

## PSAU nutraceutical R&D facility inaugurated



The newly-inaugurated R&D facility funded by BAR will be supporting the nutraceutical researches being done by PSAU. PHOTO: NCORONADO

With the Bureau of Agricultural Research (BAR) and the Pampanga State Agricultural University (PSAU) reaching a milestone in 2015 for the construction of the first Nutraceutical Research Laboratory (NRL) in the Philippines, a subsequent Institutional Development Grant (IDG)-funded project was inaugurated.

Attending the unveiling ceremony for the Nutraceutical Research and Development (R&D)

facility on 14 September 2017 were BAR Director, Dr. Nicomedes P. Eleazar; and BAR-Institutional Development Division (IDD) Head, Ms. Digna L. Sandoval. They were joined by PSAU President, Dr. Honorio M. Soriano Jr.; Vice President for Research, Extension, and Training, Dr. Emelita C. Kempis; Director of Extension and Training, Dr. Geraldine C. Sanchez; Assistant Director of Extension and Training, Dr. Aris F. Miclat; and other PSAU researchers, faculty, and staff.

The 100-square meter facility was funded by BAR to accommodate nutraceutical research and development activities, and to serve as a training and knowledge dissemination center for intended beneficiaries in Magalang, Pampanga and other nearby areas.

Through the facility, PSAU aims to generate researches concerning the health and wellness properties of plants, animals, and various raw and processed agriculture and fisheries products. ### (Nadine B. Coronado)



Leading the unveiling of the facility's marker are: BAR Director Nicomedes P. Eleazar (left) and PSAU President Honorio M. Soriano, Jr. (right). PHOTO: NCORONADO

### IN THIS ISSUE...

PSAU nutraceutical R&D facility .....	1
ASec Gazmin briefs BAR .....	2
Accelerating ADPs .....	3
BAR leads review and planning .....	5
National review and calibration .....	6
2 <sup>nd</sup> National Adlay Congress .....	7
CSC recognizes BAR's partners .....	8
First face-to-face session of IKM .....	10
All-women group in Quezon .....	11
BAR-BPI project to develop .....	12
Goat farming featured in BAR .....	13
FOI highlighted during DA info .....	14
First-of-a-kind organic R&D center .....	15
BAR-funded organic waste converter .....	16

# ASEC GAZMIN BRIEFS BAR ON ASPIRE PROJ

**D**epartment of Agriculture (DA) Assistant Secretary for Agribusiness, Engr. Leandro H. Gazmin, together with his two staff members, Ms. Jocelyn Palisada and Ms. Aleli Manguilin, visited the Bureau of Agricultural Research (BAR) for a briefing on the ASPIRE project on 18 September 2017.

ASPIRE, which stands for Agribusiness Support for Promotion and Investment in Regional Expositions, is a partnership project of the DA, Department of Trade and Industry (DTI), and Philippine Chamber of Commerce and Industry (PCCI). This initiative aims to converge and harmonize the key players in agriculture business and industry to push for investment, and build a strong relationship with other government and private sector.

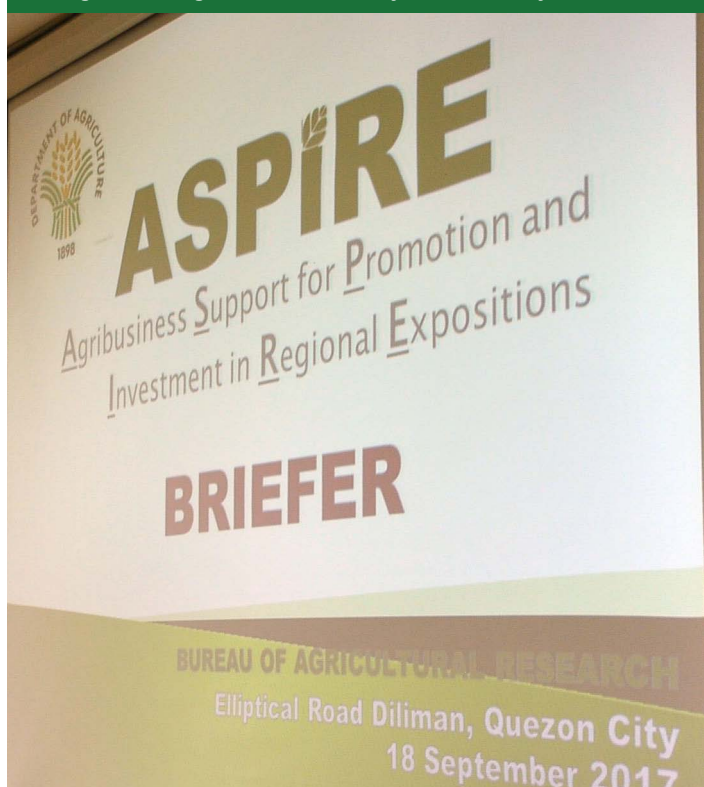
As presented by Asec. Gazmin, the ASPIRE project has four components, namely: 1) production support, 2) enterprise development and industry support, 3) investment promotion, and 4) market promotion and development.

*turn to page 4*

*Erratum: In our July 2017 issue's article titled, "Cacao R&D forum opens opportunities to Mindanao farmers," the Cacao R&D Program Leader should be Mr. Simeon Fernandez, science research specialist II from the DA-RFO II-Research Division, instead of Ms. Geraldine Gaterine of the Regulatory Division. We apologize for the mistake.*



BAR Director Nicomedes P. Eleazar (left) and DA Assistant Secretary for Agribusiness and Marketing Leandro H. Gazmin (right) meet for a briefing on the ASPIRE project that seeks to strengthen the agribusiness industry in the country. PHOTOS: RDELACRUZ



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# ACCELERATING ADPs HIGHLIGHTS RM MEETING



The quarterly meeting is attended by regional technical directors for research, and research managers from the DA-RFO-Research Divisions and Bureau of Fisheries and Aquatic Resources-Regional Offices, including key officials and staff members of BAR.

PHOTO: DBATTAD

**I**n intensifying and accelerating profitable agriculture through research and development (R&D), products and technologies must be put to the next level through agribusiness demonstration projects (ADPs). This was stressed during the 3<sup>rd</sup> Quarter Research Managers' (RM) Meeting held on 19-20 September 2017 in Los Baños, Laguna.

ADP is implemented to showcase new or advanced technologies that will enhance profitability of farming and/or fishing enterprises. Its features include private enterprise-like operations; profit and market oriented; income-generating and self-liquidating; and independently operated directly under the Department of Agriculture-Regional Field Offices (DA-RFOs).

As in any other enterprise, it follows operational guidelines and criteria such as favorable, strategic locations, competitive edge in the overall production and post-production, dominant presence of farmers and fishers, and shall be

implemented fully by the DA-RFOs through its research units.

BAR Director, Dr.

Nicomedes P. Eleazar reiterated the importance of ADP in view of the need for the agri-fishery R&D to be upgraded towards a more profitable sector. "We have so many products

already generated from R&D and the next wise thing to do is to sustainably market these," he shared.

In this light, the DA-Cagayan Valley Research Center (CVRC) presented its successful ADP implementation. Ms. Vanessa Joy Calderon, CVRC's agriculturist,

*turn to next page*



BAR Director Nicomedes P. Eleazar, in his message, encourages all DA-RFOs to increase the number of ADPs being implemented in the regions. PHOTO: DBATTAD

### *Accelerating ADPs...from page 3*

gave a report on the “Conceptualization and Sustainability Schemes for Agribusiness Demonstration Projects: CVRC Experience.” Conceptualized in 2001, the project ran for two years under BAR’s funding support. The project targeted to come up with an agri-based technology product store to promote and market generated and developed mature technologies of DA-RFO 2 in product forms and on-station techno-showcase.

Sixteen years later, CVRC takes on its full ADP operations facilitating delivery of new technologies to farmers and other target clients; making available at all times supplementary sources of input supply (seeds) and other services to farmers; enhancing DA clients’ awareness with regards to developed technologies’ actual use and field performance; generating income needed to support and sustain implementation of other R&D and extension projects; and providing employment and business opportunity to farmers, entrepreneurs, and interested individuals.

“Other regions can take cues and strategies in the ADP implemented by CVRC, and BAR will be supportive of this feat,” said Dr. Eleazar.

The RM meeting, a quarterly activity of BAR, through its Program Monitoring and Evaluation Division, was attended by regional technical directors for research, research managers from the research divisions of the DA-RFOs and Bureau of Fisheries and Aquatic Resources-Regional Offices, and key officials and selected staff members of BAR. ### (Daryl Lou A. Battad)

### *Asec Gazmin briefs BAR...from page 2*



BAR officials and staff members join the meeting for the ASPIRE project PHOTO: RDELACRUZ

The program was designed to come up with regional priorities based on market demand and strengths in production so that assistance can be immediately provided using the Value Chain Analysis (VCA) approach. It is also envisioned that through the ASPIRE, stronger collaboration between national government agencies (DA and DTI) and industry stakeholders (MSMEs and farmer/producers) will be achieved. “That is why we call this ASPIRE, because it’s our aspiration that if we can really put our acts together and really know what the needs of the industry are, we can help the sector better. We can build a simpler supply chain of raw materials for suppliers and processors,” Asec. Gazmin

reiterated.

During the briefing, BAR Director Nicomedes P. Eleazar mentioned to Asec. Gazmin some of the bureau’s initiatives related to the ASPIRE project, including the publication of the “Financial Viability of Agricultural Commodities”. This contains technology profile and financial viability scenarios of BAR-funded projects under its National Technology Commercialization Program.

Joining the director was Asst. Director Teodoro Solsoloy and members of the BAR Executive Committee, assistant heads, and technical staff from the Technology Commercialization Division. ### (Rita T. dela Cruz)

***ASPIRE aims to converge and harmonize the key players in agriculture business and industry to push for investment, and build a strong relationship with other government and private sector.***



## BAR LEADS REVIEW AND PLANNING R&D WORKSHOP FOR VEGETABLES AND ROOTCROPS



Participants of the review and planning workshop of BAR-funded projects on vegetables and rootcrops under the HVCDP. PHOTO: ABRION

Amid renewed emphasis on commercial crops, the Bureau of Agricultural Research (BAR) conducted the “National Review and Planning Workshop for BAR-supported R&D Projects on Commercial Crops (Vegetables and Rootcrops)” in collaboration with the High Value Crops Development Program (HVCDP) on 25-29 September 2017 in Los Baños, Laguna. The participants came from selected agencies and units of the Department of Agriculture (DA), state universities and colleges (SUCs), and private sector.

Spearheaded by BAR’s Program Development Division (PDD), the activity is the second of a series of workshops on commercial crops. It aims to put R&D interventions for vegetables, herbs and spices, and rootcrops in place to support the targets of the industry, the HVCDP, and the DA as a whole.

In his message, Director Nicomedes P. Eleazar took note of the important contributions of the vegetables and rootcrops industries in the agriculture sector. He also mentioned that under the HVCDP, garlic and onions have become the top priority commodities. He encouraged the participants to look

into the development of project proposals that are demand-driven and are aligned with the current thrusts and priorities of the Department.

In giving the overview, objectives, and expected outputs of the workshop, BAR’s PDD Head Joell Lales said that new R&D areas that respond to the requirements of the end-users of technology and other outputs of research have to be identified. He exhorted the group to look into current needs and, of these, what needs intervention. The goals of the commercial crop industries would be a good basis for identifying these. The generation of Good Agricultural Practices and the development of postharvest protocols were particularly mentioned. He cited that the Program Management Committee headed by DA Undersecretary for High Value Crops and Rural Credit Evelyn G. Laviña has a working timeframe of five years for garlic.

Dr. Rodel Maghirang of the University of the Philippines Los Baños gave a presentation on the status of the vegetables industry, while Dr. Erlinda Vasquez of the Philippine Rootcrops Research and Training Center talked on where the rootcrops industry is now. A value chain analysis of lowland and

upland vegetables, onion, garlic, white potato, and sweet potato was presented by Ms. Orelie Delas Alas of the DA’s Philippine Rural Development Program.

In the break-out sessions, the participants were grouped into three: 1) vegetables, 2) herbs and spices, and 3) rootcrops. Each of the groups worked on the validation of identified gaps with reference to the RDE Agenda and Programs for 2016-2022 and the Industry Roadmaps. Accordingly, they identified R&D projects that have not yet been addressed or are needed in response to climate change, opportunities, threats, requirements, or other conditions.

The groups’ reports covered problems, new research areas, specific projects, objectives, proposed implementing agencies, ranking of projects, and timelines. Ms. Virgilia Arellano of DA-Regional Field Office 4A presented the output of the vegetables group, Dr. Dionisio Buciao of the Mariano Marcos State University rendered the report for the herbs and spices group, while Dr. Juliet Roa of the Visayas State University did the presentation for rootcrops. ### (Victoriano B. Guiam)

# National review and calibration of Climate Change R&D Program held



The workshop aimed to assess how the BAR-supported climate change R&D projects fit and align with the logical framework and research priorities identified in the Climate Change Research and Development and Extension Agenda 2016-2022. PHOTO: LFONTANIL

**T**he Bureau of Agricultural Research (BAR) led the conduct of the “National Review and Calibration of BAR’s Climate Change R&D Program” on 4-8 September 2017 at the Philippine Carabao Center (PCC) in Muñoz, Nueva Ecija.

This came as a follow-up to the “R&D Partners and Stakeholders’ Orientation Meeting” held on 29 June 2017 at the National Meat Inspection Service (NMIS) in Quezon City that aimed to provide leveling-off of information and expectations among the participants and the generation of data and information as inputs to the national review. Meanwhile, the activity at PCC sought to assess how the BAR-supported climate change R&D projects fit and align with the logical framework and research priorities identified in the Climate Change Research and Development and Extension Agenda (CC RDEAP) 2016-2022. The agenda was developed in 2015 to serve as a reference material in prioritizing climate change-related R&D activities and to provide overview in harmonizing the efforts

of the bureau’s R&D implementing partners in addressing climate change concerns.

BAR Assistant Director Teodoro S. Solsoloy gave the opening remarks on behalf of Director Nicomedes P. Eleazar. “Climate change continues to be one of the biggest challenges of our time. Given its complexity and magnitude, there is a need for focused research efforts to fully understand the drivers of climate change and to generate options to reduce its impacts. As the coordinating arm of the Department of Agriculture (DA) for R&D in agri-fishery initiatives, BAR recognizes the need to strengthen R&D activities that will focus on improving the adaptive capacity of our farmers and fisherfolks to the challenges of climate change,” he said.

In attendance were representatives from partner research-implementing agencies involved in Climate Change R&D including project implementers from private and state universities and colleges, non-government organizations, and other stakeholders. Also present were

representatives from the DA-Systems-Wide Climate Change Office (DA-SWCCO), Agricultural Training Institute (ATI), National Food Authority (NFA), Philippine Center for Postharvest Development and Mechanization (PhilMech), and Philippine Council for Agriculture and Fisheries (PCAF), as well as BAR’s technical experts, key officials, and focal persons.

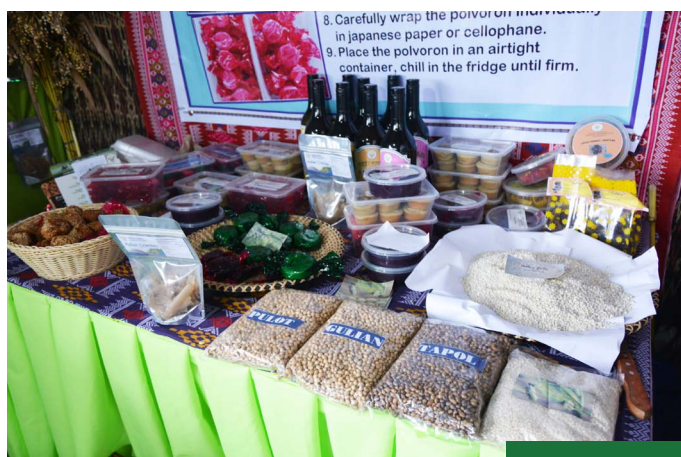
Facilitated by the bureau’s Program Development Division (PDD) and Program Monitoring and Evaluation Division (PMED), the activity was conceived to review and finetune the implementation of the bureau’s current climate change R&D program with the CC RDEAP as the reference.

Participants were divided into four sectoral groups: crops, poultry and livestock, fisheries, and cross-cutting. Each group presented their outputs on identified research gaps, and new and continuing researchable areas that serve as the bases for identifying priority climate change R&D projects.

Dr. Luis Rey I. Velasco of

*turn to page 9*





Various products developed from adlay showcased in the congress



PHOTOS: DBATTAD



## 2<sup>nd</sup> National Adlay Congress held

The Mindanao Zonal Research, Development and Extension Network, in partnership with the Bureau of Agricultural Research (BAR), organized the 2<sup>nd</sup> National *Adlay* Congress on 26-27 September 2017 at the Department of Agriculture-Northern Mindanao Agricultural Crops and Livestock Research Complex (DA-NMACLRC), Dalwangan in Malaybalay, Bukidnon.

The two-day congress gathered close to a thousand participants comprised of researchers, scientists, academicians, members from the national and local government units, private sector entities, students, and farmers.

Carrying the theme, “Bringing Technologies of *Adlay* and other Agri-Commodities to Farmers and Stakeholders through Intensive Technology Transfer and Commercialization for Food Secure and Self-Reliant Communities,” the

event aimed to demonstrate research technologies that were studied, practically used, and applied at the farmers’ field.

BAR, pioneering the initiatives on *adlay* research and development (R&D), attended the event led by its assistant director, Dr. Teodoro S. Solsoloy. In his keynote speech, he narrated how *adlay* has flourished through the years since its conceptualization in 2010 through BAR’s initiatives. He shared that “the bureau believes that this promising crop is as equally important as the country’s major crops like rice and corn. Further, with the administration’s support in this program, I personally believe that it is paramount to the success that *adlay* has achieved so far, being that the DA Secretary Manny Piñol gave a directive to BAR regarding the intensification of the study on *adlay*.”

In the message of

Undersecretary for Agribusiness and Marketing, and Regional Engagement of the DA Bernadette Romulo-Puyat, she lauded the efforts of BAR and its regional partners in mainstreaming *adlay* alongside major crops like rice and corn. With the successful identification of four *adlay* varieties (*gulian*, *tapol*, *ginampay*, and *kiboa*), she delightedly shared the accomplishments of the *adlay* program in terms of production, cultural management practices, product development and commercialization, and market projection. However the undersecretary reiterated that R&D efforts have to be continuously carried out, stressing that production must increase, quality of *adlay* must improve, and market must be sustained.

Among the highlights of the congress included the showcasing of a wide variety of *adlay* products

turn to page 9



# CSC RECOGNIZES BAR'S PARTNERS IN R&D

Four active and dedicated partners of the Bureau of Agricultural Research (BAR) in research and development were recognized by the Civil Service Commission (CSC) as among the 2017 Outstanding Government Workers during the awards rites on 20 September 2017 at the Malacañan Palace.

Rose Mary Aquino, OIC regional technical director for research and regulatory of the Department of Agriculture-Regional Field Office (DA-RFO) 2; and Dr. Erlinda Vasquez, director of the Philippine Root Crops Research and Training Center (PhilRootcrops)-Visayas State University (VSU) were among this year's Presidential *Lingkod Bayan* awardees for the individual category. Dr. Louella Rowena Lorenzana, regional technical director for research and regulations of the DA-RFO 4B who is one of the team leaders of the Mango Weevil Research Team also

received the same award for the group category. Dr. Norman de Jesus, director of the Alternative Low Input Agriculture System (ALIAS) Center of the Pampanga State Agricultural University (PSAU) was among the Civil Service Commission Pagasa awardees under the group category.

Aquino was instrumental in the development of *Pinoy Gournmix*, the packaging and labeling of which was supported by BAR under its National Technology Commercialization Program. As a highly nutritious food resembling porridge, *Pinoy Gournmix* is being used in various feeding and nutrition programs of government and private agencies. Ms. Aquino also led various BAR-funded R&D projects on legumes (peanut, mungbean, soybean) varietal and technology improvement that helped strengthen

the industry in Cagayan Valley region.

Dr. Vasquez is known for her works on managing plant diseases and pests in sweet potato and cassava. As such, under the Corn and Cassava R&D Program, BAR supported the project involving the management of Cassava Phytoplasma Disease through a systematic nationwide survey, characterization, diagnosis, and control; and a project under BAR's Institutional Development Grant for the provision of equipment support for other cassava-related researches.

The Mango Weevil Research Team with Dr. Lorenzana as one of the team leaders, is known for their efforts on the control of mango pulp weevil (MPW) aimed at keeping MPW field infestations at low levels especially in the province of Palawan.

*turn to next page*



Dr. Norman de Jesus of PSAU was among the Civil Service Pagasa Awardees under the group category.

PHOTO COURTESY OF NDEJESUS



Dr. Erlinda Vasquez of VSU received this year's Presidential *Lingkod Bayan* Award for the individual category.

PHOTO COURTESY OF EVASQUEZ



## CSC recognizes...from page 8



Ms. Rose Mary Aquino of DA-RFO 2 received this year's Presidential Lingkod Bayan Award for the individual category. PHOTO COURTESY OF RAQUINO

Together with the Philippine Nuclear Research Institute, Dr. Lorenzana's team from the DA-RFO 4B embarked on a research study that aimed to address possible MPW eradication protocols. This study won in the 23<sup>rd</sup> National Research Symposium of BAR in October 2011. Dr. Lorenzana was also recognized as a *Gawad Saka* Outstanding Agricultural Scientist in 2008.

Meanwhile, Dr. de Jesus, team leader of PSAU-ALIAS Center's Initiative to Promote Organic Production System, cites the conglomeration of BAR-supported projects that the Center was able to put up together with

emphasis on organic production systems as contributory to the award. These include, among others, research and development projects on lotus-tilapia integration, apiculture, *adlay*, and lotus product development initiatives.

According to CSC, the Presidential *Lingkod Bayan* Award is conferred to an individual or group for exceptional or extraordinary contributions that had nationwide impact, while the CSC Pagasa Award is given to an individual or group of individuals for outstanding contributions that directly benefit more than one department of the government. ### (Anne Camille B. Brion)



Dr. Louella Rowena Lorenzana of DA-RFO 4B received this year's Presidential Lingkod Bayan Award for the group category. PHOTO COURTESY OF LORENZANA

## National review...from page 6

the University of the Philippines Los Baños and a member of BAR's pool of experts delivered the workshop synthesis. He stressed that the framework of the activities is really about making greater impact for the DA's clientele taking into account that the end-users have different requirements, expectations, and levels of risks. He pointed out that the challenge is how to make the support available to the end-users. Such support includes capacitating end-users on doing assessments of their situation and identifying suitable options on their own. ### (Victoriano B. Guiam and Leoveliza C. Fontanil)

2<sup>nd</sup> National Adlay...from page 7

BAR Assistant Director Teodoro S. Solsoloy recounts on the accomplishments that the *Adlay* R&D Program was able to achieve since its implementation in 2010. PHOTO: DBATTAD

coming from the different *adlay*-producing regions through the DA-Regional Field Offices 2, 3, 5, 4A, 4B, 9, 10, 11, 12, and 13. These include Gourmix, *adlay* snack foods such as *chamorado*, cookies, brownies, ice cream cones, polvoron, crackers, *mamon*, coffee, and beauty soaps, among others.

The participants were also toured to *adlay* production sites where they get to witness various demonstrations of *adlay* technologies generated through R&D. ### (Daryl Lou A. Battad)



# First face-to-face session of *IKM Mentorship Program*

## kicked off

**T**he Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) spearheaded the “Orientation and First Face-to-Face Session of the Information and Knowledge Management (IKM) Mentorship Program” on 12-15 September 2017 at SEARCA, Los Baños, Laguna. The activity also marked the official launching of the IKM Mentorship Program, which is funded by the Bureau of Agricultural Research (BAR).

The IKM Mentorship Program is intended to capacitate the research information officers of the Department of Agriculture (DA) who are specifically responsible in disseminating research results in agriculture and fisheries. Using a blended approach (i.e. face-to-face session and online learning tools), the program covers writing and reportage techniques using different media platforms, as well as the discussion of concepts on inclusive growth and sustainable development.

Participating in the session were 14 representatives from the DA-Regional Field Offices.

Ms. Julia Lapitan, head of the BAR-Applied Communication

Division, delivered the opening remarks, on behalf of BAR Director Nicomedes Eleazar. In her opening remarks, she cited IKM as one of the important pillars of R&D in realizing the very heart of BAR’s mandate which is to bring relevant information and technologies to the people. She said, “this is not only about sharing and reusing them, but, more importantly, it is about how information and knowledge are effectively managed for their optimum utilization.”

Ms. Lapitan added that, given the current priorities of Agriculture Secretary Emmanuel Piñol, BAR is investing on the effective delivery of information, it being a crucial resource in bringing development to the agriculture and fisheries sector.

Part of the session were the presentations of BAR’s banner programs, the Community-based Participatory Action Research (CPAR) and the National Technology Commercialization Program (NTCP). Ms. Amavel Velasco, assistant head of the BAR-Program Monitoring and Evaluation Division, presented the CPAR program while Mr. Glenn Dimayuga of the BAR-Technology Commercialization

Division discussed the NTCP. Also present was Professor Elaine DC. Llarena who served as the project leader and the overall facilitator; and IKM mentors from the University of the Philippines Los Baños-College of Development Communication (UPLB-CDC), namely: Dr. Edmund G. Centeno (Photography and Audio-visual Writing and Production), and Prof. Pamela Joyce M. Eleazar (Online and Publications Writing and Production); including University Extension Specialist Rikki Lee B. Mendiola (Online Learning).

The IKM Mentorship Program is an offshoot of two previous trainings: 1) Demystifying Knowledge Management, and 2) Knowledge Sharing Tools for Project KM - both of which were also facilitated by SEARCA. The program was created to sustain what was learned during the first two trainings and to provide the opportunity for professional development and growth among DA’s information officers who are involved in research. ###  
(Rita T. dela Cruz)



# All-women group in Quezon sees potential of **Kamias**

An all-women group dubbed as *Kilos Unlad ng Mamayan ng Real* (KUMARE), Inc. has seen the great potential of *kamias* (*Averrhoa bilimbi* Linn.) by turning this underutilized crop to an additional source of income.

Based in Real, Quezon, KUMARE is now commercializing *kamias* commonly known as *bilimbi*, cucumber tree, or tree sorrel, which are growing abundantly in Quezon.

*Kamias* grows in clusters and the tree is often found in backyards. It is commonly eaten raw or dipped in rock salt or dried to be used as souring ingredient in cooking traditional Filipino dishes like *paksiw* or *sinigang*. They are also processed into pickled, dried candies, and juice.

Beyond its uses as food, *kamias* is also believed to have medicinal properties and is used as treatment on itches or skin eruptions, rheumatism, swelling, or mumps. Not to forget the common rural use in whitening fingernails, bleaching or removing stains in clothes or rust and tarnish from brass.

With more than 2,000 active members in the municipalities of Real, Infanta, General Nakar, and Polilio, KUMARE members are active participants in various community projects and programs. Furthermore, they are willing to participate in livelihood and income-generating activities especially those on processing and product commercialization.

KUMARE stands based on the principle of “empowering women to live their lives as fully as possible”. This can be achieved by helping them improve their economic situations, achieving a higher education for their children, having adequate health education and assistance, and caring for the environment.

Seeing the potential of *kamias*, the Department of Agriculture-Quezon Agricultural Research and Experiment Station

(DA-QARES) packaged a proposal titled, “Commercializing *Kamias* (*Averrhoa bilimbi* Linn) Production and Utilization for the Women Group KUMARE of Real, Quezon.”

The project was funded by the Bureau of Agricultural Research

under its National Technology Commercialization Program (NTCP).

“Research progression on how to reduce the over utilization of primary crops by looking into the use of underutilized crops can be a good alternative and additional source of income. One promising crop, which is locally abundant and can offer a lot of benefits, is *kamias*,” Mr. Dennis Bihis, project leader, explained.

He shared that trials on propagation by seeds and trials using asexual propagation are being conducted. Trials were done since *kamias* is relatively harder to propagate and seeds do not readily germinate. To date, 5,000 seedlings were produced wherein 2,500 seedlings were distributed to members of the beneficiary group and other interested clients for establishment of groves. “Based on initial results, 90 percent success rate in propagating *kamias* through seeds (soaked in water for 15 minutes at room temperature) has been noted,” he said.

Members of the KUMARE group already attended training on *kamias* production, field management, and product development spearheaded by DA-QARES. Existing products developed from *kamias* include soap, prunes, and candy. Trials are currently being conducted to assess the oxalic acid



KUMARE, Inc., a women's group, is looking into the potential of *kamias* as a source of livelihood. PHOTO COURTESY OF DA-QARES

content of the fruits to be used as bleach or anti-browning agent.

*Kamias* soap and *sinigang* powder are now available in local markets and KUMARE's business outlet in Real, Quezon. Market linkage has been made for the two products and will be done also for other products once these have been analyzed and packaged.

The group is looking into tapping the bustling tourist industry of the province and arrangements are being made to supply products to beach resorts, hotels, and other establishments.

Venturing into the production of soap, candy, and prunes proved profitable with a return on investment of 161 percent with a payback period of one year and seven months. Sensitivity analysis was also conducted and production of the three products will still be viable given the 10 percent increase in gross cost or 10 percent decrease in gross profit scenarios.

Mr. Bihis added that beneficiaries will be given additional training on the package of technology of the crop and on value-adding technologies; and equipment for product development have been provided so that they may continue implementing the project even after project completion and after funding support. ### (Ma. Eloisa H. Aquino)

# BAR-BPI project to develop organic seed production system



Organically-grown tomatoes PHOTO COURTESY OF BPI



Participants of a training on organic seed and vegetable production held in Oriental Mindoro PHOTO COURTESY OF BPI

Organic farming plays a crucial role in helping farmers and producers meet consumers' demand for organic food products. Organic agriculture advocates view the farming system as an alternative method of reducing the effects of chemical-based fertilizers in the food production processes. It also provides a healthier alternative farming by not using excessive chemical farm inputs.

Central to organic farming is producing the seeds. Production of organic seeds on a much larger proportion must respond to the demands of the organic farming industry.

To address this, the Bureau of Agricultural Research (BAR) funded a project, "Development of Organic Seed Production System of Lowland Vegetables and Field Legumes at BPI-LBNCRDC and Strengthening Partnership in CALABARZON, MIMAROPA and Bicol Region," that aimed to establish a national organic seed production area and broaden the science-based knowledge on organic seed production technologies.

Implemented by the Bureau of Plant Industry-Los Baños National Crop Research, Development, and Production Support Center (BPI-LBNCRDC), the project is led by its center chief, Dr. Herminigilda A.

Gabertan.

Specifically, the project looks into: 1) increasing the production of certified organic seeds of NSIC varieties and promising lines of field legumes and selected vegetables; 2) maintaining organic certification from Organic Certification Center of the Philippines (OCCP) for the organic seed production system of the Center; 3) strengthening partnership with identified organic stakeholders in CALABARZON, MIMAROPA, and Bicol Regions; and 4) disseminating organic seed production technology to farmers and interested individuals in said regions.

The organic seed production area for tomato, eggplant, squash, *ampalaya*, bottle gourd, sponge gourd, mustard, *okra*, pole sitao, and cowpea consists of a three-hectare land inside BPI-LBNCRDC. The harvested organic seeds were conserved for future use and a significant amount of seeds was distributed to farmer groups in partner areas and to other interested individuals.

Since the project was implemented in 2013, significant outputs were obtained resulting to the expansion of organic area and distribution of organic seeds. The project proponents believed that one of their major contributions to the OA industry is the supply of organic planting materials.

BAR and BPI's partnership led to the distribution of more

than 1,112 kilograms of assorted organic seeds to farmers, producers, and other stakeholders as well as disseminated organic farming technologies in selected municipalities of CALABARZON, MIMAROPA, and Bicol regions.

Under the project, there were more than 2,000 farmers and technicians trained on organic seed and vegetable production. The trainings were conducted in Palawan, Albay, Sorsogon, and Oriental Mindoro, which led to the identification of possible collaborators of the project like the Organization for Industrial Spiritual and Cultural Advancement (OISCA), Lucban Quezon; Christian Life Community (CLC), San Fernando, Camarines Sur; Dr. Minerva Jovilla of the Sorsogon State College; Mr. Nestor A. Nava, Philippine International Agricultural Training Exchange Inc. (PIATE); and Mr. Rudy C. Carticiano, an organic farmer in Calapan Oriental Mindoro; among others.

Evaluated seed performance of the different varieties and results showed that cowpea yielded 1.05 tons per hectare; pole sitao-1.54 tons/ha; mungbean-0.88 ton/ha, and tomato-0.057 ton/ha.

Also, one of the noteworthy accomplishments of the project was the granting of "Organic-in-Transition" Certification by the Organic Certification Center of the Philippines (OCCP) to BPI-LBNCRDC for the seeds it produced in June 2013. ###  
(Patrick Raymund A. Lesaca)



# Goat farming featured in BAR seminar

**G**oat farming is an important component of the livestock sector. Raising goat and processing it into food and non-food products are becoming a profitable enterprise.

Dr. Jovita M. Datuin, chief of the Research Division of the Department of Agriculture-Regional Field Office (DA-RFO) 1, served as the resource speaker during the in-house seminar of the Bureau of Agricultural Research (BAR) held on 21 September 2017.

In her presentation, Dr. Datuin talked on upgrading the protocols and production of medium-scale commercial goat breeders to ensure good quality meat, also

known as chevon, which according to the resource speaker, is one of the healthiest meat.

The speaker also presented the various characteristics considered in selecting good breeds, improved production practices on feeding, health management, and the recommended materials to be used for housing needs and fencing facilities. “When goat farmers are equipped with proper knowledge and can easily adapt to new technologies, and implement them with a good business sense, one can ensure its success,” Dr. Datuin said.

The presentation of Dr. Datuin titled, “Technology Commercialization of Slaughter Goat in Region 1 – Phase II”, is a BAR-funded project that aimed to contribute to the government’s aim to enhance a vibrant and sustainable goat livelihood enterprise by transforming village farmers as partners in livestock development opportunities to commercial goat raisers. The project also addresses the need for improved goat productivity in selected areas so as to ensure sustainable and profitable livestock production.

Dr. Datuin’s research on rural enterprise development that focuses on goat production technologies is aimed at teaching

farmers to become self-reliant and to have a sustainable agribusiness through goat production. The study paved the way for her to earn numerous awards, citations, and recognitions.

As of May 2017, the total inventory of goat was 3.71 million heads. Of the total goat population, 98.62 percent was raised in backyard farms, while commercial farms accounted for 1.38 percent. The regions with the highest goat inventory were Ilocos Region, Negros Island, and Central Luzon. These three regions accounted for 31.26 percent of the country’s total goat inventory.

The BAR seminar series is a monthly activity of BAR, through its Applied Communication Division, that highlights the results of its supported research and development projects and developed technologies for the benefit of farmers, fishers, private individual, and other stakeholders. It is free and open to the public. During the course of the seminar, various information and educational materials and flyers are being provided to the participants, the production of which were funded by the Asian Food and Agriculture Cooperative Initiative (AFACI). ###  
(Patrick Raymund A. Lesaca)



Dr. Jovita Datuin of DA-RFO 1 serves as the resource speaker for the seminar on goat technology commercialization. PHOTO: LFONTANIL



BAR-ACD Head Julia Lapitan explains that the seminar topics are research results from the supported projects by the bureau that are being disseminated to the public through the conduct of the seminar. PHOTO: LFONTANIL

# FOI highlighted in DA info officers' meeting



PHOTO COURTESY OF DA-AFID

DA public and regional information officers, and library staff members participate in the 3<sup>rd</sup> Quarterly Consultative cum Workshop.

In the light of a recently signed Executive Order No. 2 also known as the “Freedom of Information (FOI) Order” issued by President Rodrigo Duterte, public information officers (PIOs), regional information officers (RIOs), and library staff members of the Department of Agriculture (DA) were briefed on 21 September 2017 during its 3<sup>rd</sup> Quarterly Consultative cum Workshop held in Tagaytay City.

The briefing on FOI was done with the hope that as information champions of DA, they will be aware of the directives and will be guided accordingly especially in disclosing information involving public interest and upholding right to information particularly on matters of public concern.

Two major topics highlighted the discussion: 1) DA’s FOI, and 2) electronic FOI onboarding workshop. The first topic, presented by Ms. Danica Orcullo of the Presidential Communication Operations Office (PCOO), included the provisions and exceptions of the order, securing an FOI Manual, and the protocols for requesting information. Meanwhile, the second topic, as discussed by Ms. Kris Hannah Arnidoval of the Policy and Legislative Office, detailed on how to be onboard using the eFOI, an online request platform open to the public that facilitates requests for data and information.

The FOI is a landmark law under the Duterte Administration that provides every Filipino an access to information, except for matters affecting national security. In Section 3 of E.O. 2 specifically states that: “Every Filipino shall have access to information, official records, public records and to documents and papers pertaining to official acts, transactions or decisions, as well as to government research data used as basis for policy development.”

The FOI order covers the national government and all its offices, departments, bureaus, offices, and instrumentalities, including government-owned and controlled corporations, and state universities and colleges.

PCOO during the workshop, announced that DA has already complied with securing its own FOI Manual and uploading it in its Transparency Seal, as required by the Memorandum Circular (MC) No. 4 series of 2017.

The Bureau of Agricultural Research (BAR), as one of the staff bureaus of DA, has already complied with MC No. 4. ### (*Rita T. dela Cruz*)





# First-of-a-kind **Organic R&D Center** in Region 11 inaugurated



The Organic Agriculture R&D Center in Region 11 is located in DARCES, Manambulan, Davao City.

PHOTO COURTESY OF DA-RFO 11

The Department of Agriculture-Regional Field Office (DA-RFO 11) inaugurated the newly-constructed Organic Agriculture Research and Development Center, a first of its kind in Region 11. The activity was held on 29 September 2017 at DARCES, Manambulan in Tugbok District Davao City. The Center was funded by the Bureau of Agricultural Research (BAR) under its Institutional Development Grant (IDG).

The establishment of Organic Agriculture R&D Center is a realization of our government's mandate on the Republic Act 10068 also known as Organic Agriculture Act in 2010 and the Davao City Ordinance on Organic Agriculture. The facility is designed to cater workshops and trainings on organic agriculture technologies as well as experiments on preparations of organic inputs and products. It will also serve as display and information center for organic products and technologies available in the region where farmers could seek assistance in organic farming.

Representing BAR Director Nicomedes Eleazar was Institutional Development Division Head Digna

Sandoval. In her speech, she said that BAR will continue to provide farming support to the farmers, where in fact, they already established 14 Organic R and D Center in the country with three regions completing the facility.

"In support to the R and D component of the National Organic Agricultural Program (NOAP) and with the view of achieving the mission and objectives of the organic agriculture industry, BAR continues to provide funding support for the implementation of organic agriculture R and D related undertakings," Ms. Sandoval said.

Meanwhile, Atty. Francisco M. Villano Jr, DA undersecretary for Administration and Finance, emphasized in his message that currently, DA is working towards the promotion of direct marketing for the farmers so they will get better price for all their farm produce. He also challenged all the government employees to give their best in doing their duties as public

servant.

The highlight of the activity was the ribbon-cutting and unveiling of marker led by Usec. Villano Jr.; Ms. Sandoval; and Mr. Lary Tumpalan of the Committee on Agriculture. Joining them were Dr. Angelina Pancho, regional technical director for Research and Regulations; Dr. Juanito Lupiba, chief of Research Division; Organic Agriculture R and D Project Leader Simeon Fernandez; participants from partner organizations, and farmers from different provinces in Davao Region. ### (*Joy M. Montecalvo, Research Division, DA-RFO 11*)



Leading the ribbon-cutting ceremony are (L-R) DA Usec Francisco Villano, Jr., DA-RFO 11 RTD Angelina Pancho, BAR-IDD Head Digna Sandoval, and DA-RFO 11-Research Division Chief Juanito Lupiba. PHOTO COURTESY OF DA-RFO 11

# BAR-funded organic waste converter facility launched in Nueva Vizcaya

An organic waste converter facility was launched in Bambang, Nueva Vizcaya on 28 September 2017. The facility was funded under the Institutional Development Grant (IDG) Program of the Bureau of Agricultural Research (BAR) and was implemented by the Department of Agriculture-Regional Field Office (DA-RFO) 2 in collaboration with the Nueva Vizcaya Agricultural Terminal, Incorporated (NVAT), and the local government.

The facility, a first of its kind in the Philippines, addresses the waste management needs of the region and also converting the agricultural waste into a more profitable product. It mechanizes the composting process and shortens the processing time to produce bio-organic fertilizer through the use of this in-vessel technology where waste inputs are placed in a machine and come out as homogenized fertilizer products. The integrated system consists of a double shredder, an organic waste converter, and a curing system.

Present during the launching was Nueva Vizcaya Governor Carlos M. Padilla who expressed his gratitude to BAR for its continuous support in realizing the region's goal of more sustainable and environment-friendly agricultural practices in the province.

Joining him were DA-RFO 2 Center Chiefs Blesita C. Tega and Celerina T. Miranda; and Agricultural Marketing and Agribusiness Division Chief Vivien De Los Santos.

Representing Director Nicomedes P. Eleazar during the event was Ms. Elvira Rapada of the BAR-Institutional Development Division. Ms. Cheryl Marie Natividad-Caballero was also among the guests representing *InangLupa Movement Inc.* ### (*Ephraim John J. Gestupa*)



PHOTOS: EGESTUPA



The organic waste converter is a first-of-its kind facility in the country that mechanizes the composting process and shortens the processing time of producing bio-organic fertilizer.



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