



Overview of Dairy Milk Co-Operative Societies of Kalpetta Block, Wayanad, Kerala

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ABSTRACT

Dairy cooperative societies play a pivotal role in the agricultural and dairy sectors, providing a collaborative platform for local farmers in the Kalpetta block, Kerala. This study delves into the dynamics and functioning of 14 dairy cooperative societies, showcasing their impact on dairy sector in the study area. The societies were classified from Class 1 to Class 10 based on daily milk procurement capacity, each contributing uniquely to the cooperative's resilience and inclusivity. The study utilized structured interviews and data analysis to present a comprehensive overview of the cooperative landscape, emphasizing the societal, economic, and agricultural impact of these entities. The entire study examined data on milk procurement, member demographics, feed supply, animal possession, and workforce dynamics revealed the diverse and vital contributions of each class. The research contributes to the understanding of dairy cooperatives as drivers of community engagement, knowledge exchange, and socio-economic development.

Key Words: Animal possession, Dairy cooperative societies, Feed supply, Milk, Procurement,

INTRODUCTION

Dairy cooperative societies represent a unique and impactful model in the agricultural and dairy sectors. Dairy cooperatives were established to expand the dairy sector and satisfy local demand. In India, dairying is growing not just to produce more milk but also to give rural residents stable jobs (Sonkamble *et al*, 2021). These cooperative entities bring together local farmers, fostering collaboration, and collectively addressing challenges in producing and distributing dairy products. The fundamental principle behind dairy cooperatives is to empower farmers, enhance their bargaining power, and create a sustainable ecosystem that benefits both producers and consumers (Dhaliwal and Dhillon, 2017). Farmers themselves oversee the cooperatives in accordance with community needs and demands. The growth of the rural economy was significantly aided by dairy cooperatives (Wani *et al*, 2015). In a dairy cooperative, local farmers pool their resources, both in terms of milk production and expertise, to form a cohesive organisation. This joint

effort allows them to overcome individual challenges and collectively invest in facilities, technology, and marketing strategies. The cooperative model emphasises community-driven decision-making, ensuring that the interests of the farmers are at the forefront. The dairy cooperative has become a major driver of job creation, effective milk marketing, and the socioeconomic advancement of dairy producers. It is imperative to implement pertinent policies and practices that guarantee effective milk marketing, increased compensation, and the long-term socio-economic growth of dairy producers (Khan *et al*, 2014).

Key features of dairy cooperative societies include shared ownership, equitable distribution of profits, and a focus on improving the overall livelihoods of participating farmers, especially women (Asha *et al*, 2021). These cooperatives often play a crucial role in providing essential resources such as veterinary services, quality feed, and modern processing facilities, contributing to enhanced productivity and product quality (Nargunde, 2013). As

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we delve into dairy cooperative societies, it becomes evident that these entities go beyond economic transactions. They become hubs of community engagement, knowledge exchange, and socio-economic development. This article explores the impact of cooperative society on the dairy sector in the study area. The district Wayanad contains 55 Dairy cooperative societies (GOK, 2023). The present study has laid emphasize on investigating the dynamics and functioning of 14 dairy cooperative societies of Kalpetta block, Wayanad district of Kerala.

MATERIALS AND METHODS

The study was initiated in the Kalpetta block of Wayanad. Kalpetta, being a central location, provides a comprehensive representation of the dairy cooperative landscape in the region. Out of the total 15 dairy cooperative societies identified within the Kalpetta block, a strategic decision was made to include 14 societies in the study. This selection process aimed to capture a significant and representative sample, allowing for a more comprehensive understanding of the overall scenario.

A structured interview schedule was meticulously prepared which served as a tool for data collection to gather valuable insights through personal interviews with key stakeholders involved in the dairy cooperative societies. The structured nature of the interview schedule ensured that pertinent questions related to the functioning, challenges, and successes of the cooperative societies were systematically addressed. The personal interview method was chosen as it facilitates direct communication between the researchers and the respondents. This approach enhances the quality of data collected and allows for in-depth exploration and clarification of responses. The

data collected through these interviews are instrumental in providing a nuanced understanding of the operational aspects, organisational structure, and impact of the dairy cooperative societies in Kalpetta.

RESULTS AND DISCUSSION

The dairy cooperative landscape in Wayanad district exhibited a diverse range of societies, each classified based on their daily milk procurement capacity. This classification system, ranging from Class 1 to Class 10, provided a structured framework for understanding and assessing the different capacities and capabilities of these cooperative societies.

In this classification scheme, societies were further distinguished within certain classes. For instance, under Class 1, there are subdivisions like Super Grade and Special Grade, indicating exceptional performance or unique features. This nuanced classification allows for a more detailed analysis of the strengths and specializations of each society.

Specifically focusing on Kalpetta, one of the prominent locations in Wayanad district, the distribution of societies across different classes provided valuable insights into the varied capacities of these cooperatives. In this context, it is noteworthy that one society in Kalpetta falls under Class 2, showcasing a certain level of operational scale and efficiency. Moving down the classification, three societies fall under Class 3, while a substantial number—seven societies—belong to Class 4. This suggests a notable presence and contribution of societies with a mid-range daily milk procurement capacity.

Furthermore, the distribution revealed that two societies fall under Class 7, each potentially facing different operational dynamics. Lastly, one society is classified under Class 10, signifying a unique position and possibly distinct challenges or opportunities (Table 1).

Table 1. Categories of Dairy Cooperative Societies in the study area basis on milk procurement.

Class	Litres of Milk Procurement per Day (LMPD)	Number of societies in the study area
Class 2	Above 5000 and up to 7500 LMPD	1
Class 3	Above 3000 and up to 5000 LMPD	3
Class 4	Above 1500 and up to 3000 LMPD	7
Class 7	Above 400 and up to 700 LMPD	2
Class 10	Below 100 LMPD	1

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Milk procurement data of DCS in Kalpetta

As part of this analysis, it is important to consider the daily milk procurement figures of each DCS, as these numbers serve as a key indicator of their efficiency and impact. The data typically includes the amount of milk collected by each society on a daily basis, providing a comprehensive overview of their contributions to the overall milk production in the region. (FIG 1).

Average daily milk procurement (L)

The cooperative's milk procurement is thriving with diverse contributions from different classes of farmers. Class 2 leads with an impressive daily average of 6300 L, making an annual impact of 2,299,500 L. Following closely, Class 3 maintains a steady production of 3775 L daily, totalling 1,377,875 L annually. Class 4 showcases efficiency with a daily procurement of 2553.27 L, contributing 931,943 L yearly. Even smaller classes like Class 7 and Class 10, with daily averages of 571.5 L and 80 L respectively, play crucial roles, adding 208,597.5 L and 29,200 L annually. Together, these diverse classes create a resilient and inclusive cooperative system, ensuring a consistent and robust milk supply chain.

Average daily milk production (L)

Each class of farmers contributes uniquely to the cooperative's milk production. Class 2 maintains a consistent pace with 6300 L daily, ensuring reliability. Class 3 aligns closely with 3666 L daily, emphasizing equilibrium. Class 4, with seven societies, achieves efficiency at 228017.74 L daily. Class 7 highlights balance with 571.5 L daily. Even with a lower daily production of 80 L, Class 10 plays a crucial role in the cooperative's comprehensive approach.

Average quantity of milk sold locally/year

In Kerala's dairy market, each class plays a vital role. Class 2 dominates with annual sales of 271956.5 L, shaping the commercial landscape. Class 3 sustains momentum with 651184.55L in sales, while Class 4 strategically stabilizes the market with 240089 L. Class 7 proves moderate figures matter with 106154 L in sales. Even Class 10, selling 11300.4 L annually, meets specialized needs, showcasing the diversity and resilience of the dairy sector.

Average quantity of milk given by dairy to union/year

In the union's collective effort, Class 2 leads

with an annual supply of 1883789.2 L, addressing significant market demands. Class 3's consistent contribution of 943876.6 L adds stability to Kerala's dairy industry. Class 4 strategically supplies 587785 L, fortifying the cooperative structure. Even with a moderate supply of 126631.5 L, Class 7 plays a meaningful role. Class 10, despite its smaller scale at 4022.73 L annually, caters to specialized needs, showcasing the diverse and vital contributions of each class to the union's resilience.

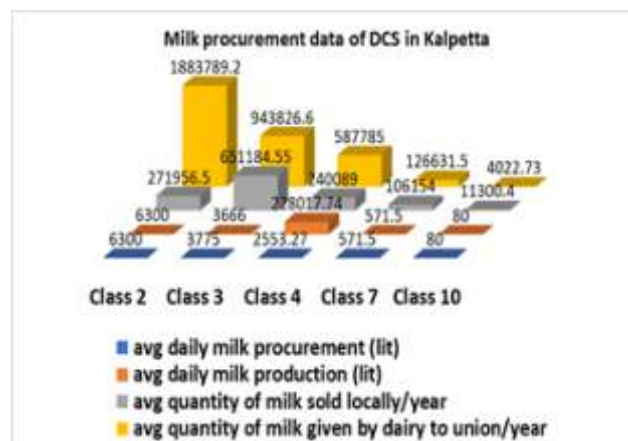


Fig 1

Details of registered members under DCS of Kalpetta

It involves an overview of the average membership, representation of SC/ST members, and the total count of male and female members. It shows the demographic composition of these cooperative societies & highlights the key aspects of their membership structure. (Fig 2).

Average number of membership

Class 2 leads with an impressive average of 2065 registered members, fostering a robust dairy enthusiast community. Class 3, with 991 members, embodies a deep commitment to the cooperative model. Class 4, with 849.16 registered members, contributes to diversity and cooperative values. Class 7, with 708 members, thrives as a cohesive collective. In a specialized niche, Class 10, with 16 registered members, showcases the dairy cooperative model's versatility, meeting unique community needs.

Average number of SC/ST members in society

Class 2 leads inclusively with an average of 160 SC/ST members, emphasizing equal opportunities. Class 3, with 115 SC/ST members on average, showcases dedication to social equality. Class 4, with

52.42 SC/ST members on average, represents ongoing efforts for balanced inclusion. Class 7, averaging 70 SC/ST members, fosters diversity, enriching cooperative perspectives. In the specialized realm of Class 10, with an average of 16 SC/ST members, the cooperative society demonstrates adaptability and commitment to niche inclusion within the dairy industry.

Average number of male and female members in society

Class 2 models' diversity with 1400 male and 635 female members, highlighting balanced participation. In Class 3, gender parity is actively pursued with 515.66 male and 272.33 female members on average. Class 4 fosters equality with 276.83 male and 110.17 female members on average. Class 7 thrives as a mosaic with 425.5 male and 177 female members on average, enriching the cooperative with diverse perspectives. In the specialized Class 10, an average of 10 male and 6 female members were involved.

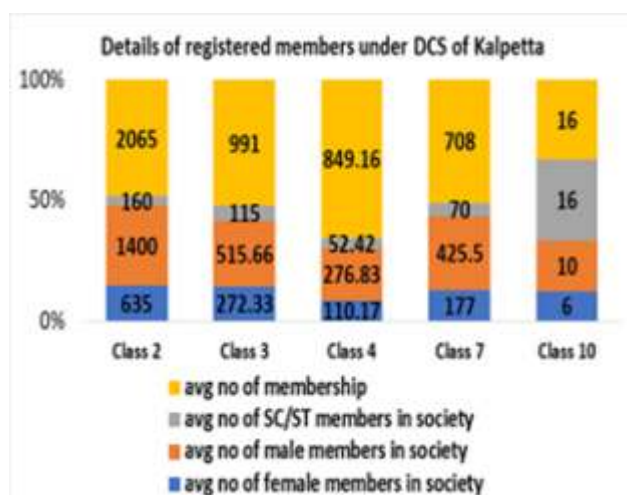


Fig 2

Data regarding feed supply to society

In the intricate web of Kerala's dairy cooperative society, the supply of cattle feed and food supplements plays a pivotal role in sustaining the health and productivity of the region's livestock. Examining the average quantities sold during the financial year across different classes within the society unveils a story of careful management, diverse needs, and the cooperative's commitment to ensuring the well-being of the dairy ecosystem. (Fig 3).

Average quantity of feed, feed supplement sold during 2022-23

Class 2 leads in feed supply, selling 480,000 kgs, serving as the cornerstone. In Class 3, 83,360.332 kgs are carefully supplied, focusing on balanced nutrition. Class 4 strategically manages feed with 51,270.83 kgs sold. Class 7 efficiently supplies 45,487.5 kgs, catering to moderate-scale livestock. Class 10, with a specialized supply of 25 kgs, meets specific and unique needs within the cooperative society.

Average quantity of cattle feed purchased during 2022-23

In Kalpetta's dairy landscape, Class 2 anchors feed supply with an annual purchase of 480,000 kgs, supporting neighbouring classes. Class 3 focuses on optimal nutrition with a substantial yearly purchase of 426,991.66 kgs. While Class 4 strategically manages feed, 51270.83 Class 7 efficiently procures 46,306.37 kgs, catering to diverse scales of dairy farming. In a specialized role, Class 10's precise annual purchase of 2,500 kgs meets unique cooperative society requirements.

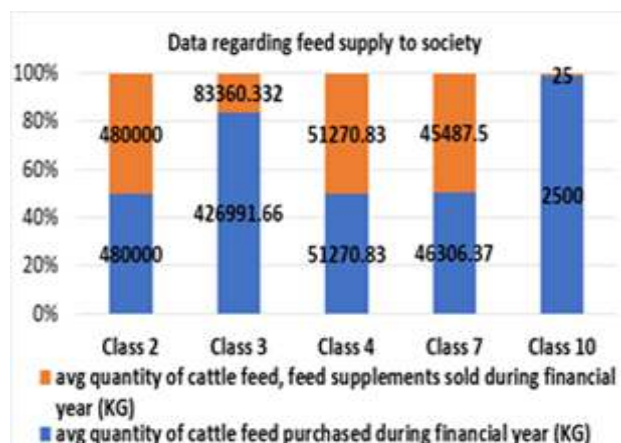


Fig 3

Details of animals possessed by members and non-members

In the serene landscapes of Kalpetta, Kerala, the possession of animals by both members and non-members plays a pivotal role in shaping the dynamics of the dairy cooperative society. Examining the average number of animals possessed by both groups across different classes unveils a narrative of diverse engagement, cooperative participation, and the collective effort to foster a thriving dairy ecosystem. (Fig 4).

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Average number of animals with non-members (poured milk to society)

In Class 2, an average of 230 animals showcase their significant engagement beyond formal membership. Class 3, with 178 animals, and Class 4, with 113.75 animals on average, emphasize the diverse and vibrant contributions of non-members. In Class 7, an average of 50 animals from non-members actively participate, reflecting the cooperative's commitment to accommodating various scales of animal possession. While Class 10 registers no animals from non-members, it highlights the cooperative society's adaptability to diverse needs within Kerala's dairy industry.

Average number of animals with members of society

In Class 2, members lead with an average possession of 1500 animals, defining the cooperative's livestock scale. Class 3 members contribute substantially to 380 animals, ensuring a reliable milk supply. Class 4 members strategically possess 263.75 animals, actively contributing. Class 7 members, with 120 animals on average, showcase commitment, ensuring a diverse milk supply. In Class 10, members possess 18 animals on average, contributing uniquely to the cooperative's diverse dairy landscape.

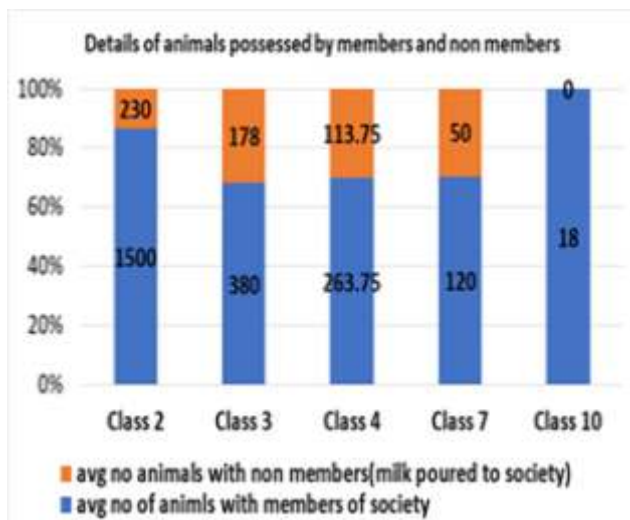


Fig 4

Employees engaged in DCS

Investigating 5 employee involvement within Dairy Cooperative Societies (DCS) of Kalpetta reveals key details such as the average number of employees, along with a breakdown of permanent and temporary

staff. This article sheds light on the workforce dynamics essential for the effective operation of these cooperative societies. (Fig 5)

Average no of employees in society

Class 2 leads with 20 employees, highlighting a commitment to meet diverse community needs. In Class 3, 11 employees streamline operations efficiently, emphasizing operational excellence. Class 4 maintains precision with 10.85 employees, ensuring stability and efficiency. Class 7 operates efficiently with four employees on average, showcasing adaptability. Class 10 represents niche expertise with an average of two employees, demonstrating a focused approach.

Permanent employees in society

Class 2 has 7 stable employees, bringing expertise to the cooperative. Class 3, with 3.6 employees, empowers the community in Kalpetta. Class 4, with 4.4 employees, is known for efficiency in the local dairy scene. Class 7 operates with 3 employees, showing efficiency in every role. Class 10 has no permanent employees, symbolizing a unique aspect of the cooperative society.

Temporary employees in society

Class 2 employs 3 temporary staff, contributing to operational efficiency. Class 3 adapts with an average of 7.3 temporary employees, responding to diverse demands. Class 4 manages well with 6.4 temporary employees. Class 7 operates efficiently with one temporary employee, strategically enhancing productivity. In Class 10, an average of two temporary employees provide specialized support within the Kalpetta Block dairy cooperative.

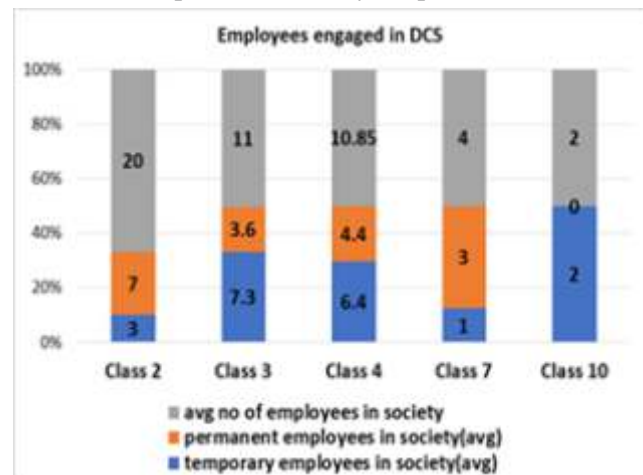


Fig 5

The research findings revealed that the majority of milk producers were male in different classes, as compared to the female members. This suggests a gender disparity in entrepreneurship within rural milk production, indicating a predominance of men in this sector. This finding is supported by earlier findings of Chander and Chand (2020). The members and non-member dairy farmers were significantly different concerning the animals they possessed. Hence, the dairy cooperative has a positive impact on dairy farmers. This finding is in accordance with the observation of Khyalia *et al* (2016).

CONCLUSION

Noteworthy findings include Class 2's leading role in milk production, Class 3's commitment to social equality, and Class 7's efficiency with a small yet effective team. The study presents a comprehensive overview of the cooperative landscape, emphasizing the societal, economic, and agricultural impact of these entities. The study also reflects the need for further, deeper assessment of the functional dynamics of Dairy Milk Cooperative societies and also emphasise the need for studying the impact of these societies on the livelihood security of farmers in the study area.

REFERENCES

- Asha K, Narayanagowda K and Manager G Ananda (2021). Perception of women dairy farmers about dairy enterprise in Ramanagara District of Karnataka. *J Krishi Vigyan* **10** (1): 184-188.
- Chander R K and Chand R (2020). Socio-cultural effect of training and dairy extension services on milk producers of rural Punjab. *J Krishi Vigyan* **9** (1): 306-310.
- Dhaliwal A P S and Dhillon G S (2017). Management practices followed by dairy farmers in rural and urban areas of Bathinda district in Punjab. *J Krishi Vigyan* **6** (1): 124-127.
- GOK (2023) Dairy Development Department, Kerala, India.
- Khyalia N K, Sagar M P and Pratap J (2016). Impact of dairy cooperative society on the overall status of member dairy farmers. *J Agric Biol Environ Sci* **3**: 1-4.
- Nargunde A S (2013). Role of dairy industry in rural development. *Int J Advanced Research Engineering and Technol* **4** (2): 8-16.
- Nizamuddin K, Parashari A K, Salman M S (2014). Role of dairy cooperatives in the socio-economic development of dairy farmers in Moradabad District: A case study. *Int J Social Sci* **2**: 1-8.
- Sonkamble A C, Khalge M I, Wanole S N (2021). Socio-economic status and problems faced by members of dairy cooperative societies in improving socio-economic status. *Int J Microbiol App Sci* **10**: 766-771.
- VykhaneSwari K and Babu G S K (2021). A study on the performance of the dairy sector in India. *Asian J Agric Ext Econ Sociol* **39**: 59-67.
- Wani S A, Sankhala G, Singh A and Chahal V P (2015). Performance of dairy cooperative societies and milk disposal pattern of member farmers in Jammu and Kashmir. *Indian J Anim Sci* **85**: 662-666.

Received on 12/1/2024 Accepted on 2/2/2024