



BAR announces NRS gold winners



Clockwise: Arlene Joaquin (PhilMech), Maria Theresa Mutia (BFAR-NFRDI), Claro Niegos Mingala (PCC), Ma. Cecilia Antolin (PhilMech), Roger Bagaforo (DA-RFO IX), Mark Ariel Agresor (DA-RFO I), Edgardo Tulin (VSU), and Marissa Romero (PhilRice) present their respective AFMA R&D papers during the symposium proper. PHOTOS COURTESY OF BAR-ACD

Eight winners emerged as AFMA Best R&D Paper and Poster during the awarding ceremony of the 30th National Research Symposium (NRS) held on 7 November 2018 at the PICC Complex, Roxas Blvd., Manila.

Leading the awarding of winners were Department of Agriculture (DA) Undersecretary for Operations Ariel Cayanán; Atty. Rod Pino, on behalf of Rep. Evelina Escudero of the 1st District of Sorsogon; Bureau of Agricultural Research (BAR) Director Nicomedes Eleazar; and BAR OIC-Asst. Director Digna Sandoval.

BAR received 176 research entries this year, of which seven R&D papers and one poster won the gold awards. The winners were selected from seven competing categories: 1) Basic Research, 2) Socio-Economic Research, 3) Development Research-Agriculture, 4) Applied Research (Technology Generation/Information

Generation)-Agriculture, 5) Applied Research (Technology Adaptation/Technology Verification)-Agriculture, 6) Applied Research (Technology Generation/Information Generation)-Fisheries, and 7) Applied Research (Technology Adaptation/Technology Verification)-Fisheries.

Besting other papers for Development Research – Agriculture Category was the paper titled “CPAR on Integrated Rice-Based Farming System: An Approach Towards Community Driven Agricultural Development in Ilocos Norte” by Mark Ariel Agresor, Melinda Calumpit, Evelyn De Los Reyes, Eliemar Ragadi, Joi Labii, and Justina Sacro of DA RFO – Ilocos Region.

For the Applied Research (TG/IG) Fisheries Category, the paper titled “Development of Maliputo (*Caranx ignobilis*) Seed Production Technology: A First in Philippine Aquaculture” by Maria Theresa

Mutia, Drusila Esther Bayate, Frederick Muyot, Myleen Magistrado, Janet Baral, and Ma. Lourdes Merilles of the Bureau of Fisheries and Aquatic Resources (BFAR)–National Fisheries Research and Development Institute (NFRDI)–National Freshwater Fisheries Research and Development

turn to page 4

IN THIS ISSUE...

BAR announces NRS gold.....	1
“Research for the People”.....	2
Proposal Writeshop for ACEF.....	3
BPI Los Baños inaugurates.....	4
PHILARM, BAR holds management.....	5
Buskirk Engineering to partner.....	6
BAR participates in 15 th NOAC.....	7
Over 500 participants attend.....	8
SEARCA, BAR train R&D.....	9
Isabela hosts 1 st Luzon.....	10
BAR, SEARCA launched batch.....	11
BAR participates in 14 th Biotech.....	12
2 nd batch of RBM&E.....	13
CPAR on cacao in Calinan.....	14
BAR seminar highlights organic.....	14
Farmers share experiences on.....	15
12 NTCP projects reviewed.....	16

“Research for the People” book launched



DA Usec. Ariel Cayanán, together with BAR officials and Atty. Rod Piño, representative of Congresswoman Evelina Escudero, in a photo opportunity with the five Gawad Saka Outstanding Scientists featured in the book.

To recognize the valuable contributions of the Gawad Saka awardees, the Bureau of Agricultural Research (BAR) launched a book titled, “Research for the People: Gawad Saka Outstanding Scientists Devoting Their Works to Uplift the Lives of Farmers and Fisherfolk” during the closing ceremony of the 30th National Research Symposium on 8 November 2018 at PICC, Roxas Blvd., Manila.

The book, which BAR co-published with the Foundation for Agriculture-Related Missions (FARM), Inc., features five Gawad Saka Outstanding Scientists who unquestionably deserve being awarded for their selfless and patriotic efforts in helping farmers and fishers through proven R&D solutions.

The five scientists represent the three subsectors of agriculture: crops, livestock, and fishery, capturing a wider perspective and describing the diversity in fields of expertise. Likewise, the five scientists represent the major island groups of the Philippines since three of them are from Luzon, one from Visayas, and one from Mindanao.

The five outstanding scientists featured in the book were:

Dr. Louella D. Lorenzana, 2007 Gawad Saka Outstanding Scientist, currently the OIC-RTD for Research and Regulations of DA-Regional Field Office 4B (MIMAROPA), whose research into the mango pulp weevil problem was pivotal in saving Palawan’s imperilled mango industry;

Dr. Carlos S. Dela Cruz, 2011 Gawad Saka Outstanding Scientist,

chief of Regulatory Division and organic agriculture focal person of the DA-Regional Field Office 8 (Eastern Visayas), who has led efforts to save the region’s jackfruit industry;

Dr. Mudjekeewis D. Santos, 2012 Gawad Saka Outstanding Scientist, OIC of the Marine Fisheries Research Division of the National Fisheries Research and Development Institute, Bureau of Fisheries and Aquatic Resources (BFAR), who remains to this day as the country’s leading marine scientist;

Dr. Cayetano C. Pomares, 2013 Gawad Saka Outstanding Scientist, vice president for Research and Extension of the University of Southern Mindanao, a man on a mission to develop the country’s small ruminants industry starting from the countryside; and

Dr. Jonar I. Yago, 2014 Gawad Saka Outstanding Scientist, researcher and professor at the Nueva Vizcaya State University, who took the cudgels to rehabilitate the citrus industry of the Ilocos region.

Aside from the individual stories, the book also narrates the history of the Gawad Saka Awards since it started in 1970 up to the time that BAR was tasked by DA to be the Secretariat for the two categories: Outstanding Agricultural Scientists (OAR) and Outstanding Agricultural Researcher (OAR). ### (Rita T. dela Cruz)



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PRODUCTION TEAM

Editor:
Consulting Editor:
Managing Editor/Layout:
Writers:

Rita T. dela Cruz
Julia A. Lapitan
Rena S. Hermoso
Clarisse Mae N. Abao, Ma. Eloisa H. Aquino,
Daryl Lou A. Battad, Rita T. dela Cruz,
Leoveliza C. Fontanil, Ephraim John J. Gestupa,
Rena S. Hermoso, Patrick Raymund A. Lesaca,
and Juan Nikolas A. Paller
Ricardo G. Bernardo
Lyn D. Pardilla and Lino Norman D. Reyes
Julia A. Lapitan
Dr. Nicomedes P. Eleazar, CESO IV, Director
Digna L. Sandoval, OIC-Assistant Director

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ACD Head:
Advisers:

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For subscription and inquiries, please contact us at: Tel. Nos. +63 (2) 461-2800 or 461-2900 local nos. 1136, 1143, 1139, 1138 Fax No. +63 (2) 927-5691 Email: acd@bar.gov.ph

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Dr. Nicomedes Eleazar shares insights on how to write a proposal during the writeshop proper.

PHOTO: MEAQUINO

Proposal Writeshop for ACEF R&D Grant facilitated

The Bureau of Agricultural Research (BAR) conducted a “Proposal Writeshop for Technology Commercialization Projects” for possible funding under the Agricultural Competitiveness Enhancement Fund (ACEF) Fund on 5-9 November 2018 in Tagaytay City.

The writeshop was conducted to help project implementers fine tune their proposals for the package of technologies (POTs) to be funded under the ACEF Research & Development Grant. This also came about upon the recommendation of the ACEF Program Management Committee to include a financial analysis in the project proposals.

In 2016, R.A. 10848 was enacted, extending the period of implementation of the ACEF until 2022. The Fund, composed of all duties collected from the importation of agricultural products under the minimum access volume

(MAV) mechanism has allocated ten percent (10%) as grants for research and development of agricultural and fishery products, and the commercialization of such, including the upgrading of research facilities, of qualified state universities and colleges, which shall not exceed five million pesos (P5,000,000) per project.

BAR was tasked to facilitate the screening and evaluation of proposals to be funded under the 10 percent allotment for research and development, also known as the ACEF R&D Grant.

BAR Director Nicomedes Eleazar graced the activity and discussed some reminders to the group. He urged proponents to inform their fellow researchers about the ACEF R&D Program and encouraged the submission of additional project proposals for possible funding.

He also mentioned that: 1) proposals must be endorsed by

the head of the state college and university; 2) project cost should not exceed five million pesos; 3) for technology commercialization program, it must include an identified private partner/ collaborator (farmer/fisherfolk cooperatives or associations) who will commercialize the technology, financial indicators to show the viability of the technology (cost and return analysis, financial cashflow analysis, ROI, etc.), and sustainability plan.

Present during the writeshop were the pool of experts under the National Technology Commercialization Program, namely: Dr. Edralina Serrano of the University of the Philippines Los Baños, Dr. Cesar Quicoy of UPLB, Len Garces of USAID Oceans Program, Dr. Blesilda Burgos formerly of SEARCA, and Cheryl Caballero of Optiserve, Inc. ###
(Ma. Eloisa H. Aquino)

BPI Los Baños inaugurates BAR-funded R&D facilities



BPI OIC-Director George Y. Culaste (left) and BAR Director Nicomedes P. Eleazar (right) lead the unveiling of marker of the IDG Rehabilitation of Phase I to III of the BPI-LBNCRDPSC.

PHOTO: CMABAO

The Bureau of Plant Industry Los Baños National Crop Research Development and Production Center (BPI-LBNCRDPSC) officially opened its newly-rehabilitated facilities, funded by the Bureau of Agricultural Research (BAR), on 20 November 2018 in Los Baños, Laguna. The inauguration was part of the 87th Anniversary of BPI-LBNCRDPSC. The rehabilitation is part of an

Institutional Development Grant Project titled, “Strengthening of R&D Facilities of the Bureau of Plant Industry Los Baños National Crop Research Development and Production Center,” which was implemented from March 2017 to March 2018.

The facilities include an improved multi-purpose function hall, meeting room, audio visual control room, pantry, and kitchen.

The multi-purpose function hall will serve as the main venue of trainings and seminars for farmers, students, and other stakeholders. Aside from the mentioned rooms, BAR also funded the construction of the Plant Pathology Laboratory which will be used by the technical staff of BPI-LBNCRDPSC.

Present during the inauguration were BAR Director Nicomedes

turn to page 7

7 AFMA Best R&D...from page 1

Center (NFFRDC) bagged the gold award.

For the Applied Research (TG/IG)-Agriculture, Animal Science Category, the first prize was given to the paper titled “Development of Loop Mediated Isothermal Amplification Assay-based Test Kit for the Detection/Screening of Caprine Arthritis Encephalitis Virus (CAEV)” by Claro Mingala, Michelle Balbin, Daryl dela Cruz, and Joram Gautana of Philippine Carabao Center-National Headquarters and Genepool (PCC-NHQGP).

Bagging the best paper for the Applied Research (TG/IG)-Agriculture, Engineering

and Postharvest Category was the paper titled “Development of Non-Destructive Moisture Meter for Coffee Beans” by Arlene Joaquin, Richard Avila, Maria Elizabeth Ramos and Romualdo Martinez of the Philippine Center for Postharvest Development and Mechanization (PhilMech). While in the Applied Research (TA/TV)-Agriculture, Engineering and Postharvest Category was the paper titled “Development of Postharvest and Processing Technologies for Locally Produced Soybeans” by Ma. Cecilia Antolin, Renita SM. dela Cruz, Cesar Neric, Jr., and Kathlene Corpuz also from PhilMech.

For the Applied Research (TG/IG)-Agriculture, Soils and Water Science Category, the best R&D paper declared was, “Microbial-Induced

Micronutrient Mobilization in Soil: Innovation for Increasing Yield and Improving Nutritional Quality of Sweet Potato” by Edgardo Tulin, Anabella Tulin, Zenaida Ecleo, and Mark Christian Moreno of the Visayas State University (VSU).

In the Applied Research (TA/TV)-Agriculture, Soils and Water Science Category, the paper titled “Adoptation of Bhoochetana (Yamang Lupa Program) Principles and Approaches in Boosting Agricultural Productivity in Region IX” by Roger Bagaforo, Rictibert Pamunag, John Paul Guadalupe, Genevieve Hassan, Ronnie Gonzales, and Cherry Mae Jumao-As of DA-RFO – Zamboanga Peninsula Region got the gold award.

The Best AFMA R&D Poster was given to “Comprehensive



PHILARM, BAR hold management training course

The Philippine Association of Research Managers Inc. (PHILARM) spearheaded the conduct of the “Research, Development and Extension Management Course for Level II Managers and Coordinators” on 22-26 October 2018 at the University of the Philippines Los Baños (UPLB), Laguna.

The conduct of the training-course was part of the project, “Capacity Building on Managerial-Leadership for Agricultural Research and Development Managers,”

implemented by PHILARM and funded by the Bureau of Agricultural Research (BAR).

The five-day course included a series of lectures and seminar-workshop tours at selected Research and Development Institutions (RDIs) in UPLB and in Science City of Muñoz, Nueva Ecija. The RDIs visited were: 1) Institute of Plant Breeding, UPLB; 2) National Institute of Molecular Biology and Biotechnology, UPLB; 3) Philippine Carabao Center; 4) Philippine Center for Postharvest Development and

Mechanization; and 5) Philippine Rice Research Institute.

The participants of the training were composed of superintendents of the different DA-Research Experiment Stations (RES) and selected BAR staff.

With the theme, “RES as Local Agents of Change in Agriculture,” the main goal of the course is to update and upgrade the managerial-leadership capacities of the RES superintendents leading to the improvement of the performance of their respective stations. RDE program development, research-extension linkage and modalities, principles and practices of supervision and station development were some of the topics discussed during the lecture.

Dr. Rogelio V. Cuyno, senior adviser and founder of PHILARM; Dr. Lily Ann D. Lando, former country director of The WorldFish Philippines; and Ricarte V. Castro, former president of PHILARM, served as the resource speakers during the training.

The seminar-workshop tour included presentation and discussion of the institute’s organizational profile, R&D breakthroughs, as well as, the issues and concerns encountered and the strategies to address them. From the discussions, participants were able to gain important lessons that will help them in improving their performance. ### (Juan Nikolas A. Paller)

Phenotypic and Genotypic Profiling of Economically-Important Traditional Rice Varieties in the Philippines through Participatory Research” by Marissa Romero, Henry Mamucod, Teodora Mananghaya, Loida Perez, John Oscar Enriquez, and Renneth Millas of the Philippine Rice Research Institute (PhilRice).

The AFMA Best R&D Papers Gold awardees received a cash prize worth Php 100,000. Silver awardees received a cash prize of Php 75,000 while Bronze awardees received a cash prize of Php 50,000. For AFMA Best R&D Posters, Gold awardee received a cash prize of Php 50,000 while Silver awardee and Bronze awardee received Php 35,000 and Php 25,000 respectively. Aside from the cash prize given, all the winners were

received a proposal-based research grant from BAR.

The NRS is an annual event of BAR that recognizes the researchers and scientists from agriculture and fisheries R&D and their contributions to the sector. It serves as an avenue to share and expound results of scientific researches leading to significant technologies and breakthroughs in agriculture and fisheries.

This year’s theme, “Generating and Integrating Best Practices in Agriculture and Fisheries through Participatory R&D,” underscored the importance of incorporating the farmers’ and fishers’ knowledge and experience in research and extension. ### (Leoveliza C. Fontanil)

PHOTOS: CMABAO



Burskirk Engineering Co-owners Kirk Johnson (6th from L) and James Wheeler (4th from R), together with Agriculture Attaché Josyline Javelosa (5th from R) in a photo opportunity with PCC Director Arnel del Barrio (3rd from L), BAR Director Nicomedes Eleazar (6th from R), other officials from DA attached agencies, and representatives from DOST.

Buskirk Engineering to partner with DA to improve Phl agri by-products

To further improve the vast potentials, particularly the coconut industry, and explore potentials for the utilization of other agricultural by-products in the country, Buskirk Engineering, a US-based company that specializes in Biomass Densification giving individuals and businesses an alternative use for various wastes, visited the Philippines on 12-16 November 2016 as part of their project partnership with the Department of Agriculture (DA).

Through the support of the Bureau of Agricultural Research (BAR), James Wheeler, CEO and Kirk Johnson, co-owners of Buskirk Engineering, conducted consultation meetings, R&D related engagements, and site visits with Dr. Josyline Javelosa, Philippine agriculture attaché for the Americas, during their five-day visit to the Philippines.

DA Secretary Emmanuel Piñol graciously welcomed Buskirk Engineering along with Agriculture Attaché Javelosa at the Philippine Coconut Authority (PCA) in San Ramon, Zamboanga City on 12

November 2018.

In the consultation meeting conducted also at PCA-Zamboanga, resource persons from the PCA-Zamboanga, Philippine Fiber Industry Development Authority (PhilFIDA), and Philippine Carabao Center (PCC) presented the current status of coconut processing, banana fiber processing, and water lily processing. These presentations provided DA Secretary Piñol and the

Buskirk Engineering ideas on the machines which will be developed to process agricultural wastes in the country.

To further their research on utilizing coconut husks and coconut fiber for developing high value products, Wheeler and Johnson conducted a series of site visits on November 12-14. Along with Agricultural Attaché Javelosa, they

turn to page 12



Buskirk Engineering co-owners Wheeler and Johnson, DA Secretary Piñol, PCA-Zamboanga Board Member Manuel Serra, Jr., Agriculture Attaché Javelosa, and the engineers from PCA-Zamboanga present the cocoblock product.

BAR participates in 15th NOAC and 4th PNOPEX



INSET: DA Usec. Ariel Cayanan (left) delivers a message in behalf of Sec. Emmanuel Piñol while BAR OIC-Asst. Dir. Digna Sandoval (right) leads the launching of the “Organic Agriculture Research and Development and Extension Agenda and Program FY 2018-2023.”

PHOTOS: RDELACRUZ

To intensify the promotion of organic farming in the Philippines and provide practitioners with viable technologies that they can adopt to improve their productivity, the Bureau of Agricultural Research (BAR), as the national focal agency for Organic Agriculture Research and Development (R&D) of the Department of Agriculture-National Organic Agriculture Program (DA-NOAP), participated in the 15th National Organic Agriculture Congress (NOAC) on 12-15 November 2018 in Cebu City.

Hosted by the DA-Regional Field Office 7, the congress coincided with the 4th Philippine Natural and Organic Products Expo (PNOPEX), a showcase of various natural and organic products made by Filipino agri-preneurs and supported by DA.

DA Usec. Ariel Cayanan delivered a message in behalf of Secretary Emmanuel Piñol wherein he emphasized the importance of organic farming and its potential in improving the lives of Filipino farmers.

BAR participated as one of

the exhibitors showcasing its funded studies under the Organic Agriculture R&D including seed production system, postharvest technology, organic feeds for poultry, and processed products from organically-grown pig. Meanwhile, BAR OIC-Asst. Dir. Digna Sandoval led the launching of the “Organic Agriculture Research and Development and Extension Agenda and Program FY 2018-2023” – a reference book that details the thrusts and priority researches for funding under the Organic Agriculture R&D.

With the theme, “Organic Agriculture: Advancing the Local Food Culture Movement in the Philippines,” this year’s congress highlighted the importance of promoting local produce to prevent the disappearance of local food cultures and traditions. If local produce are being continuously promoted or if cooking traditions are kept alive, they will continue to be used up to the future generations.

The NOAC is an annual event of DA that convenes various stakeholders, organic farmers and practitioners, as well as supporters

of Organic Agriculture to discuss different strategies to further improve the implementation of the Organic Agriculture Program in the Philippines. The event also serves as an avenue for organic practitioners to share their knowledge and showcase the best practices of organic farming in the country. ### (Rita T. dela Cruz)

BPI Los Baños...from page 4

Eleazar wherein he commended BPI-LBNCRDPSC for advancing the advocacy on agritourism and knowledge-based farm tourism, in lieu of this year’s theme. “Farm tourism presents small farmers with opportunities to generate additional income, creates employment for the rest of the community, and provides revenue for their respective local government while promoting sustainable agricultural systems, and community involvement and participation,” said Dr. Eleazar. ### (Clarisse Mae N. Abao)

Over 500 participants attend 1st Mindanao TechCom Forum and CPAR Congress



(L-R) DA-RFO 12 RTD Isaac Bangcaya, BAR-PMED Chief Salvacion Ritual, BAR-OIC Asst. Dir. Digna Sandoval, Councilor Marissa Abella of 2nd District of Davao, DA Usec. Francisco Villano, Jr. DA-RFO 11 Regional Exec. Dir. Ricardo Oñate, Jr., DA-RFO 10 Regional Exec. Dir. Carlene Collado, DAF-ARMM Director for R&D Daud Lagasi, DA-RFO 9 RTD Melba Wee, and DA-RFO CARAGA RTD Nicandro Navia, Jr.

With over 500 participants, representing the six regions of Mindano (9, 10, 11, 12, Caraga, and ARMM), the Mindanao Zonal Research, Development and Extension (RDE) Network conducted the “First Mindanao Technology Commercialization Forum and Community-based Participatory Action Research (CPAR) Congress” on 23-24 November 2018.

Following with what the Bureau of Agricultural Research

(BAR) has started at the national level, the back-to-back event aimed to provide a localized approach in disseminating and promoting technologies generated by the Mindanao RDE Network out of their CPAR and National Technology Commercialization Program (NTCP) projects.

The event was attended by regional executive directors and regional technical directors for research, researchers, project implementers, farmers and farmers’

groups, officials from the local government units and partner national agencies, and BAR staff.

Representing Agriculture Secretary Emmanuel Piñol was Undersecretary Francisco Villano, Jr. who commended the Mindanao group for organizing such huge event showcasing the products of R&D. He likewise acknowledged BAR for the “swift transfer of technologies that are deemed crucial in boosting farm productivity.” Usec. Villano added that “the heart of CPAR lies in its democratic nature, allowing our stakeholders to actively participate in all stages of technology development and its eventual widespread adoption”.

Attending for BAR, in behalf of Director Nicomedes Eleazar, was OIC-Asst. Dir. Digna Sandoval who reported that the bureau has supported 87 CPAR projects in Mindanao in 219 sites. “These projects have established 4,955 farmers all over the zone and have assisted 141 farmer organizations,” she cited.

Other highlights of the event were the opening of the booths and exhibits featuring

turn to page 10



BAR OIC-Asst. Dir. Digna Sandoval (2nd to the R) and BAR-PMED Head Salvacion Ritual (2nd to the L) pose with the products of DA-RFO IX.



The participants of the training-workshop include project implementers from the Department of Agriculture-Regional Field Offices, state universities and colleges, and non-government organizations.

PHOTOS: DLBATTAD

SEARCA, BAR train R&D partners on agritechnologies' financial viability and profitability

The Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), in partnership with the Bureau of Agricultural Research (BAR), conducted the second batch of training-workshop on “Financial Viability and Profitability Analysis of Agricultural Technologies and Enterprises” on 12-17 November 2018 in Los Baños, Laguna.

The six-day training-workshop was carried out as part of BAR’s initiative in capacitating research and development (R&D) implementers and project leaders from its partner-institutions to carefully assess the adequacy of R&D projects to agrifishery enterprise development.

According to BAR Director Nicomedes Eleazar, projects under the bureau’s National Technology Commercialization Program (NTCP), one of its flagship programs, must be directed towards agricultural enterprise and must establish linkages especially with the private sector. “At this point, *sa dami ng mga technologies na na-develop na natin through R&D, dapat mayroon ng mga takers lalo na sa private sector. Sa mga projects na ginagawa ninyo, unang-unang isasaalang-alang ninyo ay ang enterprise aspect nito. We are in this period kung saan ang farming ay dapat negosyo na,*” said

Dr. Eleazar.

Project leader Dr. Corazon Aragon, Dr. Cesar Quicoy, Prof. Bates Bathan, and Prof. Antonio Jesus Quillo who are experts and consultants from the University of the Philippines Los Baños and SEARCA served as resource speakers. Training topics included cost and return analysis; partial budget analysis; breakeven analysis; and financial cash flow analysis.

Actual projects implemented by the participants’ respective agencies and funded by BAR were used as

working files during the workshop activities.

SEARCA, as a long-time partner of BAR in various R&D activities such as capability building, information and knowledge management, and institutional development, sees the important role of agricultural technologies in increasing farm productivity especially of small and medium-scale agro-enterprises which are considered major drivers of Philippine agriculture-based industry. ### (Daryl Lou A. Battad)



BAR Director Nicomedes Eleazar stressed the importance of directing projects under NTCP towards agricultural enterprises. He also emphasized the importance of establishing linkages especially with the private sector.

Isabela hosts 1st Luzon Legumes Summit



Legume farmers and industry stakeholders convened for the 1st Luzon Legumes Summit on 19-22 November 2018. The summit was organized by the DA-Office of the Undersecretary for High Value Crops and Rural Credit and the DA-Cagayan Valley (Region 2).

PHOTO: L.FONTANIL

The Department of Agriculture (DA), pushing for higher yields and more value-adding for legumes that will help increase the competitiveness of farmers cultivating the crop, hosted the first Luzon Legumes (Peanut, Mungbean and Soybean) Summit on 19-22 November 2018 in Ilagan, Isabela.

The DA-Office of the Undersecretary for High Value Crops and Rural Credit and the DA-Cagayan Valley (Region 2) office spearheaded the summit that gathered legume farmers and stakeholders and which addressed the industry's current issues and concerns such as production improvement and crop protection, and interventions

to improve the farmers' production capacity and competitiveness. In the summit, the participants also realized the need for a five-year roadmap for the development of the domestic legume industry.

"Legumes are important not only as a source of food for humans and animals. They provide nutritionally rich crop residues needed for the development and improvement of cropping systems for corn, rice, fruit trees and other crops," said Rose Mary Aquino, DA-Cagayan Valley regional technical director for research and regulatory, told participants of the summit.

"They play a key role in maintaining crop productivity and

provides a solution for depletion of nutrient elements in the soil," she added.

Among the highlights of the summit were exhibits showcasing some of the Bureau of Agricultural Research-supported research and development technologies on value-adding and improved seed varieties of legumes. Technologies on Carrageenan for mungbean productivity, boron fertilization for improved yield and income of peanut, hermetic seed storage technology for mungbean, and cost-effective seed storage technology for peanut were also exhibited. ###
(Leoveliza C. Fontanil)

Over 500 participants...from page 8

technologies generated from the CPAR and NTCP projects; plenary sessions on marketing, entrepreneurship, and product packaging and labeling; presentations of successful CPAR projects, farmers' testimonies; and awarding of best products, booths and farmers'

organizations.

Winners of the best products were: coconut soy sauce of DA-RFO 10 (first), ginger probiotics of DA-Caraga (second), and Apali nuggets of DA-RFO 11 (third) while the winners of best booth went to: DA-RFO 10 (first), DA-Caraga (second), and DAF-ARMM (third). Also awarded were the best CPAR farmers' organization

which was bagged by the CPAR Plaridel Association of DA-RFO 10.

A book, "Mindanao's Ripples of Success" featuring success stories of CPAR projects implemented by the Mindanao Network, was also launched during the closing ceremony. ###
(Rita T. dela Cruz)



BAR, SEARCA launch batch 2 of IKM mentorship program

Following the successful conduct of the first batch of the Information and Knowledge Management (IKM) mentorship program, the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), in partnership with the Bureau of Agricultural Research (BAR), launched the second batch of course learners on 19-21 November 2018 at SEARCA headquarters, Los Baños, Laguna.

Eighteen learner-participants from the Bureau of Fisheries and Aquatic Resources (BFAR) regional offices and the Department of Agriculture (DA) attached agencies were gathered for the program which will run for eight months.

During the orientation, BAR Applied Communication Division Head Julia Lapitan, representing the bureau director, Dr. Nicomedes Eleazar, formally welcomed the learner-participants to the IKM program. "The Bureau of Agricultural Research sees the value of this discipline especially in the research and development sector. BAR, as an R&D advocate, believes that all knowledge derived from various researches should be shared, reused, and transferred from your desks to the fields. These

forms of knowledge must always be discoverable, accessible, and practical, and this is why you are all here today," she shared.

The mentorship program is composed of four modules delivered through the blended learning approach using both face-to-face (F2F) meetings and online learning discussions. The course content involves science reportage and domains of science communication; agriculture research reportage in various platforms such as print and online; and skills in popularizing technical information, photography, videography, and writing for social

media.

The modules and trainings are facilitated by professors from the College of Development Communication, University of the Philippines Los Baños, led by Asst. Professor Elaine Llarena.

The IKM mentorship program aims to facilitate improved agri-fishery research reporting and knowledge management to address the gap between R&D and practice, making R&D technologies more visible by reaching their intended users and beneficiaries using multiple media platforms. ### (Daryl Lou A. Battad)



Asst. Professor Elaine Llarena of the University of the Philippines Los Baños gives the first lecture of the mentorship program.

PHOTOS: DLBATTAD

BAR participates in 14th Biotech Week

With the theme, “*Pambansang hamon, pambansang solusyon*,” this year’s 14th National Biotechnology Week (NBW) focused on addressing world challenges including food security, through advancing the innovation of biotechnology for the benefit of the farmers who rely on their crops for livelihood. Hosted by the Department of Science and Technology (DOST), the annual event was held on 13-17 November 2018 at the World Trade Center, Pasay City.

Joining the event as an exhibitor was the Bureau of Agricultural Research (BAR) along with other staff bureaus and attached agencies of the Department of Agriculture (DA). Featured in the BAR exhibit were supported researches on biotechnology R&D including bio-fertilizers and natural pesticides, stress-resistant crops, improved livestock reproduction, and improved industrial uses of agricultural commodities conducted by its R&D partners.

Key officials present in the opening ceremonies were: Chair of the Senate Committee on Agriculture and Food Cynthia Villar, DOST Secretary Fortunato dela Peña, and DA Undersecretary Segfredo Serrano.

Senator Cynthia Villar mentioned the indispensable role of biotechnology. “*Hindi mapagkakaila na ang biotechnology ay malaki ang papel na ginagampanan sa paghanap ng mga solusyon sa mga hamon*



Sen. Cynthia Villar and DA-Biotech Program Dir. Vivencio Mamaril visit the BAR booth during the 14th NBW.

PHOTO: EJGESTUPA

na hinaharap natin sa iba't ibang larangan ng sector.” According to Senator Villar, biotechnology is what will further realize food security and climate change adaptation in the agricultural sector.

Meanwhile, DOST Secretary Fortunato Dela Peña welcomed all the attendees of the week-long event and stated the various accomplishments of each sector that were made possible through biotechnology: increasing crop productivity despite limited planting areas in agriculture, improving access and delivery of health services in the field of medicine, and the development of research-driven enterprises in trade and industry. “The most important objective for this event is creating a high level of awareness and appreciation among our citizens

of the important contributions of biotechnology to several sectors,” said Dela Peña.

Representing DA Secretary Emmanuel Pinol was Undersecretary Segfredo Serrano who congratulated the organizers of the event for holding an activity in which the younger generation can develop a deeper sense of appreciation for agriculture, science, and biotechnology. “This is a brave new world for as long as we can imbue our people, specially the young with an appreciation for science, its objectivity and its passion for evidence and systematism,” Serrano added.

The NBW serves as a venue to spread awareness on current Filipino initiatives and advancements in the field of biotechnology. ### (Ephraim John J. Gestupa)

Buskirk Engineering...from page 6

visited PCA Zamboanga Coconut Processing Area; Franklin Baker Processing Plant in San Pablo City, Laguna; and RDF Feed Livestock and Foods, Inc. in Bacolor, Pampanga.

After the site visits, the Buskirk Engineering officials and Agriculture Attaché Javelosa proceeded to Clark, Pampanga on November 14 to meet with Clark Development Corporation (CDC) officers. CDC had introduced

Clark Freeport Zone as a world-class investment and tourism hub.

The week-long meetings and site visits of Buskirk Engineering concluded in an exit conference at the DA Office of the Secretary on 15 November 2018. Buskirk Engineering presented the potentials of “ecoblocks” and their project plans to the representatives of PCC, PCA, PhilFIDA, Philippine Center for Postharvest Development and Mechanization (PhilMECH), and Department of Science and Technology-Philippine Council for

Industry, Energy and Emerging Technology Research and Development (DOST-PCIEERD).

BAR facilitated the official visit of Buskirk Engineering in the Philippines. BAR, together with concerned agencies, will work closely with Buskirk Engineering and the Office of the Agriculture Attaché for the development of the ecoblocks scheduled to finish until the first quarter of 2019. ### (Ma. Eloisa Aquino and Clarisse Mae N. Abao)



The participants of the 2nd batch of RBM&E Training-Workshop in a photo opportunity with Dr. Romeo B. Santos, RBM&E expert and professor from UP Diliman.

PHOTO COURTESY OF EJGESTUPA

2nd batch of RBM&E Training held

Following the successful conduct of the first “Training-Workshop on Results-based Monitoring and Evaluation (RBM&E) for Agriculture and Fisheries Research and Development (R&D),” the Bureau of Agricultural Research (BAR), through its Program Monitoring and Evaluation Division (PMED), spearheaded another RBM&E Training-Workshop on 19-23 November 2018 in San Fernando, Pampanga for the second batch of bureau staff.

Dr. Romeo B. Santos, an RBM&E expert and a professor at the University of the Philippines Diliman, served as the resource speaker during the five-day activity. He discussed the importance of measuring performance and success in organizations and the role and history of RBM&E. He also explained the difference between traditional M&E and results-based M&E. He presented the various criteria and standards used in the RBM&E practice and the Theory of Change. Other topics discussed were designing RBM&E performance framework and implementing

RBM&E system.

According to Dr. Santos, “results-based M&E or results-based management is considered to be a new philosophy of doing business. There must be an evaluation culture developed among societies and sectors, so that we can change the way we do things. Otherwise, we may be there... *naka-stick po tayo lagi, ‘yon na lang ang ginagawa.*” A tool for measuring policies, programs, projects, and the organization’s performance, RBM&E is focused on the results, outcomes, and impacts, and uses rigorous research methods in determining evidence of performance and success.

In her opening message, PMED Head Salvacion M. Ritual highlighted the importance of results-based monitoring and evaluation in the bureau’s capacity as the lead coordinating and funding agency for agriculture and fisheries R&D in the country. The activity does not only serve to strengthen the capabilities of the bureau’s technical staff in monitoring and evaluating different R&D projects but also functions to

assess the performance of the bureau as an agency that delivers.

The training was divided into four lecture sessions. After each lecture, workshop outputs were presented by each four groups: National Rice Program, Knowledge Management, Administrative, and Finance. Through the workshop, the participants were able to assess the functions and goals of their respective divisions and program using the RBM&E framework. ### (Rena S. Hermoso)



Dr. Santos serve as the resource speaker for the activity.

CPAR on cacao in Calinan turned over to LGU



Ceremonial turnover of the CPAR project to the local government of Calinan District, Davao

PHOTO: RDELACRUZ

After two years of implementation, the “Community-based Participatory Action Research (CPAR): Improvement of Cacao

Production in Brgy. Sirib and Brgy. Subasta, Calinan District, Davao City” is reaping its fruits, both literally and figuratively.

On 26 November 2018, the

Department of Agriculture-Regional Field Office 11 in collaboration with the local government unit (LGU) of Calinan, organized the “Farmers’ Field Day and Turnover Ceremony” to showcase the results of the CPAR and to officially turnover the project to the LGU.

CPAR is one of the banner programs of the Bureau of Agricultural Research (BAR) and is being implemented nationwide through the various Regional Field Offices (RFOs) of the Department of Agriculture.

The CPAR on Cacao Production, which started in 2016, aimed to increase the production of cacao in Calinan District, particularly in the two barangays (Sirib and Subasta), by introducing various research

turn to page 15

BAR seminar highlights organic farming

The Bureau of Agricultural Research (BAR), through its Applied Communication Division, held its monthly in-house seminar on 29 November 2018 featuring organic agriculture.

Serving as the resource speakers were Dr. Herminigilda A. Gabertan, center chief of Bureau of Plant Industry-Los Baños National Crop Research Development and Production Support Center (BPI-LBNCRDPSC), and Dr. Pio A. Javier, adjunct research professor at the University of the Philippines (UP) Los Baños.

Dr. Garbetan talked about her project, “Influencing farmers to adopt organic seed production of lowland vegetables and field legumes in the Philippines.” The project is in keeping with BPI’s goal of strengthening the organic seed production in the country research, seed production, training, and partnership. The project evaluated the seed yield performance of selected organically-grown crops and produced organic seeds of National Seed Industry Council-approved varieties and promising lines of lowland vegetable and field legumes. Part of her presentation was a demonstration on



Dr. Herminigilda A. Gabertan (left), center chief of BPI-LBNCRDPSC, and Dr. Pio Javier (right), adjunct research professor at UP Los Baños serve as the resource speakers for this month’s in-house seminar.

PHOTOS: RHERMOSO

how to make fermented plant juice,

Dr. Javier, on the other hand, discussed the management of major insect pests of organically-grown eggplant. He taught the participants how to identify major insect pests of eggplant and the damage they can cause. He also explained the different organic pest management methods against major insect pests of eggplant. These include: 1) use of biological control agents wherein living organisms are used to suppress pest population, 2) use of resistant varieties of eggplant, and 3) use of botanical pesticides which are the naturally occurring insect toxins extracted from plants. He also briefly

discussed the significant results and findings of his project, “Management of Eggplant Fruit and Shoot Borer, *Leucinodes orbonalis* Guenee (Lepidoptera: Pyralidae) and Other Major Insect Pests in Organically-grown Eggplant with Emphasis on Biological Control Agents and Botanical Pesticides in Quezon, Laguna and Batangas.”

Part of the activity was the distribution of free information, education and communication materials. The production of which was made possible through the collaborative effort between BAR and the Asian Food and Agriculture Cooperation Initiative (AFACI). ### (Rena S. Hermoso)

Farmers share experiences on CRA practices

Farmer-cooperators of the project, “Community-based Participatory Action Research for Climate-resilient Agriculture and Fishery (CRA) in Northern Mindanao,” shared their experiences going through the project and adopting the interventions that were introduced to them. This was facilitated during a monitoring activity by the Bureau of Agricultural Research (BAR) on 12-14 November 2018. The monitoring team was assisted by Northern Mindanao Agricultural Crops and Livestock Research Complex (NMACLR) Chief Carmelito R. Lapoot.

Taking off from the initial phase of Adaptation and Mitigation Initiative in Agriculture (AMIA), the program sought to establish community-level research and development interventions to facilitate the introduction and upscaling of CRA innovations.

With this, the NMACLR under the Department of Agriculture-Regional Field Office (DA-RFO) 10 embarked on a project that aims to establish and enhance climate-resilient agrifisheries livelihoods in target climate-risk communities through participatory action research in Libona, Bukidnon.

Plagued by drought since early in the millennium, the Municipality of Libona was identified as one of the most vulnerable sites in Northern Mindanao based on the assessment conducted by the Central Mindanao University. “*Iba talaga ang drought dito, hindi katulad sa Luzon. Dito nahihirapan na kami ngayon. Tumanda na ako na nagfa-farming...iyong lakad lang ng araw at saka buwan, tininitnan ko lang iyon. May kahoy*



Members of the Gango Kinawe Community-based Participatory Action Research Cooperative, one of the project beneficiaries, convened to share their experiences on the CRA practices introduced.

PHOTO: RHERMOSO

ako na palantandaan [that serves as an early warning mechanism for change in temperature]. *Ngayon bigla nalang umiinit. Kahit agriculturist kami, nahihirapan kami* [to assess changes in temperature],” shared Rodolfo Sardan, chairperson of the Kiliog Farmers Multipurpose Cooperative, one of the farmer cooperatives involved in the project.

According to Lapoot, project leader, the effects of drought are usually felt during the second cropping. To mitigate this hazard, the project introduced the following CRA practices: crop rotation and diversification, corn-cassava relay, swine and poultry integration, and adjusting the timing of planting through using early maturing varieties. These CRA practices are currently being tested in different sites.

Lapoot also commended the farmer-cooperators of the project for their active participation. Apart from the interventions introduced through the project, they were also actively

consulting him on other potential alternatives for additional income that come to their minds. He shared that the farmer cooperators suggested utilizing Roselle (*Hibiscus sabdariffa*) for processing into value-added products for additional income in times of severe drought.

Corn is the main commodity in the municipality. According to Carlos Pichay, assigned agricultural technician in the project from Libona-local government unit partner, farmers are currently using early maturing varieties of corn to address the drought. He shared that with such varieties, the farmers can harvest their crop before drought can ruin it during the second cropping.

The AMIA program of DA aims to build climate-resilient livelihoods and communities through climate-resilient agri-fisheries approach by enabling local communities to manage climate risks while pursuing sustainable livelihoods. ### (Rena S. Hermoso)

CPAR on cacao in...from page 14

interventions including the integration of cacao recommended varieties (UF18, W10, and BR25) as well as capacitating the farmers on cacao production management (i.e., good agricultural practices, fertilization, pruning, etc.).

Present during the activity was Regional Technical Director Angelina Pancho of DA-RFO 11

who was enthusiastic in encouraging the cacao farmers to level up their production and gear up for processing and value-adding of their products.

Also present was BAR-Program Monitoring and Evaluation Division Asst. Division Head Amavel Velasco who cited the five important factors or key players in implementing a successful CPAR projects: implementers, DA-RFO,

LGU, farmers, and adoption of technologies.

Grace Gutierrez, CPAR project leader, presented the updates of the project to the farmers and reminded the farmers that although the project is now turned over to the LGU, the CPAR Team of DA-RFO 11 will still be supporting them particularly on the technical aspect of the project. ### (Rita T. dela Cruz)

PHOTO: PRLESACA



12 NTCP projects reviewed

Twelve on-going projects funded under the National Technology Commercialization Program (NTCP) of the Bureau of Agricultural Research (BAR) were subjected to progress review on 21-22 November 2018 in Tagaytay City.

BAR-Technology Commercialization Division (TCD) Assistant Head Maria Elena Garces stressed the importance of the review mentioning the need to determine the relevance and level of achievement based on the objectives, effectiveness, impact, and sustainability of the project.

Serving as project evaluators were Dr. Cesar Quicoy and Dr.

Edna Aguilar of the University of the Philippines Los Baños, and Evelyn Juanillo of BAR.

During the evaluation process, the evaluators mentioned that in measuring the progress of the projects, proper attributions must also be considered. For instance, most of them cited the inclusion of activities geared towards commercialization, through the “phases of commercialization” and the provision of sound feasibility studies (FS) from the standpoint of producers since majority of the projects are for commercialization. Conducting extensive market researches, FS on village levels, and the enumeration of product uniqueness were just some of the

pointers raised by the evaluators.

The project proponents reviewed were from the Department of Agriculture-Regional Field Office 5; Bureau of Fisheries and Aquatic Resources Region 5; Southern Luzon State University-Judge Guillermo Eleazar; University of Antique; Benguet State University; and Provincial Local Government Unit of Ifugao.

A project review is a systematic and objective assessment of on-going and completed projects, designed to improve program implementation and to periodically ensure the effectiveness of the program. ###
(Patrick Raymund A. Lesaca)



RDMIC Bldg., Visayas Ave., cor. Elliptical Rd.
Diliman, Quezon City 1104
PHILIPPINES
