

BARChronicle

The fortnightly newsletter of the DA-Bureau of Agricultural Research

52 Ilagan farmers equipped with SSNM-NE knowledge

Fifty-two farmers from Ilagan City gained cutting-edge skills in fertilizer management during a two-day training on Site-Specific Nutrient Management for Nutrient Expert (SSNM-NE) held April 23-24, 2025, at Ilagan City Hotel.

The workshop, organized by the Ilagan municipal local government in partnership with the DA-BAR and University of the Philippines-Los Baños (UPLB), equipped participants with science-backed strategies to optimize maize and cassava production.

SSNM-NE, a software tool developed by UPLB, generates field-specific fertilizer recommendations using the 4Rs nutrient stewardship framework: right source, right amount, right time, and right placement. This

approach replaces traditional trial-and-error methods, which often lead to wasted resources and uneven crop growth.

Participant Elmer V. Aguinaldo shared his old practice before SSNM-NE awareness.

"Noon na basta magtanim ka na lang tapos nagbabase na lang kami doon sa itsura ng pananim kung kailangan pa namin ng fertilizer," Aguinaldo said.

He also highlighted how the training transformed his perspective.

"Mas may kumpyansa na [ako]... Napag-aralan na kung ilang days bago mag-fertilizer. Kahit mga susunod na henerasyon sa pamilya namin, mae-eksperto na rin sila sa pagtanim."

Moreover, Moises C. Alamo, Ilagan City Agriculturist, outlined post-training plans to reinforce adoption: "I-vi-visit namin ang mga field nila para mag-establish ng demo sites. Mag-a-allocate kami ng seeds at fertilizer para masunod ang recommendations."

He also commended participants for their eagerness to learn despite varying educational backgrounds: "Nagpursige silang umattend para matuto kung paano i-manage ang productivity lalo na sa corn production."

With corn and cassava being key crops in Isabela, SSNM-NE's targeted nutrient management could significantly reduce input costs of Isabela farmers while increasing their productivity.

JIMWELL KENNETH R. TANAY



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Joint DA-BAR-IRRI review defines plan for scalable rice tech



To refine collaborative strategies for sustainable rice farming, the DA-BAR and the International Rice Research Institute (IRRI) held a joint research for development (R4D) review and planning meeting on April 29–30, 2025, at the IRRI Headquarters in Los Baños, Laguna.

The review tackled ongoing and pipeline projects such as Sustainable Community-Based Action Research for Development and Extension for Livelihood Enhancement, Upliftment, and Prosperity (SCALE UP), Sustainable Rice Ecosystems, and Dry Direct Seeded Rice Technology.

Updates were also presented on OneRicePH, Climate-Smart Pest

Management, and Drones4Rice.

New proposals highlighted the use of rice straw for innovations, ratoon rice system development, Pal.ai – an AI-powered farming advisor, and PRIME+ for improved pest surveillance and yield loss estimation-based seeding and crop monitoring through machine learning and multispectral imaging.

DA-BAR Assistant Director Joell H. Lales underscored the bureau's focus on scaling high-yielding, climate resilient varieties, and smart technologies to drive transformation across the rice value chain.

"We are not only working toward rice sufficiency; we envision a



future where Filipino farmers are competitive, resilient, and prosperous. This goal calls for united efforts from scientists, farmers, and policymakers alike," said Lales.

DA-BAR Director Junel B. Soriano also shared that strong partnerships with private sectors, local government units, and farmer leaders will be critical to reaching rice sufficiency by 2028.

Representatives from DA-BAR, IRRI, Philrice, DA-Bureau of Plant Industry, Bataan Peninsula State University, UPLB, and Visayas State University attended the two-day event. **LEA BAÑARES-CALMADA**

TECH HIGHLIGHT

BATUAN SINIGANG MIX

Batuan or binucao, a native fruit widely used as a souring ingredient in Ilonggo and Negrense dishes, offers a distinct and authentic alternative to sampaloc and balimbing. With funding support from DA-BAR, the DA-Western Visayas successfully developed value-added batuan products including batuan powder, flakes, jelly, puree, pickles, and sinigang mix, significantly boosting local farmers' incomes and creating new market opportunities.

TECHNOLOGY DEVELOPER

DA-Western Visayas

For more details, please contact **Ms. Nora T. Garpa** through email noragarpa418@gmail.com



Mango waste repurposed into cosmetics, health products through R4D

Researchers from UPLB and BIOTECH found a new use for mango wastes into high-value ingredients for cosmetics and health supplements.

The DA-BAR-funded project, “Mango Beyond: Mango Wastes Transformed into Powerful Bioactives” was presented during the bureau’s Online Seminar Series on April 24, 2025.

Led by Engr. Maria Katrina N. Alaon, the project developed two bioactive ingredients, PhenoFera, a raw cosmetic ingredient derived from mango seed kernels, and Diaferin, a dietary supplement ingredient sourced from pruned mango branches.

“Both of these products aim to address a growing demand for sustainable, plant-based actives, while opening new sources of income for farmers and providing sustainable, nature-based products,” said Alaon.

Bioactives are natural compounds

found in small amounts in plants and certain foods that offer health benefits, such as reducing inflammation, supporting immune function, and possibly preventing chronic diseases like cancer, diabetes, and heart problems. They are also used in cosmetics and supplements for protective or anti-aging effects.

Initial data shows that Luzon-based cooperatives generate around 88 tons of mango seed waste and 65 tons of branches annually. These are processed into powders that serve as the

base for PhenoFera and Diaferin.

With limited local production of plant-based active ingredients, this technology holds huge market potential. BIOTECH and UPLB are now inviting cosmetic and supplement companies, private firms, and investors to collaborate in scaling up production and exploring licensing opportunities. **LEA BAÑARES-CALMADA**



EXPERT SAYS

What support systems or follow-up mechanisms are being planned to assist farmers in implementing appropriate management strategies once a viral disease is identified using the kit in their fields?

The LAMPParA kit will be integrated with Good Agricultural Practices for abaca production. Moreover, this kit will become a component of the disease management program of PhilFIDA. Once a viral disease is identified, the infected plant will be immediately eradicated. The integration of the LAMPParA Kit into these programs ensures that farmers can detect and address disease threats promptly, contributing to the overall health and productivity of their abaca.

DR. LENY C. GALVEZ
CAREER SCIENTIST I AND OIC CHIEF OF THE RESEARCH DIVISION
PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY (PHILFIDA)



SCALE UP program strengthens synergy for R4D expansion

To ensure the effective implementation of the Sustainable Community-Based Action Research for Development and Extension (R4DE) for Livelihood Enhancement, Upliftment, and Prosperity (SCALE UP) Program, the DA-BAR convened members of the National Steering Committee (NSC) and Technical Working Group (TWG) for its first hybrid meeting on April 24, 2025 in Quezon City.

The meeting set strategic directions and institutional roles to ensure a unified implementation of the program's R4D initiatives nationwide.

The NSC shall be responsible for leading the SCALE UP program by providing policy direction, strategic oversight, and implementation guidance. The National TWG, on the other hand, shall provide technical and administrative guidance, foster inter-agency collaboration,



develop policy recommendations, monitor program performance, and support Regional TWG. Both shall ensure alignment of efforts in executing program initiatives at the national and regional levels.

Chaired by DA Undersecretary for Operations and Agri-Fisheries Mechanization and Rural Credit Engr. Roger V. Navarro and vice-chaired by DA-BAR Director Junel B. Soriano, the SCALE UP program builds on the successes of the Yamang Lupa Program and

aims to scale holistic, community-anchored R4D efforts for felt impact from the ground up.

"Together let us SCALE UP not just our research, but also our reach. Let us SCALE UP not just livelihoods, but lives. And most of all, let us SCALE UP the hope, dignity, and prosperity of our farmers and fisherfolk," Soriano reiterated, calling for stronger collaboration among agencies.

MA. ELOISA H. AQUINO

chats on the farm

"Ang challenge kasi ay 'yong babagsakan ng mga fresh mushroom, dati kasi ay wala namang siguradong bibili ng mga produce namin kaya pailan-ilang fruiting bags din lang ang ginagawa ko. Dahil sa proyekto ng DA-Cagayan Valley Research Center, binibili na ng CJM Food Manufacturing ang mga fresh mushroom namin para gawing raw materials ng fishball at kikiyam food products nila. Malaking bagay para sa aming mga mushroom growers na may sigurado na kaming market. Kung dati ay dalawang kilo ng kabute lamang ang nagagawa namin at na-i-bebenta ng Php 200 kada kilo, ngayon na may sure market ay nagparami na kami ng fruiting bags kaya nakakakuha na kami ng 15 kilograms kada araw."

CAMILO DELA CRUZ JR.
Member
Kabute-han ng Malligeñong Magsasaka Association



BUREAU BULLETIN

Management updates



In recognition of the DA-BAR's outstanding performance in FY 2024, the bureau was ranked as the third top performing agency within the bureau cluster.

Reflecting the results of the Performance Appreciation System, the bureau has not only met but exceeded the criteria across PAS's four key dimensions of accountability.

The recognition reflects the relentless efforts of the DA-BAR team, partners, and stakeholders in driving meaningful progress in agriculture and fisheries research for development. DA-BAR extends its deepest gratitude to all who contributed to this remarkable achievement. **GELINE NICOLE A. MORILLO**



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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OFFICIAL ENGAGEMENTS



The DA-BAR and the International Rice Research Institute (IRRI) facilitated a remote pre-engagement meeting on April 23-24, 2025 to prepare for the first-ever international symposium for agricultural and fisheries research and development (R4D) in May 2025.

The international research centers International Crops Research Institute for the Semi-Arid Tropics (ICRISAT); World Vegetable Center (WVC); International Livestock Research Institute (ILRI); and International Maize and Wheat Improvement Center (CIMMYT) met with corresponding DA bureaus, attached agencies, and banner programs to align mutual priority areas.

The pre-orientation seeks to ensure the smooth conduct of the symposium which will foster international partnerships exploring shared interests, identifying areas of collaboration, enabling access to international expertise, and facilitating information sharing. **KRISTINA S. ESTRADA**

Key activities at a glance

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