

Milk Companies Distribution Channel Special Case in Uttar Pradesh

Dr. Saurabh Verma

Associate Professor, Department of Business Administration, MJPRU Campus, Bareilly, Uttar Pradesh, India

ABSTRACT

“Dairy Industry in Uttar Pradesh: Market Size, Growth, Prices, Segments, Cooperatives, Private Dairies, Procurement and Distribution”, offers an in-depth analysis of the Uttar Pradesh dairy market. The milk production in Uttar Pradesh mainly consists of cow and buffalo milk. According to the report, the Uttar Pradesh dairy market size reached INR 1,626.7 Billion in 2022. Looking forward, the market is expected to reach INR 3,613.2 Billion by 2028, exhibiting a growth rate (CAGR) of 14.24% during 2023-2028. Based on the product type, this report has categorized the Uttar Pradesh dairy market into 18 major products.

INTRODUCTION:-

The evolution of the dairy sector in India and the stellar role played by dairy cooperatives since the launch of Operation Flood form an integral part of the country's remarkable growth story after Independence. Today, India is the largest producer of milk in the world, contributing 23% of global milk production.

During the 1950s and 1960s, the situation was radically different. India was a milk-deficit nation dependent on imports, and the annual production growth was negative for several years. The annual compound growth rate in milk production during the first decade after independence was 1.64%, which declined to 1.15% during the 1960s. In 1950-51, per capita consumption of milk in the country was only 124 grams per day. By 1970, this figure had dropped to 107 grams per day, one of the lowest in the world and well below the minimum recommended nutritional standards. India's dairy industry was struggling to survive. The country produced less than 21 million tonnes of milk per annum despite having the largest cattle population in the world.[1,2,3]

Following the visit of late Prime Minister Lal Bahadur Shastri to the Anand district of Gujarat in 1964, the National Dairy Development Board (NDDB) was created in 1965 with a mandate to support the creation of the 'Anand Pattern' of dairy cooperatives across the country through the Operation Flood (OF) programme which was to be implemented in phases.

The 'Anand Pattern' was essentially a cooperative structure comprising village-level Dairy Cooperative Societies (DCSS), which promote district-level unions, which in turn promote state-level marketing federation. Starting in 1970, NDDB replicated the Anand Pattern cooperatives through the Operation Flood programme all over India.

Dr. Verghese Kurien, widely renowned as the “Father of White Revolution” in India, was the first chairman of NDDB.

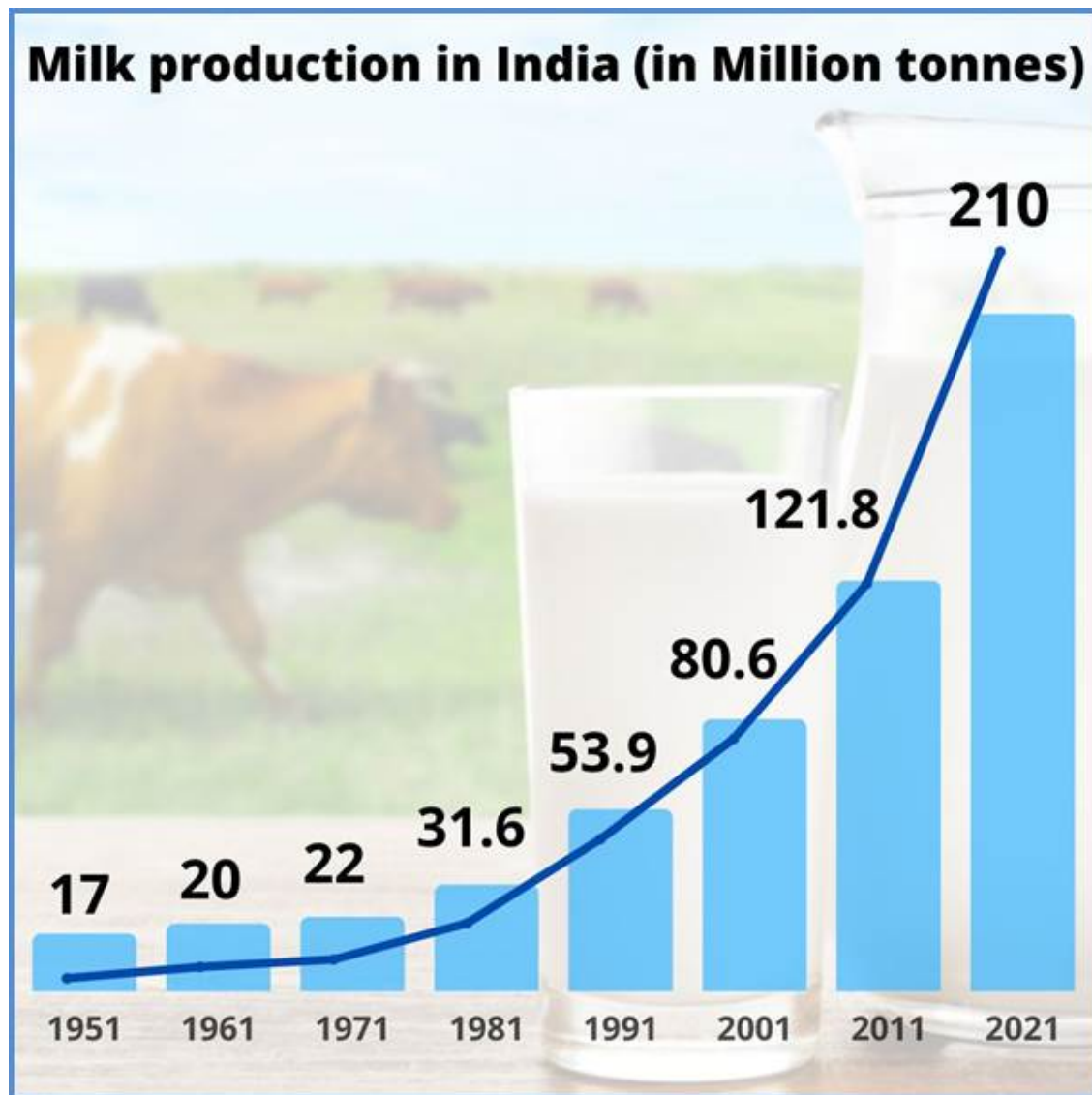
Along with his team, Dr. Kurien commenced work on the launch of the project, which envisaged the organisation of Anand-pattern cooperatives in milk sheds across the country from where liquid milk produced and procured by milk cooperatives would be transported to cities.

Operation Flood was implemented in the following phases:

1. Phase I (1970–1980) was financed by the sale of skimmed milk powder and butter oil donated by the European Union (then the European Economic Community) through the World Food Programme.
2. Phase II (1981–1985) increased the number of milk sheds from 18 to 136; urban markets expanded the outlets for milk to 290. By the end of 1985, a self-sustaining system of 43,000 village cooperatives with 42,50,000 milk producers had been covered.
3. Phase III (1985–1996) enabled dairy cooperatives to expand and strengthen the infrastructure required to procure and market increasing volumes of milk. This phase added 30,000 new dairy cooperatives, which led to a total of 73,000.

Operation Flood helped quality milk reach consumers across 700 towns and cities through a National Milk Grid. The programme also helped remove the need for middlemen, thereby reducing seasonal price variations. The cooperative structure made the whole exercise of production and distribution of milk and milk products economically viable for farmers to undertake on their own. It also ended India's dependence on imported milk solids. Not only was the nation equipped to meet its local dairy needs, but it also started exporting milk powder to many foreign countries. Genetic improvement of milking animals also increased due to cross-breeding. As the dairy industry modernised and expanded, around 10 million farmers started earning their income from dairy farming.[4,5,6]

Milk production in 1950-51 stood at merely 17 Million Tonnes (MT). In 1968-69, prior to the launch of Operation Flood, milk production was only 21.2 MT which increased to 30.4 MT by 1979-80 and 51.4 MT by 1989-90. Now it has increased to 210 million tonnes in 2020-21. Today, milk production is growing at the rate of two per cent in the whole world, whereas in India, its growth rate is more than six per cent. The per capita availability of milk in India is much higher than the world average. In three decades (the 1980s, 1990s and 2000s), the daily milk consumption in the country rose from a low of 107 grams per person in 1970 to 427 grams per person in 2020-21 as against the world average of 322 grams per day during 2021.



After Operation Flood, the Indian dairy and animal husbandry sector emerged as a primary source of income for a huge number of rural households – most of them either landless, small or marginal farmers. Today, India holds the place of pride of having been the largest milk-producing country in the world for nearly two-and-a-half decades.

The dairy sector assumes a great deal of significance for India on various accounts. As an industry, it employs more than 80 million rural households, with the majority being small and marginal farmers as well as the landless. The cooperative societies have not only made the farmers self-sufficient but have also broken the shackles of gender, caste, religion, and community. Women producers form the major workforce of the dairy sector in the country. The sector is an important job provider, especially for women, and plays a leading role in women's empowerment.[7,8,9]

Every year, since 2001, June 1 is observed as World Milk Day by the Food and Agriculture Organisation (FAO) of the United Nations to acknowledge the importance of milk as a global food and to celebrate the dairy sector. In India, the birthday of Dr. Verghese Kurien, on November 26, is observed as National Milk Day.

With a series of measures being taken by the Government as well as the growing role of the private sector in dairy development, India is expected to sustain its growth in milk production and milk processing in the coming decades. Further, to encourage farmers to take up productivity enhancement of indigenous breeds of milch animals in a scientific manner and to motivate Cooperative and Milk producer Companies, the Government of India is conferring the prestigious National Gopal Ratna Awards on the occasion of National Milk Day. To know about the winners of the National Gopal Ratna Awards – 2022

The dairy sector has been a major contributor to the growth of the rural economy in India. The government has facilitated the dairy farming infrastructure through its initiatives such as the development of the National Dairy Plan, a sustainable development-focused framework for the sector, along with general empowerment schemes such as the Jan Dhan Yojana and the Start-up India initiative. In the past eight years, the animal husbandry and dairying sector have received a great deal of impetus under Prime Minister Modi's vision of 'Atmanirbhar Bharat', and the journey of this sector is indeed a remarkable reflection of self-reliance.

As of 2015–16, Uttar Pradesh based VRS Foods Ltd and Tamil Nadu based Hatsun Agro Product Ltd are the top two private dairy players with an average milk procurement of 25 LLPD and 18 LLPD, respectively. Maharashtra based Parag Milk Food

procures 12 LLPD of milk. Besides, there are 8–9 private dairy companies across the country with an average milk procurement of 7–15 LLPD each (Dairy India 2017). However, official data on volume of milk procurement as well as processing capacity of organized private sector is not known. While Food and Safety Standard Authority of India (FSSAI) collects data on registration and licensing of dairy plant capacity, the data is not disaggregated into co-operatives and private organized players

Private sector organized dairies have expanded their base across states like Uttar Pradesh, Maharashtra, Tamil Nadu and Gujarat. Highest concentration of private dairy units is in Uttar Pradesh and Maharashtra, accounting for half of the total dairy plants in the country (Dairy India 2017). The future scaling of dairy processing would be driven by the private sector. Keeping in mind the increasing role of private sector in milk processing, the government had announced INR 15,000 crores Animal Husbandry Infrastructure Development Fund (AHIDF) in June 2020 which could play a critical role in coming years.

For each of the product segments, the report provides a thorough analysis of the current and historical value and volume trends, market share of key players and market forecast. Currently, liquid milk represents the biggest product segment in Uttar Pradesh. Some of the fastest growing segments include frozen/flavoured yoghurt, cheese, UHT milk, flavoured milk and butter milk. The competitive landscape of Uttar Pradesh's dairy market has also been examined in this report. Some of the major players include Amul (Gujarat Co-operative Milk Marketing Federation Ltd), Mother Dairy Fruit & Vegetable Pvt Ltd, Parag (Pradeshik Cooperative Dairy Federation Ltd), Madhusudan (SMC Foods Ltd) and Ananda Group.

The study provides a detailed evaluation of the dairy market landscape in Uttar Pradesh, covering the current, historical and future trends for milk production, milk production by cattle, milk procurement prices, etc. The report also offers SWOT, Value Chain and Porter's Five Forces analysis of Uttar Pradesh dairy market along with market segmentation by product type and an analysis of the competitive landscape. The study is based on both desk research and multiple waves of qualitative primary research. This report is a must-read for entrepreneurs, investors, researchers, consultants, business strategists, and all those who have any kind of stake or are planning to foray into the Uttar Pradesh dairy market in any manner.[10,11,12]

Report Coverage:

Report Features	Details
Base Year of the Analysis	2022
Historical Period	2017-2022
Forecast Period	2023-2028
Units	Million Tons, INR Billion
Product Type Covered	Liquid Milk, Ghee, Curd, Paneer, Ice-Cream, Table Butter, Skimmed Milk Powder, Frozen/Flavoured Yoghurt, Fresh Cream, Lassi, Butter Milk, Cheese, Flavoured Milk, UHT Milk, Dairy Whitener, Sweet Condensed Milk, Infant Food, Malt Based Beverages
Companies Covered	Amul (Gujarat Co-operative Milk Marketing Federation Ltd), Mother Dairy Fruit & Vegetable Pvt Ltd, Parag (Pradeshik Cooperative Dairy Federation Ltd), Madhusudan (SMC Foods Ltd) and Ananda Group
Customization Scope	10% Free Customization
Report Price and Purchase Option	Single User License: US\$ 2299 Five User License: US\$ 3399 Corporate License: US\$ 4499
Post-Sale Analyst Support	10-12 Weeks

DISCUSSION

This case should facilitate participants to analyze the influence of internal and external factors on a growing company in the dairy, agro and food industries; analyze the drivers of a company's competitive advantage; evaluate the relevance of the company in the new product-markets; and propose growth strategies for the expansion of the business beyond the core markets.

Gyan Dairy began its journey in 2007 and operated in the business-to-business segment by supplying skimmed milk powder and white butter to other dairy players. Then, the company launched its packaged milk brand in Lucknow – the capital city of Uttar Pradesh – one of the largest provinces in India. By the end of 2020, Gyan was the leading private dairy brand in Uttar Pradesh. The company's vision was to become one of the top dairy brands in India by 2035. While deliberating on the growth choice, the company's senior management debated whether to strengthen the company's position in the existing markets or expand operations in adjacent locations. Increasing market share would have led to price wars or advertising costs. Diversifying into product categories involved the risk of product-market misfit and new product development and marketing costs. However, pursuing these options would further strengthen the company's position in the North Indian market. Expanding into new locations would help establish the company's presence across different parts of India. However, both these options were replete with various challenges. Expanding into new markets needed one of the promoters of the Gyan Dairy, to relocate, build new markets and institutional connections and build a completely new localized economy of scale, which would create a financial burden on existing operations until the new operation was self-sustainable. However, in this journey, they would find and build a model to help expand their operations in other countries as well. Ideally, the company could pursue all the options, but this was not possible due to constrained resources.

This case allows students to discuss and evaluate alternate growth options associated with operationalizing the growth strategy choices in perishable branded food categories beyond existing markets and products. In addition, it also helps discuss how to arrive at such decisions after analyzing the focal firm's market opportunities and existing capabilities. This case is

helpful for the “growth strategy” module in the strategic management core course in a general MBA program and in specialized MBA programs in food and agri-business management.

This case is suitable for graduate-level courses on strategic management courses in general management programs and agri-business management programs. In a strategic management course, the case will help cover topics such as analysis of the internal and external environment of the firm and growth and expansion strategies. This case will help teach how to build competitive advantage in dairy and agro-food industries and the strategic analysis needed while pursuing growth decisions. Emerging markets, including India, are the growth markets for leading multinational companies in the food and dairy industries.[13,14,15]

RESULTS

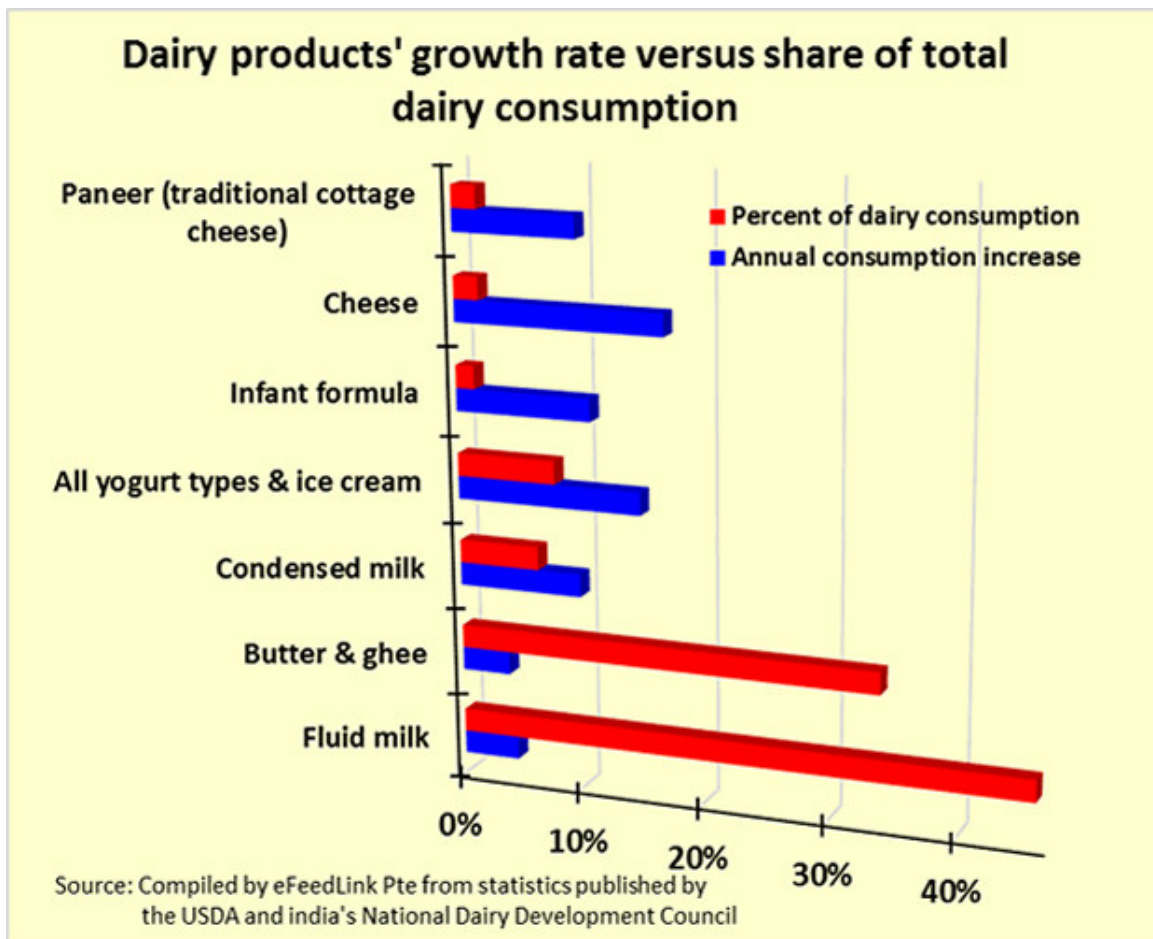


India has the highest livestock population in the world with 50% of the buffaloes and 20% of the world’s cattle population, most of which are milch cows and milch buffaloes. India’s dairy industry is considered as one of the most successful development programmes in the post-Independence period. It offers opportunities galore to entrepreneurs worldwide, who wish to capitalize on one of the world's largest and fastest growing markets for milk and milk products. A bagful of 'pearls' awaits the dairy processor in India.

I have just completed a channel distribution strategy workshop with a large Milk Cooperative based out of Varanasi India last week and see that the age old milk distribution is now changing its avataar from being farm led to distribution led. What i mean by farm led is, being supply dependent. There was a time when we saw every household, in villages, across India had a cow, and the entire eco-system from milk to fuel was centered around our holy cow. Then there were larger households having larger number of cattle after which there were specialised cattle farms producing milk. Then came Amul under Dr Verghese Kurien, whose operation "Flood" ensured that a National Milk Grid connecting 700 towns and cities with millions of consumers and ensuring that the farmer gets a fair price and the consumer does not have to bear the brunt of seasonal variations. I would say India today stands in the Post Kurien Era, where socialisation and the co-operative movement has ensured that we have achieved the base standards that ensure that milk is travelling from farmers to the marketplace in a very defined manner.

Dairy Cooperatives account for the major share of processed liquid milk marketed in the India. Milk is processed and marketed by 170 Milk Producers’ Cooperative Unions, which federate into 15 State Cooperative Milk Marketing Federations. Over the years, several brands have been created by cooperatives like Amul (GCMMF), Vijaya (AP), Verka (Punjab), Saras (Rajasthan), Nandini (Karnataka), Milma (Kerala) and Gokul (Kolhapur).

Uttar Pradesh, Punjab, Haryana, Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu are the milk surplus states in India. The manufacturing of milk products is obviously high in these milk surplus States. Exports of dairy products have been growing at the rate of 25% per annum in the terms of quantity terms and 28% in terms of value since 2001. Significant investment opportunities exist for the manufacturing of value-added milk products like milk powder, packaged milk, butter, ghee, cheese and ready-to-drink milk products.[16,17,18]



Hence creating an effective channel distribution strategy for India will involve the use of the existing distribution networks and infrastructure already available. You will need to create a robust brand around which the entire strategy would revolve. Amul today has become a power brand and has literally reached the entire country using the latest technological development in the sector and the logistic reach that we have today across the country. Local brands are strong in their respective markets with Nandhini doing well in Karnataka, Mother Dairy in Delhi NCR, Aavin In Tamil Nadu, Vijaya in Andhra Pradesh, OMFED in Orissa and so on.

We are increasingly seeing Milk Kiosks and Parlours across Railway Stations, Bus Stands and Other High Footfall markets as brands are retailing using these touch points through retailers and milk products franchises. While a Amul or a Nandini Milk Parlour not only sells hot and cold milk but also sell Peda's and other Milk Related products. The industry is moving towards brand oriented patronage as all of us have a specific brand of Milk and not any milk that we consume. Hence companies today are deploying a hybrid channel of milk distribution ensuring that they reach the consumers through all possible routes.

Many of the quick commerce companies have seen their dairy business grow by almost 100 percent in the past year alone. The cooperative dairy brands, on their part, have seen their e-commerce sales increase by 25-30 percent on these platforms. It is easy to understand why. Consumers tend to be in a hurry in the mornings and late evenings (which incidentally are the peak hours for quick commerce orders), and quick commerce offers them a way to order doodh, dahi, ghee, paneer, makhan, ice cream, and other products from trustworthy brands at reasonable prices.

The other benefit of quick commerce is that it boosts the visibility and sales of milk-based products of dairy cooperatives. While these cooperatives are known, trusted, and preferred for their milk and curd, the other products they offer – such as chocolates, sweets, processed cheese, and more – compete against the distribution and promotional might of competing brands offered by FMCG behemoths.

Quick commerce helps them overcome this disadvantage online. It has become an equaliser by providing detailed catalogues for each product category and improving visibility, recall and orders for the dairy products of cooperatives. Amul Chocolates, for instance, are one of the highest-selling stock keeping units (SKUs) in the Indian quick commerce sector, as are milkshakes, lassis, and cheese slices offered by dairy cooperatives and upcoming private dairies.

Many years ago, the great Dr. Verghese Kurien said that a successful consumer product is an object of thousands of transactions every day, where the brand name serves in lieu of a social contract – a contract that is renewed daily. The consistency of this renewal, he observed, was based on three things: quality of produce, value for money, and availability. Over the years, India's dairy cooperatives have done an exemplary job in ensuring the first two. Quick commerce is now strengthening the third. It is a matter of great pride for the quick commerce sector that it is providing meaningful support to the dairy sector, which brings more than two crore farmers from more than two lakh Indian villages into its fold, in its journey of manufacture and distribution.[19]

CONCLUSION

Earlier this month, when the Food and Agriculture Organisation (FAO) observed "World Milk Day", India, which contributes almost a fourth of the world's milk production, deservedly held center stage. India's success story as a leader in milk production is a beautiful mosaic of the success of various cooperative dairy brands across the country, each enjoying immense trust amongst the producers (farmers) and consumers in its State. Some brands even have a pan-India appeal. However, owing to distribution challenges and supply chain constraints, the unorganized sector continues to account for almost one fourth of total milk distribution. This leads to problem of milk contamination and debasement – a concern that has been highlighted previously by Food Safety and Standards Authority of India (FSSAI). The fast-emerging "quick commerce" sector has the potential to address this problem and yield other benefits for dairy cooperatives and consumers. Quick commerce is presently a \$700 million market in India, and almost a fourth of all orders placed daily have a milk component – a milk pouch, a milk carton, or a dairy product such as cheese, curd, or ghee. Almost all the milk produced comes from the organised sector, a bulk of it from cooperatives. In less than three years since it came into being, quick commerce has become a highly effective distribution channel for dairy cooperatives. Products from cooperatives are some of the highest-selling items on quick commerce platforms. In some cases, quick commerce companies are the biggest business to consumers (B2C) distribution channel for milk cooperatives. This trend is already showing an immense promise of improving the distribution and reach of dependable brands and helping reduce a consumer's dependency on unorganised sector - where several instances of spurious milk have been found.

Following are the key recommendations to make the dairy value chain in India more competitive, inclusive, sustainable, and scalable with adequate access to finance.

Limited export opportunities for SMP exist for the private sector in South Asian countries, which needs to be encouraged. Particularly states like Uttar Pradesh should explore such opportunities. However, growth of the Indian dairy sector cannot be achieved from export competitiveness in SMP alone as it is only a residual product. The dairy sector would need to focus on high-value dairy products for exports to specific markets of South Asia and Gulf countries.

The key challenge is to include more women in actual functioning of co-operatives through greater representation in the board of dairy co-operatives. At present, less than 3% of the members of the board of the dairy co-operatives are women, although they constitute 18% of the membership.

There is a need for strengthening technologies for forage production, cropping systems and other land-use strategies for ensuring sustainable growth of the dairy sector.

Another critical challenge the dairy sector is likely to face over the next few years pertains to impact of climate change which may pull down growth in milk output in the country. Milk production may get hit following an average rise in temperature which would create scarcity of water and dry fodder for the cattle. A strategy needs to be developed to deal with the situation arising out of climate variability.

Advanced herd management needs to be promoted for maintaining and improving the genetic potential of the cattle.

The government agencies need to conduct extensive study on the water foot print of dairy sector for formulating future strategy keeping in mind water use efficiency of the sector.

Dairy co-operatives need to be treated as private enterprises of farmers and freed from any government imposed controls. For ensuring transparency and accountability, the government should ensure that co-operatives' financial results are disclosed in public.

The future growth in milk production should be driven by increasing yield per cattle. There has to be an acceptable solution for disposal of male cattle not wanted by farmers. Use of frontier technologies like sex-sorted semen, genomic selection of high merit animals, embryo transfer, data collection and analytics need to be promoted on priority.

The co-operatives need to expand their base in states including Uttar Pradesh, Madhya Pradesh, Odisha, West Bengal, Chhattisgarh and Jharkhand for meeting the procurement target, as milk production increases.

The central government could consider providing vitamin-enriched milk to the 100 million children currently covered under Mid-Day Meal (MDM) for boosting demand for milk. Compared to huge annual food subsidy budget, the cost of providing milk under MDM would be much smaller.

The financial institutions must provide working capital assistance to dairy farmers at reasonable rates. In the absence of institutional financing structure at the ground level, dairy farmers are forced to seek credit from the informal sources at much higher interest rates. Provision of specific windows for accessing credit for purchase of animals need to be made. Kisan Credit Cards to dairy farmers would help farmers in meeting their working capital requirements.

Expansion and modernization of milk processing facilities would need substantial investments. Since a major portion of this has to be carried out by the private sector, a financing mechanism at par with co-operatives will have to be set up to ensure that dairy farmers in areas not covered by the co-operatives have the opportunity to enhance their incomes, significantly.[20]

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