

Factors Hindering the Progress of the Dairy Sector in Assam

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Introduction

When it comes to milk, India wears the global crown. With over 239.30 million tonnes of milk produced annually, we are the largest milk producer in the world. The dairy sector is not only an economic engine, contributing 4.5% to the national GDP and 24% to the agriculture sector, but also a source of livelihood for millions, especially in rural areas.

However, a different picture emerges when we zoom into Assam, the gateway to Northeast India. Despite being the largest milk-producing state in the region, Assam's dairy industry faces a web of structural, infrastructural, and socio-cultural hurdles. Let's explore the challenges in detail and what can be done to turn things around.

The Promise and the Paradox

Assam produces about 1,092.24 tonnes of milk annually and contributes to 60% of the total milk production in Northeast India. Yet, the per capita availability of milk is just 84 grams per person per day—significantly lower than the recommended 300 grams/day by ICMR and far behind the national average of 471 grams. This paradox, being a leader in the region but still falling behind in performance it shows that there is still a lot of unused potential.

What's Holding Assam's Dairy Sector Back?

There are a lot of factors which is hindering the progress of the dairy sector in Assam. These are-

Low Milk Productivity: Assam's dairy production is heavily dependent on indigenous cattle such as the Lakhimi breed and swamp buffaloes, which are hardy but low milk yielders. Lakhimi cows yield just 270–375 litres per lactation. In comparison, high-yielding breeds like the Holstein Friesian can produce 7,200–9,000 litres, and Jersey cows average 5,000–8,000 litres per lactation. On the other hand, Assam's registered swamp buffalo breed, known as "Luit," produces only 270–375 litres per lactation, whereas the indigenous Murrah buffalo can yield 2,400–3,600 litres per lactation. This drastic difference in productivity hampers the economic viability of dairy farming for smallholders in Assam.

Lack of Infrastructure

The backbone of any dairy industry is its cold chain and logistics network, something that Assam sorely lacks. There's a shortage of chilling plants and milk processing units. Limited access to electricity and cold storage leads to

milk spoilage and wastage. Apart from these, poor rural roads and connectivity also make it difficult to transport milk on time. Without these basic infrastructural facilities, even surplus milk cannot reach markets safely or efficiently.

Poor Breed Quality and Limited Genetic Improvement: Breed improvement is the cornerstone of dairy development, yet Assam lags behind. The availability of crossbred or exotic breeds is low. According to the 20th livestock census, there is only 7.68 lakh crossbred cattle population in Assam.

The Artificial Insemination (AI) services are insufficient and irregular in remote areas. Also, there is a lack of awareness and infrastructure for genetic improvement programs. This leads to continued reliance on low-yield breeds and stagnant productivity.

Inadequate Veterinary Services: Animal health plays a vital role in productivity. However, veterinary support in Assam is minimal. Because there is a shortage of Veterinary Doctors and trained technicians, especially in rural areas. Also, there is a shortage of diagnostic laboratories.

Diseases, infections, and reproductive issues often go undetected or untreated, and irregular animal health services severely impact milk yield.

Weak Market Linkages and Farmer Exploitation: Despite producing a sizable amount of milk, farmers struggle to sell it profitably because around 95% of the milk market is informal, dominated by middlemen. There are also very few milk procurement centres or organized cooperatives. The middlemen exploit pricing, offering farmers lower rates while making higher profits in the open market. As a result, farmers earn very little, even though they work hard.

High Input Costs: Running a dairy farm is expensive, and in Assam, these expenses are often too much for small and marginal farmers to bear. Cattle feed, supplements, and medicines are expensive and often hard to find in remote areas. Veterinary services and treatment costs are also high, adding to the financial burden. Although subsidies and low-interest loans exist, they are either insufficient or not properly implemented. Additionally, there is a shortage of quality feed and green fodder, which negatively impacts milk productivity. As a result, the cost-benefit ratio makes dairy farming an unappealing option for many rural families.

Lack of Awareness and Skill Development: Knowledge is power, but many dairy farmers in Assam still lack awareness of modern dairy practices. There is limited training on

scientific dairy farming techniques, and most farmers do not maintain records or have proper planning and herd management skills. As a result, they continue to rely heavily on traditional and often outdated methods. Without proper education and exposure, these farmers are unable to fully benefit from available technologies, government schemes, or scientific advancements.

Apart from the above-mentioned factors, **Socio-Environmental Constraints** also play a major role in hindering the growth of the dairy sector in Assam.

Assam is a flood-prone region, where frequent floods disrupt grazing, feed storage, and access to animal health services. Seasonal migration further affects the continuity of dairy-related activities. Additionally, there is cultural resistance to modern practices, with many farmers hesitant to adopt artificial insemination (AI) or introduce crossbreeds. Limited landholdings also pose a challenge, making it difficult to grow fodder or expand dairy units.

So, What's the Way Forward?

Here's a helpful approach with different ideas to bring change:

- a) Develop strategies for breed improvement and AI coverage
- b) Strengthen SHGs and dairy cooperatives
- c) Invest in cold chain and processing infrastructure
- d) Conduct regular training and animal health camps
- e) Ensure proper implementation of schemes
- f) Timely and Affordable veterinary services
- g) Proper Market strategies to remove the dependency upon middle man

h) Availability of Inputs (feed, equipment's etc.) at Subsidized rates to the farming community.

Conclusion

Assam's dairy sector has immense potential, but it faces challenges at multiple levels—from cattle breeds to policy implementation. Unlocking this potential requires a holistic and collaborative approach. While the obstacles are many, none are unconquerable. With joint efforts from the government, the private sector, and the farming community, Assam can transition from a struggling dairy state into a model of rural resilience and sustainable success.

A Vision for Tomorrow

As Dr. Verghese Kurien, the visionary behind India's White Revolution, wisely said: "India's place in the sun would come from the partnership between the wisdom of its rural people and the skill of its professionals." This vision resonates strongly with Assam's current journey. With its rich cattle heritage, hardworking farmers, and a steadily improving policy environment, the state's dairy industry is poised for a breakthrough—if given the right push at the right time.

References:

1. Basic Animal Husbandry Statistics, 2024
2. FAO
3. pib.gov.in
4. 20th livestock census, 2019
5. Animal Husbandry and Veterinary Department, Assam
