

Dairy Farming in Nagaland

An Emerging Enterprise

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The challenges faced by North Eastern India in general and Nagaland in particular for food and nutritional security to fast growing population needs an integrated approach for livestock farming. With increasing population, income and urbanization, demand for animal proteins has increased. In India, there has been a significant increase in the milk production in the last few decades. India ranks first in the World in the total milk production. However, there is large variation across the region in the milk production as well as consumption. This is due to many factors including food habits of the people which develop over a period of time. Also, as economy develops, people tend to consume more livestock products and therefore, lead to shift in food habit. This particular argument probably stands for lack of development of dairy in North Eastern region in particular. Nagas are known to eat highest amount of animal protein in the form of meat. However, availability of meat is a major issue due to multiple factors. Nagaland imports maximum numbers of pig for consumption. Pig population in India as well as in Nagaland is decreasing and there is reports of African Swine Fever in Assam and Arunachal Pradesh. This will further lead to shortage of meat in Nagaland.

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TO minimize the risk of food security, it is pertinent to diversify the farming to include dairy, goater, poultry and piggery etc. Therefore, there is need to put emphasis on dairy farming in Nagaland. Traditionally, milk consumption is low in Nagaland. There is a general notion that Nagas are meat eater and not a milk drinker. However, this is also due to non-availability of milk in sufficient quantity. Also, there is higher lactose intolerance in Mongoloid people in North East India. However, there is an increasing demand of milk products like cheese, yoghurt, etc.

Nagaland is inhabited by sixteen major tribes, each occupying its own distinct region in the State. Each tribe has its own unique culture and food habit, and cattle rearing were common in the past. Agriculture is the prime source of livelihood for the majority of rural population in this

region. It is characterized by subsistence, low input-low output, technologically lagged mixed farming system, and is dominated by smallholders. Although cereals dominate the cropping pattern in Nagaland, livestock are an important component of mixed farming system. Recently, there is increase in urbanization, particularly in Dimapur and Kohima district. This leads to development of cosmopolitan culture in these towns. People are becoming more health conscious and there is a gradual shift towards vegetarian food habit. This leads to increase in the demand of milk and milk products. Dairy entrepreneurship in Nagaland is in its infancy and at present; there are very few Nagas who has taken up dairying on a large scale. There are five cattle and one buffalo breeding farm in Nagaland. Nagaland Livestock Development Board (NLDB) is a nodal agency for

implementing of national programme on bovine breeding which include dissemination of artificial insemination technology in cattle and buffalo. Cattle population in Nagaland is 76.87 thousand only in 2019 and has decreased substantially (383.308 thousand in 1997). This is a general trend in all livestock species in Nagaland. However, milk production has increased from 54 thousand tonnes in 2001-02 to 72.57 thousand tonnes in 2018-19. Total milk requirement of the State is 117.71 thousand tonnes and there is deficit of around 35-40%. Similarly, per capita availability of milk was only 81 g in 2018-19 compared to national average of 394 g. This shows that there is a potential for development of dairy industry in the Nagaland. As per NSSO, milk consumption is almost three times in urban area compared to rural area of Nagaland. There is demand of milk

Success Story

Mr. Arū Khate (68) is a matriculate and a full-time farmer from Ura village, Dhansiripar block in Dimapur district of Nagaland. He started his cattle farm in 1997 at Kuda village with 10 milch cow and later



shifted the farm in 2007 to Ura village. He has 42 acres land where he grows napier grass, cow pea, bajra and maize for his dairy farm. He keeps 50 to 60 adult cattle of Holsatian Frisien breed and 6-10 Murrah buffaloes besides young stocks. He has made his dairy farm with mix of local materials. He follows two feedings in a day (morning and evening). The feed is a mixture of crushed rice, maize, waste brewery and pea powder, which is all-together, mixed with water and fed to the cattle. He himself along with his son looks after all the operation of dairy farm. He has taken dairy farming training at ICAR-NDRI and also at Israel. Artificial insemination in cattle and buffaloes is done by himself in his farm. He also does estrous synchronization and fixed time artificial insemination in cattle and buffalo. He used to visit ICAR Nagaland Centre for

technical knowledge and sourcing of buffalo semen from ALDA, Guwahati. Fresh milk is made available on a daily basis to different outlets like DIMUL, hotels, plazas etc. Supply of fresh milk to DIMUL constitute



70-80%. The farm has ten people working daily which constitutes 2 drivers and 8 working people. According to Mr. Arū Khate, maximum milk production is during winter and it decreases during summer season. In peak times, his farm produces 300-400 litres of milk daily. Fresh milk is sold at ₹ 60 per litre and there is enough demand of milk in the market. Monthly approximate profit of milk comes up to ₹ 1.5-2.0 lakhs and during dry period it varies from ₹ 50,000-70,000. The surplus calves are sold at a rate of ₹ 30,000-50,000 and adults are sold at a rate of ₹ 70,000 which are bought normally for reasons like rearing by local farmers or for consumption.

He believes that cattle farming are a means of good income source and sustainability and better provenance of benefit if incorporated with production of own fodder crops. He also believes the integration of cattle farm along with growing his own crops has resulted in complementary method of enhancing productivity of his crops. His utmost advice that he would give to Nagaland farmers is to be fully committed and give 100% in this profession once it is chosen.

from sweet shops, bakery plant, army and milk processing plant. There are successful examples of Dimapur District Cooperative Milk Producers Union Limited (DIMUL) and Kohima District Cooperative Milk Producers Union Limited (KOMUL). These cooperative produces flavoured milk, paneer, sweet curd, lassi, ice-cream etc. and there is huge demand in Nagaland and adjoining districts of Assam.

There is immense scope for improving dairy farming in Nagaland. Nagaland produces 1.36 lakhs tonnes of maize and 31.41 thousand tonnes of soybean (2016-17). This can be utilized for production of compounded feed. Similarly, there is abundant availability of forest and pasture land for grazing. This can also be used for growing quality fodder plant. Tho-tho is unique indigenous cattle of Nagaland. It is mainly used for meat purpose and it produces 0.5-1.5 litres of milk. However, this breed can be utilized in breeding programmes for its unique disease resistance trait. Also, there is need to bring higher milk producing animals. Infrastructure facilities for dairy farming need to be strengthened. Cooperative models of DIMUL and KOMUL can be replicated in other districts too. There is need to establish a modern dairy in each district which can also act as training and demonstration centre for farmers. Development of dairy enterprises is a rising phenomenon amongst the Nagas although it has not been highly commercialized yet and needs much emphasis on measures of improvement in its management, organizational structures, processing and marketing to make it economically viable for the state. To conclude, there is rising opportunities in dairy farming in Nagaland. However, there is urgent need for formulating a holistic policy for development of dairy sector. Also, all stakeholder needs to come together for development of the farming community.

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