FOSTERING CLIMATE RESILIENT UPLAND FARMING SYSTEM: KOLASIB DISTRICT

Success Story of Boar Semen Station, Kolasib District

Reproductive assistance techniques, such as Artificial Insemination (AI) have significantly improved production rates on pig farms in recent years. According to the FAO (2016), pork is worldwide the most consumed type of red meat thanks to its excellent rate of food conversion, generating a significant demand for world food security. Consequently, implementing AI reproductive techniques allow optimizing production conditions, reducing their cost and increasing their efficiency. It must be recognized that the optimization and improvement in the reproductive processes of pig farms with the implementation of reproductive assistance services such as AI, can lead to greater productive performance and improve efficiency.

FOCUS Project recognized that Artificial Insemination is the key in pig reproduction and any effort to develop this activity will go in a long way in the breeding activities both in the rural and urban areas as well as up to village level. The project proposed to set up boar semen stations, with proper cold chain extending up to the village level at the farmer's door step.

Following this, Boar Semen Stations were constructed in four (4) districts viz. Kolasib, Serchhip, Mamit and Champhai district. Civil construction of all the buildings and biosecurity were completed by AH & Vety in convergence with National Livestock Mission (NLM) which account for 61.70% of the total project cost. Material equipments, propulsion cost, technical and non-technical staff salary and other operational cost were contributed by FOCUS which account for 38.30% of the total cost.

The setting up of Boar Semen Station is very fortunate for both the Department of AH & Vety and the Piggery farmers. When there is no provision for Artificial Insemination, pig farmers used the breeding boar for reproduction which is time and money consuming and associated with risk of contracting diseases.

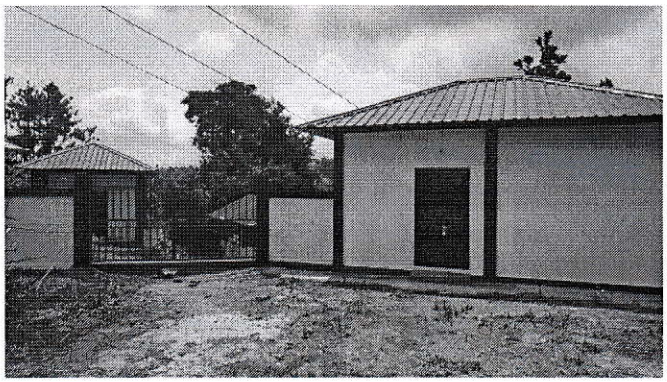
The fully equipped laboratory is beneficial in identifying the quality of semen for insemination, the reproduction capacity of boar and any presence of defect in the sperm. Availability of a good quality boar of known pedigree made it possible to improve the overall population of pig as the semen collected from a single animal can be used to inseminate large number of sows. The availability of hot and cold storage box for transportation and extender of semen made it possible to preserve the semen for a longer time to transport and disseminate the semen to a wider area. With the help of Boar Semen Station there is high hope that the district will soon be self sufficient in pig and pork production.

The Boar Semen Station in Kolasib has started functioning under the project since April, 2021 serving farmers from different villages within the district by providing timely Artificial Insemination with superior semen quality. During April, 2021 to March, 2022 AI service was

delivered to 2573 animals in the Semen Station cover area. Through this service, 11404 numbers of piglets (5858 male and 5546 female) were born. With natural service the farmers had to pay Rs. 2000 inside Kolasib town area. AI with superior quality germplasm was done only at Rs. 500 per insemination. Farmers could save significant amount of money using AI service. With piglet born of 11404 numbers, after considering 5% mortality, farmers in Kolasib area generated an income of about Rs. 750 lakh through piglets alone. Apart from this the Semen Station could sustain itself for feed cost, cost of production of packed semen and other additional cost such as cost for deworming and medicine etc.

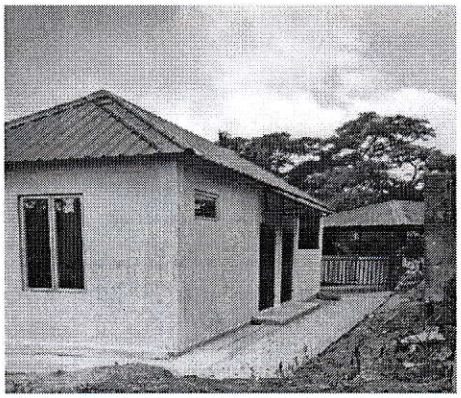
Unfortunately, Since April 2022, regular AI service could not be provided to the farmers as the Station faced loss of its breeding boars due to African Swine Fever (ASF). However, during those times, limited AI service was provided to those farmers who requested the service by procuring the boar semen from Regional Semen Station, A.H & Vety, Dept. Selesih.

After following standard protocol for ASF, the Semen Station had kept replacement boars and trained them for AI service. As a result, the Semen Station had resumed its normal services since January, 2023 with an insemination of 106 animals during the month.

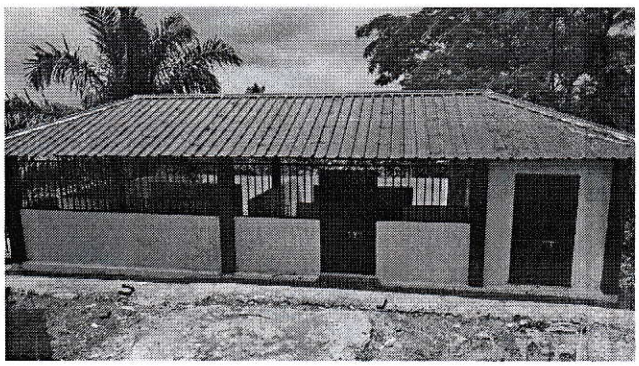


BSS entrance with Changing room

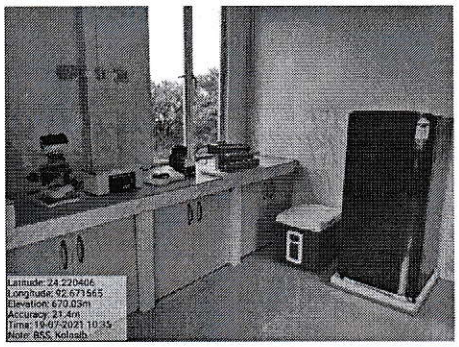
Office Room



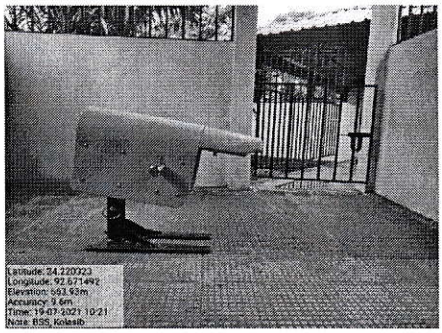
Laboratory building



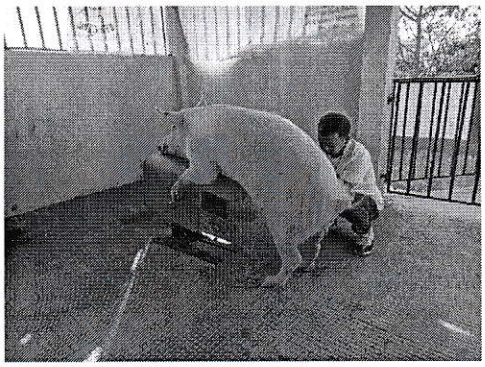
Sty for Breeding Boar



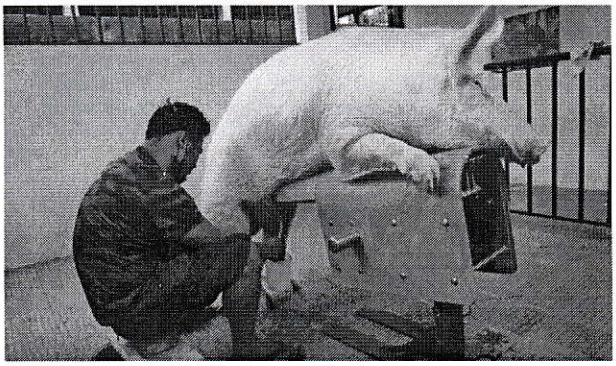
Laboratory



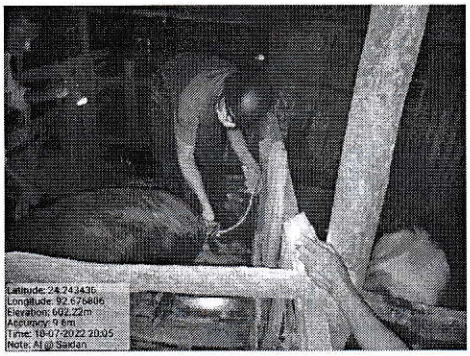
Semen collection area with Dummy



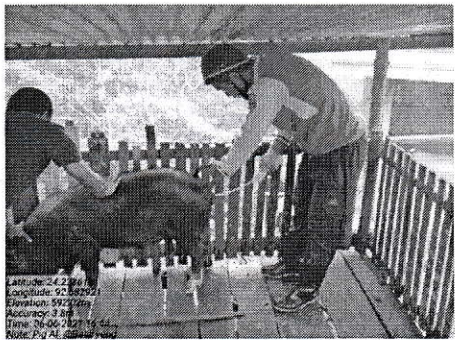
Training of Boar



Semen Collection



AI performed at night



VFA under FOCUS performing AI

Dated Kolasib, the 10th February, 2023

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