

BARChronicle

The fortnightly newsletter of the DA-Bureau of Agricultural Research

PH, Japan tie up for collaborative efforts on water resource mgmt

As the nation grapples with persistent challenges such as flooding, droughts, landslides, and sedimentation—issues further intensified by climate change—DA-BAR Director Junel B. Soriano emphasizes the crucial role of technology-driven solutions through research for development (R4D) to mitigate the country's vulnerability to these water-related threats.

In this era of increasing climate variability and urgent water security challenges, the Philippines—through the Department of Agriculture and Isabela State University—and Japan's R4D institutions, are collaborating on joint research initiatives focused on critical areas like water resource management, climate change adaptation, and innovative

cascading rainwater harvesting systems.

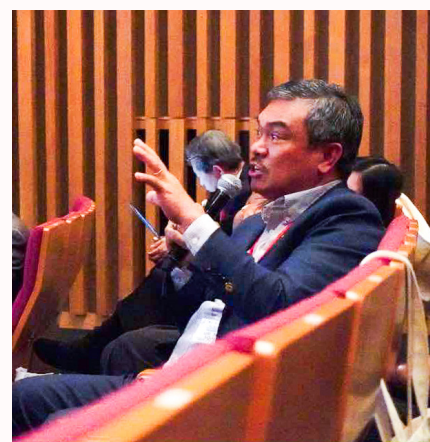
This significant partnership was catalyzed during the recent Japan-Philippines Nexus Program on Water Security, held on March 11-14, 2025, in Kyoto, Japan. The event included an inception workshop and a high-level ministerial meeting attended by various stakeholders. During this gathering, Soriano presented DA's ongoing R4D initiatives aimed at enhancing water resource management and strengthening climate change resilience in the agricultural and fisheries sectors.

Looking ahead, DA-BAR has set ambitious goals in collaboration with Kyoto University and other higher education institutions

in the Philippines. The bureau plans to implement cascading rainwater harvesting systems in select river basins nationwide, seeking not only to enhance water security but also to promote sustainable practices that mitigate the impacts of climate variability.

This four-day event, a joint effort between Kyoto University and Isabela State University in the Philippines, represents a significant step in fostering international cooperation to address water security challenges. By leveraging the strengths of both Japanese and Philippine institutions, the partnership aspires to develop effective strategies for managing water resources and adapting to climate change.

GELINE NICOLE A. MORILLO



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NIAHS ExeCom accelerates action plan for agricultural heritage sites recognition

The Nationally Important Agricultural Heritage Systems (NIAHS) Executive Committee (ExeCom) strengthened its Action Plan for implementing DA-DENR-NCIP-NCCA Joint Memorandum Circular (JMC) 1 Series of 2023 during its second meeting on March 20, 2025.

DA-BAR Assistant Director Joell H. Lales presided over the meeting as the permanent representative of the DA-BAR Director and Vice Chairperson of the NIAHS ExeCom. Attending the meeting were permanent representatives: Director Reynaldo A. Dingal of the Office on Socio-Economic

Services & Special Concerns (NCIP), Deputy Executive Director for Operations Bernan Joseph R. Corpuz (NCCA), and Joy M. Navarro, OIC-Chief of the Caves, Wetlands, and Other Ecosystems Division (DENR-BMB).

The meeting focused on refining the roles and responsibilities of the involved agencies—DA, DENR, NCIP, and NCCA—as well as finalizing the target timeline of activities. Key discussions included the approval of the proposed agenda, review of the minutes from the previous meeting, updates on the Joint Special Order for the NIAHS

ExeCom Secretariat, and approval of the revised work plan and timeline for 2025-2028.

Aligned with the NIAHS ExeCom's mandate to recognize and confirm NIAHS sites, this initiative is part of the Philippines' commitment under the Convention on Biological Diversity. The Philippine Biodiversity Action Plan aims to declare at least 10 NIAHS sites by 2040.

The initiative targets to preserve traditional agricultural practices, promote sustainable land management, and enhance community-based conservation efforts. Recognizing NIAHS sites can also drive economic growth through tourism and investment in local communities while preserving cultural heritage. **LEA B. CALMADA**



TECH HIGHLIGHT

Batuan Sinigang Mix

Widely distributed in Luzon and Visayas, batuan or binucao is a native tree commonly used as a souring ingredient in Ilonggo and Negrense dishes.

Batuan propagation and processing technologies were introduced to farmers, processors, and representatives from the local government unit for promotion and adoption.

TECHNOLOGY DEVELOPER
DA-Western Visayas

TECHNOLOGY TAKER
Gina Salviejo



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

DA-BAR builds RDE linkages at 6th Int'l Research Congress



The DA-BAR participated in the 6th International Research, Development, and Extension Management Congress on March 18-20, 2025 in Ho Chi Minh City, Vietnam to build and strengthen cross-border partnerships in Research, Development, and Extension (RDE) innovation and management.

With the theme, “Fostering Innovation in Research Management: Towards a Glocalized Economy through Research and Development,” the congress provided an avenue for in-depth panel discussions on agriculture, education, social sciences, environment, technology, and business and economics. The event gathered over a hundred delegates from various universities, research institutions, government agencies and businesses across the ASEAN region.

Salvacion M. Ritual, Knowledge Management Information and Systems Division head and Philippine Association of Research Managers (PHILARM) National Ex-Officio Board Member represented DA-BAR. She also served as one of the evaluators during the paper presentations under the ICT, Business, and Economy sub-theme.

“This congress supports the DA-BAR’s efforts of building the capacities of researchers and staff not only in research management but also in knowledge sharing, networking, and collaboration,” Ritual said, noting that insights gained from the congress are expected to inform the bureau’s strategies on strengthening institutional linkages and accelerating the research-to-impact pipeline.

A key outcome of the congress was the signing of a Memorandum of Understanding between Saigon Business School

and PHILARM, setting the stage for a broader collaboration between Vietnam and the Philippines.

“DA-BAR and PHILARM have been strong partners in advancing the role of research management in driving innovation, sustainability and growth in the agri-fishery sector,” Ritual said.

Founded in 1989, PHILARM is a private, non-stock, non-profit organization dedicated to promoting and enhancing the role of research managers in improving and sustaining productivity in research.

The congress was hosted by the Saigon Business School and organized by PHILARM, in collaboration with the Department of Science and Technology-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, Southeast Asian Regional Center for Graduate Study and Research in Agriculture, Marinduque State University, and Philippine School of Business Administration.

MA. ELOISA H. AQUINO



EXPERT SAYS

What is the most unique thing about the Healtea en Montes project?

What sets the Healtea en Montes project apart is its groundbreaking achievement of producing green and black tea made exclusively from the *Camellia sinensis* plant. This tea is uniquely cultivated in La Paz, Zamboanga Peninsula, making it the only locally-grown tea in the Philippines derived from this specific plant. Unlike other teas in the country, which are often crafted from herbs or alternative plants, this project highlights a truly distinctive and region-specific product.

EDEN P. BEJERANO
Senior Science Research Specialist
DA-WESMIARC



DA-BAR seeks stronger agri R&D collaboration with AFACI

As part of the bureau's efforts to further explore opportunities and bolster cooperation on agricultural research and development (R&D) with the Asia Food and Agriculture Cooperation Initiative (AFACI) under the Rural Development Administration (RDA) of Korea, DA-BAR convened key officials on two separate meetings in March 2025.

On March 19 through a virtual meeting, DA-BAR Director Junel B. Soriano presented a proposal to Dr. Seol Kuk-Hwan, Senior Deputy Secretary General of AFACI. The proposal aims to deepen and expand the DA-BAR-AFACI partnership, focusing on strategic R&D initiatives, technology transfer and scaling, policy development, and capacity-building programs. Utilizing international expertise and shared resources, these efforts are geared towards enhancing the missions of AFACI and the Philippines' Department of Agriculture (DA) to create a more resilient and sustainable agricultural sector in the country and throughout Asia.

Dr. Seol Kuk-Hwan provided his initial insights on the proposed collaboration, signaling interest in the partnership to advance shared agricultural goals.

Following the initial presentation of the bureau with AFACI, DA-BAR gained full support from the DA Undersecretary for Policy, Planning, and Regulations Asis G. Perez during a meeting on March 27 at the DA Central Office in Quezon City. Usec Perez stated his full support of the proposal with a clear



direction of making the concept operational.

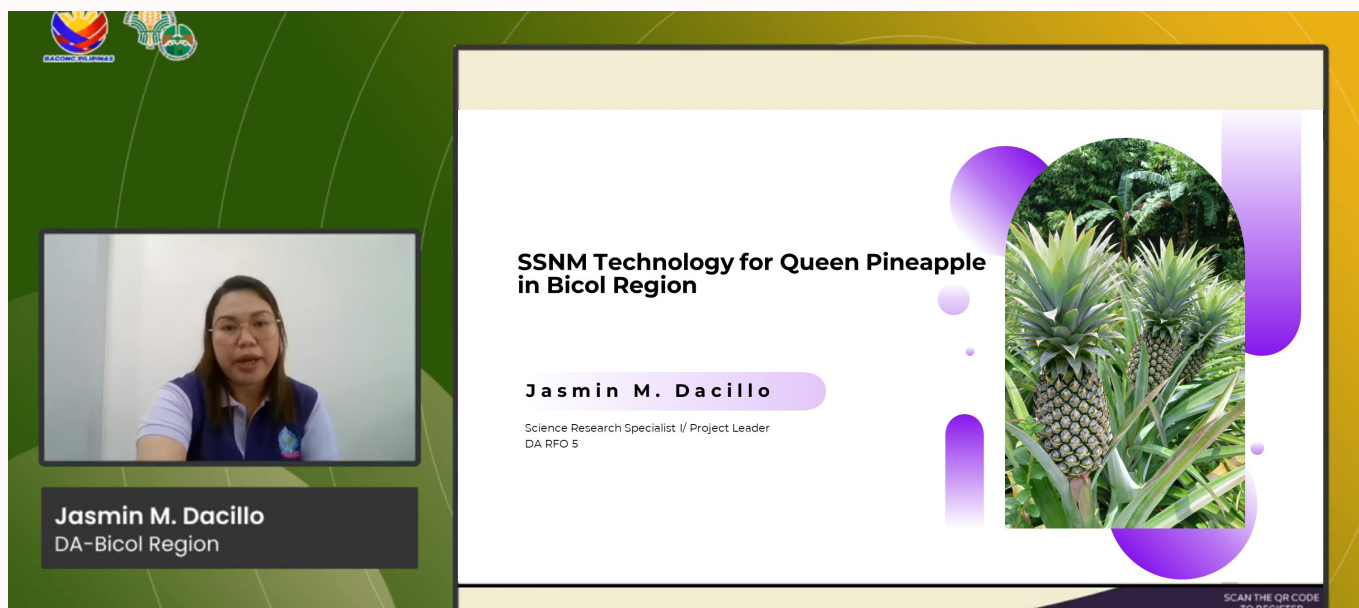
Presented by Director Soriano and AFACI Philippines National Contact Person Julia A. Lapitan, Usec Perez concurred with the bureau's proposal, laying the groundwork for further discussion in the upcoming high-level meeting with RDA of Korea and AFACI in May.

Stressing the need for strategic funding and policy-aligned priorities, Usec Perez urged

DA-BAR to effectively address sector-wide agri-fisheries challenges through targeted R&D initiatives. DA-BAR is set to determine resource allocations to support the proposed collaboration, a welcome outlook in advancing said partnership.

Since 2010, the DA and AFACI partnership resulted in 14 completed and six ongoing projects addressing pressing agricultural challenges. **MA. ELOISA H. AQUINO**

DA-Bicol Region advances SSNM for Queen Pineapple



SSNM Technology for Queen Pineapple in Bicol Region

Jasmin M. Dacillo
Science Research Specialist I / Project Leader
DA RFO 5

Jasmin M. Dacillo
DA-Bicol Region

SCAN THE QR CODE TO REGISTER

Site-specific Nutrient Management (SSNM) for Queen Pineapple in Bicol Region showed potential to increase farmer Return on Investment (ROI) by up to 141% while reducing fertilizer costs, based on findings presented by Jasmin M. Dacillo of DA-Bicol Region. She shared the project updates during the DA-BAR Online Seminar Series held on March 20, 2025, in celebration of National Women's Month.

Queen Pineapple is a key commodity, with the Philippines ranking as the world's second-leading exporter of pineapple products and Bicol Region as the fourth-highest national producer. Addressing the challenge of rising fertilizer costs for growers, the project utilizes the SSNM approach, applying the 4R standard (right source, rate, time, place) to optimize nutrient use based on farm conditions.

Implemented by DA-Bicol Region, in collaboration with the University of the Philippines Los Baños, and funded by DA-BAR under the High Value Crops Development Program, the project's first phase involved Minus-One Element Technique trials across six provinces.

Phase 1 established baseline yield variations (ranging from 24.04 to 43.08 T/ha), identified environmental limitations like waterlogging and compaction in low-yielding sites such as Virac, Catanduanes and Pili, Camarines Sur, and highlighted the critical role of nitrogen and the complex effects of phosphorus. These results informed the initial SSNM prototype recommendations developed (300-60-340 and 260-50-300 NPK kg/ha).

Phase 2 validation trials for the SSNM recommendations are ongoing across demonstration farms. These trials suggested the developed SSNM prototypes could significantly reduce fertilizer amount and cost, demonstrating the potential ROI increase compared to traditional practices, Dacillo highlighted.

Preliminary results from this phase indicated continued yield variability (ranging from 28.17 T/ha to 42.68 T/ha). Sites in Daet and Basud, Camarines Norte, and Cabid-an, Sorsogon, were identified as highest performing, while those in Castilla, Sorsogon, and San Andres, Catanduanes, performed poorest, often due to extreme weather,

prompting a recommendation for supplemental irrigation during drought. Further findings indicated BioN microbial inoculant showed promise as a partial nitrogen substitute (~20% N) but needed further study, and reinforced that phosphorus fertilizer required careful, site-specific consideration. A need for multiple factor correlation analyses was also identified to better predict yield responses.

Final results await completion of the 16-18 month crop cycle. To address these findings and further hone the technology, a follow-through project is now underway focusing on detailed soil characteristic testing across locations to optimize recommendations and develop a standard SSNM application protocol.

Women beneficiaries involved in the project also shared feedback through a video message. They expressed gratitude toward the project team for introducing the technology and appreciation for its potential to improve their livelihoods and help them better provide for their families. **RENA S. HERMOSO**

Mushroom R4D tech yields high profit, scale potential



An R4D-initiative funded by DA-BAR is proving financially variable, driving growth of the local mushroom industry in Central Luzon, with financial analysis showing high profitability and strong potential for commercialization.

Led by the DA-Central Luzon, the project, which was presented during a DA-BAR online seminar on March 27, 2025 showed that mushroom-based products including tocino, tapa, and bulgogi resulted good returns on investment (ROI) ranging from 38% to as high as 68%, with a projected two-year payback period on an initial PhP 2-million capital.

Project leader Veronica P. Mangune noted that value-adding was shown to increase profitability by as much as 70%, as the project takes on efforts to further increase the market reach of oyster mushroom products, one of the region's champion crops, accounting for about 77% of production.

"Mushroom is an ideal crop because it is easy to cultivate, which makes it attractive

especially for small-scale women producers," Mangune said, adding that the increasing demand for healthy, plant-based products is also a plus.

However, the high perishability remains a challenge, as fresh mushrooms last only up to three days at room temperature and six days when refrigerated. Presently, value-adding efforts have been introduced to address this.

The project aims to expand target markets including health-conscious individuals, vegan restaurants, *pasalubong* centers, and convenience stores.

To further promote this technology, these mushroom-based R4D products have been showcased at key industry events, including the 2nd National Agriculture and Fisheries Technology Exhibition, Alok 2024: Translating AANR Innovation Into Viable Enterprises, Agri-Aqua Innovation Pitch Fest 2024, and the DA-RFO III Technology Forum 2024, among others. **LEA B. CALMADA**



Pagbati, Jocel at Earl!



Jocel Anne C. Yamson
Information Systems Analyst III
Knowledge Management and
Information Systems Division

Joining DA-BAR in 2022, Yamson's exceptional work as Information System Analyst I led to her appointment as OIC, and now Head, of the Information Management Section as Information Systems Analyst III, recognizing her expertise.

She significantly contributed to DA-BAR by developing a range of vital online systems supporting operations and data management. These initiatives markedly improved bureau efficiency and simplified client transactions.

Prior to DA-BAR, Yamson developed key information, reservation, and data systems for various government and non-government organizations, alongside contributions to laboratory profiling and website enhancement. Currently, she maintains updated ICT ISO Files and ensures ICT equipment functionality.



Earl Vincent M. Cañaveral
Agriculturist II
Program Monitoring, Evaluation
and Linkaging Division

Following his tenure as a DA-BAR Project Development Officer II, where he contributed to the MAYA Program framework, Cañaveral honed his skills in research, instruction, policy, and extension. This combined experience paved the way for his return to DA-BAR, securing a plantilla position as Agriculturist II.

DA-BAR, Fabella Hospital conduct feeding program for mothers

In a pioneering collaboration coinciding with the National Women's Month, the DA-BAR partnered with Dr. Jose Fabella Memorial Hospital (DJFMH) for the "A Sisterhood of Support" — a Gender and Development (GAD) feeding program. The initiative involved a formal turnover ceremony on March 21, 2025 and feeding activities held on March 31, 2025.

This GAD initiative aimed to integrate agricultural innovation with essential healthcare, showcasing healthy food products developed through DA-BAR-funded research for development (R4D) projects. Featured items included Pinoy Gourmix, a nutritious blend of grains, legumes, and vegetables easily prepared as lugaw; Instant Ginisang Munggo, a convenient, quick-cooking version of the traditional Filipino mungbean dish; Texturized Full-fatted Soybean Protein, an affordable, high-protein plant-based source; and Veggie Crunch, fruit and vegetable snacks made using lower-oil vacuum frying technology. The program highlighted the broader impact of agricultural R4D in advocating community health while supporting small-scale food producers and local farmers.

The formal program on March 21st underscored the project's core goals — "[it is] more than just about feeding; it is about nourishing lives, strengthening communities, and fostering a culture of care for mothers and their children," said Dr. Estrella O. Jusi, chief of Medical Professional Staff II at DJFMH.



"This initiative is not just about what we serve on the plate, but also about the support we extend to one another. The theme, A Sisterhood of Support," reminds us that no woman should have to walk alone. Through this program, [we] can empower mothers with knowledge on proper nutrition, sustainable food practices, and the value of community support," she added.

Led by DA-BAR Gender and Development Focal Point System-Technical Working Group (GFPS-TWG) Chair Evelyn H. Juanillo and Vice Chair

Raymond Patrick L. Cabrera, the symbolic turnover represented the continued commitment to empowering women in agriculture, promoting sustainable food sources, and ensuring proper nutrition for maternity patients and lactating mothers.

In her closing remarks at the ceremony, Dr. Mari Grace M. Omadto, DJFMH GFPS-TWG chair, thanked the participants and partners: "Through this GAD activity, we celebrate the power of women supporting women, nourishing not just bodies but also hearts and futures." **RENA S. HERMOSO**

DA-BAR strengthens internal capacity on data privacy, digital protection



As part of the bureau's Learning and Development Program, the DA-BAR hosted a training on "Data Privacy and Protection Fundamentals" on March 28, 2025, in Quezon City.

Jude Ray P. Laguna, Human Resource Management Unit Head, in his opening remarks, stressed the vital role of DA-BAR staff in safeguarding privacy and security of information.

"This training is designed to give you the knowledge and tools needed to handle data responsibly and ethically. It is for us to learn how to handle data according to the law. Remember, privacy isn't just about compliance; it's about building trust."

Atty. Bernalyn D. Alcanar, who specializes in data privacy compliance and communications, led the training session which covered the Data Privacy Act of 2012, Five Pillars of Accountability and Compliance, Privacy Impact Assessment, and protocols on Data Breach and Security Incidents.

She reiterated that in cases of uncertainty concerning data privacy and digital protection, taking precautionary measures, such as withholding information and immediately notifying the authorities, is the best course of action.

Institutional Development Section Head Marjorie M. Mosende reaffirmed the importance of learning the skills for managing data and protecting privacy. "All of the data features and privacy issues are rampant these days. So it is very important that you have the right skills and knowledge to control and protect the data that you manage."

The training aimed to equip DA-BAR staff with the knowledge and tools necessary to comply with data privacy regulations and laws, understand their roles in data protection, implement data security measures, and cultivate a culture of data privacy and security by integrating privacy assessments into its wide R4D knowledge base and lifecycle.

KRISTINA S. ESTRADA



Welcome to DA-BAR,
Cheney, Jener, Jennilyn,
and Philip!



Chenny Jane S. Daguyo
Project Evaluation Officer II
Program Monitoring, Evaluation
and Linkaging Division



Jener R. De Pedro
Administrative Assistant V
Program Development Division



Jennilyn B. Rallos
Administrative Assistant IV
Administrative and Finance Division-
Commission on Audit



Philip Allan R. Triviño Jr.
Administrative Aide V (Carpenter II)
Administrative and Finance Division-
Building Maintenance,
and General Utility Services Unit

OFFICIAL ENGAGEMENT



DA-BAR Director Junel B. Soriano and University of Guelph (U of G) Assistant Vice-President for Graduate Studies Ben Bradshaw discussed potential partnerships in agricultural research during a meeting on March 27, 2025, in Quezon City.

Strategic R4D ventures will concentrate on Veterinary Sciences, Dairy and Animal Science, and Food Science and Technology — areas where the U of G, known as “Canada’s Food University,” has proven its strength on both the Canadian and global scales. **KRISTINA S. ESTRADA**

chats on the farm



CERILO L. SUMAJIT JR.
Owner, CJM Mushroom Products Manufacturing

“

Dati di ako makapag-produce ng volume [ng mushroom products] talaga. Sa tulong ng mga machine na binigay ng DA-BAR, nadagdagan ang production namin. Nasu-supply-an na namin ang demand ng customers namin.

Natulungan din ako sa pagpapatayo ng mushroom growing house. Tapos noong nabigyan ako ng oportunidad ng DA-BAR, naging daan ito para makapagbigay ng employment, at natupad ang goal natin na makapagbigay ng trabaho sa aming baryo. Hopefully, in the future, ay maipakita natin na maraming pwedeng gamit ang mushroom, lalo na bilang frozen products.



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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Key activities at a glance

MARCH 2025

- 14** M&E activity at DA-CNLRRS
- 17** DA-BAR and WMSU ceremonial MOA signing for the upgrading of food processing and innovation facility
- 25-28** M&E activity in Western Visayas
- 26** DA=BAR, DA-CALABARZON SCALE UP inception meeting
- 26** DA-BAR and DA-Bicol expository meeting