

Dairy Industry Challenges in India

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Abstract:

India unquestionably holds the position of being the largest milk-producing country globally, boasting the highest populations of both cows and buffaloes. Since gaining independence, the dairy industry in India has consistently demonstrated a steady and robust growth rate of 3 percent. There have been substantial enhancements in the supply chain and milk processing facilities within the sector. But even with this rapid expansion, cattle farms in India have been hesitant to adopt modernity, and they face many difficulties today. This article examines the different issues that the dairy business in India faces and attempts to analyze them using frameworks like SWOT analysis.

Key words: Challenges, Indian Dairy Farm, Swot analysis

Introduction:

The Indian dairy industry holds significant importance within the country, ranking as one of the pivotal sectors. As the largest global milk producer, India commands approximately 13% of the world's total milk production. Notably, the nation's consumption matches its entire production output. Milk, recognized as an economical protein source, caters to the dietary needs of India's substantial vegetarian populace.

Challenges:

Elevated Milk Production Costs

Reducing the cost of milk production is imperative for Indian milk producers. The primary factor contributing to the high production costs is the relatively low average milk yield of Indian cattle, which stands at 987 kg/year. In comparison, this figure is substantially lower than that of other countries, such as Denmark (6273 kg/year), France (5289 kg/year), Canada (5938 kg/year), the United Kingdom (5462 kg/year), the USA (7038 kg/year), and Israel (11000 kg/year). The disparity implies that farmers in these countries expend considerably less compared to their Indian counterparts.

Contrary to the belief that climate plays a role, Israel, with temperatures ranging from 45°C to 47°C, achieves a remarkably high milk yield through effective feed, water management, housing, and the utilization of superior quality germplasm. Notably, Israel's cows achieve this high yield while maintaining higher per capita fat production compared to India

Elevated Costs in Milk Handling and Marketing

Dairy penetration in India remains relatively low, with a substantial portion of milk collection undertaken by private entities. These entities subsequently sell the milk to private dairies or other channel members, leading to a multi-tiered distribution process before reaching pasteurization facilities. The intricate distribution channels further contribute to the increased costs associated with milk handling. This process ultimately results in a doubling of the milk price.

As an example, in Gujarat, a cooperative dairy acquires one liter of milk from farmers at a rate of 25 to 28 Rs/liter. However, owing to the high costs incurred in milk handling, these dairies sell the milk to end consumers at a considerably higher rate of 48 to 52 Rs/liter. Opportunities exist to streamline the milk-handling process by reducing the number of intermediaries, thereby diminishing handling costs and potentially lowering the retail price of milk.

Diminished Milk Quality Arising from Unsanitary Handling Practices

The primary cause of substandard milk quality can be attributed to the unsanitary conditions prevalent in both animal farms and dairies. Despite a high demand for milk products in foreign countries, exporting such poor-quality products is unfeasible. Instances of Indian milk products facing rejection in international markets are frequent due to unhygienic milking practices, resulting in elevated microbial counts in the milk. Reasons behind the quality affected in India are due to poor health of animal, polluted water and food and unclean surrounding in farm. So it is necessary to consider all these challenges in improving milk production.

SWOT analysis of Indian dairy industry:

Strengths:

- * A substantial livestock population stands as a vital asset for the Indian dairy industry, ensuring sustainable reproduction and fostering continuous industry growth.
- * The current low milk productivity of Indian milk animals presents significant potential for improvement, offering a considerable scope for enhancing overall productivity.
- * The ongoing economic growth contributes to an increase in the income of the middle-class population, resulting in higher purchasing power, which, in turn, positively impacts the dairy industry.
- * Milk consumption is ingrained in the daily dietary habits of the Indian population, ensuring a consistent and steady growth in the demand for milk.
- * The availability of cheap labour and low cost fodder in the form of farm residuals helps maintain a cost-effective approach to milk production.
- * India benefits from a well established cooperative structure, with a large number of milk cooperatives ensuring that farmers receive fair compensation for their milk.

Weaknesses:

- * Limited penetration of crossbreeds and high yielding animals; a large proportion of Indian dairy farms primarily consist of low milk yielding animals.
- * Challenges arising from inadequate road connectivity and poor infrastructure pose significant obstacles for dairy farms, particularly in terms of efficiently supplying raw milk to processing facilities.
- * A prevailing lack of awareness among the majority of dairy farms regarding modern scientific dairy farming techniques, clean milk production, and integrated supply chain practices.
- * The dairy industry faces challenges such as a low growth rate, insufficient returns on investment, a dearth of research initiatives, and the absence of reliable milk production data. These factors contribute to a hesitancy among potential investors to engage in dairy farming ventures.

Threats:

- * The combined effects of urbanization, industrialization, and extensive grazing have exerted immense pressure on pastoral lands, leading to their complete degradation.
- * The introduction of crossbreeds has posed a significant threat to many valuable indigenous cattle breeds.
- * Instances of adulteration and the presence of synthetic milk have eroded the confidence of milk buyers. Over time, consumers may explore alternative options.
- * Substitutes like soya milk and coconut milk have the potential to replace traditional farm cattle milk in the market.
- * A significant portion of milk procurement is still controlled by middlemen, highlighting the necessity for proactive measures to reduce their influence.
- * Farmers currently lack awareness about crucial quality parameters, including microbiological and chemical contaminants, as well as residual antibiotics. Efforts should be made to address this knowledge gap.

- * The liberalization of the Indian economy presents a significant opportunity for milk producers to explore and expand their product sales in the global market.
- * The robust economic growth offers a favourable environment for investment in dairy farms, opening up avenues for substantial returns.

Opportunities:

- * Opportunities for forward integration with milk cooperatives can enhance the productivity and profitability of dairy farms.
- * Exploring cooperative animal rearing and establishing animal hostels can unlock the untapped potential within the dairy industry.
- * Adoption of new technologies by dairy farms has the potential to significantly improve productivity, streamline operations, and enhance overall profitability.

Conclusion:

India stands as one of the leading milk-producing nations globally; however, the per capita milk production in the country remains considerably lower than that of other major milk-producing countries. Despite its substantial milk production, India struggles to meet domestic demand. The average annual milk production per cow and buffalo in India is notably low, contributing to the high cost of milk. The efficiency of Indian cattle farms operates at a suboptimal level.

The prevalence of inadequate knowledge and a lack of comprehensive medical histories contribute to elevated cattle mortality rates. Cattle farmers face challenges in maintaining vaccination records and health histories for their livestock. Inefficiencies within the supply chain and traditional cattle-rearing methods further compound the challenges faced by the dairy industry.

Revitalizing the industry necessitates embracing modernization in cattle farms, leveraging technology more extensively, and transitioning towards an organized approach to cattle rearing.

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