# BARChronicle The fortnightly newsletter of the DA-Bureau of Agricultural Research

### AFRREDN advances unified agri-fisheries research for dev't and extension



The DA-BAR is scaling up its research for development and extension (R4DE) impact in agriculture and fisheries through tighter regionalnational collaboration, locking in key initiatives in climate adaptation and stakeholder engagement.

In a series of meetings, the bureau convened all 15 regional agri-fisheries networks to operationalize and mainstream R4D frameworks: the Participatory Research Outreach Services Towards R4D Project Execution and Community Transformation (PROSPECT) approach for community-tailored R4D strategy, and the Climate Resilient Agriculture and Fisheries towards a

Transformative Research for Development (CRAFT R4D) agenda, prioritizing climateresilient research investments.

"This alignment guarantees our R4DE resources translate to visible field impact, while supporting a more inclusive, demand-driven linkages between regional and national levels," DA-BAR Assistant Director Joell H. Lales said, noting that these frameworks will direct the three-year R4DE investments supported by the bureau.

To strengthen the R4DE continuum, the bureau is set to implement a three-pronged action plan: (1) Accelerate tech transfer, with DA-BAR

strategically and systematizing the handover of R4D results to the DA-ATI for nationwide extension; (2) Strengthening policy direction under the guidance of DA Undersecretary and AFRREDN Chairperson Roger Navarro, and (3) Strategic budget leverage by aligning regional proposals with DA-BAR's priority frameworks.

"The immediate and critical next step will be the implementation of a new technology management protocol to guide the transfer of all R4D-generated outputs to target end-users, including farmers, agripreneurs, and industry stakeholders," DA-BAR Program Monitoring, Evaluation, and Linkaging Division Head Raymond Patrick L. Cabrera said, reiterating that the bureau is engineering pathways from technology adoption to impact assessment.

The unified AFRREDN, coled by DA-BAR and DA-ATI, was established through a memorandum of agreement formally merging DA-BAR's Regional Research, Development, and Extension Network and DA-ATI's Regional Agriculture and Fisheries Extension Network. MA. ELOISA H. AQUINO

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## DA-BAR, DA-MIMAROPA partner to scale up banana industry with first state-run banana tissue culture lab



The DA-BAR is scaling up the production of disease-free Lakatan banana through a PhP 3-million project agreement with DA-MIMAROPA using the country's first government-owned banana tissue culture laboratory in Calapan, Oriental Mindoro.

Initiated by project leader Catherine E. Castro, the facility currently maintains 2,000 tissuecultured Lakatan plantlets, which is set to be increased to its full capacity of 6,000 bottles.

Since August 2022, the facility has been the first government-owned banana tissue culture lab in the Philippines to receive a DA-BPI accreditation, positioning the region as a key provider of sustainable and high-quality banana seedlings to farmers and growers in Oriental Mindoro, as well as Romblon, Marinduque, and Palawan.

Presently, the project has expanded and is now focusing on intensifying the adoption of tissue-cultured bananas. It has



brought 19 farmer-adopters onboard, including farmer cooperatives, Indigenous Peoples (IP) leaders under the AMIA project, and the NGO Tablas Bread of Life, which established the first banana techno demo farm in Tablas Island, Romblon.

Further, the project encouraged public-private partnerships with other plant nurseries within Oriental Mindoro and its neighboring provinces, to create a more efficient seedling delivery system for wider adoption and scale.

The agreement, signed by DA-BAR Director Junel B. Soriano and Mr. Renie Madriaga, Agricultural Program Coordinating Officer of DA-MIMAROPA representing Regional Executive Director Christopher R. Bañas, will support the implementation of the project, "Intensifying the Adoption of Tissue-Cultured Lakatan Banana Towards Expansion and Sustainable Production in MIMAROPA." DARYL LOU A. BATTAD

# DA-BAR kicks off 2025 Women's Month with gender-forward hub showcase



To honor women and their role in agricultural research for development (R4D), the DA-BAR officially launched its Gender and Development (GAD) Corner, marking the bureau's celebration of 2025 Women's Month, on March 3, 2025 in Diliman, Quezon City.

Director Junel B. Soriano led the kickoff ceremony with a call to action to continue empowering women in R4D for a more grounded and inclusive sector. Soriano highlighted the crucial role women play in the advancement of all sectors and reinforced the bureau's dedication to inclusivity, gender equality, and empowerment.

"It is a powerful reminder that women are integral to progress in all sectors, including agriculture and fisheries. Women are farmers, fisherfolk, researchers, entrepreneurs, and leaders who drive change and innovation. Our bureau stands in full support of gender equality and empowerment, ensuring that women are given the recognition, opportunities, and resources."

GAD focal Evelyn H. Juanillo announced the month-long lineup of activities of the bureau: free facial and massage services for women; feeding program for mothers at the Dr. Jose Fabella Memorial Hospital; and two seminar episodes led by women partner-researchers of the bureau, focusing on technology related to pineapples and market for mushroom products.

With the theme "WE Make CHANGE Work for Women" and the sub-theme "Babae sa Lahat ng Sektor, Aangat ang Bukas sa Bagong Pilipinas," the celebration serves as a powerful call for sustained action to create compassionate, unified networks promoting gender equality and women's empowerment.

KRISTINA S. ESTRADA

#### TECH HIGHLIGHT

#### **GINISANG MUNGGO**

This ready-to-cook ginisang munggo is not only convenient and delicious, but also highly nutritious. Made from locally-sourced mungbeans, it is enriched with squash blossoms, mushroom powder, and ampalaya leaves for added flavor and health benefits.

TECHNOLOGY DEVELOPER

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For more details, please contact Vanessa Joy F. Calderon through email vanj14calderon@gmail.com



### Jute leaf meal cuts costs, boosts sustainability for Bicol poultry farmers

Poultry farmers in Albay and Camarines Sur are slashing feed costs and improving livestock health by substituting commercial feeds with organic jute leaf meal—a move that could reshape native chicken farming in Bicol.

During the site visit to projects under DA-BAR National Organic Agriculture Program R4D on March 10-14, 2025 partner cooperatives reported that chickens fed with jute leaf meal showed accelerated growth rates, while production expenses were reduced, and environmental footprint depleted.

"Jute leaves are cheaper and can be grown in backyards, unlike expensive commercial feeds. This significantly lowers production costs for native chicken farming," said Jusmine M. Maun, DA-BAR project evaluator. Maun emphasized that the plant's high protein and fiber content could enhance the nutritional quality of Camarines strain native chickens, a hardy breed prized in the region for its adaptability and organic meat.



With rising consumer demand for organic poultry, Maun predicts higher profits for farmers: "Poultry raisers and cooperatives could see better returns, especially as market demand for organic native chickens grows."

DA-BAR is now conducting trials to optimize jute leaf meal's effectiveness, affordability, and scalability. Key focus areas include farmer adoption rates, long-term sustainability, and supply chain development.

"Our role isn't just funding we're providing science-backed strategies to ensure success," Maun added.

The bureau plans to expand the initiative by training farmers in jute cultivation, forging partnerships with feed processors, and linking producers to markets. "Supporting projects like this strengthens affordable, eco-friendly native chicken farming," Maun said. JIMWELL KENNETH R. TANAY

### chats on the farm

"Bilang isang magsasaka dito sa Batanes, malaki ang naitutulong ng paggawa namin ng sweet potato flour o 'wakay flour.' Sa ngayon, marami na kaming nagagawang produkto tulad ng polvoron, candy, loaf bread, cakes and muffins, kutsinta, doughnuts, cookies, chips, at suman.

Malaki rin ang naging ambag ng DA-BES sa amin dahil sa mga kaalaman at training na ibinahagi nila, gaya ng tamang proseso ng paggawa ng wakay flour, food safety, at Good Manufacturing Practices (GMP). Bukod sa pagpapalago ng aming kabuhayan, mas nakikilala rin ang Batanes bilang isang matatag na lalawigan na patuloy na bumabangon sa tulong ng agrikultura at suporta mula sa pamahalaan."

#### MARGO A. CABRERA

Chanarian-Tukon Women's Association (CHATU) Vice President



### Local SMEs benefit from DA-BARsupported food processing facility in OMSC

A DA-BAR-funded food processing facility operated by the Occidental Mindoro State College (OMSC) in San Jose, Occidental Mindoro is empowering local agribusiness and transforming small and micro enterprises by providing them with access to needed resources for food processing and value-adding activities.

According to project leaders Dr. Ronaldo G. Orpiano and Arvin Jonathan L. Flores, about 10 small food processors regularly utilize the facility, which complies with Good Manufacturing Practices (GMP).

"Our goal is to have these facilities and tools accessible by stakeholders, so that when they engage in agriculture business, they can produce products that are able to compete in higher-value markets," said Flores.

Supported under the DA-BAR Agricultural Competitiveness Enhancement Fund–Research Facilities Development Grant, the facility also functions as a training and innovation hub for

students, farmer-cooperatives and associations, and other community groups to spark interest in venturing into the agri-food business. During the visit led by DA-BAR Director Junel B. Soriano, the center flaunts a growing lineup of market-ready onion-based products such as kropeck, vinaigrette, onion powder, onion flakes and paste, ice cream, pandesal, muffins, and other value-added products from ginger, turmeric, bignay, sweet potato, and mungbean.

OMSC has also partnered with the LGU-Tourism Office to promote products and gain more exposure through participation in various exhibits and trade fairs.

Currently, OMSC is in the process of securing compliance certifications to meet food safety and industry standards as it prepares to potentially reach wider and major markets. DARYL LOU A. BATTAD





## PH rice sector to benefit from 4 new BAR-approved R4D projects





The DA-BAR has approved four research for development (R4D) projects that could significantly improve rice productivity through precision fertilization and water-smart technologies.

The projects, reviewed during a virtual en banc meeting on March 6, 2025 include dry direct seeding technologies in rainfed areas that could increase yields by 7% while reducing water use. Other projects focus on locationspecific balanced fertilization strategies for hybrid rice in key production areas including Leyte, Zamboanga del Sur, and Cagayan Valley, targeting increased rice outputs while reducing input costs.

These R4D initiatives will be implemented by Bataan Peninsula State University, DA-Cagayan Valley, DA-Central Visayas, and DA-Zamboanga Peninsula. Experts from the DA-National Rice Program, DA-PhilRice, DA-BSWM, and UPLB assessed the projects' technical viability, expansion potential, and sustainable value to the country's rice sector. Discussions also focused on refining implementation strategies and work plans for 2025. LEA B. CALMADA



### What is Site-Specific Nutrient Management (SSNM) for the Queen Pineapple?

SSNM is a precision farming approach that tailors fertilizer use to the specific needs of crops based on soil, weather, and crop conditions that targets to improve production and yield of Queen pineapple growers in Bicol Region.

#### Benefits:

- Increase Yield: Optimized nutrients result in better fruit growth and equality
- Cost Efficiency: Reduces fertilizer waste and input costs
- Environmental Sustainability: Reduces nutrient runoff and soil degradation, protecting local ecosystems
- Improved Fruit Quality: Promotes even ripening and enhances the sweetness and firmness of the pineapple

# Corn and cassava R4D projects in SOCCSKARGEN assessed for expansion and impact







The DA-BAR conducted a monitoring visit to South Cotabato on March 11-13, 2025 to assess and strengthen project implementation and ensure impact of R4D initiatives on corn and cassava implemented by the region.

The monitoring focused on five ongoing projects under the National Corn Program and one PROSPECT-based (formerly PARTNERS) project implemented by DA-SOCCSKSARGEN, led by Regional Executive Director Roberto T. Perales and Research Division Chief Maimona B. Amil.

The projects center on addressing challenges in crop productivity, pest management, and market development. Key initiatives include improving corn and cassava yields through scaling out the use of SSNM in the region, enhancing composites of purple and glutinous corn from traditional varieties, developing a forecasting model on the incidence and severity of major cassava pests and diseases, improving the accuracy and reliability of the iFARM system, and enhancing the processing protocol and quality of purple corn products based on market assessment.

The PROSPECT-based project aims to boost productivity and farm incomes in Sarangani province through the introduction of sustainable integrated nutrient and crop pest management practices.

ALVIN L. FONTANIL

## Rice seed info system showcased in Masbate training

The Rice Seed Information System (RSIS) was showcased during the Retooling Course on Inbred Rice Seed Production and Certification held from February 18-21, 2025, attended by seed growers and inspectors from Masbate province.

Organized by the Bureau of Plant Industry–Crop Research and Production Support Division, the activity highlighted RSIS, a platform that collects, processes, generates, and shares rice seed-related information using information and communications technology (ICT). RSIS is jointly implemented by DA-PhilRice and DA-BPI-NSQCS, with funding support from the National Rice Program through the DA-BAR.







BAR Chronicle highlights the bureau's activities as the country's national coordinating agency for agriculture and fisheries R4D, and provides updates on NaRDSAF-member institutions.

We welcome and appreciate your comments and suggestions. Reach us via email: ikm@bar.gov.ph.

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What strategies can farmers employ to maximize their return on investment during the 18-month waiting period for Queen pineapple harvests?

The strategies that the queen pineapple growers can employ to maximize Return on Investment (ROI) during the waiting period of 18 months are through intercropping of cash crops, particularly peanuts, corn, and taro. This can be done through the planting of pest- and disease-free queen pineapple suckers 1 to 2 months after planting the queen pineapple using the double row spacing of 100 cm x 50 cm x 30 cm. This allows the land to stay productive while maximizing the area for production as well as gaining an additional income while waiting for the maturity of the queen pineapple.

At 4-5 months, an additional income of Php 18,150.00 for peanuts, Php 82,896.04 for corn, and Php 71,647.50 for taro can be incurred. Therefore, one cropping of queen pineapple can gain an overall income of Php 354,474.04/ hectare. This practice is found to be not only economically advantageous, but it has also led to savings in terms of agricultural inputs and labor, particularly in weed management and addressing nitrogen deficiency.

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