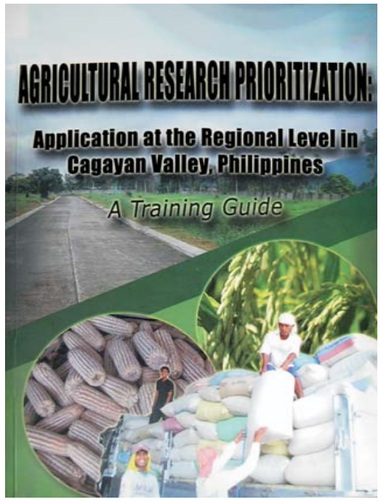
Training guide on agri research prioritization now available

A reference book for agricultural research managers titled, *"Agricultural Research Prioritization, Application at the Regional Level in Cagayan Valley, Philippines, A Training Guide"* was launched during the 22nd National Research Symposium (NRS) awarding ceremony on 8 October 2010 at the Fernando Lopez Hall, BSWM, Visayas Ave., Diliman, Quezon City.

The book was produced by the Institute of Strategic Planning and Policy Studies, College of Public Affairs (ISPPS-CPAf), University of the Philippines Los Baños (UPLB) through the funding support from BAR. Dr. Agnes C. Rola and Ms. Elvira E. Dumayas serve as the technical editors of the training guide while other contributors in the book include researchers and experts in the field of agricultural research from both the academe and the Department of Agriculture (DA).

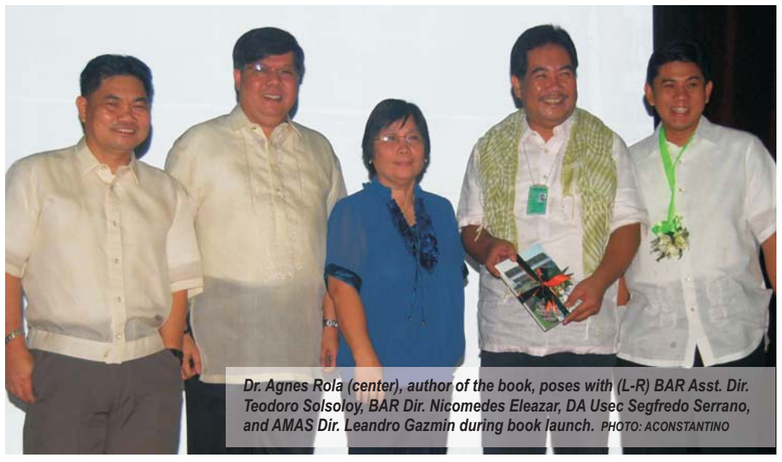
The book attempts to integrate multidisciplinary data sets and tools to come up with biophysical and socio-economic characterization of various farm production environments. The geographic information system (GIS) was a methodology used to generate maps on soil, rainfall, elevation, land use, yields, and area planted to major crops, among others. Economic analysis was likewise used to prioritize research investments.

The book is mainly aimed for use of the agricultural research managers in the different Regional Integrated Agricultural Research Centers (RIARCs) attached to the DA nationwide. The authors promote prioritization processes as valuable inputs to research leaders' decisions for investment allocation in agricultural research.



The methodology described in this guide was developed from two previous projects supported by different agencies on the application of GIS and institutionalizing agricultural research prioritization in the Philippines. ### ***(Miko jazmine J. Mojica)***

For more information about the book, you may contact Dr. Agnes C. Rola through her email: agnesrola08@yahoo.com



Dr. Agnes Rola (center), author of the book, poses with (L-R) BAR Asst. Dir. Teodoro Solsoloy, BAR Dir. Nicomedes Eleazar, DA Usec Segfredo Serrano, and AMAS Dir. Leandro Gazmin during book launch. PHOTO: ACONSTANTINO

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Secretary Alcala expresses high hopes for the agriculture sector

Agriculture Secretary Proceso J. Alcala expressed high hopes for the agriculture and fisheries sectors in his keynote speech during the opening program of the 2010 Agrilink/Foodlink/Aqualink on 7 October 2010 at the World Trade Center in Pasay City, Manila.

Believing that the agriculture sector will greatly contribute to the economic development of the country, Sec. Alcala said that it is a priority of the Aquino administration particularly its thrusts toward food security and global competitiveness.

He lauded the organizers of Agrilink, the biggest agribusiness exhibit in the country, for making the Department of Agriculture a partner in the endeavor and emphasized the importance of the various participating exhibitors and their valued contributions in developing the sector.

Specific on his program on food security, Sec. Alcala said that he's aiming to make the Philippines self-sufficient in rice in the next three years. Although many critics are unconvinced that he would not be able to deliver this seemingly "shooting the moon" goal, the Secretary is hopeful that with appropriate strategies and effective programs, this will be realized.

Agriculture Secretary Proceso J. Alcala delivers his message with a smile during the opening of the 2010 Agrilink/Foodlink/Aqualink held at the World Trade Center in Pasay. PHOTO: RBERNARDO

One of the important thrust of the DA that Sec. Alcala stressed in his message was the need to intensify technology transfer to benefit more people at the grassroot level, including farmers and fisherfolk. "A lot of them are left behind because they are not equipped with the latest technologies on effectively and appropriately increase their production. Hence, what we want is to enhance the capabilities of our agricultural technicians and finally, our farmers through trainings," the agriculture chief said.

He also mentioned other assistance that must be extended to the farmers and fisherfolk on the end of making them competitive including assistance to market linkage and credit facility for farmer cooperatives. "Not only in production should we focus our attention, we also need to ensure an effective market linkage for their produce, hence we, at DA, need to provide seeds to market assistance to them." ### ***(Rita T. dela Cruz)***

Bangladesh gov't officials visit BAR

Six officials from the Planning Commission, Ministry of Planning, People's Republic of Bangladesh, visited the Bureau of Agricultural Research (BAR) on 12 October 2010 to learn about the recent developments in Philippine agriculture R&D and the climate change program for agriculture and fisheries.

The visitors from the Bangladeshi government are Mr. Patit Paban Debnath, Ministry of Planning; Murtuga Zulkar Nani Noman, Planning Commission; Anwarul Alam, Planning Commission; Kamsun Nahas, Planning Commission; Ma. Zobili Ullah, Planning Commission; and Ma. Abdul Malek, Chief, Agriculture Division, Planning Commission.

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What's inside...

Serrano underscores importance of a proactive R&D in 22nd NRS

PHOTO: MMOJICA

DA Usec Segfredo R. Serrano

In his keynote speech during the recently concluded 22nd National Research Symposium (NRS) organized by the Bureau of Agricultural Research (BAR), Segfredo R. Serrano, DA undersecretary for Policy, Planning, Research and Regulation, appealed to the scientific community to take action in conquering hunger and addressing food security to be a truly great nation.

"No country that rose to be a great nation did not conquer hunger or addressed issues on food security. If we could not do something about this, we could just be meeting every year but have virtually the same challenges. The scientific community could do a lot if we put our heads together," he said.

Serrano underscored several intertwining issues on climate change, population growth, and food insufficiency and encouraged the scientists and researchers in the country to craft relevant and doable proposals on these important matters.

"We in the Department of Agriculture also seek tangible results from R&D but we know that there has got to be a predictable budget for this. Fortunately, the budget for R&D for 2011 has increased but we also expect you to give us the nudge every now and then for us to champion a predictable budget for R&D," he added.

He expressed dismay over supply-side remedies that intended to meet the current demand immediately. According to him, such remedies have failed in the past and will fail in the future.

"In addressing the population growth in the last century, we have already breached the lands of the country. Today we have scarcer land and water resources. Increasing production is not enough. We have to improve our R&D, improve our biotechnology efforts, and develop rice varieties with high nutrient uptake," he stated.

Moreover, he advocated for demand-side remedies in addressing the country's quest for food sufficiency. His solution was simple: eat less rice and more vegetables.

"People who eat more vegetables eat less rice. This is something we could do as a nation. We may be swimming in dollars but there will come a time when we cannot buy rice if we want to. The challenge of imports not being reliable anymore is very real. They are also facing the impact of climate change and it means they will have to prioritize their own food supply," he explained.

Doing something about these issues, he said, is never a matter of choice but an imperative. The scientific community, according to him, should squeeze its creative juices to help us graduate from food insufficiency.

"We must craft a solution for our country. This has to be done. Don't think this is a curse. This is something we have to face and I am optimistic about this. Take this as a challenge and not as a put-down. In the war for national survival, it's not stock of intelligent cells in our brain but what is devoted for this cause," he concluded. ### ***(Miko Jazmine J. Mojica)***

BARChronicle
BUREAU OF AGRICULTURAL RESEARCH

BAR CHRONICLE is published monthly by the Applied Communication Division of the Department of Agriculture - Bureau of Agricultural Research, RDMIC Building, Visayas Avenue, cor. Elliptical Road, Diliman, Quezon City 1104 Philippines.

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

Managing Editor/Layout:	Rita T. dela Cruz
Consulting Editor:	Victoriano B. Guiam
Writers:	Rita T. dela Cruz, Patrick R. A. Lesaca Angelito A. Paguio, Jr., and Miko Jazmine J. Mojica
Reproduction/Printing:	Ricardo G. Bernardo and Anthony A. Constantino
Circulation:	Victoria G. Ramos
ACD Head:	Victoriano B. Guiam
Adviser:	Nicomedes P. Eleazar, PhD, CESO IV

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For subscription and inquiries please contact us: Tel. Nos: +63 (2) 928-8505, 928-8624, 920-0234 local numbers 3011, 3026, 3027 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*

a decade. Some of them were given to farmers who wished to venture in the same business, leaving him a total of 30 hogs as of press time.

Hoping for a 'wild' future

The wild boar farmer expressed his enthusiasm for cooperation with the Bureau of Agricultural Research in his objectives of making his small farm a demo farm for *baboy ramo* production, a multiplier farm for breeder stocks and a focal farm for its commercialization. "I'm aspiring for Natividad, Pangasinan to be known for large-scale *baboy ramo* production," he further disclosed.

In return, BAR Assistant Director Teodoro Solsoloy extended the agency's willingness to support, urging the farmer to pass first a project proposal.

Although his practices is not a convincing organic farming as he claimed, the exotically luscious meat and rewarding returns generated from *baboy ramo* production makes it a promising venture and an alternative for commercial hog raising especially for small-scale livestock farmers. ###

Bangladesh...*from page 1*

Government officials looks at the product displays at the R&D Technology Commercialization Center during their visit at BAR. PHOTO: MMOJICA

The Asian Institute of Developmental Studies, Inc. (AIDSI) based in Los Baños, Laguna, organized the study visit of the Bangladeshis who are in the country for their official study tour program on agricultural development and management in the Philippines on 10-19 October 2010.

BAR Asst. Director Teodoro S. Solsoloy and Mr. Victoriano Guiam, chief, International Relations Unit, led the BAR group who welcomed the visitors. BAR's Program Development Chief Carmencita Kagaoan presented the climate change program of the bureau after the group gained information about agriculture and fisheries R&D programs in the country. Ms. Evelyn Juanillo of the Technology Commercialization Unit and Ms. Salve Ritual, chief, Research Coordination Division, were also present in the meeting.

The Bangladeshi visitors were interested in knowing how the Philippines plans, funds, and implements its agriculture and fisheries programs. They likewise shared some information about how things work back home.

After the meeting, the officials from Bangladesh visited the Technology Commercialization Center at the BAR Lobby. Ms. Juanillo showed the different agriculture and fisheries products developed by the beneficiaries of BAR's National Technology Commercialization Program (NTCP). Mr. Arizabal likewise gave a brief background on the uses of sweet sorghum as feed, food, and fuel source. ### ***(Miko Jazmine J. Mojica)***

Do-It-Yourself...*from page 13*

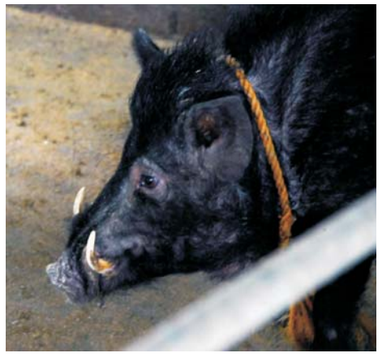
of recyclable containers to serve as pots where a variety of vegetables could grow. Hydroponics, a technology that enables crop production without soil, is also incorporated as well as the making of trellises and making composts. These simple methods are easy to learn and do not need sophisticated tools to perform.

For this project, beneficiaries of the training on edible landscaping include public and private school teachers who have started to establish their school's edible garden with the involvement of its students. At the end of the project, it is expected that a manual on the good agricultural practices (GAP) would be produced as a useful information material for dissemination to the public. ###

For more information, contact:
Bryan B. Apacionado
Crop Science Cluster, College of Agriculture, University of the Philippines Los Baños (UPLB), College, Laguna
Tel no. (049) 536-2227 or
email:*bryanapacionado@yahoo.com*

BABOY-RAMO

A good source of food and income



Story by:
ANGELITO A. PAGUIO, JR.
Photos by:
NICANOR B. DEL ROSARIO III

Barrel-like body balanced on top of four long slender legs. Black hair arranged in bristles. Tusks curling out of its mouth, kept sharp and nice. Growl. Just hearing its grumble shattering the silence, one would instantly feel the cold air pressing into his body knowing that this creature is in full alert, ready to defend itself as it senses danger.

Wild as they are, how would one think that these boars can be a good source of food and bucks?

Getting the 'wild' idea

Producing safer, leaner and more nutritious pork is the first thing that entered the mind of Mr. Rufino M. Legayo of Natividad, Pangasinan, which lured him to start his *baboy ramo* farming in 1996. Mang Boy, to his family and folks, went to America in 1988 for a vacation. The term "organic vegetables" grew on him as it is gaining popularity in US at the time. While organic farming and organic vegetables were hitting the market, he noticed that something is lacking. He thought of how these mere organic vegetables could satisfy the taste buds of those meat (particularly pork) lovers who were also health-conscious. And that is how the idea of producing "organic pork" popped up in his mind.

Starting wild begets wild surprises

Few years after the conception of the idea, Mang Boy started the business by capturing a female *baboy ramo* from the Pangasinan wild. The wild sow was so difficult to handle so it was crossed with a black native boar for easier domestication.

"Their progenies were still aggressive and could easily jump their way out of the waist-high fence, but rather more manageable in closed fences than the parent *baboy ramo,"* explained the wild boar farmer.

Resembling the features of a wild boar except that they were a bit tamer, the raised progenies were lot smaller than commercial swine breeds. Marketability of these *baboy ramo* was often judged based on the standards of the swineherd and the preference of the buyers. However, they were usually raised for more than a year, sold mostly to Chinese customers for ₱ 250/ Kg dressed meat, a value higher than those of commercial pork in the market.

"A live hog only weighing 20 Kg can be sold up to ₱ 6, 000," Mang Boy said. "It is popularly used for *lechon de leche* during fiestas and the meat as main ingredient in special recipes among restaurants in the metro."

Its expensiveness is said to reflect the boar's leaner, tastier, and healthier meat.

Though the wild boar meat commands a higher price in the market, it does not mean that it also requires higher cost of production. In fact, according to Mang Boy, these wild creatures are high profit generators even if kept in a less ideal condition.

"During the dry season, the herd of pigs is set free to roam around the farm area and look for their own food," he said. "Among their favorites are the roots of cogon."

Only in the late afternoon that their diet is supplemented with a ration of samak leaves from the backyard mixed with rice bran and corn grits bought in the market in 1:1:1 proportion for only 6 kilos of the ration for the 30-head herd per day. They are also less susceptible to diseases compared to commercial swine breeds.

Having a short farrowing interval and an average of six to ten piglets per litter, Mang Boy was able to market countless *baboy ramos* for over

Mr. Rufino Legayo (left) of Natividad, Pangasinan discusses with BAR Asst. Dir. Teodoro Solsoloy how he produces, safer, leaner, and more nutritious pork from baboy-ramo.

BAR awards 15 AFMA R&D Best Papers, 3 Best Posters

PHOTO: ACONSTANTINO

The Bureau of Agricultural Research (BAR) concluded its 22nd National Research Symposium (NRS) awarding 15 AFMA R&D Best Paper and 3 R&D Best Poster on 8 October 2010 during the awarding ceremony at the Fernando Lopez Hall, BSWM, Visayas Ave., Diliman, Quezon City. Department of Agriculture (DA) Undersecretary Segfredo R. Serrano served as guest of honor. He was joined in by DA-Agribusiness and Marketing Assistance Services (AMAS) Director Leandro H. Gazmin, BAR Director Nicomedes P. Eleazar, and Asst. Dir. Teodoro S. Solsoloy.

R&D papers competed based on the eight categories: *basic research*, *applied research* (technology/information generated-agriculture), *applied research* (technology/information generated-fisheries), *applied research* (technology adaptation/verification-agriculture), *applied research* (technology adaptation/verification-fisheries), *socio-economics*, *development research* (agriculture), and *development research* (fisheries).

Winners of the AFMA Best R&D Paper

Basic Research Category

1st "MMSU hBE20: A Potential Village Level Enterprise for a Greener Philippines" by Shirley C. Agrupis of the Mariano Marcos State University

2nd "Population Composition and Genetics of Glass Eels in the Philippines" by Apolinario V. Yambot of the Central Luzon State University

3rd "Size-Structure and Gonado Morphometric Characterization of the Janitor Fish (*Pterygoplichthys gill*), 1858 from Marikina River, Philippines" by Joycelyn C. Jumawan of the Caraga State University

Applied Research TG/IG - Agriculture Category

1st "Screening of Alternative Approaches to Chemical Fungicide to Control Crown Rot-Causing Fungal Pathogens of Banana" by Dionisio G. Alvindia of the Philippine Center for Postharvest Development and Mechanization.

2nd "Improved Marang Postharvest Technologies" by Emma K. Sales of the University of Southern Mindanao

3rd "Etiology, Distribution and Management of Crown and Root Rot of Mango Trees at Bearing Age in Guimaras" by Maria T. Ecang of DA RFU VI-WESVIARC

Applied Research TA/TV - Agriculture Category

1st "Adaptation of Arrowroot (*Maranta arundinacea*) Processing Technologies in Typhoon Prone Marginal Areas in Bicol" by Arnulfo P. Malinis of the Bicol University

2nd "Mitigating the Effects of Climate Change through Rice Adaptation in Flood and Drought- Prone Areas in Bicol" by Corazon A. Orbon of DA RFU-V

3rd "Evaluation of Different Strains of Coffee *Arabica* in the Highlands" by Norma B. Pedroche of the BPI-Baguio National Crops Research and Development Center

BAR awards...from page 3

Winners of the AFMA Best R&D Paper

Socio-Economics Research Category

1st "Market Structure, Conduct and Performance of the Inbred Rice Seed Industry in Northwest Luzon" by Bethzaida M. Catudan of the Philippine Rice Research Institute-Batac Station

2nd "Supply Chain Improvement for the Abaca Fiber Industry in Selected Areas in the Philippines: Phase 1 Evaluation Research" by Antonio P. Abamo of the Visayas State University

3rd "Assessment of the State and Magnitude of Paddy Postharvest Losses in Major Rice Production Areas in Region 8" by Leonarda A. Londina of DA RFU VIII-EVIARC

Development - Agriculture Category

1st "Agribusiness Development Project on Lanzones in CALABARZON" by Avelita M. Rosales of DA RFU IVA- STIARC

2nd "Development of Fruit Crops Seed System in Eastern Visayas" by Carlos S. Dela Cruz of DA-RFU VIII-EVIARC

3rd "Nurturing Rural Community by Bringing in Technology to Aroman, Carmen, North Cotabato" by Erlene C. Manohar of the Philippine Coconut Authority

The grand winner for each category is conferred the *Best AFMA R&D Paper Award* receiving a plaque and cash prize of Php 50,000. The first and second runners-up took home Php 30,000 and Php 20,000 and certificates, respectively. All qualifying papers (with score 80% and above) received Php 10,000 cash prize and certificate each.

AFMA Best R & D Poster Award

1st "Assessment of the State and Magnitude of Paddy Postharvest Losses in Major Rice Production Areas in Region 8" by Leonarda A. Londina, Glicerio N. Pernito, Elvira C. Torres, Rufino B. Ayaso III, Amelita R. Salvador, Domingo Miranda of the DA RFU VIII – EVIARC and Philippine Center for Postharvest Development and Mechanization

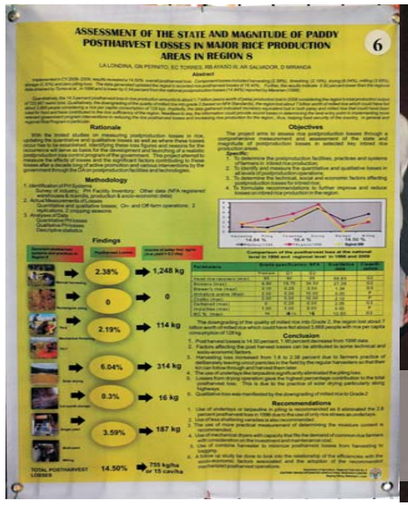
2nd "Agribusiness Development Project on Lanzones in CALABARZON" by Avelita M. Rosales, Virgilia D. Arellano, Elizabeth R. Gregorio, Thelma M. Lambio, Merly K. Tuazon, Digna P. Narvacan, Cristina D. Goma of the DA RFU IV-A STIARC and OPAG-Laguna

3rd "Development of Package of Technology (POT) for Improved Production of Confectionery Peanut Varieties in Region 2" by Rose Mary G. Aquino, Orlando J. Lorenzana, Vanessa Joy V. Fortin, Norma A. Nerona, Lorenzo M. Caranguian of DA-RFU II-CVIARC/CVLMROS

The "Best AFMA R&D Poster" received Php 10,000 while the first and second runners-up won Php 8,000 and Php 5,000 cash prizes, respectively.

For this year, the 22nd NRS Steering Committee received 70 paper entries from which 29 qualified and made it to the pre-final stage.

NRS is annually conducted by BAR to promote R&D excellence and give due recognition to the accomplishments of agriculture and fisheries researchers for their notable achievements in the field. This year's NRS carried the theme, "Empowering Farmers and Fisherfolk in a Changing Environment: Improving Agriculture and Fisheries through R &D". ### ***(Patrick R.A. Lesaca)***



Dr. Leonarda Londina (left) of DA-RFU 8 receives the trophy and cash for winning the AFMA R&D Best Poster during the 22nd NRS awarding ceremony. PHOTO: ACONSTANTINO

DO-IT-YOURSELF FOOD GARDEN

Story by:
MIKO JAZMINE J. MOJICA
Photos by:
RITA T. DELA CRUZ

Here's a simple way to help take the pressure off your pocket, your environment, and your overall well-being: grow your own food. Well, that may not be a new idea for some of us anymore. For the longest time now, we've been told about the benefits of planting our own garden and growing our own fruit and vegetables. But have you given serious thought about edible landscaping?

A popular concept

Edible landscaping, as it turns out, is also not a novel concept. In the 1990s, Dr. Leonido Naranja of the University of the Philippines Los Baños (UPLB) began to introduce backyard food production while incorporating the basic principles of landscaping, hence the term edible landscape. But even agriculture-oriented countries in the west has been actively promoting and practicing edible landscaping or food gardening both as a means to a healthy lifestyle and ready access to fresh produce since the 1980s.

Why put importance to edible landscaping now if the concept has been already widely available a few decades back?

Spreading the benefits

Finding it a worthwhile endeavor to infuse the practice of edible landscaping to both urban and rural settings, the Bureau of Agricultural Research (BAR) supported its promotion through technology demonstration and transfer.

The one-year project was conceptualized by Dr. Naranja under the Crop Science Cluster of UPLB's College of Agriculture (CA) with the main aim of providing a creative and practical solution to limited food production and decreasing available land for agriculture.

The project officially commenced this year as the demo gardens has been established at the AgriPark, an extension facility of the CA-UPLB for showcasing technologies on agriculture and at the office grounds of BAR. The AgriPark likewise serves as the venue for trainings to disseminate the technologies on edible landscaping.

Cheap and easy

Since it can be done in any backyard garden, it doesn't entail a lot of resources to start your own edible landscape. A poor family or community in the rural area could choose to begin with a handful of crops and therefore lower installation costs while those with larger available space could include fruit trees and vining plants.

The edible landscape garden being promoted for this project includes themed selections such as the *pinakbet* garden (tomato, eggplant, ampalaya, etc.), salad crop garden (lettuce, pechay, radish, etc.), and tree vegetables (such as *malunggay*).

It likewise promotes the use

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Drive to save RP's most expensive fish pushed

(Above photo) Ludong, also known as the 'President's fish,' is a freshwater mullet endemic to Cagayan River and its tributaries, extending from the river systems in Ilocos Sur and Abra. The DA-BFAR is vigorously implementing 'Oplan Sagip Ludong'--in partnership with local governments, fishers' groups and NGOs. PHOTO: DA-BFAR 2

(Left photo) Agriculture Secretary Proceso J. Alcala (left) looks at the samples of 'ludong' (Cestreus plicatilis) as shown by Dr. Jovita Ayson, regional director of the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) in Cagayan Valley. PHOTO: JLUCAS/AFIS

Various government agencies are set to initiate action to save Ludong (*Cestreus plicatilis*), a rapidly dwindling species of mullet, following orders issued by Agriculture Secretary Proceso Alcala during his recent visit here.

In a report to Sec.Alcala, Dr. Jovita Ayson, regional director of the DA's Bureau of Fisheries and Aquatic Resources (BFAR) said the DA-BFAR will implement *Oplan Sagip Ludong* (OSL) a three pronged approach anchored on research, conservation and protection, and intensified information and education campaign, as measures to stem the disappearance of the rare fish species.

"We shall conduct research on breeding in captivity and population genetics, as soon as we can have live samples of ludong in time with its spawning run this October," Dir. Ayson said.

The agency has also submitted proposal for the amendment of Fisheries Administrative Order 31, a 1952 law banning the catching and selling of ludong. "We have stipulated a penalty of P80,000 compared to 200 pesos in the old FAO," Ayson said.

Ayson said that they will also make representation with the provincial governments to support OSL, mainly through the enactment of ordinance calling for their respective municipalities to support and enforce a closed season banning the catching of ludong in their areas.

Ludong is a rare and indigenous fish that thrives in the headwaters of the Cagayan river, and Bantay – Santa of the Abra river system in the provinces of Ilocos Sur and Abra. It is catadromous, which means it thrives in freshwater but migrates to marine or seawater to spawn.

Its suspected habitats in Cagayan Valley are in the Upper Pinakaanan River in the towns of Jones, San Agustin and San Mariano in the province of Isabela, Addalem River in Aglipay, Quirino and Dasimpit rapids also in Jones. The fish migrates yearly towards the mouth of the Cagayan River in Aparri town to spawn.

Known as the Philippines' most expensive food fish, its price is increasing annually and has reached P4,000.00 to P5,000.00 per kilo last year. ### ***(DA-Press Release)***

"Oplan Sagip Ludong," is a three-pronged approach of DA-BFAR which is anchored on research, conservation and protection, and intensified information and education campaign, as measures to stem the disappearance of the rare fish species.

BAR features 4 NTCP-supported technologies in 2010 Agrilink

Dr. Heraldo Layaoen (left) discusses ethanol production from sweet sorghum to Agriculture Secretary Proceso J. Alcala. Beside Sec. Alcala is BAR Dir. Nicomedes P. Eleazar. PHOTO: RBERNARDO

ICRISAT Dir. Gen William D. Dar (2nd from left) drinks sweet sorghum juice during his visit at BAR's booth. PHOTO: NDELROSARIO

Visitors sample from the freshly squeezed sweet sorghum juice inside the BAR booth. PHOTO: RDELACRUZ

The Bureau of Agricultural Research (BAR) joins the 2010 Agrilink/Foodlink/Aqualink, the biggest agribusiness exhibit in the country, participating in its exhibits and seminar on 7-9 October 2010 at the World Trade Center (WTC).

As part of its exhibit, BAR highlights four technologies funded and supported under one of its banner programs, the National Technology Commercialization Program (NTCP). These are: Asha peanut, sweet sorghum, Queen pineapple and organic agriculture. These technologies were chosen specifically for their potential benefits in the agribusiness sector particularly, to enhance and strengthen the market potentials of these "non-mainstream products" which were generated from R&D.

Asha peanut (*Arachis hypogaea*), now a certified peanut variety, was introduced in the Philippines in 2005 by the International Crops Research Institute for Semi-Arid Tropic (ICRISAT), an international agricultural research center based in India, and was initially field-tested and evaluated to determine and compare its adaptability and agronomic performance with the commercially grown peanut varieties in Region 2. This big-seeded peanut variety is known to produce nuts much larger than those traditionally grown in the country. Given its size and high-yielding qualities, Asha has shown great potential for increasing the harvest and incomes of local peanut farmers in the country. It is being widely cultivated in Isabela (Region 2), Sorsogon (Region 5), and recently in Quezon Province (Region IVA) through projects funded by BAR.

Another crop that was recently introduced by ICRISAT to the country is sweet sorghum (*Sorghum bicolour*), which is considered as one of the best food and fuel crops in the tropics. To distinguish it from the grain sorghum which is often used for feeds, the introduced crop from India is sweet and juicy. Its versatility to adapt to drought and wet conditions makes a compelling reason to make sweet sorghum a crop of choice for the future under a regime of climate change, energy, population, and food crises.

Since its introduction, BAR has supported various R&D projects on sweet sorghum first in the Ilocandia region through the Mariano Marcos State University (MMSU) with Dr. Heraldo Layaoen, national team leader of the BAR's sweet sorghum program. Five out of the eight varieties of sweet sorghum bred by ICRISAT and brought into the country for field testing have been found to thrive well under Philippine conditions. These are: NTJ 02, SPV 422, ICSV 93046, CSR 93034, and ICSV 700. They are found to have high content of

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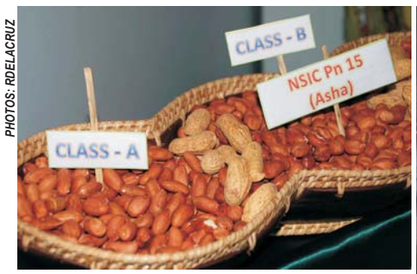
PHOTOS: RDELACRUZ



BAR Dir. Nicomedes P. Eleazar (left) shows a bottle of bioethanol produced from sweet sorghum stalks during the Agrilink. PHOTO: RDELACRUZ

juice and good grain yield when tested at the experimental farms of MMSU. Also, the crop has provided bright prospects not only as feedstock for ethanol production, but also as food and feed grain.

The 'Queen' or Formosa cultivar *(Ananas comusus)* is among the three cultivars of pineapple cultivated in the country together with 'Smooth Cayene' and 'Red Spanish'. It is a small variety whose weight does not exceed two kilograms and has been found to be very adaptable in the soil and climate of Camarines Norte where it is usually intercropped with coconut. As compared to 'Smooth Cayene', the said cultivar is more resistant to disease infection. The 'Queen' pineapple is also renowned for its golden yellow flesh, crisp texture and mild delicate flavor which made it very suitable for fresh consumption. The Labo Progressive Multi-Purpose Cooperative (LPMCP) is among the institutions in Labo, Camarines Norte that promotes livelihood projects on pineapple production and integrated leaves processing. Among its mission is to provide more employment and create more innovative products that will respond to the needs of its members and the international market. The production of handwoven and machine decorticated fibers is among the livelihood programs of the LPMPC for its members, majority of which are farmers. LPMPC and the Department of Agriculture Regional Field Unit 5 (DA RFU 5) are the implementers of the project entitled "Enhancing Competitiveness of the Queen Pineapple in the Bicol Region (Phase II)" coordinated by BAR and funded under the Ginintuang Masaganang Ani-High Value Commercial Crops (GMA-HVCC) program.

Under *Section 20* of the Organic Agriculture Act of 2010 or the Republic Act (RA) 10068, BAR is tasked to lead and coordinate among executive agencies of government to develop, enhance and support and consolidate activities for the formulation and implementation of unified and integrated organic agriculture research and development and extension (RD&E) plans and programs from the national down to the field level. Prior to this task, BAR has lined up various R&D projects on organic agriculture one of which is the "Promotion of Protective Cultivation Technology for High Value Organic Vegetable Production" being implemented by the Bataan Peninsula State University's (BPSU). The project aims to 1) produce off-season high value organic vegetables, 2) utilize animal waste and plant residue as a source of organic fertilizers, and 3) determine the least cost combination of farm inputs while providing sufficient supply of nutritious and safe high value vegetables in the market. The project also focuses on the economic benefits of the technology in addition to the health and environmental concerns. The project is being coordinated by BAR, funded through the Technology Management for Competitive Agriculture and Fisheries Sectors of the DA-National Agricultural and Fishery Council (DA-NAFC) and the Japan Official Development Assistance's (ODA) - 2KR Program Grant Assistance for Underprivileged Farmers.

Aside from the exhibit, BAR will also conduct four seminars on 8 Oct at 1:00 -5:30 pm, Seminar Room C of the World Trade Center. Topics for the BAR seminars include: Enhancing Competitiveness of Pineapple Industry in Bicol Region (Mr. Mariano Espeso of the Labo Progressive Multi-Purpose Cooperative), Sweet Sorghum as Source of Bioethanol (Dr. Rex Demafelis of the University of the Philippines Los Baños), Native Swine Production (Dr. Rene Santiago of the Bureau of Animal and Industry), and Good Agricultural Practices (Dr. Edralina Serrano of UPLB). ### ***(Rita T. dela Cruz)***

PHOTO: RDELACRUZ

DA-Biotech finetunes program for next medium term, 2011-2015

BAR Planning Officer Joell H. Lales presents biotechnology projects funded by BAR through Grants-in-Aid (GIA) during the planning workshop held in Lubao, Pampanga. PHOTO: RDELACRUZ

To review the status of implementation of the Agriculture and Fisheries Biotechnology Program of the Department of Agriculture (DA) based on its 10-year (2000-2009) roadmap vis-à-vis the current administrative and policy climate and national government priorities, a review and planning workshop was held on 12-13 October 2010 in Lubao, Pampanga.

The activity aimed to update the program's current major components in response with the demands of the looming commercialization of locally-developed biotechnologies. Organized by the DA-Biotechnology Program Implementation Unit (Biotech PIU), the planning-workshop also hoped to fine tune the proposed biotechnology program of the DA for the next medium term (2011-2015), as well as to plan and prioritize projects and activities for implementation in 2011.

Being the research arm and funding agency of the DA for agriculture and fisheries RDE, the Bureau of Agricultural Research (BAR) was present during the two-day affair. Mr. Joell H. Lales, head of the Planning Unit of BAR, presented the 11 biotechnology R&D projects funded under its Grants-in-Aid (GIA). Seven of the biotech projects are being implemented by the University of the Philippines Los Baños (UPLB) including biotechnological production of high-value products from wastes of mango industry and from coconut oil industry (phases 1&2), improvement of Philippine Mallard duck through applied animal biotechnology, somatic embryogenesis of banana, and somatic embryo germination and regeneration of banana and abaca. The other three biotech projects are being implemented by the DA-Fiber Industry Development Authority (FIDA), University of Southern Mindanao (USM), and Mindanao State University-Iligan Institute of Technology (MSU-IIT).

Dr. Candida B. Adalla, head of DA-Biotech PIU, presented the implementation status of the DA-Biotech Program including its accomplishment vis-à-vis the 10-year roadmap. Also presented were current initiatives of the sectors that are significant to the implementation of biotechnology programs including the RA 10068 or the "Organic Agriculture Act of 2010" and it implication to biotechnology. Dr. Adalla, based on an earlier pronouncement of Secretary Proceso J. Alcala, mentioned that the Secretary sees no conflict between organic and biotechnology and looks at the latter as an important tool in achieving food security particularly in improving crop varieties, fish strains, and livestock breeds.

Participants of the DA Agriculture and Fisheries Biotechnology Planning Workshop in a photo op.

Part of the two-day activity was the revisiting and assessment of the major accomplishments of the DA-Biotech Program in terms of its support to four major areas: 1) policy formulation, 2) applied biotech research, 3) institutional capability enhancement, and 4) information education communication (IEC). Workshops were facilitated from which experts in the four areas were invited to constitute the technical working committees.

Some of the agreements during the plenary sessions were: 1) identification of priority commodities towards food security and global competitiveness, 2) identification of potential indigenous natural ingredients/products that can be further improved and developed through biotech applications, 3) effective consolidation of resources and facilities for efficiency and effectiveness in implementing and transferring results from biotech R&D, 4) sustainable management of agriculture and fisheries resources under an ecologically-sound managed system in view of addressing the negative effects of climate change, and 5) promotion and advocacy of biotech program as a complementing knowledge base to other scientific and technological endeavors of the national R&D system. ### ***(Rita T. dela Cruz)***

Philippine fisheries in dire need of conservation—BFAR

Sammy A. Malvas, officer-in-charge, Fisheries Policy and Economics Division, BFAR during his presentation on the challenges in Philippine fisheries. PHOTO: MMOJICA

Our fisheries production continuous to enjoy an upward trend in the last three decades, making us the sixth top producing countries in the world and a net exporter of fish and fishery products—but we may not enjoy this for too long, according to the Bureau of Fisheries and Aquatic Resources (BFAR).

"The Philippines is a hotspot for fisheries biodiversity but we need to do everything we could to conserve our resources," Sammy A. Malvas, officer-in-charge, Fisheries Policy and Economics Division, BFAR during his presentation on the challenges in Philippine fisheries on 11 October 2010 at the Fernando Lopez Convention Hall, Bureau of Soils and Water Management (BSWM), Diliman, Quezon City.

Malvas said that the Philippine fisheries is constrained by the issues of climate change, degradation of coastal areas, and the more stringent requirements of major international markets. According to him, the tremendous impact of these challenges could boil down to higher incidence of hunger and poverty unless strategic interventions are carried out successfully.

"The Philippines is part of the Coral Triangle wherein our country is recognized to be the 'center of the center' of marine biodiversity. But the bad news is many of our marine resources are in a degraded state, experiencing a declining trend, or threatened and overstressed," he explained.

Some of these threatened resources include our corals, seaweeds, mangroves, tunas, sharks and rays, small pelagic fishes, and marine turtles.

Recognizing that the Philippines is not lacking in legislation but its effective implementation, Malvas said that BFAR aims to strengthen its regulation, enforcement, and quarantine mechanisms to give a teeth to the efforts of the government especially on conservation.

On improving market linkages, BFAR is pushing for the use and establishment of more postharvest facilities and encourages the private sector to get accreditation on Hazard Analysis Critical Control Point (HACCP) to address the food safety requirements of international markets.

For coastal areas, BFAR is prioritizing mangrove reforestation, establishment of marine protected areas, and eco-friendly aquaculture activity such as aqua-silviculture, which promotes a harmonious co-existence between fishponds and mangroves.

During the open forum, UNESCO Ambassador Preciosa Soliven, who was one of the guests in the scientific conference, said that the government should go back to basics and introduce fish conservation in the school curriculum of young students.

"Let the children understand the importance of fish conservation while they are young. This is how we ensure the awareness of the people. The government should go down to schools, public and private, and collaborate with local government units to make this work," she stated.

Dr. Crispino Saclauso, fisheries expert from the University of the Philippines-Visayas also expressed concern over mariculture parks being built by the government nationwide. He said that the government has to make certain that these were carefully studied so that we could avoid making further damage to our marine ecosystem.

The mariculture park is an infrastructure innovation introduced by BFAR to promote marine fish culture versus capture fisheries which is not sustainable. This is established in coastal municipal waters and uses modern floating cages to be managed and operated by a fisherfolk association. According to BFAR, 50 mariculture parks have already been established while nine will be launched this year.

The scientific conference was organized by the National Fisheries Research and Development Institute (NFRDI) with BFAR as part of the celebration of the Fish Conservation Week. ### ***(Miko Jazmine J. Mojica)***

PHOTO: RDELACRUZ

BAR Logistics Center unveiled

(L-R) BAR Dir. Nicomedes Eleazar, Asst. Dir. Teodoro Solsoloy, CLSU-FI Exec. Dir. Marcelo Roguel, and Rev. Gerald Mendoza lead the ribbon-cutting ceremony during the blessing and inauguration of BAR's Logistics Center. PHOTO: NDELROSARIO

There is a saying, '*From East to West - Home is Best'* and finally, a new 'home' for the Bureau of Agricultural Research (BAR) was formally inaugurated and unveiled through a simple and yet meaningful blessing and ribbon-cutting ceremony on 5 October 2010.

Reverend Father Gerald Mendoza of Our Lady of Hope Parish officiated the blessing rites while Director Nicomedes P. Eleazar, Assistant Director Teodoro S. Solsoloy, and Dr. Marcelo M. Roguel, executive director of the Central Luzon State University-Foundation Incorporated (CLSU-FI) graced and led the ribbon-cutting activity.

Dir. Eleazar in his message thanked CLSU-FI for partnering with BAR on such a collaboration and professed his excitement on the fruits of its usefulness now that the facility has been fully realized. The Bureau chief added that the building serves as a 'stop-over' abode for DA-Regional Field Units (RFUs), researchers, field personnel, and other stakeholders including researchers from state universities and colleges (SUCs) while conducting their researches and other R&D related activities in Manila. "This is a big help for them and is considered another milestone for the bureau," Dir. Eleazar said.

As a testimony of support, Dr. Roguel congratulated the entire management and staff of BAR for launching the facility and articulated that BAR is CLSU-FI's staunch partner in terms of growth and development. He also bid everyone an ambiance of joy and hospitality. Dr. Roguel likewise acknowledged Engineer Emerson Y. Maulit of REYGEM Builders being the official building contractor and likewise extended his appreciation to CLSU's pool of engineer led by Engineer Gil A. Alcantara.

The three-storey building can house close to 70 people comfortably and will be equipped with the necessary logistics to warrant a comfortable stay away from home. BAR's *Logistics Center* is also envisioned to cater to small meetings and groupings, more important, an ambiance of home will always be there. ### ***(Patrick R.A. Lesaca).***

Korean gov't funds RP rural dev't project

The Korean government is granting the Department of Agriculture (DA) $790,000 to fund a rural development project in Isabela which seeks to improve local corn yield by adapting appropriate machineries, technologies and systems of post-production from Korea.

"The project will address the needs for agricultural and rural development in the country through increased agricultural output and enhanced local community capacity," DA Undersecretary Berna Romulo-Puyat said.

Puyat signed for the Philippine government the Records for Discussion on the implementation the project while Dr. Kim Yong-Taek, leader of the Korea Rural Economic Institute (KREI) Implementation Survey Team signed for the counterpart country.

The joint-project, to be implemented by Philippine Center for Postharvest Development and Mechanization (PhilMec), has a total cost of $790,000 and covers the establishment of a corn processing center, two multi-purpose warehouses and a community center.

Specifically, the funding will be used for the establishment of village type corn center that will cover two harvest seasons introducing corn postproduction and bulk handling systems and facilities from Korea; two multi-purpose warehouses which will serve as machinery shed and grain storage; and community center which will be used for trainings and other project-related activities in the area.

A pilot area of three hectare lands will be utilized for the said project where two hectares will be used as production sites and the remaining area for the establishment of the facilities needed. Along with this, farm inputs such as seeds, fertilizers and pesticides will be provided to the farmers for two croppings.

Experts from Korea in different aspects of the project will supervise and provide necessary technical guidance and advice to ensure the success of the project.

Concerned officials and experts on rural development, corn production and post-production are also expected to receive workshops to enhance technical skills and to introduce the project to local residents. ### ***(DA-Press Release)***

NAFC, BAR projects under RP-Japan KR2 featured in NEDA-IFAD Exhibit

PHOTO: NDELROSARIO

The Department of Agriculture-Bureau of Agricultural Research participated in the National Economic Development Authority-Productivity Enhancement Program (NEDA-PEP) and the International Fund for Agricultural Development (IFAD) for a two-day product exhibit and knowledge-learning market initiatives at the SM Mega Malltrade Hall 2 on held on 12-13 October 2010.

PEP is a financing window implemented by NEDA utilizing 20 percent of its peso proceeds of the RP-Japan Grant Assistance for Underprivileged Farmers (GAUF) formerly known as the KR2 (Kennedy Round 2) while the remaining 80 percent is administered by the Department of Agriculture (DA) through the National Agricultural and Fishery Council (NAFC). Meanwhile, IFAD is a specialized agency of the United Nations established in 1977 as an international financial institution.

Product exhibit and knowledge-learning market

In an effort to recognize the assistance provided by the Japanese Government to the Government of the Philippines, NEDA-PEP partnered with IFAD to showcase the successful projects and programs funded under the PEP-GAUF. The event, tagged as "*Shared Resources – Shared Development*" capitalizes the valuable assistance extended by the Government of Japan through GAUF, which helps developing nations achieve food sufficiency and alleviate poverty.

Japanese Ambassador to the Philippines, His Excellency Makoto Katsura, graced the occasion by welcoming the participants to event. In his welcome remarks, Ambassador Katsura said that more than three decades of RP-Japan relationship has indeed created a generation of mutual understanding and friendship which is geared toward the national development of each country. He cited that event is an act of promoting agricultural productivity in the countryside, and thus will result to a more vibrant and dynamic Philippine agriculture.

IFAD Country Programme Manager Sana F.K. Jatta likewise acknowledged the Philippine government particularly NEDA for collaborating with IFAD and for hosting the 2nd Knowledge and Learning Market. The activity aims to promote continuing investment, and upscale and replicate proven technologies and best practices for potential users and investment partners while spreading public awareness and appreciation.

Hon. Jatta said that IFAD is also committed to help reduce poverty in the countryside focusing further on rural development, and the call for knowledge sharing and resources is imperative for economic growth and development.

A portrayal of being "*Makatao, Makakalikasan, Makabayan*" was the opening statement delivered by DA Undersecretary Joel S. Rudinas, who represented Secretary Proceso J. Alcala. In his opening remarks, Undersecretary Rudinas underscored the current thrust of DA through the *AGRI Pinoy* banner programs under the Aquino Administration.

DA's intervention in this undertaking is a welcome and positive development in terms of promoting high impact agriculture and fisheries programs that would ultimately benefit the marginalized farmers and fisherfolk .

Being this year's host, NEDA Deputy Director General Rolando G. Tungpalan likewise thanked and acknowledged everyone particularly DA-NAFC and all agencies of government including the private sector, state universities and colleges, federations, and other stakeholders and development partners involved in making the event a success.

Sixty exhibitors, funded through NEDA, IFAD and DA-NAFC, displayed their respective products and showcased their products through audio-video presentations for easier appreciation.

A positive public turn out also concluded the event through an investment and public forum held during the event whose objective is to serve as venue to influence policy formation in support to the rural communities.

NAFC-BAR collaboration

In 2008, NAFC and BAR signed a Memorandum of Agreement (MOA) establishing the "Technology Management for Competitive Agriculture and Fisheries Sector" (TMCAFS) which aimed to speed up the transfer of mature technologies for farmers' and fishers' use and for increased productivity and income by commercializing these technologies, thus, transforming agriculture and fisheries into market-driven sectors. From this agreement, 16 projects were funded and five of them were featured during the NEDA-IFAD Exhibit. These included:

- ***Promotion of Protective Cultivation Technology for High Value Organic Vegetable Production of the Bataan Peninsula State University in Balanga, Bataan.*** The promotion of this technology ensures the economic benefits of farmers using organic inputs that provides safe vegetable and ready supply organically grown vegetables in the in the market.
- ***Commercialization and Technology Promotion of Mango Wine and Dried Mango by the Ramon Magsaysay Technological University in Zambales.*** The processing of mango by drying and turning the spent syrup into wine lessens post harvest losses thus, more income is derived by mango growers.
- ***Enhancing the Productivity of Abaca Farms in the Bicol Region Through Integrated Farming System: Abakayamanan Program by Dr. Editha Lomerio, FIDA V, Legaspi.*** The program emphasizes the active participation of abaca farmers as partners in adaptation and further improvement of integrated farming system to increase abaca farm productivity.
- ***Development and Promotion of Locally Available Botanical Plants in Region IX.*** This explore the possibility of making juice concentrate from malunggay leaf and other plant extracts and evaluate the nutritional benefits of different juice concentrate and tea preparations using different botanical plants, and
- ***Sweet Sorghum Processing and Marketing Towards Commercialization in Ilocos Norte.*** The proponent, BAPAMIN Farmers' Cooperative is located in Batac, Ilocos Norte. This KR2 project ventures into quality packaging processed sweet sorghum food products that is globally competitive and safe.

To encourage growth and development in current and future projects, the RP-Japan KR2 organizers lauded the achievements of the exhibitors by creating the needed awareness that agricultural and environmental projects with economic impacts are being achieved and are within reach of those who are willing to share knowledge and resources.

(Patrick R.A. Lesaca)


DA Usec Joel Rudinas (4th from left) poses with BAR staff and project leaders from FIDA, RMTU, BPSU, BAPAMIN, and DA-RFU 10 inside the BAR booth during the opening of the NEDA-IFAD KR2 Exhibit at SM Megatrade Hall 2. PHOTO: NDELROSARIO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IFAD Country Programme Manager Sana F.K. Jatta (2nd from right) samples from the mango wine which is one of the featured products inside the BAR booth. PHOTO: RBERNARDO