



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2023; SP-12(8): 448-451
© 2023 TPI
www.thepharmajournal.com
Received: 24-05-2023
Accepted: 28-06-2023

Mohammed Arshath
Department of Dairy Chemistry,
Kerala Veterinary and Animal
Sciences University, Pookode,
Wayanad, Kerala, India

Yancy MI
Assistant Professor, Department
of Dairy Husbandry, Kerala
Veterinary and Animal Sciences
University, Pookode, Wayanad,
Kerala, India

Corresponding Author:
Yancy MI
Assistant Professor, Department
of Dairy Husbandry, Kerala
Veterinary and Animal Sciences
University, Pookode, Wayanad,
Kerala, India

Understanding the socio-economic landscape of dairy farmers in Ollukkara block, Thrissur district, Kerala: A comprehensive analysis

Mohammed Arshath and Yancy MI

Abstract

This study presents an in-depth analysis of the socio-economic landscape of dairy farmers in the Ollukkara Block, Thrissur district, Kerala, India, a region recognized for its vibrant dairy industry. We conducted a comprehensive survey involving 60 dairy farmers selected through random sampling, collecting data on a range of socio-economic variables. Our findings reveal that dairy farming in the area is predominantly conducted by middle-aged (55.00%), married individuals (91.67%), primarily males (65%), with nuclear families being the predominant family structure. Agriculture serves as the main occupation for a majority of the respondents (70%). We also identified a strong correlation between the level of formal education and involvement in dairy farming, suggesting that cattle rearing is not limited to a specific educational background. In terms of annual income and land ownership, a moderate-income level and land ownership ranging between 20 cents and 1 acre dominated the survey. Furthermore, all respondents were members of a milk cooperative society and 65 percent of them had undergone cattle rearing training, indicating the critical role of cooperative societies and continuous training in dairy farming. The study provides valuable insights that can guide policy formulation and implementation to further enhance the dairy farming sector in the region.

Keywords: Annual income, dairy farming, educational qualification, herd size, socio-economic profile

1. Introduction

Dairy farming encompasses the deliberate breeding of cattle, goats, buffalos, and other milk-producing animals with the primary objective of ensuring sustained milk production and facilitating subsequent processing. India is predominantly an agricultural country, with animal husbandry acting as the economic underpinning. The dairy business not only improves family nutrition and creates income continually, but it also helps reduce unemployment. Numerous studies show that dairying has a significant potential to improve the socio-economic status of the vast majority of rural populations.

The dairy industry assumes a pivotal role in India's economic framework, making a substantial contribution to the country's GDP. As of the 2020-21 estimations at current prices (NDDDB, 2020-21) [7], the dairy sector accounts for a noteworthy portion of the national GDP. The livestock sector, including cattle and buffalo, was responsible for approximately 6.2 percent of the total GDP, thereby underscoring its economic significance. As per the latest available reports the milk production in India is 221.1million metric tonnes with a per capita availability of 427gms/day (BAHS, 2022) [2]. This remarkable figure not only reflects India's pivotal role in meeting global milk demand but also demonstrates the dairy industry's potential for further growth.

Amongst the various regions contributing to this thriving industry, the Ollukkara Block in Thrissur district, Kerala, holds particular importance for its unique agricultural landscape and progressive dairy practices. With India being the world's largest milk producer and consumer, the role of dairy farming in supporting rural livelihoods and meeting the country's milk demand cannot be overstated. Against this backdrop, this study embarks on a comprehensive analysis to unravel the socio-economic landscape of dairy farmers specifically within the Ollukkara Block of Thrissur district. By integrating relevant statistics and data, we aim to shed light on the current state of livestock farming in India and its local impact on Ollukkara's dairy farming community.

2. Materials and Methods

2.1 Study area

The study was conducted in the Ollukkara Block, which is situated 8 km east of the Thrissur district's headquarters in Kerala, India. Thrissur district spans 3032 sq. km and encompasses five taluks: Chavakkad, Talappilli, Thrissur, Kodungallur, and Mukundapuram. Within the district, there are 17 blocks spread across 97 panchayats and 7 municipalities.

2.2 Data collection

A total of 60 dairy farmers were selected for this survey using the random sampling method. Primary data was collected through the utilization of questionnaires and interviews. To ensure the questionnaire's validity, a pre-test was conducted within the study area, and necessary adjustments were incorporated.

2.3 Variables

The study encompassed several variables related to the dairy farmers' socio-economic profile. These variables included the type of family, age of farmers, gender, marital status, number of children, main occupation, educational qualification, annual income, area of land owned, herd size, availability of

media at home, social participation, and training undergone.

2.4 Data analysis

The collected data was subjected to analysis using basic statistical tools, such as calculating averages, frequencies, and percentages. These analytical approaches aided in the comprehensive examination of the socio-economic characteristics of dairy farmers in Ollukkara Block, facilitating the extraction of meaningful insights and trends within the dataset.

3. Results and discussion

The data presented in the Table.1 provides insights into the characteristics of the respondents in study, along with their respective frequencies and percentages. The study appears to be focused on a population involved in cattle rearing, and the respondents' characteristics are described in the table's rows.

3.1 Type of family

The majority of dairy farmers (70%) belong to nuclear families, while the remaining 30% are from joint families. This indicates that cattle rearing is prevalent among both family types, but slightly more common in nuclear families. The investigation conducted by.

Table. 1: Socio economic profile of dairy farmers of Ollukkara Block, Thrissur district, Kerala, India

Sr. No	Antecedent characteristics	Category	Respondents (n=60)	
			Frequency	Percentage (%)
1	Type of family	Joint	18	30.00
		Nuclear	42	70.00
2	Age	16-29 (Young)	5	8.33
		29-42 (Middle)	33	55.00
		42-55 (Old)	21	35.00
		Above 55	1	1.67
3	Gender	Male	39	65.00
		Female	21	35.00
4	Marital status	Married	55	91.67
		Unmarried	3	5.00
		Widow/widower	1	1.67
		Divorce	0	0.00
5	No. of. Childrens	1	7	11.67
		2	24	40.00
		3	20	33.33
		More than 3	6	10.00
6	Main occupation	Agriculture	42	70.00
		Government employee	5	8.33
		Private job	9	15.00
		Business	1	1.67
		Daily wage work	2	3.33
7	Educational Qualification	Others	1	1.67
		Illiterate	0	0.00
		Up to LP	4	6.67
		Up to UP	15	25.00
		HS	29	48.33
		College	12	20.00
8	Annual Income	Professional	0	0.00
		Below 25000	4	6.67
		25000-50000	28	46.67
		50000-100000	21	35.00
9	Area of land owned	Above 1 lakh	7	11.67
		Below 5 cents	3	5.00
		5-10 cents	6	10.00
		10-19 cents	16	26.67
		20-49 cents	21	35.00
		50 cent- 1 acre	9	15.00
	Above 1 acre	5	8.33	

10	Herd size	Small (0-5 dairy animals)	25	41.67
		Medium (6-10 dairy animals)	22	36.67
		Large (>10 dairy animals)	13	21.67
11	Undergone cattle rearing training programme	Yes	39	65.00
		No	21	35.00
12	Availability of media at home	Newspaper	42	70.00
		TV	51	85.00
		Radio	22	36.67
		Agriculture Journals	15	25.00
13	Social Participation	Membership in milk cooperative society	60	100.00
		No membership	0	0.00
		Not undergone	0	0.00

Prasad *et al.* (2017) ^[8] on the socio-economic profile and challenges encountered by cattle owners in the Wayanad district of Kerala also revealed a higher percentage of dairy farmers affiliated with nuclear family units.

3.2 Age: The farmers ages are divided into four categories. The highest proportion (55%) falls within the age group of 29 to 42 years (Middle age). The age group above 55 has the lowest representation (1.67%). This suggests that cattle rearing is predominantly carried out by individuals in their middle age. This observation is congruent with a study carried out in Assam by Tamang *et al.* (2023) ^[10], providing additional substantiation to the hypothesis that middle-aged farmers play a vital role as contributors to the agricultural workforce in diverse geographical regions.

3.3 Gender: The data shows that 65% of the dairy farmers are male, while 35% are female. This indicates that cattle rearing is more commonly associated with males in the given population. This data aligns with the investigation conducted by Tamang *et al.* (2023) ^[10] regarding the socio-economic status of dairy farmers in Assam, wherein it was reported that the majority of dairy farmers were male (85%).

3.4 Marital status: The prevalence of married individuals among dairy farmers (91.67%) indicates a higher level of engagement in cattle rearing compared to unmarried or divorced individuals. These results corroborate the findings reported by Tamang *et al.* (2023) ^[10].

3.5 Number of children: Approximately 40% of the respondents reported having two children, while less than 10% respondents either had one child or more than 3 children and 33% indicated having three children. These figures suggest that individuals with a moderate number of children are more actively involved in cattle rearing. These findings exhibit a resemblance to the results of Gopi *et al.* (2020) ^[5], who conducted a study in Tamil Nadu on the Socio-economic profile and constraints of dairy farmers in Cuddalore district, India. Their research unveiled that nearly three-fourths (73.33%) of farmers had up to five individuals in their households, with the remaining 26.67% having more than five occupants.

3.6 Main occupation: Agriculture constitutes the principal occupation for a significant proportion (70%) of the respondents, with private jobs (15%) and government employment (8.33%) being the subsequent prominent sources of employment. This emphasizes the significance of agriculture-related activities in cattle rearing practices. These findings align with the study conducted by Devaki *et al.* (2015) ^[4] on the socio-economic profile of women engaged in

livestock farming in Thiruvallur district, Tamil Nadu. The data reveals a diversification of income sources among the farmers, with a notable percentage engaged in private jobs, government employment, daily wage work, and business activities. Such economic diversification may function as a protective measure during agricultural fluctuations and contribute to overall household resilience.

3.7 Educational qualification: The majority of respondents have achieved at least a high school (HS) level of education (48.33%), and 20% possess college-level education. Interestingly, none of the respondents are categorized as illiterate or possess a professional qualification, indicating that cattle rearing is not confined to a specific educational background. These findings are consistent with a study entitled "Socio-economic Profile and Adoption of Recommended Milking Practices among Small Dairy Farmers of Meenangadi Gram Panchayat in Wayanad District, Kerala" by Asiya and Gopi (2019) ^[11].

3.8 Annual income: A significant portion of respondents (46.67%) falls within the income range of 25,000 to 50,000 Rupees. This observation implies that cattle rearing serves as a feasible livelihood option for individuals with moderate income levels. Interestingly, these findings stand in contrast to those of Kumar *et al.* (2020) ^[6], who reported that 53% of dairy farmers in Karnataka had a low annual income from dairy operations, amounting to less than 25,000 Rupees. The observed differences in the income levels of dairy farmers between Kerala and Karnataka could be attributed to various factors related to the regional variations in agricultural practices, socio-economic conditions, and market dynamics.

3.9 Area of land owned: The data analysis demonstrates that a substantial proportion of the respondents (35%) possess land holdings ranging from 20 cents to 1 acre. This indicates that cattle rearing is embraced by individuals with diverse land sizes. These outcomes closely parallel the results of Sasidharan *et al.* (2023) ^[9] in their investigation on the socio-economic status of dairy farmers in Kerala. Considering these variations in land ownership patterns, strategies aimed at enhancing land use efficiency and fostering sustainable farming practices can be tailored to suit the specific needs of the dairy farmers.

3.10 Herd size: The data analysis indicates that the overwhelming majority (78.34%) of the respondents in the sample possess small to medium-sized dairy animal herds (0-10 dairy animals). This observation signifies that cattle rearing is predominantly practiced in smaller herds. These findings bear resemblance to the outcomes of Bhalarao *et al.* (2022) ^[3] in their investigation on the socio-economic

characteristics of dairy farmers in the Akola district of Maharashtra's Vidarbha region.

3.11 Undergone cattle rearing training programme: The majority of the respondents (65%) have undergone cattle rearing program. This indicates a willingness among respondents to acquire knowledge and training in cattle rearing practices.

3.12 Availability of media at home: Most of the respondents have access to newspapers (70%) and TVs (85%) at home, which can serve as sources of information and knowledge for cattle rearing. Radio and agriculture journals also have some presence.

3.13 Social participation: The results reveal that every respondent (100%) holds membership in a milk cooperative society, indicating a notable degree of social engagement and collaborative endeavors in cattle rearing activities. These findings bear resemblance to the study conducted by Gopi *et al.* (2020) ^[5] in Tamil Nadu, which sought to comprehend the socio-economic status of dairy farmers in Cuddalore district. In that study, it was discovered that all farmers were affiliated with one or more organizations.

4. Conclusion

The comprehensive analysis of the socio-economic landscape of dairy farming in the Ollukkara Block, Thrissur district, Kerala, India, reveals valuable insights into the characteristics and practices of dairy farmers in the region. The study highlights that dairy farming is predominantly carried out by middle-aged, married individuals, with agriculture being the primary occupation for a majority of the respondents. Moreover, the data shows that cattle rearing is not limited to a specific educational background, indicating the inclusivity of the sector.

The findings underscore the significance of cooperative societies and continuous training in dairy farming, as all respondents were members of a milk cooperative society and 65 percent had undergone cattle rearing training. This collective approach and skill development initiatives contribute to the success and growth of the dairy industry in the region.

The study also sheds light on the diverse land ownership patterns and herd sizes, suggesting that cattle rearing is practiced by individuals with varying land sizes and herd capacities. This variation provides an opportunity to implement tailored strategies to optimize land use efficiency and promote sustainable farming practices.

Overall, the research provides valuable data that can guide policy formulation and implementation to further enhance the dairy farming sector in the Ollukkara Block and beyond. By understanding the socio-economic profile of dairy farmers and the factors influencing their practices, stakeholders can work towards fostering sustainable dairy farming practices, empowering farmers, and bolstering the dairy industry's contribution to the rural economy.

5. Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

6. References

1. Asiya P, Gopi G. Socio-economic Profile and Adoption of Recommended Milking Practices among Small Dairy Farmers of Meenangadi Gram Panchayat of Wayanad District of Kerala. *Mapana Journal of Sciences*. 2019;18(4):41-51.
2. Basic Animal Husbandry Statistics; c2022 Retrieved from website. <https://dahd.nic.in/schemes/programmes/animal-husbandry-statistics> on 26.7.2023.
3. Bhalerao AV, Raut MA, Durge SM, Ingale SY, Kale NM. To find out the association between personal and socio-economic characteristics of dairy farmers and technological gap in dairy management practices. *The Pharma Innovation Journal*. 2022;11(1):913-917.
4. Devaki K, Senthilkumar K, Subramanian R. Socio-economic profile of livestock farm women of Thiruvallur district, Tamil Nadu. *International Journal of Science, Environment and Technology*. 2015;4(5):1322-1329.
5. Gopi RA, Manivannan MG, Sindhu MG, Soundararajan C. Socio-economic profile and constraints of dairy farmers in Cuddalore district of Tamil Nadu, India. *International Journal of Current Microbiology and Applied Science*. 2022;9(04):1320-1326.
6. Kumar S, Sankhala G, Kar P, Meena DK. Socio-Economic Profile, Motivational Sources and Reason behind Joining the Farmer Producer Companies by the Dairy Farmers in India. *International Journal of Plant & Soil Science*. 2021;33(14):35-44.
7. NDDDB. National Dairy Development Board. Annual report (2021-22). Retrieved from website. http://nddb.coop/sites/default/files/NDDDB_AR_2021-22_Eng.pdf on 26.07.2023; c2022.
8. Prasad K, Savale S, Mahantesh MT, Pavan M, Barman D, Abraham J. Socio-economic profile and constraints faced by dairy farmers of Wayanad District, India. *International Journal of Current Microbiology and Applied Sciences*. 2017;6(6):870-874.
9. Sasidharan M, Kannan A, Joseph BA, Raji K, Sunanda C. Study on socio-economic status of dairy farmers in Kerala. *The Pharma Innovation Journal*. 2023;12(5): 394-398.
10. Tamang R, Chutia P, Talukdar D, Swargeary BD, Kalita DJ. Study on socio economic status of dairy farmers and its impact on environment at Topatoli village of Kamrup Metropolitan district of Assam, India. In Report of the ICSSR Sponsored National Seminar on Present Status of Agriculture & Allied Activities in India: Problems & Prospects; c2023. p. 148.