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VILLAGE-BASED ARTIFICIAL INSEMINATION TECHNICIANS AS A PRIVATIZED SERVICE

Expanded AI Program widens the coverage of artificial insemination and improves its efficiency in support of ongoing efforts toward massive herd build-up.

Over the years, the Department of Agriculture (DA) has rendered artificial insemination (AI) services in cooperation with local government units (LGUs). However, the limited number of AI technicians directly assigned to serve farmers in the villages has constrained the extent of delivering this AI service, not to mention the lack of support from some LGUs to carry out AI activities. The national AI coverage has not gone beyond five percent of the total breedable female carabaos and cattle (Cruz, 2007).

Solution

To address this gap, the PCC launched the Expanded AI Program (EAI) in 2006. It sought to widen the coverage of the AI program and improve its efficiency in support of ongoing efforts toward massive herd build-up. Likewise, the EAI aimed to generate additional income and new jobs from carabao-based dairy enterprises. Having village-based AI technicians makes it more convenient for farmers to report when animals are in heat or in estrus so that they may access insemination services at the right time. Water buffaloes that manifest estrus need to be inseminated within 24 hours to ensure pregnancy (Sarabia et al., 2009).

In developing village-based AI technicians, PCC at Mariano Marcos State University (PCC@MMSU) in the Ilocos Region undertook the following activities:

Pre-training activities

(1) Selection of trainees and submission of other requirements. Select applicants for AI training based on the following criteria:

- *Personal qualifications:*

- between 18 and 40 years old
 - physically healthy
 - at least high school graduate
 - raises carabao(s)
 - village resident and not presently working outside the village
 - interested, willing and has time to conduct AI
 - accept the responsibilities of a village-based AI technician (VBAIT)
- Recommendation/Endorsement from the barangay chairman, municipal agriculturist and local chief executive (mayor)
 - Submission of carabao census in the municipality, detailing breed, age, and name of farmer-owner
 - Once accepted for training, the LGU and the applicant execute a contract to ensure the latter's active performance for at least two years after the training; otherwise, he/she would be compelled to refund training fee equivalent to Php30,000.
 - In addition, once it has accepted VBAIT applicants for training, the LGU executes a Memorandum of Agreement with PCC regarding the operation of the VBAIT in the municipality.

(2) Census validation. The regional center conducts an estrus synchronization-AI activity to validate the carabao census submitted by the applicant.

*PCC gives the
TRAINING FREE of charge.*



Post-training activities

(1) Equip and mobilize the VBAIT. The center provides the VBAIT complete AI paraphernalia. The center, together with the LGU, introduces and promotes the VBAIT and his services for a fee in assembly or barangay meetings. The PCC, likewise, assists in "setting the estrous cycle" of animals by means of the estrus synchronization technology.

(2) Conduct consultations. The center conducts regular consultations or meetings with VBAITs to solicit feedback regarding their conduct of AI, to determine emerging issues and concerns, to establish distribution schemes for liquid nitrogen (LN₂) and frozen semen, and to promote camaraderie among AI technicians.

(3) Build capability. The center provides continuing education to the VBAITs, who have varied educational backgrounds, in the form of lecture-seminars particularly on animal health care and management; practicum on castration and pregnancy diagnosis; milk collection and handling; forage production; and waste management.

(4) Monitor and submit reports. As stipulated in the MOA and the contract, the VBAITs submit monthly reports of accomplishments to the PCC with a copy furnished to the municipal agricultural office (MAO). The MAO submits report of accomplishment of VBAITs in the municipality to the Provincial AI Coordinator (PAIC) and/or Provincial Veterinarian. The PAIC consolidates the reports of the MAO and submits to the Regional AI Coordinator (RAIC).

(5) Provide frozen semen and LN2 delivery support. The LN2 is a critical component of the AI system. To ensure frozen semen quality, the center developed a regular LN2 distribution scheme. Mother tanks are placed in the care of the MAOs, where VBAITs refill their field tanks at least weekly and PCC replenishes at least monthly (Fig. 1).

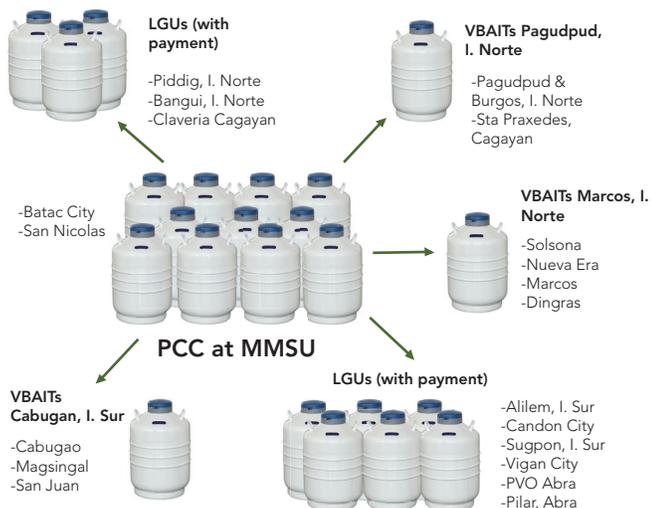
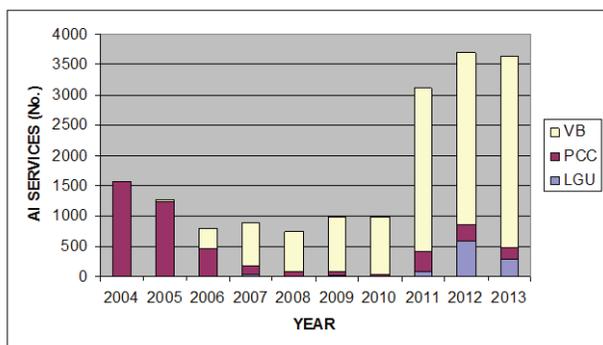


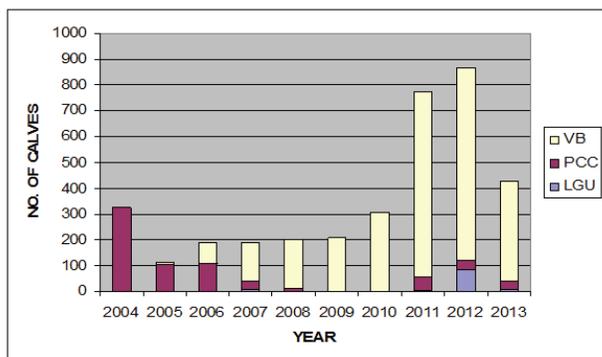
Fig. 1. Sample liquid nitrogen distribution scheme

Results

Increased AI output of VBAITs



Increased calves produced as a result of AI by VBAITs



AI Entrepreneurs



Francisco Alex Dani Passion

- 2012 Most Outstanding VBAIT in the Philippines
- Region I Gawad-Saka Awardee (Large Animal Category)
- 38 years old when trained in July 2005
- Undergraduate, farmer of Brgy. Santiago, Marcos, Ilocos Norte
- CHARGE PER SERVICE- Php500.00; earns Php20,000 monthly out of his AI service fees



Daniel Natividad

- One of the Outstanding VBAIT's in 2010
- 21 years old when trained in 2006
- Full-time VBAIT, covers municipalities of Vintar, Piddig and Sarrat, Ilocos Norte
- CHARGE PER SERVICE- Php500.00- Php700.00 (depending on distance); earns average of Php15,000 monthly out of his AI service fees

Lessons Learned

- Provide continuous capability and confidence building for the VBAITs
- Train preferably undergraduate or out-of-school youth as they are more likely to remain as AI technicians compared to college graduates

Keywords: village-based artificial insemination technician



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ABOUT THE MATERIAL

iASK, an acronym for innovative answers, solutions, and knowledge, is a knowledge product series packaged and produced by the Philippine Carabao Center with the Southeast Asian Regional Center for Graduate Study and Research in Agriculture. This iASK issue is specifically intended for policy makers in supporting a privatized delivery model for village-based artificial insemination technicians in support of the carabao development program.

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