

Promoting fresh semen AI to raise the profit of small pig farmers

Context

Samarth-NMDP had conducted the first ever **frozen semen artificial insemination** training for grandparent seed stock (GPS) farms that maintain pure breed of pigs on June, 2014 by importing exotic and superior breeds like Berkshire, Duroc, Large Black and Hampshire from Swine Genetic International, USA. The aim was to address the problem of excessive in-breeding, leading to low quality pigs throughout Nepal. Five GPS farms - government and private - have already started frozen semen AI.

The next natural step was to move to **fresh semen artificial insemination** which would not only be possible to conduct in Nepal but will also be affordable by small farmers.

Fresh boar semen AI training

Samarth-NMDP in collaboration with Department of Livestock (DLS) and Nepal Agriculture Research Council (NARC) organized a six-day training of trainers (ToT) on **Fresh Boar Semen artificial insemination** from 12th Jan 2016 to 17th Jan 2016. Neither the government nor the private sector had received such training before. Samarth also helped establish the first lab for fresh semen AI in Pokhara livestock Pvt Ltd where the training had been organized.

Nineteen attendees who were provided practical and theoretical training on fresh boar semen AI were from the private farms as well as from the government farms: Pokhara Livestock Pvt Ltd; Kulung Bangur Farm House; Regional Agriculture Research Station Tarhara; Centre for Pig and Poultry Promotion Office (CPPPO); National Livestock Breeding Centre (NLBC); Swine And Avian Research Program (SARP); Animal Breeding Division (ABD) and livestock development farm Pokhara.

The candidates were provided theoretical and practical knowledge on extracting and collecting boar semen, and operating lab equipment for processing, packaging and storing of semen.

What next

After training the GPS farms to produce fresh semen for artificial insemination, Samarth is planning to train the **service providers / inseminators** who will then provide the services to village breeder farmers. Potential service providers / inseminators identified by Samarth are government technicians; current breeder farmers who could use the service as well as provide service to others; and service providers currently engaged in AI of cattle and buffalo.

Development impact

Natural breeding is the only form of breeding in pigs among small farmers. Therefore, small breeder farmers have the compulsion to raise a boar for breeding. This is an added cost to them. If they start receiving fresh semen AI services, they will have access to superior quality and disease free semen, their cost of production will decrease and profit will increase.



Theoretical class on AI in pigs in Hotel Crown Himalayas, Pokhara, Kaski by Dr. Kevin Rozeboom from GENEPro USA



Demonstration of boar training and semen extraction to the participants by the trainer at Pokhara Livestock Pvt. Ltd., Lekhnath, Kaski



Dr Kevin Rozeboom, SGI/GENEPro, USA, demonstrating on how to extract semen using a dummy



Group picture of the participants on the final day of the training