



Engineer Becomes Agri-Preneur through Livestock and Poultry Based Farming System

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ABSTRACT

Mr. Monbhai Thamoung, an educated tribal youth involved himself through developing small multi-species livestock based farm comprising poultry, piggery, dairy and goatry and gain popularity among the farming community at Namsai district (Lat. 27.670826°; Long. 95.916087°) of Arunachal Pradesh. The young entrepreneur acquired his knowledge and skill in the field of livestock based farming system through various trainings and demonstrations conducted by KVK Namsai. The overall net income generated from his existing model of farming is Rs.61200/- a year with benefit cost ratio of 2.8 (B:C ratio) by selling 36900 eggs and 1350 kg of poultry meat, 40 piglets and 2 fatten pigs, 1620 liter of cow milk, 1 goat and around 2q of farmyard manure. He encouraged many farmers of the district to develop his model of livestock based farming system in scientific way by utilizing household resources for maximum profit. He is conferred as best farmers award for his contributions in livestock sector during 2023 by the district administration of Namsai district.

Situation analysis

Mr. Monbhai Thamoung, an educated unemployed tribal youth at Kaisu village of Namsai district, Arunachal Pradesh completed his B. Tech. degree during the year 2010. The family holds a total of approximately 4.5 ha of land and utilized only 1 ha of land for paddy cultivation traditionally as a tool of livelihood like other village family. Due to small family size and non availability of labour in Namsai district, his family cannot grow crops in entire land. They have a small area of 0.5 acre upland adjoining to their house where they practiced in rearing of local cattle, pig and poultry in traditional way and utilized their products mostly for family consumption. After completion of his graduation, he engaged himself by running a computer centre in Namsai township and started earning of rupees 10-15 thousands per month with total annual income of around Rs.1.5lakh. Mr. Thamoung was not satisfied with that income and decided to involve himself in livestock and poultry based farming system. Initially he started rearing broiler chicken with the capacity of 100 birds per batch during the year 2018. He sold the broiler meat

directly in the market without involving middlemen and satisfactory income was generated. At this point, he felt the huge market demand of poultry meat and egg at Namsai district and almost all poultry meat and eggs were outsourced by Namsai district. As per vision document of Namsai district 2030 (2018) there was demand of 1170 (MT) meat in the district against production of 911(MT) where as requirement of 18500000 nos of egg against production of 2800000 nos (18th Livestock Census 2007). Though the market was there, Mr. Thamoung was reluctant to increase his batch strength due to early chick's mortality.

Plan, implementation and support

The poultry farmers of Namsai district are mostly unorganized and they are being exploited at various stages of the value chain. Due to lack of awareness and technical knowledge on standard farm operation and farming system, most of the farming community of Namsai district deprives to earn satisfactory income with their existing resources despite of investing hard labour and time. In the course of time, Mr. Thamoung came in



Poultry unit



contact with KVK Namsai and approached the KVK scientist for technical guidance as well as skilling in the subject.

Subsequently, the experts of KVK Namsai had visited the farm site of Mr. Thamoung and put few suggestions to him considering the existing land of 0.5 acre and small family size. They recommended establishing a small multi-species livestock based farming system comprising poultry, piggery, dairy and goatry to explore maximum utilization of land and labour. Accordingly, Mr. Thamoung agreed to establish the units as per the direction of KVK, Namsai and

setup two poultry units separately with the capacity of 500 birds each, a piggery unit of 10 animal's capacity (8 sows and 2 boars) and a small goat house in scientific way. Training on Scientific poultry (broiler, improved variety and local chicken), piggery, dairy and goatry were also imparted simultaneously by the expert of KVK Namsai. He was also undergoes 7 days hands on training conducted by KVK Namsai on "health management of livestock and poultry" skilling with how to infuse medicines and vaccines in different routes to farm animals and birds.



Piggery unit

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Initially, KVK, Namsai offered 100 numbers of DOC of Kalinga brown variety and 100 DOC Sonali chicks. The KVK also provided 4 numbers of cross-bred (Hampshire & Yorkshire) piglet. Later, 100 more BV-380 variety and 3 more cross-bred piglets were provided to him. He was also asked to inseminate his local cattle with improved semen viz. Sahiwal, Jersey or Red Sindhi semen straw exist in local veterinary dispensary and asked to mate his estrous female goat at breeding centre ran by KVK Namsai with Sirohi, Jhakrana and Assam hill buck. He followed all the instructions provided by the experts of KVK Namsai and started generating more income from the flock. Later on he has strengthen his farm complex by purchasing more nos. of animals and birds and at present he holding 525 numbers of poultry birds (217 improved variey poultry. 200 broiler, 108 chicks), 17 pigs (5 sow, 3 boar, 9 piglets), 5 goat and 6 cattle (3 milch cow).

Output

As per KVKs suggestion, Mr. Thamoung adopted scientific way of livestock and poultry management practices including feeding, breeding and healthcare. Broiler and pigs are reared as intensive system of management whereas improved variety poultry bird, cattle and goat are reared as semi-intensive system of management. At present, his overall net income generated from his existing model of farming is Rs.612000/- a year with benefit cost ratio of 2.8 (B:C Ratio). The farm product is mainly sold in the local market whereas demand also comes from the adjoining areas of Namsai district.

From the poultry enterprise, earned net income of Rs.391000/- by selling 36900 numbers

of egg and 1350 kg of poultry meat with B:C ration of 2.8. Improved variety poultry birds viz. Sonali, BV-380, Kalinga brown etc. are kept for production of eggs whereas broiler are reared for meat purpose sold at the age in between 2-3 months. However, the extra male of improved variety birds are also sold at their maturity after keeping required numbers of male in the flock for production of fertile egg at 1:7 ratio.

A total of 40 piglets and 2 numbers of fatten pigs are sold from his model farm directly in the local market with net income of Rs.345000/- (B:C ratio 2.4). Cross-bred pig of Hampshire and Yorkshire are being reared by Mr. Thamoung utilizing market feed along with homemade feed prepare through locally available unconventional feed stuffs to reduce burden of feed cost. The sows farrowed average 8-9 piglets with good body weight at birth. He also practiced fattening of pig and sold at market as raw meat (pork).

Around 1620 liter of milk produced from his three local cows in a lactation period earning net income of Rs.61000/- with B:C ration of 4. His cows grazed at the community grazing field whole the day. Moreover, a little amount of concentrated feed is offered to the animals at morning and evening.

Mr. Thamoung rears his goats investing minimum expenses by utilizing locally available feeds and fodder. He started mated his estrous doe with Jhakrana and Sirohi buck at KVK Namsai goat breeding unit for production of quality kids. From goatery enterprise, he earned Rs. 15000/- as net income by selling one goat with the B:C ratio of 6.

Simultaneously, Mr. Thamoung also sold farm yard manure prepared utilizing farm waste



Goatry unit



F₁ Serohi cross kid



Dairy unit



Farmyard manure/ pit

viz. dung, poultry drops and other farm residues which have high market value and sells in the markets regularly. He earned amount of Rs.30000/- as net profit by selling the farmyard manure.

Outcome

Keeping small flock size of Cattle, Pig, Goat and Poultry for family consumption is common in almost every village household of Namsai district but they rear with local variety mostly in traditional way. Introducing high performing breed/crossbreed of livestock and poultry with scientific intervention may lead to develop a livestock based entrepreneurship in every household to generate family income. However keeping 3-4 enterprises together facilitate efficient utilization of land, labour and time.

Mr. Monbhai Thamoung has earned a good annual income by adopting multi-species livestock based farming system and now become a source of inspiration for the farming community in the district. He sells his farm products in the name of M/S. M.T. Enterprise owned by him, technically supported and guided by KVK Namsai. He also practiced hatching of fertile eggs with local chicken (Natural hatching) for production of quality chicks to maintain his flock size. By seeing the success of Mr. Thamoung, many farmers of his locality now adopted his farming model. They took the fertile eggs from Thamoung's farm and produced chicks through natural hatching. Mr. Thamoung also supplies quality piglets to the farmers in low price to establish new enterprises. He also practiced traditional "Adhi" system of livestock and poultry rearing where his livestock and poultry are maintained by other farmers and in return gets 30 percent of its production. In this way he also

encourages the poor needy farmers to develop their own enterprise. Being a skilled animal health worker as trained by KVK Namsai, Mr. Thamoung engaged himself to treat and vaccinate his farm animals and birds regularly as well as to the other farms of his locality. He also demonstrated in front of the farmers how to utilize locally available unconventional feedstuff for farm animals to reduce production cost since maximum cost of production comes from animal feed.

Impact

The new model of multi-species livestock based farming system practiced by Mr. Thamoung utilizing mostly household resources gain popularity amongst the farming community of the Namsai district. Farmer use to visit his farm complex for practical learning and to seek guidance to develop such model. Beneficiaries of agriculture and allied departments of the district are also made visited his farm with their farmers as a part of exposure visit.

The progress and success of Mr. Thamoung is highly appreciated by the district administration of Namsai district. They invite him to put stall with his farm products at district as well as state level celebrations like Arunachal Pradesh Statehood Day, Republic Day, Independent day etc. He was also awarded as best farmer as well as best stall during the statehood day 2023 by the district administration. He has also rendered his service as a member of Scientific Advisory Committee of KVK Namsai.

REFERENCES

- 18th Livestock Census 2007, Govt of Arunachal Pradesh (Namsai District Vision 2030).