

2018 Agricultural Newsletter of the Year



Bubalus



Quarterly Newsletter of the Philippine Carabao Center

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'Carabao Family' in Kananga, Leyte showcases goodwill for a noble cause

By Eric Palacpac and Asuka Kunisawa

Hers is a genuine gesture of empathy, goodwill, and desire to help a marginalized community in a foreign land.

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Meters-long 'Kesong Puti' takes center stage in N.E.'s 1st Kesong Puti Festival

By Ma. Cecilia Irang

The ceremonial slicing of a 5.3-meter-long "kesong puti" (white cheese) was the highlight of the first ever Kesong Puti Festival held last May 9 in Talavera, Nueva Ecija (N.E), which coincided with the town's "Farmer's Week" celebration.

The cheese, weighing 245 kg with a width of 1.11 meters and a

thickness of 2.54 cm, is dubbed the biggest dairy product made by the Philippine Carabao Center (PCC) so far. It used 700 liters of fresh carabao's milk as the main ingredient, which was provided by the PCC's processing plant and dairy farmers in Talavera.

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"Human capital" or the knowledge, skills, and experience of an individual or a population viewed in terms of their value or cost to an organization, community, or society is at the core of any development programs or interventions. At the PCC, this is, indeed, a basic tenet.

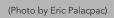
In this issue of Bubalus, we featured some of the stories along the effort and commitment of the agency and its partner-institutions to continuously build and hone the capacity or capability of its workforce, farmer-clients, and other primary stakeholders through various learning events, which focused on: (1) ovarian palpation, aimed at improving the efficiencies of artificial insemination technicians; (2) use of digital weighing scale and radio frequency identification for use in animal recording system; (3) processing of dairy and milk-flavored products; (4) dairy buffalo production via farmer livestock school in Sto. Niño, South Cotabato; (5) strengthening reportage of PCC's regional information officers; (6) consultation on the implementation of national school feeding program; and (7) improved forages and feeding protocols.

Stories on these learning events were complemented by feature stories on capability-enhancing mechanisms, as provided by PCC and its partner agencies such as (1) Department of Trade and Industry by way of shared service facility to a dairy cooperative in Bohol (BODACO); (2) Agricultural Training Institute through establishment of learning sites in Tarlac and Pampanga; and (3) JICA-JOCV by way of engagement of a Japanese volunteer at the PCC's National Impact Zone in Nueva Ecija. All these redound to an empowered chain of actors along the carabao industry value chain. And we, at PCC, are committed to continuously serve as enablers and stewards of knowledge and its applications for the benefits of its own people and its clientele.

Malacjar Dr. Bric P. Palacpac

About the cover

The "Carabao Family", led by Japanese national Chieko Takemi, helps poverty-stricken farmers in Leyte by donating carabaos for farm works and other draft purposes.





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Bubalus is a quarterly publication published by the Philippine Carabao Center that gives its readers new updates and inspiring stories happening in the carabao industry.

Email us your comments, feedbacks, and suggestions at ilivestockbiotech@gmail.com or mail them to: The Editor, Bubalus Newsletter, Knowledge Management Division, Philippine Carabao Center National Headquarters and Gene Pool, Science City of Muñoz, 3120 Nueva Ecija. You may also call us at (044) 456 0731 to 35.

PCC 'Bubalus' wins 'Agricultural Newsletter of the Year' award

By Ma. Cecilia Irang

Bubalus, the official newsletter of the Department of Agriculture-Philippine Carabao Center (DA-PCC) won the 2018 Binhi Award's "Agricultural Newsletter of the Year" given by the Philippine Agricultural Journalists, Inc. (PAJ) on March 28 at Makati Diamond Residences Hotel in Makati City.

The Binhi Award, an annual contest sponsored by San Miguel Corporation, is a prestigious recognition for journalism in agriculture.

"Since 1978 the PAJ has been conducting the Binhi Award to recognize the efforts and outstanding body of works of media persons covering the agriculture, environment and agrarian reform beats, including writers, editors and broadcast journalists for their reportage, agricultural publications, radio and television programs, and information campaign," Noel Reyes, PAJ vice president for external affairs and chairman of the 2018 PAJ-SMC Binhi Awards committee, said.

Bubalus (taken from the generic name of bovines where the water buffaloes belong), managed by the PCC's **Applied Communication Section-**Knowledge Management Division (ACS-KMD), is a quarterly publication of PCC with nationwide circulation.

The said publication, launched by PCC only last year, is written in English and covers industry news and feature stories that are informative, timely, relevant, and engaging which are manifestations of the Carabao



NEWS

Development Program's (CDP) present day realities.

Bubalus is edited by KMD chief Dr. Eric Palacpac, managed by ACS-KMD head Rowena Bumanlag and issue managed by Ma. Cecilia Irang. The ACS-KMD writers Charlene Joanino, Ma. Cecilia Irang, Khrizie Evert Padre, Chrissalyn Marcelo, and Charlene Corpuz are regular contributors.

The PAJ also honored PCC's Editorial Consultant and Philippine Daily Inquirer Correspondent Dr. Anselmo Roque for his lifetime achievement and excellence in agricultural journalism.

According to newly-elected PAJ President Alfred Gabot, the 2018 PAJ-SMC Binhi awards featured three major categories (Agricultural Journalist, Agri Beat Reporter, and Environment Journalist of the Year) and 12 minor categories (Agricultural Magazine, Agricultural Newsletter, Agricultural Section of National Newspaper, Best Climate Change Story, Best Environment Story, Agri Regional Television Program, Agri National Radio Program, Agri Regional Radio Program, Agri Information and Media Campaign, Agri Photo Journalist, Best Agri News

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PCC at USM strengthens skills of AI technicians on OP

By Ludivina Estimo

Twelve successful participants composed of provincial artificial insemination coordinators (PAIC) who are also performing as AI technicians from Davao del Sur, Davao Oriental, Davao del Norte, Compostela Valley, North Cotabato, South Cotabato, Sultan Kudarat, Sarangani and Maguindanao completed the Advance Training on Ovarian Palpation facilitated by the Philippine Carabao Center at University of Southern Mindanao (PCC at USM) from May 1 to 12, 2019.

Mr. Jeffrey Rabanal, AI and training coordinator of PCC at USM said that the training aims at strengthening the knowledge and skills of AI technicians on ovarian palpation to discern effectively estrus period and right timing of AI services in carabaos to increase calf drop efficiency and eventually increase the carabao population.

Moreover, ovarian palpation can determine the status of ovary and differentiate the sizes of follicles and determine any presence of corpus luteum and dominant follicles, which are attributes to subject female carabaos to AI after estrus synchronization (ES).



Some of the participants while familiarizing themselves with female carabao's reproductive organs.

For many years, AI is one of the banner services of the PCC and is rendered nationwide in the villages by trained AI technicians. It is used to produce animals with better productivity for milk and meat while also improving the draft power capability of carabaos.

The resource speakers include Dr. Peregrino Duran, National AI and Bull Loan Coordinator, PCC National Headquarters; Mr. Hernando Venturina, SSRS, PCC at CLSU; Dr. Virgilio Lopez, Farm Superintendent II and Mr. Jeffrey Rabanal, AI and Training Coordinator both from PCC at USM. They discussed topics such as Review on the Anatomy and Physiology of Female Reproductive System; Physiology of Estrous Cycle in Carabaos; Folliculogenesis; In-situ study of Ovarian Structures, Invivo Familiarization of the Ovarian Structures (Rectal palpation in parallel with Transrectal Ultrasonography); Selection of Animals for Hormonal injection; Principles of Estrus Synchronization and Induction of Ovulation in Carabaos; Best Practices in AI to Increase Efficiency Rate; Corpus Luteum Development and Function; Hormonal Interplay in

relation to Female Reproduction; Ovum Pick-Up (OPU) Technology; and Familiarization of Ovarian Structures thru Rectal Palpation.

Actual field practice on pregnancy diagnosis (PD) and AI of carabaos in various barangays in the municipalities of Matalam and Mlang, Cotabato and Esperanza, Sultan Kudarat were done, which was facilitated by AI technicians from PCC at USM. An examination was also conducted to assess the knowledge gained by the participants after the training.

During the closing program, Dir. Benjamin John Basilio, center director of PCC at USM, encouraged and challenged all AI technicians to sharpen their knowledge and skills on ES and AI so that calf drop efficiency can be improved.

In response, Mr. Robert Cardinal, PAIC of Davao del Norte said that the training was so timely for them to enhance their performance of AI services in the field and that every aspect of the training expectations were amply tackled in preparation for the actual application.

PCC centers gear up for new tools in recording data for buffaloes

By Ma. Cecilia Irang and Charlene Joanino

More than 20 participants from the Philippine Carabao Center's (PCC) regional network underwent a "Training on Integrating Digital Animal Weighing Scale and Radio Frequency Identification/Electronic Identification (RFID/EID) Readers for Buffaloes" last April 24-26, 2019 at the PCC National Headquarters and Gene Pool.

The training aimed to enrich the knowledge of participants and provide them hands-on experience on the use of the digital animal weighing scale, RFID/EID readers, and the Management Information System for Buffalo (MISBuff) software.

"These tools don't only lighten the burden of the tedious work of writing down the body weight and other body measurements of buffaloes but also help avoid human errors by eliminating the step of writing on paper, the body weight and measurements of individual animals," Dr. Ester Flores, PCC's Animal Breeding and Genomics Section head, said.

Meanwhile, according to Dr. Annabelle Sarabia, chief of PCC's Research and Development Division, the tools will



Hands-on practice of the participants on the use of digital animal weighing scale and RFID reader.

make recording standardized, precise, and accurate.

The RFID/EID readers scan for the presence of EID tags placed on individual animals that contain unique 16-digit numbers specific for each animal. The EID is enclosed in a ceramic bolus that is placed inside the rumen using a bolus applicator. An advantage of using EID is that it does not fall off and lasts for the lifetime of the animal. The problem of not being able to identify an animal due to the ear tags falling off is avoided.

There are two kinds of readers used by PCC, the RS4320 reader stick, a sturdy tool also called as "Darth Vader", and the Datamars. both of which can transmit data in the computer or laptop through a cable. Once an animal steps on a weighing scale and scanned using the RFID reader, the weight taken is paired with the scanned EID and stored in the memory of the digital weighing scale. This is done on all animals weighed and at the end of the session, the data on all animals weighed with their corresponding EID can be downloaded to a computer and uploaded to the MISBuff system.

Meanwhile, the MISBuff system allows real time recording of all the animal's data per herd, which include weight, body measurement, family tree and performance traits.

"The technology and tools are here so why not make use of them?" Dr. Flores urged.

The PCC GIP is closely working with a programmer to further develop the MISBuff software. An application will be launched soon in consideration of the regions where internet signal is slow or non-existent.

Trainings on other features of the tools will be conducted in due course and will be cascaded down to the PCC-assisted farmers in the future. Meanwhile, additional digital weighing scales were expected to arrive soon.

Before the tools were released in the centers last year, the PCC National Headquarters and Gene Pool was already using the said tools.

Also present during the training were PCC Deputy Executive Director Dr. Caro Salces and some of the PCC National Headquarters and Gene Pool staff.



Mina Abella, Carabao Enterprise Development Section head, supervises the participants on their hands-on training on processing of carabao's milk.

Training, demo showcase select local carabao milk-based products

By Charlene Joanino

In celebration of the first Filipino Food Month, the Philippine Carabao Center (PCC) held a hands-on training on processing of carabao's milk particularly the creation of white cheese (kesong puti) and milk candy (pastillas de leche) last April 26 at the PCC National Headquarters head, underscored in her message. and Gene Pool (NHGP) in the Science City of Muñoz, Nueva Ecija.

The theme of the activity is "Pagkaing Pilipino mula sa Gatas ng Kalabaw". It was participated in by 10 farmers, processors and aspiring entrepreneurs from San Jose City, Science City of Muñoz, and Rosario, Pangasinan.

Apart from processing, the participants also learned about milk quality testing, maintenance of milk quality and the dairy supply chain, which covers production, processing, and delivery to consumer.

"It is important to know and maintain the quality of milk because if it is bad, the product also becomes bad. We have to ensure that the milk reaches the consumer in good condition," Mina Abella, Carabao Enterprise Development Section

She also urged the participants to expand their horizons and think of expanding their livelihood towards a progressive enterprise. And that they shouldn't be afraid to take risks as entrepreneurs.

Two of the regulatory agencies on milk are the National Dairy Authority (NDA) and Food Safety Regulatory Agency (FSRA). The NDA regulates raw milk while the FSRA is concerned with pasteurized liquid milk products.

Meanwhile, as part of PCC's participation in the Filipino Food Month celebration, it earlier

facilitated a cooking demo on the processing of "kakanin" (bibingkang gatas and espasol de leche) using carabao's milk as an ingredient. The demo was conducted last April 12 at the PCC NHGP.

About 30 attended from the areas covered by the National Impact Zone (NIZ), PCC at Don Mariano Marcos Memorial State University, PCC at Cagayan State University and PCC at Mariano Marcos State University. The demo was done by a member of Catalanacan Multi-Purpose Cooperative, which is one of the progressive cooperatives in Nueva Ecija.

According to Ma. Theresa Sawit, Senior Science Research Specialist, the initiative was a combined effort of PCC Operations-Carabao Based Enterprise Team, PCC National Impact Zone Coordinating unit and PCC Carabao Enterprise Development Section.

Select Sto. Niño farmers gain knowledge, hands-on experience from FLS-DBP

By Charlene Joanino



The farmer-graduates of FLS-DBP in Sto. Niño, South Cotabato.

"What makes the Farmer Livestock School on Dairy Buffalo Production (FLS-DBP) stand out from other trainings is that it doesn't force participants to adopt a certain technology but it offers technology options that farmers can use based on their needs and situation."

This was underscored by Dr. Eric Palacpac, chief of the Philippine Carabao Center (PCC) Knowledge Management Division (PCC-KMD),in his message during the graduation of 27 farmers who finished their stint as students of FLS-DBP last May 8 at the town hall of Sto. Niño in South Cotabato.

For more than 30 weeks, the farmergraduates were equipped not only with know-hows but they also experienced application of their learnings. Some of the topics in the FLS-DBP courses focused on dairy carabao raising, feeding and health management, milk and meat processing, and waste management.

"The PCC at University of Southern Mindanao (PCC@USM) is committed to engage in different means of

obtaining carabaos that can be loaned out to qualified farmers," PCC@USM Director Benjamin John Basilio shared.

He also enthusiastically stated that the provincial government is working towards the allocation of fund for a carabao buy-back scheme in the province.

Meanwhile, Dr. Palacpac noted that the farmers will have a sure market since there is now a huge demand in milk as per RA 11037 or the "Masustansiyang Pagkain para sa Batang Pilipino Act". Under the law, milk supplementation was included as a component of the national school feeding program.

PCC@USM partnered with the LGU- Sto. Niño in the conduct of the FLS-DBP. Also in support are the South Cotabato Provincial Agricultural Training Institute, Provincial Veterinarian Office, Region XII- Regional Agriculture and Fisheries Information Section and the Provincial Department of Trade and Industry.

The FLS-DBP is part of the PCC's Communication for Development (ComDev) Campaign in Visayas and Mindanao or "Karbawan". It is the fourth of its kind in the campaign's roster of interventions that aims to strengthen the Carabao Development Program (CDP) in the said islands.

Based on the results of Karbawan's **Initial Participatory Communication** Appraisal and the Strategic Planning conducted by the PCC-KMD, five target sites where FLS-DBP is included as one of the interventions were identified.

As of May, 116 farmers from four target sites including Sto. Niño, South Cotabato successfully completed the learning modality. In Don Carlos, Bukidnon, 20 farmers graduated last April 11. The PCC at Central Mindanao University partnered with LGU-Don Carlos in the conduct of the modality.

A total of 44 members of Polanco Carabao Breeders and Raisers Association finished FLS-DBP in

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Meters-long 'Kesong Puti' takes... From page 1

Its dimension was relatively bigger than the kesong puti that the PCC had prepared for the annual Gatas ng Kalabaw Festival in the previous years, which usually measured 1.8m x 1.12m x 4cm (LxWxH).

After the ceremonial slicing, the kesong puti was eventually served with pandesal as breakfast fare for the participants.

The launching of the first Kesong Puti Festival was made possible through the initiative of Mayor Nerivi Martinez of the municipality of Talavera with the help of PCC. It was a prelude to setting a record in the "Guinness World Records" for the title "Biggest Kesong Puti in the Philippines".

PCC Executive Director Dr. Arnel Del Barrio said in his message that he considered the launching and creation of biggest kesong puti as a symbol of partnership.

"For me, we all contributed, especially our dairy farmers, to the processing and creation of that white cheese. It is the biggest kesong puti not only in Talavera but also in the whole province of Nueva Ecija. And I assume, this is also the biggest we had made so far in the country," Dr. Del Barrio said.

He encouraged everyone to help uplift the local dairy industry by nurturing and strengthening the partnership of agencies, farmers, and other dairy value chain players.

Dr. Del Barrio also cited in his message the importance of ricedairy integration model wherein rice farmers may integrate carabao dairying as a complementary enterprise. He said that carabao's manure can be turned into vermicompost or organic fertilizer that can be used to enhance the fertility of the rice land.

On the other hand, he added, the rice straws after harvest can be collected and used as good carabao feedstuff.

Also part of the celebration were ecumenical service, trade fair, and cooking contest using kesong puti as the main ingredient.

Meanwhile, Shrimp Kare-Kare with Kesong Puti, Suso with blended Kesong Puti, and Fried Lumpiang Kalabasa with Kesong Puti and Mushroom Dip won first, second, and third places, respectively, in the cooking contest participated in by residents of Talavera.

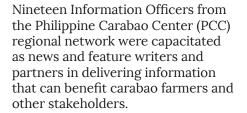
Apart from Dr. Del Barrio, other guests during the event were Department of Trade and Industry Provincial Director Brigida Pili, Provincial Agriculturist Serafin Santos, DAR Provincial Agrarian Reform Officer I Jocelyn Ramones, and N.E. Agricultural Program Coordinating Officer Dr. Evelyn Fernando.

Select staff members of PCC and DTI, LGU officials, dairy farmers, and businessmen also attended the event.

The Kesong Puti Festival was also featured live in Unang Hirit, a morning newscast by GMA Network.

PCC trains regional IOs

By Evelyn Deligero



Rowena Bumanlag, Knowledge Management Division-Applied Communication Section (KMD-ACS) Head, said the number of KMD personnel from the national headquarters who are doing information dissemination jobs is very lean and can only do so much.

"There are many good stories happening on the ground or in our station in the provinces but we could not document them because of constraints in personnel and the accessibility of the sites from the PCC National Headquarters and Gene Pool (NHGP) where the writers are located. Our regional reportage is weak and we want to strengthen it," she said.

Thus, the two-day training workshop for PCC Regional Information Officers (RIOs): "Strengthening Reportage of Regional CDP Highlights" held on March 28-29, 2019 at the PCC NHGP in Science City of Muñoz, Nueva Ecija, was conducted to address this concern.

Four communication experts from



Participants, facilitators, and resource persons of the two-day training workshop for PCC Regional Information Officers (RIOs): "Strengthening Reportage of Regional CDP Highlights" held on March 28-29 at the PCC National Headquarters and Gene Pool.

different institutions served as resource speakers. These include Prof. Ben Domingo Jr., chair of the CHED Technical Committee for Journalism, who served as the topics synthesizer and facilitated the output critiquing; Dr. Maria Inez Angela Ponce de Leon, an Assistant Professor from Ateneo de Manila University, who talked on "Telling the Stories of Science: It's More than Just Giving Facts"; Ms. Rowena Paraan, head of Bayan Mo, Ipatrol Mo, who discussed "Effective Multi-Platform and Social Media Engagement for Information Dissemination"; and Mr. Jayson Berto, a multimedia production specialist of DA-PhilRice, who gave a lecture and workshop on the principles of agriculture photography and videography.

Bumanlag said that after the training the KMD will be requesting the PCC top management to issue a Special Order to all its regional centers to officially designate their respective Information Officers.

"It is high time that the PCC regional centers will have their respective Information Officers who will focus on information dissemination," Bumanlag added.

Alongside Bumanlag, other facilitators of the workshop include Dr. Eric Palacpac, KMD chief and Ma. Cecilia Irang, information officer; with inputs from Dr. Anselmo Roque, editorial consultant.

The participants of the training include Mark Edcille Canda from LAMAC Multipurpose Cooperative, Christine Helen Adriano from PCC at Central Luzon State University, Aileen Bulusan from PCC at Cagayan State University, Kimberly Turaja from PCC at Don Mariano Marcos Memorial State University, Marijoan Nefulda from PCC at Mariano Marcos State University, Joela Malijan from PCC at University of the Philippines-Los Baños, Victor Geroche from PCC at La Carlota Stock Farm, Jocer Dam Dolfo from PCC at West Visayas State University, Emy Goritte Gorra from PCC at Visayas State University, Leinefe Aton from PCC at Ubay Stock Farm, Ludivina Estimo from PCC at University of Southern Mindanao, Jeson Candole from PCC at Central Mindanao University, and Dorie Bastatas from PCC at Mindanao Livestock Production Complex.

There were also participants from the PCCNHGP, which include Khrizie Evert Padre, Chrissalyn Marcelo, Charlene Corpuz, Charlene Joanino, and Jeffrey Laurence Antolin. Participants from the Department of Agriculture Regional Offices include Evelyn Deligero from Davao region and Justin Aquino from Region 12.

PCC awards dairy buffaloes to ATI Central Luzon accredited learning sites

By Charlene Corpuz

The Philippine Carabao Center (PCC) awarded eight dairy buffaloes, all of which are considered matured and milking animals, to two accredited learning sites of Agricultural Training Institute-Central Luzon (ATI-CL) in Sta. Ignacia, Tarlac and Sta. Ana, Pampanga last April 10. This initiative aims to support local farmers and further boost the country's milk production.

The PCC and ATI-CL, through a Memorandum of Agreement (MOA) signed last year, collaborated for the assistance to the select learning sites, which include Ragsak Family Farm and St. Isidore "The Farmer" Learning Center Incorporated.

According to Veronica Concepcion Esguerra, center director of ATI-CL, this is a great opportunity to capacitate the learning sites and be engaged in buffalo dairy farming to create higher income for the farm owners and cooperators.

She added that this grant of water buffaloes also complements the aim of PCC to increase milk production in the country, as it is mandated to help small farmers to uplift their livelihood through

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PCC 'Bubalus' wins 'Agricultural Newsletter of the Year'... From page 3

Story, and Best Agri Feature Story of the Year).

Meanwhile, Agriculture Secretary Emmanuel Piñol, who was the guest of honor and keynote speaker, underscored in his speech the importance of establishing a solid foundation of agriculture and innovations to withstand climate change. This is in view of the challenges posed by the weather forecast of El Niño and its possible effect in the country's agriculture industry.

He said the government is proposing several recommendations and has taken on interventions in preparation for the El Niño forecast, which include: identification and protection of headwaters in the country; reforestation of

mountains; building of small water impounding and catchment systems; and implementation of the solar power irrigation system and other sustainable irrigation systems.

The DA chief, along with PAJ President Gabot and former Agriculture Secretary Senen C. Bacani, chairman of the Board of Judges, handed over the cash prizes and trophies to the winners.

Other members of the Board of Judges were Bangko Sentral ng Pilipinas Monetary Board Member Bruce Tolentino, veteran journalist and educator Dr. Crispin Maslog; SMC AVP for corporate and media affairs Mary Jane Llanes Oconer; and broadcast journalist and former party-list representative Angelo Palmones.

Select Sto. Niño...

Polanco, Zamboanga del Norte last February while 25 Ipil Carabao Farmers Association members graduated in Ipil, Zamboanga Sibugay. The PCC at Mindanao Livestock Production Center and the LGUs of Polanco and Ipil partnered in the FLS-DBPs.

The last FLS-DBP under Karbawan will be held in Iloilo this June.

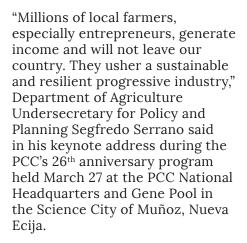
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Other Karbawan interventions are radio plug and press release, school-on-the-air, testimonial videos, jingle, advocacy kit, manual on proper buffalo management of dairy buffaloes, pastillas diplomacy, comics, billboard, and engagement flip chart.

(With information from the stories of Jeson Candole and Dorie Bastatas)

'Agripreneurship' to usher more sustainable, progressive industry—Serrano

By Charlene Joanino



In attendance during the program were the progressive carabao entrepreneurs or carapreneurs that are being assisted by PCC.

PCC's anniversary theme "Empowering 'Carapreneurs': Our Purpose in Focus" places on spotlight the outstanding carapreneurs who have exemplary testimonies on how the dairy buffalo-based business has empowered them to have a sustainable livelihood.

"We call our farmers as carapreneurs because we envision them not only as buffalo raisers but to eventually imbibe the entrepreneurial spirit to maximize their profit from the business," Dr. Arnel del Barrio, PCC executive

director, said.

A book titled "25 Faces of Success in Carapreneurship" and a new farmers' audio-visual presentation were launched during the program to underscore this year's anniversary theme.

"In these productions, we featured the stories of carabao raisers who are now reaping the bountiful benefits of dairying because of their unrelenting persistence despite their struggles," Rowena Bumanlag, anniversary overall chair and head of the Applied Communication Section of the Knowledge Management Division, said.

USec. Serrano lauded the PCC for ushering empowerment in many farming communities with the buffalo as an instrument of development.

The main highlight of the program was the awarding of outstanding farmers in various categories.

Carlo Magno Abellanosa of Don Carlos, Bukidnon was recognized as the "Best Family Module"; Catalanacan Multi-Purpose Cooperative of Science City of Muñoz, Nueva Ecija was adjudged "Best Dairy Buffalo

Mercader of San Jose City, Nueva Ecija as "Modelong Juana sa Pagkakalabawan"; and Rolly Richard Zalameda of Ormoc City, Leyte as "Outstanding Kabataan sa Pagkakalabawan"; Leopoldo Marcos of San Jose City, Nueva Ecija as "Outstanding Dairy Buffalo Farmer for Smallhold Category"; Eliseo Mislang of San Jose City, Nueva Ecija as "Outstanding Dairy Buffalo Farmer for Semi-Commercial Category"; and Andy Poe Garcia of Magalang, Pampanga as "Outstanding Dairy Buffalo Farmer for Commercial Category". Miguel Alfonso of San Jose City, Nueva

Farmer Cooperative"; Erlinda

New categories were added in the roster of recognitions this year. Carlos Cruz of Tanay, Rizal bagged the "Outstanding Independent Dairy Farmer for Semi-Commercial Category" and Ernesto Padolina of General Tinio, Nueva Ecija for the commercial category.

Ecija took home the "Gintong

Senior Dairy Buffalo Cow".

Kalabaw Cup" for owning the "Best

Apart from the anniversary program, several other important events were conducted during the weeklong celebration that run from from March 25 to 29.

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PCC gears up for RA 11037 with 'Value Chain Players Consultation'

By Jeffrey Laurence Antolin

The Philippine Carabao Center (PCC) conducted the "Value Chain Players Consultation on National School Feeding Program Implementation" last March 28, 2019 at the PCC National Headquarters and Gene Pool, pursuant to the implementation of Republic Act (RA) No. 11037 or "Masustansyang Pagkain Para sa Batang Pilipino Act".

The activity was organized through concerted efforts of representatives from PCC's 12 regional centers, the Department of Education (DepEd), Department of Social Welfare and Development (DSWD), Department of Trade and Industry (DTI), National Nutrition Council (NNC), Department of Agrarian Reform (DAR), Asia-Pacific Rural and Agricultural Credit Association (APRACA), Carabao-based Enterprise Development (CBED) coordinators, cooperatives, local government units from Region III and other entities.

With the implementation period nearing, which is on June 2019 onwards, the activity was held to clearly identify the members of the value chain, which are categorized into five groups: milk producers, milk processors, milk distributors,

implementers, and capability building group, in order to discuss issues as to how these groups will work together from producing the milk from the carabao, processing it, and distributing it to the intended beneficiaries in their respective regions.

The main issue addressed was the sufficiency of milk to cover the number of children to be fed, with possible solutions suggested such as formulation of a long-term development plan for animal production to breed potential milk producers, close monitoring of day-to-day milk inventory to prevent spoilage, promotion of 'twice-a-day-milking', and rental of lactating animals from private individuals, with the goal of increasing milk production.

As per estimate by the DepEd and DSWD, a total of 3.7 million children, need to be fed with fresh milk for 120 days in 100-200mL servings, with a total national requirement of approximately 605,000 liters per day.

The challenges ahead

Milk processors needed to ensure

application for the necessary permits, compliance with milk quality and food safety standards, potential upgrading of existing plant facilities, and attendance to relevant training as required by the Food and Drug Administration (FDA).

The milk distributors were required to be registered with the Philippine Government Electronic Procurement System (PhilGEPS).

On the other hand, implementers were tasked with the observation of the height and weight of the children, whether they correspond with their age requirements.

Members of the capability building group were assigned to coordinate with other government agencies for the provision of credit facilities and learning activities for the other groups to be equipped with required technical, financial, and product knowledge.

Dr. Caro Salces, PCC Deputy Executive Director, urged everyone to fully participate and give their best effort in order to minimize, if not eliminate, the problem of malnutrition in the country.

'Agripreneurship'... From page 11

In the R4D Pre In-House Review, 18 on-going and 6 completed papers were evaluated. The papers are in line with the thematic fields of Biosafety, Genetic Improvement-Reproductive and Cryopreservation Techniques, Genetic Improvement-Animal Genomics/Genetic Diversity and Cryopreservation, Product Development, Socio-**Economic Dimensions of CDP** Implementation, and Production Management System. The In-house evaluators were Dr. Claro Mingala, PCC Scientist III and Livestock Biotech Center chief, Dr. Edwin Atabay, PCC Scientist I, and Dr. Eric Palacpac, PCC's Knowledge Management Division chief.

Following this was a Farmer's Field Day-cum-Technology Showcase that was attended by some 300 buffalo farmers from the national and regional impact zones of PCC. An exhibit that showcased the value chain of dairy buffalo production and management was featured in the technology showcase.

Another highlight was the PCC Employees' Night where outstanding employees were recognized: "Outstanding Center Director" (Dr. Daniel Aquino of PCC at Central Luzon State University (PCC@CLSU); "Outstanding Supervisor" (Ludivina Estimo of PCC at University of Southern Mindanao); "Outstanding Development Officer" (Engr. Fiorelia Aguinaldo of PCC@CLSU), and "Outstanding Support Staff" (Ma. Corazon Casal of PCC at University of the Philippines Los Baños). Employees who stayed loyal with PCC were also given

recognition.

Among other activities that were simultaneously held were the "Value Chain Players Consultation on National School Feeding Program Implementation" and the "Training-Workshop for PCC Regional Information Officers (RIOs): Strengthening Reportage of Regional CDP Highlights".

Capping off the weeklong celebration were the Sports Day, "Karwanan", and HR Transformational Seminar.

The anniversary committee said "Karwanan" is a newly introduced PCC anniversary event that aims to create an unstructured and informal venue for fellowship among PCC employees to allow better rapport and camaraderie.

PCC awards... From page 10

derived products from buffaloes or carabaos.

Among the 70 accredited learning sites in Central Luzon, these two received buffaloes after complying with ATI's evaluation requirements such as adequate facility and personnel to accommodate and nurture the buffaloes. Moreover, these farms practice modern agriculture utilizing various technologies.

The St. Isidore "The Farmer"
Learning Center with Mr. Romeo
Cordova as its cooperator is also
an accredited farm tourism spot.
It received three milking water
buffaloes while Ragsak Family Farm,
owned by Dr. Ronaldo Sumaoang,
received five buffaloes.

Dr. Sumaoang expressed his

gratitude to PCC and ATI.
According to him, these buffaloes
give him excitement to venture
in this new enterprise. He wants
to maximize the potentials
of water buffaloes, including
milk production and, later on,
processing of dairy products.

"I already prepared myself in this venture and had planned some strategies to make this dairy buffalo production and management effective in my farm through the assistance of PCC at Central Luzon State University (PCC@CLSU)", he averred.

The PCC@CLSU is the center in charge of necessary technical assistance in their area.

Dr. Daniel Aquino, PCC@CLSU center director discussed a few

basic and pragmatic management practices needed for the buffaloes.

Dr. Aquino explained that the objective of the partnership of PCC and ATI-CL is to model the Carabao-based Enterprise Development (CBED) program empowering dairy farmers, wherein buffaloes are granted for profit purposes and not to simply serve as farm pets.

These learning sites under ATI-CL were the second batch to receive water buffaloes from PCC. The first was awarded in Davao region.

The PCC and ATI-CL are currently working to establish more learning sites, including some of PCC's potential 'carapreneurs' and progressive farms.

BODACO receives Php600k-worth of SSF grant

By Leinefe Aton

The Department of Trade and Industry (DTI) thru its Shared Service Facility (SSF) project awarded three units of Soft Ice Cream Machines to Bohol Dairy Cooperative (BODACO) during the launching activity on March 22 at Philippine Carabao Center at Ubay Stock Farm (PCC at USF), Lomangog, Ubay, Bohol.

BODACO requested the Php600,000-worth of equipment to increase its ice cream production, which is one of its highest selling products.

Beforehand, the co-op has two soft ice cream machines donated by the Korea International Cooperation Agency (KOICA). These are placed in their outlets at the public markets of Ubay and Alicia. According to Shirley Molina, general manager of BODACO, one machine will be added to Alicia outlet while another will replace a malfunctioned unit in Ubay outlet. The placement of the remaining machine, however, is yet to be agreed with the management.

"The challenge now is to increase", said Dr. Glen Doloricos, representative from the Provincial Government of Bohol as he emphasized that for every



BODACO receives three units of soft ice cream machines from the DTI's SSF project.

grant received, there must be improvements to the co-op and especially to its members.

Dr. Gundolino Bajenting, Officer In-Charge of PCC at USF added that the only way to upsurge the milk is to increase the number of farmers milking their carabaos. Furthermore, he committed that PCC will always be supportive of the co-op's undertakings.

"The approval of the co-op's proposal didn't come easy though not also very hard", according to Marisol Balistoy, OIC-Provincial Director of DTI-Bohol. "It has to undergo series of reviews and validations to ensure that guidelines of the SSF project will not be compromised", she added.

The SSF project is a major component of DTI's Micro Small & Medium Enterprise Development (MSMED) program that aims to fill-in the production gaps of the existing enterprise to increase its income. Balistoy explained during her statement of the rationale that what qualified BODACO to avail is that the co-op has demonstrated a complete value chain on carabao dairy enterprise. It has raw milk production, toll processing, and

marketing operations with the identified gaps.

Though the machines were awarded to the group, the ownership of these, however, remains with DTI up to three years, as stipulated in the Memorandum of Agreement. Afterwards, the co-op can own these upon validation that the project has truly increased the income and the employment of the group.

Lita Aranas, one of the co-op's Board of Directors who represented the chairman during the launching activity, expressed her gratitude to God for entrusting DTI to grant their ever-dreamt additional facilities. In her acceptance speech, Aranas stated that the co-op wholeheartedly accepts the blessing and the responsibility on the SSF project and commits to properly manage it and make it fruitful with the help of God.

Also extending their supports to the co-op thru their attendance and messages were: Mr. Benedicto Boyles, representing the Mayor of Ubay, Bohol and Ubay Vice-Mayor Nelso Uy.

The machines were tested at the end of the program while giving free soft ice cream to all attendees.

PCC-HRMS: Empowering human resource toward excellent service delivery

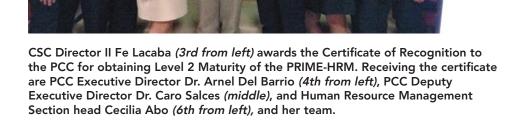
By Jeffrey Laurence Antolin

Effective public service delivery through empowered human resources – this was the driving force behind the Philippine Carabao Center (PCC) for obtaining Maturity Level 2 of the enhanced Program to Institutionalize Meritocracy and Excellence in Human Resource Management (PRIME-HRM) of the Civil Service Commission (CSC).

The PRIME-HRM is the accreditation program of the CSC for government agencies, which ensures that each agency is committed to following the best possible human resource management practices.

According to the PRIME-HRM primer developed by the Philippines-Australia Human Resource and Organisational Development Facility (PAHRODF), the said program was introduced to "elevate public sector human resource management (HRM) to a level of excellence through the assessment, assistance, and awarding processes of HRM systems, practices and competencies using HRM maturity level indicators that are at par with global HRM standards."

PCC has undergone auditing by CSC field office directors Claudia Tan and Fe Lacaba to assess the agency in terms of conformance to Maturity Level 2 core HRM system indicators: recruitment, selection and placement



(RSP), learning and development (L&D), performance management (PM), and rewards and recognition (R&R).

Under the leadership of PCC HRM Section head Cecilia Abo, the audit results indicate that the agency has achieved Level 2 maturity in all four areas, qualifying the PCC for the Bronze Award to be given at a later time.

In the past, the PCC already achieved Level 2 maturity but only in three of the four core HRM systems, excluding L&D.

Through the PRIME-HRM, government agencies are given a certain degree of autonomy, which are classified into four maturity levels.

When the appointing authority of a government agency appoints an individual to a plantilla position, it is usually still subject for review by the CSC. The effectivity date of the appointment is not yet final and executory unless approved by the Commission.

With Level 2 maturity, an appointment made by PCC is considered effective from the date of signing.

The PRIME-HRM describes the four levels that define the human resource practices of the agency, namely:

Transactional HRM, Process-Defined HRM, Integrated HRM, and Strategic HRM.

The first level, Transactional HRM, is characterized by agency compliance to existing CSC policy.

The second level, Process-Defined HRM, means that agency policies are aligned with agency requirements, aside from compliance to CSC policy.

The third level, Integrated HRM, relates the link of one core HRM area to the three others.

The fourth and highest level is Strategic HRM. This level affirms that agency policies are continuously reviewed to cater to changes in agency strategic goals.

The PCC HRMS is currently tightly working with the top management to elevate the accreditation of PCC to Level 3 maturity.

With the goal of optimizing the use of technology in the discharge of human resource functions, the HRMS plans to introduce an improved HRM Information System, which will integrate the four HRM core areas, gradually readying the agency to be subjected to audit for Level 3 maturity in the immediate future.



4DX:

A PCC execution strategy

By Ma. Theresa Sawit

"Planning is important but the devil is in the execution". This saying holds true according to the experts like former PCC Executive Director Dr. Libertado Cruz and the current leaders of PCC. Setting the agency target output is easier than detailing the plans of execution to achieve specific targets that have to be acted upon by the program implementers across the country.

One important mandate of PCC is to propagate carabao as a source of income of farming families towards improved general well-being and better nutrition. As a matter of fact, PCC commits to increase the production of genetically improved calves by 5% each year. To achieve this, PCC is implementing a genetic improvement program (GIP) which uses artificial insemination (AI) and bull loan program as strategies to ensure the production of quality calves.

PCC capacitates and partners with AI technicians and bull handlers to provide income opportunities through the delivery of production services in the communities. Based on the reports, however, the agency had not attained its calf production target except for the year 2018. The



non-attainment of target called for the need to implement an effective strategy that will help capture more calf production report.

When Dr. Caro Salces became the new PCC Deputy Executive Director in 2018, he explained his program and emphasized the importance of using the 4 Disciplines of Execution (4DX). The 4DX was already introduced to the Center Directors of PCC before but was not fully implemented.

Dr. Salces emphasized that 4DX is an effective tool or strategy because it provides focus on what needed to be done by the program implementers. He declared that the use of 4DX should be revisited and should be implemented to help achieve calf production target.

The 4DX explains that four basic disciplines need to be embedded into an organization to create a culture of execution: (1) focus on the wildly important goal (WIG); (2) act on the lead measures; (3) keep a compelling scoreboard; and (4) create a cadence of accountability.

As part of the implementation of 4DX in PCC, the Center Directors and program coordinators last year

decided that the agency's WIG is to produce 20,663 calves by end of December 2018.

According to Dr. Salces, PCC conducts many activities but priority should be given to activities that will directly contribute to the attainment of targets committed by the agency to the Department of Budget and Management (DBM) and the Department of Agriculture (DA). The Regional Centers are required to submit daily calf production report through a messenger group chat created and managed by the Operations Team. Each center assigned its official 4DX reporter who will post the daily calf production report through the said platform. The reports are then transformed into tabular and graphical presentation by the Operations Team for better appreciation of the centers.

The presentation serves as a scoreboard that is being shared through the messenger group chat. The graph is simple and communicates daily how close or far is the agency's actual accomplishment from the target. Dr. Salces also explained that the

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Focusing on 'main course' provides good nutrition beneficial for livelihood sustainability

By Charlene Corpuz

In several occasions that serve a variety of food like appetizer, main dish, and desserts, everyone would choose the best according to their own cravings, preferred tastes, and moods. However, the 'main course', which is usually the most complex and substantial dish on every menu, catches the attention of many.

What has been referred to as "dishes" for human corresponds to feedstuff for livestock, which not only benefit the nutrition of the animals but also allow farmers to earn better income.

Main course and benefits

Spearheaded by Philippine Carabao Center at Central Luzon State University (PCC@CLSU) center director Dr. Daniel Aquino, the technology of producing homegrown grasses and legumes allows dairy farmers to provide the recommended nutrition for growing and lactating dairy buffaloes.

Such technology is a product of a research project titled "Development of Feeding Protocols to Support the Nutritional Requirements of Dairy Buffaloes",





These improved forages and legumes provide good sources of nutrients for buffaloes. They are also safer compared to traditional tethering system, cheaper, and convenient for farmers, as these address feed scarcity during dry season.

which is one of the components emphasized in a collaborative R4D program "Enhancing Milk Production of Water Buffaloes through S&T Interventions" between PCC and Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD). This program underscored animal nutrition as an important aspect.

"These improved forages and

nutrients for buffaloes, which are also safer compared to traditional tethering system, cheaper, and convenient for farmers, as these address feed scarcity during dry season. Another recommended technology focused on the nutrition of buffaloes is the total-mixed ration (TMR) composed of water hyacinth and banana stalks," Charity Castillo, PCC's Science Research Specialist II, explained.

legumes provide good sources of

To page 22



'Carabao Family'... From page 1

Chieko Takemi, 80, a Japanese national, first visited Leyte in 1987 as a journalist who researched on the potential pollution hazard of a local copper refinery. Japan had experienced early on an environmental disaster due to copper mining, and Chieko, a staunch environmentalist, did not want the same thing to happen in the Philippines.

During her visit, she also saw the difficult situation of tenant-farmers in Leyte, i.e., they did not have their own resources to farm e.g., land, planting materials, other inputs, and draft (work) carabaos. As a rule, the landowners deduct the costs related to the use of these resources from the share of the tenants. Thus, the tenant-farmers only earn a meager income.

Forming the carabao family

Chieko wanted to help the impoverished farmers in Leyte, a

personal calling, which she also alluded to as a moral obligation to Filipinos by the Japanese people because of what happened during World War II. Thus, she and a Japanese pastor-friend consulted the locals in Leyte on the possible assistance that they could give.

"I accompanied Chieko and her pastor-friend in asking some residents of Burauen, Leyte what they needed, and they said they wanted carabaos", recalled Cosmiana Lopez, 82, a former pastor of the United Church of Christ in the Philippines (UCCP), who became Chieko's trusted friend in Leyte.

Thereafter, Chieko and colleagues formed a group composed of ten officers together with members of UCCP. As requested by the locals, they planned on donating carabaos, being the traditional ally of Filipino farmers for farm works, for carrying heavy loads, and even for carrying sick persons to the hospital, as road conditions were poor and other means of transport were not available

in those times.

The newly formed group held meetings in the villages to promote the carabao dispersal program and interviewed possible recipients of carabaos. The poorest of the poor were prioritized.

The group eventually registered with the Securities and Exchange Commission in 2003, as an association called "Leyte Carabao Family", which was later renamed as "Leyte Carabao Family Center for Rural Development". Today, the group is simply called "Carabao Family", which has a logo of a farmer and his son riding a carabao. To the group, the carabao symbolizes power, understanding, and caring for the people.

Fundraising and distribution of carabaos

Chieko went back to Japan and invited other Japanese friends to join the Carabao Family by way of donating 200 yen (Php94) a month or 2,400 yen (Php1,100) a year, as a membership fee for each individual. It is said to be equivalent to saving one cup of coffee a month in Japan. Accumulated membership fees were used to purchase carabaos and ploughs for farmer-beneficiaries in Leyte. The only responsibility expected of the beneficiaries was to show that the carabaos were still alive and used for farming each time Chieko visits Leyte, which is once or twice a year.

"We have a simple rule in carabao dispersal, that is, a qualified group of 15-16 farmer-members in a selected barangay receives four head of carabaos, which means, one carabao for every four beneficiaries", Cosmiana said. Ten pure native female carabaos were initially dispersed in Burauen, Ormoc, and Palo. If the donated carabao gives birth, then the recipient would give the calf to another farmer-group ("passing it on" policy). Carabao dispersal of this arrangement, which started in eastern Leyte, soon proliferated all over the province. For the past 30 years, the Carabao Family has already donated over 100 carabaos in various parts of Leyte.

"Upon SEC registration, we attempted to contact the beneficiaries because our plan was to monitor the carabaos, provide further assistance when needed, and find out if the lives of the beneficiaries really improved", Timothy "Tim" Lopez, Cosmiana's son, said. They wanted to prepare a report for the appreciation of carabao donors in Japan but they could not trace and contact anymore some of the recipients. Nonetheless, a few would send photos of themselves and the carabaos, which are good indications.

A haven for carabao family

It was in 2002 when Chieko and

her colleagues bought a 6-ha farm land in Kananga, Leyte, where they built a house, which also serves as a center for the Carabao Family. This is where they gather neighbors and friends during meetings and other events and build relationship with them. One of the outcomes of these gatherings was the planting of 100 mango trees in the area through a sponsorship program, again with the assistance of Chieko's friends in Japan. Tim, serves as farm manager and supervised the establishment and upkeep of the mango plantation.

Typhoon Yolanda

It was in 2013 when super typhoon Yolanda devastated Leyte. As a result, many farmer-beneficiaries of the Carabao Family fled the province. Sadly, some recipients and donated carabaos were among the casualties. The whereabouts of any surviving donated carabaos are unknown following the typhoon and exodus of many beneficiaries. Likewise, the mango plantation was almost wiped out by the typhoon. Only one mango tree survived the calamity and is now bearing fruits. In such trying times, Chieko and her colleagues were not disheartened. Instead, they relied on valued relationships with Japanese and local partners. Together, they always find a new resolve to pursue their vision for the Carabao Family.

Current situation and future plans

As an aftermath of typhoon Yolanda and partly because of farm mechanization and decreasing number of supporters in Japan (many of which have become too old or have already passed away), the number of carabaos being donated by the Carabao Family has now declined. Nonetheless, local partners in Kananga have endeavored to maintain the 6-ha farm land. Meanwhile, Chieko has continued doing publicity campaign in Japan to

raise fund for a planned community center and shelter in Kananga, which she called "Project KAIBIGAN".

According to a Japanese architect who designed the envisaged structure, it will be made of an underground concrete shelter for storage and evacuation and an upper or roof part, which is made of native or traditional materials, where farmers and children gather together to talk and learn from each other, particularly about traditional or organic agriculture.

Chieko is more inclined on growing high value crops like mango, papaya, and pineapple in the area. Meanwhile, she sees the important role of carabaos as work animals during land cultivation and hauling of produce.

Engagement with PCC

Chieko has heard of PCC many years ago when she visited Visayas State University (VSU) in Baybay, Leyte. However, she was not interested that time in carabao crossbreeding or carabao dairying. Instead, she is more into conserving and utilizing the native carabaos as work animals for traditional agriculture and food production. To her, farm mechanization is not sustainable and has brought serious problems in Japan, as big companies have now monopolized its food supply. She does not like similar fate to happen at least in Leyte.

Nonetheless, upon recent meeting with Dr. Ivy Lopez, OIC-Center Director of PCC at VSU, Chieko and her group are now open to possible collaboration with PCC along the area of crossbreeding and, later, enterprise development.

From all indications, the Carabao Family is on track in pursuing yet bigger and nobler purpose in the future. It has subsisted for three decades, thanks to Chieko's vision and network of committed enablers and participants, which she endears as a "family".

Cooperation, use of technologies usher improvement of dairy livelihood in N.E.

By Charlene Joanino

By 2020, Dr. Kunisawa hopes to have at least 80% of the farmers she assisted to be adopting the technologies from PCC and that they are using them to improve further their means of livelihood.







A veterinarian from Osaka, Japan, Dr. Asuka Kunisawa, 34, decided to join the Japan Overseas Cooperation Volunteers (JOCV) in the Philippines to help smallhold dairy farmers.

Using her bicycle, she pedals her way from the PCC National Headquarters and Gene Pool to reach the barangays of Licaong and Catalanacan in Muñoz, Nueva Ecija where she is assigned. She conducts different initiatives that are anchored on PCC's "Dairy Herd Improvement" (DHI) program that aims in bringing some more improvements in dairying in the province, which is designated as the "National Impact Zone" (NIZ).

The DHI addresses the overall provision of social and technical services of PCC to dairy farmers. Some of these are facilitation of trainings on proper animal management, entrustment of carabaos, organization of

cooperatives, and other assistance that can help dairy farmers.

The results of this particular program are set to be replicated among the PCC's regional centers in the country.

On volunteering

Under the agreement between the PCC, Japan International Cooperation Agency (JICA), and Philippine National Volunteer Service Coordinating Agency (PNVSCA), Dr. Kunisawa became a volunteer sent by JICA in the Philippines last year.

For 24 months, she will be one among those working on DHI at the NIZ. She started working at PCC in July 2018 and expects to complete her stint in July 2020.

"What is good about this undertaking is that we can focus on two PCCassisted cooperatives in Licaong and

Catalanacan. It will allow us to see and identify problems in the herd of the farmers. The findings will be shared to other cooperatives in Nueva Ecija," Wilma del Rosario, head of PCC-NIZ coordinating unit said.

At present, 42 farmers are being assisted by Dr. Kunisawa. She helps in tending 200 carabaos.

Dr. Kunisawa has three primary objectives in her activity plan on DHI. First is to determine the technologies utilized by the farmers, second, to ensure that the farmers apply technologies from PCC by educating them, and third is to measure the effect of using PCC technologies.

On the side, Dr. Kunisawa also delves on breeding, centered on shortening the calving interval and on pregnancy detection. To determine the dilemmas of the farmer on these issues, she patiently interviews them. "Based on the initial data she gathered, it was found that the common problem of farmers was the recording of their observation when it comes to breeding," Mario Delizo of PCC-NIZ coordinating team said.

To make the recording better, Dr. Kunisawa decided to share her knowledge in using an improved version of breeding calendar, which is a technology from Japan.

The calendar is a monitoring and recording tool. It shows when the farmer can determine pregnancy of the dairy buffalo and if pregnant, the possible day of giving birth.

"Breeding is one of the hardest things to conduct because apart from the farmers being in different places, we usually rely on the farmer's observations. Hence, the breeding calendar recommended by Dr. Kunisawa can be of good help," Delizo said. Dr. Kunisawa added that with the use of the calendar, the calving interval would be shortened because the farmer is aware of the critical days that need to be considered in breeding.

"If the calving interval was shortened, more calves will be born within the productive life span of a dairy buffalo, which the farmer can benefit from. The milk production will increase and the income of the farmer will also increase," del Rosario said.

Towards a more intensified initiative on DHI

According to Delizo, apart from Dr. Kunisawa, they also work hand-in-hand with different PCC groups that are in-charge of the projects of PCC and Philippine Council for Agriculture, Aquatic and Natural Resources Research

and Development that are being conducted at the NIZ.

The projects are (1) Development of Feeding Protocol and Practices to Support the Nutritional Requirements of Dairy Buffaloes, (2) Development of Reproductive Management Program for Increased Efficiency of AI in Dairy Buffaloes, (3) Development of Health Care Technologies and Practical Farm Practices in Support of Increasing Buffalo Milk Production, and (4) Milk Quality and Safety Assurance from Farm to Milk Processing Plant.

"At present, we assist 50 cooperatives in the NIZ," del Rosario said.

On the other hand, Delizo stated that apart from providing support to the needs of the purebred buffaloes, the PCC-NIZ coordinating unit has started giving assistance to crossbred buffalo owners in the province.

Focusing on 'main course' provides good nutrition beneficial... From page 17

"These homegrown grasses and TMR technology provide multiple benefits to both dairy farmers and buffaloes," she added.

Achieving sustainable livelihood

Better nutrition, higher quality of milk and meat, and a more efficient calf production are the benefits arising from proper feeding management. Thus, focusing on the recommended nutrition for water buffaloes is beneficial for human food production and sustainability of buffalo farmers' livelihood.

To further expound on sustainability, a limited forage area will not be a problem with homegrown grasses. In fact, a hectare of improved grasses is adequate to sustain 10-15 heads of buffaloes year round.

Homegrown grasses and legumes

represent the 'main course' for the dairy buffaloes while the dairy products they produce represent the desserts in a menu, which signify sustainable livelihood among dairy farmers when combined together.

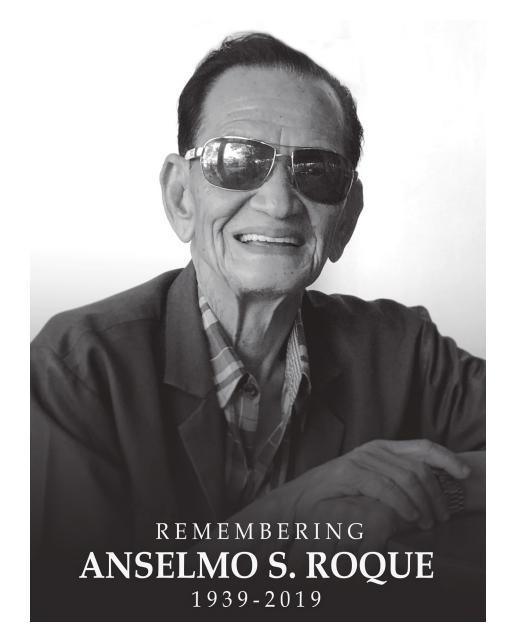
"After all, every PCC's milk product is derived from grasses that pass through a buffalo (not a machine), which we only need to take care of," Dr. Aquino averred.

The said technology was showcased during the "Farmers' Field Day and Technology Expo" as part of PCC's weeklong anniversary celebration last March 25, held at its Pavilion hall. It aimed at promoting dairy buffalo production, management, and corresponding carabao-based enterprises.

Around 400 PCC clients attended the event comprising of assisted farmers, partners, and stakeholders engaged in the dairy and livestock industries. The majority of the participants are farmer co-ops from the PCC's regional centers.

During the technology expo, it is always attractive to taste delicacies and milk products being offered for free, yet most dairy farmers still prefer the technology pertaining to the nutrition of animals - the foundation of good animal health. Thus, adequate attention must be given to the feeding management as it contributes greatly to attain sufficient nutrients necessary for optimum milk production and quality meat.

Driven by its mandate, PCC stewards farmer-clients to have better income and to become 'carapreneurs' through the utilization of carabao's meat and milk. Understanding the concept behind the animal's productivity will pave the way to livelihood sustainability.



Dr. Anselmo Santos Roque, a veteran and multi-awarded development journalist, joined the PCC on September 1, 2009 as an editorial consultant for the publications and knowledge products prepared and produced by the PCC's Knowledge Management Division (previously known as Information and Training Division). At the onset of his work in the agency, two of his accomplishments were the revamping of the PCC Newsletter and the release of the maiden issue of PCC Balita.

In a span of one decade, Dr. Roque notably authored three books

namely: "Appreciating the Carabao", "Businessing the Carabao", and "San Agustin: Rising High on the 'Nuang' (carabao)".

Apart from being a prolific editorial consultant, Dr. Roque was one of the longest-serving provincial correspondents of the Philippine Daily Inquirer (PDI). He covered and wrote compelling stories for PCC publications and submit them as press releases for possible publication. There were a number of stories he wrote about the agency's undertakings, technologies, farmers' success stories that made headlines in PDI and other mainstream media. He wrote not just for the sake of

writing but with a purpose—i.e., to make a change on people's perspectives of the carabao as not a beast of burden but a beast of fortune.

Dr. Roque also worked with local media in promoting PCC's carabao development program and facilitated several knowledge cafés and media fora for the agency. He played a vital role not only in the PCC's publications but also in terms of its media mileage. In fact, he also anchored a local radio program where he fostered programs related to the national carabao development.

Dr. Roque was in the writing profession for 55 years. He reaped more than 30 awards and recognitions for writing. He was a double "Hall of Fame awardee" of the Philippine Agricultural Journalists, Inc. (PAJ) for having won eight times as "Agricultural Journalist of the Year" in Filipino and English. Last March, he received the lifetime achievement award from PAJ.

He won three times in the Palanca Memorial Awards for Literature in Essay and twice in the playwriting contest sponsored by the Cultural Center of the Philippines and the Diwa ng KKK playwriting and production contest.

His final award was the DOST-PCAARRD Ulat SIPAG (print category) in recognition of his outstanding contribution in the field of print media for the promotion of research and development results utilization.

Dr. Roque was an educator. He loved to share his knowledge on journalism by mentoring budding writers. He is an inspiration to many and a great loss to the journalism industry but his wisdom, teachings, and legacy will live on in the lives and hearts of the people he touched and nurtured.

As he always said, they will "carry on". (by Ma. Cecilia Irang)

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implementers tend to perform more when they see and compare their scores.

At the regional level, the implementers were suggested to create their own messenger group chat to get real time report from their AI technicians and assisted bull handlers. Unlike message through text, sending of message through messenger doesn't require much prepaid load as long as the sender has free data or internet connection.

Aside from daily reporting, 4DX implementers of Regional Centers are required to meet at least 30 minutes each week to celebrate the team's success and to discuss their plans for the following week. Sense of accountability among staff or team members can be developed and sustained only through active participation in group discussions or meetings.

PCC has proven that the 4DX implementation is effective because the agency was able to achieve and

even surpass the 2018 calf production target by 7%. The total calf production last year reached 22,303 reported in advance through the messenger group chat and encoded through the official database early January this year.

The positive result of the initial 4DX implementation drives the management to continue the use of the strategy to help reach the target this year. The messenger app is being optimized to facilitate the full implementation of the strategy.



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