

PCC Newsletter

Official Publication of the Philippine Carabao Center of the Department of Agriculture
ISSN 1655-2496 • VOL. 9 NO. 3 • July-September 2010



3

PCC capacitates village-based AI technicians for privatized AI program

PCC Newsletter



Department of Agriculture
PHILIPPINE CARABAO CENTER
ISO 9001:2000

Official Publication of the Philippine Carabao Center
of the Department of Agriculture

Vol. 9 No. 3
July-September 2010

Editorial Staff

- Rowena Galang-Bumanlag Editor-in-Chief
- Joahna G. Goyagoy Managing Editor
- Khrizie Evert M. Marcelo Editorial Assistant
- Rowena G. Bumanlag Writers
Joahna G. Goyagoy
Khrizie Evert M. Marcelo
Anselmo S. Roque
- Rowena G. Bumanlag Layout and Photos
- Annabelle S. Sarabia Technical Editor
- Rubina O. Cresencio Subject Matter Specialists
Paul C. Limson
Felomino V. Mamuad
Eulogio M. Montealto
Grace Marjorie R. Recta
Franklin T. Rellin
- Anselmo S. Roque Editorial Consultant
- Eric P. Palacpac Chief, Knowledge Resource
Management Division
- Libertado C. Cruz
Executive Director/Editorial Adviser

Call for Contributions

The PCC Newsletter welcomes industry-related articles not exceeding 800 words, with photos and corresponding caption.

Success stories of farmers, cooperatives, and other beneficiaries and stakeholders of the Carabao Development Program are preferred.

PCC encourages reproduction of articles from this publication with proper acknowledgment.

Topic suggestions and comments are also welcome.

Please send your articles and comments to email address pccnewsletteric@gmail.com or mail them to

THE EDITOR-IN-CHIEF
PCC Newsletter
Applied Communications Section
Knowledge Resource Management Division
Philippine Carabao Center
National Headquarters and Gene Pool
CLSU, Science City of Muñoz
3119 Nueva Ecija

Table of CONTENTS

3 COVER STORY

PCC capacitates village-based AI technicians for privatized AI program



6 UNAIP ensures harmonized implementation of AI program



8 A life-long commitment to AI service

12 Sons of a gun

-A.I gun, that is



16 'Sukis' of AI are proud CB owners

18 VBAITs in Ilocos Norte forms own coop



20 Bulls for higher reproduction rate

22 'Nuang' Festival: A showcase of outputs of the carabao upgrading program

FEATURES

INDUSTRY NEWS

26 Pushing N.E. toward becoming the Dairy Capital of the Philippines

27 SEA animal experts agree to promote native animals for rural dwellers' benefits

28 San Agustin dairy development gets boost from LGU officials, PCC

28 PCC staff members undergo training in Thailand

29 Llanera town hosts 'Gatas ng Kalabaw' fest

30 LGU in Iloilo takes initial steps toward dairying

30 PCC-USF holds trainings on AI and PD

31 PCC official is oral presenter in the 16th Asian Agricultural Symposium



PCC capacitates village-based AI technicians for privatized AI program

BY ROWENA GALANG-BUMANLAG

An empowered farmers and stakeholders is one end-goal that the Philippine Carabao Center (PCC) truly aspires to accomplish. Realization of this will definitely not happen in a dash but PCC is already gradually and steadily gaining headway in this thrust.

True to its mandate as an institution of people empowerment and nation-building, PCC exerts efforts in drawing itself closer to carabao farmers in remote villages where support and services are most needed. Among other measures it took, the creation of village-based

artificial insemination technicians (VBAITs) is proving to be a very useful and a practicable development intervention.

Artificial insemination (AI) is one of the frontline services of PCC. It is an effective reproductive biotechnique in making possible the propagation of outstanding breeds of buffaloes. It involves the impregnation of a female carabao with frozen-thawed semen collected from superior sires. The processed semen is mechanically injected into the reproductive tract of the recipient female. The goal is to improve the genetic make-up of the native carabaos toward increased production of milk and meat.

Also tagged as “bare-foot technicians”, VBAITs are private individuals trained by PCC to become skilled AI technicians. The main advantage of having VBAITs in the

villages is their constant presence in the community so that animals in estrus can be readily serviced.

Initiated in 2006 as a component of the Expanded AI Program, the logic behind the VBAIT approach is to increase AI diffusion and coverage through privatization so that farmers gradually learn how to invest on animal breeding and not to rely on dole-out services from the government.

The VBAIT approach capacitates willing individuals to work in the villages as an AI technician. This is done through a 21-day training program that includes detecting signs of estrus, proper handling of frozen semen, pregnancy diagnosis and how to effectively perform AI services in the

NEXT PAGE ►►

villages.

While they take an important role in the national genetic improvement program, VBAITs are at the same time empowered by being able to earn income for their families and develop a sense of self-worth.

Initially, the supply of AI materials is provided by the PCC. These include liquid nitrogen (LN2) tanks, AI paraphernalia and frozen semen. But as the privatization scheme is gradually accepted in the community, the government will eventually end its material support to AI technicians.

From 2004 to present, PCC has already

Behind the success of the VBAITs are epochal stories of sacrifice, enduring response to the call of duty and ardent commitment to attain a vision.

Such are the experiences told by the center directors concerned.

In the National Impact Zone

PCC at CLSU, headed by Dr. Felmino Mamuad, is the pioneering center of the PCC which strategically put in place a system of strengthening the AI program.

Since the implementation of the Food and Agriculture Organization (FAO)-funded project "Strengthening of the Philippine Carabao Research

"In implementing the VBAIT approach, the government can save a lot of money from salaries and other allowances of AI technicians. We can now direct our efforts to other activities to help farmers," Dr. Mamuad, PCC deputy executive director and PCC-CLSU center director, said.

**TANGIBLE
A.I. OUTPUTS**

An aggregate total of 34,826 artificial inseminations were performed by the VBAITs trained by PCC.



trained 365 VBAITs in its five centers, namely: PCC at Central Luzon State University (PCC-CLSU), PCC at University of the Philippines-Los Baños (PCC-UPLB), PCC at Cagayan State University (PCC-CSU), PCC at Ubay Stock Farm (PCC-USF) and PCC at Central Mindanao University (PCC-CMU).

An aggregate total output of 34, 826 AIs was registered by these performing VBAITs on the said period, records of the PCC national AI coordinator show.

Through the government's Unified National AI Program (UNAIP) which oversees the consistency in implementing the agenda at the national level, monitoring and incentive systems were put in place to ensure that VBAITs will be performing productively. This system, among other support mechanisms, is executed by the implementing arm of UNAIP which is the Bureau of Animal Industry (BAI) through its Livestock Development Division (LDD).

VBAITs
are empowered
by being able to earn
income for their families
and develop a sense of
self-worth

and Development Center (PCRDC)" in 1983, the center sustained its efforts to improve the wellbeing of carabao owners, particularly in its coverage areas in Region III.

The center recognized the importance of local government unit's (LGU) support and acceptance of the project by the community towards the localization of the program at the village-level.

Consultations about the AI program were done with participating agencies and LGUs which included municipal agricultural office, provincial veterinary office and livestock technicians.

"We presented the AI program during these consultations and determined which areas are already covered by the LGU technicians so that there will be no competition between them and the VBAITs in terms of service coverage. Areas that have already bulls loaned from PCC were also removed from the coverage areas of VBAITs," Dr. Mamuad added.

Consultations were also participated in by community stakeholders prior to the acceptance of participants for the training.

As part of the rigorous selection process, the barangay chief executive recommends qualified individuals in the area to undergo training.

Participants are selected based on

the following criteria: age (between 18 and 40 years), physically healthy, at least high school graduate, a carabao or cattle raiser, a resident of the village, not presently working outside the village, interested and willing to conduct AI, accepts the responsibilities of being a VBAIT and should be duly endorsed by the community or the LGU.

AI equipment and supplies are provided to the graduates after the training. Distribution of supplies such as AI sheath, gloves, LN2 and frozen buffalo semen is done weekly based on the specific need of the AI technician as indicated in his/her performance report.

includes village-based, LGU, private and PCC AI technicians. Currently, PCC-CLSU is assisting 58 VBAITs who cover 181 villages in Nueva Ecija.

He also said that their study indicated that the VBAITs are more productive in many aspects than the LGU technician, such as in the number of animals served and in regularly monitoring the animals.

“If the animals are regularly examined by the VBAITs, they can readily inseminate female carabaos that are in estrus. This redounds to more animals inseminated or higher AI output,” Dr. Mamuad explained.

The VBAITs, he added, had more number of animals inseminated per

On plans toward privatizing VBAITs, Dr. Mamuad said that VBAITs in the NIZ can gradually operate independently after next year as they have been prepared for privatized capacities. “We will still be providing them the technical support and the AI supplies will be given to them on a consignment basis. Until they are organized and self-reliant, we can’t afford ending our support to them,” he said.

About 40 VBAITs in Region III have actually organized themselves into “Central Luzon Livestock Service Cooperative”. Cornelio Agustin, the coop’s president, said that the cooperative was established for the benefit of its



Aside from the material support, PCC-CLSU extends technical support to VBAITs through regular consultation meetings which are seen as appropriate means to exchange new ideas and to address and resolve concerns.

The center also institutionalized systematic recording and monitoring systems to achieve efficiency in the performance of VBAITs. The AI technicians maintain a strictly updated record of the reproductive cycle of all breedable female carabaos in their respective areas of coverage, insemination schedule and expected calving date of each pregnant animal. This record is submitted to PCC-CLSU before AI supplies are released to a technician.

In his paper presented in the previous PCC in-house research and development (R&D) review, Dr. Mamuad said that from 19 batches of trainings, a total of 196 AI technicians were produced by PCC-CLSU from 2003 to 2008. The number

month. He attributed it to the fact that LGU AI technicians are not readily available in the villages because of their official functions.

The study, led by Dr. Mamuad himself, concluded that VBAITs assure carabao owners in the villages that their animals will be immediately served when “in heat” as they are practically available 24 hours a day throughout the year.

Soon, Dr. Mamuad said, VBAITs will also be participating in the dairy module program so that they can also showcase the output of their services.

“The best way to reach out to farmers and demonstrate the benefits of the program is through the VBAITs since they are already trained extension workers,” he said. These VBAITs, he added, actually hand a big help to PCC-CLSU in its ear-tagging activity which aims to establish a database of crossbred carabao population in the NIZ.

members.

“In preparation for the time that they will be operating on their own, I always tell the VBAITs to render only quality service to farmers. I make them realize that they are like doctors who will have more loyal clients if they give quality treatments,” Dr. Mamuad said.

With a better support system in place, he said VBAITs will be more excited to report outstanding performance and will be more enthusiastic to serve farmers better using their skills.

Capacitating VBAITs for privatized initiatives

For 15 years, the PCC at Mariano Marcos State University (PCC-MMSU), through a handful of six AI technicians, conducted AI services for free in Ilocos Norte, Ilocos Sur and Abra. For sure, the dole-out services were welcomed by the farmers and positive results were

CONTINUED ON PAGE 24

Artificial Insemination or AI is one of the most effective reproductive biotechniques that ensures propagation of animals with good genetic merit and allowing the diffusion of superior genetics from one generation to another.

In the Philippines, crossbreeding of animals using the AI technology was introduced in the 1950's. It was only in 2001, however, that the efforts to harmonize all activities of the government pertaining to the use of this technology were pursued. The efforts resulted in the creation of the Unified National Artificial Insemination Program (UNAIP).

"This project was approved at the same time with the Japan government-funded project Water Buffalo and Beef Cattle Improvement Project, spearheaded by the Philippine Carabao Center," Dr. Rubina Cresencio, head of the Livestock Development Division (LDD) of the Bureau of Animal Industry (BAI), said. LDD-BAI is the government's lead implementing arm for the UNAIP.

UNAIP is one of the major components of the livestock development agenda of the Department of Agriculture (DA) which puts in place a mechanism that will ensure a systematic and consistent implementation of the AI program.

Its main objective is to provide better opportunities for livestock farming communities by enhancing productivity and competitiveness through institutionalized AI delivery systems at the village level.

"The idea behind the UNAIP is to capacitate the local government units (LGUs) through the Regional Field Units (RFUs) of the DA. Eventually, the LGUs will be implementing the program on their capacity," Dr. Cresencio said.

Consistency in the application of the



UNAIP ensures harmonized implementation of AI Program

BY ROWENA G. BUMANLAG

AI technology and implementation of the program, she said, are ensured because there is a central unit that facilitates everything.

The partner agencies of the UNAIP include the National Dairy Authority (NDA), PCC, Livestock Development Council (LDC) and the DA-RFUs.

"We have a strong link with the RFUs through their regional AI coordinators down to the identified provincial and municipal AI coordinators to make sure that the government will no longer do extension work since it is already devolved to private individuals such as the village-based AI technicians," Dr. Cresencio said.

The village-based AI technicians (VBAITs) approach is currently a commitment of PCC in enhancing the capacities of interested private individuals through training. They are later on deployed as a technician in the villages in which they get income in rendering AI service.

One component of the UNAIP is

the cash-calf incentive provided to all accredited AI technicians.

"This is an output-driven incentive scheme which is given to technicians who are able to produce calves," Dr. Cresencio said.

One live calf produced by a technician is equivalent to Php100 incentive.

By putting in place a strong support system such as an incentive scheme, the government hopes to accelerate the AI diffusion rate to 30 percent of the total number of breedable cattle and carabaos which is about 243,000 head. Conception rate of these animals at the field level is also projected to increase up to 65 percent.

Dr. Paul Limson, the national coordinator of the UNAIP, said that they were able to record 95.66 percent AI diffusion rate, or 44,016 out of its 46,103 target inseminations, from the services done by the accredited AI technicians based on their target in 2009.

Records of the UNAIP also showed that 13,052 or 82.81 percent genetically



Dr. Rubina Cresencio, Head, Livestock Development Division (LDD)-Bureau of Animal Industry (BAI)

The UNAIP uses systems and processes to ensure consistent operation of the AI program in all agencies concerned

improved animals were produced out of its target of 15,761.

“We also recognize the top AI performer annually during the BAI anniversary,” Dr. Limson said.

Cash prizes of Php10,000 for the top performer, Php6,000 for the second, and Php4,000 for the third prize are given.

Presently, he said, UNAIP covers 70 out of 79 provinces in the country. It has 587 active AI technicians nationwide composed of national-, state university-, LGU- and village-based AI technicians.

Dr. Limson said that another component of the program is the regular conduct of reviews and consultative meetings annually participated in by the AI coordinators and program implementers. These assemblies become the right forum where performance updates, issues and concerns of the technicians are deliberated and resolved.

“These meetings are conducted to operationalize the privatization of the AI program,” Dr. Cresencio added.

Currently, supplies given to the technicians are at a cost-sharing scheme between the DA and the LGU. The DA provides for the training of technicians through the PCC, as well as

the cattle and buffalo semen and the needed information, education and communication materials. The LGU, on the other hand, covers their technicians’ travel allowances, liquid nitrogen (LN2) and tanks, AI gun, AI gloves, AI sheath and semen straws.

The supply of frozen beef cattle semen is sourced from accredited private breeder farms where donor animals have undergone pedigree and performance tests. Semen of dairy cattle is largely imported as facilitated by the NDA. Buffalo semen is from PCC, which is processed in its semen laboratories in Nueva Ecija and Laguna.

Six LN2 mini plants, established through the Japan International Cooperation Agency/Japan Overseas Cooperation Volunteers (JICA/JOCV) in 1999, are generating the needed supply for LN2. These are strategically located in Quezon City, Bukidnon, Pampanga, Cebu and Davao.

The UNAIP is currently on its second phase of implementation, which started in 2007. An additional undertaking in the program is the expansion of its AI service coverage in terms of commodity. It will soon include AI in small ruminants such as goat and sheep.

Just recently, the DA included AI providers for swine in the UNAIP coverage recognizing the significance of this technology in improving the reproductive efficiency in swine and in reducing risk in transmission of diseases.

The program is also working on the establishment of an e-report system that will make consolidation and monitoring of performance reports of the AI technicians easier.

“The system, when finally established, will make use of a simple data entry form. Reports will be sent via a national e-mail address and preliminary analysis will be done at the level of the provinces while the in-depth analysis will be done by BAI,” Dr. Limson explained.

With this system, he added, UNAIP will be implemented at a more organized scheme to benefit more livestock industry stakeholders resulting from maximized cost benefits of the AI technology.



Dr. Paul Limson
National Coordinator, UNAIP

UNAIP covers 70 out of 79 provinces in the country. It has 587 active AI technicians nationwide composed of national-, state university-, LGU- and village-based AI technicians



A life-long commitment to AI service

BY JOAHNA G. GOYAGOY

Being an artificial insemination (AI) technician is tough but members of this group in Cagayan and Isabela proved that they are tougher.

Despite difficult challenges and countless sacrifices, they remain bold and steadfast with their “calling”. They pledged to surmount any adversity that crosses their way.

They play their role as one of the instruments to the sustainability of carabao upgrading program. They go hand in hand in realizing the success of the said program.

First VBAIT in Isabela

Melbourne Juan, 34, of Brgy. Palachan is the first VBAIT in San Agustin, Isabela. In 2006, he underwent a 23-day training given at Digdig, Carranglan in Nueva Ecija given by PCC at Central Luzon State University (PCC-CLSU). He was recommended by Mayor Virgilio Padilla.

That time, AI among the native

carabaos was a top priority of PCC-CSU.

Juan started performing AI services in 2007 as he acquired the needed materials only then. From 2007-2009, he was the only VBAIT in San Agustin. Since he pledged to fulfill his calling, he also joined the AI technicians from the LGUs during their massive AI services in certain barangays.

At times, he felt discouraged as most of his clients refused to pay his services. He had to suffer the pain of paying from his pocket since he rents a motorcycle (Php50-Php100) in going to his client’s place.

Nevertheless, he endured and gained inspiration from his family who never failed to encourage him to stay put and serve.

“Full support ang asawa ko sa pagiging VBAIT ko kaya kahit mahirap ay itinutuloy ko pa rin (My wife gives me full support that is why I continue being a VBAIT even though it is really difficult),” Juan said.

His main source of livelihood is a hectare of rice field and a half hectare of corn. But somehow, he said his being

a VBAIT helps his family gain additional income especially so that his two children are attending school.

He used to inseminate 10 carabaos a month before. But now, his monthly inseminations doubled.

Juan confides that he is able to earn Php3,000- 4,000 for his AI services. Since he started being a VBAIT, he has already inseminated almost 200 carabaos and hundreds of cattle.

His expertise has brought him to the municipalities of Jones in Isabela and in the provinces of Quirino and Aurora. He said in these two towns, the farmers always pay him in full.

Today, however, he struck a deal with his clients that they will pay half of the Php500 service fee upon insemination and the other half when the carabao is confirmed pregnant.

Achieving a 40% success rate in his AI services and demonstrating remarkable dedication to service, Juan was cited as an “Outstanding VBAIT” during the 6th Nuang Festival held in San Agustin on September 27-28, 2010.

Juan extends his gratitude to PCC for providing him complete AI paraphernalia and continuous technical support and empowerment. He said that he will be forever indebted to PCC because of this.

“Kahit mahirap ang trabaho ko, VBAIT ako for life (Though being a VBAIT is tough, I will stay as VBAIT for life),” Juan smilingly said.

Additional VBAITs

In June 2010, two more VBAITs became active again in San Agustin.

Jan Win Coloma, 28, of Brgy. Mapalad, had his AI training given by PCC in 2008. After his training, he inseminated only two carabaos. His clients, though, did not pay so he was discouraged and stopped being a VBAIT for some time.

Back again to pursue his AI services, he felt triumphant. He has inseminated 19 carabaos already, 14 of which are suspected pregnant.

“Nagsubli ak ti pagka-VBAIT ku ta ammu nga dapat nga ituloy ku ta sayang met jay inadal ku nga inted ti PCC (I resumed being a VBAIT because I realized that the knowledge I gained from the training given by PCC will just go to waste had I stopped),” he said.

The same experience is shared by John L. Bangloy, 56.

Bangloy had his AI training at Digdig, Carranglan in 2006. After his training, he also joined the technicians from the LGU in conducting AI services, in which, he inseminated 10 carabaos. But just like the case of Coloma, his clients refused to pay his services. He then decided to stop being a VBAIT. He concentrated on tending his rice farm to support his growing family.

On June 14, 2010, he renewed his “calling” by being an active VBAIT again. During the time of the interview, he said that he has inseminated 20 carabaos already, of which, five are pregnant.

“I don’t regret being an active VBAIT again because I felt the enthusiasm of my clients toward the AI service,” he said in his dialect.

AI technicians from LGUs

Franklin Reyes dela Cruz, 32, is an AI technician from the LGU in San

Agustin. He is a graduate of animal husbandry and an undergraduate in Veterinary Medicine at the Isabela State University.

Dela Cruz underwent AI training given by PCC in 2006. He was then absorbed by the LGU as an AI technician.

Aside from AI, he also executes estrus synchronization, deworming, castration, post-mortem and ante-mortem inspection at the town’s slaughter house, vaccination, and basic management practices on buffalo handling.

Being one of the pioneer AI technicians in San Agustin, he said that he does not hesitate to share every single technical-know-how that he has.

While his services are rendered free of charge, he assures that his services do not coincide with the services of the VBAITs.

“When I conduct AI, I always remind them that I work for the LGU, that is why my services are for free unlike the VBAITs whose services should be compensated,” he explains.

Dela Cruz said that he is happy with his work because aside from having a regular job, he is also able to help the farmers.

“I am also very thankful to PCC for its continuous support and for making this project possible and sustainable,” he said.

Another AI technician from the LGU is Ricky P. Hidalgo, 32, of Brgy. Masaya Centro in San Agustin. He works as an



Juan



Canseran



Hidalgo



Tapulao



Dela Cruz



Coloma

animal health technician and a livestock inspector since 1998.

Based on records, his efficiency rate reaches 40% to 50%. He had inseminated almost 300 carabaos to date, of which, he already had 150 calves produced.

He said that he is still happy about his job even if it requires him to work over time because he is able to help the farmers gain additional income through owning crossbred buffaloes.

Like dela Cruz, he does castration, information drive, health care



Canseran (middle) has established a comfortable relationship with his clients as he also gives them advice on proper management practices for free.

management, and pregnancy diagnosis.

In Cagayan Valley

In the remote part of Cagayan, from the rice fields up to the muddy road and cliff-edges, a bare-foot VBAIT trudges on to render his AI services.

Victor Tapulao, 45, and his wife Magdalena, are not blessed with a child. They, however, regard every crossbred calf produced thru Victor's AI services as their "children".

Originally from Baggao, Cagayan, Tapulao migrated to Brgy. Masikal, Amulung West where he became a permanent resident.

Along with two others, Victor had his AI training at PCC-CSU in 2006. They were recommended by the municipal agriculture office (MAO). In 2007, however, he was the only one left to perform as VBAIT. Nonetheless, he was not discouraged to continue his "calling".

"Noong una, naglalakad lang ako para mapuntahan ang mga kliyente ko (Before, I just walk to reach my client's place)," Victor attested.

Sometimes, though, he hitches on a passenger jeep or resort to hiring a motorcycle.

Most of the time, when a farmer texted him that his carabao is in estrus, at 7 am, he would start walking and reaches the place at almost 9 am, that would equate to two hours of walking. This has been his routine for almost three years.

His services, however, were compensated only in kind, such as chicken. Later, when the dam produces offspring, the carabao owners would pay him in cash.

"Di ako nadismaya na ituloy ang AI services ko kahit wala akong produce noong una dahil ginawa ko nang commitment ang pagiging VBAIT ko (I was not discouraged to continue being a VBAIT despite having no calf-drop during my first year of service. It became my commitment to become a VBAIT.)," he said.

Because of the hardships Victor is experiencing, his wife, Magdalena, resorted to destroying his mobile phone so that he won't receive messages from his clients anymore.

"Awang-awang na talaga ako sa asawa ko dahil lagi siyang pagod kaya pinili kong sirain na lang ang cellphone niya. Hindi sa ayaw ko ang trabaho niya kundi dahil gusto ko lang siyang makapagpahinga kahit papaano, (I really take pity on my husband because he is often tired from his work so I resorted to destroying his mobile phone. It is not that I don't want his work but because I just want him to have more time for himself so that he can take some rest)," Magdalena said.

His wife also said that Victor never says "no" to every farmer that asks for his AI services.

Being an inherently shy person, he rarely had a friend. But since he started

being a VBAIT, his friends gradually grew in number.

Vicente Bautista, one of his clients said, "Victor really helps us a lot. He is always available when we need his AI services."

Since his wife cannot stop him from his work, they decided to sell one of their carabaos which they used in acquiring a motorcycle. They pay it through installment and the money comes from the payment of fees Virgilio gets out of the AI services he rendered.

With his priceless dedication as a VBAIT, his clients now call him "idol" for according to them, he is a model worth emulating. As a proof, he was given an "Outstanding VBAIT 2010" award during the 17th anniversary of PCC.

As a support, the PCC-CSU provides him with complete AI paraphernalia and his own mother tank for LN2.

Like Juan, Virgilio also pledged to become a VBAIT for life.

Model employee

Virgilio Canseran, 49, of Brgy. Andarayan Norte, Solano, Cagayan, is an agriculturist by profession. He was an agricultural technician but turned to a full-time AI technician.

In 1994, he underwent AI training given by PCC-CSU.

Canseran covers the whole town of Solana and sometimes reaches Tuguegarao and Enrile, also in Cagayan,

when a VBAIT is not available.

Since he started being an AI technician under the provincial government, he learned to love his profession because of the positive responses he gets from his clients.

As a sign of gratitude, his clients even give him vegetables or chicken.

Canseran also experienced being called at almost 4 o'clock in the morning. One of his clients, he said, threw a stone on to their roof top just to wake him up because he felt very much excited when he saw his carabao was in estrus. The farmer could not stop his excitement to have another crossbred buffalo, he said.

Like the VBAITs in San Agustin, he also made his mobile phone number available to his clients. Most of the time, according to him, his clients personally come to his house to inform him that their buffaloes are in estrus. There were also instances that some of his clients bring their carabaos directly to his yard to have it artificially inseminated.

He also said that his clients even send him mobile phone load (top ups) so he can respond to the inquiries and requests of his clients.

Angelita Binayog, 52, one of the clients of Canseran said that because of her crossbred buffaloes, she was able to buy her own house because she sold her animals at a high price.

"My son, Deejay, witnesses how wonderful my work is that is why he also aims to become an AI technician like me," he said.

Being a dedicated AI technician, he was awarded as the "model employee of the provincial government under the veterinary office" in 1998 and was also recognized as "best AI technician in Region 2" in 2003.

He said that his edge over the other AI technicians who were considered for the award, was his accomplishments and dedication toward his work.

Canseran also keeps a clean and complete record of all his accomplishments. From 2004-2009, he was able to inseminate 928 carabaos.

He also said that the provincial government offered to promote him as

a livestock inspector. He chose to stay as AI technician, however, as he said he is happier with the said position.

He extends his gratitude to PCC for the technical support that it gives him. The PCC provides buffalo semen, liquid nitrogen (LN2) and tank, and dewormer.

"Kahit magretire na ako as AI technician from the government service, itutuloy ko pa rin dahil bukod sa nakatutulong ako sa kapwa ko ay siguradong may pera din mula dito (Even when I retire from government service, I will continue being an AI technician because aside from the fact that I am helping my co-farmers, there is also money in AI)."

Truly, this group of VBAITs have become instrumental in the realization of the national carabao upgrading program as they regard their AI services not just a service but a deep commitment.



'Sukis' of Ilocos Norte/ from page 16

blessing. They currently own one CB.

"It's like magic!," Marylou exclaims.

She still cannot believe that in just one service of Daniel, their native carabao got pregnant. Their CB is now as big as its mother, too.

In barangay Nangarani, Batac, a former paiwi client now owns three CBs and because of it, he is the envy in the neighborhood.

Emilio Basamot, 65, was a paiwi client. He raised a female native carabao. After patiently raising the carabao for years, and submitting it to AI, he was duly rewarded when it gave birth to its second offspring. He raised the second offspring as his share.

In almost eight years of being a carabao raiser enthusiast and an AI patron, he now enjoys raising three CBs, which according to Noel Pagtama, his VBAIT, are now CBs with 50%, 75% and 87.5% bloodline.

The 50:50 CB is a result of the first generation backcrossing between a purebred murrah buffalo (PMB) bull and a female native carabao. For a CB with 75% bloodline, it is a result of first generation backcrossing between a PMB bull and a female 50:50 CB while for 87.5% bloodline, it is the result of first generation backcrossing between a PMB bull and a 75:25 female CB.

"Umapal garud ti kakarrubak nu makita da dagituy nuang ku nga nagdadakkel (My neighbors envy me every time he sees my crossbreds because of its unusual size)," Emilio says.

Overall, these farmers are but a few of the many farmers in Ilocos Norte who have become very enthusiastic and optimistic in owning CBs. They are one in saying that truly, the carabao upgrading in the Philippines is gaining more and more acceptance among farmers and that it is a big blessing to them.

SONS OF A GUN

—A.I. gun, that is

BY ROWENA G. BUMANLAG



Noel Pagtama

Like soldiers who are winning a tough battle, these VBAITs vow to beat more odds to provide more dimensions to their work which they will carry out with more enthusiasm and degree of excellence.

Like a soldier who is summoned for battle, he gets ready to traverse a rough course armed with skillful hands and a load of confidence.

He is a village-based artificial insemination technician (VBAIT) who obtained expertise in performing AI through a training given by the PCC.

As a technician, who is on-call 24 hours a day and seven days a week, he is expected to be consistently prepared to perform AI anytime when a carabao is in estrus and anywhere, even in the remotest areas.

The VBAITs, like Alex Pasion, Noel Pagtama, Gilbert Pasion, Daniel Dilmer Natividad and Arnulfo Corpuz, are faced with this challenge every day but they take it lightly as they recognize that it comes inherently with their chosen job.

All from Ilocos Norte, they are among the 18 active VBAITs supported by PCC at Mariano Marcos State University (PCC-MMSU) who belonged to the roster of PCC's awardees as "Outstanding VBAITs" during its 17th anniversary celebration in March.

Each shared his passion in his career and a rich experience as an AI technician.

Alex Pasion, 42, of Barangay Santiago in Marcos town, is the pioneering VBAIT of PCC-MMSU who was trained in 2005. His training was an initiative of PCC-MMSU in developing Marcos as its regional impact zone.

Pasion's service coverage was initially in Santiago and its neighboring barangays.

In the onset of his operation as a VBAIT, PCC-MMSU provided him with the much needed technical and material support. William Gudoy, the center's AI coordinator, guided him in his infancy as a VBAIT.

Gudoy performed estrus synchronization (ES) among the female carabaos to "set their estrous cycle", Pasion then follows up with the AI treatment.

Being a member of the Timpuyog ti Santiago Farmers Association, Pasion, who is a civil engineering undergraduate, performs AI in the neighborhood for free. He charges a minimum fee of Php300, however, from non-members depending on his proximity to the requesting farmer.

Pasion currently serves about 500 loyal farmer-raisers of both carabao and cattle in the municipalities of Marcos, Dingras, Banna and Sarrat. He registers an average calf drop efficiency of 33 percent.

Pasion earns an additional income of Php20,000 per month out of his AI service fees.

In the case of non-paying customers, Pasion said, *“Basta natutulungan ko ang kapwa ko magsasaka, masaya na ako (As long as I am helping my fellow farmers, I’m more than happy to be of service).”*

As the first-ever AI technician stationed in the villages who charges fees for services, he encountered many farmers who were not willing to pay because they used to have a dole-out AI service from PCC-MMSU.

“Ipinaliliwanag ko na lang sa kanila na iba na ang sistema at wala nang libre hanggang sa nasanay na rin sila (I just explain to the farmers that the system has already changed and there are no longer free services until they gradually accepted the new scheme),” Pasion said.

Sharing his good experiences as a VBAIT, Pasion said that it truly makes him very happy when farmers appreciate his work once their animals get pregnant.

“Sa sobrang tuwa nila, dinadagdagan pa nila ang bayad nila sa akin (In their happiness, they would even pay me more than the usual fee),” he said.

He also does pregnancy diagnosis for free.

Pasion tested the waters of politics then but was unsuccessful. His barangaymates believed that he will still charge for his AI service if he gets elected as councilman.

A hesitant participant of the PCC AI training in the beginning, Pasion now displays passion for what he does as a VBAIT.

“Habang may buhay, mag-a-AI ako (I will eternally perform AI),” he vowed.

Aside from this work, he is also a full-pledged dairy and rice farmer. He raises six purebred dairy buffaloes: three males, one heifer and two lactating cows, of which, he collects milk twice a day and sells it at Php40 per liter.

“Mas magaan ang trabaho sa paggagatas kung ikukumpara sa

pagsasaka lalo na siguro kung mas marami pa ang mga kalabaw ko. Iyong napagbilhan ko ng gatas, pang-allowance ng tatlo kong nag-aaral na anak (Work is easier with milking compared to rice farming, especially maybe when I have more lactating cows. Our milk sales are used for the allowances of my children who are still studying),” Pasion said.

Because of his milk sales and income as a VBAIT, Pasion was able to acquire a 7,000-sq m farm land. From this area, he allotted 2,000 sq m for forage production.

“Because of his dedication to the PCC programs, Alex is almost a family member to us at PCC,” Grace Marjorie Recta, center director of PCC-MMSU, said.

“Nagpupunta ako sa opisina ng PCC dalawang beses kada linggo para magdala ng gatas, kaya para na rin akong nag-oopisina doon. Napaka-supportive ng PCC sa mga katulad kong magsasaka. Lahat ng proyekto na makatutulong sa amin, ibinibigay nila. Number one sila pagdating talaga sa suporta (I go to the PCC office twice a week to deliver milk, that’s why I am almost like their officemate. PCC is very supportive to farmers like me. It introduces all the projects that are beneficial to us. Indeed, it is number one in giving us support),” Pasion said.

Pasion is currently the chairman of the Ilocano Artificial Inseminators Credit Cooperative (ILAICC).

Noel Pagtama, 28, of Barangay Salbang in Paoay, started performing as an AI technician in 2007 after graduating from a training conducted by PCC at Central Luzon State University (PCC-CLSU).

His service areas are in Pinili, Batac, Currimao and Paoay towns in Ilocos Norte.

In barely four years of serving as a VBAIT, Pagtama has developed a number of loyal customers who would also refer him to other farmers. He had already served more than 200 farmers and still counting.

He earns an income of Php15,000 to Php20,000 out of his services monthly. He also does pregnancy diagnosis which



Alex Pasion performs AI to his own carabaos.

he charges for a minimal fee of Php100 per animal for those that were not yet AI'd. Pregnancy diagnosis is done 90 days after the AI service to verify if the cow is already pregnant.

Aside from serving as a VBAIT, Pagtama is also a part-time employee of PCC-MMSU as a farm laborer earning an additional income of Php231 per day and reporting four days a week.

Like a “doctor to the barrio”, Pagtama also gives recommendations to the farmer on how to take care of his animal better after the service. Some farmers, he said, would also solicit his advice in detecting if their animal is already in heat or not.

Pagtama said that as a VBAIT, his responsibility is not only limited to performing AI but in discussing the importance of the technology to farmers who are newly introduced to the program.

When asked what kind of fulfillment he gets from his work as a VBAIT, Pagtama said, *“Mahal ko ang trabaho ko dahil marami akong natutulungang magsasaka. Habang dumadami ang mga suki ko, alam kong nagugustuhan nila ang trabaho ko at naniniwala sila sa kakayahan ko (I love my work because I am able to help many farmers. As I acquire more loyal customers, I know that they value my work and have faith in my service).”*

“Kung masaya ang kliyente ko kapag nabuntis ang kalabaw niya, mas lalong



masaya ako (If my client is happy that his buffalo was impregnated because of my AI service, I am more than happy),” he said.

Reports of the PCC-MMSU show that Pagtama registered an average AI efficiency of 40 percent from 2007 to 2009.

Pagtama supports three young children with wife Fredelyn: Stephen Josh, Kristel Mae and Yosef Aaron, with his income from PCC and as an AI technician.

Gilbert Pasion, 22, of Barangay Catangraran in Solsona, is one of the youngest VBAITs supported by PCC-MMSU. He was just 19 years old when he graduated from the AI training conducted by PCC-CLSU in 2007.

At such a young age, being an AI technician in villages became a whole new adventure for Pasion.

William Gudoy, dubbed as the VBAIT’s “big brother” who dedicatedly provides them guidance and expert advice, said that Pasion then was very shy and hardly speaks.

His mother, Emma, would accompany Pasion to the office of PCC-MMSU in Batac City to collect his AI supplies, such as liquid nitrogen (LN2).

On the other hand, his father Cirilo escorted him in the villages to talk with the farmers about the new scheme of the AI program. He helped impress upon the farmers the need to pay for the services of the VBAITs.

Now, Gudoy said, Pasion actively participates in discussions during VBAITs’ consultative meetings. He is one of the center’s models in terms of his credibility among the farmers and his ability to enlist more customers.

Pasion achieved an average calf drop efficiency of 53 percent from 2007 to 2008.

“Kapag nabuntis na ang kalabaw nila, kung anu-ano na ang ibinibigay nila sa akin tulad ng gatas pati na mga gulay dahil sa sobrang tuwa nila (When their caracows get pregnant, famers give me almost anything like milk and vegetables because of extreme joy),” Pasion shared.

Paid at Php500 per AI service, he earns an income of Php10,000 monthly. He charges Php150 to Php200 per pregnancy diagnosis.

He remits his earnings to his parents to support his three siblings who are still studying, one in high school and the other two in grade school. Pasion is the eldest among eight siblings.

He also bought a second-hand motorcycle in cash out of his service fees. He shared that he only used to ride a bicycle then or rented a tricycle for Php200 when servicing carabaos in remote areas.

“Nagpapasalamat ako sa PCC sa lahat ng suporta nito at paggabay sa akin sa simula’t simula pa lang. Masaya ako na nakatutulong ako sa mga magsasaka dahil sa natutunan ko sa PCC (I am grateful with the support extended by PCC from the very start. I am happy that I am able to help farmers because of the skills that

PCC had taught me),” Pasion said.

Because of his commitment to work, he was tapped by the municipal agriculture office (MAO) of Solsona to serve as its livestock technician. On top of his work as an AI technician, he also administers vitamin supplementation and deworming of animals in the villages.

In turn, the LGU provided him gears for use during field work such as raincoat and rubber boots. The LGU sees the additional task of Pasion as a strategy to promote his services in the larger community.

Through the stewardship of Solsona mayor Joseph de Lara, the LGU gives its full support to the PCC programs in the municipality. In fact, the mayor himself introduces and promotes the service of Pasion during meetings.

Municipal agriculture officer Ranison Narciso said, “On the onset of the deployment of VBAITs in the villages, we send letters to barangay officials formally introducing them to the community. We also distribute calling cards of Gilbert to farmers. Actually, people in all the 22 barangays of Solsona already know him.”

The LGU also provides the needed estrus-inducing hormone prostaglandin F2 alpha (PGF2α) when estrus synchronization is scheduled to be performed in a certain area.

Aside from being a VBAIT recognized for his exemplary work performance, Pasion is also an active 4-H Club officer. He was actually one of the four youths, out of the 17 contenders, who passed the regional screening for a scholarship in Japan.

Surely, success comes easily to Pasion as he demonstrates a sense of responsibility and dedication to his work.

Daniel Dilmer Natividad, 24, of Barangay Ab-abut in Piddig, started to work as a VBAIT in 2006.

“Mahirap noong una kasi hindi pa kumbinsido ang mga magsasaka. Iyong iba, ayaw magbayad kasi sanay sa libre. Ang ginawa ko, nag-AI muna ako ng libre. Sabi ko subukan muna nila ako. Noong makapagpaanak na ako ng limang



William G



Daniel Dilmer N



Gilbert Pasion



Natividad



Arnulfo Corpuz

kalabaw, naningil na ako (It was difficult then because the farmers were not yet convinced. Others didn't like to pay because they were used to free services. What I did was to perform AI without a fee. I told them to try my service first. After five successful AI services, I already charged them)," Natividad said.

In a hands-on exercise on actual AI during their training in PCC-CLSU, Natividad, who was the youngest among the trainees, completed the task the fastest.

Natividad was actually just a replacement for the priority participant who backed out from attending the training on AI. He was recommended by his barangay captain who learned of the training in a newspaper announcement.

"*Nakiusyoso lang ako dati sa mga nag-a-AI. Kaya noong may nagtanong sa akin kung gusto kong mag-training, um-oo kaagad ako* (Before, I was just a spectator watching what the AI technicians were doing. That's why, when somebody asked if I want to join the training, I immediately said yes)," Natividad said.

Natividad now earns Php500 per AI service. He charges Php600 to Php700 if the place is distant especially in

three years. His motorcycle will be fully-paid in three more months.

Natividad's father, Daniel Sr., said he often worries about the safety of his son especially when he has to conduct AI in remote areas. He commended Daniel, though, for being such a humble and responsible son.

In three years as an AI technician, Natividad had established his credibility for having more than 500 customers in his coverage areas in Piddig, Vintar, Sarrat, Laoag, Bacarra and parts of Solsona.

"*Masaya ako kapag may naipanganak na bulo na bunga ng pag-A-AI ko. Nagpapasalamat ako sa PCC dahil natuto akong magsumpit at kumikita ako ngayon* (I am happy when a calf is born out of my service. I am very thankful to PCC because of the new skill and now that I am earning a good income)," he said.

He added that he is flattered when farmers would give him praises in each of his successful service.

"*Sa sobrang saya nila binibigyan nila ako ng tip. Pinakamalaki iyong Php250. Minsan may nagkatay pa ng kambing noong nanganak iyong kalabaw niya* (In their delight, farmers would give me a tip

mountainous areas. He gets an income of Php15,000 a month. He doesn't charge for doing pregnancy diagnosis but the farmers usually offer him snacks or pay his transportation fare.

A bigger part of Natividad's income is used to support his family and a nine-month old daughter. He also pays his motorcycle at Php2,500 per month for

for my service. The biggest was Php250. Once there was this farmer who even slaughtered a goat when his dropped a calf)," he said.

Natividad recorded an average calf drop efficiency of 58 percent from 2006 to 2008.

Arnulfo Corpuz, 46, of Barangay Bingao in San Nicolas, was 39 years old when he attended the AI training in PCC-CLSU.

Despite his age, Corpuz delivered an output that is worth emulating by the young and new VBAlTs. PCC-MMSU reported that Corpuz registered an average of 44 percent calf drop from 2007 to 2009.

He covers the municipalities of San Nicolas, Sarrat, Paoay, Currimao, Pinili and the cities of Batac and Laoag.

He collects Php500 per AI service and Php150 for pregnancy diagnosis. He gets an average monthly income of Php15,000 to Php20,000.

At first, he said, the farmers don't like to pay the service. Some others request for a deferred payment, like at harvest time or some other days. But now that they like his service and have enjoyed the benefits of owning carabao crossbreds, Corpuz is paid right after each AI service.

Out of this additional income, Corpuz was able to purchase two crossbred carabaos. He also tills 1 ha for rice production and utilizes another hectare for forage production.

Corpuz and his wife Editha support their two children who are presently in college taking up nursing and agricultural engineering.

"*Masaya ako na nakatutulong ako sa kapwa dahil sa trabaho ko* (I am happy that I am able to help other people because of my job)," Corpuz said.

Indeed, Alex Pasion, Noel Pagtama, Gilbert Pasion, Daniel Dilmer Natividad and Arnulfo Corpuz are proving that the government's program on AI technology can be sustained by village-based technicians who will soon operate on their private capacities.

They are proving that empowerment works and that they can support their families with their income from a job that they consider not only satisfying but also very challenging.

'Sukis' of AI are proud CB owners

BY JOAHNA G. GOYAGOY

"Isang text lang namin sa kanila, andiyan na sila agad!"

This is the common claim of the clients, commonly called "suki" (patronizer), of the village-based artificial insemination technicians (VBAITs) in Ilocos Norte. They said that the technicians are always prompt in answering calls for their AI services.

The expanded AI program of the Philippine Carabao Center at Mariano Marcos State University (PCC-MMSU) has become one of the most appreciated government programs by farmers in Ilocos Norte. This has become evident as more and more farmers are patronizing the AI services rendered by the VBAITs.

On top of that, many farmers are now optimistic that soon they, too, will be raising more crossbred buffaloes (CB) not only as a strong animal for farm works but an ultimate source of income as well.

In different barangays in Ilocos Norte, farmers share their own stories about owning CBs as products of AI. They said they owe it to the promptness of the VBAITs in their respective barangays. While most of them regard having a CB as a property worth bragging about, some also said that their CBs have become their bread and butter especially during their most challenging times.

VBAITs and sukis relationship

The VBAITs made their mobile phone numbers known publicly so that they can be reached readily. The clients themselves attest that they only send text message and the VBAIT comes to them, in time for the service of their

carabaos that are in heat.

Aside from being always prompt in attending to their client's requests, the VBAITs also help their clients in putting up their carabao's chute needed when performing AI.

The VBAITs, according to their sukis, also give them advices on how to handle the newly inseminated carabaos properly to assure pregnancy. They also go back to their clients patiently every after 18-21 days of rendering AI to make sure that the carabao has conceived.

At first, the sukis opted not to pay the service given by the VBAITs because they were used to having services done for free. But later on, when they saw the beautiful results of the AI services, they now pay voluntarily and sometimes also give extra payments for the VBAIT's motorcycle's fuel. Some farmers even pay in kind such as rice, chicken, vegetable and fruits.

What the 'sukis' say

While the VBAITs gain extra income for their services, the sukis also gain big hope for every CB produced through AI.

As one of the sukis attested, he said that their CBs brought happiness to their family because they provide them extra income and extra help to their farm works. They also pin hope on their CBs when they are confronted with economic difficulties.

Francisco Martin, 72, currently owns two CBs. His CB was one of the first products of AI in Ilocos Norte in 1997. His native carabao was first artificially inseminated by William Gudoy, PCC-MMSU AI coordinator.

Even at his ripe age, his enthusiasm

towards nurturing a CB is still evident on his face. Since AI is a novel technology in their place, they were not sure if having their female native carabao artificially inseminated could bring any luck to their life. In 1997, their carabao's first offspring was born and since then their lukewarm attitude toward the AI service eventually changed.

"I was elated when my native carabao gave birth to a crossbred offspring. I saw it grew fast and I knew it is really a good type of carabao," Martin said in his dialect.

His CB grew in number. From one native carabao and one CB, he now owns six crossbreds, two of these are products of sumpits (local term for AI in Ilocos Norte) done by Francis Alex Dani Pasion, the VBAIT in the municipality of Marcos.

Aside from the happiness he and his family feel for having CBs, he also relies on his animals to be readily available whenever he is in dire need of money.

"When one of my sons got married, we really had no idea where to get money to use for his wedding. It was a good thing we had a male crossbred carabao and we were able to sell it for a good price."

Francisco sold his male CB for Php37,000. He also gave two of his CBs to his two sons.

In barangay Banna, Marcos, Ilocos Norte, Ceferino Arellano also found carabao raising an ultimate source of income. He started raising carabaos in 1998 which he used for draft. Sometimes, when money gets tight, he sells the carabao.

"I prefer to raise more crossbred carabaos because many farmers opt to

have carabaos that are as big as mine which means that it is a viable business venture,” he said in his dialect.

“What is also amazing is that a one-year old crossbred buffalo is already as big as its mother native carabao. A native carabao and a crossbred buffalo of the same age, say one-year old, can be sold at Php8,000 to Php10,000 and Php15,000, respectively,” he added.

At present, Arellano owns three CBs.

The same story is shared by Gilbert Pasion’s client. Juan Veneracion, 51, of barangay Mariquet is pretty amazed because his seven-month old CB is as large as its mother carabao which is already nine years old. His neighbor offered to buy his CB for Php25,000 but he refused because he said that his CB is his only investment. He also plans to raise more CBs through AI.

“The Php500 that I paid to Gilbert is nothing compared to what I have now,” he says.

Benjamin “Jamin” Bueno, 59, also a client of Gilbert in Brgy. Mariquet, now owns three CBs, two of which were products of Gilbert’s AI services.

“As I have my crossbred buffaloes, I felt they are blessings from above because they can save my family when we need help the most,” Bueno attested.

Bueno sold his two male CBs which were one-year old for Php38,000 (one for Php20,000 and the other for Php18,000). He said that the money went to their daily needs, maintenance of their swine, savings and payment of their debts.

Gilbert said that Bueno pays him instantly after each insemination. Sometimes, Jamin also offers him extra payments like vegetables and rice.

In barangay 9 Ab-abut, Piddig, Ilocos Norte, a “paiwi” system (trusteeship) for CBs has become very popular and in demand among the community.

Rogelio “Anton” dela Cruz, 48, started his “paiwi business” in cows. But since carabaos can be used for draft, he also tried investing in carabaos.

When he had his first CB, his enthusiasm toward investing in carabao business soared. Inspired by this attractive result, he continued patronizing the AI service.

At present, he owns 11 carabaos, of which, six are natives and the rest are CBs, all loaned out to his fellow farmers.

Under the *paiwi* system, the owner gets the first female offspring and the value of the succeeding offsprings are divided between the owner and the paiwi client. If it’s a male offspring, Anton and his client would agree on a certain price for it. If the carabao is sold, the profit is divided between him and the farmer.

“Today, because they see how beautiful mestizos are, they are already asking for reservations of crossbred carabaos to be loaned out to them,” Dela Cruz said.

Anton’s CBs were products of Daniel Dilmer Natividad’s AI services, the VBAIT in the municipality of Piddig.

“Daniel is always prompt every time I need his AI services. I just text him and comes immediately. One thing more, Daniel knows well what he’s doing because my carabaos get pregnant easily. I am very happy because I am certain that my carabaos will grow in number.”

Maximo Corpus and Francisco Bautista, Daniel’s clients and paiwi clients of Anton, both said that raising a CB is a lot easier to manage compared to raising native carabaos because it grows faster.

“Because of their big size, our workloads in the farm become effortless,” says Corpus in Ilokano dialect. They also invest on CBs because they can easily sell it at a really good price.

Anton said that he will keep on raising more CBs to be used for dairying as another source of income not only for him but for his co-farmers as well.

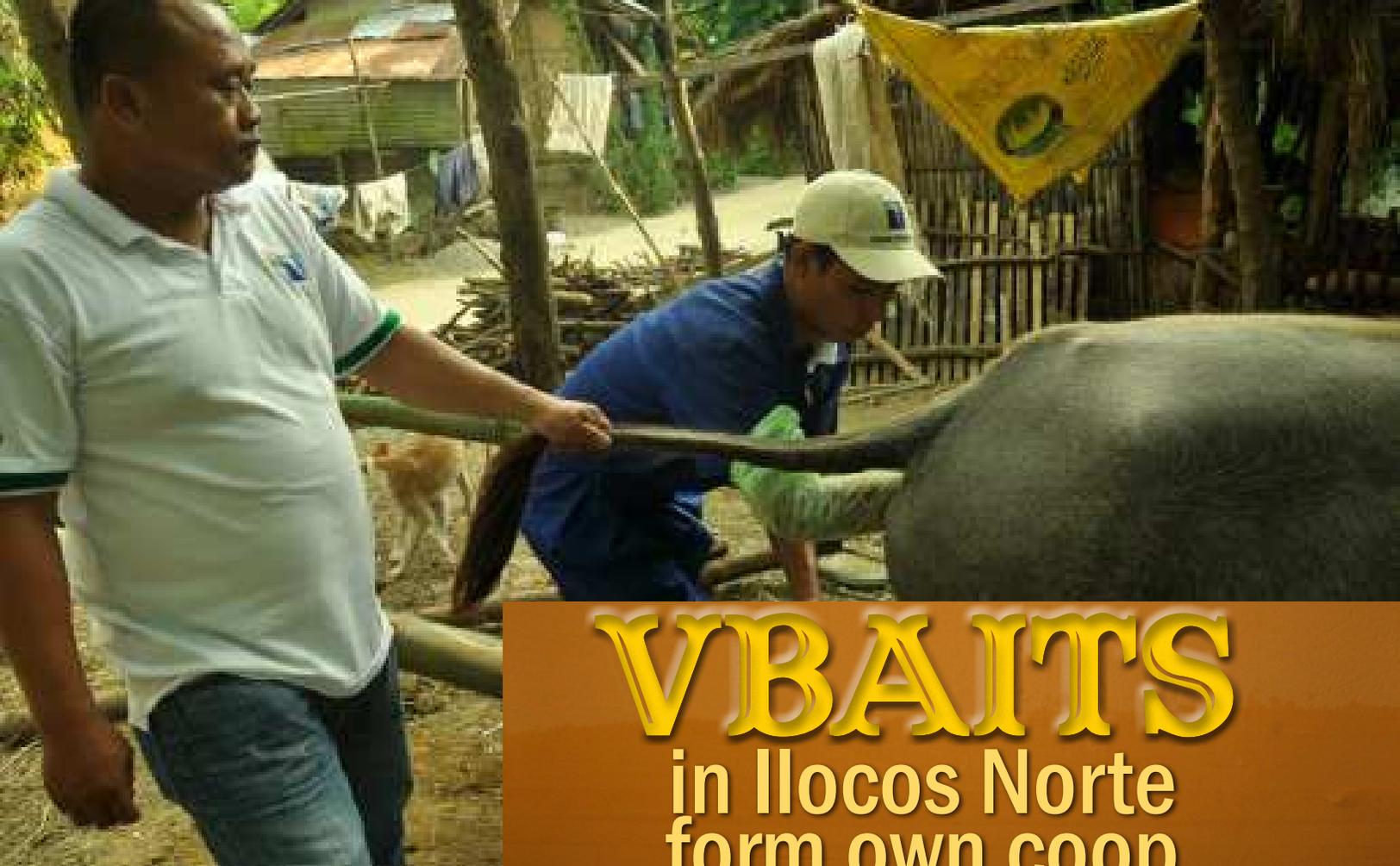
Like Bueno, spouses Marylou Mariano and Larry Alonzo in the same barangay regard the coming of their CB as a

continued on page 11



These farmers proudly show the products of successful AI treatments by the VBAITs.

Realizing, and even actually savoring, the benefits of owning a CB, more and more farmers exclaim, “We want more CBs, please!”



VBAITS in Ilocos Norte form own coop

On April 16, 2008, the group formed the Association of Ilocano Inseminators (ASIN). Francis Alex Dani R. Pasion, a pioneer VBAIT, was unanimously voted president of the association.

“Noong ibinoto ako bilang kaunahang president ng asosayon, pakiramdam ko mabigat na responsibilidad iyon dahil nagsisimula pa lang ang asosasyon. Pero dahil sa tiwala na ibinibigay ng bawa’t miyembro, kabilang na ang PCC, nagagawa ko naman ang tungkulin ko (When my co-members voted me as the president of the association, I felt it was a big responsibility since we were still starting. But with the trust given by the members, and the guidance of PCC, I am able to cope with my responsibilities to the association),” Alex said.

On their second meeting that year, their constitution and by-laws were drafted and subsequently ratified. In March 2009, during the celebration of the PCC’s 16th anniversary, Dr. Libertado Cruz, PCC executive director, inducted to office

the association’s officers.

To have a strong foundation for their association, the officers and members paid a one-time membership fee of Php2,000 and a capital build-up of Php300 to be paid quarterly. Rules and regulations on absences, tardiness, and wearing of IDs during meetings were imposed with corresponding fines for violations.

Aside from a close-knit bond among the members, the association also helps in providing its members and their families with mutual privileges which include soft loan of Php3,000 with only 3% interest per quarter. In special cases, they also give donations for accident and death aid assistance.

Challenged on how to ensure the sustainability of the privatization of the VBAITs, the regional center thought of transforming the VBAITs’ association into a cooperative. Since the Cooperative Development Authority (CDA) requires at least 30 members, the VBAITs and other AI technicians that belong to the PCC, Provincial Veterinary Office and

Regional Field Unit joined the proposed cooperative.

On April 21, 2010, the association became the Ilocano Artificial Inseminators Credit Cooperative (ILAICC).

Through the formation of the cooperative, the VBAITs are able to obtain loans, savings mobilization, financial assistance and other related financial services.

“The cooperative continues to raise funds through the capital build-up scheme,” center director Marjorie Grace M. Recta said.

Asked what benefits they get in joining the cooperative, the VBAITs are one in saying that the cooperative is helping them make their life easier as they can regularly apply for loans aside from the priceless brotherhood among the members.

Aside from providing AI paraphernalia to the VBAITs, the PCC also provides them with other capability-building activities. These include lectures, seminars on animal health care and management, practicum on pregnancy diagnosis, integrated corn management, institutional/ team building, and waste management.

In forming their cooperative, the members have become service-oriented rather than profit-oriented. They give more value to the services that they render than the money they get in return. This has become their quality edge in maintaining the loyalty and trust of their respective clients, said Director Recta.

“*Kung sino ang AI technician ng kliyente, sa kanya lang talaga sila magpapa-AI* (Whoever the AI technician of the farmer-client is, they only rely on him for AI services),” says Jonel, a coop member.

“I always advice the VBAITs to make sure that they provide quality AI services so that in return, their clients will trust and patronize their services,” says William Gudoy, PCC-MMSU AI coordinator.

Before, most of the farmers fail to pay the AI service fee. When this happens, the VBAITs are at a losing end as they had to rent a tricycle or a motorcycle to reach

their clients.

This problem, though, did not deter them from still conducting AI services for the farmers who need their assistance.

During their quarterly meetings, they aired this concern to the PCC-MMSU’s center director and AI coordinator. The two, with the help of the Municipal Agriculturist, convened the farmers and explained to them that the VBAITs should be compensated with Php500 for every AI service (assured pregnancy).

After the said meeting, the system improved.

The VBAITs eventually acquired, some by installments, motorcycles which they financed out of the fees paid to them.

Frequently, many of their clients give them extra money for the motorcycle’s fuel or vegetables and fruits.

“*Kung dati ayaw nilang magbayad, ngayon ay di na kailangang singilin dahil kusa na silang nagbabayad. Kung minsan ay binibigyan pa kami ng bonus gaya ng mga gulay at bigas* (Usually before, they opt not to pay our AI service. This time, however, is different because they voluntarily pay us and sometimes they even give us bonus payments such as vegetable or rice),” Gilbert said.

They also issue receipts upon payment of the fee.

“While the cooperative ensures no competition among the VBAITs in their communities, they also ensure brotherhood among them. In special cases, they give donations for accident and death aid assistance,” said Dir. Recta.

Last October, the VBAITs of Ilocos Norte went to Pagudpud, Ilocos Sur to conduct massive AI or bayanihan to introduce AI in the place and to welcome, as well, the new member of the cooperative.

“As the VBAITs go further distance in providing quality AI services, their cooperative will also ensure them more promising future through milk collection and milk processing,” Director Recta said.

“After 3-4 years, we hope this cooperative can stand on its own,” she added.





BULLS

for higher reproduction rate

BY KHRIZIE EVERT M. MARCELO
with reports from Gloria dela Cruz

When it comes to reproduction, nothing beats natural mating in terms of efficiency especially in carabaos.

Thus, reproductive biotechnologies, like artificial insemination (AI), in-vitro embryo production techniques, and even cloning, come only as a complement to the techniques in hastening reproduction.

Natural mating efficiency in a service area was found out to be 75%, much higher than the AI efficiency of 40%.

Obviously, in natural mating, bulls are needed. Quality bulls, however, are not commonly present in communities where the farmer owning carabaos ready for breeding are located.

To help address this concern, the Philippine Carabao Center (PCC) launched its Bull Loan Program. It aims to enhance

further the efforts toward increasing the efficiency in the carabao crossbreeding program.

The Bull

Under the program, a junior bull undergoes a breeding soundness evaluation (BSE) for mounting behavior, tameness, sexual urges or libido before mixing it with the herd. The weight of the breeding bull is also considered more than its age. A junior bull if managed correctly can serve and impregnate 20 to 25 females per year. A breeding bull can be put into service starting at three years of age.

The program indicates that, the bulls

should be replaced more often to avoid inbreeding, i.e., if the bull has produced females ready to bred in the area. If the bull shows signs of loss of interest in the females or ill, it should be taken out of service immediately.

The Program

The PCC's Bull Loan program was instituted in 1999 as a complement to its AI program. It aims to upgrade the Philippine carabao in terms of milk and meat production by loaning out bulls with superior genetic quality for natural mating.

To qualify, the service is made available to farmers and individuals with at least 25 breedable female native carabaos in service areas where AI service is limited.

There are two ways to avail of the program. One is by directly loaning out the bull to a farmer-cooperator. Another is through the transfer of ownership to the Local Government Unit (LGU) with identified farmer-recipients from their community provided with a Memorandum of Agreement drawn among PCC, Provincial Veterinary Office and the concerned LGU.

Under the contract, the bull should be properly managed according to the standards set by the PCC. Adequate housing facilities, corral-enclosures and pastures should be provided. The bull should not be removed from the locality where the farmer-cooperator resides nor be sold or disposed without written permission from the PCC.

The PCC shall transfer the ownership of the bull to the cooperator once it has produced 25 calves under proper documentation.

In case of disease or sudden death of the bull, a report of the incidence should be immediately made to the nearest provincial or municipal veterinary office and/or designated officer from PCC.

The cooperator is encouraged to submit a monthly report to the PCC through the Office of the Municipal Agriculturist/Provincial/City/Municipal Veterinary Office where bull(s) is located,

about the condition of the bull(s) and its breeding services. The report must include data such as date of breeding, date of calving of the cows, breed of offspring, and others.

The program has already loaned out a total of 2,076 bulls. Due to some circumstances, such as selling, slaughtering or death of the animal, only about 1,095 of the total numbers were monitored to be still in the hands of the recipients.

The purebred bulls were distributed to 13 PCC Regional centers nationwide. Out of the 1095 bulls, 625 were actively used for natural mating.

Additional Income

Antonio Pacpaco, 67, is one of the three cooperators of the bull loan program in Alaminos, Pangasinan.

A rice farmer cultivating one hectare land, Pacpaco earns an additional income of Php200 per breeding service from his bull. The amount helps him indeed, whenever the family runs short of money to meet their daily needs.

According to Mr. Eulogio Montealto, PCC's National Bull Loan Coordinator, the suggested service fee ranges from Php200-Php500 depending on the area.

"The bull loan program is a big help to farmers like us", Pacpaco said. The bull, under his charge was able to produce 55 calves since he received it in 2006. Of this number, 31 are female crossbreds.

Three bulls have been loaned out to the beneficiaries in Alaminos, Pangasinan by PCC.

Alaminos Mayor Hernani A. Braganza plans to establish a dairy cooperative to maximize the potentials of the produced female crossbreds in his town. He also intends to institute program that will encourage raising carabao whose male offsprings can be used solely for meat



Mr. Antonio Pacpaco happily and proudly shows his bull loaned from PCC. This bull has given him additional income per breeding service.

production.

Future Plans

The bull loan program is expected to contribute significantly in improving herd population, increasing the number of dairy animals, and increasing the meat production in the country.

"This bull loan program is very helpful and effective in principle as a complement to the AI program. We need to utilize it properly to really hasten the increase in the population of our dairy animals,"

said Dr. Annabelle Sarabia, PCC's Chief for Operations.

Mr. Montealto also emphasized that bull handlers will be organized and a 100% close monitoring of the program will be implemented as part of the bull loan program's annual plan to improve the performance of the bulls and the bull handler himself/herself. A training will also be conducted to improve awareness on the proper bull management, he added.



'Nuang' Festival

A showcase of outputs of the carabao upgrading program

BY ROWENA G. BUMANLAG

To the amazement of spectators, hundreds of crossbred carabaos were ushered by their owners and caretakers in a parade in San Agustin, Isabela in celebration of the town's 61st Founding Anniversary and 6th Nuang (Carabao) Festival last September 28.

Adopting the theme "Nuang nanumo man, ngem makaited pagrang-ayan ken pakaidawayan ti sangkailian (The carabao, although simple, can give livelihood and pride in the community)", the festival highlighted a parade of different sectors in the municipality, including its various line agencies and schools. At the tail of the parade was a showcase of an array of dark and stocky crossbreds owned by smallholder-farmers in the community.

About 305 crossbreds were paraded before the locals and guests who cheered for their own favorites.

San Agustin Mayor Virgilio Padilla said that the festival, as it has been since its inception, was aimed at showing

and letting the people know of the commitment of the local government to the Carabao Upgrading Program (CUP) and to encourage neighboring towns to participate in the program.

Municipal agricultural officer (MAO) Julio Lamug added that the annual festival aims to showcase the accomplishments of San Agustin not just in paper or documents but in real life.

In its effort to encourage farmers to continuously support the CUP, the LGU devised an incentive scheme for all participating crossbred carabao owners.

Each paraded crossbred was rewarded a cash incentive of Php200 from the LGU. Some barangays gave an additional Php100 to each participating farmer.

He said that this scheme demonstrated to the farmers that the local government values the participation of the CUP stakeholders in endeavors such as the "Nuang Festival".

The crossbred carabaos were likewise judged for the various titles in the

popularity contests.

These include "well dressed buffalo", "outstanding crossbred dam", "best bull", "best draft carabaos" and "most productive carabao" in terms of milk production capacity. The winners were given certificates and cash prizes.

The buffalo which showed up with its owner at the venue the earliest and the barangay that had the most crossbred carabao participation were also given cash prizes and recognized during the program.

The amount given for the prizes was shared by the LGU and PCC.

Carabao festival inception

MAO Lamug shared that he suggested the celebration of a carabao festival in 2004 in recognition of the growing crossbred carabao population in San Agustin. There were about 700 crossbreds owned by smallholder-farmers in the municipality during that time.

He recalled that 145 crossbreds were brought in for the town's first carabao festival parade.

"Through this activity, we hope to encourage more farmers to actively participate in the program. We also thought of giving awards for selected animals so that the farmers will be enjoined to better take care of their crossbreds and carry out good management practices," he said.

Meetings were conducted months before the conduct of the festivity, which the LGU arranged to coincide with the

founding anniversary of the town.

Lamug said that the LGU, through Mayor Padilla, actively engaged the participation of everybody to make the festival a memorable event, especially for the visitors from other provinces such as Cagayan, Nueva Ecija, Kalinga and Quirino.

Currently, Lamug said, San Agustin town has over 1,600 crossbred carabaos. He added that in the next five years, this number will be significantly increased by about 500 more crossbreds through the help and intervention of PCC.

"We are very grateful to the support of many agencies, such as the Department of Agriculture and PCC," he said.

Aiming for crossbred capital title

Initially an avid customer of PCC's artificial insemination (AI) service in 1993, Mayor Padilla said that he always believed in the benefits of improving the carabao for milk and meat production.

When he was elected as the municipal mayor in 1994, he immediately placed the CUP in his administration's priority agenda. This is still his focus as he goes on in his third term as the chief executive of San Agustin.

The "Nuang Festival" is just one avenue where Mayor Padilla shows his staunch support to the program.

"We want to show the people in our neighboring towns the benefits of the program and to encourage them to participate in the improvement of carabaos," he said.

Among other measures to elicit farmers' commitment in the program, Mayor Padilla said that an ordinance was passed by the Municipal Council in 2008 to regulate the sale and slaughter of crossbred buffaloes in the municipality.

"They should first inform the LGU of their intention to sell the animal so that if we still have an available fund in our seed money, the LGU will buy it," he said.

The LGU has appropriated Php500,000 as "seed money" for the purchase of crossbred carabaos offered by the farmer for sale.

"I always tell our farmers that the crossbreds are not solely owned by them but partly by the LGU and the PCC because of the technical support given them. I told them that once we catch them selling their animals, they will no longer get any support from us," Mayor Padilla said.

The LGU has established a network of people in strategic areas in the town to monitor compliance with this ordinance.

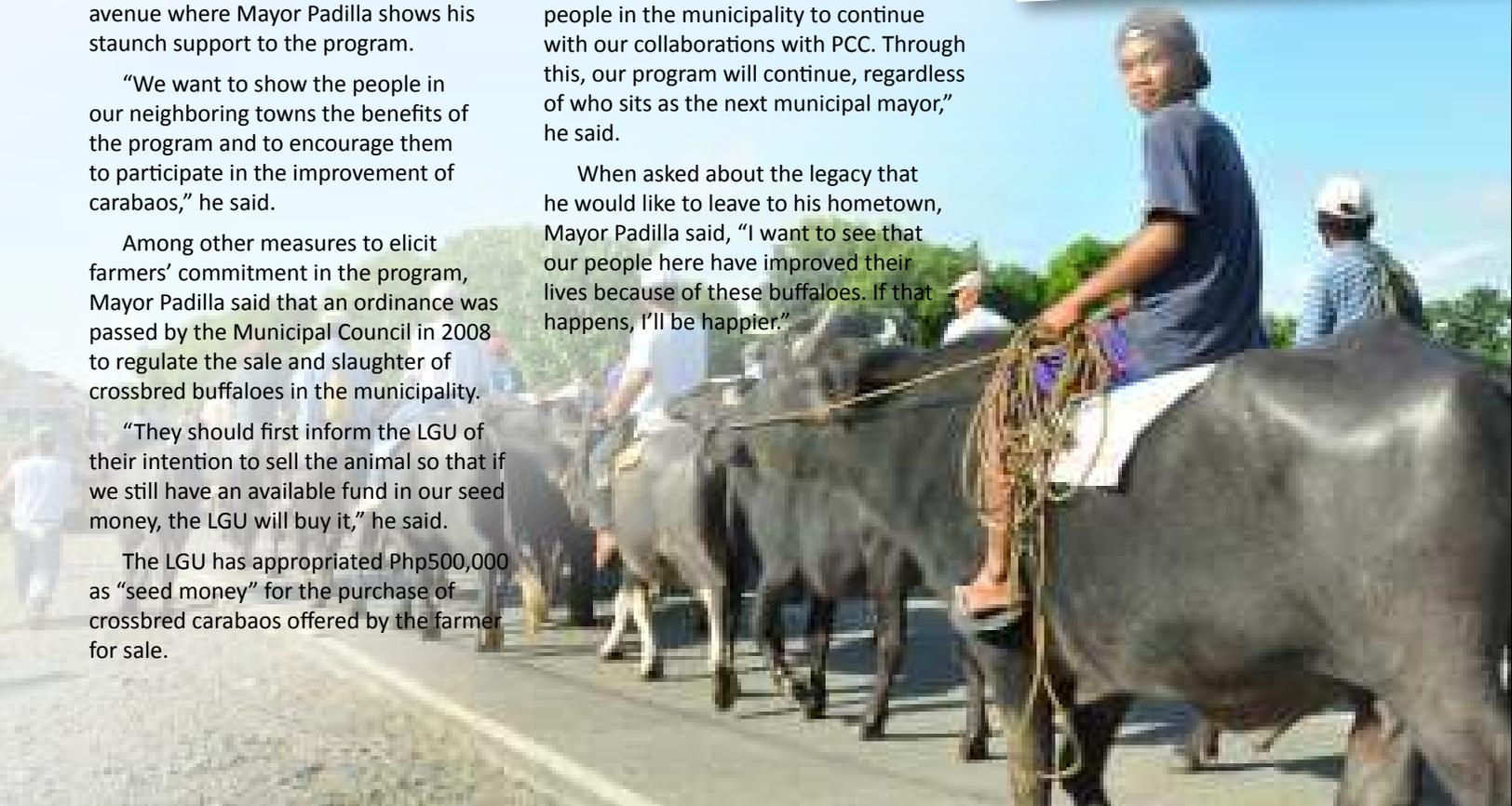
Padilla also implicated that the town of San Agustin is now heading toward dairying. This, he said, is in time with the deployment of a PCC team to ensure the development of carabao-based enterprises in the town.

Conrad Penuliar, the project's team leader, said that the project will organize and capacitate native carabao owners toward dairy development, use crossbred and native carabaos as main production base for enterprise development and engage active participation of all stakeholders in spearheading the project.

Even now, the mayor has already thought of a strategy on how this program will be continued by his successor.

"I was thinking of developing a memorandum of understanding that will be signed by all the sectors in San Agustin. This will be a covenant that enlists all the people in the municipality to continue with our collaborations with PCC. Through this, our program will continue, regardless of who sits as the next municipal mayor," he said.

When asked about the legacy that he would like to leave to his hometown, Mayor Padilla said, "I want to see that our people here have improved their lives because of these buffaloes. If that happens, I'll be happier."



PCC CAPACITATES... from page 3

obtained.

When the Expanded AI Program was launched in 2006, the VBAITs who were trained at PCC-CLSU largely took the job from the center-personnel.

“Privatizing AI service means substantial savings for the government and the local government units. The very limited personnel of government agencies such as the PCC can now focus on other programs such as in research and development and in the establishment of carabao-based enterprises,” Grace Marjorie Recta, center director of PCC-MMSU, said.

The center’s first batch of VBAITs was composed of seven out-of-school youths from the municipalities of Nueva Era, Piddig and Vintar in Ilocos Norte.

Through the initiative of the team of Director Recta, in cooperation with the local government units, an extensive information campaign about the AI program was carried out to encourage more private citizens to join the growing pool of VBAITs in the PCC-MMSU’s coverage areas.

The VBAITs collect fees for services rendered. The fee usually ranges from Php500 to Php1,000.

“For almost two years, farmers had a hard time accepting the new system since they naturally want to avail of the AI service for free,” Director Recta said.

Introducing the VBAIT approach to the farming community was not a breeze at first, according to Recta. They encountered several issues such as the lack of identification system for the VBAITs, lack of promotional support, unpreparedness of farmers to avail of the AI service for a fee, problems on the mobility of VBAITs such as in performing AI in far-flung areas and conflict with bull handlers.

Each of these issues was properly addressed by Director Recta and her staff.

The VBAITs in the PCC-MMSU areas now have an ID system and their “non-free” service is now well-known in the villages.

“Now, farmers are very willing to pay for the VBAITs’ service since they have already tested the quality of their work,” Director Recta said.

Likewise, promotion is no longer a problem. MMSU promotes the VBAITs in its radio programs and their services are always mentioned during Provincial Agriculture and Fishery Council meetings. The LGUs also take an important part in the promotion aspect.

All of the VBAITs have acquired motorcycles paid in installment or in full through the AI service fees paid to them. They can now make themselves readily available to clients even in far-flung areas.

In areas where there is a purebred breeding bull, made possible via the PCC’s bull loan program, VBAITs are advised not to operate.

Currently, PCC-MMSU has 18 active VBAITs, four of whom were absorbed by the local government unit.

Records of PCC-MMSU show that the VBAITs have registered a calf drop efficiency rate ranging from 19 percent to 27 percent.

Aside from putting in place a system of mobilizing VBAITs, PCC-MMSU has established a strong support mechanism for the operation of the VBAITs. Consultative dialogues, among others, were regularly conducted to address issues and concerns of the technicians. Other nurturing activities include capability building and organizing.

The VBAITs, including AI technicians from PCC, are now organized into a cooperative which they named Ilocano Artificial Inseminators Credit Cooperative.

Rafael Hope Bacnis, vice chairman of the coop, said that the establishment of the cooperative is in preparation for the time when the AI technicians operate on their own.

Presently, PCC-MMSU still provides the coop free AI paraphernalia that include LN2, plastic straws and frozen semen, AI gun, AI gloves, straw cutter, forceps and thermometer.

“We provide the supplies to the coop then the VBAITs buy them at half the price. The proceeds are used for the capital build-up of the coop,” Director Recta said.

The VBAITs’ coop now has a total fund of Php51,000 and maintains a regular collection of Php2,000 a year per member for capital build-up.

“We want to eventually promote dairying through the coop. I always tell the VBAITs that they are not just AI technicians. They should also eventually engage in dairying. That is the ultimate mission that we want to accomplish,” she added.

Linking with partners to realize a vision

After producing the first-ever calf born in Cagayan out of AI in 1984, director Frank Rellin of PCC at CSU and his team, were faced with a dilemma on how to expand the service to other areas. The problem was due to the lack of LN2 supply during that time.

Thus, their achievement was immediately clouded by apprehensions as the technology cannot be readily replicated in other areas.

AI paraphernalias were then provided by the Department of Science and Technology’s Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (DOST-PCARRD).

Eventually, a system for LN2 provision was put in place. Refilling of supply was done in Santa Rosa, Laguna and transported via the public bus.

The launching of the Carabao Action Program (CAP) by the Department of Agriculture (DA) in 1985 boosted the conduct of AI where municipal livestock inspectors and even staff of the DA-Regional Field Unit (DA-RFU) were trained on AI.

When the program ended in 1989, the DA became the lead convener of all AI technicians in the region.

For seven years, from 1986 to 1993, PCC-CSU had only three AI technicians: AI Bernardino, Hitler Dangatan and Director Rellin.

Bernardino and Dangatan were stationed in San Agustin, Isabela where their AI skills were truly tested by time. Rellin said that the two were able to produce many crossbred carabaos in the municipality using fresh extended semen.



Dr. Felomino V. Mamuad
Center Director,
PCC-CLSU

Prof. Grace Marjorie R. Recta
Center Director,
PCC-MMSU

Prof. Franklin T. Rellin
Center Director,
PCC-CSU

Bernardino recalled that they had to travel by foot to extend AI services even to far-flung barangays.

“We only used an ice chest then where vials of frozen semen were stored. We used vials because that’s the only way we can carry more doses of semen when we are requested to service remote areas,” Bernardino said. One vial contains 10 ml of semen or equivalent to 20 French straws.

The tandem, aboard motorcycles, said they did regular monitoring of their work in San Agustin particularly during the breeding season or the last quarter of the year. It took them six hours of travel from the PCC regional office in Piat, Cagayan before reaching San Agustin.

Despite the odds, they were able to perform 300 inseminations per month in San Agustin alone.

San Agustin, Isabela is now itching to be declared as the “Crossbred Carabao Capital of the Philippines”.

When PCRDC was institutionalized to become PCC, LN2 supply was no longer a problem. The program was focused on utilizing AI for massive crossbreeding of the native carabao using exotic germplasm of the dairy buffalo, primarily the Murrah breed.

Because of its initial collaborations with the local government units, PCC’s implementation of the AI program is currently anchored on the Provincial Veterinary Office (PVO) and the DA-RFU.

PCC-CSU sees an opportunity to implement carabao upgrading at an accelerated pace since its technicians are

complemented with the provincial and municipal AI technicians, which means that there are more additional skilled hands to realize a unified cause.

Director Rellin said the center had always seen collaboration with LGU as the best way to expand AI services in terms of coverage.

“We initially informed the provincial government, then we approached the municipalities through the agriculture office and finally the barangay officials,” Director Rellin said.

He added that the PCC team always made sure that they coordinated first with the municipal agricultural officer (MAO) each time they introduce the program to a remote community.

“The farmers were naturally hesitant in joining the program but eventually accepted it after being convinced of its objectives,” Director Rellin added.

The same efforts of establishing partnership with the concerned local governments are continuously pursued by PCC-CSU in terms of providing support to its pool of 32 active VBAITs.

Edelina Rellin, PCC-CSU’s senior science research specialist and training coordinator, said that the trained AI technicians now cover the provinces of Cagayan, Isabela, Quirino, Nueva Vizcaya, Kalinga, Apayao and Batanes.

She said that the center started conducting AI training in 2006 at two batches per year. VBAITs have a target of five inseminations per month but some active VBAITs even average eight.

Two of the active VBAITs were absorbed by the LGU and paid on a contractual basis at Php2,500 per month.

Director Rellin said that aside from recognizing the VBAITs’ capability, the LGUs also provide the estrus-inducing hormone prostaglandin F2 alpha (PGF2 α) in situations where estrus synchronization (ES) is scheduled. A dose of PGF2 α costs Php250.

ES technique is performed only by PCC and is followed up by AI conducted by a VBAIT. This technique makes the coming into estrus at the same time of as many female carabaos as possible, thus resulting in higher AI outputs.

PCC-CSU envisions withdrawal of support to VBAITs five years from now.

“VBAITs will be later transformed to an organized group of private AI technicians who will provide their services to farmers on a contract basis,” Director Rellin said.

He added that PCC will only be providing training support by that time including very minimal regulatory intervention.

He said that for PCC to be able to do this, capability building among the VBAITs will be strongly pursued until such time that they will be self-reliant.

Director Rellin also shared his vision on the status of AI in the coming years saying that AI will be fully integrated in the regular undertakings of the LGUs.

He said that the concept of privatizing VBAITs is not only about them being paid by farmers but for them to be able to buy their AI kits. Aside from this, VBAITs should be able to work independently, but harmoniously, with the government in pushing the genetic improvement program.

“Someday, they will be able to establish a private company of their own with a credibility of rendering quality AI service to farmers,” Director Rellin concluded.

Nueva Ecija Dairy Development Plan 2010-2015

Pushing N.E. toward becoming the Dairy Capital of the Philippines

BY KHRIZIE EVERT M. MARCELO

DAIRY INDUSTRY holds a great promise in terms of alleviating poverty and boosting rural entrepreneurship while contributing significantly to the nutritional status of farming communities.

The milk and dairy products share one fourth of the Philippines' total agricultural imports, thus, the potential of carabao's milk production and products development can indeed be very rewarding and promising.

Nueva Ecija, known as the "Rice Granary of the Philippines," is girding to be known by yet another title, "Dairy Capital of the Philippines".

The dairy industry in Nueva Ecija has been growing notably for the past years. Since the Philippine Carabao Center (PCC) declared the province as its National Impact Zone (NIZ) for dairy buffalo development, it has become the country's major buffalo's milk producer. The 25-cow dairy module served as the main route in speeding up the development of a viable carabao-based enterprise in the province.

Started in 1999, 1,000 buffaloes were loaned out to 36 carabao-dairy cooperatives in the province resulting in an increase in the volume of milk production. After seven years, the original 1,000 head increased to 3,365. These animals are genetically superior dairy buffalo breeds distributed in 11 towns and cities in the province.

At the same time, milk collection systems, collection centers, and post-harvest facilities were put up in different places in the province. Cooperative members were given training on collection, handling, transport, storage, processing, labeling, and packaging of raw and processed milk.

In May 2002, the Nueva Ecija Federation of Dairy Carabao Cooperatives (NEFEDCCO) was established as the central processing and marketing arm of the member-cooperatives.

To date, a total volume of 1.74 million liters of milk is produced by the member-coops providing income amounting to Php62.7 million to at least 1,300 farmer-members.

The enterprise generated additional jobs for farm families as well as cooperatives, artificial insemination technicians, bull handlers and others in the farming communities involved in the dairy enterprises.

In view of the success in carabao dairying, the dairy stakeholders in Nueva Ecija, composed of the PCC as the principal implementer, the Department of Agrarian Reform (DAR), Department of Trade and Industry (DTI), Nueva Ecija Provincial Government (NEPG), Small and Medium Enterprise Development Council (SMEDC) and Local Government Unit (LGU) as partners, met and addressed the challenges ahead in carabao dairying. They convened for a planning workshop in Baguio City held last August 2-3.

They came out with a "Nueva Ecija Dairy Development Plan (NEDDP), 2010-2015".

The NEDDP 2010-2015 is a positive response to the need for a stronger convergence for Nueva Ecija's Dairy Buffalo Entrepreneurship Program. By its very nature, the program is both a medium and long-term plan that seeks to boost the operation of the local dairy industry in the province.

To achieve the desired goal in the plan, it was recommended that: legislation should be put in place, complementary and ancillary enterprises across the supply chain be established, regular supply of quality carabao's milk and milk products should be continually maintained, the source of genetically improved carabaos should be enhanced, and a localized Carabao Development Plan should be implemented.

Dr. Liza G. Battad, PCC's Chief of Planning and Special Projects Division,

emphasized that the planning workshop was basically aimed at getting clear perception on the output and how to bring this output on the ground.

"We want to see many viable dairy enterprises in Nueva Ecija for it to truly become the dairy capital. In order for us to do this, we must creatively refine what we have now, finalize the plan and agree on the next steps on how to localize the plan", she added.

Based on the established plan, the province will gain headway in the dairy buffalo entrepreneurship program.

In terms of the province's dairy herd, it is projected to increase from 2,600 to 13,982 female Bulgarian buffaloes and from 110 to 4,317 male Bulgarian buffaloes or a total of 18, 299 buffaloes by year 2015. This figure is eight times bigger than the current carabao inventory in the province.

The AI services and the bull loan service efficiency will also be intensified to produce as many crossbreds as possible, thus increasing the herd inventory.

The target milk production by 2015 is 8,389,200 liters from the current 563,692 liters assuming twice a day milking and an average production of five liters per animal. The price of milk will also increase from the current Php32 to Php36 per liter, giving Nueva Ecija a projected milk income of Php302, 011,200 in 2015.

The "NEDDP 2010-2015" is expected not only to enhance the dairy agribusiness in the province but expand to a greater height the buffalo-based dairy industry in the province.



Dr. Libertado C. Cruz, PCC executive director, delivers his topic on “Utilization of Indigenous Swamp Buffaloes Under a Changing Agricultural Setting” during the international seminar last July 22.

SEA animal experts agree to promote native animals for rural dwellers’ benefits

BY JOAHNA G. GOYAGOY

NATIVE ANIMALS play an important role in building livelihood among rural dwellers.

In most Southeast Asian countries, where many smallhold families rely on mixed-farming system, the indigenous livestock are an integral part of such system, said Dr. Libertado C. Cruz, PCC executive director.

“Programs to promote utilization and improvement of these animals carry significant social impact among millions of smallhold farming families ensuring that the element of sustainability is fully addressed,” he added.

Native animals are among the most important resources in smallhold farms in rural areas, said Dr. Synan S. Baguio, assistant director of the Livestock Research Division (LRD) of the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD). They produce high-value protein food products and provide additional income to farmers aside from sewing other socio-cultural functions, he added.

PCARRD executive director Dr. Patricio

S. Faylon also said that native animals are often discriminated because of their low productivity.

“However, their ability to adapt to natural environment even with minimal intervention enables them to survive. This is one advantage why they can bring opportunities for rural dwellers to earn additional income,” he said.

Issues like these, were addressed during the “International Seminar-Workshop on Utilization of Native Animals in Building Rural Enterprises in Warm Climate Zones” held at the Philippine Carabao Center-National Headquarters and Gene Pool, Science City of Muñoz, Nueva Ecija last July 20-22.

Attended by animal experts from Southeast Asia, the event created a venue for exchange of strategies among researchers and experts on how to maximize the potentials of native animals in providing livelihood opportunities for rural farming families. It also aimed to promote the utilization of these animals in helping mitigate the devastating effects of climate change.

Among other points of discussion, the

workshop also identified native animals with potential for rural enterprises. These include swine, carabao, cattle, goat, sheep, chicken and duck.

The shifting preference of consumers toward food and safety concerns increase the demand for native animals because they naturally breed, which do not entail the use of antibiotics and other synthetic growth promotants. In addition, their meat is unique and distinct in texture, color and flavor.

These characteristics of native animals command higher price in the market compared with commercial animals. For instance, the Japanese willingly pay high prices for the beef of their Wagyu cattle. In the Philippines, native chickens are priced 50% to 200% more than the commercial broilers.

Aside from meat quality, native animals are also seen essential in mitigating concerns on environmental protection and climate change and competition between livestock and humans in the consumption of grains and cereals.

Meanwhile, experts devise strategies to sustain the genetic improvement of these animals to meet the growing demands of consumers for healthy, safe and environment-friendly meat products.

Organizers of the said international workshop were the LRD-PCARRD in collaboration with PCC and the Food and Fertilizer Technology Center (FFTC)-Taiwan.

Research and development workers from colleges and universities nationwide also participated in the workshop. They are from the Western Mindanao University (WMU), Capiz State University (CSU), Isabela State University (ISU), University of the Philippines-Los Baños (UPLB), Central Luzon State University (CLSU), West Visayas State University (WVSU), and Benguet State University (BSU).

San Agustin dairy dev't gets boost from LGU officials, PCC

BY ROLDAN C. PARAGUISON and MAE ANNE C. CORDOVA

THE CELEBRATION of the 6th Annual Nuang Festival in San Agustin, Isabela last September 28 proved to be a turning point for the town's efforts of establishing a community-based dairy buffalo enterprise.

On that day, Isabela Gov. Faustino G. Dy III pledged to contribute Php5 million for the dairy project in the town.

The contribution was the immediate reaction of the governor after hearing words about the potential of the carabao-based industry and understanding the needs to further boost the dairy production project in San Agustin. He was impressed and pleased with the current developments in carabao upgrading and initial dairy production in that town.

Subsequently, a Memorandum of Agreement (MOA) signing activity was held at the governor's office in Ilagan, Isabela.

The San Agustin's LGU, represented by Mayor Virgilio Padilla, in coordination with the Department of Agriculture-Provincial Field Unit (DA-PFU) and the Philippine Carabao Center (PCC) detailed in the

agreement what it wants to accomplish and how the governor can actualize them.

In the MOA, what will be done for the 12 priority barangays of San Agustin for dairying was specified.

The MOA stipulates that the PCC and the LGU of San Agustin will implement a five-year project entitled "Transforming San Agustin as Dairy Community Utilizing Crossbred Buffaloes".

It also formalized the partnerships in pursuing San Agustin's aspiration to become "Milk Capital of Isabela" and "Carabao Crossbred Capital of the Country".

Under the agreement, the amount will be used for establishing milk barns in 12 barangays. The barns will include milking machine, power supply, potable water system, forage nursery development, maintenance and other infrastructures.

The ceremonial hand-over of the Php5 million contribution took place in time for the visit of Pres. Benigno Aquino III in



President Benigno Aquino III, during his visit to Isabela, handed over the Php5 million counterpart fund of the Provincial Government of Isabela to Mayor Virgilio Padilla for the development of the town as the "Milk Capital of Isabela". (Photo by Bombo Radyo-Isabela)

Isabela last October 8.

San Agustin is a farming community whose main source of income is corn, rice and banana production. In 1993, the town took advantage of the benefits offered by the government's Unified National Artificial Insemination Program (UNAIP).

After several years, numerous crossbred carabaos were produced in San Agustin town. Currently, San Agustin has over 1,600 crossbred carabaos.

PCC, in coordination with other agencies, continues to help San Agustin on technologies about carabao improvement and how to capitalize on carabao-based enterprises for progress and development.

The DA- Provincial Field Unit, on the

continued on page 31

PCC staff members undergo training in Thailand

BY JOAHNA G. GOYAGOY

THREE STAFF members of the Philippine Carabao Center (PCC) underwent a five-week training course on dairy processing and dairy plant operations in Thailand in preparation for the operation of the newly constructed dairy plant at PCC.

The training was held last September 26 to October 31.

The trainees were Mina P. Abella, Senior Research Specialist II in product processing; Venus C. Quines, Research assistant in product processing and marketing; and Benedick C. de Leon, electrician in equipment operation.

The putting up of a dairy plant is an integral component of the 2KR project titled "Enhancing Rural Employment through Promotion of Village-Based Dairy

Enterprise."

The dairy plant will serve as the central milk processing plant as well as market outlets of milk products among dairy farmers in Nueva Ecija.

To expose the trainees on dairy processing and dairy plant operations, they underwent trainings on the different methods in the operation and maintenance of different dairy processing equipment, familiarization and utilization of the different laboratory techniques used in milk and milk products and technical know-how in operating a dairy plant.

The five-week training program also covered lectures and trainings on dairy plant operation dealing with milk

collection and processing involving different equipment, quality assurance and quality control, product storage, and delivery.

The plants visited included the Boonyakeat Ice Cream Co., Ltd in Muang, Petchaboon and Wangnamyen Dairy Cooperative, Ltd. in Wangsomboon, Sakeao.

"The knowledge and skills learned from the training will be applied in the operation of the PCC Dairy Plant," Quines said.

She added, "The training is very helpful for the upcoming operation of the PCC dairy plant considering that Thailand has really gone very far in the dairy industry."

The local government units (LGUs) in Nueva Ecija, the Philippine Carabao Center and the Department of Trade and Industry showed their strong support to the LGU of Llanera in promoting dairy enterprise as a viable source of additional income for carabao farmers.



Llanera town hosts 'Gatas ng Kalabaw' fest

BY JOAHNA G. GOYAGOY

LLANERA, a small town located in the heart of Nueva Ecija, proved yet another act of willingness to embrace progressive change as it hosted, last July 2, the "Gatas ng Kalabaw Festival" in Nueva Ecija.

The annual celebration of the "Gatas ng Kalabaw Festival" was initiated by the Department of Trade and Industry (DTI) in 2007. The festival aims to create awareness among farmers in Nueva Ecija that dairying is indeed a viable source of income aside from rice, onion and vegetables.

Organizers of the festival agreed to hold the fourth celebration outside its traditional venue at the NE Pacific Mall in Cabanatuan City. This year, the highlights of the event were held in Llanera while products exhibits were set-up simultaneously in Cabanatuan City.

The localization of the event aimed to promote the One Town One Product (OTOP) of dairy products of Llanera, including those of San Jose City, Science City of Muñoz, Talavera and Guimba.

This year, the festival adopted the theme, "Masustansiyang Gatas ng Kalabaw Para sa Wastong Kalusugan at Kaunlaran ng Bawat Pamayanan."

In her speech, Mayor Lorna Mae Balunes-Vero emphasized that "health is

wealth."

"With the introduction of dairy industry in the municipality, our people will not only have proper nutrition but will be benefited with additional source of income other than rice and onion," she said.

Different exciting activities such as street dancing, cooking contest, milk toasting and drinking and float parade participated in by different dairy cooperatives underscored the celebration.

Also highlighted in the program proper was the turn-over of the dairy modules to the qualified cooperatives of Llanera by the Philippine Carabao Center (PCC). The cooperatives namely, Kapitbahayan sa A. Mabini Producers' Cooperative, San Vicente Dairy Producers' Cooperative and Casile Dairy Producers' Cooperative were awarded a total of 116 dairy-type buffaloes from Brazil.

"PCC promises to give not only carabaos and not only hope but our whole heart to help in attaining the objectives of and sustaining the dairy production project," Dr. Libertado C. Cruz, PCC Executive Director, said.

Simultaneous with the celebration held at Llanera, products trade fair was opened to the public at the NE Pacific Mall on July 1. "The Small Medium

Enterprises (SMEs) trade exhibit serves as a gateway towards identifying products that will be marketed not only in the province but outside the region and soon to compete in the international market," Brigilda Pili, DTI Provincial Director, said.

"We also look forward to Nueva Ecija being declared as the dairy capital of the Philippines. The dream begins to become a reality and this won't happen unless we give our share of this dream," Pili added.

During the opening of the trade fair, Dr. Liza G. Battad, Chief of the Planning and Special Projects Division of PCC, said, "we envision Nueva Ecija to be the dairy capital of the Philippines and this will happen very soon not because of PCC or DTI but because of farmers and cooperatives who demonstrated that the carabao is also a cash commodity."

Llanera earned the 2009 TESDA (Technical Education and Skills Development Authority) Kabalikat Award for Region III under the leadership of Mayor Vero. Llanera shared this distinction with the Office of Speaker Prospero Nograles Jr. of the 1st District of Davao City in the national level. According to TESDA, this is the first time that a National Kabalikat Award is won by a municipality.

LGU in Iloilo takes initial steps toward dairying

BY VIVIAN C. ABANTAO/PCC-WVSU

THE LOCAL government unit (LGU) of Calinog in Iloilo made its first stride toward a dairy project through collaborative efforts of the Alternative Learning System (ALS), Municipal Agriculture Office of Calinog, the Carabao Raisers Association, and the Philippine Carabao Center at Western Visayas State University (PCC-WVSU).

The ALS is headed by Ana Lerio Caspillo, the municipal agriculture office by Jesus Coronado, and the Carabao Raisers Association by Susan Casipe.

Buffalo hand milking was formally introduced in Calinog town last May 21 at barangay Badlan Grande when farmer Ramon Oren, dam owner, milked for the first time his dam. A month after, Nestor Amular, another F1 dam raiser, milked

his animal at barangay Gama Grande, Calinog. Mr. Anthony L. Leal, PCC-WVSU's carabao-based enterprise development coordinator, facilitated the holding of the two events. The events trigger the deeper consciousness of those who are currently owning or raising crossbred buffaloes.

Several farmers of Calinog became aware of the F1 backyard dairying through cross-visit, word of mouth and mass media (Radiyo ng Bayan and TV Cable Star Iloilo City), courtesy of Regional Agri-Fishery Information Division (RAFID- DA 6).

So far, the crossbred buffalo dairying in Calinog has already showed results as the two farmers reported additional incomes. They said they harvested a peak of 4 kilos

in their morning hand milking and an average of 2.5-3 kilos per milking.

At Php50 per kilo, 3 kilos of raw milk provide an income of Php150 a day.

On the issue of joblessness and utilization of farm by-products, the two pioneers of dairying in Central Panay were able to demonstrate having an extra income by way of raising crossbred buffaloes.

Meanwhile, Rocil Latanafrancia, a purebred buffalo owner, whose dairy farm consists of seven buffaloes in Barangay Jorog, Lambunao, was invited by RAFID-DA 6 Chief Ms. Juvy Gatton for a one hour Radio and TV guesting last September 11.

PCC-USF holds trainings on AI and PD

BY LEINEFE B. LIBRES/PCC-USF

A BASIC training course on artificial insemination (AI) and pregnancy diagnosis (PD) for local government units (LGU) and prospective village-based AI technicians was conducted by the Philippine Carabao Center at Ubay Stock Farm last August 4-27 and attended by seven participants from region 8 and seven from region 7.

The training, the 9th in a series, aimed at accelerating the delivery of AI services in the villages through the Village-based AI program.

It was done through lectures for four successive days on theoretical aspects of AI, PD, animal reproduction, and other pertinent topics related to the overall success of animal breeding. For two weeks, the participants also underwent practicum on familiarization of the reproductive organ of both sexes, AI gun

insertion using a fresh specimen, and on pregnancy diagnosis. The participants were given grades according to their performance as a way of determining and monitoring their learning ability.

In the last week of the training, the participants had their field exposure and final practicum on actual AI and PD in Carlos P. Garcia, Bohol which is known as the native buffalo conservation island in the country. Likewise, they were trained on proper data recording and proper filling up of AI receipts from the Unified National Artificial Insemination Program (UNAIP).

The participants in the said training were Bienvenido Nayga Jr., Jonathan Torres, Andres Cortes, Doroteo Rance Jr., Julito Ordiz, all from Leyte province; Sean Magallanes and Dr. Vicente Catucod, both from Samar; and Ernesto Mendez, Jonerie

Gumapac, Tito Garcia, George Villadores, Bienvenido Curay Jr., Gerardo Gaudicos, and Juanito Palado, from Bohol.

The 24-day training was successfully carried out thru the combined efforts of Dr. Caro Salces, training director and lecturer; Dr. Gundolino Bajenting, assistant training director and lecturer; Abdon Anos, training officer and lecturer; and training technicians namely: Oswaldo Godinez, chief of the extension section; Jose Bigcas, Alexander Casinillo, and Franco Anos. The resource persons included Dr. Agapita Salces, a geneticist and a senior agriculturist of DA-RFU 7, and Floriano Bernales, BIZDP chief.

The training facilitator was Bonifacia Hingpit, the AI and Bull Loan Program Coordinator of the center, assisted by Leinefe Libres, center information officer.

PCC official is oral presenter in the 16th Asian Agricultural Symposium

BY KHRIZIE EVERT M. MARCELO

DIFFERENT APPROACHES to promote agricultural development are progressing through the years. Probably the most significant ones are technology transfer and capacity building.

Efforts along this line were recognized in a gathering of agricultural scientists all over the world during the 16th Asian Agricultural Symposium (AAS) held in King Mongkut's Institute of Technology Ladkrabang (KMITL) in Bangkok, Thailand last August 25-27.

They presented and gave updates on advanced and environment-friendly agricultural technologies.

The exchange of ideas and experiences among agricultural scientists and the building of a strong network of researchers were among the objectives envisioned in the symposium. Key theme of the gathering was "Sufficiency Agriculture".

Among the presenters was Dr. Liza Battad, Chief for Planning and Special Projects Division of the Philippine Carabao Center (PCC). Her paper dealt with harnessing the flexibility of the native carabao as a socio-economic resource appropriate to non-traditional dairy communities benefiting rural farming families. She cited higher levels of income of rural families through the establishment of village-level dairy carabao enterprises.

Dr. Battad's paper, titled "Intensifying Village-Level Carabao-Based Dairy Enterprise Development in Non-Traditional Dairy Communities", presented the impressive growth of the dairy industry in Nueva Ecija which was attributed to the impact zone template that presented an active partnership of the many stakeholders in the dairy industry.

The project, she pointed out in her paper, illustrated the feasibility of buffalo-dairying in non-traditional dairy communities as proved by the

increasing incomes of smallhold farmers, cooperatives and other participants in the dairy chain.

One factor that complemented the successful implementation of the project she stressed, was the establishment of mechanisms that encouraged different carabao-based enterprises in Nueva Ecija to engage in such endeavor. These included distribution of "incubator" modules consisting of 25:1 cow-bull ratio of purebred Murrah buffaloes at breedable age. These are awarded to qualified cooperators to showcase the productivity and profitability of the animals.

The upgrading program of native carabaos through crossbreeding with the imported dairy breed of buffaloes were also institutionalized across the country while intensifying the capacity of smallholder-farmers in production, processing and marketing of buffalo-derived products.

More importantly, the project provided social preparation, community organizing, technical and entrepreneurial skills training, and the support for the eventual ownership of established buffalo-based enterprises by the smallhold farmers.

Dr. Battad's paper was classified under the category "Extension's Role in Sustainable Agricultural Development".

Other topics highlighted in the Symposium were about agricultural and food supply systems; implications for food security dimensions at different levels: household, local community, national and international; appropriate technology, traditional knowledge and the implications of agricultural modernization; natural resource management and rehabilitation; alternative energy; economic globalization, free trade, and community self-sufficiency/empowerment and international agricultural policy and development.

Held every three years, nine countries participated in the AAS with 156 scientific papers and 86 posters presented. The attendees included agricultural scientists, academics, researchers, government and private representatives and students from across the globe.

Dr. Battad was joined by other delegates from the Philippines representing the Pampanga Agricultural College (PAC), University of the Philippines Los Baños (UPLB), Central Luzon State University (CLSU) and Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA).

San Agustin dairy.../ from page 28

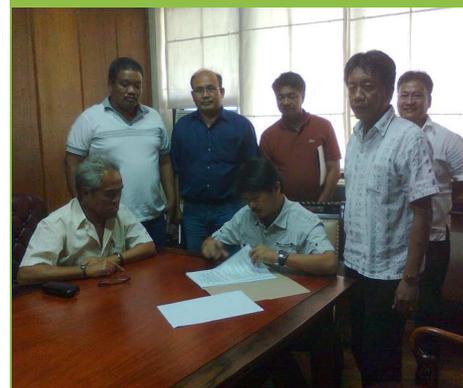
other hand, will be providing veterinary and technical support.

According to the socio-economic survey conducted by the PCC, the milk production in San Agustin can be facilitated by establishing milk barns where carabao owners can bring in their lactating carabao for daily milking.

The Dairy Association on the other hand, will manage the business aspect of the project.

The carabao owners, according to the initial plans, will receive payments corresponding to the volume of milk produced by their lactating carabaos.

The local government of San Agustin will be providing the necessary support fund and appropriate policies to ensure the long-term sustainability and continuity of the said development.



MOA signing at the Governor's Office in Ilagan, Isabela.



A farmer and his AI technician foster a relationship that is continuously flourishing as the breed of the native carabao in the field level is improved through the effective reproductive biotechnology called Artificial Insemination.