

BAR spearheads... from page 15



DA Asec. Salvador Salacup graces the National Review and Assessment of Organic Agriculture RDE Projects and Programs.

by Ms. Grace Dacuyan, BPI-Central Office; 6) Development of Organic Seed Production Systems for Field Legumes & Lowland vegetables (RFU IVA&B, V) by Dr. Herminigilda Gabertan, BPI-Los Banos; 7) Variety evaluation: On Farm Trials & Seed Production of Organic Vegetables in Ilocos Region as presented by Wilhelmina Castaneda, DA-ROS, RFU I; 8) Organic Pest Management Approaches in Producing Organic Vegetables in Region- X as presented by Ms. Berly Tatoy of DA-NOMIARC; 9) Protocol Improvement & Product Development of Liquid Organic Fertilizers from Fermented Plant Extract as presented by Dr. Mannix Pedro of UPLB and the 10) Community-based Organic Agriculture Project by Dr. Portia Lapitan in collaboration with the Center for Environmental Law and Policy Advocacy (CELPA).

Meanwhile, the four projects on R&D Facilities that presented were: 1) Upgrading of the Existing Bio-Organic Fertilizer R&D and Production Facility by Joseph Ngohayon, Dean College of Agriculture and Forestry, Ifugao State University (IFSU); 2) Construction of

DA-CVIARCs Laboratory Services by RIARC Manager Robert Olinares, DA-CVIARC, RFU II; 3) Establishment of Research and Development center for Heirloom Rice in Mountain Province by Ms. Jovita Camso representing the Provincial Government of Mountain Province; and 4) Establishment of Bio-Organic Fertilizer Demonstration Farm and Production Facility as presented by Dr. Apolonio Machica, Jr. of the Eastern Samar State University.

After the paper presentations, participants were grouped by sub-sectors (crops, livestock and poultry, fisheries) and simultaneously conducted the workshops on the refinement of RDE Agenda and Action Plan. Each group was led to discuss the workshop parameters as formulated by BAR in consultation with the NOAB. Outputs of the workshop were presented afterwards. The outputs will be essential in the refinement of the Roadmap and the Action Plan for Organic Agriculture R&D (2013 and beyond) which will give high priorities to organic RD&E activities both at the regional and national levels.

BAR Assistant Director Teodoro S. Solsoloy concluded the three-day event. He echoed his appreciation to the rest of the participants including the experts, zonal representatives, R&D implementing agencies, presenters of OA projects and members of DA-STAG.

Dr. Solsoloy likewise acknowledged the involvement of Asec. Salacup in the assessment process and assured everyone that BAR will continue to play an active role in the implementation of Organic Agriculture in the country. ### (Patrick Raymund A. Lesaca)

BAR's Com Group...from page 14

knowledge management is an increasingly important source of competitive advantage, and a key to the success of contemporary organizations, bolstering the collective expertise of its employees and partners.

Several perspectives on KM were also presented to the group along with specific case studies which were used as models for restructuring and modifications. Other topics were on techno-centric focus; enhancing knowledge integration and creation; KM organizational focus to optimize organization design and workflows; ecological focus relating to people interaction; knowledge and environmental factors.

As part of the learning experience, the group concluded that in order for knowledge to flow it has to be continuously acquired, managed, shared, exchanged and reused to generate a new one. If not, knowledge becomes useless. With effective KM, information and knowledge is greatly valued for its stakeholders in terms of facilitating informed and wise decisions.

The 4th KMIS was organized and conducted by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC) in cooperation with the Association for the Advancement of Artificial Intelligence (AAAI) and the Informatics Research Centre (IRC). The conference was chaired by Professor Kecheng Liu of the University of Reading, United Kingdom. (Patrick Raymund A. Lesaca)

Gold winners for 24th NRS Best R&D papers awarded



Development Research



Basic Research



Applied Research TA-TV



Best Poster



Applied Research TG-IG

PHOTOS: RDELACRUZ

Mechanization (PhilMech) and the Department of Science and Technology (DOST) for the study, "Utilization of Mango Peels as Source of Pectin". The same study bagged the "AFMA Best R&D Poster" award.

For the Applied Research TA/TV (agriculture category), the study, "Lowland Irrigated Good Practice Options for Disaster Risk Reduction/Climate Change Adaptation in Bicol, Philippines (GPOs for Rice Farming)" by Edgardo B. De La Torre, Luz R. Marcelino, Jose V. Dayao, and Edgar R. Madrid of DA - Regional Field Unit 5 (Bicol Integrated Agricultural Research Center) was given the highest prize.

And for the development research, the best R&D paper went to "Peanut Seed Security Support Program in Region 02" by Rose Mary G. Aquino, Orlando J. Lorenzana, Lorenzo M. Caranguan, Norma A. Nerona, Vanessa

Emerson U. Palad of the Department of Agriculture (DA) and Executive Director Jovita M. Corpuz of the Agricultural Credit Policy Council (ACPC).

For the basic research, the best R&D paper was awarded to Lucia M. Borines, Carlos S. dela Cruz, Renie G. Gerona, Ruben M. Gapasin, Victoria G. Palermo, Gil Guadalquiver, Rosalie Daniel, and David Guest of the Visayas State University, DA-RFU VIII, and University of Sydney, Australia for the study titled, "Etiology and Incidence of Jackfruit Decline in the Philippines Caused by *Phytophthora palmivora* (Butler)".

For the Applied Research TG/IG (agriculture category), the award was bestowed to Ma. Cristina B. Gragas, Aileen R. Ligisan, Rosalinda C. Torres, Romulo R. Estrella of DA's Philippine Center for Postharvest Development and



RDMIC Bldg., Visayas Ave., cor. Elliptical Rd.
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Phytophthora palmivora: Nemesis of jackfruit in Reg. 8

Known for its versatility as a crop, jackfruit is one of the high value commodities being prioritized by the Department of Agriculture (DA). In Region 8, where jackfruit is the flagship crop, the production and processing are continuously being optimized through the collaboration of DA, local government unit, the academe, and the Eastern Visayas Integrated Agricultural Research Center (EVIARC).

However, jackfruit production in Eastern Visayas has been facing a significant decline because of a disease that causes canker sore, yellowing, and rotting that leads to the death of the trees. Through the direction of the Visayas State University (VSU) together with the support from the Australian Centre for International Agricultural Research (ACIAR), a project to identify the root cause of and solution for this looming problem was conducted to save the jackfruit industry of the region.



Dr. Lucia Borines of VSU talks about the fungus causing disease on jackfruits.

PHOTO: LPADILLA

Investigating the cause of jackfruit decline

A research titled “Etiology and Incidence of Jackfruit Decline in the Philippines Caused by *Phytophthora palmivora* (Butler)” was conducted by a group of experts from the Department of Pest Management in VSU by Dr. Lucia Borines, a professor at VSU.

Cognizant to the value of jackfruit as fruit, vegetable, fodder, lumber/firewood/wood, medicine, as well as its potential function in watershed rehabilitation, the experts aimed to determine the incidence of jackfruit decline in Eastern Visayas through isolation, pathogenicity tests, and



PHOTO: LPADILLA

pathogen characterization and identification. For a holistic investigation, another causal factor which is the dissemination of pathogen through insects was also studied.

After conducting surveys of 42 jackfruit plantations in Biliran Island, Leyte, and Samar, it was found that 85 percent experienced decline in productivity with 52 percent of the farms troubled with disease incidence of 50 percent or more.

“Initial isolations yielded *Phytophthora*, *Pythium*, *Fusarium*, *Colletotrichum* and *basidiomycetous* fungi but most isolates were *Phytophthora*. Fourteen isolated were found pathogenic to jackfruit after the conduct of Koch's postulates,” stated Dr. Borines.

Phytophthora palmivora is a fungus that causes serious diseases in palms, coconut, papaya, durian, and other crops. This fungus was found to be the main cause of disease incidence on jackfruit in Region 8 and its symptoms are canker lesions, yellowing, wilting, and rotting.

It was found that there are eight insects associated with jackfruit and these can be considered as vectors (i.e., carrier or transporter of disease) of the disease caused by *Phytophthora*. The insects are chrysomelid beetle, curculionid beetle, snout beetle, ponerinae ants (black), myrmecinae ants (red), tree hoppers, fruit borer, and mealy bug.

After conducting two trials that explored the effects of the presence of the eight insects, it was found that seven insects (snout beetle carries *Fusarium* only) are found to carry *Phytophthora*. Importantly, the ants and beetles were found to have a higher percentage of infection to the plants over the other insects.

Research wins Gold in BAR's 24th NRS

This research is a component of a much bigger project titled “Integrated Management of *Phytophthora* Diseases of Durian and Jackfruit in the Southern Philippines”. Due to the constant incidence of the disease caused by *Phytophthora*, experts and researches have been jointly pursuing to find ways on how to mitigate the effects of this disease and on how to possibly eradicate the spread of this infection.

Given its significant findings on the cause of jackfruit decline in Eastern Visayas, the research paper was awarded Gold Winner under the Basic Research category during the 24th National Research Symposium (NRS) of the Bureau of Agricultural Research (BAR) on 18 October 2012.

NRS is an annual event that extols significant accomplishments of agri-fisheries R&D workers and gives honor to agricultural scientists and researchers from all over the country. (Leila Denisse E. Padilla)

Empowering women entrepreneurs in Carles through product development



PHOTOS: MEAQUINO

A municipality rich in natural resources. This best describes the municipality of Carles, Iloilo. And in line with the celebration of Carles' town fiesta this year, the local government of Carles organized the Carles Expo 2012 to showcase various products and by-products of Carles.

Among the featured exhibits are its very own products from “CARLES ISLES Multi-Purpose Cooperative (CIMPC)”, a recently organized group of women entrepreneurs in Carles who are now processing and promoting value-added products from marine and aquatic resources of Carles.

In July 2012, the University of the Philippines Visayas (UPV) through its project leader and vice chancellor for academic affairs, Prof. Encarnacion Emilia S. Yap, conducted a series of lectures *cum* workshops for the interested constituents of Carles.

The activity was part of the UPV's project “Community-based Postharvest Fisheries Technology

Transfer Program” funded by the Bureau of Agricultural Research (BAR) under its National Technology Commercialization Program (NTCP).

The project aims to increase the capacity and exposure of women in coastal communities in fisheries post harvest technologies and to provide them the opportunities to engage in smallscale enterprise.

“Postharvest fisheries starts immediately after catch, and involves handling, and transportation, processing and distribution of fish and fishery products that would require control so as to limit or prevent occurrence of postharvest losses,” Prof. Yap said.

“We felt that during the first few sessions, the participants still have to be given additional session/s on skills training and packaging/ labeling,” underscored Prof. Yap. As a result, another round of lectures and trainings were spearheaded by the group resulting to a total of 38 participants.

The official launching of the fishery products of the group was also held during the first day of the Carles

Expo 2012 on 10 October 2012.

Ms. Ma. Elena B. Garces represented Dr. Nicomedes P. Eleazar. In the speech, he commended the activity and the members of CIMPC. “*Ang pagdaraos ng Carles Expo 2012 ay isang repleksiyong nagpapahiwatig na maraming katuwang ang gobyerno sa pagkamit ng mithiing pag-unlad ng agrikultura sa bansa.... Naniniwala akong malayo pa ang mararating ng inyong asosasyon dahil sa ipinapakita niyong kooperasyon at dedikasyong matuto at gumamit ng mga makabagong teknolohiya*”. Everyone was also encouraged to work together to nurture and enrich coastal resources.

Also present to give inspirational messages were Hon. Arnold A. Betita, mayor of Carles; Ms. Jolly I. Dusanan, municipal agriculturist, and Ms. Lynie B. Chavez, district supervisor of the Department of Education. Meanwhile, the UPV Team of Prof. Yap who also attended the activity was composed of Ms. Ruby Napata, Ms. Liberty Espectato, and Ms. Rosana Gabriel.

Exhibit booths were categorized into fruits and vegetables, fresh and dried fish, shells and shellcrafts, processed foods, and tourism.

To date, members of CIMPC are producing and marketing bottled sardines, spicy anchovy (dilis), fish tapa, boneless danggit, squid ring, and dried squid, carrying the brand name *Carles Isles. ### (Ma. Eloisa H. Aquino)*



PHOTO: CVIARC

Promoting the....from page 17

Region 2 to participate in any soybean development programs, since the provinces of Cagayan and Isabela were known as the soybean producing regions in the early 1990's. Thus, Ms. Aquino proposed a study to the DA-Bureau of Agricultural Research titled "Organic Soybean Production Development Program in Region -02-CAR Cluster" to improve the organic soybean production in selected areas in Cagayan Valley and Cordillera Administrative Region (CAR) through available seeds of recommended soybean varieties and promotion of organic soybean production in target areas. The study also aims to develop and sustain 100 hectares of commercial soybean production in the said region.

In line with the first study is another proposed project titled "Soybean Varietal Evaluation Under Organic Conditions in Region 2", which focuses on conducting field trials for proper identification of adapted high-yielding varieties that are responsive to organic production. Both studies led by Ms. Aquino are simultaneously done and are still on-going.

Joke turned reality

According to the proponent, it all started as a joke during their lunch discussion with the LGU partners on the Soybean Techno-Demonstration Trials Field Day in Bintawan Norte, Villaverde, Nueva Vizcaya on September 19. In support to the LGU Child-Friendly Advocacy Program, they thought of

feeding the malnourished school children in a form of a regular meal that is why they have an ongoing tie-up with a fast food chain. In addition, Ms. Aquino suggested coming up with a soy food value meal which is more nutritious and cost-effective. "Mabilis na sinakayan ko ang idea by suggesting the inclusion of healthy soybean food products in their feeding program at kaagad kumagat ang Municipal Agriculturist ng LGU-Villaverde," Ms. Rose Mary Aquino explained.

After the confirmation, the feeding program was immediately presented to the municipal mayor, Atty. Ronelie Obando-Baltorio together with the provincial directors of DepEd, DSWD, DOH, and PLGU-Nueva Vizcaya Governor Loren Cuaresma. Luckily, the group obtained an immediate approval which led to the implementation of the feeding program. Ms. Aquino also added that students' positive response to soybean products became a basis of DSWD and DepEd, in partnership with DOH and LGUs in adopting the soybean snack foods to be served and to be sold to school canteens and day care centers.

An experimental feeding trial with model day care centers and DepEd Schools in Nueva Vizcaya would also be next in line this November 2012. The success story has reached their neighboring province and as a result, the local government unit (LGU) of Iguit, Cagayan, will fully implement the

feeding program. Some private-partners in other regions also extended their initiatives of repeating the well-recognized activity.

Countless benefits

Soybean has various benefits not only to children, but also to adults. It contains large amount of high quality proteins and high levels of sulphur containing an essential amino acid called *Lysine*, which prevents child obesity by improving satiety or feeling of fullness and by suppressing appetite and controlling hunger. Soy food contains a compound called *isoflavone*, which has anti-oxidant properties and has protective effect against several types of cancer like breast, prostate, colon, lung, uterus and stomach.

In previous studies, as early as 1980's, substitution of animal protein with soy proteins reduces plasma total cholesterol and low density lipoprotein (also known as the bad cholesterol) levels by 20-22 percent. Soybean oil is also a good source of essential fatty acids like linoleic acid and omega 3, which helps facilitate regular muscle contraction, blood pressure and growth of healthy cells. That is why soybean is considered as one of the major protectors against heart diseases. Soybean oil also has high content of Vitamin E. There were recent studies that higher intake of foods rich in Vitamin E may reduce long-term risk of dementia and Alzheimer's Disease.

Soymilk, as one of the by-products of soybean, is a good source of calcium, thus, it promotes strong bones and prevents osteoporosis. During menopausal stage, bones tend to have low amounts of calcium due to the decreasing level of estrogen. Therefore, soy food intake helps to reduce bone loss in older women.

For those individuals who are lactose intolerant, vegetarian, and allergic to dairy milk products, soymilk is the best milk substitute because it is also rich in calcium and it is well absorbed in the body. ### (Liza Angelica D. Barral)

Sources:

1. Research paper: Dietary Antioxidants and Long-term Risk of Dementia, Arch Neurol. (2010) 67(7):819-825
2. European J Nutrition (2009) 42(2):92-100

Study to ease **pectin** supply in the country wins NRS applied category

In the Philippines, 100 percent of the pectin requirement is currently being imported. Pectin is a gelling agent produced commercially and used as fillings, sweets, and medicines which is also a source of dietary fiber.

In order to supply to the Philippines, there is a need to find alternatives to produce pectin apart from apples as the main source. A study titled, "Utilization of Mango Peels as Source of Pectin" by Ma. Cristina B. Gragasin, Aileen R. Ligisan, Rosalinda C. Torres, and Romulo R. Estrella of the Philippine Center for Postharvest Development and Mechanization (PhilMech) and the Department of Science and Technology –Industrial Technology Development Institute (DOST-ITDI) was conducted to address the lack of pectin supply.

The study of Dr. Gragasin and her colleagues provided information for the production of pectin from another raw material, which is abundant and common in the country — mango peels.

The group proposed the use of mango peels in the production of pectin as a solution to the dependent importation of this gelling agent. Aside from this, using mango peels to produce pectin will not only enable the Philippines to supply for its own pectin



Dr. Gragasin elaborates their study on the use of mango peels in pectin production. PHOTO: ZREYNOSO

needs, but will also provide a solution to the increasing (albeit unpopular) volume of solid mango waste materials from mango processing plants in dumpsites.

The study won this year's gold award for the National Research Symposium (NRS) under the Applied Research Technology/Information Generation in Agriculture category.

NRS is held annually to recognize significant and revolutionary studies that directly contribute to

agriculture and fisheries research and development (R&D) in the Philippines. This event, spearheaded by the Department of Agriculture's (DA) Bureau of Agricultural Research (BAR) brings together key players in the industry not only to disseminate the latest innovations available for the agriculture and fisheries R&D sector, but also to promote awareness in such developments, which when shared to the appropriate players, will bring about greater progress for the industry.

NRS papers are directed, first and foremost, to provide solutions to current issues, and/or to present developments to achieve the highest expected output of production in the agriculture and fisheries sector. The outputs are geared on solving problems concerning the farmers and fisherfolk through the combined efforts of researchers and farmers and fisherfolk cooperators. But more importantly, the major prize is knowing that the studies are benefitting countless others once implemented. ### (Zuellen B. Reynoso)



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This publication provides regular updates on DA-BAR's activities as the country's national coordinator for agriculture and fisheries R&D. It also highlights features and news articles concerning NaRDSAF-member institutions.

PRODUCTION TEAM

Editor/Layout:	Rita T. dela Cruz
Consulting Editor:	Julia A. Lapitan
Writers:	Ma. Eloisa H. Aquino, Liza Angelica D. Barral, Daryl Lou A. Battad, Anne Camille B. Brion, Rita T. dela Cruz, Diana Rose A. de Leon, Patrick Raymund A. Lesaca, Leila Denisse E. Padilla, Zuellen B. Reynoso, Mara Shyn M. Valdeabellana and Mae Odmyrl Abarabar-Morales (contributor)
Reproduction/Printing:	Ricardo G. Bernardo and Lino Norman D. Reyes
ACD Head:	Julia A. Lapitan
Adviser:	Dr. Nicomedes P. Eleazar, CESO IV

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For subscription and inquiries please contact us: Tel. Nos: +63 (2) 928-8505, 928-8624, 920-0234
local nos. 3011, 3012, 3328 Fax No. +63 (2) 927-5691 Email: acd@bar.gov.ph
Articles are also available online, visit our official website: <http://www.bar.gov.ph/barchronicle>



Project leader Ms. Rose Mary Aquino (CVIARC) expounds on the seed security program that her group was able to come up with to strengthen the production of peanut in Region 2. PHOTOS: DBATTAD

Seed Security Program: 'Lost glory' of peanut in Region 2 no more

The project "Peanut Seed Security Support Program in Region 02" funded by the Bureau of Agricultural Research (BAR) won gold under the Development Category - Agriculture during the 24th NRS held on 18 October 2012.

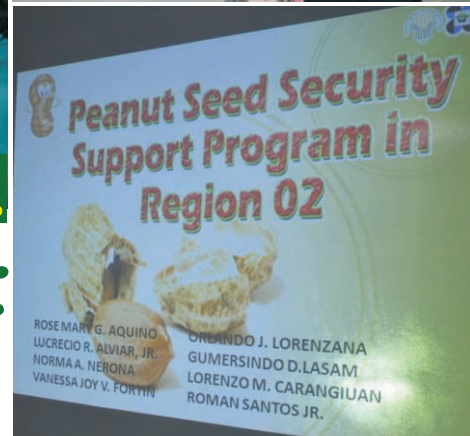
Back in the early to mid-1900's, the Cagayan Valley region was the country's leading producer of raw peanuts, dedicating around 22,000 hectares of the region's land area to peanut production. But due to the unavailability of seeds especially during the planting season, and notably low yields which made matters worse, farmers started to shift to yellow corn production until the supply of peanut substantially decreased, affecting the national peanut production of the Philippines.

Peanut, locally known as "mani", is a protein-rich legume. It is one of the oldest crops grown by farmers. Due to its erratic production, it has not gained a good reputation as a commercially viable crop. But talk about its benefits to health, peanuts has quite a reputation. Also called groundnuts, they are a good source of many essential nutrients such as crude

protein, carbohydrates, fiber, vitamins E, B2, B6, choline, and crude fat. Nowadays, it is reported to reduce the risks of heart diseases and even cancer. Some studies revealed that peanuts have antioxidants which potentially deliver anti-aging effects. Various researches are now available which indicate the valuable role of peanuts in battling other serious health conditions such as obesity and diabetes.

There are truly many advantages of growing peanuts: a potential profit generation, big demands locally and internationally at a fairly competitive price, and an aid in promoting health. On the production side, Philippine soils are deemed immaculate for peanut planting, especially in Region 2. All it needs are improvement in the variety, guaranteed seed resource, and dedicated researchers and support systems.

The continuing problems specifically on seed availability and low production in Region 2 has led its local government units in coming up with a production management system coupled with good organizational ties to improve its current status in the peanut industry. The Cagayan Valley Integrated Agricultural Research Center



(CVIARC) of the Department of Agriculture - Regional Field Unit 2 in Ilagan, Isabela has been coordinating efforts with other organizations to administer and implement peanut crop improvement and seed support system.

A team of researchers and crop experts led by Ms. Rose Mary G. Aquino of DA-CVIARC came up with the research program to increase and sustain peanut production in Region 2 through improved seed system (formal and informal) combined with the development and promotion of new varieties and package of technology for confectionery variety production.

It includes two major components: *Peanut Crop Improvement* and *Peanut Technology Transfer Acceleration through Efficient Seed Support Systems* consecutively.

Requisite to the first component was the problem on low yield brought about by the repeatedly use of mixed and old peanut variety. The *Peanut Crop Improvement* component was able to identify and select varieties with improved yield and resistance to

Promoting the health benefits of SOYBEAN through feeding program in Region 2

In an effort to promote the nutritional and health benefits of soybean as well as to effectively sustain the Soybean Development Program through public-private partnership initiatives, the Department of Agriculture (DA) together with the Department of Education (DepEd), Department of Social Welfare and Development (DSWD), Department of Health (DOH) and PLGU-Nueva Vizcaya, launched a Soybean Feeding Program in the municipality of Villaverde, Nueva Vizcaya.

A total of 600 participants were

present during the activity, mostly school children who are underweight and senior citizens who need protein rich foods. The students, parents, Home Economics teachers and Barangay Nutrition Scholars were presented with cooking demonstrations and food preparations.

Before the actual feeding program, Ms. Rose Mary Aquino of the Cagayan Valley Integrated Agricultural Research Center (CVIARC) and program leader of Soybean Program in Region 2 discussed the health and nutritional benefits of soybeans.

The participants had the chance of tasting the by-products and recipes developed from soybeans like taho, soymilk, soy bola-bola, soybean siomai, and soy lumpia. The entire program was indeed a success due to the participants' wide acceptance of soybean food products.

Where it all started

As a senior agriculturist, Ms. Rose Mary Aquino has seen the constant initiatives of farmers/stakeholders in

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PHOTOS: CVIARC

BAR features health benefits and food products from soybean



Ms. Rose Mary Aquino (left) and Mr. Ricardo Navis (right) discuss on the various health benefits of soybean.

PHOTO: ABRION

Soybean, an industrial crop grown for protein and oil, is a legume known for its protein-rich content and various medicinal properties. Cognizant to its value and potential, the Department of Agriculture (DA) included soybean as one of the priority commodities under the High Value Crops Development Program (HVCDP).

As the research and development arm of DA and as the R&D component in the Soybean Program under HVCDP, the Bureau of Agricultural Research (BAR) has been facilitating and supporting endeavors that focus on creating a sustainable soybean industry in the Philippines. Recently, BAR featured organic agriculture production technologies on soybean and soybean-based food products in a seminar series held on 25 October 2012.

“Recognizing soybean’s valuable contribution in attaining food security and enhancing human nutrition, our government came up with an initiative that will help boost soybean production in the Philippines. Referred to as The Philippine Soybean Roadmap for 2010-2014 titled “Building Sustainable Soybean Industry in the Philippines”, it aims to promote a community-based and sustainable soybean production in the country,” read Ms. Virginia Agcopra, BAR technical adviser, as she delivered the welcome remarks of BAR Director Nicomedes P. Eleazar.

Soybean for health and wellness

“It is popular in the world as the “wonder crop” of the 20th century due to its

significant contribution to health and wellness,” stated Ms. Rose Mary Aquino, senior agriculturist of the Cagayan Valley Integrated Agricultural Research Center (DA-CVIARC) in Region 2.

Due to her research initiatives and expertise on soybean, Ms. Aquino was invited as key speaker for the soybean seminar. Titled “Soybean Production Technologies for Organic Agriculture”, the presentation tackled about soybean’s origin and characteristics, health benefits and agricultural importance, supply-demand dynamics, and most importantly, the organic agriculture practices and production technologies.

Highly consumed in Southeast Asia, soybean is known as a good source of dietary fiber and it contains anti-cancer and anti-inflammatory factors, and components that aid in the prevention of osteoporosis, heart diseases, and diabetes. Among peanut, mungbean, beans and peas, soybean has the highest protein content with 35-40 percent. In the Philippines, domestic production of soybean is concentrated in Surigao del Sur and Negros Oriental, which is why we import most of our soybean needs every year.

Aside from its numerous health benefits, soybean is also an important crop in an agricultural system

because of its capability to fixate nitrogen that is present in the air. “The symbiotic relationship between the nitrogen-fixing bacteria [in the root nodules] and the host legume plant provide nitrogen to the agricultural system,” explained Ms. Aquino.

Recent technologies on soybean were also discussed. The Vegetable or Texturized Vegetable Protein (TVP) is a technology that processes soybean into fiber or chunk which is then used as a food ingredient. Another technology is the Soy-fed Fish that promotes the utilization of high-quality soy protein as source of feeds for farmed fish and shellfish. Aside from reducing the need for wild-caught fish as fishmeal, soy-based feeds are high in nutrients and proteins that induce healthier growth and development for fish.

Improving one's diet with soybean

Soybean noodles, soybean coffee, soya milk, tokwa, and taho are among the soy-based food products that were featured by Mr. Ricardo Navis of the Masaganang Gabay sa Kalusugan (MGSKFI) during the second part of the seminar series.

During his talk on “Ating Lutuín and Masustansyang Soybean”, Mr. Navis relayed real success stories on how the “wonder crop” and its food products have helped enhance his and his family’s health, vigor, and resistance.

Included in his presentation is the demonstration of processing soybean noodles, which was performed by him and his group. At the end of the seminar, samples of healthy soy-based food products like taho, instant noodles, soya milk, and lumpiang shanghai were distributed to the participants. (Leila Denisse E. Padilla)



PHOTO: ABRION

drought, foliar and soil-borne diseases. It also identified appropriate production technologies for confectionery peanuts, and developed high yielding varieties and yield-enhancing production technologies appropriate especially for the wet season production. This component on crop improvement delivered exemplary results, having been able to address the farmers’ desire for improved varieties. Locally known variety “G.D. Lasam-Pride” was recommended and nominated as the first drought-tolerant variety in the Philippines. Also, new promising peanut selections (ICGV 01273, ICGV 96176, and ICGV 97120) were recently accepted and recognized by Field Legumes Technical Working Group (FLTWG) as National Cooperative Testing (NCT) official entries in our country. The varietal evaluation, selection, and recommendation finally developed the first Package of Technology (POT) for confectionery peanut production, thus serving as farmers’ guide in improving yield in Region 2 and other peanut growing regions across the Philippines.

After improved varieties were identified, the project intends to sustain peanut commercial production of 2, 000 hectares in the region, as reflected in the second component, the *Peanut Technology Transfer Acceleration through Efficient Seed Support Systems*.

Methodically, this component established the formal and informal seed systems, comprising of on-station and on-farm seed productions, and seed procurement; seed saving, seed relay and exchange, capacity building and provision of technical assistance, enterprise and market development, and the provision of IEC materials.

Highlights of the establishment of the seed systems include a total of 36 accredited seed growers and 651 commercial producers who benefitted from the on-station seed production and distribution; on-farm seed production exhibited a total sales of more than P200,000.00 in which seeds were sold and distributed to peanut farmers in 34 municipalities in regions 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, CAR, and NCR;

organization and accreditation of CAVALEGA peanut seed growers with 58 member-growers and 36 accredited seed growers by the Bureau of Plant and Industry; sponsorship of the LGU for various training to enhance farmers’ knowledge on seed and commercial production; and establishment of producer-users linkages that vary from private to public organizations, cooperatives, and other seed farms and seed growers in other regions.

Truly, the productivity of peanut has gradually improved in Region 2 through the formal and informal seed system. The latest data from the Bureau of Agricultural Statistics (BAS) in 2011 showed that yearly, there is an increase of 300-400 metric tons of peanut from 2009. To date, there is a significant increase in production of 980.55MT starting in 2011.

But the best thing about this endeavor is not seen or measured in numbers. To the researchers and farmers alike, this project has demonstrated social upliftment for secured food, empowering resource-poor farmers, household members, and women through their involvement in the entire production process. It has also accelerated promotion and adoption of improved varieties and technologies for enhanced peanut productivity, resulting to sustainability of seed and food business enterprises. This has led them to a more secured economic status, having the ability to provide for their family’s needs. Even more, this project promotes a sound environment through the decreasing dependence on synthetic fertilizer and pesticides. Its responsiveness to climate change has enabled a fallback crop for the farmers during calamity times. Through this, devastated crops and idle land will no longer be a problem to the farmers and to the entire region.

Given the region’s resiliency to issues concerning peanut production, the success of this industry may bring back Cagayan Valley’s recognition as the Peanut Capital of the Philippines. ### (Daryl Lou A. Battad)

Gold winners...from page 1

Joy V. Fortin, and Roman M. Santos, Jr. of DA - RFU 2 (Cagayan Valley Integrated Agricultural Research Center).

The NRS is a yearly event organized and conducted by BAR as a nationwide competition wherein various research papers are submitted by researchers and scientists to compete for recognition alongside the cash incentives. This yearly event is conducted to give due recognition to significant research and development (R&D) results and technologies conducted and generated by researchers and scientists in the fields of agriculture and fisheries.

Paper entries for this year’s NRS focused on the theme, “Responsive R&D Excellence Towards Food Security and Growth in Agriculture and Fisheries,” highlighting on researches and innovations that will help the Department of Agriculture achieve its goal to attain food security.

BAR Director Nicomedes P. Eleazar highlighted the importance of conducting the NRS and how this served as an effective venue to disseminate new technologies and knowledge. He also reported on the increasing number of paper entries in the NRS since it was initiated 24 years ago. For this year, BAR received 140 entries which is an 11 percent increase from last year’s 126 entries.

The bureau chief also reiterated the importance of the symposium. “Today, in the NRS, we take a look at how far our researchers have gone in furthering our knowledge. This annual event is not just about giving awards to recognize individual performance in research, but it is something more. The NRS is very much a show of the country’s prowess, a demonstration of our ability to meet expectations of research. Through the NRS, we are also finding fresh confidence in ourselves as we recognize each one’s ability to contribute to the whole,” Dr. Eleazar said.

The two-day event was attended by almost 1,000 researchers and representatives from the R&D sector and the science community including state universities and colleges (SUCs), attached agencies and staff bureaus of the Department of Agriculture (DA), and private institutions. ### (Rita T. dela Cruz)

BAR launches CPAR Manual and translated handbook on Organikong Gulayan



BAR Director Nicomedes P. Eleazar (2nd from left) hands over the CPAR Operations Manual to DA Usec. Emerson U. Palad (3rd from left). They are joined by ACPC Executive Director Jovita M. Corpuz (leftmost) and BAR Assistant Director Teodoro S. Solsoloy (rightmost). PHOTO: ACONSTANTINO

The Bureau of Agricultural Research (BAR) launched the first series of Community-based Participatory Action Research (CPAR) Operations Manual and a handbook on organic vegetable production during the awarding ceremony of the 24th National Research Symposium (NRS) on 18 October 2012 at the Bureau of Soils and Water Management Convention Hall, Diliman, Quezon City.

As one of the flagship programs of the bureau, CPAR has been a vehicle that carries technological innovations to improve farm productivity of more than 10,000 farmers nationwide. With the changing environment and new innovations available, the CPAR Operations Manual will help the researchers to be refreshed and updated on CPAR guidelines and processes for a more effective and efficient project implementation. The

The two books are the efforts of BAR to provide the stakeholders an easy-to-understand compendium that will help in bringing closer to the farmers the programs and R&D initiatives implemented by the RDE sector and the Department of Agriculture (DA) in general.

manual also encapsulates the experiences and lessons learned and gained from more than a decade of CPAR implementation.

The first series gives an overview of the general guidelines and processes involved in CPAR starting from project eligibility for funding, community action planning and mobilization up to project implementation, monitoring and evaluation.

The CPAR overview is the first series of the four-part CPAR Operations Manual. The other three are: the participatory rural appraisal, the proposal preparation, submission and approval, and the CPAR implementation and management.

On the other hand, "Mga Pamamaraan sa Organikong Gulayan" is a handbook on organic vegetable farming and is now translated into *Ilokano*, *Bisaya*, and *Bikolano*. The launching of the three translated handbook is based on the pronouncement of Agriculture Secretary Proceso J. Alcala to translate the previously launched *Tagalog* version into these three dialects for wider reach. The translated handbook is hoped to cover a wider range of readers and at the same time strengthen the promotion of organic agriculture in the country.

Same as its *Tagalog* version, the handbook aims to help the farmers understand the simple and easy-to-follow practices in organically cultivating vegetables. Dr. Blesilda M. Calub of the University of the Philippines Los Baños led the conceptualization of this handbook.

Accepting the publication was DA Undersecretary Emerson Palad on behalf of Secretary Proceso J. Alcala. Former BAR Director Jovita M. Corpuz now Executive Director of Agricultural Credit Policy Council (ACPC) also graced the event.

The two publications are funded by BAR under its Scientific Publication Grant. ### (Diana Rose A. de Leon)



(L-R) BAR Director Nicomedes P. Eleazar, ACPC Executive Director Jovita M. Corpuz, Dr. Edna Luisa A. Matienzo (UPLB), Dr. Blesilda M. Calub (UPLB), DA Usec. Emerson U. Palad and BAR Assistant Director Teodoro S. Solsoloy PHOTO: ACONSTANTINO

BAR spearheads review and assessment of ORGANIC AGRI PROJECTS



PHOTO: RDELACRUZ

The Bureau of Agricultural Research (BAR), as the lead agency for research and development (R&D) component of the Organic Agriculture (OA) Program of the Department of Agriculture (DA), spearheaded the "CY 2012 National Review and Assessment of Organic Agriculture (OA) Research, Development and Extension (RDE) Projects and Programs" on 24-26 October 2012 in Clark, Pampanga.

The activity aimed to review and assess the accomplishments of OA at the national level in line with the OA-RDE Agenda and Programs 2012-2016 and as embodied in the National Organic Agriculture Program (NOAP) and to assess the gaps and strategies in support to the implementation of OA.

In attendance were DA Assistant Secretary for Fisheries and Agribusiness Salvador S. Salacup who is also the OIC of the Bureau of Agricultural and Fisheries Product Standards (BAFPS); Mr. Edicio dela Torre and Ms. Teresa Perez-Saniano, members of the Secretary's Technical Advisory Group (STAG) of the Office of the Secretary.

Serving as evaluators/reactors were Dr Luis Rey Velasco and Dr. Blesilda Calub from the University of the Philippines Los Baños (UPLB); and

Dr. Chito Medina and Dr. Jose Balaoing of the National Organic Agriculture Board (NOAB).

BAR Director Nicomedes P. Eleazar reinforced the bureau's role in the implementation of Organic Agriculture. He said, "*Sapat at ligtas na pagkain para sa mamamayang Pilipino ang tinututukan at binibigyang pansin sa sektor ng agrikultura. Kaya naman sa tulong ng itinuturing na ama ng organikong agrikultura sa Pilipinas na si Secretary Proceso Alcala, nalagdaan at naisakatuparan ang RA10068. Ito ay naglalayong mapalawig ang organikong agrikultura at mas mapalaganap pa ang mga organikong pamamaraan ng pagsasaka sa ating bansa sa paniniwalang ito ang susi tungo sa matagumpay na kinabukasan ng sektor ng agrikultura.*"

Director Eleazar also underscored that the conduct of the national review and assessment will send strong signal to OA stakeholders that DA, BAR, and BAFPS are committed to the program thrusts of Secretary Alcala on food safety and security. He added that the bureau funded 49 organic agriculture projects in 2011, of which, 44 projects are under the applied research while the remaining five are under the seed systems.

Asec. Salacup in his keynote address congratulated the bureau for spearheading the activity and stressed on the thought that R&D is the start-up component of agricultural and fisheries advocacies towards addressing the food security and sufficiency. He also shared the belief that public and private investments, particularly in R&D endeavors are vital in building up the needed resources.

Fourteen OA projects were subjected to assessment and review, from which 10 are applied research and 4 are R&D facilities.

The 10 organic agriculture projects under the applied research presented were: 1) Bio-Enterprise Development in Organic Agriculture Sector Through Public-Private Partnership by Dr. Flordeliza Lantican of UPLB; 2) Development of Organic Seed Production Systems for Tropical Fruits & Plantation Crop in Mindanao Island by Dr. Lorna Herradura, BPI-Davao; 3) Development of Organic Seed Production Systems for Semi-Temperate Crops in CAR by Dr. Jesus Aspuria, BPI-Baguio; 4) Development of Organic Seed Production Systems for Selected Upland Crops in Visayas Area by Dr. Milagros Abaquita, BPI-La Granja; 5) Strengthening the National Organic Rice Seed Production Systems

BAR's Com Group attends international conference on KMIS



The search for knowledge is a never ending navigation. One has to be at par and must appreciate the advances in the field of Information and Communication Technology (ICT). Otherwise, there will be information backlog and thus the level of understanding can be compromised.

As knowledge is evolving, it needs to be continuously cultivated, enhanced, and practiced. Knowledge must also be effectively managed, re-used and shared to suit the organization's purpose, intentions, and motivation.

In an effort to capacitate its Knowledge Management (KM), staff members of the Applied Communication Division (ACD) of the Bureau of Agricultural Research (BAR) participated in the 4th International Conference on Knowledge Management and Information System (KMIS) held on 4 to 7 October 2012 in Barcelona, Spain. The Communication Group was composed of Julia A. Lapitan, ACD OIC head; Rita T. dela Cruz, assistant head, Patrick R.A. Lesaca, information officer/writer.

During the conference, KM was defined in several ways, but in the context of Information Sharing (IS), it was referred to as a discipline concerned with the analysis and technical support of practices used in an organization to identify, create, represent, distribute and enable the adoption and leveraging of good practices embedded in collaborative settings and, in particular, in organizational processes. On the other

hand, IS was referred to as involving data exchange, communication protocols and technological infrastructures. Although standardization is indeed an essential element for sharing information, IS effectiveness requires going beyond the syntactic nature of Information Technology (IT) and delve into the human functions involved in the semantic, pragmatic and social levels of organizational semiotics.

The main objective of the KMIS conference was to provide a point of contact for scientists, engineers, practitioners and researchers in the scientific and technical advancement of all perspectives of KMIS. More than 200 delegates representing different countries, including the Philippines, attended this international event.

KMIS is one of the three integrated conferences that are co-located and constitute the International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (IC3K). The other two are KDIR - International Conference on Knowledge Discovery and Information Retrieval and KEOD - International Conference on Knowledge

Engineering and Ontology Development. The joint conference, IC3K received 347 paper submissions from 59 countries, which demonstrated the success and global dimension of the conference. From these, 44 papers were published as full papers, 88 were accepted for short presentation and another 60 for poster presentation.

The Com Group of BAR attended and participated in 28 research paper presentations under the KMIS session. Most of the papers presented and discussed delved on the discussions of various IT platforms and modalities that KM practitioners could tap and modify for their own organizations' uses.

The group learned that effective [turn to page 20](#)



Around 200 delegates from all over the world attended the KMIS Conference. Representing the Philippines from BAR's Applied Communication Division are (L-R) Ms. Rita T. dela Cruz, Ms. Julia A. Lapitan and Mr. Patrick Raymund A. Lesaca.

Strengthening the animal industry highlighted in AgriLink 2012



With edible landscaping as its central design, BAR booth draws attention from visitors who are lining up to get communication materials featuring various R&D technologies.

PHOTO: ABRION

As the largest international agribusiness event in the country, the 19th AgriLink/Foodlink/Aqualink was attended and participated by all sectors particularly those who seek information on the latest products and recent technologies that are related to agribusiness. Held on 4-6 October 2012 at the World Trade Center, Manila, this year's theme centered on "Improving animal productivity beyond medication".

Mr. Ricardo Alba, president and chief operating officer of Univet Nutrition and Animal Healthcare Company (UNAHCO), welcomed the guests and visitors present during the

event. In his remarks, he stated that AgriLink serves as a connecting bridge between the private and government sectors, together with the farmers and fisherfolk, in working collaboratively to contribute to the growth of the agriculture sector and in achieving national development. He furthered that this year's theme would address productivity issues regarding the animal industry and will be instrumental in "helping our farmers and stakeholders bid linkages to international market to ensure the quality and safety of our products and develop better adaptive capacity in improving livelihood and overall revenue. For every Filipino

household, this means food security."

Continuing efforts of the Department of Agriculture (DA) in helping uplift the lives of Filipino farmers/fisherfolk was the focus of Secretary Proceso Alcala's keynote address. He highlighted the government's initiative of establishing trading centers in the country which will help smallscale farmers and livestock raisers to earn more profits through faster access and direct links to the markets. For the fisheries sector, he reported the fruitful results of the Zamboanga Peninsula project, wherein the banning of fishing in the area starting

from December to February resulted in almost double the amount of sardines caught in the seas. He also shared the opportunity given to the Philippines as the sole country with 36 fishing vessels permitted to fish in Pocket 1 of the Pacific. These undertakings of DA are expected to open more doors that will increase the country's fish supply.

The Bureau of Agricultural Research (BAR), one of the participating agencies and sponsors of the event, showcased 11 technologies generated in collaboration with its partner R&D agencies through its two banner programs: Community-based Participatory Action Research (CPAR) and National Technology Commercialization Program (NTCP). These include: beekeeping, adlai, sapinit, queen pineapple, soybean, Asha peanut, sweet sorghum, mushroom, oregano, fruit wines, and edible landscaping.

During the viewing of exhibits, Sec. Alcala, together with Mr. Antonio Roces, president of the Foundation for Resource Linkage and Development, Inc. (FRLD), visited the BAR booth and tasted fruit wines which were developed using local fruits as primary ingredients.

Senator Francis "Kiko"



DA Secretary Proceso J. Alcala discusses with BAR Assistant Director Teodoro S. Solsoloy (2nd from right) during the viewing of exhibits.

PHOTO: ABRION

[turn to page 13](#)

BAR participates in 2012 World Food Day Celebration

A celebration of a year's worth of efforts in ensuring food security for the country, the World Food Day was held on 18 October 2012 at the Liwasang Aurora, Quezon City Memorial Circle. This yearly gathering not only commemorates the anniversary of the United Nations Food and Agriculture Organization (FAO) but also marks the achievements of the Department of Agriculture (DA), its staff bureaus, regional offices and partners in agricultural food production. The Bureau of Agricultural Research (BAR), as one of the staff bureaus of DA, participated in this internationally-celebrated event.

This year's theme, "Agricultural Cooperatives: Key to Feeding the World" is in recognition of the role cooperatives play in improving food security and contributing to the eradication of hunger. Farmer and fisherfolk cooperatives' efforts in providing agriculture and fishery products through sustainable agriculture and fishery techniques are acknowledged both to boost existing initiatives and to encourage participation.

Amidst the particularly capricious weather on the day of celebration, guests DA ASec. Salvador S. Salacup, UN Resident Coordination and the United Nations Development Programme (UNDP) Representative Ms. Luisa Carvalho, and FAO Representative Kazuyuki Tsurumi addressed the entire DA congregation with gusto, as the combined efforts led to another fruitful year, bringing the movement of food security and sustainability within arms reach. Inspirational messages were shared by Ms. Harlene Bautista (representing Hon. Herbert Bautista, Mayor of Quezon City, and UN World Food Programme/WFP Philippines' National Ambassador Against Hunger, Ms. KC Concepcion. Guest artist singer-composer Mr. Noel Cabangon entertained the crowd during intermission, singing songs of



PHOTOS: ACD

hope for a truly worthy cause.

The DA Chief, Secretary Proceso J. Alcala addressed his Department, sharing his gratitude to the devoted efforts of each individual, office, division, and bureau in making the

PHOTO: DDLEON
DA Secretary Proceso J. Alcala talks about food security during the World Food Day celebration.

Philippines a food secure country by 2013.

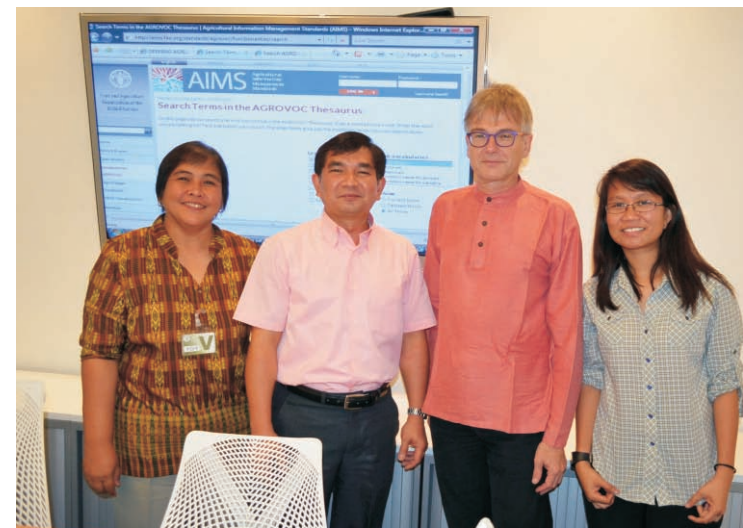
"*Halos abot-kamay na po natin ang kasapatan sa food staples na atin pong pinaglalaban. Nung nagsimula po tayo nung 2010, ang sabi po sa atin panay yabang lang yan. Ngunit ngayon*

po halos abot-kamay na po natin ang kasapatan. Wag po kayong mag-alala, hindi po tayo titigil na sa bigas po lamang – dahil kailangan po, kung may bigas ka, meron ding pang-ulam."

Part of the celebration is the awarding of this year's "Outstanding Rural Women", in collaboration with the Philippine Commission of Women among others. Awarded by Sec. Alcala, this year's winners are Tiny Rosareal-Tamayo, Conchita Silor-Masim, Susan Pasacay-Aceron, Felomina Hernando-Janiva, Alejandrina Lazaro-Correa, and Desiree Butuhan-Duran. Also awarded during the event were five young students who were winners of the 2012 World Food Day on-the-spot poster-making contest.

The celebration is capped by the ceremonial candle lighting, headed by Sec. Alcala, filling the center grounds of Liwasang Aurora with the lighted candles. And before the fireworks, the World Food Day Pledge was recited by all in unison.

"*Ngayon, sa muling pagdiriwang ng World Food Day, kaisa ako sa pagsambit ng mga pangako, tungo sa mas maunlad na Pilipinas.*" ### (Zuellen B. Reynoso)



Posing after the FAO briefing on CIARD with Dr. Johannes Keizer (3rd from left) are (L-R) Ms. Julia A. Lapitan, Mr. Patrick Raymund A. Lesaca and Ms. Rita T. dela Cruz.

delegation from BAR met with Ms. Xiangjun Yao, director of the Office of Knowledge Exchange, Research and Extension (OEK), who gave a briefing on the function of their office in view of FAO's program on knowledge management. The OEK provides leadership towards an integrated approach to the generation, management, sharing, communication and transfer of knowledge and information related to food, agriculture and towards the sustainable use of the earth's natural resources in order to respond to the knowledge, technology and capacity development needs of member countries and the fostering of research, innovation, extension and learning. The office is branched into four, including: Knowledge and Capacity for Development, Knowledge Management and Library Services, Publishing Policy and Support, and Research and Extension.

After a brief, introductory meeting with the director of OEK, the group was oriented on the various relevant topics on information and knowledge management (IKM) for agricultural development. Among those that provided the briefing was Mr. Michael Riggs, IKM officer of the Knowledge and Capacity for Development, discussing FAO's initiatives on "e-Agriculture and Information on Communication Technology for Development or ICT4D". According to Mr. Riggs, e-Agriculture is a global Community of Practice (CoP) where people from all over the world exchange information, ideas, and resources related to the use of information and communication technologies (ICT) for sustainable

agriculture and rural development. Currently it has over 9,000 members from 160 countries and territories composing of individual stakeholders such as information and communication specialists, researchers, farmers, students, policy makers,

business people, development practitioners, and others.

Another topic was given by Dr. Stephen Rudgard, chief of the Knowledge and Capacity for Development, lecturing on "Coherence in Information for Agricultural Research for Development (CIARD)". CIARD is a portal offering an interlinked registry of existing information services in agriculture. Dr. Johannes Keizer, team leader of the Knowledge Standards and Services gave the group a briefing on knowledge standards and guidelines and information management.

Providing a briefing on e-learning and introductions on the two modules on knowledge sharing and communications were Mmes. Fabiola Franco and Denise Melvin. The last presentations came from Ms. Sally Berman and Dr. Susana Siar on the topics, Capacity Development and Fisheries IKM, respectively.

To learn effectively, one must learn on a practical level, finding out who the best people in your creative fields are, and learn how they found success. It could be a means of learning how they failed, and where they've left opening for improvement.

In KM, where it involves strategies and practices, knowing what the "successful one does" is not enough. Organization that is keen on adopting effective strategies and practices must also learn how to identify, create, represent, distribute, and adopt these learned insights and experiences, hence, the purpose of the benchmarking visit. ### (Rita T. dela Cruz and Patrick Raymund A. Lesaca)

Strengthening...from page 7

Pangilinan and DA Assistant Secretary Salvador Salacup also dropped by and were introduced to some varieties of Adlai, a crop that is explored for its potentials as an alternative food staple.

In connection with this year's theme, BAR organized and facilitated three seminars which aimed to disseminate useful and relevant information that will help in further building up the animal sector of the country. The seminar topics were on: 1) sakwa as alternative feeds for pigs, 2) oregano and its healthy products for animals, and 3) vermicompost and earthworm biomass for organic tilapia culture. Dr. Virgilio Villancio of the University of the Philippines Los Baños, Dr. Estela Taño of the DA-Quezon Agricultural Experiment Station, and Dr. Rafael Guerrero of Aquatic Biosystems served as the resource speakers for the seminars. ### (Anne Camille B. Brion)

IDG-funded...from page 11

wastes.

As per the proponent, the UPLB team has started collecting and segregating wastes and is currently planning to expand outside the immediate surrounding areas of the campus.

From their initial collections, the team has been able to conduct a dry run for the processing of landscape organic waste materials into compost using effective microorganism. However, they have not yet evaluated their compost for its physical and chemical properties for use in crop production.

Also gracing the event were Dr. Calixto M. Protacio, director of the Crop Science Cluster (CSC) of the College of Agriculture of UPLB and Dr. Cecilio Arboleda, executive director of the UPLB Foundation Inc., who both gave equally significant messages.

Present also during the inauguration were Dr. Sanchez's co-project proponents, Ms. Norma Medina and Mr. Jose Ira Borromeo, BAR executive assistant for Administration and Legal Affairs.

Formally closing the program was Dr. Jose E. Hernandez, former director of CSC. ### (Mara Shyn M. Valdeabella)

BAR's Applied Com learns from IFAD and FAO Com Group to strengthen its KM Capacity Development

Adhering to the golden rule of creativity, “learning from the best”—communication specialists of the Applied Communications Division (ACD) of the Bureau of Agricultural Research (BAR), led by its OIC head, Ms. Julia Lapitan with Ms. Rita dela Cruz and Mr. Patrick Raymund Lesaca, met with the Communications Group and Knowledge Management (KM) experts from the International Fund for Agricultural Development (IFAD) and the Food and Agriculture Organization (FAO) on 9-10 October 2012 to learn the best KM practices and success stories.

The institutional visits were organized by the Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) as part of the component of the project titled, “Capacity Building Program on Knowledge Management,” aimed to strengthen national capacities of agricultural and fisheries information stakeholders on KM with emphasis on knowledge capture, sharing and reuse, and knowledge products design and development.

Lessons learned from the institutional visits will be essential inputs and basis in designing a capacity development program that is specific and suited for the KM Capacity Development Program for the Philippine agriculture

and fishery R&D sector. The bureau believes in the importance of effectively managing knowledge and the need to responsibly cascade them to users which is necessary in the realization of BAR's corporate goals and R&D agenda.

At IFAD, the group met with Ms. Roxanna Samii, head of the Communications Division, who was keen and helpful in sharing IFAD's best KM practices particularly in extracting success stories from their funded

projects. She underscored the importance of knowledge sharing and reuse and how this practice could benefit a whole wide range of people. She also provided the group a copy of the “Toolkit for IFAD Communications”—a practical guide for effective

communications. The group also met with Mr. Sundeep Vaid, reference librarian, who briefed on the different platforms and information technology vehicles that IFAD is using in managing, sharing, and reusing knowledge in their database. For a better grasp of the various platforms, Mr. Vaid provided a demonstration of how to use the platforms and how BAR could also produce its own through open source. One productive result of the meeting was to link up the Philippine Agricultural Information Services Network (PhilAgriNet) database with IFAD.

IFAD is an international financial institution and a specialized agency of the United Nations (UN) dedicated to eradicating rural poverty in developing countries, including the Philippines. It supports more than 200 on-going programs and projects around the world. Since 1978, IFAD has committed a total of US\$168.8 million in financing 13 projects related to agricultural development in the Philippines.

Meanwhile, at FAO the



At the FAO Headquarters: (L-R) Dr. Stephen Rudgard, Ms. Rita dela Cruz, Director Xiangjun Yao, Ms. Julia A. Lapitan, Mr. Michael Riggs and Mr. Patrick Raymund A. Lesaca PHOTO: FAO



BAR team meets with Mr. Sundeep Vaid (2nd from left) and Ms. Roxanna Samii (rightmost) at IFAD PHOTO: PLESACA

Farm technologies featured in NOMIARC agri expo; Sec. Alcala distributes farm inputs to farmers



Around 3,000 farmers and participants from all over Region 10 gathered at the Northern Mindanao Integrated Agricultural Research Center (NOMIARC) in Dalwangan, Malaybalay City for the 19th NOMIARC Farmers' Field Day and Technology Forum. Featured in the event were more than 70 products, technologies, and services including techno demonstrations on rice, corn, adlai, vegetables, legumes, rootcrops, sweet sorghum, coffee, white potato, integrated farming systems, livestock, and value-adding technologies, among others.

Gracing the activity was Agriculture Secretary Proceso J. Alcala who delivered the keynote speech. Joining him were Dr. Teodoro S. Solsoloy, assistant director of the Bureau of Agricultural Research (BAR) and Dr. Ma. Luz Simborio, vice president for Research of the Central Mindanao University (CMU).

Considering the needs of the farmers for agricultural support, Secretary Alcala provided farm animals, implements and planting materials to the participating farmers. Among the farm implements and planting materials distributed to the field day participants included: 2 units of hermetic storage, 4 units collapsible dryer, 10 units knapsack sprayer, 30 units drum seeder, 30 units sickle, 30 units rotary weeder, 50 bags OPV white corn seeds, vegetable seeds, coffee seedlings, handbags with IEC materials, and shirts, among others. Meanwhile, 4 carabaos and 4 cattle were also awarded to livestock farmers.

The agri giveaways were distributed to rice, corn and high value crops farmers and livestock growers in Region 10 which totaled to more than a million worth of material support. This is according to what the Secretary instructed to be allocated from the DA-AgriPinoy Programs for Rice, Corn, High Value Crops Development and Livestock.

Farmers went home laden not only with an upclose experience with recent farming solutions, but also with the “presents” they can use in their respective agricultural endeavors.

Aside from exhibiting potential crop varieties and livestock breeds, nutrient and fertilizer management and integrated farming systems, the center also featured the development of climate change adaptation farming systems,

organic crop production technologies and NOMIARC-produced value-added products/food innovations including chips, polvoron, juice, and wine.

“The field day and NOMIARC's technology dissemination initiatives are clear manifestations of the center's commitment to deliver the benefits of efficient farming solutions to our farmers and agricultural stakeholders,” said NOMIARC Manager Juanita Salvani.

The Farmers' Field Day is a major annual event of NOMIARC which aims to exhibit research results and technology options for agricultural development. This year's theme, “*Forging Strong Public-Private Partnership for Food Security and Environmental Sustainability*”, manifested NOMIARC's active partnership with the private sector with the participation of various seed and fertilizer companies. Among them are: Green World Woo Tekh Phils., Alliance Hybrid Seed Genetics, Inc., Pilipinas Kaneko, Multi World Internationals Phils., Inc., DevGen Seeds and Crop Technologies and Nestle Phils., Inc. ### (Mae Odimyl Abarabar-Morales, DA-NOMIARC)



PHOTOS: NOMIARC

On-going R&D initiatives discussed during DA ManCom Meeting

In a recently concluded Management Committee (ManCom) Meeting of the Department of Agriculture (DA) held on 10-14 October 2012 at Puerto Princesa City, Palawan - Agriculture Secretary Proceso J. Alcala discussed with Bureau of Agricultural Research (BAR) Director Nicomedes P. Eleazar its on-going funded R&D initiatives in DA-RFU IVB particularly projects on cashew and rubber of the Palawan Agricultural Experiment Station (PAES).

Also highlighting the activity was the Coconut Tree Planting activity participated by the members of the ManCom. With the theme, “*Kaunlaran sa Niyogan Kasaganaan ng Bayan*”, the activity aims to develop one hectare Aromatic Coconut Seed Farm integrated in DA Livestock Resource Center for seednut production and showcasing a coconut model farm for KANIB Project.



Dir. Eleazar (left) explains to Sec. Alcala (right) on-going R&D projects and interventions in the Region.



Sec. Alcala leads the coconut tree planting activity.

PHOTOS: AOBLIGADO

mango.

In line with the goal of attaining food staples self-sufficiency, Sec. Alcala encouraged everyone to continue working harder and also start the enhancement of productivity and determine the global competitiveness of commodities. “*Napapanahon ang panukala ng PhilRice na ideklara ang 2013 na National Year of Rice*,” he added. His Excellency Benigno S. Aquino approved the declaration of year 2013 as the National Year of Rice through Proclamation No. 494 dated 18 October 2012. Furthermore, affirms the month of November of every year as the National Awareness Month pursuant to Proclamation No. 524 (s. 2004).

DA ManCom is composed of all Undersecretaries, Assistant Directors, Program Directors, Bureau Directors, Heads of Attached Agencies and Corporations, Regional Executive Directors, Service Directors, and STAG members. Attending for BAR were Director Eleazar; Mr. Joell H. Lales, senior executive assistant and head of the Planning and Project Development Division (PPDD); and Mr. Anthony B. Obligado, head of the Technology Commercialization Division (TCD).
(Ma. Eloisa H. Aquino)



New DA-Bureau of Plant Industry (BPI) Plant Quarantine Service Building PHOTO: AOBLIGADO

Sec. Alcala also led the ceremonial inauguration of the new BPI Quarantine Service Building. The office ensures smooth processing and issuance of phytosanitary permits or certificates for various plants, planting materials and products. Likewise, he issued domestic permits for clients from Palawan, except

Dir. Eleazar visits Palawan Agricultural Experiment Station

In a recent attendance to the Department of Agriculture-Management Committee (DA ManCom) Meeting, BAR Director Nicomedes P. Eleazar, together with Mr. Joell H. Lales, senior executive assistant and head of the Planning and Project Development Division (PPDD) and Mr. Anthony B. Obligado, head of the Technology Commercialization Division (TCD), visited the DA-RFU IVB-Palawan Agricultural Experiment Station (PAES) to monitor its recent research and development initiatives and activities on 9 October 2012 in Sta. Mojica, Puerto Princesa City, Palawan.

The group toured the Agri-based Processing and Techno Center of PAES. BAR, together with the DA-Agribusiness Marketing Assistance Section (AMAS), supported the establishment of processing facilities for cashew-based products in order to accelerate the development of cashew-based industry in Palawan.

The center processes and packages value-added products from cashew that includes nuts, wine, and prunes under the project titled “Technology Commercialization of Cashew-based Products/Agri-based Enterprise Development Project”.

The group from BAR was welcomed by Ms. Marissa R. Luna, manager, MIMAROPA Integrated Agricultural Research Center; Engr. Elmer T. Perry, agricultural center chief of DA-PAES; Mr. Luisito B. Eleazar, asst. superintendent of DA-PAES; and Ms. Librada L. Fuertes, project leader.

DA-PAES also showcases the growing of fish and plants together, known as Aquaponics. It is a combination of aquaculture and hydroponics. Aquaculture is the raising of fish in synthetic tanks while hydroponics is the growing of

plants without a soil medium.

It serves as a close circuit system where outputs or by-products of one production cycle becomes an input of the other integrated subsystem as discussed by Dr. Carlos Fernandez, former DA Undersecretary.



PHOTOS: AOBLIGADO

To date, PAES has an on-going research on “Techno-Demo of Recommended Clones of Rubber and Nursery Establishment Toward Commercialization in Palawan” which aims to commercialize rubber production in Palawan towards creating jobs and enhancing ecological balance and sustainability.

The station planted recommended clones of rubber for performance trial. These include RRIM 600, PB260, USM 1, PB 311, PB 330).
(Ma. Eloisa H. Aquino)

IDG-funded UPLB Landscape Horticulture R&D Facility inaugurated

To serve as the propagation house of the nursery and demonstration area for students and other researchers in conducting basic and applied research studies on landscape horticulture, the Crop Science Cluster (CSC) of the College of Agriculture of the University of the Philippines Los Baños (UPLB) inaugurated the “Landscape Horticulture Research and Propagation Facility,” at the Ornamental Crops Nursery, on October 2012. The facility was funded through the Institutional Development Grant (IDG) Program of the Bureau of Agricultural Research (BAR).

Welcoming the guests and visitors to the event was Dr. Fernando C. Sanchez, Jr., UPLB Vice Chancellor for Planning and Development, who is also the project leader. In his message, he expressed his deep gratitude to BAR for supporting them in their quest of providing better facilities for the students and researchers alike. In his words, “We are the first in the Philippines to have these equipment. We are very grateful; it was only BAR who gave fund for this building.”

In response, BAR Director Nicomedes P. Eleazar, expressed his high regard to all those who have been part of the accomplishments and success of the project. He also thanked the team for its usual support to the activities of the bureau such as the annually conducted “National Technology Forum and Product Exhibition” and other joint exhibits.

He also emphasized on this facility as part of the bureau's response to DA Secretary Proceso J. Alcala's pronouncement to expedite the rehabilitation and improvement of agricultural R&D facilities.

Another highlight of the inauguration was the presentation and demonstration of the equipment purchased under the National Technology Commercialization Program (NTCP) - funded project, “Technology Utilization of Landscape Organic Waste Materials for Crop Production.”

The wood chipper or tree chipper is a gasoline-powered machine used for reducing wood, such as the tree limbs or trunks, to chips. As demonstrated by the team of Dr. Sanchez during the inauguration, the equipment can reduce even large branches into small chips while loading straight to the truck. The leaf vacuum/ debris collector, on the other hand, can collect massive leaf



The R&D facility will cater to the needs of various stakeholders especially in the conduct of research studies regarding landscape horticulture.

PHOTOS: JBORRAMEO



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