

# San Agustin, Isabela

## “A Show Window of Carabao Upgrading”

By Sosimo Ma. Pablico

After traversing 26 kilometers of good road from the Echague (Isabela) highway junction, passing through a newly constructed bridge way above the mighty Cagayan River and another bridge that is yet to be finished, one finally finds himself in the southernmost town of Isabela – San Agustin.

An interior fourth class town which formally started on January 1, 1950 with an estimated population of 5,050 inhabitants, it is strategically located at the crossroads of the provinces of Isabela, Quirino, Aurora and Quezon at the foot of the Sierra Madre. It is bordered up north by Jones town from where it was carved, down south by Maddela town, and in the east by the extensive Sierra Madre mountain range.

A relatively young town created on September 28, 1949 by virtue of Executive Order No. 269, San Agustin was carved from the southern part of Jones, which was originally a part of Echague. It has a projected population of 22,228 for 2005, majority of whom are Ilocanos who comprise 92.65 percent of the populace, descendants of pioneer settlers from the Ilocos.

One's initial impression upon reaching the town center is that San Agustin is a sleepy town with 23 barangays and has yet to see more economic and social developments to come. However, this impression slightly changes somehow as one gets to the interior barangays, especially after crossing

the Cagayan River through a ferry when the weather is fair and it did not rain upstream the previous night.

Truly, San Agustin could very well be considered the country's show window of carabao upgrading, initially through AI [artificial insemination] and later through natural mating with Murrah buffalo bulls loaned by the PCC [Philippine Carabao Center] as well as buffalo upgrades or mestizos.

Indeed, nowhere in the Philippines can one find at any given time an aggregate of about 600 buffalo-upgraded carabaos or mestizo buffaloes with the excellent features of the Murrah buffalo.



### **PCC Triggers it All**

Julio V. Lamug, San Agustin municipal agriculturist since 1986, narrated that all of these were initiated by the PCC [Philippine Carabao Center], as it is mandated to conserve, propagate and promote the carabao as a source of draft power, meat, milk and hide for the benefit of small farmers.

In a meeting called by PCC at CSU [Cagayan State University] and the OPV [Office of the Provincial Veterinarian] in Ilagan in September 1993, hardly a year after the creation of the PCC, Isabela municipal agriculturists were informed on the Unified National Artificial Insemination Program [UNAIP]. They were asked if they were interested in promoting AI [artificial insemination] in carabaos.

After being informed about the program, Mayor Jesus M. Silorio Sr. told Lamug they may as well try it since PCC assistance was forthcoming from PCC. Subsequently, a municipal fund of P25,000 was appropriated for a start.

Not long after that, the AI program started in late October 1993. On October 25 and 26 that year, pregnancy diagnosis and estrus synchronization were conducted on 107 carabaos in 10 barangays – Nemmatan, Masaya Centro, Masaya Norte, Masaya Sur, Laoag, Santos, Dappig, Calocan, Panang, and Palacian.

However, only 24 of the 107 carabaos qualified for artificial insemination three days later with assistance from PCC at CLSU [Central Luzon State University]. Extended semen of Indian Murrah buffalo, brought all the way from the PCC ranch in Digdig, Carranglan, Nueva Ecija, was used.

Ten of the 24 artificially inseminated carabaos gave birth after 300 days, indicating a success of 31 percent, which could be considered already good for a start. More importantly, seven of the 10 calves were females. If these were to be artificially inseminated again, the bloodline of their offspring would already be 75 percent buffalo and, hence, their features would already be much better than the local stock.

For the record, the owners of the first 10 buffalo-upgraded carabaos were: Apolonio Alupay, Nemmatan; Nemesia Baysa and Nestor Enriquez, Masaya Centro; Victor Gerardo, Severo Manglanlan, Antonio Mangaoil and Marcela Decena, Masaya Sur; Ruben Gabriel, Laoag; Pedro Tomas, Santos; and Hilarion Antonio, Dappig.

Upon learning of the initial outcome, farmers in the other barangays already complained why they were not included in the program. Thus, except Bautista, the innermost barangay, which is not accessible by road most of the time, 22 barangays were already included in the second year.

In addition to the original 10 barangays, 12 others were included as follows: Sinaoangan Sur, Sinaoangan Norte, Salay, Dabubu Grande, Dabubu Pequenio, Rang-ay, Virgonesa, Quimmalabasa Sur, Quimmalabasa Norte, San Antonio, Sto. Nino, and Mapalad. Most of these barangays can only be reached by crossing the mighty Cagayan River, which bisects the town, using a ferry.

It can be assumed, therefore, that easy access from the town proper was made the foremost consideration during the first year of the program. For one thing, Masaya Centro is the seat of the local government unit.

On October 24 – 29, 1994, pregnancy diagnosis was conducted by 11 teams on 321 carabaos. The teams consisted of technicians from PCC at CLSU, PCC at CSU, DA [Department of Agriculture], OPV, and San Agustin local government unit. A total of 193 carabaos qualified for estrus synchronization, while 51 were in heat, making a total of 244.



Efforts in the second year resulted in the birth of 59 calves (27 males and 32 females) or 24.18 percent success. Estrus synchronization resulted in 53 calves, while six calves were given birth by dams in natural heat that were inseminated.

### **New Mayor Continues Program**

The next nine years, 1995 to 2004, saw the continuing support of a new town executive, Mayor Virgilio A. Padilla, which was the third year of the program. In fact, he made carabao upgrading as his banner program.

Although the number of barangays covered in 1995 decreased to only 16 due to the lack of technicians [only PCC at CSU and the OPV provided assistance], the coverage subsequently increased thereafter as follows: 1996, 19; 1997 and 1998, 21; 1999, 22; 2000, 23 including Bautista. In 2001, however, Bautista was dropped from the coverage due to extreme difficulty of road transport.

In 2002, the 10<sup>th</sup> year of the program, the coverage was greatly reduced to only five barangays – Sinaoangan Sur, Palacian, Masaya Sur, Masaya Norte, and Kimmalabasa Norte.

From 2002 to 2005, only carabaos in natural heat were inseminated. However, estrus synchronization resumed in 2006. Some 135 carabaos were synchronized, while 54 were in natural heat.

Amazingly, the farmers became increasingly interested in AI as shown by the number of animals inseminated since 1995 as follows: 1995, 168; 1996, 193; 1997, 289; 1998, records were lost as a result of rampaging flood; 1999, 206; 2000, 233; 2001, 131; 2002 and 2003, 61; 2004, 17; 2005, 16; and 2006, 189.

Calves delivered through the years numbered as follows: 1995, 34; 1996, 33; 1997, 56; 1998, no record; 1999, 29; 2000, 27; 2001, 40; 2002 and 2003, 28; 2004, 17; and 2005, 16.

From 1993 to 2006, therefore, artificial insemination has resulted in a total of 349 mestizo buffalos.

Director Franklin T. Rellin of PCC at CSU explained in a mobile phone interview that the farmers also used male mestizos to mate with Philippine carabaos as well as with female mestizos and, hence, the total number of buffalo upgrades has already reached more than 600.

Mayor Padilla, who is back as the town's chief executive after three years of being a provincial board member, said he earlier created the concept of Barangay Officer of the Day [BOD]. In this concept, farmers alternate with each other in being designated as BOD whose duty is to report to the MAO any carabao that is in heat so that the animal would be inseminated right away.

When asked about the future of the AI program, the mayor said, "*narugyantayo daytoyen, isagadsagadtayon* (we have already started this, we may as well keep on doing it)." After all, San Agustin is now recognized as the town with the highest number of buffalo mestizos. Padilla is also a farmer and owns a buffalo mestizo that has won in a "pinaka" contest in Region 2.

To ensure that animals in heat are immediately inseminated, Mayor Padilla plans to have six VBAIT [village-based AI technicians] to be trained by PCC at CSU. Each VBAIT will cover one of the town's six clusters. He is optimistic that this scheme will prove beneficial, as LGU livestock technicians have difficulty crossing the Cagayan River during the rainy season.

Mayor Padilla also envisions the VBAITs as the milk collector in their respective cluster and will be responsible in bringing the milk to the town's dairy processing center.

While VBAITs are allowed by a municipal ordinance to collect service charges, they are also given an incentive of P100 per head by the DA.

### **Production**

Among the 23 barangays of San Agustin, Sinaoangan Sur is recognized to have the most number of buffalo mestizos. Most of the mestizos that participate in the parade of the town's annual Nuang Festival, which started on September 26-28, 2005, reportedly come from Sinaoangan Sur.

Brgy. Captain Samson Reyes said that in 2006 alone, Sinaoangan Sur had a total of 64



*A crossbred buffalo is being compared with a native carabao of almost the same age.*

buffalo mestizos owned by 31 farmers, which he claimed no other barangay in San Agustin could surpass. He said there could have been more if some farmers did not sell their animals to interested farmers outside the barangay.

In Sinaoangan Sur, Rodel Cinco, 30 and a graduate of the Diploma in Agriculture from CSU-Lallo, has already produced 10 buffalo mestizos using three female native carabaos, which were sold in 2003 and 2004 for a total P60,000.

Of Rodel's seven mestizos at the time of the interview, four were females, three of which were pregnant. Two were expected to give birth in October and November 2007. They were mated by purebred Bulgarian Murrah bull.

He has already sold 3 mestizos, one male and two females. The two-year old male was sold at P15,000, which is three times the cost of a male native carabao. Although the females were cheaper at P12,000 and P9,000 each, they still commanded a higher price than the native female. He uses the male mestizos as work animals.

Upgrading of his native carabaos started in 1998 primarily because he was told that the offspring produces more milk. Most of the time, however, he only collects just enough milk for his family's consumption, claiming that there is no market for carabao milk in San Agustin. Although a dairy processing center already exists in the town center, he only brings milk to the center when he gets orders.

Incidentally, Rodel won the first prize in the *pinakamaraming gatas* [highest milk collection] contest and the fourth prize in *pinakamagandang inahin* [most beautiful dam] contest during the first Nuang Festival.



Arnel Cosilit, 38, has also produced six mestizos, four through AI and by a mestizo. Calves sired by Mestizo bulls have white hairs, especially at the end of the tail.

Samson Reyes also had three mestizos, while Rolly Abara and Eliseo Reyes likewise had two and four, respectively.

In Barangay Masaya Sur, which is just a few kilometers away from the town center, Crispin Pascual, 60, has six mestizos produced through AI, four of which are females. Two were pregnant at the time of the interview and were expected to deliver last November, as they were inseminated at the same time. The two other females were still heifers. He gave the male mestizos to his children as their work animals.

On the other hand,

although Perfecto Manuel, 47, has already produced three mestizos through AI, two got drowned in the flood brought about by typhoon Harurot.

In Barangay Santos, Marcelo Taguiam, 54, has also produced seven mestizos, three of which were sold to defray the hospitalization expenses of a family member. A female mestizo was sold at P20,000, while the male mestizos, which were then still very young, were sold at P10,000 each.

Of Marcelo's four mestizos, three were females, of which one was lactating with an eight-month old calf. On the other hand, Pablo Tomas, 65, also had three mestizos sired by a mestizo.

Like Pablo, Arturo Soliva, 61, also had produced three mestizos. However, one was produced through AI, while the other two were sired by a Murrah buffalo bull, as Arturo is the Murrah bull handler in Barangay Santos. The mother of the first two mestizos was also a mestizo produced through AI.

Alipio Tamayo, 37, also used AI and Murrah buffalo bull for upgrading, resulting in two mestizos. In contrast, Irineo Antonio, 67, has been backcrossing his female mestizo, which was born in 1995, with a native bull three times, resulting in the reduction of the offspring's buffalo bloodline by half. However, the latest offspring of the mestizo was produced through AI and, hence, its buffalo bloodline has increased to 75 percent.

Severo Manglanlan, 77 and the first prize winner in the *pinakamagandang inahin* [most beautiful dam] contest during the first Nuang Festival, has likewise produced eight mestizos through AI – three males and five females.

He was one of the first 10 farmers who were able to produce a buffalo Mestizo through AI. His first female mestizo, born in 1994, was subsequently artificially inseminated through the years, producing three male and four female mestizos with a bloodline of 75 percent Murrah buffalo. He intended to raise the last heifer as a replacement of the mother.

In Barangay Dappig, we met Absalom Echave and Tertulio Bareng, both high school graduates, 59 and 38 years old, respectively.

Absalom has produced three buffalo mestizos – two males and one female, which he intends to raise as a dam. He has already sold the male mestizos at P7,000 to P8,000 each.

On the other hand, Tertulio is taking care of a mestizo produced through AI under the *paiwi* system. Owned by the municipal agriculturist, the dam has already given birth to two female mestizos produced through AI. Under the *paiwi* system, the owner gets the first female offspring. The dam is much bigger than its mother, a Philippine carabao.

Incidentally, Julio Lamug has been buying buffalo mestizos because farmers with some financial problems ask him to buy their animals. Some farmers reportedly ask him to give even just a portion of the payment and Julio just could not refuse them. In many instances, the animals remain under their care, following the *paiwi* system. In other instances, the animals are given to other interested farmers.

Julio also started to buy female native carabaos a few years after the AI program started. Thus, he now has a total of 13 mestizos, including those that he bought.

In Barangay Laoag, where Julio was raised, his brother Venancio takes pride in having sold a female mestizo at P40,000. Barangay Laoag is about eight kilometers away from the town proper.

Some farmers are interested in buying Venancio's remaining female mestizo and have offered a price of P50,000 but he would not part with the animal at that price. Incidentally, he won the second prize in the *pinakamagaling na buffalo* [most intelligent buffalo] contest during the first Nuang Festival.

On the other hand, Ruben Lamug, 57, has produced six mestizos, four of which are being dispersed under the *paiwi* systems, as there is hardly an open space where animals could be tethered.

Mayor Padilla, BS Industrial Education graduate, at present has nine mestizos in his farm in Barangay Mapalad, which is much farther from the town proper than Sinaoangan Sur. Nine of them were females, of which three were lactating dams during our visit. He had already sold eight mestizos at price ranging from P20,000 to P30,000 each.

### **What They Say**

Although the mestizos produce more milk than native carabaos, Mayor Padilla bewails that if ever farmers milk their animals, they do not collect all the milk because they pity the dams. Not even his caretaker would collect all the milk of his lactating dams.

Irineo Antonio, for instance, collects only two to three liters a day from his lactating dam. While Crispin Pascual knows fully well that more milk could be collected from mestizos, he only collects just enough for family because he is afraid that nothing would be left for the calf. Arnel Cosilit follows Crispin's line of thinking.

Eliseo Reyes tried to milk his dam once but stopped doing it "because I don't have enough time for it."

On the other hand, Rodol Cinco puts a high premium on the mestizos because they command a higher price than native carabaos. This should be expected since the body configuration of the mestizos is much bigger and beautiful than native carabaos.

Thus, "*itutuloyko ti agtaraken kadagiti mestizo* [I will continue to raise mestizos]," he said.

Arnel, however, has nothing but good words for the mestizos as work animals. "*Napintas daytoy tumaod a nuang. Napigsa a pagtalon, sabali ti puersana ta napigpigsang gem native. Nakired iti init ta*

*sako laeng ipalugnak no tumingnga ti aldawen* [This new carabao is different. It is a strong work animal, stronger than the native carabao. It takes until high noon before I allow the animal to wallow in the mud],” he said.

In contrast, he added, a weak native carabao already refuses to work after eight o’clock in the morning when the weather is hot.

The barangay captain of Sinaoangan Sur, Samson Reyes, said the AI program has given farmers a host of benefits. This is why Rolly Abara has decided to raise his two female mestizos so that he would be able to multiply them. In fact, he wishes to have utmost five female mestizos because of the difficulty of gathering forage for the animals.

Pablo Tomas said the Mestizo is patient and a strong work animal such that he would not exchange it for a native carabao. He added that if it is possible at all, he would prefer to have mestizos “because it has more meat if it is butchered and, hence, would command a higher price.”

Overall, these farmers are just a few of the numerous farmers in San Agustin who have come to put a high value on their buffalo mestizos, as the animal has already created a new reputation for their town – THE SHOW WINDOW OF CARABAO UPGRADING IN THE PHILIPPINES.

