the IPTBM in the CMI	Ilocos Sur Polytechnic State College (SPSC)	Research and Development InstitutionsLocal Government UnitsMSMEs/IndustriesPrivate agencies	01-Oct-24	30-Sep-26	ONGOING	2,600,000	1,321,164

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 4 (Project 1C). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Pangasinan State University (PSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the PSU-IP-TBM office in the selected Consortium to intensify the technology commercialization and IP-management-related activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBM in PSU; 2. Establish and enhance the IP Policies of PSU to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of PSU; 4. Intensify linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Publications:5 IEC Materials2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent MiningPatents:10 IP applications (Patent and UM)20 other IPs filed (Copyrights, Trademarks, etc.)1 Patent granted 4 UM RegisteredProducts:20 Prior Art Search Reports12 IP Education / Awareness caravan2 Patent Search Training2 Patent Drafting Training 1 Technology and IP Inventory updated1 PSU Communication plan developed/enhanced and implemented5 Technology Communication plans developed/enhanced and implemented5 Pre-commercialized reports prepared2 technologies pitched1 technology commercialized1 Patent mining report preparedPeople and Services:1 CMI staff trained in Patent Mining1 PSU staff trained in Spin Off Policy1 PSU staff trained in IP Valuation training2 PSU staff attended the Regional IP Audit and Inventory workshop (updating)2 PSU staff attended the Regional Policy/Tech Trans Protocol review (updating)2 PSU staff attended the Regional Communication plan workshop (updating)At Least 2 PSU staff trained on regional echo IP/MC/ABMS/TCMS/TPMS; at least 2 PSU staff trained in Patent Mining/Spin-off Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Patent Mining/ Spin-off conducted20 researchers trained on echo seminarsParticipate to content build up of RTMS1 pitching activity conductedPlaces and Partnerships:1 commitment letter for the national trainings2 partnership agreements with Business/Trade/institutions1 Commercialization Agreement1 Technology Licensing Agreement (TLA)Policy:1 IP Policy enhanced and BOR- approved1 Technology Transfer Protocol enhanced and BOR-approved1 spin off policy crafted/enhancedInstitutionalization of of the IPTBM in the CMI	Pangasinan State University (PSU)	Consortium Member InstitutionsResearch and Development InstitutionsLocal Government UnitsMSMEs/IndustriesPrivate Agencies	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,788,002
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 5 (Project 1D). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in University of Northern Philippines (UNP) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the IPTBM of the UNP to intensify its technology commercialization and IP-management-related activities. Specific: To enhance and operationalize the IPTBM in UNP; Establish and enhance the IP policies of the UNP to synchronize IP management and technology transfer activities; Capacitate the technology transfer officers and other personnel of the UNP; Intensify linkages with various agencies to enhance activities of the IPTBM; and Actively participate and collaborate with the IPTBM network in the region.	Publications:10 IEC2 Training reports in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent MiningPatents:10 IP applications (Patent & UM only)10 Other IPs filed (Copyright, Trademark, etc.)1 Patent granted4 UM registeredProducts:5 Prior Art Search Reports1 list of Priority R&D areas/commodity prepared and updated1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 UNP communication plan developed/enhanced & implemented5 Technology Communication Plans developed/enhanced & implemented5 Technology Commercialization Plans developed/enhanced & implemented5 Pre-commercialization reports prepared2 technologies pitched1 technology commercialized1 IPTBM report (IPs filed, tech commercialization, etc.)People and Services:1 UNP staff trained in Patent Mining1 UNP staff trained in Spin-off Policy1 UNP staff trained in IP Valuation training2 UNP staff attended regional IP Audit & Inventory Workshop (updating)2 UNP staff attended regional IP Policy/Tech Transfer Protocol review (updating)2 UNP staff attended regional Communication Plan Workshop (updating)2 UNP staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS2 UNP staff trained on Regional echo seminar on Patent Mining/Spin-off Institutional echo seminars on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted20% of researchers trained on echo seminarsParticipate to content build-up of RTMS1 Pitching activity conductedPlaces and Partnerships:1 Commitment letter for the national trainings2 partnership agreements w/ Business/Trade Institutions1 Commercialization agreement1 technology licensing agreement2 technologies assisted in the commercialization of ripe technologiesPolicies:1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 Spin-off policy crafted/enhancedInstitutionalization of the IPTBM in UNP	University of Northern Philippines (UNP)	Consortium Member InstitutionsResearch and Development InstitutionsLocal Government UnitsMSMEs/IndustriesPrivate Agencies	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,786,334
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 6 (Project 2). Strengthening the Regional Agri-Business Hub (ABH) in Ilocos under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen agribusiness management initiatives by cultivating a culture of innovation, efficiency, and resilience within CMIs, empowering them to thrive in the dynamic regional agribusiness landscape. Specific: 1. Build capacities of selected CMI staff on agribusiness development through trainings and mentorship; 2. Assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. Lead in the conduct of various pre-commercialization activities in the region; 4. Acquire partnerships with business companies for technology commercialization; and 5. Operationalize the regional agribusiness hub.	Publications:1 Regional training report on National Valuation Training2 Regional training report on echo ABMS/Valuation1 Regional training report on echo AgripreneurshipProducts:20 Pre-commercialization services (feasibility study, enterprise plan, business plan, market study, valuation report)1 consolidated regional report 1 Consolidated Technology Commercialization Plans of CMIsPeople and Services:Coordinated attendance of 10 CMI Staff in the national training Coordinated participation of 5 CMIs in the national valuation trainingCoordinated the attendance of 5 CMI staff in the national valuation trainingCoordinated participation of 10 CMI staff in the regional echo on ABMS/TCMS2 CMI staff trained/attended the national training1 Regional echo ABMS/Valuation Training conductedTrained 10 CMI staff regional echo on ABMS/Valuation training2 Regional training on agripreneurship for MSMEs or potential agripreneurs conducted10 Trained MSMEs or potential agripreneurs on agripreneurshipParticipate in the content build-up & updating of RAISE RTMSParticipation to 2 Regional Pitch FestUS Pitch decks reviewed and validatedAssisted 5 CMIs in pre-comm services (e.g. FS, BP, MS, MT, Val, EP)Places and Partnerships:5 partnership agreements w/ Business/Trade InstitutionsPolicies:AABH Regional Operations Manual finalized, BOR-approved and implemented	Mariano Marcos State University (MMSU)	CMI, MSMEs and interested HEIs	01-Oct-24	30-Sep-26	ONGOING	4,890,000	3,834,634
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 7 (Project 3). Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Ilocos under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	Regional ATBI General: Provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capacity building on technology transfer to R&D partners in the region; 2. Provide a venue for the convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new Public-Private Partnerships for the utilization of research outputs. Institutional ATBI General: Provide support in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capacity building on technology transfer to R&D partners in the region; 2. Provide a venue for the convergence of AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new Public-Private Partnerships for the utilization of research outputs.	Regional ATBI Publications:3 Regional Training Reports on echo TCMS2 Regional Training Reports on echo ATBI MCI Regional ATBI Operations Manual BOR- approved and implemented1 Regional ATBI Business Plan as approved by the Regional Consortia and implemented1 Regional ATBI service offering enhanced/updated1 Consolidated updated (& new if any) curricula of existing ATBIProduct:4 Technologies co-incubated1 Technologies Commercialized through the Regional ATBI assistance2 Consolidated regional ATBI report1 Regional ATBI Sustainability Plan enhanced and approved by the ConsortiaPeople and Services:2 New incubatees enrolled in any of the existing ATBI4 New incubatees under the co-incubation programCoordinated participation of 5 CMIs in Regional ATBI MCCoordinated participation of 5 CMIs in Regional TCMS2 Reg™ echo on ATBI MC conducted2 Reg™ echo on TCMS conductedTrained 10 CMI staff in regional ATBI MCTrained 10 CMI staff in the regional TCMS2 Regional technology/business pitch day conducted2 Regional promotional activity conductedAssisted 5 CMIs in ATBI servicesParticipate in the content build-up & updating of RAISE RTMSParticipation in 2 Regional Pitch FestPlaces and Partnerships:Facilitated 2 MOAs w/ incubatees4 Partnership agreements with Business/Trade InstitutionsInstitutional ATBIPublication:1 ATBI business plan revised as needed/enhanced and implemented1 ATBI operations manual revised as needed/enhanced and implemented1 Training report on institutional echo seminar10 Basic incubation curricula developed6 Advanced incubation curricula revised as needed/enhanced6 Acceleration curricula developed2 IEC or promotional material for the ATBI produced1 Promotional video for the ATBI developed2 IEC or promotional materials for the incubatees developed2 Promotional videos for the incubatees developed1 ATBI sustainability plan developed and implemented1 ATBI communication plan enhanced and implementedPatent:10 Trademarks filed10 Trademarks filedProduct:22 Technologies incubated/adopted by new incubatees2	Don Mariano Marcos Memorial State University (DMMMSU)	Start-up/Incubatees/CMI/Entrepreneur/Private Individual/Associations/Cooperatives/Farmer/Producers/Processors/Students/Faculty researchers/Technology Generators	01-Oct-24	30-Sep-26	ONGOING	7,046,000	5,644,577

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 8 (Project 3A). Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in Mariano Marcos State University (MMSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Provide support in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability building on technology transfer to R&D partners in the region; 2. Provide a venue for the convergence of AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new Public-Private Partnerships for utilization of research outputs.	Publication: 1 ATBI business plan revised as needed/enhanced and implemented; 1 ATBI operations manual revised as needed/enhanced and implemented; 1 Training report on institutional echo seminar; 10 Basic incubation curricula developed; 6 Advanced incubation curricula revised as needed/enhanced; 1 IEC or promotional material for the ATBI produced; 1 Promotional video for the ATBI developed; 16 IEC or promotional materials for the incubatees developed; 2 Promotional videos for the incubatees developed; 1 ATBI sustainability plan developed and implemented; 1 ATBI communication plan enhanced and implemented; 10 Trademarks filed; 10 Copyrights filed; 10 Technologies incubated/adopted by new incubatees; 2 Technologies co-incubated; 3 Technologies commercialized with issued Fairness Opinion Report; 10 New incubatees assisted and enrolled under basic incubation program; 6 Continuing incubatees enrolled in advanced incubation program; 10 Incubatees graduated from any of the incubation program; 10 Startups or spinoffs registered and launched; 10 Trainings for the ATBI staff conducted or participated in; 3 Pre-comm business plan implemented; 10 Trainings for the incubatees conducted; 10 Business plans for incubatees developed; 6 Business plans for the continuing incubatees improved; 4 Awareness seminars or promotional activities conducted; 2 Business pitching events, industry meetups, or networking events conducted or participated in; 2 Consortium member-agencies mentored on ATBI operations; 1 Institutional echo seminar conducted; 30 Trained staff on echo seminars; 1 Benchmarking activity conducted; ATBI operations included in the PCAARRD's ATBI web-based M&E system; 10 MOA's/MOUs with new incubatees forged; 6 MOA's/MOUs with continuing incubatees renewed; 5 MOA's/MOUs with organizations from the public and private sectors forged/renewed; ATBI Advisory Board/Committee/Council created and convened; Policy-institutionalization of ATBI in the CMI; span style="font-size: 11pt; background-color: transparent; font-variant: normal; font-weight: normal;">11pt; background-color: transparent; font-variant: normal; font-weight: normal;	Mariano Marcos State University (MMSU)	Start-ups, incubatees, MSMEs, Food processors, LGUs, RICs, 4H club, Farmer Cooperatives, Fisherfolks, student-entrepreneurs, faculty and researchers	01-Oct-24	30-Sep-26	ONGOING	4,085,000	3,117,627
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Ilocos (Phase 2)	Project 9 (Project 4). Strengthening the Regional Knowledge Management (KM) Hub in Ilocos under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to enhance the Knowledge Management services of selected CMIs. Specific: 1. Populate the e-Library system and the Real Time Monitoring System (RTMS) of the RAISE Program; 2. Facilitate the improvement of the inventory of Knowledge Resources in the region; 3. Capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. Promote matured technologies to potential users and partners through various modalities i.e. Exhibits in RSTW, FIESTA, Trade Fairs, Technology Pitch Fest, etc.	Publication: 1 Regional Training Report on Knowledge Resources Workshop; 1 Regional Training Report on echo TPMS; 1 Regional Training Report on Communication Plan Workshop; 6 Promotional materials (video, print/social media, RAISE calendar) developed; 1 Promotional video and flyer developed for e-library; 1 Patent; 5 Copyrights filed for promotional materials developed; 1 Regional Inventory of Knowledge Resources updated; 1 Regional Communication Plan updated and implemented; 1 Consolidated CMI Communication Plans updated, implemented and monitored; 1 Consolidated Technology Communication Plan updated; 1 People and Services; 1 Regional Inventory of Knowledge Resources Workshop conducted; 1 Trained 24 CMI Staff on Reg's Inventory of Knowledge Resources Workshops; 1 Regional Communication Plan Workshop conducted; 1 Trained 24 CMI Staff on Reg's Communication Plan 1 Regional echo on TPMS conducted; 2 Regional tech/business pitch day conducted; 2 Regional promotional activities conducted; 1 Participation to RTMS content build up training; 1 RAISE RTMS managed, facilitated, coordinated, and monitored for content build up; 1 Facilitate consolidation of knowledge resources for the e-lib; 1 Participation to 2 Pitch Fests; 1 Participation to 4 promotional activities (RSTW, FIESTA, Trade Fairs, etc.); 1 Contributed to content build up of PCAARRD's Innovation Corner; 1 Benchmark activity conducted (national); 1 Places and Partnerships; 1 At least 1 MOA forged with local media	Mariano Marcos State University (MMSU)	Faculty and fulltime researchers of the different CMIs Research Development Institutional Government Units/Students	01-Oct-24	30-Sep-26	ONGOING	2,100,000	1,596,153
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 1. Strengthening the Regional Intellectual Property and Technology Business Management (IPTBM) in Southern Mindanao under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the PCAARRD regional consortia on intellectual property management and commercialization of technologies and R&D outputs. Specific: 1. Manage regional AANR technologies and intellectual properties; 2. Support regional partners in developing their respective technology transfer programs; 3. Provide capability building on technology transfer to R&D partners; 4. Provide a venue for convergence of regional AANR stakeholders from the academe, public, private, sectors, NGOs and international partners; 5. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; 6. Strengthen existing and forge new Public Private Partnerships for R&D Results Utilization (RDRU); and 7. Facilitate the transfer and commercialization of technologies generated by the CMIs.	Publication: 2 Patent; 12 Product; 20 People; 37 Place; 38 Policy; 48	University of Southeastern Philippines (UseP)	NULL	01-Oct-24	30-Sep-26	ONGOING	4,282,422	3,280,686
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 10 (Project 2). Strengthening the Regional Agri-Business Hub (ABH) in Southern Mindanao under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To Strengthen the regional agribusiness hub in selected SMAARDEC CMIs Specific: 1. Build capacities of selected CMI staff on agribusiness development through trainings and mentorship; 2. Assess and package various R&D outputs to support the development and operation of viable AANR, based enterprises; 3. Lead in the conduct of various pre commercialization activities in the region; 4. Acquire partnerships with business companies for technology commercialization; and, 5. Operationalize the regional agribusiness hub.	Publication: Patent: 1; 3 Product; 20 People; 34 Place; 43 Policy; 48	University of Southeastern Philippines (UseP)	NULL	01-Oct-24	30-Sep-26	ONGOING	4,100,000	3,325,778
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 11 (Project 3). Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Southern Mindanao under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The main objective of the project is to establish a regional technology business incubation hub of SMAARDEC to provide an avenue for CMI innovators with potential ideas leading to the formation of start-up/spin-off. Specific: 1. Provide capability building on technology transfer to R&D partners in the region. 2. Provide a venue for convergence of Regional AANR stakeholders. 3. Provide incubation services to potential adopters/incubatees/co-incubatees. 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region. 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs.	Publication: Patent: Product: People: Place: Policy:	University of Southeastern Philippines (UseP)	NULL	01-Oct-24	30-Sep-26	ONGOING	4,992,684	3,754,612
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 12 (Project 4). Strengthening the Regional Knowledge Management (KM) Hub in Southern Mindanao under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Enhance the Knowledge Management services of selected CMIs. Specific: 1. Facilitate the improvement of the inventory of Knowledge Resources in the region; 2. Populate the e-Library system and the Real Time Monitoring System (RTMS) of the RAISE program; 3. Capacitate consortium member institutions on Knowledge Management and Technology Promotion; and 4. Promote matured technologies to potential users and partners through various modalities i.e. Tech, Demo/FIESTA/Technology	Publication: 2 Patent; 12 Product; 20 People; 32 Place; 43 Policy; 48	University of Southeastern Philippines (UseP)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,100,000	1,572,725
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 2 (Project 1A). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in the Bureau of Plant Industry - Davao National Crop Research, Development and Production Support Center (BPI-DNCRDPSC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2 Patent; 12 Product; 20 People; 32 Place; 43 Policy; 48	Bureau of Plant Industry - Davao National Crop Research Development and Production Support Center (BPI-DNCRDPSC)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,778,834

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 3 (Project 1B). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Davao de Oro State College (DoOSC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2Patent: 12Product: 20People: 32Place: 43Policy: 48	Davao de Oro State College (DoOSC)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,842,973	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 4 (Project 1C). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Davao del Norte State College (DNSC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2Patent: 13Product: 20People: 32Place: 38Policy: 48	Davao del Norte State College (DNSC)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	2,016,784	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 5 (Project 1D). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Davao Oriental State University (DOUSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2Patent: 12Product: 20People: 32Place: 38Policy: 48	Davao Oriental State University (DOUSU)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	2,016,784	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 6 (Project 1E). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Davao del Sur State College (DSSC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2Patent: 12Product: 20People: 32Place: 38Policy: 48	Davao del Sur State College (DSSC)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,798,899	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 7 (Project 1F). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in the Philippine Coconut Authority - Davao Research Center (PCA-DRC) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2Patent: 12Product: 20People: 32Place: 38Policy: 48	Philippine Coconut Authority-Davao Research Center (PCA-DRC)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,778,834	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 8 (Project 1G). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Southern Philippines Agribusiness and Marine and Aquatic School of Technology (SPAMAST) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: 2Patent: 12Product: 20People: 32Place: 43Policy: 48	Southern Philippines Agribusiness and Marine and Aquatic School of Technology (SPAMAST)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,778,834	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Mindanao (Phase 2)	Project 9 (Project 1H). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in University of the Philippines Mindanao (UPMindanao) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Regional IPTBM in SMAARDEEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region.	Publication: Patent: Product: People: Place: Policy:	University of the Philippines Mindanao (UPMin)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,778,834	
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 1. Strengthening the Regional Intellectual Property and Technology Business Management (IPTBM) in Southern Tagalog under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	Component A. Regional IPTBM General: To strengthen the Regional IPTBM in Southern Tagalog Agriculture Resources Research and Development Consortium (STARDEEC) to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region. Component B. Institutional IPTBM General Objective: Strengthen the IPTBM of the Cavite State University to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM in Cavite State University; 2. Establish and enhance the IP policies of the Cavite State University to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of the Cavite State University; 4. Intensify linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Component A. Regional IPTBMPublication: 1 Regional Training Report on Patent Mining1 Regional Training Report on Spinoff Policy Training1 Regional Training Report on echo Patent Mining/Spin-off2 Regional Consolidated RAISE Program Report 1 Regional IPTBM Operations Manual prepared, approved, and implemented20 IP Applications Product: 1 Regional list of Priority R&D Areas/Commodities prepared and updated1 Regional technology and IP inventory prepared and updated1 Regional Sustainability Plan preparedConsolidated regional IPTBM report (IPs filed, tech commercialized, etc.)People and Services: 2 Regional Pitch Fest conducted Coordinated participation of 20 male and female participants from CMIs on national Patent Mining MentorshipCoordinated participation of 20 male and female participants from CMI Staff in the national spinoff policyCoordinated participation of # CMIs on national Valuation TrainingCoordinated attendance of 1 Staff in the national patent mining mentorshipCoordinated attendance of 1 male and female participants from CMI Staff in the national spinoff policyCoordinated attendance of 1 Staff in the IP valuation training2 Regional IP Audit & Inventory Workshop conductedTrained 2 Staff on IP Audit & Inventory Workshop (updating)1 Regional Policy/Tech Transfer Protocol review conductedTrained 2 Staff on Policy/TTP Review1 Regional echo IPM/C/ABMS/TOMS/TPMS conductedTrained 2 participants from CMI Staff on echo IPM/C/ABMS/TOMS/TPMSParticipate in the content build-up & updating of RAISE RTMS1 Regional tech/business pitch day conducted1 Regional promotional activity conducted (e.g. exhibits, bootcamps, IP caravan, etc.)1 Derwent Training hosted1 Spinoff Policy Training hostedPlaces and Partnerships: 11 CMIs assisted in the commercialization of technologies 1 RAISE Advisory Council created (with BOR approval) and convened1 RAISE Advisory Council Resolution prepared1 letter of Commitment1 Memorandum of Agreement signedAt least 1 partnership agreements with the Philippine Chamber of Commerce Inc./Business	Component A. Regional Training Report on Patent Mining1 Regional Training Report on Spinoff Policy Training1 Regional Training Report on echo Patent Mining/Spin-off2 Regional Consolidated RAISE Program Report 1 Regional IPTBM Operations Manual prepared, approved, and implemented20 IP Applications Product: 1 Regional list of Priority R&D Areas/Commodities prepared and updated1 Regional technology and IP inventory prepared and updated1 Regional Sustainability Plan preparedConsolidated regional IPTBM report (IPs filed, tech commercialized, etc.)People and Services: 2 Regional Pitch Fest conducted Coordinated participation of 20 male and female participants from CMIs on national Patent Mining MentorshipCoordinated participation of 20 male and female participants from CMI Staff in the national spinoff policyCoordinated participation of # CMIs on national Valuation TrainingCoordinated attendance of 1 Staff in the national patent mining mentorshipCoordinated attendance of 1 male and female participants from CMI Staff in the national spinoff policyCoordinated attendance of 1 Staff in the IP valuation training2 Regional IP Audit & Inventory Workshop conductedTrained 2 Staff on IP Audit & Inventory Workshop (updating)1 Regional Policy/Tech Transfer Protocol review conductedTrained 2 Staff on Policy/TTP Review1 Regional echo IPM/C/ABMS/TOMS/TPMS conductedTrained 2 participants from CMI Staff on echo IPM/C/ABMS/TOMS/TPMSParticipate in the content build-up & updating of RAISE RTMS1 Regional tech/business pitch day conducted1 Regional promotional activity conducted (e.g. exhibits, bootcamps, IP caravan, etc.)1 Derwent Training hosted1 Spinoff Policy Training hostedPlaces and Partnerships: 11 CMIs assisted in the commercialization of technologies 1 RAISE Advisory Council created (with BOR approval) and convened1 RAISE Advisory Council Resolution prepared1 letter of Commitment1 Memorandum of Agreement signedAt least 1 partnership agreements with the Philippine Chamber of Commerce Inc./Business	Cavite State University (CVSU)	Male and female faculty and Researchers: IP incentives through IP filing, documents for promotion under IC, royalty in case of commercialization of technologyMale and female authors, artists, and other creators- Protection of their creative worksUniversities and research institutions-in dealing with key issues in IP management	01-Oct-24	30-Sep-26	ONGOING	14,590,160	12,818,308

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 10 (Project 1), Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Romblon State University (RSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the IPTBM of the Romblon State University to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM in Romblon State University; 2. Establish and enhance the IP policies of the Romblon State University to synchronize IP management and technology transfer activities; 3. Capacitate the technology transfer officers and other personnel of the Romblon State University; 4. Intently linkages with various agencies to enhance activities of the IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region	Publications 5 IEC2 Training report in institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent10 IP Applications (UM & Patent only)10 Other IP's filed1 PCT Filed1 Patent Granted4 UM RegisteredProduct10 PAS Report1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople and Services1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted20s researchers trained on echo seminar/Participate to content build up of RTMS1 Pitching activity conducted Places and Partnerships1 Commitment Letter for the national trainings2 partnership agreement w/Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing AgreementPolicy1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	Romblon State University (RSU)	The proposed project targets RSU stakeholders, innovators, and technology adopters. It will also include individuals involved in Science and Technology-related activities. Additionally, it applies to all personnel involved in developing Agri-aqua research-based technology, which could be offered to investors or technology adopters for potential commercialization partnerships.Target BeneficiariesFaculty and researchersStudentsPartner Agencies	01-Oct-24	30-Sep-26	ONGOING	2,201,300	1,652,575
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 11 (Project 1), Strengthening the Intellectual Property and Technology Business Management (IPTBM) in the University of the Philippines Los Baños (UPLB) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General:To strengthen the Regional IPTBM in the selected Consortium to intensify the technology commercialization and IP-management-related activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBM in UPLB; 2. Enhance and harmonize the IP policy of UPLB to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of UPLB; 4. Intently linkages with various agencies to enhance activities on IPTBM; and 5. Support the management of the IPTBM network in the region.	Publications 5 IEC2 Training report in institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent10 IP Applications (Patent only)2 IP applications (UM only)10 Other IP's filed1 potential international adopter for PCT application1 Patent Granted4 UM RegisteredProduct14 PAS Report1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople and Services1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted50 researchers trained on echo seminar/Participate to content build up of RTMS1 Pitching activity conducted Places and Partnerships1 Commitment Letter for the national trainings2 partnership agreement w/ Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing AgreementPolicy1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	University of the Philippines Los Baños (UPLB)	The target beneficiaries of this project encompass a diverse array of individuals, groups, and organizations, including Existing IPTBM offices within STAARRDEC and their personnel,Other consortium member institutions (CMIs),AANR stakeholders, which span Academia/Public and private sectors,Non-government organizations (NGOs),Micro, Small, and Medium Enterprises (MSMEs),International partners/Potential entrepreneurs	01-Oct-24	30-Sep-26	ONGOING	2,300,000	1,874,984
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 12 (Project 2), Strengthening the Agri-business Hub (ABH) in Southern Tagalog under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project generally aims to strengthen the robust and dynamic ecosystem for agribusiness development through enhanced collaboration, capacity building, technology pre-commercialization, and expanded services of the regional agribusiness hub. Specific: 1. Build capacities of selected CMI staff on agribusiness development through trainings and mentorship; 2. Assess and package various R&D outputs to support the development and operation of viable AANR-based enterprises; 3. Leads in the conduct of various pre-commercialization activities in the region; 4. Acquire partnerships with business companies for technology commercialization; and 5. Operationalize the regional agribusiness hub.	Publications1 Regional Training Report on National Valuation Training2 Regional Training Report on echo ABMS/Valuation2 Regional Training Report on echo AgripreneurshipProduct20 Pre-Commercialization services4 technologies with business plan4 technologies with feasibility study4 technologies with market study4 technologies with validation technologies with enterprise plan (EP)1 Consolidated regional report1 Consolidated Technology Commercialization Plans of CMIsPeople and ServicesCoordinated attendance of # CMI Staff in the national training (c/o AABI SERO)Coordinated participation of # CMIs in the national valuation trainingCoordinated the attendance of 1 CMI Staff in the national valuation trainingCoordinated the attendance of 2 CMI Staff in the regional echo on ABMS/TCMS2 CMI Staff trained/attended the national training (c/o SERO)2 Reg*MI echo ABMS/Valuation Training conductedTrained 2 CMI Staff regional echo on ABMS/Valuation Training2 Regional Trainings on Agripreneurship for MSMEs or potential agripreneurs conducted10 Trained MSMEs or potential agripreneurs on agripreneurshipParticipate in the content build-up & updating of RAISE RTMSParticipation to 2 Regional Pitch Fests5 pitch decks reviewed and validatedAssisted 11 CMIs in pre-comm services (e.g. FS, BP, MS, MT, Val, EP)Places and Partnerships1 partnership agreements with Business/Trade InstitutionsPolicy/ABH Regional Operations Manual finalized, BOR- approved and implemented	Cavite State University (CVSU)	The project prioritizes the benefits for the following female and male technology generators and inventors of the various CMIs of the STAARRDEC regardless of academic rank and employment statusfemale and male personnel and staff of various CMIsfemale and male agri-entrepreneurs, business investors, faculty members, and students as well as consumers of agricultural products	01-Oct-24	30-Sep-26	ONGOING	4,100,000	3,138,103
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 13 (Project 3), Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in Southern Tagalog under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	Component A: Regional ATBI General: To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability-building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new public-private partnerships for utilization of research outputs. Component B: CVSU ATBI General: Provide support in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability building on technology transfer to R&D partners in Cavite State University; 2. Provide a venue for convergence of AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees;Facilitate public-private access to AANR technologies to improve the innovation ecosystem in Cavite State University; and 4. Strengthen existing and forge new Public Private Partnerships for utilization of research outputs. 5. Strengthen collaborations with technology experts and other institutions to offer valuable resources for developing agriculture-based products and services for incubatees; 6. Introduce initiatives to attract and engage investors, supporting incubates in their journey to building profitable agriculture-based technology enterprises; 7. Assist in growing the business of the continuing incubates into a more profitable and	Component A: Regional ATBIPublications2 Regional Training Reports on echo TCMS2 Regional Training Reports on echo ATBI MC1 Regional ATBI Operations Manual BOR-approved and implemented1 Regional ATBI Business Plan approved by the Regional Consortia and implemented1 Regional ATBI service offering enhanced/updated1 Consolidated updated curriculum of existing (& new if any) ATBI/Products 4 Technologies co-incubated2 Technologies Commercialized thru the Regional ATBI assistance 2 Consolidated regional ATBI report1 Regional ATBI Sustainability Plan enhanced and approved by the Consortia/People and Services2 New incubates enrolled in any of the existing ATBI4 New incubates (male or female) under co-incubation program1 Coordinated participation of 11 CMIs in Regional ATBI MCCoordinated attendance of 11 CMI Staff (male or female) in the national ATBI MCCoordinated participation of 11 CMIs in regional TCMS2Coordinated attendance of 11 CMI Staff (male or female) in the regional TCMS2 Regional echo on ATBI MC conducted2 Regional echo on TCMS2Coordinated Trained 22 CMI staff in the regional ATBI MCCoordinated 22 CMI staff in the regional TCMS2 Regional technology/ business pitch day conducted2 Regional promotional activity conductedAssisted 4 CMIs in ATBI servicesParticipate in the content build-up & updating of RAISE RTMSParticipation in 2 Regional Pitch FestsPlaces and PartnershipsFacilitated 2 MDAs w/ incubatees Partnership agreement with Business/Trade InstitutionsComponent B: Institutional ATBI (CVSU)Publications1 ATBI business plan revised as needed/enhanced and implemented1 ATBI operations manual revised as needed/enhanced and implemented1 Training report on institutional echo seminar10 Basic incubation curricula developed/Advanced incubation curricula revised as needed/enhanced2 IEC or promotional material for the ATBI produced1 Promotional video for the ATBI developed16 IEC or promotional materials for the incubatees developed2 Promotional videos for the incubatees developed1 ATBI sustainability plan developed and implemented1 ATBI communication plan	Cavite State University (CVSU)	The target beneficiaries of this project include the following individuals, groups and organizations:Existing ATBIs in Region IV and its personnel will be capacitated rendering them to be more qualified to extend necessary requests by incubates and other potential beneficiariesOther consortium institutions with no established ATBI will be benefit from this project because the Regional ATBI will be able help them to find potential adopters of their AANR technologies or maybe assisted to institutionalize their own ATBI unitsAANR stakeholders from academe, public and private sectors, non-government organizations (NGOs) and international partners are also more likely to benefit from this project because this is a good source of learning activities for business students. This will also be beneficial to public and private sectors which have similar mandates. Potential entrepreneurs who are not knowledgeable in terms of managing business are also the target beneficiary of this project because having capacitated personnel will help them learn the process.	01-Oct-24	30-Sep-26	ONGOING	8,500,000	6,367,012

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 14 (Project 3A). Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in Laguna State Polytechnic University (LSPU) under the RAISE Program Phase 2a	Rapid, inclusive and sustained economic growth	General Objective: Provide support in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specifically Objectives: Provide capability building on technology transfer to R&D partners in the region; Provide a venue for convergence of AANR stakeholders; Provide incubation services to potential adopters/incubatees/co-incubatees; Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and Strengthen existing and forge new Public Private Partnerships for utilization of research outputs.	Publications: 1 ATBI business plan developed, or revised as needed/enhanced and implemented1 ATBI operations manual revised as needed/enhanced and implemented1 Training report on institutional echo seminar10 Basic incubation curricula developed6 Advanced incubation curricula revised as needed/enhanced6 acceleration curricula developed10 IEC materials for the ATBI produced2 promotional videos for the ATBI developed22 IEC materials for the incubatees developed2 promotional videos for the incubatees developed1 ATBI sustainability plan developed and implemented1 ATBI communication plan enhanced and implemented1 Patent10 Trademarks filed10 Copyrights filedProducts22 Technologies incubated/adopted by new incubatees2 Technologies co-incubated3 Technologies commercialized with issued Fairness Opinion ReportPeople and Services10 New incubatees assisted and enrolled under incubation program (counts only if adopted SUC commercializable tech)9 Continuing incubatees enrolled at advanced incubation programs Acceleratees enrolled at acceleration programs Incubatees graduated from any of the incubation program10 Startups or spin offs registered and launched6 Trainings for the ATBI staff conducted or participated in10 Trainings for the incubatees conducted10 Business plans for incubatees developed Business plans for continuing incubatees improved6 Business plans for acceleratees improved4 Awareness seminars or promotional activities conducted4 Business pitching events, industry meetups, or networking events conducted or participated in2 Consortium member-agencies mentored on ATBI operations4 Institutional echo seminar conducted4 Trained 40 staff on echo seminars1 Benchmarking activities conductedATBI operations included in the PCAARRD's ATBI web-based M&E systemPlaces and Partnerships10 MOAs/MOUs with the incubatees forged6 MOAs/MOUs with the continuing incubatees renewed6 MOAs/MOUs with accelerated forged10 MOAs/MOUs with organizations from the public and private sectors forged/renewed1 ATBI Advisory Board/ Committee/ Council convened and Publications1 ATBI business plan developed1 ATBI operations manual developed1 Training report on institutional echo seminar2 IEC or promotional material for the ATBI produced1 Promotional video for the ATBI developed16 IEC or promotional materials for the incubatees developed2 Promotional videos for the incubatees developed1 ATBI sustainability plan developed and implemented1 ATBI communication plan developed and implemented1 Patent10 Trademarks filed5 Copyrights filedProduct16 Technologies incubated/adopted by new incubateesPeople and Services10 Incubatees assisted and enrolled under incubation programs Trainings for the ATBI staff conducted or participated in10 Trainings for the incubatees conducted10 Business plans for incubatees developed4 Awareness seminars or promotional activities conducted4 Business pitching events, industry meetups, or networking events conducted or participated in1 Institutional echo seminar conducted4 Trained 20 staff on echo seminars2 Benchmarking activities conductedATBI operations included in the PCAARRD's ATBI web-based M&E systemPlaces and Partnerships10 MOAs/MOUs with the incubatees forged5 MOAs/MOUs with organizations from the public and private sectors forged/renewed1 ATBI Advisory Board/ Committee/ Council organizePolysinstitutionalization of the ATBI in the CMI; Counterpart funds (at least P50,000 in cash or in kind), personnel (at least 2 full-time staff), office space, utilities, operators (e.g. incentivizing researchers and TJO)ATBI-related policies of the University revised as needed	Laguna State Polytechnic University (LSPU)	DOST-PCAARRD-LSPU-ATBI Project Team members: incubatees, co-incubatees, and other potential incubatees; Other consortium member institutions: AANR stakeholders from the academe (SUC), public, and private sectors, non-government organizations (NGOs), and international partners; Potential industry adopters and networks	01-Oct-24	30-Sep-26	ONGOING	4,401,017	3,321,059
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 15 (Project 3B). Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in Forest Products Research Development Institute (FPRDI) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Provide support in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new Public Private Partnerships for utilization of research outputs.	Publications: 3 Patent: 12 Product: 19 Publications: 1 ATBI business plan revised as needed/enhanced and implemented1 ATBI operations manual revised as needed/enhanced and implemented1 Training report on institutional echo seminar10 Basic incubation curricula developed10 Advanced incubation curricula developed, or revised as needed/enhanced3 IEC or promotional material for the ATBI produced1 Promotional video for the ATBI developed16 IEC or promotional materials for the incubatees developed8 Promotional videos for the incubatees developed1 ATBI sustainability plan developed and implemented1 ATBI communication plan developed and implemented1 Patent10 Trademarks filed10 Copyrights filedProduct16 Technologies incubated/adopted by new incubateesPeople and Services10 Incubatees assisted and enrolled under incubation programs Trainings for the ATBI staff conducted or participated in10 Trainings for the incubatees conducted10 Business plans for incubatees developed4 Awareness seminars or promotional activities conducted4 Business pitching events, industry meetups, or networking events conducted or participated in1 Institutional echo seminar conducted4 Trained 20 staff on echo seminars2 Benchmarking activities conductedATBI operations included in the PCAARRD's ATBI web-based M&E systemPlaces and Partnerships10 MOAs/MOUs with the incubatees forged5 MOAs/MOUs with organizations from the public and private sectors forged/renewed1 ATBI Advisory Board/ Committee/ Council organizePolysinstitutionalization of the ATBI in the CMI; Counterpart funds (at least P50,000 in cash or in kind), personnel (at least 2 full-time staff), office space, utilities, operators (e.g. incentivizing researchers and TJO)ATBI-related policies of the University revised as needed	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	NULL	01-Oct-24	30-Sep-26	ONGOING	3,649,930	2,763,247
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 16 (Project 3C). Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in Western Philippines University (WPU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Provide support in the transfer of technologies through capacity building, technology business incubation or co-incubation. Specific: 1. Provide capability building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new Public Private Partnerships for utilization of research outputs.	Publication: 3 Patent: 12 Product: 19 Publications: 1 ATBI business plan revised as needed/enhanced and implemented1 ATBI operations manual revised as needed/enhanced and implemented1 Training report on institutional echo seminar10 Basic incubation curricula developed10 Advanced incubation curricula developed, or revised as needed/enhanced3 IEC or promotional material for the ATBI produced1 Promotional video for the ATBI developed16 IEC or promotional materials for the incubatees developed8 Promotional videos for the incubatees developed1 ATBI sustainability plan developed and implemented1 ATBI communication plan developed and implemented1 Patent10 Trademarks filed10 Copyrights filedProduct16 Technologies incubated/adopted by new incubatees2 Technologies co-incubated3 Technologies commercialized with issued Fairness Opinion ReportPeople and Services10 New incubatees assisted and enrolled under incubation programs Continuing incubatees enrolled to the advanced incubation programs5 Incubatees graduated from any of the incubation program10 Startups or spinoffs registered and launched6 Trainings for the ATBI staff conducted or participated in10 Trainings for the incubatees conducted13 Business plans for incubatees developed6 Business plans for the continuing incubatees improved5 Awareness seminars or promotional activities conducted4 Business pitching events, industry meetups, or networking events conducted or participated in2 Consortium member-agencies mentored on ATBI operations1 Institutional echo seminar conducted30 Trained staff on echo seminars1 Benchmarking activities conductedATBI operations included in the PCAARRD's ATBI web-based M&E systemPlaces and Partnerships10 MOAs/MOUs with the incubatees forged6 MOAs/MOUs with the continuing incubatees renewed10 MOAs/MOUs with organizations from the public and private sectors forged/renewed1 ATBI Advisory Board/ Committee/ Council createdPolysinstitutionalization with BOR approval, counterpart funds: at least P500,000 in cash or in kind and at least 1 permanent	Western Philippines University (WPU)	WPU-ATBI Incubatees: farmers and Fisherfolks Cooperatives and Associations Existing MSMEs Tech Start-ups Local Government Units with Agri-aqua initiatives Non-governmental organizations (NGOs) with livelihood programs for the community Private individuals Student/faculty researchers of Western Philippines University Industry stakeholders Beneficiaries of agriculture/aquaculture alternative livelihood programs of the government and non-government organizations Venture capitalists (individuals or groups) who wants to engage in aquaculture/agriculture businesses	01-Oct-24	30-Sep-26	ONGOING	3,942,878	2,974,215
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 17 (Project 4). Strengthening the Regional Knowledge Management (KM) Hub in Southern Tagalog under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project aims to enrich knowledge management among member agencies of the Southern Tagalog Agriculture and Aquatic Resources Research and Development Consortium (STAARRDEC). Specific: 1. Facilitate the improvement of the Inventory of Knowledge Resources of the STAARRDEC member institutions; 2. Populate the RAISE Real-time monitoring system (RTMS), PALMS, and PCAARRD Elibrary thru content build-up and capacity building activities; 3. Capacitate consortium member institutions on Knowledge Management and Technology Promotion; 4. Facilitate a workshop on communication planning and IEC production for KM staff of CMIs; 5. Develop and implement communication objectives thru digital marketing strategies, IEC materials; and 6. Promote mature technologies to potential users and partners through various modalities i.e. Tech Demo/Fiesta/Technology Pitch Fest etc.	Publications: 1 Regional Training Report on Knowledge Resources Workshop1 Regional Training Report on echo TPMS Regional Training Report on Communication Plan Workshops6 Promotional materials (video, print/social media, RAISE calendar) developed1 Patent5 Copyrights filed for promotional materials developed Products Regional Training Report on Knowledge Resources workshop1 Regional Communication Plan updated and implemented1 Consolidated CMI Communication Plans updated, implemented and monitored1 Consolidated Technology Communication Plan updated165 Agri-Aqua technology-based IEC materials collected for E-Lib uploading1 Consolidated regional KM report1 Documentation of Lessons Learned and Best Practices of the Regional RAISE program People and Services1 Regional Inventory of Knowledge Resources Workshop conducted1 Trained 44 CMI Staff on Regional Inventory of Knowledge Resources Workshops1 Regional Communication Plan Workshop conducted1 Trained 22 CMI staff on Regional Communication Plan1 Regional echo on TPMS conducted2 Regional Tech/business pitch day conducted2 Regional promotional activity conducted1 Participation to RTMS content build up training1 RAISE RTMS managed and monitored1 Assisted 11 CMIs in KM Management services1 Facilitate consolidation of knowledge resources for the E-Lib1 Facilitate and coordinate content build-up of RTMS of the region2 Pitch Fest participated1 Participation to 2 Promotional activities1 Contribute to content build up of PCAARRD's Innovation Corner (2)	Cavite State University (CVSU)	The target beneficiaries of this project include the following individuals, groups, and organizations: Intellectual Property and Technology Business Management (IP-TBM) of selected SUCs/RDIs Technology transfer officers/managers (SUC/RDI) Researchers/inventors Knowledge Management Staff of CMIs Interested Investors General Public	01-Oct-24	30-Sep-26	ONGOING	2,092,329	1,628,813

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 2 (Project 1A). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Southern Luzon State University (SLSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the IPTBM of the Southern Luzon State University (SLSU) to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IP-TBM at SLSU; 2. Enhance and harmonize the IP policies of SLSU to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of SLSU; 4. Improve and harmonize the 2021 IPP and 2023 TTP of SLSU; 5. Intensity linkages with various agencies to enhance activities on IPTBM; and 6. Manage the IPTBM network in the region.	Publication: 5 IECs developed2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent: 10 IP rights applied for patent or UM/D Other IP rights filed1 PCT filed1 Patent granted4 UM registered Product: 20 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report prepared People: 1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IPP/TTP review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted20% of researchers trained on echo seminars/Participate to content build up of RTMS1 Pitching activity conducted Place: 1 Commitment Letter for the national training2 partnership agreements with Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing Agreement (TLA) Policy: 1 IPP enhanced and BOR-approved1 TTP enhanced and BOR-approved1 Spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	Southern Luzon State University (SLSU)	The project will benefit the following:IP-TBM personnel and STAARRDEC cluster representatives at SLSU,students, faculty, faculty-researchers, and non-teaching personnel at SLSU;industrial communities of SLSU including MSMEs, private industries, and non-government organizations (NGOs)	01-Oct-24	30-Sep-26	ONGOING	2,004,074	1,537,048
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 3 (Project 1B). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in the University of Rizal System (URS) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the IPTBM of the University of Rizal System to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance the operation of the IPTBM of the URS; 2. Enhance and harmonize the IP Policies and Technology Transfer Protocol of URS to synchronize IP management and technology transfer activities; 3. Increase the number of capacitated faculty and staff in IP and technology business management; 4. Intensity linkages with various agencies to enhance the promotion and commercialization activities of the URS; 5. Enhance and sustain activities related to IPTBM by identifying and strengthening IP protection, technology transfer, and commercialization; 6. Intensity project coordination and monitoring; and 7. Actively participate and collaborate with the IPTBM network in the region.	Publication: 5 IEC2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent: 10 IP Applications (UM & Patent only)10 Other IPs filed1 PCT filed1 Patent Granted4 UM RegisteredProduct:10 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople:1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted20% of researchers trained on echo seminars/Participate to content build up of RTMS1 Pitching activity conducted Place:1 Commitment Letter for the national training2 partnership agreement w/Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing AgreementPolicy:1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	University of Rizal System (URS)	The project implementation is intended to bring progress to the following:Administration of the University of Rizal System;Faculty members and staff of URS;Faculty and student researchers of URS and other education institutions in the province of Rizal;Stakeholders,investors and other researchers,Businesses and technology takers,Agri and aqua Farmers,URS IPTBM Office	01-Oct-24	30-Sep-26	ONGOING	2,000,997	1,583,962
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 4 (Project 1C). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Marinduque State University (MarSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Intellectual Property and Technology Business Management in Marinduque State University (MarSU) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program under Southern Tagalog Agriculture, Aquatic and Resources Research, Development and Extension Consortium (STAARRDEC). Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Establish and harmonize the IP policies of participating CMI to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensity linkages with various agencies to enhance activities on IPTBM; and 5. Actively participate and collaborate with the IPTBM network in the region.	Publication: 1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI5 IEC2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent: 10 IP Applications (UM & Patent only)10 Other IPs filed1 PCT filed1 Patent Granted4 UM RegisteredProduct: 10 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople: 1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop2 CMI Staff attended regional IP Policy/Tech Trans Protocol review2 CMI Staff attended regional CommPlan Workshop2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted20% of researchers trained on echo seminar/Participate to content build up of RTMS 1 Pitching activity conductedPlace:1 Commitment Letter for the national training2 partnership agreement w/Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing AgreementPolicy:1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	Marinduque State University (MarSU)	Marinduque State University's Intellectual Property and Technology Business Management Office (IP-TBM) encompass a wide range of stakeholders. This includes:Faculty, Researchers, and Students: Who will benefit from enhanced support for innovation, intellectual property management, and technology commercialization, fostering a culture of innovation and entrepreneurship within the academic community.Local Entrepreneurs and Startups: Who will gain access to intellectual property assets, technology transfer opportunities, and support for commercializing innovative products and services, facilitating the creation of new businesses and job opportunities.Farmers and Fishers: Who stand to benefit from the adoption of innovative solutions developed through research and innovation activities, leading to improved productivity, sustainability, and resilience in the Agri-aqua sector.Industry Stakeholders: Including agricultural and aquacultural enterprises, who can leverage technology transfer opportunities, research collaborations, and access to intellectual property assets to enhance their competitiveness, productivity, and market access.Local Communities: Who will experience the indirect benefits of economic growth, job creation, and improved livelihoods resulting from the advancement of the Agri-aqua sector and the broader impact on regional development.	01-Oct-24	30-Sep-26	ONGOING	2,000,387	1,509,227
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 5 (Project 1D). Strengthening the Intellectual Property and Technology Business Management (IPTBM) at Batangas State University (BatStateU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The general objective of this project is to strengthen the IPTBM of the BatStateU to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IP-TBMs of BatStateU; 2. Enhance and harmonize the IP policies of BatStateU to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the Faculty and Staff of BatStateU; 4. Intensity the technology promotion and commercialization activities of BatStateU; 5. Identify and intensity linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; and 6. Coordinate, monitor, and oversee the project implementation. Actively participate and collaborate with the IPTBM network in the region.	Publication:5 IEC2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent:10 IP Applications (UM & Patent only)10 Other IPs filed1 PCT filed1 Patent Granted4 UM RegisteredProduct:12 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople:3 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted100 researchers trained on echo seminars/Participate to content build up of RTMS1 Pitching activity conducted Place:1 Commitment Letter for the national training2 partnership agreement w/Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing AgreementPolicy:1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	Batangas State University (BatStateU)	The project will benefit the following:IP-TBM personnel and STAARRDEC cluster representatives at BatStateU,Students, faculty, faculty-researchers, and non-teaching personnel at BatStateU,Clientele communities of BatStateU including MSMEs, private industries, and non-government organizations (NGOs)	01-Oct-24	30-Sep-26	ONGOING	2,050,000	1,585,994

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 6 (Project 1E). Strengthening the Intellectual Property and Technology Business Management (IPTBM) at Rizal Technological University (RTU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Strengthen the IPTBM of the Rizal Technological University (RTU) to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance the operations of the IP-TBM of RTU; 2. Facilitate the full implementation of the IP Policy and Technology Transfer Protocol of RTU; 3. Mentor and capacitate the technology transfer officers and faculty of RTU; 4. Intensify the technology promotion and commercialization activities of RTU; 5. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; and 6. Actively participate and collaborate with the IPTBM network in the region.	Publication: 25 IEC2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent:10 IP Applications (UM & Patent only)10 Other IPIs filed1 PCT filed1 Patent Granted4 UM RegisteredProduct10 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)1 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted20% of researchers trained on echo seminarParticipate to content build up of RTM51 Pitching activity conducted Places and Partnerships1 Commitment Letter for the national trainings2 partnership agreement w/Business/Trade Institutions1 Commercialization Agreement1 Technology Licensing AgreementPolicy1 IP Policy enhanced and BOR-approved1 Technology Transfer Protocol enhanced and BOR-approved1 Spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	Rizal Technological University (RTU)	Faculty members (teaching and non-teaching); Researchers (part time/ full time faculty, staff and students); Visiting faculty; External researchers and Other government, private and industry sectors	01-Oct-24	30-Sep-26	ONGOING	2,002,000	1,539,066
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 7 (Project 1F). Strengthening the Intellectual Property and Technology Business Management (IPTBM) at Western Philippines University (WPU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to strengthen the Intellectual Property and Technology Business Management (IP-TBM) at the Western Philippines University (WPU) through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program under the Southern Tagalog Agriculture, Aquatic and Resources Research, Development and Extension Consortium (STAARDEC). Specific: 1. Enhance and operationalize the WPU IPTBM; 2. Enhance and harmonize the IP policies of the WPU IPTBM to synchronize with the IP management and technology transfer activities of all participating SUGs under the STAARRDEC; 3. Mentor and capacitate the technology transfer officers of the WPU IPTBM; 4. Intensify the technology promotion and commercialization activities of the WPU; identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; and 5. Actively participate and collaborate with the IPTBM network in the region.	Publication5 IECs developed2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent:10 IP rights applied for patent or UM10 Other IP rights filed1 PCT filed1 Patent granted4 UM registeredProduct10 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report prepared People 5 Services1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)1 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted50 researchers trained on echo seminarsParticipate to content build up of RTM51 Pitching activity conducted Places and Partnerships1 Commitment Letter for the national trainings2 partnership agreements with Business/Trade institutions1 Commercialization Agreement1 Technology Licensing Agreement (TLA) Policy1 IPP enhanced and BOR-approved1 TTP enhanced and BOR-approved1 Spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	Western Philippines University (WPU)	The target beneficiaries of the Western Philippines University (WPU) Intellectual Property Technology Business Management (IP-TBM) program are diverse and encompass various groups within and outside the university. These include: Faculty-Researchers/Technology MakersStudentsUniversity StaffLocal Community/Industry PartnersOther Economic Institutions	01-Oct-24	30-Sep-26	ONGOING	2,314,326	1,778,308
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 8 (Project 1G). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Laguna State Polytechnic University (LSPU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To Strengthen the IPTBM of the Laguna State Polytechnic University to intensify its technology commercialization and IP-management-related activities. Specific: 1. Enhance and operationalize the IPTBM of Laguna State Polytechnic University; 2. Enhance and harmonize the IP policies and to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology developer of LSPU including Faculty, staffs, and students; 4. Intensify linkages with various agencies to enhance the commercialization activities of LSPU; 5. Actively participate and collaborate with the IPTBM network in the region.	Expected Outputs (EP):Publication5 IECs developed2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent:10 IP applications (2 Patents and 8 UM)10 IPIs filed (eg. Trademark , copyright)11 PCT filed1 Patent Granted4 UM RegisteredProduct10 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared2 Technologies Pitched1 Technology Commercialized 1 Patent Mining report preparedPeople & Services1 CMI staff trained in Patent Mining1 CMI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training2 CMI staff attended regional IP Audit & Inventory Workshop (updating)2 CMI staff attended regional IP Policy/Tech trans protocol review (updating)2 CMI staff attended a regional CommPlan workshop updating.2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/ Spin-off/ Patent Mining conducted8 researcher trained on echo seminarParticipate to 1 content build up of RTM51 Pitching Activity conductedPlaces and Partnerships1 Commitment Letter for the national trainings2 partnership agreements with Business/Trade institutions1 Commercialization Agreement1 Technology Licensing Agreement (TLA)Policy1 IPP enhanced and BOR-approved1 TTP enhanced and BOR-approved1 Spinoff Policy crafted/enhanced-ii dir="T" style="list-style-type: disc; font-size: 10pt; font-family: Arial, sans-serif; color: rgb(0, 0, 0); background-color: transparent; font-variant: numeric: normal; font-variant-east-asian: normal; font-variant-alternates: normal; font-variant-position: nor	Laguna State Polytechnic University (LSPU)	The proposed project is intended for the LSPU stakeholders, innovators and technology adopters. It will also involve those individuals who are engaged in Science and Technology-related activities. It also applies to all personnel engaged in the development of Agri-aqua research-based technology that may be made available to investors or technology adopters for potential commercialization partnerships.Faculty members (teaching and non-teaching); Researchers (part time/ full time faculty, staff and students); Visiting faculty; External researchers and Other government, private and industry sectors	01-Oct-24	30-Sep-26	ONGOING	2,624,790	1,979,398
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Southern Tagalog (Phase 2)	Project 9 (Project 1H). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Forest Products Research Development Institute (FPRDI) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: The project aims to enhance and strengthen institutional capacity for IP management and commercialization of FPRDI developed technologies through the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program under Southern Tagalog Agriculture, Aquatic and Resources Research, Development and Extension Consortium (STAARDEC). Specific: 1. Enhance and operationalize the IPTBM of FPRDI; 2. Establish, enhance and harmonize the IP policies of FPRDI to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer specialists and researchers of FPRDI; 4. Intensify the technology promotion and commercialization activities of FPRDI; 5. Identify and intensify linkages with various agencies to enhance activities on intellectual property protection and management and technology transfer & commercialization; and 6. Actively participate and collaborate with the IPTBM network in the region.	Publication5 IECs developed2 Training report in Institutional echo on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent:10 IP rights applied for patent or UM10 Other IP rights filed1 PCT filed1 Patents granted4 UM registered5 UM filedProduct16 PAS Reports1 IP and technology inventory updated1 Inventory of knowledge resources prepared and updated1 CMI communication plan developed/enhanced & implemented5 Technology Communication plans developed/enhanced & implemented5 Technology Commercialization plans developed/enhanced & implemented5 Pre-commercialization reports prepared 2 Technologies pitched1 Technology Commercialized 1 Patent Mining Report preparedPeople 8 Services1 FPRDI staff trained in Patent Mining1 FPRDI staff trained in Spin Off Policy1 CMI staff trained in IP Valuation Training1 FPRDI staff attended regional IP Audit & Inventory Workshop (updating)2 FPRDI staff attended regional IP Policy/Tech Trans Protocol review (updating)2 CMI staff attended regional Communication Plan Workshop (updating)2 CMI staff trained on Regional echo IP/MC/ABMS/TCMS/TPMS 2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off 2 Institutional echo seminar on IP/MC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted30 researchers trained on echo seminarsParticipate to content build up of RTM51 Pitching activity conducted Places and Partnerships1 Commitment Letter for the national trainings2 partnership agreements with Business/Trade institutions1 Commercialization Agreement1 Technology Licensing Agreement (TLA)Policy1 IPP enhanced and BOR-approved1 TTP enhanced and BOR-approved1 Spinoff Policy crafted/enhancedInstitutionalization of the IPTBM in the CMI	DOST-Forest Products Research and Development Institute (DOST-FPRDI)	The target beneficiaries of this project include the following individuals, groups, and organizations: Existing IPTBM Offices in STAARDEC and its personnel; Other consortium member institutions; AANR stakeholders from the academe, public, and private sectors, non-government organizations (NGOs), Micro, Small, and Medium Enterprises (MSMEs), and international partners; and Potential entrepreneurs.	01-Oct-24	30-Sep-26	ONGOING	2,955,608	2,141,784

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 1. Strengthening the Regional Intellectual Property and Technology Business Management (IPTBM) in Western Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	Component A: Regional IPTBM General: The Regional IPTBM component project generally aims to strengthen the Regional IPTBM in WESVAARRDEC to intensify the technology commercialization activities of participating CMIs. Specific: 1. Enhance and operationalize the IPTBMs of the participating agencies; 2. Enhance and harmonize the IP policies of participating CMIs to synchronize IP management and technology transfer activities; 3. Mentor and capacitate the technology transfer officers of the participating agencies; 4. Intensify linkages with various agencies to enhance activities on IPTBM; and 5. Manage the IPTBM network in the region. Component B: IPTBM in CAPSU The institutional IPTBM component project, the IPTBM in CAPSU, aims to intensify and strengthen the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations at Capiz State University to sustain technology commercialization. Component B: IPTBM in CAPSU Specific?	Publication: Patent: Product: People: Place: Policy:	Capiz State University (CapSU)	NULL	01-Oct-24	30-Sep-26	ONGOING	8,936,058	7,339,682
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 10 (Project 1), Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Iloilo State University of Fisheries Science and Technology (ISUFST) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the operations of the Intellectual Property and Technology Business Management (IP-TBM) in Iloilo State University of Fisheries Science and Technology and to intensify its technology commercialization activities. Specific: 1. To synchronize the IP Management and Technology Transfer Activities of Iloilo State University of Fisheries Science and Technology; 2. To capacitate the Technology Transfer Team of Iloilo State University of Fisheries Science and Technology; 3. To strengthen the IP generation and protection, and technology promotion and commercialization activities of Iloilo State University of Fisheries Science and Technology; and 4. To intensify linkages and partnerships with various agencies to enhance activities on IP management and technology commercialization.	Publication: Patent: Product: 30People: 33Place: 46Policy: 48	Iloilo State University of Fisheries Science and Technology (ISUFST)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,966,784
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 11 (Project 1), Strengthening the Intellectual Property and Technology Business Management (IPTBM) in University of the Philippines Visayas (UPV) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the operation of Intellectual Property and Technology Business Management (IP-TBM) in University of the Philippines Visayas to intensify technology commercialization activities. Specific: 1. To enhance the IP generation and protection activities of UP Visayas IP-TBM; 2. To synchronize the IP management and technology transfer activities of UP Visayas; 3. To intensify the technology promotion and commercialization activities of UP Visayas; and 4. Intensify the linkages with various agencies to enhance IP management and technology transfer activities.	Publication: 3Patent: 12Product: 26People: 33Place: 46Policy: 48	University of the Philippines Visayas (UPV)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	3,180,000	2,643,514
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 12 (Project 2), Strengthening the Regional Agri-business Hub (ABH) in Western Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the Agribusiness Hub in Region VI Specific: 1. Enhance the capacity of selected CMI Staff on agribusiness development through trainings and mentorship; 2. Extend the capacity building on agribusiness development to other HEIs/LGUs/Govt Agencies and existing and potential agipreneurs; 3. Assess, package and promote R&D outputs for potential adoption and/or establishment of AANR-based enterprise; 4. Acquire partnerships with business entities for potential technology commercialization; and 5. Operationalize the regional agribusiness hubs in Region VI.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	University of the Philippines Visayas (UPV)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	4,100,000	3,280,530
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 13 (Project 3), Strengthening the Regional Agri-Aqua Technology Business Incubator (ATBI) in Western Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Project 3: Regional ATBI General: To provide support to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business incubation or co-incubation. Component 3A: Institutional ATBI General: To enhance the advanced incubation and co-incubation services, foster an environment conducive to innovation and entrepreneurship, and accelerate the commercialization of technologies in the agriculture and aquaculture sector within the province of Capiz and beyond. Specific: 1. Provide capability-building on technology transfer to R&D partners in the region; 2. Provide a venue for convergence of regional AANR stakeholders; 3. Provide incubation services to potential adopters/incubatees/co-incubatees; 4. Facilitate public-private access to AANR technologies to improve the innovation ecosystem in the region; and 5. Strengthen existing and forge new public-private partnerships for utilization of research	Publication: 2Patent: 12Product: 26People: 33Place: 46Policy: 48	Capiz State University (CapSU)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	6,025,000	4,715,173
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 14 (Project 3A), Strengthening the Agri-Aqua Technology Business Incubator (ATBI) in University of the Philippines Visayas (UPV) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: Provide support, in collaboration with CAPSULE as Regional ATBI, to CMIs and other ATBIs in the transfer of technologies through capacity building, technology business, incubation or co-incubation. Specific: 1. Continue the on-going operations of FTBI, especially in the nurturance of existing incubatees to become a fully established and competitive businesses; 2. Provide assistance, together with CAPSULE, capability building and mentoring on TBI establishments and setting up agri-aqua technology-based business creation to CMIs of WESVAARRDEC, particularly, but not limited to, the provinces of Iloilo, Guimaras, and Antique; 3. Collaborate with CAPSULE in organizing TBI related events, market fairs, etc.; and 4. Elevate FTBI operations to the international level as well as partnerships and linkages.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	University of the Philippines Visayas (UPV)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	4,420,000	3,686,457
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 15 (Project 4), Strengthening the Regional Knowledge Management (KM) Hub in Western Visayas under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To enhance the Knowledge Management System (KMS) for improved knowledge sharing and collaboration among stakeholders in the Visayas region. Specific: 1. To integrate additional data and resources into the KMS. 2. To improve the user interface and user experience of the KMS. 3. To ensure sustainable adoption and use of the KMS, 4. To facilitate training and capacity-building activities for stakeholders.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	University of the Philippines Visayas (UPV)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,100,000	1,629,674
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 2 (Project 1A), Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Atklan State University (ASU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the operation of Intellectual Property and Technology Business Management (IP-TBM) in Atklan State University to intensify technology commercialization activities. Specific: 1. To enhance the IP generation and protection activities of ASU IP-TBM; 2. To synchronize the IP management and technology transfer activities of ASU; 3. To intensify the technology promotion and commercialization activities of ASU; and 4. Intensify the linkages with various agencies to enhance IP management and technology transfer activities.	Publication: Patent: Product: 26People: 33Place: 39Policy: 48	Atklan State University (ASU)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,842,149

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 3 (Project 1B). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Central Philippines State University (CPSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the operation of Intellectual Property and Technology Business Management (IP-TBM) in Central Philippines State University to intensify technology commercialization activities. Specific: 1. To enhance the IP generation and protection activities of CPSU 2. To synchronize the IP management and technology transfer activities of CPSU 3. To intensify the technology promotion and commercialization activities of CPSU 4. Intensify the linkages with various agencies to enhance IP management and technology transfer activities.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	Central Philippines State University (CPSU)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,906,046
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 4 (Project 1C). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Guimaras State University (GSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project generally aims to intensify the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations at Guimaras State University to sustain technology commercialization. Specific: 1. Sustain operations of the IP-TBM of Guimaras State University; 2. Craft and adopt spinoff policy; enhance Technology Transfer Protocol and IP policy of Guimaras State University; 3. Integrate the enhanced IP policy and technology transfer protocol in the University's Research, Extension, and Thesis and Dissertation Manuals; intensify technology promotion and commercialization activities; and 4. Increase and sustain linkages with various agencies on intellectual property protection management, and technology transfer and commercialization.	Publication: 2Patent: 10Product: 26People: 33Place: 46Policy: 48	Guimaras State University (GSU)	NULL	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,842,183
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 5 (Project 1D). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Northern Iloilo State University (NISU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General Objective: Project 1D. Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Northern Iloilo State University (NISU) under the RAISE Program Phase 2 Specific Objective: Project 1D. Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Northern Iloilo State University (NISU) under the RAISE Program Phase 2	Publication: 5 IECA2 Training report in Institutional echo on IPMC/ABMS/TCMS/TPMS/Spin-off/Patent Mining Patent: 10 IP Applications (UM & Patent only)/10 Other IPs filed (copyright, trademark and ID) 1 Patent Granted 14 UM Registered/Product:10 Prior Art Search Reports/1P and Technology inventory updated/1 Inventory of knowledge resources prepared and updated/1 CMI communication plan developed/enhanced & implemented/5 Technology Commercialization plans developed/enhanced & implemented/5 pre-commercialization reports prepared/2 Technologies pitched/1 Technology Commercialized/1 Patent Mining Report prepared/People:1 CMI staff trained in Patent Mining/1 CMI staff trained in Spin-Off Policy/3 CMI staff trained in IP Valuation Training/1 CMI staff attended regional IP Audit & Inventory Workshop/2 CMI staff attended regional IP policy/Tech Trans Protocol/2 CMI staff attended regional Communication Plan Workshop/2 CMI staff trained on Regional echo IPMC/ABMS/TCMS/TPMS/2 CMI staff trained on Regional echo seminar on Patent Mining/Spin-off/2 institutional echo seminar on IPMC/ABMS/TCMS/TPMS/Spin-off/Patent Mining conducted/20% of researchers trained on echo seminar/Participate to content build-up of RTMS1 pitching activity conducted/Place:1 Commitment Letter for the national trainings/2 Partnership Agreements w/ Business/Trade institutions/1 commercialization Agreement/1 Technology Licensing Agreement/Policy:1 IP Policy enhanced and BOR approved/1 Technology Transfer Protocol enhanced and BOR approved/1 crafted/enhanced Spinoff Policy/institutionalization of the IPTBM in the CMI/Social Impact:Contributes to the SUC leveling among participating agencies/influence a positive change in the Professional Level Point System for the local inventor/Economic Impact:If the SUC will hire a patent agent to conduct prior art search reports, claim drafting and file the application they will need an average of P50K@ (as compared to Private HEI*)	Northern Iloilo State University (NISU)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,842,802
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 6 (Project 1E). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in University of Antique (UA) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General Objective: General: This project generally aims to intensify the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations at University of Antique (UA) to sustain technology commercialization. Specific: 1. Sustain operations of the IP-TBM of University of Antique; 2. Craft and adopt spinoff policy; 3. Enhance the Technology Transfer Protocol and IP policy of University of Antique; 4. Integrate the enhanced IP policy and technology transfer protocol in the University's Research, Extension, and Thesis and Dissertation Manuals; 5. Intensify the technology promotion and commercialization activities; and 6. Increase and sustain linkages with various agencies to sustain activities on intellectual property protection and management and technology transfer & commercialization.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	University of Antique (UA)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,843,166
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 7 (Project 1F). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Carlos Hilado Memorial State University (CHMSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project aims to strengthen and intensify the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations in Carlos Hilado Memorial State University and to intensify technology commercialization activities. Specific: 1. Sustain/enhance and operationalize the IP-TBM of the University; craft and adopt spinoff policy; Enhance Technology Transfer Protocol and IP policy of CHMSU; 2. Integrate the enhanced IP policy and technology transfer protocol in the University's Research, Extension, and Thesis and Dissertation Manuals; 3. Intensify technology promotion and commercialization activities; and 4. Increase and sustain linkages with various agencies on intellectual property protection management, and technology transfer and commercialization.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	Carlos Hilado Memorial State University (CHMSU)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,856,340
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 8 (Project 1G). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in Iloilo Science and Technology University (ISAT U) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: This project aims to strengthen and intensify the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations in ISAT U and to intensify technology commercialization activities. Specific: 1. Sustain/enhance and operationalize the IP-TBM of the University; 2. craft and adopt spinoff policy; 3. Enhance Technology Transfer Protocol and IP policy of ISAT U; 3. Integrate the enhanced IP policy and technology transfer protocol in the University's Research, Extension, and Thesis and Dissertation Manuals; intensify technology promotion and commercialization activities; and 4. Increase and sustain linkages with various agencies on intellectual property protection management, and technology transfer and commercialization.	Publication: Patent: Product: 26People: 33Place: 46Policy: 48	Iloilo Science and Technology University (ISAT-U)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,820,166
Strengthening the Regional Agri-Aqua Innovation System Enhancement (RAISE) Program in Western Visayas (Phase 2)	Project 9 (Project 1H). Strengthening the Intellectual Property and Technology Business Management (IPTBM) in West Visayas State University (WVSU) under the RAISE Program Phase 2	Rapid, inclusive and sustained economic growth	General: To strengthen the capacities of Intellectual Property and Technology Business Management (IP-TBM) operations of, West Visayas State University Specific: 1. To capacitate , the technology transfer personnel of West Visayas State University- at CAF-Campus, Lambunao, Iloilo and other campuses catering to agri-aqua innovation; 2. To enhance the technology promotion and commercialization activities of West Visayas State University especially at CAF Campus, Lambunao, Iloilo, and other campuses catering to agri-aqua innovation and; 3. To intensify linkages and partnerships with various agencies to enhance activities on IP management and technology commercialization of agri-aqua innovations.	Publication: 1Patent: 12Product: 26People: 34Place: 43Policy: 48	West Visayas State University (WVSU)	Startups, spinoffs, farmers, fisherfolks, industry, MSMEs, general public, researchers/students/ NGOs/NGOs, SUCs/RDIs	01-Oct-24	30-Sep-26	ONGOING	2,350,000	1,853,225

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Adoption of Improved Hatchery-Nursery Culture System for Commercial Production of Mangrove Crab Seedstock in Buguey, Cagayan	Integrity of the environment and climate change adaptation and mitigation	General: Roll out the technology on a commercial-scale mangrove crab hatchery-nursery system to maintain a reliable supply of mangrove crab seedstocks in Buguey, Cagayan Province. Specific: 1. Retro-fit an existing Tilapia hatchery into a commercial-scale mangrove Crab hatchery-nursery facility adopting the DOST-SEA/DEC technology in the Municipality of Buguey. 2. Capacitate Project Management Team and beneficiaries on the hatchery operations, entrepreneurship, financial management and on the use of hatchery-bred crabs for an improved nursery/and or grow-out production; 3. Strengthen the academic and government partnership in the promotion, establishment, and management of commercial scale mangrove crab hatchery-nursery system; 4. Produce and market about 560,000 hatchery-reared crabs for nursery and grow-out ponds per year; 5. Develop and disseminate information materials on hatchery, nursery, and grow-out production of hatchery-bred crabs; and 6. Promote mangrove Crab hatchery-nursery technology and grow-out of hatchery-produced crabs for men and women crab grow-out farmers in the eight coastal towns of Cagayan (Aparri, Abulug, Buguey, Claveria, Gonzaga, Pamplona, Sanchez Mira, and Sta. Ana) where mangrove crab population is naturally occurring.	Publications 1,000 pcs IEC materials of two kinds produced and disseminated (500 pcs for hatchery operation, 500 pcs for nursery operations in Filipino and English) - Two (2) infomercial videos (one for hatchery and one for nursery operations) produced - One (1) hatchery operation manual produced - One (1) communication plan developed - One (1) sustainability plan developed - 1,000 pcs IEC materials - Two (2) infomercial videos - One (1) hatchery operation manual produced - One (1) communication plan developed - One (1) sustainability plan developed Products -	Cagayan State University (CagSU)	Mangrove Crab hatchery-nursery-grower operators and other stakeholders in Cagayan	01-Jul-23	30-Sep-25	COMPLETED	12,910,996	741,457
	Agri-Skills 101: Expanding Agricultural Knowledge and Techniques of Future Agri-Leaders	Rapid, inclusive and sustained economic growth	General: To enhance students' knowledge, skills, and appreciation of agriculture by providing hands-on training in advanced agricultural techniques, fostering creativity, and promoting sustainable practices, thereby encouraging their active participation in agriculture as a viable pathway for food security, environmental conservation, and economic development. Specific: 1. Reinforce students agricultural knowledge by designing and implementing an agricultural skill acquisition program that will provide hands-on exercises on the different agricultural topics provided in the project Engaging and Empowering Youth through Agricultural Awareness and Sustainable Gardening Practices. 2. Enhance agricultural education by providing students with hands-on training in advanced agricultural techniques such as asexual propagation, vegetable grafting, hydroponics and vermicomposting. 3. Foster creativity and innovation through activities such as garden and fruit art, and agri-preneurship. 4. Equip students with practical and entrepreneurial skills to prepare them for future opportunities in agriculture.	Publications: - Developed one (1) Agricultural Skill Acquisition Training Program Manual Produced two (2) documentary videos produced (featuring hands-on and incentive-based activities conducted) - Published four (4) articles featuring the project Products: - Established and maintained one (1) field laboratory (vegetable garden) at BPI-LBNCRDPSPC for two (2) academic calendars - Produced 200 kgs of (assorted) fresh produce from BPI-LBNCRDPSPC field laboratory People and Services: - Organized and conducted one (1) planning workshop - Conducted six (6) consultative meetings - Organized and conducted three (3) inception meeting cum project launching	Bureau of Plant Industry - Los Baños National Crop Research Development and Production Support Center (BPI-LBNCRDPSPC)	Grade 8 students of Los Baños Community National High School (LBCNHS)- Poblacion, Los Baños National High School (LBNHS)- Batong Malake, Los Baños, and B.N. Calara Integrated National High School	01-Jul-25	30-Jun-27	ONGOING	5,000,000	2,541,407
	CLSU Project RICE: Quick Response to Impacts of Calamities and Emergencies (Phase 2)	Rapid, inclusive and sustained economic growth	General: To provide Science and Technology (S&T)-based food products made from organic rice and brown rice to calamity-prone regions in Luzon, and assess its use, acceptability, and effectiveness as convenient and nutritious meal options during emergencies. Specific: 1. Mass produce three (3) S&T-based food products from organic rice and brown rice; 2. Distribute and promote the S&T-based food products from organic rice and brown rice; and 3. Strengthen partnerships with DOST-PCAARRD, DA RFOs, LGUs, SUCs, and other stakeholders.	A. Products Produced at least 7,500 packs of instant organic rice-chicken porridge Produced at least 7,500 packs of instant brown rice-chicken porridge Produced at least 7,500 packs of rice cookies with raisin and oatmeal B. People and Services Assisted at least 22,500 individuals through disaster/calamity relief packages distributed in response to natural disasters Facilitated the licensing of one (1) technology adaptor C. Places and Partnerships Established/Forged at least two (2) institutional collaborations with MOAs Hugao State University (FSU) Aurora State College of Technology (ASCOT) Forged at least two (2) MOUs with LGUs D. Publications Documented one (1) audio-visual presentation (AVP) E. Patents Copyrighted one (1) AVP	Central Luzon State University (CLSU)	Calamity/Natural Disaster Victims/Indigenous People (IPs), Indigent Senior Citizens, PWDs and Solo Parents** Beneficiaries/Rice Farmers	01-Oct-24	30-Sep-26	ONGOING	5,000,000	1,072,928
	Designing Interventions to Strengthen Enterprises and Yield Opportunities (DISENYO)	Rapid, inclusive and sustained economic growth	General: To enhance ATBI support mechanism for incubatees market competitiveness through inclusive training-workshop and mentoring sessions in branding, packaging and labeling design, and design management, ultimately improving incubatees market position, long-term sustainability, and ability to thrive in local and global markets. Specific: 1. Develop a DISENYO module tailored to the specific needs of ATBI staff to enhance their client service delivery and expand their market reach; 2. Strengthen capacities of ATBI staff using the developed DISENYO module featuring specialized workshops, training sessions, mentoring activities, and learning assessment; and 3. Promote developed/improved design innovations, incorporating real-time visitor feedback, through participation in Design Center and DTI trade and marketing events.	6Ps/2i/y1/Products60 logos and/or packaging and label designs improved1 DISENYO modulePublications25 promotional materials1 Report on mentorship/training conducted25 Documented evolutions of packaging and labeling designs of incubatees from pre-project to post-project stagesPatentsAssisted at least 25 IP filingsCopyright filed for the DISENYO modulePeople and Services2 batches of DISENYO training-workshops conducted50 men and women trained and mentored ATBI staffPlaces and Partnerships25 partnerships established with the ATBIParticipated in at least 1 trade fairPolicy/Social ImpactStronger local enterprises contribute to job creation and community resilienceCapacity building of ATBI staff to strengthen trust in ATBIs as a reliable support hubContinued access of incubatees to Design Center's Packaging Innovation CenterEconomic ImpactEnhanced product competitiveness and consumer accessibilityOverall revenue growthTraining ATBI staff minimizes the need for external consultants, making design support more accessible and affordable for MSMEs.	Design Center of the Philippines	ATBI staff, regardless of gender ATBI incubatees, particularly women and diverse entrepreneurs	01-Sep-25	31-Aug-26	ONGOING	4,958,644	4,958,644
	Developing Technology Transfer Capacity of the Philippine Science High School System (PSHS)	Integrity of the environment and climate change adaptation and mitigation	General: To establish an intellectual property and technology transfer system among the PSHS Campuses to enhance the Systems technology commercialization programs. Specific: 1. Capacitate PSHS academic and non-academic staff on intellectual property and technology transfer management; 2. Create a technology transfer framework for the PSHS System; and 3. Operationalize the technology transfer and licensing units within the PSHS system.	Publication: 17 IELs (Technology briefs/ one-page under the TCMS)Patent: 33 IP applications IUM & Patent only under the IPMCProduct: 1 IP and technologies inventory 33 technologies with technology valuation reports (under the TPMS)People: 33 staff trained in national IPWC 33 staff trained in national TCMSPlace: 1 commitment letter for the national trainings.Policy: Crafting/enhancement of the PSHS Technology Transfer Framework	Philippine Science High School System (PSHS)	The training will upskill PSHS STEM and research teachers and staff on technology transfer and, when translated to classroom instruction, they would be able to properly guide PSHS students in conducting STEM research that is aligned to the standards of intellectual property rights and commercialization. Moreover, the public use of commercialized PSHS projects will be an opportunity for the PSHS to be of service to farmers, fisher folks, small to medium enterprises, and the Filipino households, among others.	01-Jun-23	31-May-25	COMPLETED	4,104,032	527,696

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Empowering Communities through the Adoption of Sustainable Practices in HiKPINAS and Rice Ecosystems (ECO-ASPIRE) in Nueva Ecija: An S&T Community-Based Farming Approach	Rapid, inclusive and sustained economic growth	General Objective: To improve the livelihoods of farming communities in Nueva Ecija by promoting integrated production systems to increase farmers'™ income from Special Purpose Rice (SPRice) and HiKPINAS Production Specific Objectives: To strengthen farmers'™ technical capacity by providing training on SPRice+HiKPINAS integrated farming; To introduce and promote integrated production systems for SPRice and HiKPINAS to increase productivity and income; To increase income of farmer cooperators by 77%, from P7,889 rice income monthly to P13,962.00 SPR and HiKPINAS as new stream of income; To develop and strengthen market linkages to improve the value chain and secure better pricing opportunities for rice and HiKPINAS products; and To develop policies to ensure effective project implementation and long term sustainability.	PUBLICATION 3 IEC materials produced 2 technical papers published 1500 copies of IEC materials produced/ reproduced (500 copies each) 1 training module produced 1 AVP produced 1 Production Manual on SPR Rice+HiKPINAS Integrated Farming System developed PATENT 6 copyrights filed (3 IEC materials, 3 training modules) PRODUCT 300,000 kgs (300 tons) dried grains produced 1,500,000 eggs produced 6,000 female ducks distributed 600 male ducks distributed 1,200 kg seed material for next cropping produced PEOPLE AND SERVICES 10 trainings conducted 30 farmer cooperators trained 4 promotional activities conducted 22 hectares of SPR cultivated/established 3 hectares established for IP production PARTNERSHIPS AND LINKAGES 36 MOAs forged (6 with farmers groups and 30 with farmer cooperators)	Central Luzon State University (CLSU)	30 farmers	01-Oct-25	30-Sep-27	ONGOING	5,000,000	3,227,364
	Empowering Communities: Building Resilient STCBF Bamboo Enterprises in Vulnerable Areas of Davao del Sur	Rapid, inclusive and sustained economic growth	General : To promote S&T Community-based Farm for the establishment of a Barangay-level Bamboo Enterprise as catalyst to efficiency resources use and resiliency in livelihood for Davao del Sur. Specific: 1) To establish a Davao del Sur bamboo grower group registry data bank; 2) Capacitate 50 bamboo growers on giant bamboo production and management, processing and enterprise development; 3) To establish S&T Community-based Barangay-Level Enterprise Livelihood and Levelling-up Skills Hub for the production of semi-processed raw materials of engineered bamboo, quality planting materials production, and bamboo shoot and culm production.	Products Produced 1 Data bank for Bambo Growers Registry Established 1 S&T based barangay level nursery managed by the BELLS Hub Produced 5,000 planting materials for giant bamboo in the barangay level nursery managed by BELLS Hub Increased bamboo stand population at 5,000 clumps of giant bamboo (Dendrocalamus asper) Increased bamboo stand population of the 50 farmers to 100 clumps (Dendrocalamus asper) 1,680 average bamboo slats production in a day at the BELLS Hub People and Services Organized 1 Bamboo Grower group with 50 members Conducted 4 capacity building activity on S&T 6 Bamboo Clumps S&T Management and Maintenance	Davao del Sur State College (DSSC)	Bamboo farmers and growers of 15 Barangays of the Municipality of Sulop, Davao del Sur.	01-Jan-25	31-Dec-26	ONGOING	3,464,844	3,292,534
	Empowering Fisherfolks through the S&T Community-Based for Inclusive Development (STC4ID) Modality in Barangay Behia, Magallanes, Sorsogon	Rapid, inclusive and sustained economic growth	General: To establish a sustainable AANR-based livelihood and promote inclusive development in Magallanes, Sorsogon through the STC4ID modality. Specific: 1. To strengthen the capability of men & women, farmers/fisherfolks in Magallanes, Sorsogon with fish processing techniques; 2. To increase monthly income by at least 25-30% to meet food and poverty threshold, or at least from PHP 6,147.81 to PHP 8,000.00; 3. To establish market partnership and linkages from local to regional markets; 4. To increase the presence of SRBCC organization for socio-civic activities by exposing them through product exhibits and promotional activities; and 5. To recommend policies on fishery products to ensure project sustainability.	Products 1 Community Needs Assessment Report verified; 19,200 packs Tilanggit; produced (100g); 1,704 pet bottles of fish sauce produced; 5,568 bottles fish paste produced; 438 kilograms Fish Meal; 1 Business Plan developed; 9,600 packs Tilanggit produced; 3,408 bottles of fish sauce produced; 11,136 bottles fish paste produced; 438 kilograms Fish Meal People & Services 30 F/F-cooperators identified and capacitated; 12 capacity building activities conducted for 30 F/F-cooperators conducted; 2 livelihood program transferred/technology identified; 3 Techno cross visit of 10 F/F-cooperators conducted; 30 F/F-cooperators capacitated; 8 capacity building activities conducted for 30 F/F-cooperator; 1 livelihood program transferred/technology identified; 1 Techno cross visit of 10 F/F-cooperators conducted; 1 Enterprise on Fishery Products established Places and Partnership 2 MOA/MOUs signed with LGU Magallanes (barangay & municipal); 5 MOA/MOUs signed with other partner agencies (i.e. DOST, BIGANI Association, Bicol University, LGU Caisiguan, PFO Sorsogon); 1 market agreement signed; 1 community organization assisted (BIR, SEC Registration); 3 MOA/MOUs signed with other government agencies or NGO partners; 2 market agreements signed	Sorsogon State University (SorSU)	The project beneficiaries are women and men, farmers/fisherfolk in Brgy. Behia, Magallanes, Sorsogon. The said beneficiaries are active members of the organized cooperative of Brgy. Behia, Magallanes, Sorsogon known to San Rafael Bagatso Consumers Cooperative (SRBCC). It has 30 active members in the organization who are actively engaging in the production of fish drying and selling frozen chicken.	16-Sep-24	15-Sep-26	ONGOING	5,000,000	1,278,260
	Empowering S&T-Based Bamboo Enterprises Through Bamboost® Ecosystem- Across Select Regions in the Philippines - Phase 2	Rapid, inclusive and sustained economic growth	General: To empower bamboo communities across the Philippines by enhancing their digital marketing capabilities, thereby promoting sustainable development and fostering efficient management of bamboo resources. Specific: 1. To expand the Bamboost platform through the development of a website and an iOS application; 2. Extend the Bamboos availability and usage to bamboo-rich regions in the country, ensuring that more bamboo farming communities can benefit from it; 3. To provide trainings to local communities, entrepreneurs and artisans to optimize their bamboo-based businesses; 4. To encourage the development and promotion of a wider range of bamboo products, with focus on innovative, eco-friendly, and S&T-based offerings; and 5. To conduct pre-commercialization activities of Bamboost	Publications 1 assessment report prepared; 1 business plan prepared; 3 IEC/promotional video materials prepared Patent: 1 website IOS application; 2 trademarks filed; 2 patents/UM filed; 3 copyrights filed; Product: 1 website for Bamboost developed/maintained; Bamboost iOS app maintained/enhanced/ promoted; 1 android mobile app maintained/enhanced/ promoted; 1 business plan developed People and Services 5 trainings conducted; At least 160 farmers/ entrepreneurs/artisans trained At least 100 farmers/ MSMEs reached Places and Partnerships 6 collaborations forged/ established; 5 marketing and promotional activities conducted in different regions/provinces Policy: 1 policy recommendation for the adoption of Bamboost online marketplace	University of Science and Technology of Southern Philippines - Cagayan de Oro (USTP-CdeO)	Bamboo farming communities, Bamboo MSMEs and LGUs	01-Jul-24	30-Jun-26	ONGOING	4,998,680	1,506,848

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Engaging and Empowering Youth through Agricultural Awareness and Sustainable Gardening Practices	Rapid, inclusive and sustained economic growth	General: To raise agricultural awareness and foster sustainable home gardening skills among high school students through the application of innovative crop farming techniques, and promotion of environmental stewardship and self-reliance. Specific: 1. Enhance the agricultural education and awareness of students on the importance of the agricultural sector in food security, sustainability, and environmental conservation. 2. Enhance student understanding of sustainable food production through establishments of school gardens and application of modern and innovative farming techniques, such as vertical gardening, hydroponics, and organic farming. 3. Promote healthy eating and nutrition by integrating school gardens with nutrition education programs.	Publications Developed three (3) training courses; Developed three (3) training booklets ; Produced four (4) demonstration videos; Developed six (6) lecture (PowerPoint) presentations; Developed six (6) mini-researches (students); Produced two (2) promotional videos; Products Distributed 3,000 brochures; Distributed 76 training manuals; Distributed 76 sets of demonstration videos; Distributed 152 grow-out kits (include various seeds of leafy and seedlings of fruit vegetables and herbs) for establishment of school gardens; Distributed 15 kg of african night crawler; Distributed 3,800 kg vermicompost; Distributed 2,187 grow-out kit (include various seeds of leafy and fruit vegetables) for grade 8 students; Established 38 school gardens; Established one (1) vegetable garden (800 sqm) at BPH-BINCRODPC; maintained for two (2) academic calendar; Shared 380 kgs of (sorted) fresh produce from school garden (50% to other student grade levels and 50% for student feeding program) People and Services Organized and conducted one (1) planning workshop; Organized and conducted two (2) inception meeting; cum project launching; Raised awareness to 90% of the Grade 8 student population on the role and importance of the agriculture sector in food security, sustainability and environmental conservation; Provided 36 asynchronous training module; Trained 2,187 students (subject upon agreement with school principal and SLE teachers); Conducted 18 face-to-face trainings; Trained 152 students on grafting, hydroponics and aquaponics technologies; Trained 30 teachers/school staff on grafting, hydroponics and aquaponics technologies; Organized and conducted two (2) grand culminating activity; Invited four (4) schools to visit the established BPH-BINCRODPC Field laboratory garden	Bureau of Plant Industry - Los Baños National Crop Research Development and Production Support Center (BPH-BINCRODPC)	Grade 8 high school students of DOST-PCAARRD adopted high schools: Los Baños National High School (LBNHS) - Poblacion and B.N. Calara Integrated National High School; Los Baños National High School - Batong Malake and Extension Campus; and teachers.	01-Apr-25	31-Mar-27	ONGOING	5,000,000	2,698,547
	Enhancement of S&T Community-Based Livelihood Options for Inclusive Development (STCAD) of the HAGURA Mangyan Communities in Occidental Mindoro	Rapid, inclusive and sustained economic growth	General: The project generally aims improve sustainable agricultural production through S&T interventions. Specific: 1. Enhance the Hanunuo, Gubatnon and Ratagnon (HAGURA) Mangyan farmers existing AANR-based livelihood through sustainable agricultural production, community organization, S&T trainings, and other innovative means. 2. Capacitate the Mangyan farmers on Gender Equity, Literacy, and Social Inclusion (GELS). 3. Establish market linkages for their AANR products.	YEAR 1ProductsOne (1) communication plan developedThree (3) demo farms establishedAt least one (1) value added product developedAt least one (1) handicraft design introducedPeople and ServicesThree (3) trainings conducted on AANR-based S&T livelihood interventionsOne (1) training conducted on basic literacy and numeracy skills and organizational managementTwo (2) trainings conducted in value added product development100 Mangyans trained on AANR-based S&T livelihood interventions100 Mangyans taught basic literacy and numeracy skills and organizational managementTwenty (20) Mangyan women trained in value added product developmentTen (10) Mangyans trained in handicraft designPublicationsTwo (2) IEC materials on AANR-based livelihoodOne (1) social media page createdPlaces and PartnershipsAt least one (1) MOA/MOU forgedPatentsTwo (2) IEC materials on AANR-based livelihood copyrightedYEAR 2ProductsAt least one (1) value added product developedAt least one (1) handicraft design introducedPeople and ServicesTwo (2) trainings conducted on AANR-based S&T livelihood interventionsTwo (2) trainings conducted on basic literacy and numeracy skills and organizational managementThree (3) trainings conducted in value added product developmentThree (3) trainings conducted on health, gender and food security100 Mangyans trained on AANR-based S&T livelihood interventions100 Mangyans taught basic literacy and numeracy skills and organizational managementTwenty (20) Mangyan women trained in value added product developmentTen (10) Mangyans trained in handicraft designThirty (30) Mangyan mothers trained in health, gender and food securityPublicationsTwo (2) IEC materials on AANR-based livelihoodPatentTwo (2) IEC materials on AANR-based livelihood copyrightedYEAR 3ProductsAt least one (1) value added product developedPublicationsOne (1) IEC material on health, gender, literacy and food securityOne (1) video-documentationPoliciesOne (1) policy draft on livelihood and literacy program support for the Mangyans through the LGUPatentOne (1) IEC	Occidental Mindoro State College (OMSC)	100 Hanunuo, Gubatnon and Ratagnon (HAGURA) Mangyan Farmers in Magsaysay, Occidental Mindoro.	01-Aug-25	31-Jul-28	ONGOING	5,000,000	2,555,524
	Enhancing Climate Resilience through Native Tree and Fruit Tree-based Agroforestry Technology: A Science and Technology-Based Initiative for Emergencies and Hazards in Datu Blah Sinsuat, Maguindanao	Integrity of the environment and climate change adaptation and mitigation	General: The general objective of the project is to enhance the resiliency of ecosystem and communities through native and fruit tree-based agroforestry technology in the municipality of Datu Blah Sinsuat, Maguindanao Specific: 1. To rehabilitate 35 hectares through native and fruit tree-based agroforestry technology in Datu Blah Sinsuat, Maguindanao. 2. Enhance/upgrade campus nursery facilities to optimize the production of both native (e.g., Dao, Kamansi, Narra & Alim) and fruit (e.g., Mango, Coconut, Coffee, Cacao, Lansones Rambutan and Durian) tree seedling to be planted in DBS, Maguindanao. 3. To promote native and fruit tree agroforestry technologies for ecosystem and community resiliency against the impacts of climate change through seminars and information campaigns. 4. To provide various capacity training to farmers and landowners. 5. To develop municipal vegetation rehabilitation plan using tree and fruit tree-based agroforestry technology	Publication: One (1) video documentation for the project One (1) documentation report One (1) research article sent to research journalPatent : 1 copyright registration of one (1) video documentationProduct: 20,000 native tree seedling production 30,000 fruit tree seedling production 1 campus nursery enhanced. 3 temporary nurseries established. 35 hectares of established/rehabilitated sites using native and fruit tree-based agroforestry. 10 individual landowner/c, c agroforestry plan/People: 225 people attended the seminar on promoting agroforestry technology as a strategy for ecosystem resilience. 50 people trained on planning for agroforestry plantation establishment. 100 people trained on nursery propagation and production of native and fruit tree seedlings/Place: At least 2 institutional collaborations established/strengthened with MOA At least 10 Memorandum of Understanding with project beneficiariesPolicy: 1 policy draft (Sustainability of the agroforestry projects)	Mindanao State University - Maguindanao (MSU-Maguindanao)	Farmers of Datu Blah Sinsuat MaguindanaoLocal Government Unindigenous People (IPs), Indigent senior citizens, PWDs, and solo parentsAt least 200 beneficiariesLocal entrepreneurs	16-Oct-24	15-Apr-27	ONGOING	5,000,000	847,584
	Enhancing Duck-Egg Production in Selected Communities in the Province of Isabela through the STCBF Modality	Rapid, inclusive and sustained economic growth	General: To improve duck egg production in selected communities in the Province of Isabela through the STCBF modality Specific: 1. To promote the adoption of IPINAS Kayumanggi breed in selected duck egg producing communities, 2. To capacitate duck raisers on S&T based practices, and 3. To develop policies on S&T based duck production.	Publication: 3Patent: 10Product: 26People: 37Place: 44Policy: 48	Isabela State University (ISU)	Duck raisers Duck egg dealers	01-Mar-25	28-Feb-27	ONGOING	4,817,528	2,555,764
	Enhancing the Coffee Food Value Chain through Smart Technologies and Partnerships towards Food Resiliency in Region IV A&B (CALABARZON & MIMAROPA) – Phase II	Integrity of the environment and climate change adaptation and mitigation	General: The project generally aims to continuously enhance the food value chain for coffee in the CALABARZON and MIMAROPA regions towards improving agricultural productivity, competitiveness, efficiency, and inclusive food sustainability. Specific: 1. Increase the coffee production area in the CALABARZON region by at least 15 hectares; 2. Improve at least 12 hectares of old coffee plantation maimed with low productivity through rejuvenation/rehabilitation; 3. Improve product quality by increasing the adoption rate of suitable and need-based processing technology; 4. Strengthen and widen the local coffee processing in CALABARZON by assisting POs in product development; 5. Capacitate coffee producer organizations in the region through organizational upscaling and conduct of various capacity building activities; 6. Ensure a sustainable food value chain for coffee in CALABARZON through an increase in profitability and improved market and institutional linkages; and 7. Extend the project support to the selected POs in MIMAROPA through the conduct of needs assessment and provision of relevant technologies/technical assistance and support services.	Publication: 1 needs assessment report prepared for the selected POs in MIMAROPA At least 4 IEC materials produced: about the project and technologies applied 1 training brochure developed incorporating all NCRDEC-3 modules on coffee production and processing At least 2 promotional videos developed 1 social media page maintained 1 strategic plan developed prior to the full-blown implementation of the project. 2 benchmarking activity reports for the 2-year project duration 2 site assessment reports/development plans for the pilot farms drafted 2 business plans prepared in phase 1 updated 1 sustainability plan prepared at the end of the project Patent: At least 6 copyrights filed for the whole duration of the project Product: At least 1 POT and SMART technology (rejuvenation) used at the farm level At least 1 POT and SMART (wet processing/other suitable processing method) used At least 10% adoption rate (per POs) for the whole duration of the project At least 15 has of new coffee plantation established At least 1 coffee nursery established for the whole duration of the project At least 2 new coffee products developed At least 1,000 pcs of innovative packaging materials transferred to the selected POs 2 manual/mechanical depulpers, 2 dehullers, and 1 coffee roaster deployed (technology transfer) At least 650 copies of IEC materials distributed 1 packaging material developed for each 2 POs who will be assisted in introducing their single origin coffee	Cavite State University (CVSU)	The following POs from the CALABARZON region will be the beneficiaries of the project: Bailen Coffee Growers Association (BCGA), General Emilio Aguinaldo, Cavite Minartok East Coffee Growers Association (MECGA), Amado, Cavite Cavite Guiting Upland Marketing Cooperative (CGUMC), Cabuyao, Laguna Juan Santiago Agriculture Cooperative (JSAC), Sta. Maria, Laguna Cueva Coffee Farmers Association (CCFA), Sta. Maria, Laguna Aga Farmers Multi-Purpose Cooperative (AGFAMCO), Nasugbu, Batangas Kalyway Farmers Association (KFA), Nasugbu, Batangas Samahan ng Magsasaka ng San Andres Babak Cuyambay Association, Tanay, Rizal Adarna Coffee Cooperative, Candalaria, Quezon formerly Masalukot Farmers Association Gainsayangan Coffee Growers Association and Farmer Entrepreneur (G-CAF) Inc., Gainsayangan, Quezon Owners of 2 pilot farms will also be the beneficiaries of the project: Canopy Farms, Indang, Cavite	01-Jul-23	30-Jun-25	COMPLETED	5,000,000	950,576

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Expanding Women-led Integrated Backyard Farming in Bulacan through the S&T Community-Based Farm (STCBF) Modality	Rapid, inclusive and sustained economic growth	General: The project aims to empower women through S&T-based integrated backyard farming system as a source of food and income for marginalized farm families. Specific: 1. To promote wider adoption of S&T-based integrated backyard farming technologies among marginalized women in the community; 2. To enhance the capability of target beneficiaries on various S&T-based integrated backyard farming technologies; 3. To showcase an S&T-based integrated backyard farming system through integrated backyard farm establishment; 4. To boost the agri-entrepreneurial spirit of the beneficiaries in marketing their excess produce; and 5. To initiate policy development on women empowerment through an S&T-based integrated backyard farming system.	YEAR 1 Products/Produced 60 trays of seedling/Produced vegetables per municipality- 7,340 total kgs of assorted vegetables (eggplant, tomatoes, finger pepper, hot pepper, okra, luffa, squash, sweet corn, and cucumber)- 51,600 bundles of assorted leafy vegetables (pechay, upland kangkong and sweet potato talabaun)- 7,800 pcs of pole sitap/Produced FRC products per municipality- Option A: 34,560 pcs eggs- Option B: 17,280 pcs eggs, 6,280 heads of FRC chicks, 11,897.30 kgs of FRC meat- Option C: 12,560 heads of seven-day-old FRC chicks, 23,794.60 kgs of FRC meat/People and Services/Verified 1 TMA to 60 beneficiaries/Conducted 12 trainings (4 each per project site (GAD & organization management, vegetable production, FRC production, recordkeeping & financial management)/Trained 60 trainees (20 women per site)/Established 3 seedling nurseries (1 each per municipality)/Conducted 1 Lakkay-Aral/Conducted 3 farmers' field day/Places and Partnerships/Signed 3 MOAs with LGUs/Signed 3 MOAs with women's association/publication/Developed 1 nursery operation manual/AR 2 products/Produced 300 trays of seedling/Produced vegetables per municipality- 12,940 total kgs of assorted vegetables (eggplant, tomatoes, finger pepper, hot pepper, okra, luffa, squash, sweet corn, and cucumber)- 66,900 bundles of assorted leafy vegetables (pechay, upland kangkong and sweet potato talabaun)- 13,600 pcs of pole sitap/Produced FRC products per municipality- Option A: 34,560 pcs eggs- Option B: 17,280 pcs eggs, 6,280 heads of FRC chicks, 11,897.30 kgs of FRC meat- Option C: 12,560 heads of seven-day-old FRC chicks, 23,794.60 kgs of FRC meat/People and Services/Conducted 3 trainings (1 each per project site on agri/preneurship)/Trained 60 trainees on agri/preneurs hip (10 women x 3 training)/Conducted 3 harvest festivals/publication/Developed 4 IEC materials (1 flyer each on organic vegetable production, farm waste management, vermicomposting, and FRC production management)/Developed 1 training module/Developed and produced 1 video documentation of the project/Prepared 1 article for submission in a scientific journal/Patent/Copyrighted 4 IEC materials (1 Flyer	Bulacan Agricultural State College (BASC)	Target beneficiaries are 60 women farmers (housewives, marginalized women, or any women family members directly engaged in farming) of underprivileged, urban, and rural backyard farm families who are willing to adopt the technology. The target of the project is to encourage every member of the family to plant and grow chemical pesticide-free vegetables, raise naturally grown free-range chicken, and sustain the C&Bshay Kuba&E system in their backyard. However, instead of the traditional system of listing the head of the family (usually the father) as the farmer-cooperator, this project will give a chance to the marginalized women and women farmers to shine and oversee the project as a way of empowering them through the provision of access to technology to be extended to them. The project aims not to put an additional burden on the duties and responsibilities of the women's family members, but to enable them to practice their decision-making power, enhance knowledge on S&T-based agricultural production, and improve leadership capability as well.	01-Dec-24	30-Nov-26	ONGOING	5,000,000	701,340
	Levelling-Up of Innovative Agriculture, Aquatic and Natural Resources-based Startups/Spinoffs thru Promotion, Valuation Assistance, and Development (LIPAD) Phase 2	Rapid, inclusive and sustained economic growth	General: In general, this collaborative project aims to expand the services provided by DOST-PCAARRD by introducing intervention measures that will enable AANR-based startups/spinoffs to hurdle entrepreneurial challenges and increase the success rate of becoming an innovative and sustainable enterprise. Specific: 1. To assist in packaging proposals and evaluate the application of potential SGF project beneficiaries; 2. To identify the needs of start-up enterprises in enterprise management and development; 3. To conduct training programs and provide mentorship services to increase the probability of success of these enterprises; 4. To conduct business and patent valuations training to acquire the expertise and specialized skills and knowledge needed to conduct assessments of business, intellectual property assets and strategic decisions in the startup ecosystem; 5. To support the promotion of innovative products to increase marketability; 6. To facilitate networking and linkages among startup/spinoff ecosystem; and 7. To monitor and evaluate the implementation of the project including checking and evaluation of beneficiaries equipment purchase and facilities renovation projects.	Publications: EC - At least 25 IEC materials (brochures) EC - At least 25 promotional online articles (posted on ISSI channels) EC - 8 Quarterly Mentorship Reports (covering 25 enterprises) EC - 2 Proceeding for the Inception Meeting EC - 1 LIPAD Promotional video-1 Coffee Table Book of Batch 1 SGF with 7 beneficiaries Products- At least 25 AANR-based products supported and promoted People and Services- At least 25 enterprises successfully assisted in proposal packaging, evaluated, and enrolled in the project-At least 50 trained and mentored entrepreneurs (1 CEO or founder and 1 manager) - At least 9 enterprises mentored from the new PCAARRD ATBI-SUC site- At least 25 Business Plans updated- 2 inception meetings conducted-25 enterprises provided with a certificate of compliance from the project's accountant and engineers. -At least 8) trained professionals in the valuation certification program-At least 5 Certified Valuators-25 enterprises supported in their planning and conduct of localized business matching activities-6 enterprises mentored and monitored (Batch 2 LIPAD)/Places and Partnerships- 3 partnerships with business associations and relevant advocacy group/Social Impact-Increase awareness of technological advancements within the individual sector-Promote inclusiveness through the participation and memberships of women and the marginalized sector.Economic Impact-Generation of employment through the promotion of startups/spinoffs.-Promotion of sustainable enterprises in various sectors through competitiveness and innovation.	University of the Philippines Diliman (UPD)	Twenty-five (25) AANR-based startups and spinoffs, and at least eight (8) professionals for valuation certification training.	01-Sep-24	31-Aug-26	ONGOING	8,822,413	1,914,026
	MANAKLA Project - Marinduque's Aquaculture As A Natural Key Livelihood Asset For The Fisherfolks	Rapid, inclusive and sustained economic growth	General Objective-To develop a holistic, community-based aquaculture framework for Manakla (Alpheus sp.) and other compatible species in Marinduque, integrating scientific, socio-economic, and environmental considerations to support sustainable production, alternative livelihoods, and ecosystem-based resource management. Specific Objectives: Establish and maintain community-led mangrove nurseries and rehabilitation sites to restore degraded ecosystems, provide coastal protection, and generate parallel income streams. Operationalize aquaculture technology for Manakla and other cultivable species (mud crab, tilapia, milkfish, clams) through in-situ pens in rehabilitated mangrove areas and AUU ponds. Strengthen fisherfolk cooperatives and community groups by training them on aquaculture operations, product processing, and enterprise management, with active participation of women and youth. Develop value-added Manakla-based and allied seafood products (e.g., bottled Manakla, patties, soup mix, smoked tilapia) to diversify livelihood opportunities and increase household income. Promote eco-tourism through the Manakla Experience that integrates mangrove planting, aquaculture site tours, seafood tasting, and product sales as both livelihood and advocacy activities. Support policy development and institutional linkages by aligning with PNAP, SAFE Program, and relevant LGU ordinances, and contributing inputs to the development of Philippine National Standards (PNS) for Manakla-based products.	Publication: Patent: Product: People: Place: Policy: 15 Marketing collateral (Brochures, Flyers, Primers); 15 Assessment Reports and; 15 Social Enterprise Plans; 15 Documented STBCF/3 Successful AANR SEs; 8 Improved Social Enterprise Plans; Compendium containing 15 documented STBCF and 3 successful AANR-SEs Patent: 1 Trademark filed; PCAARRD MASIGLA Logo; 1 Trademark registered PCAARRD MASIGLA Logo Product: 8 AANR-based and STBCF SEs-A, -C products (mango, coffee, cacao, rubber, fish, bamboo, buffalo, and vegetable) supported and promoted 3 successful AANR SEs (crops, livestock, fisheries, forestry) People: 15 STBCF/STAD SEs trained (at least 25 officers and members/STCBF); 15 STCBF SEs mentored; 15 Social Enterprise Plans prepared; 8 accelerated STBCF/STAD SEs trained (at least 25 members/STCBF); 8 accelerated STBCF SEs mentored; 8 Improved Social Enterprise Plans prepared and monitored	Marinduque State University (MarSU)	Primary Beneficiaries: Fisherfolk associations in Brgy. Abo and Brgy. Biga (Sta. Cruz, Brgy. Nangka II (Mogogog), and Brgy. Suha (Torrijos), Marinduque * 30 fisherfolk members directly managing aquaculture pens, participating in trainings, and benefiting from production and sales. Existing cooperatives involved in fisheries and coastal livelihood initiatives * supported as enterprise hubs for improved operations, governance, and market access. Secondary Beneficiaries: Women and youth groups in the project sites * trained in post-harvest processing, eco-tourism, marketing, and nursery operations, with inclusion targets of at least 40% women and 20% youth. Coastal households (~150) in the identified barangays * benefiting from improved food access, environmental restoration, and indirect employment. Institutional and Community Stakeholders: Marinduque State University (MarSU) * strengthened extension and research engagement, with opportunities for faculty and student involvement. Partner: LGUs (Sta. Cruz and Torrijos) * enhanced coastal resource management and strengthened local economies through aquaculture. Provincial Government of Marinduque, BFAR, DENR, and DT/DOT * access to policy models, technical inputs, and replicable frameworks for sustainable aquaculture and eco-tourism. Tourists and visitors * exposure to new eco-tourism destinations that	01-Oct-25	31-Mar-28	ONGOING	4,998,368	2,513,592
	Mobilizing and Advancing Science-based Social Enterprises through Innovation and Guided Learning Towards Organizational Agility (MASOGLA)	Rapid, inclusive and sustained economic growth	Objectives: In general, this collaborative project aims to expand the (extension) services provided by DOST-PCAARRD to enable AANR-based social enterprises to strengthen the delivery of its social mission /impact to the most vulnerable populations of AANR communities. Specific: 1. Capacitate the AANR-SEs to strengthen their marketing strategies, increase their production capacity, improve financial capacity to help others, and heighten environmental care and concern. 2. Conduct enterprise planning to improve the productivity and efficiency of the organization; 3. Design and conduct training programs that will enable enterprises to plan and innovate their operations and overall management; 4. Mentor AANR-SEs to attain the Triple Bottom Line (social, financial, and environmental) by providing knowledge on the four key aspects of business marketing, operations, HR and organization and finance; 5. Promote innovative products to increase marketability; and 6. Build competencies of at least 50% of beneficiary organizations and foster their transition to a more sustainable AANR-social enterprise like cooperatives.	Publication: 15 Marketing collateral (Brochures, Flyers, Primers); 15 Assessment Reports and; 15 Social Enterprise Plans; 15 Documented STBCF/3 Successful AANR SEs; 8 Improved Social Enterprise Plans; Compendium containing 15 documented STBCF and 3 successful AANR-SEs Patent: 1 Trademark filed; PCAARRD MASIGLA Logo; 1 Trademark registered PCAARRD MASIGLA Logo Product: 8 AANR-based and STBCF SEs-A, -C products (mango, coffee, cacao, rubber, fish, bamboo, buffalo, and vegetable) supported and promoted 3 successful AANR SEs (crops, livestock, fisheries, forestry) People: 15 STBCF/STAD SEs trained (at least 25 officers and members/STCBF); 15 STCBF SEs mentored; 15 Social Enterprise Plans prepared; 8 accelerated STBCF/STAD SEs trained (at least 25 members/STCBF); 8 accelerated STBCF SEs mentored; 8 Improved Social Enterprise Plans prepared and monitored	University of the Philippines Diliman (UPD)	Fifteen (15) AANR-STBCF/STAD social enterprises.	01-May-24	30-Apr-26	ONGOING	4,999,882	1,349,850

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Nature-based Solutions for Sustainable Mangrove Management and Resilient Coastal Communities Through Innovative Green Engineering Approach	Rapid, inclusive and sustained economic growth	General: Generally, the objective of this project is to enhance mangrove ecosystem resilience by implementing green engineering solutions Specific: 1. Showcase the sustainable green engineering interventions for the management and resilience of mangrove resources and coastal communities in select municipalities in Ilocos Norte; 2. Enhance local community participation and capacity in nature-based mitigation and adaptation approach in mangrove conservation and management; and 3. Document best practices and knowledge-sharing on the use of bamboo fence in facilitating mangrove establishments for communities in building greater area of coastal defense against coastal hazards; and 4. Produce learning materials and manuals in establishing green engineering interventions in mangrove plantations.	Publication: 1. Project brochure 2. Paper: Site suitability analysis in mangrove plantation in Ilocos Norte 3. Manual in coastal mangrove management with green engineering technology 4. Paper: A green engineering approach to assist mangrove establishment using bamboo fence 5. Paper: Estimates of blue carbon opportunities with a facilitated establishment of new mangrove areas in Ilocos Norte Patent: 1. Copyright of project brochures 2. Copyright of manual on mangrove planting with assisted soft-engineering approach Product: Vulnerability maps of coastal communities and mangrove areas People: 1. 1 project staff trained for drone flying and image processing 2. 2 project staff trained in community organizing 3. 1 project staff trained in advanced GIS 4. 2 project staff trained for project monitoring and evaluation 5. Members of the community trained in mangrove propagation with organized cooperative Place: 1. Established local partnerships (2 LGUs, 1 NGO, 2 SUCs) 2. Conducted corsis visits in 2 countries with similar project 3. establish at least 2 international collaborations Policy: 1. Policy brief for coastal wetland management policy and recommendation	Mariano Marcos State University (MMSU)	This project is expected to serve primarily the coastal municipalities that are vulnerable to coastal hazards that could be aggravated by climate change. Since the province of Ilocos Norte is a coastal province, all coastal municipalities may adapt the output of the project to increase their resilience against the worsening occurrence of hazards.	01-May-24	30-Apr-26	ONGOING	4,969,936	1,402,604
	Oikos Peace and Wellness Garden PA-SiCAT-In (Products and Services Advancement through Science for the Convergence of Agriculture and Tourism (SiCAT) for Inclusive Development	Rapid, inclusive and sustained economic growth	General: The general objective of the study is to sustain the gains from Phase I and further transform and improve the OPWG as a SiCAT site in Bohol. Specific: 1. Capacitate the personnel of OPWG and other farm owners/farming enthusiasts with technical, managerial and entrepreneurial know-how to establish and run a SiCAT farm or as farm partner to the existing SiCAT farm; 2. Improve the existing POTs and introduce new POTs for further knowledge and information dissemination and farm productivity enhancement. 3. Develop and produce fresh and value-added products of the farm; 4. Improve the tourism services and recreational activities; and 5. Secure DOT accreditation of OPWG as a farm tourism site.	Publication: At least 3 IEC technology promotional videos At least 3 IEC materials (brochures, leaflets, etc.) At least 3 training modules prepared 2 Semi-annual reports 1 Annual report 1 Terminal report Patent: At least 6 copyrighted IEC materials (brochures, leaflets, posters, etc.) Product: At least 3 new POTs downloaded At least 150 kg farm fresh produce At least 3 value-added products from existing farm produce People: At least 5 trainings conducted At least 3 webinars conducted At least 250 trained farm owners/farming enthusiasts At least 250 potential POT adapters At least 5 actual POT adopters At least 100 monthly average visitors Place: 1 SiCAT site accredited by DOT as a farm tourism site. Policy: At least 1 policy recommendation promoting implemented POTs	Bohol Island State University (BISU)	OPWG personnel Community in Zamora Farm owners Farming enthusiasts Local and foreign tourists Farm entrepreneurs Students Academe Other interested individuals and groups	16-Jan-24	15-Jan-26	ONGOING	3,000,000	938,416
	Pre-commercialization of MUCAS-4H Technology for Enhanced Lettuce Production	Rapid, inclusive and sustained economic growth	General Objective: To conduct pre-commercialization activities for the MUCAS-4H (Management of Unified Control and Automated Systems for Smart Hydroponic) technology prepare it for large-scale market deployment in the Philippine agriculture sector. Specific Objectives: To optimize the current prototype for replicable field deployment; To fabricate six (6) sets and validate them in three (3) real farm environments; To conduct technical and user-performance assessment across pilot sites; To apply for intellectual property rights of the MUCAS-4H Technology; To complete Freedom to operate, feasibility, market, and valuation activities. To package the technology for commercial use, including a full business and licensing plan.	6P/20y12/Products-1 Prior Art Search Report-1 Freedom to Operate Report-1 Market Study-1 Feasibility Study-1 Business Plan/Business Model with Financial Analysis-1 Valuation Report-1 Technology Commercialization Plan-1 Technology Communication Plan-1 Fairness Opinion Board Requirements Ready Publications-2 IEC Materials (Brochure and Poster)-1 Publishable Paper-1 IEC Material (AVP)-1 User's Manual/Operator's Manual-1 Patent-1 IP Filed-1 People and Services-1 Training/Product Demonstration-30 Farmers and Youth-1 Trained on the Technology-Places and Partnerships-1 MOU with Partner Industry-1 Negotiation with Potential Licensee-1 Policy/AN/A Social Impact The project will contribute significantly to capacity building and social development within agricultural communities. A minimum of 30 individuals comprising traditional farmers and agriculture-enthusiastic youth will be trained on the use, maintenance, and benefits of the MUCAS-4H system. Training activities will be gender-responsive, ensuring equitable participation of both men and women, particularly those from underserved and rural areas. Instructional materials such as user manuals, audiovisual presentations, and demo kits will be developed to support learning and promote technology adoption. The project will foster community-based learning by linking seasoned farmers with youth participants, enabling the transfer of practical knowledge and encouraging intergenerational collaboration in smart agriculture. Economic impact: The project is expected to generate significant economic benefits for local farmers and agricultural communities. With the adoption of MUCAS-Hydro, farmers can anticipate an additional income of approximately Php 25,000 per month per 120-square-meter greenhouse. This increase stems from higher crop yields, reduced labor costs, and improved product quality. By automating key processes such as nutrient delivery and environmental control, the system minimizes input waste and human error, thus enhancing operational efficiency. The project will stimulate local economic activity by promoting the use of home-grown technologies for system	Iloilo Science and Technology University (ISAT-U)	The most practical target beneficiaries for the pre-commercialization of the MUCAS-4H Technology are smallholder vegetable farmers, rural farming cooperatives, and agri-technical institutions. Smallholder lettuce growers, particularly those operating greenhouses or interested in transitioning to hydroponics, stand to benefit the most from this system.	01-Oct-25	30-Sep-27	ONGOING	4,952,752	2,526,800
	Pre-commercialization of Philippine Natural Zeolite-based Particle Film Technology for Cacao Pest Management	Rapid, inclusive and sustained economic growth	General: The main objective of the project is to conduct pre-commercialization activities for the Philippine Natural Zeolite-based Particle Film Technology. Specific: 1. To apply for intellectual property rights of the Philippine Natural Zeolite-based Particle Film Technology. 2. To develop packaging and commercialization designs of the Philippine Natural Zeolite-based Particle Film Technology. 3. To conduct feasibility and market studies of the Philippine Natural Zeolite-based Particle Film Technology. 4. To determine the appropriate business model for the Philippine Natural Zeolite-based Particle Film Technology. 5. To conduct trainings on the use of the Philippine Natural Zeolite-based Particle Film Technology in cacao farms and plantations. 6. To facilitate product registration through the Bureau of Agriculture and Fisheries Standards (BAFS).	6P/20y12/Products-2 IPR filed for the Philippine Natural Zeolite-based Particle Film (TM and Patent/AM/In) Publications-1 Manual or Guide for the Philippine Natural Zeolite-based Particle Film Products-1 Prior Art Search-1 Freedom to Operate Report-1 Feasibility Study-1 Market Study-1 Business Plan and Model Report-1 Philippine Natural Zeolite-based Particle Film-1 TM for the product CaeCropZield-1 Valuation Report-1 Communication Plan-1 Commercialization Plan-1 BAFS registration application-1 People and Services-1 training sessions will be conducted with thirty (30) farmers each session-1 training sessions will be conducted with thirty (30) farmers each session-1 Places and Partnerships-2 Partnership agreements with Cacao farmers / cooperatives (Terraprito Farm - Quezon Ramp; Cogon Hills Integrated Farm - Capiz)-1 Partnership agreement with Lithos Manufacturing-1 Policy	De La Salle University (DLSU)	Cacao smallholder farmers, cooperatives, and plantations.	01-Oct-25	30-Sep-27	ONGOING	5,000,000	2,500,565
	Pre-commercialization of Rice Hull Decontaminating Machine for Effective Litter Management in Broiler Chickens	Rapid, inclusive and sustained economic growth	General: The main objective of the project is to conduct pre-commercialization activities for the Rice Hull Decontaminating Machine. Specific: 1. To enhance the rice hull decontaminating machine through modifications, performance evaluations, and AMTEC testing to meet commercial standards; 2. To determine the shelf life of decontaminated rice hulls to establish optimal storage conditions; 3. To determine and analyze the market demand and economic viability of the rice hull decontaminating machine through market and feasibility study; 4. To develop critical pre-commercialization documents, including business plans, business models, and valuation reports; 5. To implement a comprehensive Communication Plan that includes product demonstrations and training sessions to drive technology adoption and equip users with operational knowledge; and 6. To formulate a strategic commercialization roadmap for the successful market entry, distribution, and long-term sustainability of the machine.	6P/20y12/Products-1 Prior Art Search Report-1 Freedom to Operate Report-1 Unit of modified and tested rice hull decontaminating machine-1 Business Model-1 Market Study-1 Feasibility Study-1 Business Plan-1 Valuation Report-1 Communication Plan-1 Commercialization Plan-1 Publications-1 IEC material-2 IEC materials-1 Operations and maintenance manual of the machine-1 submitted paper for publication-1 Patent-1 copyright of IEC-2 IP applications-1 People and Services-2 graduate students involved in the project-1 Machine demonstration on how to use/operate the technology-10 personnel from major integrators trained on the operation and maintenance of the machine-1 Technology subjected to AMTEC testing-1 Technology submitted to BAFS for the crafting of standards-1 Places and Partnerships-1 MOU between CLSU and COBB-VANTRESS PHILIPPINES, INC.-1 Policy/AN/A	Mindanao State University - Marawi (MSU Main)	The recipients of this project include all broiler-breeder farms in the Philippines that utilize decontaminated rice hulls as their bedding material. The solution aims to target broiler-breeder farms by delivering an efficient manufacturing system for decontaminated rice hulls that will meet their requirements and guarantee continuous cheap high-quality bedding supplies. The technology benefits both farm hygiene and productivity while helping poultry farmers decrease expenses thus becoming an essential resource for industry progress and sustainability.	01-Aug-25	31-Jan-27	ONGOING	10	3,477,995

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	Rehabilitation of Critically Degraded Areas and Bambusetum Establishment using Microbial Technology For a Smart Green Gold Economic and Environmental Resiliency	Rapid, inclusive and sustained economic growth	General: To capacitate and educate community leaders and residents on bamboo propagation protocol and roll out the Marinduque Bioremediation Protocol (MBP) using the UPLB-developed microbial technology in bambusetum establishment and bamboo mass production for rehabilitation of 5 ha critically degraded areas in Mogpog and Sta. Cruz, Marinduque. Specific: 1. To rehabilitate 5 ha critically degraded areas (CDAs) such as mined-out areas, riverbanks and tributaries, and other barren lands or agricultural lands in Mogpog and Sta. Cruz, Marinduque. 2. To conduct capacity building activities like training/seminar and onsite demonstration of nursery bamboo propagation protocol and application of commercial microbial biofertilizers on nursery-grown bamboo propagules. 3. To establish a community bamboo nursery in Mogpog and Sta. Cruz, Marinduque. 4. To establish bambusetum (a collection of different bamboo species native in Marinduque as well as from the Bambusetum of UPLB) in Mogpog and Sta. Cruz, Marinduque. 5. To encourage community adoption of the established nursery and bambusetum that will support succeeding rehabilitation initiatives in the Marinduque Province.	Publications Produced 1 AVP Produced 1 IEC materials Produced 1 journal article/chapter-in-a- book published in a reputable international publisher. Patent: Filed 2 copyrights (1 IEC materials and 1 for training module) Product: 1 bamboo nursery in Mogpog, Marinduque 1 bambusetum in Mogpog, Marinduque 2.5 ha CDAs rehabilitated in Mogpog, Marinduque 2 bambusetum Marinduque 5 ha CDAs rehabilitated in Marinduque People and Services Identified 30 farmer cooperators Conducted 1 workshop/focus group discussion with PO, LGU and other relevant stakeholders per site Trained 30 farmer cooperators Conducted 2 trainings on S&T-based livelihood development Places and Partnerships Established 3 partnerships and linkages (i.e. LGUs, SUCs, POs) Conducted 1 cross-visit Policy: Drafted 1 policy recommendation at LGU level	University of the Philippines Los Baños (UPLB)	LGUs Academe Farmers Foresters Nursery men Students and teachers at study site Local residents/communities PeopleK...-cs Organization	01-Aug-24	31-Jul-27	ONGOING	5,000,000	1,184,048
	Revitalizing Native Pig (Markaduke Pig) Raising through Harmonized Forage-Based Feeds Production and Processing Technology	Rapid, inclusive and sustained economic growth	General: To revitalize Markaduke native pig production through forage-based feed production and processing techniques, for sustainable growth and economic stability Specific: 1. To increase the capability of the local farmers on forage cultivation, feed formulation, processing techniques, and sustainable farming practices 2. To increase awareness on cost-effective and efficient feed processing methods to maximize nutrient retention and minimize wastage	Publication: 1Patent: 10Product: 21; 27People: 32; 37Place: 46Policy: 48	Marinduque State University (MarSU)	NULL	01-Nov-24	31-Oct-26	ONGOING	5,000,000	3,594,104
	S&T Action Frontline for Emergencies and Hazards (SAFE): Sustainable Waste Management thru Black Soldier Fly (Hermetia illucens L.) Technology in CALABARZON REGION	Rapid, inclusive and sustained economic growth	General: To harness the potential benefits of incorporating Black Soldier Fly (BSF) technology in the municipal waste management system in CALABARZON Specific: 1. Establish 3 Sustainable BSF Culture Facilities in CALABARZON's municipalities; 2. Reduce the volume of bio-waste in the municipality by at least 1MT per quarter; 3. Generate 4.5MT BSF larvae supplement and 3.6 MT organic fertilizer (Frass), at the end of the project implementation; and 4. Dissemination of BSF technology to at least three other LGUs, 75 farmers, and other stakeholders	Year 1A. ProductsProduced 1.5 Metric Tons (MT) of BSF FrassProduced 1.2 MT of BSF larvae meal as a feed supplement Established 3 BSF Service Facilities B. People and ServicesConducted three (3) capacity-building activitiesTrained 30 beneficiariesC. Publication. Places and PartnershipsForged three (3) MOU/MOA with CLGU of Trece Martires, Cavite, MLGU of Rizal, Laguna, and MLGU of Perez, QuezonForged 30 MOU with farmer-beneficiariesE. PolicyDrafted and approved three (3) policy recommendations on the ordinance for the establishment of BSF facilitiesF. PatentsYear 2A. ProductsProduced 3 Metric Tons (MT) of BSF FrassProduced 2.4 MT of BSF larvae meal as a feed supplement Maintained three (3) BSF Service Facilities B. People and ServicesConducted three (3) capacity-building activitiesTrained 30 beneficiariesC. PublicationDeveloped three (3) IEC materialsProduced 1,500 IEC materialsProduced one (1) video documentationProduced one (1) technical handbookDeveloped one (1) BSF operations manual. Places and PartnershipsForged three (3) MOU/MOA with CLGU of Trece Martires, Cavite, MLGU of Rizal, Laguna, and MLGU of Perez, QuezonForged 30 MOU with farmer-beneficiariesE. PolicyDrafted three (3) policy recommendations on the formation of a BSF associationF. PatentsFiled three (3) copyrights for IEC materialsFiled one (1) copyright for video documentationFiled one (1) copyright for the technical handbookFiled one (1) copyright for the BSF operations manual	Department of Agriculture - Regional Office CALABARZON (DA-CALABARZON)	1. Farmers (Association, cooperative) 2. Stakeholders (farmers) 3. LGUs	01-Mar-25	28-Feb-27	ONGOING	5,000,000	2,944,412
	S&T Community - Based Farm (STCBF) on Enhancing Coffee Production in Sultan Kudarat (Phase 2)	Rapid, inclusive and sustained economic growth	General: To increase the quality of green coffee beans and productivity of coffee farmers in Sultan Kudarat through the S&T Community-Based Farm (STCBF) approach. Specific: 1. To increase production yield of GCB by 40-50% per unit area from baseline yield of 600 (baseline) kg/ha to 1.1/ha; 2. To intensify the adoption of recommended technologies in coffee production through capacity building and promotion; and 3. To develop policy recommendations for the sustainability of the project.	Publication: 1Patent: 12Product: 26People: 37Place: 44Policy: 48	Sultan Kudarat State University (SKSU)	NULL	01-Nov-24	31-Oct-26	ONGOING	5,000,000	2,854,552
	S&T Community-Based Farm (STBCF) for Sustainable Production and Market Linkage of Smallholder Seaweed Growers Group	Rapid, inclusive and sustained economic growth	General Objective: In general, the project aims to improve production and market linkage of seaweed farmers in Digos City, Davao del Sur. Specifically, it aims to: 1. Enhance capacities of smallholder seaweed growers group in Digos City; 2. Establish sustainable market linkages through synchronized production of 10MT dried seaweed and 1.2K liters seaweed drippings per month; 3. Improve income of farmers by 500% per month from seaweed production; and4. Recommend policy on seaweed production at the BLGU and CLGU level.	Products - Covered 8 hectares adopting "Patundan" method - Produced 180MT dried seaweeds for international and/or local market - Produced 21.6 K liters seaweed drippings - Established 1 drying area as community-shared facility with 5 dryers with dripping collector and 2 final dryers - Consolidated dried seaweeds and drippings as synchronized production - Produced 1 GIS map of seaweed farms People and Services - Established 1 smallholder seaweed grower group with at least 60 members - Trained 60 smallholder seaweed growers - Conducted 12 capacity building activities Places and Partnerships - Signed 5 MOUs and 2 MOAs - Established linkage to potential market of seaweed drippings	Davao del Sur State College (DSSC)	Men and women seaweed farmers of Digos City	01-Oct-24	30-Sep-26	ONGOING	5,000,000	630,561
	S&T Community-Based Farm (STBCF) on Harnessing the Synergy of Vegetable Production and Stingless Beekeeping (Vegebee)	Rapid, inclusive and sustained economic growth	General:To improve the productivity of vegetable crops and provide additional sources of income of the community through beekeeping.Specific:To promote wider adoption of beekeeping technology on vegetable crops farming through the S&T community-based farm modality.To increase yield of vegetables by 20% through various S&T interventions (from 350 kg to 420 kg per 200 m2)To increase farmers' knowledge and awareness on the significance of bee pollination and implement it to the communityTo initiate policy development and advocacies on vegetable farming and beekeeping	Products Harvested 12,075 kgs of assorted vegetables Harvested 225 kgs honey, 22.5 kgs pollen, 22.5 kgs propolis, and 60 additional stingless bee colonies Installed 75 stingless bee colonies, 75 hive boxes, 15 hive tools, 15 bee veils Trained 15 vegetable farmers trained in beekeeping Conducted 4 trainings Conducted/participated in 2 trade fairs/exhibits Increased engagement through social media (480/yr) Places and Partnerships Forged 1 MOU/MOA with partner agency for the marketing of vegetables and other products produced Forged 15 MOUs/MOAs/ Contracts between CvSU and beneficiaries Established partnership with DOST for product development, packaging and marketing of products	Cavite State University (CVSU)	15 farmers from Indang, Alfonso, and Silang, Cavite	01-Oct-24	30-Sep-26	ONGOING	4,440,820	1,003,690

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2022	Total Project Cost	2025 PCAARRD GIA
	S&T Community-Based Farm on Mango Production and Processing for Enterprise Development in Cagayan Province	Rapid, inclusive and sustained economic growth	General: To improve the income and ensure the enterprise sustainability of the Iluru Sur Malauag Mango Growers and Workers Association (ISMGGWA) in Rizal, Cagayan by strengthening the members through S&T-based interventions for enhanced mango production, postharvest handling, value-adding, and market competitiveness. Specific: To enhance the capacities of ISMGGWA members through training on S&T-based mango production, postharvest handling, and value-adding. To improve mango orchards by adopting S&T-based interventions for enhanced productivity and fruit quality. To develop and implement commercial-scale production of mango fruit bars as a value-adding enterprise of ISMGGWA; and to establish sustainable market linkages by connecting ISMGGWA with at least two institutional buyers or processors for both fresh and processed mango products.	Products <ul style="list-style-type: none"> Developed 1 mango production profile of mango farmer-cooperators Established 10 cooperator farms Rehabilitated 100 pruned mango trees Rehabilitated at least 8 hectares of mango farms Harvested 17.5 MT of fresh mangoes Developed 1 pilot value-added product (fruit bar) Produced 2,000 packs of commercial fruit bars Maintained at least 8 hectares of mango farm Pruned 300 mango trees Harvested 21 MT of fresh mangoes Produced 3,000 packs of commercial fruit bars People & Services <ul style="list-style-type: none"> Capacitated 25 farmer-cooperators (i.e. 10 on S&T-based production and marketing and 15 on value addition) Conducted 10 capacity building sessions (i.e. 4 on S&T-based production and marketing, 5 on value adding, 1 on financial literacy and record-keeping) Conducted 100 social media engagements Aligned services with PhilGAP requirements in 4 cooperator farms Conducted 100 social media engagements Capacitated 25 farmer-cooperators (i.e. 10 on S&T-based production and marketing and 15 on value addition) Conducted 10 capacity building sessions (i.e. 4 on S&T-based production and marketing, 5 on value adding, 1 on financial literacy and record-keeping) Aligned services with PhilGAP requirements in 4 cooperator farms 	Cagayan State University (CSU) - Piat Campus	Men and Women Members of the Iluru Sur Malauag Mango Growers and Workers Association (ISMGGWA)	01-Oct-25	30-Sep-27	ONGOING	5,000,000	3,366,564
	S&T Community-based Farm: A techno transfer modality through Integrated Farming System of Queen Pineapple, Vegetables, and Poultry Production in Camarines Norte	Rapid, inclusive and sustained economic growth	General: To support the growth and operation of crossbred dairy buffalo-based enterprises in San Agustin, Ibalaba. Specific: <ol style="list-style-type: none"> Provide an overview of the crossbred dairy buffalo industry; Identify the challenges and opportunities facing the crossbred dairy buffalo enterprises in the study area; Develop and implement intervention strategies to address the specific needs of the enterprises; Build partnerships between and among key stakeholders in crossbred dairy buffalo industry; Develop the implementing rules and regulations for the institutionalization of crossbred carabao development program in the municipality; Monitor and evaluate the immediate outcomes of the interventions to the enterprises; and Provide recommendations for further development of the crossbred dairy buffalo industry. 	Products: <ul style="list-style-type: none"> Established 6.25 hectares of queen pineapple production area; Established 2.25 hectares of vegetable production area; Produced 22.5 MT of eggplant; Produced 22.5 MT of pole sitao; Procured 250 ready to lay native chicken Rehabilitated 100 heads of 2-3 week old chicks for sale; Produced 3,475 table eggs for sale B. People and Services: Trained 125 farmers on integrated farming system (queen pineapple, vegetables, and native chicken production and waste management); Engaged and conducted 20 promotional activities (including social media) C. Places and Partnerships- Forged 25 Memorandum of Agreements (MOAs) among Farmer Beneficiaries, Implementing Agency, and five (5) LGUs D. Publications: Developed one (1) IEC material on the package of technologies in queen pineapple, vegetable, and native chicken production - Produced and disseminated 125 copies of IEC Materials on the package of technologies in queen pineapple, vegetable, and native chicken production YEAR 2 A. Products- Produced 37.5 MT of squash - Produced 12.5 MT of pechay - Produced 150 MT of queen pineapple (15 model farms) - Produced 1,200 breeder stocks for next production cycle - Produced 17,000 heads of 2-3 week old chicks for sale - Produced 6,950 table eggs for sale B. People and Services: 	Department of Agriculture - Regional Field Office V (DA-RFO V)	Queen pineapple Farmers: Smallholder and commercial farmers engaged in Queen pineapple and vegetable production in Camarines Norte. Local Agricultural Communities: Communities within Camarines Norte with a significant presence of Queen pineapple farming. Stakeholders in the QP Value Chain: Individuals or entities involved in various stages of the Queen pineapple value chain, including processors, distributors, and marketers. Local Government and Agricultural Authorities: Local government officials and agricultural authorities responsible for overseeing agricultural development in Camarines Norte.	01-Feb-25	31-Jan-28	ONGOING	5,000,000	2,424,640
	S&T Community-Based for Inclusive Development (STCAD) on Livelihood Improvement of Mangyan Communities in Mindoro through Science and Technology (S&T) Interventions	Rapid, inclusive and sustained economic growth	General Objective: The program generally aims to uplift the socio-economic status of five (5) Mangyan Communities in oriental Mindoro through science and technology-based livelihood interventions. Specific Objectives: To improve the Mangyan's existing livelihood and provision of resources towards attaining sustainable Food and Poverty Threshold Levels; To empower Mangyan communities by improving literacy and leadership capabilities; and To promote Mangyan products through communication and marketing	Publications: <ul style="list-style-type: none"> Traditional Cooking Recipe 3 Basic Numeracy, Reading and Writing 5 Traditional/Indigenous Medication Patent: Copyright of IEC, Materials/Product: 3-hectare sustainable farm with two or more specific commodities Fresh produce of root crops, vegetables, calamansi, corn and condiments Processed products of calamansi, rootcrops, soursop and vegetables Handicrafts People: <ul style="list-style-type: none"> 200 Mangyans trained for the following: <ul style="list-style-type: none"> Package of Technology (POT) for root crops production POT for Banana, Coconut and Corn POT for Calamansi, Soursop, Vegetable Crops Food Processing and Value Adding Handicrafts Making Agricultural Marketing and Strategies 100 Mangyans were taught the basic literacy and leadership skills Produced at least 5 Mangyan Leaders which would lead their community in progress	Mindoro State University (MISU)	Selected Mangyan communities from Oriental Mindoro	16-Jan-23	15-Jan-26	ONGOING	14,570,984	1,697,164
	S&T Community-Based Project on 'Lakatan' Banana Production in Abra	Rapid, inclusive and sustained economic growth	General Objective: This project aims to enhance C-40LakatanC-40 banana production in Abra through the S&T Community-based approach. Specific Objective: 1. Promote the use of tissue-culture lakatan through S&T community-based farms 2. Increase beneficiariesC-40C income by 15% in the different target municipalities. 3. Sustain the Lakatan production in Abra through the development of policy input on productivity, profitability, and sustainability with partner LGUs.	Publication: Patent: 10Product: 27People: 37Place: 38Policy: 48	Abra State Institute of Science and Technology (ASIST)	NULL	01-Mar-25	28-Feb-27	ONGOING	5,000,000	3,349,971
	Science and Technology Action Frontline for Emergencies and Hazards (SAFE) - LIGTAS: S&T Interventions to Improve Quick Response to Calamities and Natural Disasters in Regions 1, 2, and CAR - Phase II	Rapid, inclusive and sustained economic growth	General Objective: To scale up the support for disaster-prone communities by reducing their vulnerability to natural hazards and climate-related disasters through S&T interventions in Regions 1, 2, and CAR. Specific Objective: To increase the provision of an immediate supply of food to affected communities from 2,000 to 3,000 families in the occurrence of calamities and natural disasters and to Indigenous People (IPs), indigent senior citizens, PWDs, and solo parents during non-calamities and natural disasters. To sustain the production area established for rice, mungbean, tilapia and native chicken utilizing GAP technology. To expand the provision of S&T livelihood and enterprise assistance from 10 to 20 severely affected beneficiaries in the event of calamities and natural disasters. To strengthen and expand the existing partnerships with DOST-PCAARRD, BFAR, Region 02, LGUs, and other stakeholders; To document experiences, lessons learned, and to identify different areas for improvement throughout the project duration.	Publications <ul style="list-style-type: none"> Published one (1) article Developed one (1) video documentation for the project Developed one (1) Audio Visual Presentation (AVP) Products <ul style="list-style-type: none"> Produced, prepared, and distributed at least 3,000 packs of agricultural products to selected beneficiaries (calamity-stricken communities in Regions 1, 2, and CAR). While distributed 2,000 packs to beneficiaries during the non-calamities and natural disasters which include the Indigenous People (IPs), indigent senior citizens, PWDs, and solo parents in Cagayan province during non-calamities and natural disasters Generated at least four (4) Package of Technologies (POTs) Raised at least 300 chicken pullets Produced at least 125 kg fresh tilapia for dried fish Produced at least 375 kg of tilapia Generated a yield of 2,400 kilograms from two (2) hectares of mungbean production Generated a yield of 20,000 kilograms of paddy rice from two (2) hectares of rice production Produced 13,600 kilograms of milled rice People and Services <ul style="list-style-type: none"> Sustained one (1) established production areas for rice, mungbean, tilapia and native chicken utilizing GAP technology in the CSU implementing campus Assisted at least 3,000 families through distributed relief packages during calamities and natural disasters. 	Cagayan State University (CagSU)	ECChicken growers ECTilapia growers in pondE Rice and mungbean growers EConsumers/Buyers ECalamity/Disaster victims EIndigenous People (IPs), indigent senior citizens, PWDs, and solo parents EBeneficiaries EProcessors	01-Jun-25	31-May-27	ONGOING	5,000,000	3,328,348

Program Title	Project Title	Key Result Areas (KRA)	Description of Program/Project/Objectives	Expected Output/Target	Implementing Agency	Beneficiaries	Start	End	Status 'As of December 31, 2024	Total Project Cost	2025 PCAARRD GIA
	Strengthening the Capacities of Abaca Farmers for the Establishment of S&T Based Abaca Nurseries as Source of Good-Quality Planting Materials	Rapid, inclusive and sustained economic growth	General Objective: This project generally aims to contribute to the abaca rehabilitation in Maasin, Southern Leyte through enhancing the capacities of men and women farmers in establishing S&T-based abaca nurseries/demonstration farms as source of good-quality abaca planting materials. Specific Objective: To identify between 6-12 farmer beneficiaries who will take charge in the establishment and maintenance of the abaca nurseries/demonstration farms to establish a total of 3-hectare S&T-based abaca nurseries/demonstration farms to serve as sources of abaca planting materials. To conduct capacity-building activities to farmer-beneficiaries and other abaca farmers to promote wider adoption of recommended abaca technologies thru field days and distribution of IEC materials.	Products 3 hectares abaca nurseries established Places and Partnerships 6-12 MAJU/MDA signed People and Services 6-12 farmer beneficiaries 200 beneficiaries trained Publications 8 IEC materials developed/reproduced 2 video documentation 4 training modules Patents 8 IEC materials filed for copyright Policies 1 policy recommendation on the adoption of GAP in abaca production Social Impact Empowered men and women in the local community in abaca nursery establishment Enhanced capacities of men and women abaca farmers on the use of recommended abaca technologies Economic Impact Increased income of men and women farmers due to improved abaca production Higher abaca production leading to increased raw material supply for the fiber industry, benefiting the local economy	Visayas State University (VSU)	The project will be implemented in five (5) abaca farming communities in Maasin, Southern Leyte known for their high potential in abaca fiber production. The beneficiaries are primarily smallholder abaca farmers, both men and women, many of whom are dependent on abaca as their main source of livelihood.	01-Jul-25	30-Jun-27	ONGOING	4,993,896	2,981,948
	Sustainable Good Agricultural Practices (GAP)-Based Vegetable Production and Processing Technologies Towards Enterprise Development in Cagayan Province - Phase II	Rapid, inclusive and sustained economic growth	General: To develop a sustainable GAP-based vegetable production and processing enterprise for small-scale farmers in Cagayan Province. Specific: To sustain the farm productivity of 11.4MT/ha for ampalaya, 12 MT/ha for pole sitao, 9MT/ha for okra, 7.9MT/ha for eggplant, 10.2MT/ha for tomato, 12.2MT/ha for pepper and 13.8MT/ha for squash. To increase the income of vegetable grower cooperators from Php 10,000 to 12,000 per month surpassing the provincial threshold level of 10, 258.72/ha/hold per month. To capacitate 75 vegetable grower co-operators in Cagayan Province on value-adding technologies. To introduce at least 3 S&T based vegetable value added products to be adopted by the co-operators. To reduce postharvest losses from 7% to 3% in Tomato (1,050 kgs./ha 300 kgs/ha), Okra (1,050 kgs/ha 300 kgs/ha), Pole Sitao (500 kgs/ha, 250 kgs/ha) through processing and appropriate production planning.	Publications: Publish 1 article in a reputable scientific journal or agricultural publication Develop 1 product development manual that outlines the standardized vegetable processing techniques and innovative approaches and Develop 1 Audio Visual Presentation (AVP) Products: Produce fresh preferred lowland vegetables (tomatoes, eggplants, pole sitao, okra, bottle gourd, bitter gourd, pepper and sponge gourd): Ampalaya: 11.4 MT/ha Pole Sitao: 12 MT/ha Okra: 9 MT/ha Eggplant: 7.9 MT/ha Tomato: 10.2 MT/ha Pepper: 12 MT/ha Squash: 13.8 MT/ha Produce 3 value-added processed products (Vacuum Fried Okra, Vacuum Fried Sweetened Tomatoes, Vacuum Fried Sitaw) People and Services: - Capacitate and train 3 Vegetable Growers Association with a total of 75 members. - Conduct at least 3 workshops on sustainable and profitable farming techniques, and GAP standards. - Conduct financial literacy session for the 75 vegetable growers - Conduct at least 3 training on vegetable value-adding practices Places and Partnerships: - Renew Memoranda of Agreement (MOAs) with 3 partner Municipal Local Government Units (MLGUs) and	Cagayan State University (CagSU)	Lowland Vegetable Growers of Gonzaga, Lal-fo, and Sto. Nino, Cagayan	01-Jun-25	31-May-27	ONGOING	5,000,000	3,073,800
	Sustainable Mangroves through Innovations and Livelihood Enhancement Promoting Growth and Climate Resilience (SMILE-Growth)	Integrity of the environment and climate change adaptation and mitigation	General: The project generally aims to enhance CBFM livelihood and income sources for sustainable and climate-resilient mangrove management. Specifically, it aims to Examine social-ecological system (SES) and tenurial arrangements in CBFM promoting sustainable livelihoods and income sources from mangroves. Assess climate change vulnerabilities of local communities and their respective mangrove-based livelihoods and social enterprise; identify and develop S&T-based innovations on livelihoods and social enterprise for sustainable and climate-resilient mangrove management; and Promote S&T-based innovations on livelihoods and social enterprise through conduct of training.	Products - Characterized 2 mangrove social-ecological system - Produced 2 mangrove cover maps - Characterized 2 livelihood systems/activities Produced 1 training module Places and Partnerships - Established 2 partnerships and linkages (i.e. LGUs, SUCs, NGAs) - Conducted 2 benchmarking activities in successful mangrove CBMs Conducted 1 cross-visit People and Services - Identified 30 farmer cooperators - Conducted 1 workshop/focus group discussion with PD, LGU and other relevant stakeholders per site - Trained 30 farmer cooperators - Conducted 2 trainings on S&T-based livelihood development - Supported 2 student researches (1 PhD and 1 undergrad) Publications Produced 1 journal article/ chapter-in-a-book published in a reputable international	University of the Philippines Los Baños (UPLB)	The following are the target beneficiaries of the project: CBFM members Other mangrove communities Government agencies such as the DENR, DA, BFAR, etc Non-government agencies LGUs SUCs and academes Private organizations Policy makers	16-Oct-23	15-Apr-26	ONGOING	5,000,000	811,998
	TechnoKNow: Strengthening Technology Transfer for Stronger University-Industry Collaboration for Sustainable Development	Rapid, inclusive and sustained economic growth	General Objective: The general objective of this project is to promote UPLB technologies and industry or community adoption of UPLB developed products, services, and experiences. Specific Objective: The specific objectives of the project are: To conduct a TechnoKNow interactive program once a month that will feature the different agricultural, aquatic and natural resources innovations of a particular UPLB unit; To identify and select at least nine (9) MSMEs to adopt or license UPLB technologies; To equip selected MSMEs in scaling up identified UPLB technologies from ideation to actual marketing through the utilization of UPLB's FABLAB; and To monitor the University's intervention programs and conduct a strategic planning workshop to determine the follow-through collaborations between the university and partner MSMEs.	Products Product pitches conducted; 1 Website maintained; 1 Database of MSMEs maintained; 24 Workshops conducted; 2 Pilot-scale designs prepared; 5 Packaging designs prepared; 5 Commercialization Plans prepared; 5 Marketing Plans prepared; 2 Monitoring and evaluation (M&E) metrics and procedures developed; 2 M&E report covering the following aspects: TRLS, MRLLs, etc., etc. stated in the proposal prepared; Publications 50 Technology Transfer Manual printed and disseminated; 50 Packaging and Branding Manual printed and disseminated; 24 Technology brochures prepared; 24 Technology Briefs, other exhibit materials prepared; People and Services 24 TechnoKnow Programs conducted; 14 UPLB units to be involved in the project; 9 Innovation and Entrepreneurship committee from different UPLB units involved in the project; 480 Attendees to the 24 TechnoKnow events (20jaw/session) 9 Partner and on-boarded MSMEs; 9 MSMEs assisted on technology adoption and scaling up; 2 MSMEs assisted for securing grants or funding (at least 1 per year); 9 Market validation activities conducted; 1 GREAT/MS Student supported and assisted; 2 Strategic planning workshops conducted; 2 Monitoring and evaluation of royalties received and number of licensing negotiations; 2 Technology Transfer Seminars conducted; Places and Partnerships 3 Licensing negotiations between UPLB and MSMEs facilitated; 1 ideation room renovated; Policies 1 Assisted initial negotiation for the revision of the spin-off policy of the University; 1 Assisted initial negotiation for the creation of trade secret protocol/policy of the	University of the Philippines Los Baños (UPLB)	The target beneficiaries are the following: University Researchers, Students and Staff Industry Partners and Collaborators MSMEs within the community	16-Jan-24	15-Jan-26	ONGOING	4,817,136	2,036,068

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	Translating Innovations into Commercialization: Strengthening Technology Transfer in the Philippine Science High School System (PSHSS) - Phase 2	Rapid, inclusive and sustained economic growth	General Objective: To strengthen the PSHS System's capacity in intellectual property management and technology commercialization, ensuring the sustainability of its technology transfer activities. Specific Objectives: To enhance the capacity of the researchers, technology transfer officers, and business managers in the technology transfer process and operations; To improve the technology readiness level (TRL) and increase the commercialization readiness of the identified technologies; and To promote the technologies for commercialization.	Patent 20 IP Applications (Patent/UM) Publication 11 IEC materials (Technology Briefefer/Poster) developed 1 Promotional Video prepared 1 Training Report prepared Product 11 Prior Art Search Reports prepared 1 IP and technology inventory updated 1 Technology Assessment and Commercialization Plan prepared 1 Communication Plan prepared 5 Pre-commercialization reports prepared (Market study/ Feasibility study/ Business plan/ Valuation) - 11 Technologies pitched - 1 Technology commercialized People and Services 1 IP Masterclass Echo-Training conducted 1 Technology Commercialization Training conducted 6 IP Echo-seminars in campuses conducted 18 Researchers trained on IP Protection and Management 18 TLDs and Business Managers trained on Technology Commercialization 10 IP Echo-seminars in campuses conducted 2 Technology Pitch Event conducted Policy - 1 Technology Transfer Framework/ Policy approved and implemented Places and Partnerships - 1 Commitment Letter for the National Training	Philippine Science High School System (PSHSS)	Target Beneficiaries/Communities for Implementation: San Ildefonso, Ilocos Sur Batangas City, Batangas Baguio City, Benguet Jaro, Iloilo City, Iloilo Koronadal, South Cotabato Davao City, Davao del Sur Ampayon, Butuan, Quezon City, A.	01-Sep-25	31-Aug-27	ONGOING	4,999,984	3,302,044
	Upscaling Adoption of S&S Plaza Innovations Towards SoCAT Farm Replication	Rapid, inclusive and sustained economic growth	General: To enhance adoption and replication of the S&S Plaza innovations towards establishment of LGU-based SoCAT farms. Specific: 1) To promote farming technologies and innovations showcased in the S&S Plaza; 2) To empower and enhance the competitiveness of partner LGUs through technology transfer and capacity-building initiatives; and 3) To build and expand linkages and network among government and private institutions in terms of production, postharvest, marketing, and farm tourism activities.	Publications IEC materials (brochures, leaflets or posters & videos for social media) developed; Training modules/manual prepared/ improved Patents Copyright (IEC materials) filed; Copyright (training module) filed Products S&S Plaza maintained and enhanced; LGU-based SoCAT farm established; POTS showcased Quality seeds of vegetables (kg) produced and distributed; Quality planting materials (pc) produced and distributed	Bureau of Plant Industry - Los Baños National Crop Research Development and Production Support Center (BPI-LBNCRDPSC)	LGU partners Existing technology takers Tourists i.e. Farmers, Entrepreneurs, Students, Professionals, Extension workers, Senior citizens, PWDs, Public organizations, Private Organizations, Hobbyist	01-Aug-24	31-Jul-26	ONGOING	5,000,000	1,366,140