

Rural Development Tool for District Co-Operative Dairies in Gujarat

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ABSTRACT

Indian dairy sector contributes the large share in agricultural gross domestic products. Presently there are around 70,000 village dairy cooperatives across the country. The co-operative societies are federated into 170 district milk producers unions, which in turn have 22-state cooperative dairy federation. Milk production gives employment to more than 72 million dairy farmers. In terms of total production, India is the leading producer of milk in the world followed by United State of America.

India contributes to 15% of the global milk production and stands as the largest producer of milk in the world with a production of 122 MMT in 2011. The largest size of Indian Dairy Industry is estimated at around USD 60 billion (INR 2,662 billion) with an annual growth rate of percent in volume terms. The production & demand for a milk is expected to continue and rise due to various factors including population growth, rise in income & changing life style.

1. Introduction

Milk Map of Gujarat

Gujarat is one of the largest milk producing states in India with the contribution of 7.75% share in the total milk production of India. The state having 17 Cooperative dairy milk unions & 25 private dairy plants has a milk collection of 3.45 billion litres with over 30 lakhs milk producers, affiliated to more than 15,000 Primary Milk Cooperative Societies.

Milk contributes to 22% to the Agricultural GDP of Gujarat and is one of the biggest sectors for supporting livelihood in the state. As per state census data, out of about 102 lakhs total household of Gujarat, 42.6 lakhs households are engaged in Dairy and Animal Husbandry sectors as a primary or secondary source of their income.

GLPC associations in the Dairy Sector

GLPC is involved in promoting livelihood in the dairy sector by facilitating technical and financial assistance to the beneficiaries through various Central and State sponsored schemes. During the year 2011-12, GLPC facilitated in identification and financing of milch animals to around 30,000 households in the state contributing to an additional production of about 540 lakh litres of milk annually.

Select Success Story

Under Van Bandhu Kalyan Yojana over 14,000 SHG members (primarily tribal) were identified for dairy farming. Through GLPC facilitation, they were able to purchase improved breeds of cattle and buffaloes and were linked to respective districts milk unions. The initiative resulted in the additional milk production of around 84,000 litres per day with an income generation of around INR 25 lakhs per day. The project exhibited a winning proposition for all the stakeholders. On one hand, it provided sustainable livelihood opportunities to more than 14,000 households with an estimated additional income of INR 3,000 per month and on the other hand, it created a dependable procurement source for the Cooperative Dairies.

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Milk production gives employment to more than 72 million dairy farmers. In terms of total production, India is the leading producer of milk in the world followed by United State of America. The milk production in 2005-06 is estimated at 97.1 million Metric Tons as compared to 192.5 million MT in the previous year. This production is expected to increase to 100mn Metric Tons by 2007- 08. Of this total produce of 89mn cows' milk constitute 56mn MT while rest is from other types cattle.

Sources: Census report of Directorate for Animal Husbandry, Government of Gujarat

2. History of dairy co-operatives in India

The Co-operative movement started in India in the last decade of the 19th Century with two objects in view, i.e. to protect the farmers from the hands of the private money lenders and to improve their economic condition. Madras province was the birth-place of this movement. With the setting up of an Agricultural Co-operative Banks there the movement took root in our Land and slowly gained strength.

However, the growth of Co-operative movement in India during British rule was very slow and haphazard one. In most of the cases, the provincial governments took the lead. The foreign ruler had only made some committees or framed a few rules and regulations. But they did not take any wide-ranging programme to spread the movement all over the country. The golden era of Co-operative movement began after India had won freedom. Within two decades of independence the membership of primary societies had increased four times

while the share capital and working capital increased 23 and 31 times respectively.

The history of Dairy Development Movement in India is a new one. During the pre-independence period this movement was limited to a few pockets of Calcutta, Madras, Bangalore and Gujarat. The most notable of this venture was Kaira District Co-operative Milk Producers' Union Limited of Anand, Gujarat. But after independence the National Government took great initiative in setting up new Dairy Co-operatives in many parts of the country. The National Dairy Development Board (NDDB) was set up to make the ambitious project a success.

Macro-Snap of Dairy Status in India	
Particulars	Figures
Per Capita Availability of Milk by States (gms/day)	263
Artificial Inseminations Performed	44621 (000 Numbers)
Share of Agriculture in GDP	16.04%
Livestock Sector in GDP	4.02 %
Estimates of Milk Production	112540 (000 Tonnes)
Adult Female Bovine Population	127390 (In Thousands)

Source: NDDB Annual Report 2010-11

3. Cooperatives and Economic Development

- Before the cooperative movement began, the dairy industry in the Kaira District was being exploited by middlemen who supplied milk to the consumer. It began as a response to this exploitation and put an end to it. It grew mainly because it responded to the farmers' financial needs as well as service. It has thrived because it is owned by farmers who have a stake in its success. And because it has been managed by capable professionals and strengthened by dedicated scientists, technologists and workers, it has forged ahead. Now a day in India, there are 75,000 dairy co-operative societies, spread all over the country with a membership of 10 million.
- The farmer in the village is now assured of a better future thanks to these cooperatives. Recently one of the European Embassies in Delhi requested us for information on the five biggest "companies" in the dairy business. The first three are in the cooperative sector The Gujarat Co-operative Milk Marketing Federation (GCMMF). The Kaira District Cooperative Milk Producers' Union Limited and The Mehsana District Cooperative Milk Producers' Union. The Kaira District Cooperative is the second best in the country. It helped to create GCMMF, the apex body of all cooperatives in Gujarat.

4. Review of Literature

Urs (2009), in his study reveals that the contribution of co-operatives in dairy development plays a very significant role. Therefore, he suggested that the government needs to further strengthen it.

Veerakumaran (2009), in his paper mentioned about the focused on co-operative milk production and marketing

network in the state of Kerala. Further he has identified the problems of milk co-operatives in Kerala, like escalating cost of production, occupational mobility and structural setbacks of the milk co-operatives.

Selvamani and Rani (2008), opined that Dairy Co-operatives and Development of Rural Women in the Era of Globalisation, identified relation between dairy co-operatives and women. According to their study highlighted women participation, problem faced by dairy co-operatives for development of rural women in the globalization environment. In order to survive and sustain in the new economic era of liberalization dairy co-operatives require both financial assistance and technical assistance from central and state governments, state and national level co-operative organizations, incase the co-operatives need to serve in the new economic era of globalization.

Soundarapandian and Gayathri (2008), according to their paper Karukkampalayam Milk Producers co-operative Society – A Case Study reflects purchase and sales of milk, income and expenses and financial position of the milk society. Also their study highlighted milk producers' society is strengthened by increasing the sale time this will also increase the sales to improve the performance of the milk society. Reducing expenses will also increase the profit and reduce the liabilities will improve the financial position of the society.

Ramanijam and Periaswamy (2008), according to their paper Development of Dairy Co-operatives focus on achievements of operation flood I, II and III. The dairy co-operatives, which are unique, have changed the social economic conditions the farmers in rural areas of India. They have linkages in development of agricultural employment, income, health and nutrition and education level in rural areas. But government and dairy co-operatives are essential for the development of rural people and their participation are essential for the development of rural people and their participation are essential for the development of rural people and their participation in development processes. So dairy co-operatives are more suitable for rural development of developing countries like India.

Jeykumari (2008), in her paper Dairy Co-operatives – Crafting India's Economic Development, she pointed out the achievement of the dairy co-operatives in India. The dairy development activities have the twin objectives of encouraging milk production for gainful employment, improvement of socio economic conditions of the rural people by procuring milk at a remunerative price and simultaneously supplying good quality milk and milk products at reasonable price to consumers. The hygienic quality of raw milk needs to be improved to ensure milk products of higher standards. Payment for milk in India is generally based on its FAT and SNF content. Payments for milk on the basis of microbial loads need to be initiated to enhance quality of milk and make India's milk globally acceptable.

Patil (2008), he pointed out the paper Co-operative Dairy Movement and Operation Flood in Maharashtra: an overview, the operation flood have increased employment, income and consumption of milk of rural people in Maharashtra state. Thus

the operation flood has very deep and strong positive impact on Indian dairying in particular and sector in general. Also studied about the operation flood programmes, the operation floods have increased employment, income and consumption of milk of rural people in Maharashtra state. Thus the operation flood has very deep and strong positive impact on Indian dairying in particular and on Indian agriculture sector in general.

Ghanekar (2008), his paper Strengthen dairy Co-operatives to tackle agrarian Crisis covered dairying in India is an integral part of the total farming system. Symbiotic relationship exists between agriculture and dairy farming. The agricultural by products provide feed and fodder for the cattle, whereas cattle provide necessary drought power for various agricultural operations. Hence, promoting co-operative dairy sector by providing policy support will definitely be a right strategy to tackle the agrarian crisis.

5. Effect on Rural Development

- A number of field studies conducted by independent researchers emphatically confirm the role played by milk cooperatives the progress of the dairy industry. Millions of small farmers isolated in various parts of the country have gained the strength to sustain their livelihood. The cooperatives have provided gainful employment and brought them close to the market. When cooperative dairying started in Gujarat, the dairy industry was in the doldrums. Production had stagnated and per capita consumption was falling. Farmers were at the mercy of the middlemen. Today, with about 100 lakh farmer producers, Indian dairy farmers have been shown the way to prosperity and health. The ideal conditions for long term growth in procurement have been created.
- Modern technologies in animal breeding and feeding have been adopted by a significant number of farmers.
- Modern consumer processing and marketing facilities have been created all over the country.
- Technical input services including animal insemination, balanced cattle feed / bypass proteins feed, better fodder varieties and emergency veterinary health services - have not only helped in raising and sustaining milk production but have also ensured a better quality of life in the villages.
- Besides creating urban employment in dairy plants, marketing, transport and distribution, these dairy cooperatives have helped to provide farmers with a sustainable rural employment program. A majority of the cooperative members are landless, marginal or small farmers who contribute their produce of milk at the cooperatives. For these contributors, the income derived from milk provides their only regular cash flow, transforming dairying into an economic activity.
- The village cooperative is a clean well lit and orderly place. The villages have gone through a similar transformation ever since the cooperatives began to operate. When the people of a village see cleanliness, sanitation, hard work and discipline in the cooperative. When they know that the cooperative

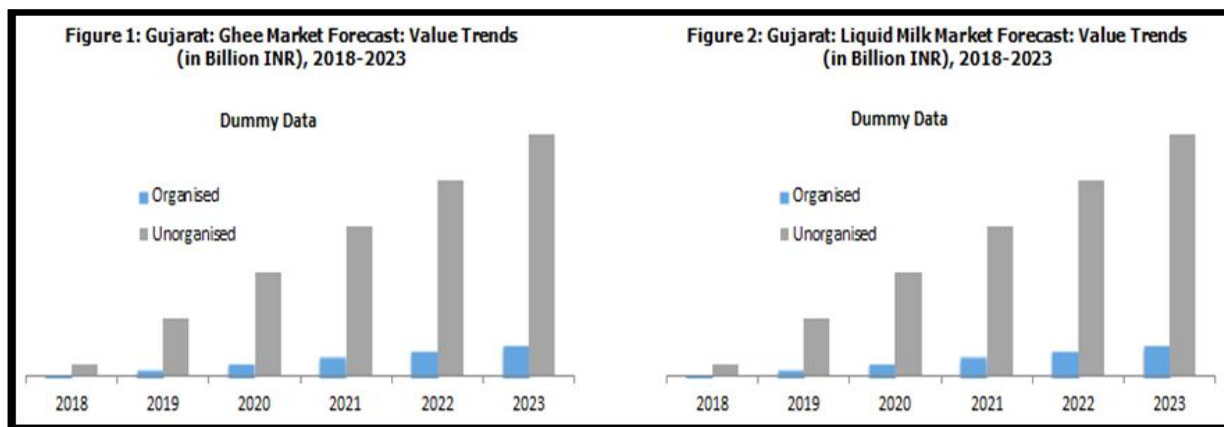
serves them well. It probably inspires them to bring more of these qualities into their own lives.

- The women members of out dairy cooperatives visit our dairies. They are shown the mysteries of artificial insemination under a microscope. Does not their knowledge of conception in animals help them to better understand their own lives and to begin to control what was simply assumed as a matter of fate?
- When out villages people see a veterinarian cure an animal that would have otherwise died, they learn about the efficacy of the modern medicine. When they see their income from milk increase as their animals improve, and the farmer produces better feeds as they ensure better housing and care, they learn hope. And they learn that it is not fate that determines their future, but they can take control of their own destinies. In a nation like ours, democracy whether it be in Delhi or in State capitals rests on a fragile foundation. We must underpin that democracy with a plurality of rural institutions that involves direct control of individuals over matters that have immediate effect on their own lives. They dairy cooperatives of India are such institutions.
- Dairy cooperatives are giving a fresh lease of life to farmers in drought-prone areas. Milk production and unexploitative marketing through the cooperatives is providing an assured source of income to farmers helping them sustain themselves against recurring drought. The migrating population is settling down. About Rs 2,000 crores is being paid to the farmers in their villages daily -- morning and evening -- which constitutes a large portion of their income. Operation Flood has, therefore, emerged in India as the largest rural employment scheme. It has been able to modernize the dairy sector to a level from where it can take off to meet not only the country's demand for milk and milk products in the next century but can also exploit global market opportunities. Thereby capitalizing on the inherent production advantages that India has, provided that the right policy options are exercised to overcome some already visible signs of market disorder in the post-liberalization period.

Source: www.indiadairy.com

6. Dairy Industry in Gujarat Market Size and Growth

IMARC Group's latest report, titled "Dairy Industry in Gujarat: Market Size, Growth, Prices, Segments, Cooperatives, Private Dairies, Procurement and Distribution", offers an in-depth analysis of the Gujarat dairy market. In 2017, the milk production in Gujarat reached a volume of around XX Billion Litres, growing at a CAGR of XX% during 2010-2017. The state currently represents the fifth largest dairy market in India. The milk production in Gujarat mainly consists of cow and buffalo milk. The report's analysis concludes that cow milk dominates the total milk production, accounting for around 55% of the total share. According to the report, the Gujarat dairy market is further expected to grow at a CAGR of XX% during 2018-2023, reaching a volume of XX Billion Litres by 2023.



Based on the product type, this report has categorized the Gujarat dairy market into 18 major product segments:

1. Liquid milk
2. Ghee
3. Curd
4. Paneer
5. Ice-cream
6. Table butter
7. Skimmed milk powder
8. Frozen/flavoured yoghurt
9. Fresh cream
10. Lassi
11. Butter milk
12. Cheese
13. Flavoured milk
14. UHT milk
15. Dairy whitener
16. Sweet condensed milk
17. Infant food
18. Malt based beverages

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 Gujarat, accounting for around 56% of the total market share. Some of the fastest growing segments include frozen/flavoured yogurt, cheese, probiotic milk drinks, UHT milk and flavoured milk. The competitive landscape of Gujarat's dairy market has also been examined in this report. Some of the major players include Amul (Gujarat State Cooperative Milk Producers' Federation), Maahi Milk Producer Company Ltd and Vimal Dairy Ltd.

The study provides a detailed evaluation of the dairy market landscape in Gujarat, 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 Gujarat 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 Gujarat dairy market in any manner.

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