

Improvement of Farm Genetic Attributes Targeted



Minister for Agriculture - Hon. Dr. Mahendra Reddy (2nd from right)

New livestock breeds will be distributed to farmers as part of ongoing efforts by the Ministry of Agriculture to support medium to large scale livestock farming.

This was announced today by the Minister for Agriculture, Waterways and Environment Hon. Dr. Mahendra Reddy, which would be the basis for the enhancement of the livestock sector, aligning with the agricultural growth and expansion strategy.

“The Ministry has an objective to increase production and productivity for goat, sheep, beef and dairy products in Fiji.

“We are establishing new breeds

for cattle, goats, and sheep to be given out to farmers and these new breeds will replace the low yielding breeds which have lost their original genetic traits due to inbreeding over time,” he said.

Minister Reddy said this would allow Fiji to again achieve the self-sustainability of meat products.

“One must not forget the mega potential this sector has for exports to other countries around the world,” he added.

Due to the dairy industry experiencing a decline due to Tuberculosis and Brucellosis, and only having recently started to experience an upward trend in

progress, the need to radically accelerate the program was now more evident than ever.

“Over the next few months, we will be reviewing our approach on the dairy industry and explore pathways to achieve our full potential in this sector, again reducing our reliance on imports and work towards becoming wholly self-sufficient, even if that means reinventing the dairy model in Fiji to achieve high production of milk and quality, good production index, structured milk production, and labour efficiency,” he highlighted.

Minister Reddy reiterated the importance of the livestock to the Fijian Government and economy, as it could assist in decreasing the importation of meat and dairy products by increasing local production.

The Ministry of Agriculture will continually strengthen its support mechanisms for the establishment of medium to large livestock farms.

In relation, over the last twelve months, the Ministry has given out fencing materials to over 400 farmers to establish medium paddocks to expand their livestock holding from small subsistence level to medium commercial holding.

“The Ministry has recently obtained \$600,000 from a donor and will now provide fencing material to 528 more farms over the next 3 months. We expect this project to begin in a month and we expect farmers to establish paddocks within three months from the delivery of the fencing materials,” said Minister Reddy.

SUSPENSION OF AGRICULTURE COVID-19 RESPONSE

The Agriculture COVID-19 Response Initiative has been a major success as witnessed by the overwhelming response received by Fijians all over the country who have taken advantage of the Ministry's program.

However, the Ministry of Agriculture wishes to inform and again remind the general public that the Agriculture COVID-19 Response Package initiative was suspended on the 17th April 2020 for two weeks.

Due to the devastation caused by Severe Tropical Cyclone Harold, the Ministry has re-diverted resources to ensure that the affected Fijian communities can also have access to food of acceptable quality and nutritious value.

The Agriculture COVID-19 Response Initiative will resume on 04th May 2020, as and when resources are available to support the continuation and completion of the initiative.

Also, upon the resumption of the COVID-19 Response initiative,

a dedicated Corporate Employers Seed Package initiative for corporate organizations will be implemented concurrently with the Home Gardening initiative as announced by Minister for Agriculture Hon. Dr. Mahendra Reddy earlier this week.

“Since the launch of this Seed Package, we have received calls from the Corporate sector to provide a specific number of packages for their employees who have lost jobs,” he said.

“We wish to announce that we will re-package the existing home gardening seed package for these employees calling it as Corporate Employee Seed Package (CESP),” added Hon. Reddy.

Under the CESP program, corporate entities are required to inform the Ministry of Agriculture about the number of employees whose employment has been affected and where their office is located, and the Ministry will deliver the packages to the office and their employees can pick their packages from there.



Uprooted cassava plant in Logani Sebi, Tailevu due to Cyclone Harold.

Artificial Insemination of Pigs



Pig under Artificial Insemination

What is Artificial Insemination?

Artificial insemination (AI) is the process of collecting sperm cells from a male animal and manually depositing them into the reproductive tract of a female.

Herd fertility is critical to the success of any breeding pig enterprise. Artificial Insemination (AI) has now started to dominate the reproductive process on many Farms. It brings superior sire line genetics onto the unit and across many females, which could not normally be achieved cost-effectively by natural matings.

If operated correctly, it should also guarantee that each mating is carried out using viable sperm, something which cannot be guaranteed practically with a boar.

Advantages

- The genetic influence of good boars can be spread more widely.
- AI is a safe, cheap method of introducing new genes into pig herds, especially from those herds classified as specific pathogen-free, minimal disease or high health status, compared with bringing in live pigs.

- There is less risk of introducing exotic diseases with AI than in the importation of live pigs.
- AI overcomes size differences between boars and sows.
- It may be used during temporary shortages of boars from death, lameness or failure to work.

Disadvantages

- Reduced farrowing rate (50%) with frozen semen.
- Lower than average results with chilled semen stored longer than 72 hours.
- Disappointing results where AI is poorly timed or done incorrectly.

Preparation of AI

Preparations for A.I. include making sure that all necessary equipment ready and available.

Catheter

The catheters commonly used for AI are the reusable rubber ‘Melrose’ with spiral tip or disposable plastic catheters having several types of tip.

- All are easy to use and achieve good results. Many inseminators prefer catheters with spiral tips that ‘lock in’ like the boar’s penis, reducing back-flow during insemination.
- A drawback with reusable catheters is the high standard of cleaning and hygienic storage needed between uses.

Semen bottles

- Chilled semen bought from AI centres comes in ready-to-use inseminating bottles

or tubes.

- If semen is collected and used fresh or diluted on-farm, a supply of clean plastic inseminating bottles will be needed.
- Can also use 60 ml syringe for administering the semen.

Care of Equipments

- Since boar semen is an excellent medium for growing bacteria, all AI equipment must be kept clean.
- Immediately after use, soak reusable equipment in cold water (distilled) so that semen or other material is easily removed later.
- Do not use soaps or detergents because they affect sperm viability. Particles of gel can be removed with a brush.
- Rinse, then boil rubber ‘Melrose’ catheters in distilled water for 10 to 20 minutes before reuse.
- Tap water must not be used for rinsing because it leaves mineral deposits on the equipment.
- Store equipment in a dust-free cabinet or when completely dry, in a sealed plastic bag.

Steps in AI

- Make sure your female is in an area where you can easily, and safely, conduct the A.I. procedure.
- If a boar will be used for additional stimulation (due to pheromones), keep it in an alleyway or the neighbouring pen.
- Best results may be achieved if the female is in a familiar area so she is not distracted and does not feel the need to explore new surroundings.

Heat Detection

- Vulva reddens
- Honking sound
- Mounting behavior
- Standing to back pressure

Vulva Hygiene

- The vulva and surrounding area should be cleaned with a disposable single-use paper towel or tissue prior to insemination

Preparing Catheter

The catheter is used to move the semen from the container (tube, bottle, syringe) into the female’s reproductive tract.

Keep the catheter clean by leaving it in a sealed plastic bag until it is ready for use.

Stimulating Female

The female should be stimulated to stand in a manner that simulates the boar’s action in a natural mating situation.

This includes:

- Applying pressure to her back
- Applying pressure to her side and flank with your knee
- Rubbing her sides and massaging her udder with your hand.

Inserting Catheter

When you are ready to insert the catheter make sure to follow these steps closely:

- Insert it slowly
- Direct the tip upward, usually about 30° Rotate it counterclockwise during insertion
- The catheter should be locked into the cervix when resistance is felt.
- Stimulation may occur before, during and after the insemination

Depositing the Semen

This is the most time-consuming part of the A.I. process, Do Not Rush this step. Make sure you follow these guidelines:

Do not open the semen container until the catheter is inserted and locked in the cervix. The goal of the process is to get as much semen into the female’s reproductive tract as possible while eliminating leakage and backwash of the catheter.

