

# BARChronicle

The fortnightly newsletter of the DA-Bureau of Agricultural Research

## Isabela farmers to benefit from new R&D projects



Six newly-approved research and development (R&D) projects are set to improve the agricultural productivity in Isabela, Cagayan Valley by equipping farmers with better technologies and agribusiness opportunities.

The DA-BAR formalized these initiatives through the signing of six Memoranda of Agreements (MOAs) with the DA-Cagayan Valley Research Center (CVRC) and Isabela State University (ISU) on January 27-28, 2025, led by DA-BAR Director Junel B. Soriano, DA-Cagayan Valley Regional Executive Director Rose Mary G. Aquino, and ISU President Ricmar P. Aquino.

Two of the new projects focus on improving the region's champion commodities: corn and soybean. The corn project will focus on developing high-yielding yellow open-pollinated corn variety, while the soybean initiative aims to enhance the productivity and profitability of Cagayan Valley Soybean Producers and

Processors Association as the producer of full-fat soybean-based food products.

At ISU, the bureau is supporting the development of three major facilities which include a technology commercialization center, smart greenhouse for high-value crop seedlings production, and mungbean R&D facility. These infrastructures will serve as a central hub for research, production, and marketing of agricultural products.

In addition, the MOA for the technology commercialization project on Indian turmeric was also signed in ISU. The project, in partnership with BauerTek Farmaceutical Technologies Corp. (BauerTek), aims to locally produce quality Indian turmeric rhizomes to meet the market demand and increase farmers' income. BauerTek was represented by General Manager Richard Nixon Gomez.

These ISU-based projects are funded under the DA-BAR's Research Facilities Development Grant and Technology Commercialization Program through the Agricultural Competitiveness Enhancement Fund.

Highlighting the role of R&D, Soriano said that "we will never see real progress and impact without R&D. We need to continuously innovate and develop best practices to come up with tools our farmers can use effectively to increase their production and profitability."

Further, he emphasized the importance of strengthening collaboration with the local government units, the private sector, and other government agencies, crediting the shared best practices and complementary roles of each in advancing research for development not only in the country, but also internationally.

KRISTINA S. ESTRADA

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# New CGUARD Plus boosts yields, eases feed shortage

DA-BAR and partner agencies are racing to boost corn production as shrinking harvests strain the supply of livestock feed.

Averaging 1.2 tons/ha for white corn and 3.5 to 4.4 tons/ha for yellow corn, current yields are falling below sufficient standards.

To tackle this, DA-BAR and partner agencies have upgraded the CGUARD program to now CGUARD Plus, a program targeting 7 tons/ha for white corn and 10 tons/ha for yellow corn through advanced farming techniques and partnerships, and improving the corn farmers' management practices such as improved corn variety, planting distance, soil health, and irrigation.

DA-BAR Director Junel B. Soriano, National Corn Program Director Milo Delos Reyes, and the Technical Working Group (TWG) unveiled the plan during the program's initial meeting on January 22, 2025 in Quezon City.

"Without intervention, our corn deficit could destabilize poultry, pork, and dairy industries in the country," said Soriano.



The TWG outlined four core strategies:

- **Precision farming:** Tailoring fertilizer use to soil conditions to cut costs and boost growth.
- **Hardier corn varieties:** Breeding crops resistant to droughts, pests, and diseases.
- **Water-smart practices:** Using efficient irrigation and adjusting planting layouts to grow more corn per hectare.
- **Public-private partnerships:** Ramping up collaboration with universities and

agribusinesses to scale hybrid corn production.

The program builds on earlier research but now prioritizes climate adaptation, critical as erratic weather continues to batter Filipino farms. By improving seed varieties, optimizing planting distances, enhancing soil health, and integrating modern irrigation systems, the CGUARD Plus program is seen to future-proof the country's corn industry against environmental threats.

**JIMWELL KENNETH R. TANAY**

## TECH HIGHLIGHT

### Drones4Rice

The Drones4Rice technology is a precision farming approach that increases farmers' productivity and income. It streamlines agricultural labor, easing farming work such as seeding and fertilizer and pesticide application. It also promotes the accurate application of inputs and environment-friendly practices, while encouraging women and youth to engage in modern farming as it is more accessible and more appealing.

TECHNOLOGY DEVELOPER  
DA-Philippine Rice Research Institute



PHOTO: DA-PHILRICE

## Hybrid rice increases yield in Nueva Vizcaya

Farmers in the Cagayan Valley region are seeing promising results from advanced rice farming technologies, as the DA-Cagayan Valley showcased significant increase in yield during a farmers' field day on January 15, 2025 at Barangay Aggub, Solano, Nueva Vizcaya.

Funded by DA-BAR, the project highlighted hybrid rice production using precision farming techniques such as hybrid seeds (15kg/ha); Bio-N fertilizers (6 packs/ha); soil-based NPK recommendations (20 bags/ha); supplemental application of Carageenan (9L/ha with 3L/ha at 15,30,45 DAT); and *Trichoderma harzianum* (20 packs/ha) applied before plowing under stubbles.

According to project leader Rosita Baquiran, "these innovations have led to an initial yield (through crop cut) of 8.4 mt/ha and a remarkable return on investment of 116.23%," noting that the results significantly surpassed traditional farming



practices with a yield of 3.96 mt/ha and ROI of 25.87%.

Edward Damaso, farmer-cooperator of Barangay Aggub Communal Irrigators Association, shared his experience and expressed his appreciation for the project.

"*Napakalaki ng impact ng project na ito sa aming mga farmers. Dahil sa mga technologies na kanilang ibinahagi ay marami kaming natutunan at nawa'y patuloy pa ang mga proyekto sa Barangay Aggub Communal Irrigators Association,*" he said.

Likewise, farmer-cooperator Nelly Cerafica also highlighted how the project reduced production costs while increasing profits. "*Salamat sa magandang project na ito dahil dati malaki ang aking gastos pero konti lang ang kita, ngunit sa project na ito ay maliit lamang ang gastos pero malaki ang kita.*"

The field day gathered 60 farmers from the irrigators' association, with local key officials led by Municipal Councilor Ramon Ramento gracing the event. **MELISSA N. SALAS**

## Smart rice R4D tech ready for dissemination

In a bid to modernize rice farming and enhance climate change resilience, the DA-BAR advances two major projects aimed at improving rice seed system efficiency and implementing climate-smart pest management strategies.

Under the auspices of the DA-National Rice Program, DA-BAR conducted an on-site evaluation of two key projects on January 24, 2025, to ensure that objectives are met and technologies generated are on track for full deployment and adoption among farmers and rice stakeholders.

The projects, "Scaling Up the Capacities and Deployment of the

Rice Seed Information System (RSIS) Towards Operationalization and Sustainability" and "Development of Innovation System for Climate Smart Pest Management in Rice (CSPM)" are implemented by the DA-Bureau of Plant Industry and in collaboration with the Philippine Rice Research Institute and International Rice Research Institute.

The RSIS project seeks to provide real-time data on seed production, certification, distribution, and buffer stocks through mobile and web-based applications, providing farmers, policymakers, and the LGUs access to accurate and more streamlined seed production data.

Meanwhile, the CSPM initiative focuses on enhancing the capacity of farmers and agricultural extension workers to identify pests, improving the efficiency and quality of biological control agents (BCA), and promoting the adoption of BCAs in rice-farming communities. The project aims to reduce crop losses due to pests, while increasing the economic resilience of rice farmers.

The project is expected to come up with a pictorial guide for pest identification, damage assessment, and disease management, alongside protocols for community-based mass production of BCAs. **PERLY J. REQUISO AND LEA B. CALMADA**

# BAR, ISU inaugurate One-Health R&D facility



A newly-upgraded One-Health Product Development R&D Facility at the Isabela State University (ISU) is set to enhance herbal production following its inauguration on January 28, 2025 in Echague, Isabela.

DA-BAR Director Junel B. Soriano and ISU President Ricmar P. Aquino led the ribbon-cutting ceremony marking the completion of the refurbished facility funded under the Agricultural Competitiveness Enhancement Fund Research for Development (R4D) Component program.

The facility is retooled with processing equipment such as pulverizer and tray dryer, among others, and was transformed into a more conducive and standards-compliant processing facility.

“Our facility will help farmers by providing them with better opportunities to grow and produce *malunggay* and turmeric as raw materials in the development of herbal drugs and food supplements,” ISU-Echague One-Health Product Development Center Director and project leader Artemio A. Martin highlighted.



He also added that the growing demand for malunggay powder and curcumin extract pushed for the upgrading of their existing and operational facility, with their local farmers gradually embracing *malunggay* and turmeric farming.

Aquino also underscored the strong commitment of the university in advancing research for development (R4D) initiatives to contribute in building a better agriculture and fisheries sector in the country.

Soriano likewise emphasized that such projects must be

instrumental in improving the productivity and profitability of farmers.

The ceremony was also graced by Richard Nixon Gomez, general manager of BauerTek Farmaceutical Technologies Corporation, one of the active industry partners of ISU’s processing facility.

The facility shall also cater to the needs of the students and faculty-researchers of the university and other R4D implementing agencies. **ANGELO N. PADURA**



## DA-BAR commits support to PH rubber industry

DA-BAR Assistant Director Joell H. Lales, speaking on behalf of the bureau, underscored the importance of rubber across industries from agriculture to manufacturing. He cited DA-BAR's partnership with the Philippine Rubber Research Institute on the project, "Enhancing Latex Yield of Rubber Recommended Clones Through Application of Stimulants Towards a Sustained Productivity."

and is expected to boost farmer's yields and income.

Lales added that for this year, the bureau has earmarked PhP 4-million for the upgrading of PRRI's Rubber Testing and R&D Laboratory at the DA-AMRES in Kidapawan City.

Themed "Rubber: A Sustainable Future through Technological Innovation tungo sa GOMA-gang Buhay sa Bagong Pilipinas," the summit was graced by officials of the DA led by Secretary Francisco P. Tiu Laurel, Jr. **MARIA RUBY G. LUMONGSOD**

Believing in the potential of the rubber industry as a key contributor in the country's economic development, the DA-BAR pledged its support to the rubber industry during the 2025 National Rubber Summit in Kidapawan City on January 22-24, 2025.

The PhP 2.52-million-project, implemented from March 2022-March 2023, covers eight municipalities in Zamboanga Sibugay, del Norte, and del Sur,

## PH strengthens Sustainable Agriculture Initiative for ASEAN 2026



*marami munang tumitingin* since we look forward to delivering impactful results as we go forward," Lales stated.

The revised PHSAI document will be submitted to the DA for approval, and is set to be launched in April.

Further, with the road map of the initiative laid out, Lales had one crucial plea to all stakeholders.

"Launching does not stop the work there; the job starts there. As we move forward, we need more clarity on the involvement and finally the execution of all concerned agencies," he said.

The bureau, as the focal agency for the ASEAN Technical Working Group on Agricultural Research and Development promotes, strengthens, and ensures that agriculture R&D remains at the forefront of ASEAN cooperation, in support of the country's upcoming 2026 ASEAN chairmanship. **JIMWELL KENNETH R. TANAY**

Ahead of the country's 2026 ASEAN chairmanship, the DA-BAR has taken a key step in refining the Philippine Sustainable Agriculture Initiative (PHSAI) through a virtual consultation meeting on January 30, 2025.

In collaboration with other DA agencies, the activity focused on enhancing the Declaration of Commitment to PHSAI to align with national and regional priorities.

DA-BAR Assistant Director Joell H. Lales reported on the program's progress, emphasizing the need for a multi-sectoral approach to integrating policies, research, and on-the-ground implementation to support sustainable agriculture development in the ASEAN region.

"It is crucial that our efforts are aligned and that we have a unified understanding of the work we will put into this initiative. *Maganda talaga na*

# SUCs strengthen agri-fisheries research with R4D writeshop

To provide expert guidance on proposal development and to harmonize the activities and strategies of state universities and colleges (SUCs) in developing and implementing agriculture and fisheries research for development (R4D) projects, DA-BAR conducted a proposal writeshop on January 28-30 2025 in La Trinidad, Benguet.

The participating SUCs were Benguet State University, Northwest Samar State University, Bicol University, University of Science and Technology of Southern Philippines, and Marinduque State University.

Leading the writeshop were resource persons Nordalyn B. Pedroche, deputy director of the Cordillera Consortium for Agriculture, Aquatic, and Resources Research and Development; Dr. Venecio U. Ultra Jr., balik scientist of DOST; Marnelie G. Subong, DA-BAR



agriculturist; and Leila Jamila P. Rebuldeda, DA-BAR project development officer.

Pedroche guided participants on navigating the research process for DA-BAR funding, emphasizing alignment with priority areas, compliance with guidelines, and the integration of innovative solutions to maximize project impact.

To support the SUCs in the funding process, Subong and Rebuldeda presented the DA-BAR's revised grants manual, highlighting key funding requirements and aligning

research projects with the department's priorities.

Meanwhile, Ultra focused on a specific research area, explaining the importance of mitigating the bioaccumulation of potentially toxic elements in crops grown in mining-impacted soils to ensure crop safety, food security, and environmental sustainability. He also provided guidance on the minimum requirements for research data collection and analyses that will contribute to development of science-based policies and strategies. **MARNELIE G. SUBONG AND LEILA JAMILA P. REBULDELA**



## EXPERT SAYS

Can you share a best practice or technique that has made a significant difference in mushroom yield and quality?

Using nutrient-rich substrate supplements such as lime, bran, and a sugar source have been shown to significantly extend the lifespan of mushroom fruiting bags, ultimately leading to higher yields. Furthermore, determining the optimal ratio of these supplements when added to base substrates like rice straw and sawdust can contribute to the production of more and higher-quality mushrooms that are favored by both mushroom processors and consumers.

**VERONICA P. MANGUNE**  
Science Research Specialist II  
DA-Central Luzon



## STAFF SPOTLIGHT

DA-BAR welcomes you,  
Norman!



**Lino Norman D. Reyes**  
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Knowledge Management  
and Information Systems Division

# SCALE UP review determines progress, future plans



To evaluate the project's accomplishments and set the direction for future initiatives, the DA-BAR held the "Review and Planning Workshop of the Sustainable Community-based Action R4DE for Livelihood Enhancement, Upliftment, and Prosperity (SCALE UP) Program" on January 21-24, 2025 in Quezon City.

Five pilot implementing agencies—the regional offices of Ilocos, CALABARZON, Eastern Visayas, and Zamboanga Peninsula, as well as the Provincial Local Government Unit of Agusan del Sur presented their respective technical and financial accomplishments, plans, and activities for 2025.

National Program Coordinator Rictibert C. Pamunag shared findings from the field at the national level while the DA-BAR SCALE UP Program focals discussed regional monitoring results. The SCALE UP Program

logo and branding were also proposed during the event.

DA-BAR Director Junel B. Soriano expressed optimism in the expansion of the program, believing that the technologies can generate lasting impacts to the farmers. Additionally, he highlighted the significance of collaboration and the sharing of best practices among stakeholders.

"Matured and new technologies are important, regardless if it was developed by us, our partner agencies, private companies, and the indigenous knowledge and the best practices of farmers. We need to combine all of these to assure that these technologies will generate impact to the lives of our farmers," Soriano emphasized.

Representatives from the DA-Cagayan Valley also participated in preparation for the program's expansion in the region within the year. **KRISTINA S. ESTRADA**



## Knowledge Exchange and Empowerment Program

Apply now for funding support for agri-fisheries R4D knowledge exchange activities!

### Who can apply?

Legally professional organizations and scientific societies actively involved in agri-fisheries R4D

### What we support?

Co-sponsorship of events such as conferences, training, forum, through IEC materials and other logistical support, as approved

### Funding amount

PhP 100,000.00 per approved proposal (*T&C apply*)

### Eligibility criteria

- The proposed event or activity must align with BAR's priorities
- Only 1 application per organization per year

### Requirements

- Official request letter signed by the head of agency or authorized representative
- Detailed program briefer
- Budget plan indicating requested support items and counterpart funding, if any
- Proof of registration of the organization and legal status

Send required documents to: [od@bar.gov.ph](mailto:od@bar.gov.ph)

For more information, contact: [kmisd@bar.gov.ph](mailto:kmisd@bar.gov.ph)

OFFICIAL ENGAGEMENTS



PHOTO: ATTY. TONY ROMAN

DA-BAR Program Development Division Head Anthony B. Obligado, representing Director Junel B. Soriano, delivered the keynote address at Bataan Peninsula State University's (BPSU) "RISE 2025" event, highlighting the long-standing partnership between DA-BAR and BPSU in agricultural research and development, and encouraging students to become future leaders in the field. He emphasized the bureau's continued support for BPSU's R4D initiatives and its commitment to fostering collaboration between scientists and farmers to drive innovation and national prosperity. **MA. ELOISA H. AQUINO**



As part of its ongoing commitment to advancing the agri-fisheries sector through research for development, DA-BAR Director Junel B. Soriano welcomed Joel Estacio of RKRN EASI Enterprise and Mario Leguiziano, an industry expert from Italy, during their courtesy visit on January 22, 2025. The meeting focused on key interventions for the aquaculture industry, specifically addressing cold storage solutions and solar-powered desalination systems. **GELINE NICOLE A. MORILLO**

## chats on the farm

Dati ang naha-harvest namin kaunti lang, 35kg lang, na nabebenta namin ng Php 35 kada kilo dahil kaunti pa lang ang cacao trees ko. Dahil sa training natuto kami ng mga techniques sa pag-aalaga ng cacao at naparami namin ng 1,000 trees kung saan nakaani na kami ng mahigit sa 500kg.

**CECILIA P. BOTTAD-WAHIGON**  
Bottad Cacao Farm  
Member, CGPAL



## Congratulations, Sir Junel!



Seniors Executive Class 11  
Development Academy of the Philippines



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](mailto:ikm@bar.gov.ph).

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