

LIVESTOCK VALUE CHAIN

First Issue

July 2019

STUDY TOUR TO INDIAN GRASSLAND AND FODDER RESEARCH INSTITUTE (IGFRI), JHANSI

A team of two field veterinary officers, one senior extension specialist from Assam Agriculture University (AAU), one subject matter specialist from Krishi Vigyan Kendra (KVK), one veterinary executive from WAMUL and two from dairy and livestock sector from PCU visited Jhansi from 01st April'2019 to 04th April'2019. The main purpose of the visit was to get updated information on green fodder and forages available for the livestock population in Assam. Accordingly, a series of detailed discussions were held with all concerned principal scientists including the Director, **IGFRI** They put some valuable inputs to alleviate the scarcity of feed and forages in this sector in Assam.

IGFRI have been adopting some innovative strategies which are remarkable in the production of feed and forage in the country and these are also being well accepted by the farmers.

They suggested the team to follow the approaches which would substantially help proper utilization of resources and increase productivity at all relevant fields:

- a. Selection of soil type:** In general light soils are suitable for leguminous fodder crops and fertile soils are suitable for non-leguminous soils.
- b. Silage making:** thick stem fodder may be selected for silage making process to provide feed during scarcity periods like monsoon season.
- c. Rotational cropping / intercropping:** In between short duration fodder, other fodder may be sown to provide sufficient fodder throughout the season and make available use of lands.
- d. Enriched feed block technology:** The fodder and feeds constitute about 60% of the total cost of milk production; hence the cost of milk production can be significantly lowered by adopting a feeding practice of enriched complete feed block.



Officials visit to IGFRI, Jhansi

PROCUREMENT OF 2nd BATCH OF LARGE WHITE YORKSHIRE BREEDER PIGS

The second batch of Large White Yorkshire breeder pigs (103) have been procured from Punjab consisting of 18 males & 85 females and the same had arrived on the 11th of May'19 without any mortality during transit due to implementation of all standards protocol during the transit. Following the standard protocol of quarantine, they were kept for a week in the quarantine facility at Morigaon Govt Pig Breeding Farm. Absence of any clinical manifestation of diseases in the pigs during the isolation period indicates fit for introduction into designated farms. Accordingly, the pigs were relocated to six farms located at Sonapur, Rani, ALPCo, Diphu, Morigaon and Khanapara Base Pig Breeding Farm.



Piglets on transit from Punjab

VETERINARY OFFICERS TRAINED AT NRC ON PIG AS MASTER TRAINERS

Among animal husbandry, piggery holds a unique advantage due to its prolific nature, faster growth rate, higher feed conversion ratio, and dressing percentage. Land resources have been diminishing due to high human population growth and rapid urbanization. Pig farming and pig production is an important sector for the promotion of livelihood and nutritional security. Due to the rapid change in the farming practices, development of new technologies and possibilities of occurrence transboundary diseases, the veterinarians must keep themselves updated with the latest knowledge to lead the farmers and entrepreneurs. The capacity building training programme has been framed primarily to train the master trainers to share the knowledge to the interested beneficiary/farmer/entrepreneur in adopting scientific pig rearing practices in an enterprising manner. The same was done in four batches under the Pork Value Chain initiative through APART.

Under the capacity building of master trainers, they have been taught about GAHP (Good Animal Husbandry Practices), pig production scenario in national & regional aspect, pig genetics resources and breeding strategies, pig farm management and nutrition, reproduction, pig diseases and their management, abattoir construction and hygienic pig slaughter, pork processing and value addition and pig by-product utilization and abattoir waste management etc.



1st batch Veterinary Officers



2nd batch Veterinary Officers



3rd batch Veterinary Officers



4th batch Veterinary Officers

PIG BONDHU TRAINING

Pig Bondhu, a representative from the pig rearing community have been selected from the APART Districts and trained at NRC on Pig on the improvement of breeding, feeding, healthcare, management and Artificial Insemination (AI) Services

Pig bondhus are equipped with Artificial Insemination gun and other accessories to carry out their insemination work with liquid boar semen at the doorstep of the farmers. The pig bondhus will operate with 224 breedable sows for AI service and at least 500 fatteners produced in a year to make it remunerative & sustainable.



Trained pig bondhus

VISIT OF WORLDBANK CONSULTANT DR HELEN LEITCH

Dr. Helen Leitch, Senior Livestock Specialist, World Bank visited Assam (25th April to 5th May'19) and reviewed the Dairy and Livestock Sector of APART. She also visited the quarantine facility and Govt Pig Breeding Farms. She recommended for the improvement of biosecurity measures to prevent transboundary animal diseases like African Swine Fever (ASF), Classical Swine Fever (CSF), Foot and Mouth Disease (FMD) and Porcine Reproductive and Respiratory Syndrome (PRRS).

Dr. Leitch emphasised on ASF, as till date no treatment or vaccine is available, globally and the disease is causing havoc in South-Asian countries causing huge economic losses. ASF is a highly contagious viral disease of pigs. It is caused by a DNA virus of the Asfarviridae family. The disease is prevalent in some African and European countries but in Asia, it is reported for the first time in China on August 2018. The disease mainly spreads through direct contact with infected domestic/wild pigs or indirect contact through ingestion of contaminated material (e.g. animal excreta, utensils, food waste, feed, garbage etc). Fortunately, the disease does not have any zoonotic importance. The biosecurity is the main preventive measure to control the disease.



Visit to 'Dairy Model Village' under WAMUL, Borjari, Morigaon



Visit in quarantine facility in Morigaon.



Dr Leitch with WAMUL team

Dr. Helen Leitch, Senior Livestock Consultant, WB visited the Model Dairy Village – Borjari under WAMUL operated area. The WAMUL officials and the farmers of the locality informed that they use only herbs and herbal products to treat their ailing animals. They also claimed that their milk is devoid of any chemical residue. WAMUL wanted to establish this village as a model dairy village for production of **chemical residue-free milk**.

CLUSTER LEVEL MEETING

Cluster level meetings were organized successfully in different APART districts with the objective to bring about awareness among the FIG members on breeding, feeding, management, artificial insemination and zoonotic diseases.



Cluster level meeting of FIG members

COLLECTION OF HEART BLOOD FROM PIG FOR SEROSURVEILLANCE OF JAPANESE ENCEPHALITIS VIRUS (JEV)

JE is caused by a virus called Japanese encephalitis virus (JEV) and is transferred from infected animals usually pigs and wading birds to humans through the bite of infected Culex mosquitoes.

Under APART, serosurveillance of JEV has been conducted in phase manner to check the presence or absence of antibody. The finding will definitely help to forecast JE risk villages prior to the onset of the disease.

A well protected pigsty with mosquito proof net has also been advised by the experts to protect the pigs from the mosquito bite. The simple but innovative procedure not only protects the pigs but also will disrupt the transmission cycle of JE Virus.

A mosquito proof pigsty have been designed and kept as a demonstration unit at NRC on Pig for the trainees as well as for the purposeful visitors.



Blood collection from pig at field level



Mosquito proof pigsty demonstration at NRC (Pig)

FEED SAMPLE COLLECTION FOR RATION BALANCING

On 8th June'19, the Veterinary Officers from APART districts organized a "Field Day" for collection of conventional and non-conventional feed samples. The proximate analysis of the locally available feed resources is also very essential. A substantial amount of local feed resources could be a part for preparation of the balanced feed. The basic idea to find out the nutritional status of non-conventional feed staff is to give precise information on the level of incorporation in the balanced feed. The collected samples were later sent to the national Research Centre on Pig (NRCP) for chemical analysis.

The evaluated nutrient content of the non-conventional feedstuff and ration balancing formulas will be fitted into software to be developed under this project and that will be used through tablets to be provided to pig bondhus. Finally the farmers will get the software based improved service at their doorstep.



Veterinary Officers in field for collection of feed samples.

VACCINATION

Under Pork Value Chain:

Cysticercosis is a dreaded zoonotic disease transmitted from pigs to humans causing neurocysticercosis which may lead to death. This vaccine for the first time has been procured in large quantity (276000 doses) and immunization has been continued in pigs under APART districts. Foot & Mouth Disease in the pig is also a highly contagious disease; to escape from this as well as to immune them against this disease vaccination has been continued to cover the entire population in designated areas.

Worm infestation in pigs is not uncommon, which causes stunted growth and debility in the growing and adult pigs. To increase the feed conversion efficiency and to get better productive and reproductive life deworming is mandatory for pigs, so, recommended doses were provided for the farmers for administration into pigs.

The sow milk is deficient in iron, suckling piglets naturally get affected due to iron deficiency. The iron supplement was provided to the piglets to cope up with the deficiency.



Vaccination of Pigs

Under Milk Value Chain:

Vaccinations of cloven-footed animals are very essential to provide herd immunity. The susceptible animals immunized against the dreaded diseases like HSBQ and Brucellosis is undertaken and is in process in the APART districts.



Vaccination of cattle

PARTICIPATION IN WORKSHOP ON PIG BREEDING FARMS

A two day workshop on “Mentoring Government Pig Breeding Farms’ was held on the 11th & 12th February 2019 at OTI, Khanapara, Guwahati. This workshop was organised by the Directorate of Animal Husbandry & Veterinary, Govt of Assam under APART, as a refresher workshop for the AHVD officials to discuss on the different perspectives of pig husbandry. The training was delivered by International Livestock Research Institute (ILRI), a knowledge partner of APART.



AHVD Officials at the workshop on “Mentoring Government Pig Breeding Farms’

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ARIAS Society

(An Autonomous Body of Govt. of Assam)
Agriculture complex, Khanapara, G.S. Road,
Guwahati-781022 (Assam, India)

Tel: +91 361-2332125; Fax: +91 361-2332564;

email: spd@arias.in,

Website: www.arias.in

Grievance Rederessal officer: grievances@arias.in