

# BARChronicle

The fortnightly newsletter of the DA-Bureau of Agricultural Research

## 73 R4D tech poised for expansion as DA-BAR sets 2025 goals

In its annual Performance Commitment Review (PCR) assessment workshop held on February 11-12, 2025, the DA-BAR is ramping up efforts to bring 73 research for development (R4D) technologies into widespread use. The bureau also laid out its 2025 roadmap to accelerate the adoption of these technologies and ensure that these translate into a profitable and sustainable agri-fisheries sector.

Led by Director Junel B. Soriano and Assistant Director Joell H. Lales, the workshop reviewed the progress, challenges, and outcomes of the bureau's initiatives, ensuring that

technologies generated through R4D are responsive to the needs and priorities of the sector, and are adaptive and scalable at farm and enterprise levels.

"Facilitating and supporting the development of these technologies are just preliminaries. Our real work begins in ensuring that these technologies are used, where farmers, fisherfolk, and other stakeholders are reached, resulting in felt impacts," Soriano said.

In 2024, the DA-BAR facilitated the development of 73 R4D technologies which include high value crops, livestock, fisheries,

postharvest, mechanization, climate-smart agriculture, biotechnology, and site-specific nutrient management protocols, among others. With the Technology Readiness Level tool now in place, the bureau aims to prioritize commercialization, fast track adoption, and strengthen partnerships across sectors to bring these technologies to scale.

The review also focused on building up DA-BAR's project implementation strategies, improving knowledge-sharing mechanisms, and enhancing operational efficiency through optimized resource management and sustained institutional performance. **DARYL LOU A. BATTAD**



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# Aquino: Passion-driven R&D is key to supporting the agri-fisheries sector

“It is not just about doing research; we have to put love and passion into R&D for our farmers and fisherfolk.”

This was the central message of DA-Cagayan Valley Regional Executive Director Rose Mary G. Aquino during the second special flag-raising ceremony hosted by the DA-BAR on February 3, 2025 in Diliman, Quezon City.

Aquino urged the research community to infuse passion into R&D, emphasizing science-based solutions, strong collaboration, and deep community engagement are key to addressing challenges faced by farmers and fisherfolk.

“When it comes to innovations and technologies, the decisions of our policymakers should come from us. We need to translate our research outputs into policies so that they can be better appreciated, and more importantly, encourage our farmers and fisherfolk to turn these R&D outcomes into viable

and successful enterprises,” Aquino added.

She also expressed her appreciation to the bureau’s continued support for R&D and emphasized the agency’s proactive stance by reminding everyone, “BAR stands for Be Always Ready. Be always ready to transform the challenges as opportunities to help our farmers and fishers.”

Further, Aquino also highlighted Cagayan Valley’s award-winning R&D programs, attributing it to a strong partnership between research, operations, and extension services. She stressed that their region’s ability to sustain projects without relying heavily on external funding stems from deep grassroots engagement and harmonized research efforts.

She also noted the importance of multi-sectoral consultation among stakeholders — including farmers and private sector — as well as tailor-fitting approaches



depending on the assessed challenges in the communities, “we need to sit down with them and discuss what are the needs of the farmers here,” Aquino stressed.

Since the start of the year, the bureau has integrated a special program into its flag raising ceremonies featuring invited speakers to inspire innovation and reinforce commitment to excellence in public service.

KRISTINA S. ESTRADA

## TECH HIGHLIGHT

### Banana Flour

This value-adding technology is viable as there is a global demand for healthier and gluten-free alternatives to wheat flour.

Nutritional benefits from bananas, based on this study and food laboratory analysis, are retained despite undergoing dehydration process. Literature review showed that banana flour is gluten-free, rich in dietary fiber and resistant starch—beneficial to healthy gut microbiome, and low glycemic index.

TECHNOLOGY DEVELOPER  
DA-Davao Region

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# Farmers to benefit from advanced rice farming innovations

Rice farmers are expected to gain from new farming technologies including drones and climate smart practices as the DA-BAR intensifies efforts in supporting rice-based initiatives to modernize the country's rice industry.

The bureau held a review of new and ongoing rice research for development (R4D) projects on February 5-6, 2025, to validate accomplishments, identify significant deliverables, and review the proposed work plans of the projects' next phases.

Funded by the DA's National Rice Program through DA-BAR, these projects are implemented by IRRI, PhilRice, UPLB, and BPI, and DA-Cagayan Valley, CALABARZON, and Bicol region.

Four projects focus on the use of agricultural drones in rice production or the Drones4Rice program, while

others support the OneRicePH program which targets the modernization of breeding programs in the country, rice-based crop diversification and mechanization, and climate-smart pest management.

The Drones4Rice initiative has developed standard protocols for drone use in rice farming, which includes seed, fertilizer, and pesticide applications. The OneRicePH program focuses on improving rice varieties and modernizing rice breeding, achieving success in developing Low Glycemic Index rice varieties, such as NSIC RC 182, PSB RC 86, and Ultra-low GI Rice, to improve popular Philippine rice strains.

Other projects include rice-based crop diversification strategies, introduction of mechanized seeders to optimize planting, and pest identification system. **LEA B. CALMADA**



## EXPERT SAYS

**What message would you like to convey to policymakers and decision-makers about the importance of supporting agriculture and fisheries R4D?**

At the DA, we see R4D as an essential tool in driving innovation, enhancing productivity, and ensuring the competitiveness of the sector. Investing in R4D initiatives means we can develop useful technologies, improve our resource management, and adapt to the ever-evolving challenges in agriculture such as climate change, pests and diseases, low productivity, to name a few. The need to strengthen R4D is an urgent, persistent need if we want to empower our farmers and improve their quality of life.

**HERMINIGILDA A. GABERTAN, PhD**  
Assistant Director for Research, Development,  
and Production Support Services  
DA-Bureau of Plant Industry



**Congratulations, Glai!**



**Glacelle Alyne C. Malinao**  
Newly-promoted Senior Agriculturist

Malinao, a BS Agriculture (Animal Science) graduate from UPLB, joined DA-BAR in 2015 as a project development officer. She was appointed Agriculturist II in 2020, during which she led the development of the 2022 Research for Development Agenda of the Poultry and Livestock Program and assisted in the finalization of the Revised ACEF R4D Grant Guidelines. From 2022 to 2024, she joined the Planning Monitoring Unit as OIC-Assistant Head, working on documents like NAREA 2023-2028 and the DA's NAFMIP R&D component, and briefly led the unit. Currently, she leads the Technology Management Section. Her proven expertise and consistent contributions, along with her ongoing pursuit of an MM in Business Management, have culminated in her recent promotion.

**Welcome to DA-BAR,  
Jennifer and Jeffrey!**



**Jennifer M. Samira**  
Administrative Aide I  
AFD-TMSU



**Jeffrey R. Mabbagu**  
Computer Maintenance Technologist II  
KMISD-IMS

# CLSU transfers legume forage production, pellet feed technology

The Central Luzon State University (CLSU), through a DA-BAR funded project, has successfully produced five technology adopters for the production of forage-based pelleted feed for goats. Seven multi-locational forage production farms in Central Luzon were also established as source of raw materials for the production of the said feed product. This initiative is in support of the growing small ruminant population in the country and R4D agenda of developing low-cost and innovative feed processing.

The adopters of the feed technology include members of

the Bayabas Farmers Association (Bulacan), Balsik Agrarian Reform Beneficiaries Association (Bataan), Fabros Integrated Farm, Training and Assessment (Aurora), Padre Pio's Best Practice in Sustainability, Inc. (Tarlac) and Titan Bio-Organic Corporation (Nueva Ecija).

Each cooperator has received a pelletizing machine, mechanical table scale and portable sack sealer. Additional processing equipment such as two units of hammer mill and one mixer were also provided. The farmer-partners have also undergone comprehensive training on forage production and processing of forage-

based pelleted feed along with financial management and entrepreneurial competency development to equip and prepare them in running their own enterprise.

“The herbage yield of the forage legumes planted averaged 1.6 kg per square meter during the initial cutting. The preliminary data has projected a 26-ton pellet production exceeding the 15-ton target. This production is expected to increase with the feed bodega for technology adopters already underway. The project is making preparations for an additional two technology adopters,” reported project leader Leny Lyn M. Del Rosario.

The feed technology developed by CLSU-SRC offers a reduction in feed cost therefore increasing financial gain in raising small ruminants. “The CLSU-SRC has adopted this project, ensuring continued support for all cooperators in both production and marketing,” affirmed Del Rosario.

The project recently underwent its completion review on January 21, 2025. **RENA S. HERMOSO**



OFFICIAL ENGAGEMENTS



As part of its commitment to strengthen agri-fisheries R4D with local government units and farming communities, DA-BAR joined the Araw ng Agrikultura as part of the 137<sup>th</sup> Birth Anniversary Celebration of Doña Aurora Aragon-Quezon on February 12, 2025, in Baler, Aurora.

Representing DA-BAR, Program Monitoring, Evaluation, and Linkaging Division head Raymond Patrick Cabrera pointed out how strategic investments in R4D yielded technologies and evidence-based policies benefiting farming and fishing communities.

He also recognized the joint efforts of the provincial and municipal governments, alongside farmers and fisherfolk, for continuously prioritizing agriculture and fisheries to create lasting impacts on the rural economy, and challenged them as lead actors for the country's food security. **RAYMOND PATRICK L. CABRERA & ERIC J. MORALES**



DA-BAR and partners convened on February 13, 2025, to align nutrient management and tech transfer strategies. Initiatives include UP Los Baños' *Site-Specific Nutrient Management- Nutrient Expert* and DA-Bureau of Soils and Water Management's *Balanced Fertilization Strategy* to boost farm productivity and soil health. The discussions also covered the technology transfer protocols particularly for biofertilizers, and the commercialization of new products, KSolB and Maizinc. Further consultations are set to finalize the said protocols. **JIMWELL KENNETH R. TANAY**



**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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 **R&D 101**

**How does LAMParA Kit work?**

Utilizing the loop-mediated isothermal amplification (LAMP) technology, the **LAMParA Kit**, packaged as LAMP para sa Abaca, is **an innovative and portable early disease detection tool capable of detecting four viruses in abaca plants**—Mosaic Virus, Banana Bract Mosaic Virus, Abaca Bunchy-top Virus and Banana Bunchy-top Virus—before symptoms appear, thus preventing the spread of the viruses and reducing crop loss.

The detection does not require use of special equipment and results can be observed through the naked eye in as fast as 20 minutes: green signals an infection, and orange means the plant is virus-free.

**Key activities at a glance**

FEBRUARY 2025

**PROJECT REVIEWS**

- 3 ACEF-RFDG Completion Review
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**MEETING AND M&E VISIT**

- 5-7 Monitoring activity of RFDG-funded OA facility of BPI-GNCRDPSC at Jordan, Guimaras
- 7 DA-BAR, Nissin preliminary meeting on possible collaboration