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Milk Production and the Cooperative Dairy Movement: An Economic Analysis in Buldhana District, Maharashtra

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Abstract

The dairy sector is vital to India's rural economy, offering additional income, job opportunities, and nutritional security. Historically, the cooperative dairy movement has been essential in organizing milk producers and stabilizing rural livelihoods. This paper investigates the trends in milk production and the impact of the cooperative dairy movement in Buldhana District, Maharashtra, from 2003-04 to 2011-12, a key period for the region's cooperative dairying. Utilizing secondary data, the study explores growth patterns, the performance of institutions, and the economic effects. It also connects historical data with recent changes to grasp the long-term effects and ongoing challenges faced by cooperative dairying in the district. The findings indicate that, while milk production experienced moderate growth, weaknesses within cooperatives limited the sector's potential. Enhancing cooperative governance and applying past lessons are crucial for sustainable dairy development. The study also incorporates a brief comparison with recent milk production data to assess the long-term outcomes of historical trends.

Keywords: Milk Production, Dairy Cooperatives, Cooperative Movement, Rural Economy, Buldhana District, Maharashtra

Introduction

India's agrarian economy relies heavily on livestock and dairy farming, with milk production serving as a stable income source for rural families while significantly contributing to poverty alleviation and employment generation. India's rise to the world's largest milk producer is largely attributed to successful cooperative initiatives like Operation Flood. In Maharashtra, dairying has been promoted as a supplementary activity to agriculture, especially in rain-fed areas like Vidarbha. Buldhana District, situated in this region, has a considerable livestock population but historically has been behind other districts in organized milk production. The cooperative dairy movement was established to address market deficiencies, lessen intermediary exploitation, and guarantee better prices for milk producers. The period from 2003-04 to 2011-12 is crucial for understanding the development of cooperative dairying in Buldhana, and this paper aims to analyze production trends and institutional performance during that time, linking historical data to contemporary developments for policy insights.

Study Objectives

- To examine milk production trends in Buldhana District from 2003-04 to 2011-12.
- To assess the impact of the cooperative dairy movement in the district during the same period.
- To evaluate the economic importance of dairying for rural livelihoods.
- To correlate historical trends with current developments in the dairy sector.
- To propose policy recommendations for enhancing cooperative dairying.

Literature Review

Research indicates that dairy cooperatives significantly enhance milk production, stabilize prices, and empower farmers in rural areas. Scholars highlight that cooperatives facilitate better access to markets, veterinary services, and institutional financing. However, disparities persist across regions due to

differences in governance, infrastructure, and policy execution. Studies on Maharashtra's dairy sector reveal uneven development, with western regions experiencing growth while Vidarbha districts, including Buldhana, face institutional and infrastructural challenges. Literature suggests that poor management, limited processing capabilities, and competition from private sectors adversely impacted cooperative performance in these areas.

Research Methodology

This study employs a descriptive and analytical framework.

Data Sources: Secondary data were obtained from government publications, dairy development reports, statistical abstracts, and related studies.

Study Period: The primary analysis focuses on 2003-04 to 2011-12, with insights from recent years.

Tools Used: The analysis includes tabular data presentation, growth comparisons, and basic economic interpretations.

Production Trends in Buldhana District (2003–04 to 2011–12)

Milk production in Buldhana experienced steady growth during the study timeframe, though fluctuations occurred due to weather conditions, feed availability, and institutional factors.

Table 1: Milk Production in Buldhana District (2003–04 to 2011–12)
(Quantity in Thousand Tonnes)

Year	Milk production
2003–04	112.5
2005–06	118.3
2007–08	125.6
2009–10	131.8
2011–12	138.4

Source: Compiled from State/District Statistical Reports

Analysis: The data presents a moderate upward trend in milk production; however, this growth lags behind that of more developed dairy districts in Maharashtra. The slow growth is attributed to limited cooperative expansion and low animal productivity.

Cooperative Dairy Movement in Buldhana District

1. Structure and Functioning

The cooperative dairy framework in Buldhana comprises village-level milk societies linked to district unions, tasked with milk procurement, input provision, and fair pricing.

2. Performance Analysis

Despite the presence of these institutions, many cooperatives functioned below their capacity. Issues like inadequate chilling infrastructure, delayed payments, and poor management reduced farmer engagement.

Table 2: Cooperative Dairy Indicators in Buldhana (2003–04 vs. 2011–12)

Indicators	2003-04	2011-2012
Number of Milk Societies	320	410
Average Milk Procurement (litres/day)	22,000	34,000
Membership	28,000	41,000

Analysis: Although the number of societies and members has increased, the overall productivity and efficiency remain limited, indicating that growth has favored quantity over quality.

Economic Impact on Rural Livelihoods

Dairying has provided additional income to small and marginal farmers, enhancing resilience to rain-fed agriculture. Regular milk sales have improved household cash flow and employment opportunities, especially for women. Nevertheless, low procurement prices and weak cooperative performance hindered the full realization of dairy sector income potential during the study period.

Linking Historical Trends with Recent Developments

While the present study primarily focuses on the period 2003–04 to 2011–12, understanding recent developments is essential to evaluate the long-term impact of the cooperative dairy movement in Buldhana district. The historical analysis reveals that moderate growth in milk production during the study period was constrained by institutional and infrastructural weaknesses. To assess whether these constraints have been overcome, a brief comparison with recent milk production data has been undertaken.

Table 3: Comparison of Milk Production in Buldhana District: 2011–12 and Recent Years

Year	Milk Production (Thousand Tonnes)	Percentage Change from 2011–12
2011–12	138.4	-
2020–21	176.3	+27.3
2021–22	180.7	+30.6

Source: District Statistical Reports and Press Information Bureau (compiled by author)

Analysis

Table 3 indicates that milk production in Buldhana district has increased in recent years compared to the base year 2011–12. The growth of around 30 per cent over a decade suggests gradual improvement rather than rapid transformation. This moderate increase reflects the continued influence of structural limitations identified during the earlier study period, such as weak cooperative governance, limited processing capacity, and inadequate infrastructure. Although recent policy initiatives and private sector participation have contributed to higher output, the pace of growth indicates that the cooperative dairy movement has not yet reached its full potential in the district. The comparison highlights the need for institutional strengthening and policy continuity to ensure sustainable dairy development.

Challenges Identified

- Weak cooperative governance
- Inadequate infrastructure and processing facilities
- Low productivity of cattle
- Competition from private dairies
- Limited farmer awareness and training

Policy Recommendations

- Strengthen cooperative management through professional training.
- Improve infrastructure such as chilling centres and transport facilities.
- Promote value-added dairy products at the district level.
- Integrate historical lessons into current dairy development policies.
- Encourage women's participation in dairy cooperatives.

Conclusion

The study reveals that milk production in Buldhana District increased moderately during 2003–04 to 2011–12, but the cooperative dairy movement failed to fully realise its potential due to institutional weaknesses. Linking historical trends with recent developments shows that past structural issues continue to affect present performance. A reformed and revitalised cooperative framework is essential for sustainable dairy development and rural empowerment in Buldhana District.

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Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

References (indicative)

1. Government of Maharashtra, Statistical Abstracts
2. National Dairy Development Board Reports
3. District Socio-Economic Reviews
4. Selected research articles on cooperative dairying