

ACTA SCIENTIFIC VETERINARY SCIENCES (ISSN: 2582-3183)

Volume 6 Issue 3 March 2024

Research Article

Personal and Socio-Economic Profile of Milk Producers of Milk Marketing Co-Operatives in Andhra Pradesh

Krishna Manasa¹, Triveni G^{2*}, Sharma GRK³ and Suryanarayana MVAN⁴

¹Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, SVVU Tirupati, India

²Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, SVVU Tirupati, India

³Associate Professor, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, SVVU Tirupati, India

⁴Professor and University Head, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, SVVU Tirupati, India

*Corresponding Author: Triveni G, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Science, SVVU Tirupati, India.

Received: January 08, 2024

Published: February 12, 2024

© All rights are reserved by Triveni G., et al.

Abstract

Animal husbandry and dairying are the cornerstones of Indian agriculture, and they have a significant impact on the socioeconomic development of rural communities in general as well as the elimination of poverty, particularly among small and marginal farmers and landless labourers. Currently, more than 80 percent of the milk produced in the country is marketed by unorganized sectors and less than 20 percent by the organized sector. India's dairy cooperative is largest cooperative dairy in world. The present research was conducted in three marketing co-operatives which were primarily available to dairy farmers in the study area: Sri Vijaya Visakha Milk Producers Company Limited, Sangam Milk Producer Company Limited, in Guntur District, and Shreeja Mahila Milk Producers Company Limited in Tirupathi District. The study encompassed 90 milk producers selected through simple random sampling. Noteworthy findings of this study include middle-aged milk producers (68%), female producers (72.2%) and 48.89% are illiterates. The average annual income of respondents falling within the medium level of income (67.8%). Medium-sized families (61.1%) accounted for 68.9% of marginal land holdings with the medium level of milk production (87.80%). The study also shed light on the experience in dairy farming, which predominantly fell within the high to medium category (72.23%). 94.45% of dairy farmers marketed milk through channel-3 and the cost of milk production was more in channel-1 (Rs.53.8), Sale price of milk based on fat-3 and SNF-8.5%, (96.67%) of milk Producers sale the milk twice a day through channel-3 and the marketing margin was highest in channel-3 of Rs. 3.1.

Keywords: Socio-Economic Profile; Milk Producers; Milk Marketing Co-Operative Societies

Introduction

Over the years, the dairy industry in India has expanded significantly. With a daily availability of 445 grams of milk per person and a production of 221.06 million tons, India is one of the world's top producers of milk [2]. In 2021-22, the Andhra Pradesh state produced around 15,403 tonnes of milk [6]. Currently, more than 80 percent of the milk produced in the country is marketed by un-

organized sectors and less than 20 percent by the organized sector. The organized sector involves government and co-operatives; the unorganized sector involves private organizations. The role of dairy cooperatives in procurement of milk and providing necessary services to the dairy farmers make them distinct among the other channels of milk marketing. India's dairy cooperative is largest cooperative dairy in world. The dairy cooperative is proving

a nutritional and economic security to India. It not only bringing the unorganised dairy sector into organised sector but also aims to improve health, animal productivity, women empowerment and a better life for rural farmers [3]. The dairy cooperatives provide a greater range of services related to dairy production, including breeding, healthcare, and milk procurement, but they focus less on marketing tactics. Therefore, research must be done to create efficient marketing methods for milk marketing in order to fulfill consumer nutrient requirements and enhance the financial standing of dairy producers within the state of Andhra Pradesh. Taking into consideration the aforementioned information, the present study was carried out. The purpose of this research is to study the socio-economic profile of milk producers of milk marketing cooperatives in Andhra Pradesh.

Methodology

The present research was conducted in three marketing cooperatives which were primarily available to dairy farmers in the study area: Sri Vijaya Visakha Milk Producers Company Limited in Visakhapatnam District, Sangam Milk Producer Company Limited in Guntur District, and Shreeja Mahila Milk Producers Company Limited in Tirupathi District. Respondents were selected using simple random sampling. The total number of respondents divided into North coastal, Coastal, Rayalaseema regions constituting 30 from each geographical region. Data was gathered through personal interviews using an interview schedule that was tailored especially for this purpose.

Results and Discussion

The majority (68%) of the milk producers were in the middle age category followed by old age (16.89%) and young age (15.11%) categories respectively. It could be deduced that the majority of middle-aged milk producers saw dairy farming as a lucrative business because it provides a consistent source of revenue that considerably boosts family income. The gender percentage revealed that majority of the milk producers were females (72%) because dairy co-operative societies may give preference to family members who are more active in dairying when accepting new members, which could lead to improved dairying compared to the males (27.80%).

Table 1 showed that majority (25.60%) of the respondents were illiterate, followed by read and write (23.3%), primary school (15.6%), secondary school (13.3%), intermediate (10%) and graduate education (6.7%). The fact that almost one-fourth of milk pro-

S. No.	Category	Frequency (N = 90)	Percentage	
1.	Age			
	Young (< 37 years)	14	15.11	
	Middle (37-52 years)	61	68.00	
	Old (> 52 years)	15	16.89	
2.	Gender			
	Male	25	27.80	
	Female	65	72.20	
3.	Education			
	Illiterate	23	25.60	
	Can read Only	5	5.50	
	Read & write	21	23.30	
	Primary school	14	15.60	
	Secondary school	12	13.30	
	Intermediate	9	10.00	
	Graduate and above	6	6.70	
4.	Social status			
	Open category	44	48.89	
	Backward caste	38	42.22	
	Schedule caste	3	3.33	
	Schedule tribe	5	5.56	
5.	Family size			
	Small Size (1-3 members)	27	30.00	
	Medium Size (4-6 members)	55	61.11	
	Large Size (7-9 members)	8	8.90	
6.	Occupation			
	Main occupation	65	72.30	
	Subsidiary	25	27.70	
7.	Land ho	lding		
	Landless/agri. labourer	0	0	
	Marginal (<2.5 acre)	62	68.9	
	Small (2.5-5 acres)	16	17.9	
	Medium (5-7.5 acres)	6	6.6	
	Large (>7.5 acres)	6	6.6	
8.	Herd size			
	Small (1-2 animals)	12	13.33	
	Medium (3-4 animals)	68	75.55	
	Large (>4 animals)	10	11.12	
9.	Milk production			
	Low (<4.44)	2	2.20	
	Medium (4.44-6.78)	79	87.8	

_	High (>6.78)	9	10	
10.	Annual income			
	Low (<45185.9)	14	15.5	
	Medium (45185.9-52994.9)	61	67.8	
	High (>52994.9)	15	16.7	
11.	Experience in dairy farming			
	Low (<6 yrs)	9	10	
	Medium (6-9 yrs)	65	72.23	
	High (>9 yrs)	16	17.77	
12.	Marketing			
	Producer to consumer	5	5.55	
	Producer to middlemen to consumer	7	7.77	
	Producer to milk co-operative society to milk producer company to consumer	90	100	
	Farmer producer organizations	0	0	
	Producer consumer organisation	0	0	
13.	Cost of milk production (Amount in rupees)			
	Channel-1	51.7		
	Channel-2	48.14		
	Channel-3	44.54		
14.	4. Sale price of milk (Amount in rupees)			
	Channel-1	53.8		
	Channel-2	50.73		
	Channel-3	44.33		
15.	Criteria for fix	Criteria for fixing price		
	Fat, SNF (3%, 8.5%)	45	50	
	Fat, SNF (4.5%, 8.5%)	-	-	
	Fat, SNF (6%, 9%)	45	50	
16.	Marketing margin (Amount in rupees)			
	Channel-1	2.1		
	Channel-2	2.6		
	Channel-3	3.1		
		-		

Table 1: Personal and Socio- Economic Profile of milk producers of milk marketing co-operatives in Andhra Pradesh.

ducers lacked literacy may be a barrier to their growth in the dairy industry. Thus, organizations that support milk producers should push them to enroll in adult education. Majority of the milk producers belonged to open category (48.8%) followed by backward caste (42.22%), scheduled caste (3.33%) and schedule tribe (5.56%) categories. The findings show that in majority of the study area's open category respondents were engaged in dairy farming. It is imperative to draw attention to the advantages of dairy farming in order to encourage participation from a wider range of individuals. The majority of milk producers were from medium-sized households (61.11%), followed by small (30%) and large sized families (8.90%) respectively. One possible explanation for this could be that people in the younger and middle age prefer to live in solitary families.

Table 1 observed that majority of milk producers had dairy farming as main occupation followed by agriculture as subsidiary occupation. This is because, in contrast to agriculture, dairy farming generates income continuously throughout the year, and the respondents of the study who are members of organizations that represent milk producers may be effectively managing the dairy businesses. It was evident that nearly three-fourth (68.9%) of milk producers had marginal level of land holding, followed by small (17.9%), medium (6.6%) and large (6.6%) categories. Majority of respondents had small family structures, which may have contributed to their higher priority on dairy farming and their lower/ marginal land holdings. Majority of the milk producers had medium size herd of 3-4 animals (75.55%), followed by small (13.33%) and large size herds (11.22%). The respondents were members of milk co-operative organizations and also majority of them were having dairying as main occupation for earning their livelihoods and hence medium sized herds. Majority of the milk producers had medium level of milk production, followed by high (10%) and low (2.2%) milk production. Small farmers with 1-2 hectares and marginal farms with less than 1 hectare of land provided majority of the milk, accounting to almost three fourth of India's total milk production.

It could be seen from the table 1, that 67.8 per cent of milk producers had medium level of annual income from dairy farming, followed by 16.7 and 15.5 per cent of milk producers belonging to high income and low income from dairying, respectively. This could be because, the milk producers in the study area belonged to co-operative milk organizations and were paid based on variable factors such as milk fat and SNF percentage. Additionally, the medium herd size of the milk producers could have contributed to their medium income level [1-8].

Majority of milk producers had medium level of experience (72.23%) in dairy farming followed by high (17.77%) and low levels of experience (10%) in dairy farming. The average experience of milk producer in dairy farming was 8 yrs. Dairy farming has been an everyday employment for generations for majority of Indian milk producers. Majority of the milk producers marketed their milk through channel-3: producers- milk co-operative societies - milk producer company-consumers, followed by channel-2: producer – middlemen - consumer, and a meagre per cent through channel-1: producer- consumer and results revealed that none of the milk producers marketed their milk through farmer producer organizations or producer consumer organizations. Due to organised marketing efforts, milk producers are continuing in societies after becoming members of the milk producer organization, which might have leads to the above results.

It could be depicted from Table 1 that cost of milk production/ litre through the channels-1, 2 and 3 was arrived as Rs.51.7, 48.14 and 44.54 respectively. The high cost of production in channels 1 and 2 might be attributed to feed cost and management cost incurred towards maintenance of medium sized herds which is proportionate to the lower returns/litre. The lower cost of production/litre in channel-3 is due to involvement of processing costs only and higher returns/litre is because of market demand and sale price fixation based on fat and SNF ranges. Results from Table 1 clearly demonstrated that average sale price of milk per litre through channel-1 was Rs.53.8, followed by channel -2 with an average of Rs.50.73 and for channel-3 with an average of Rs.44.33 respectively. It was show that, no particular criteria was followed for fixing price in channel-1 and channel-2 by the producers and for channel-3 the criteria for fixing price was based on Fat and SNF percentages of milk. The results in Table 1 demonstrate that the average marketing margin observed was Rs.2.1, 2.6 and 3.1 for channel-1, 2, and 3 respectively.

It appears that the marketing margin was comparatively less for channel-1 and 2 which may be due to the high cost incurred towards cost of production/litre of milk. The higher marketing margin in channel-3 is due to less cost incurred for cost of production because of bulk availability of milk and may also be due to the criteria followed for fixing price based on fat and SNF ranges. Since fat and SNF play an important role in price spread, the marketing margin was significantly high. This information could be indicative of the additional costs or markups incurred along the marketing chain from the producers to selling stages.

Conclusion

Overall, this investigation is a useful tool to obtain information about the personal and socioeconomic characteristics of milk producers in Andhra Pradesh. The results provide wider insights on the socioeconomic structure and cultural changes in modern Indian society. As the interaction between people and their animals grows stronger, more study in this area is necessary to promote a comprehensive understanding of how people, their animals, and the social environment they live in together are changing.

Bibliography

- 20th Livestock Census. "Department of Animal Husbandry, Dairing and Fisheries, Ministry of Agriculture and Farmers Welfare, Govt. of India (2019).
- 2. DAHD and F and GOI. "Department of animal husbandary dairying and fisheries and government of India (2022 and 2019).
- 3. Kuldeep Dudi, *et al.* "Role and contribution of dairy co-operatives development in India". S. R. publications, India (2023).
- 4. Malik A., *et al.* "Socio Economic Profile of Dairy Farmers in Hisar District of Haryana". *The Asian Journal of Animal Science* 12.1 (2017): 88-94.
- Mburu LM., et al. "Determinants of smallholder dairy farmers adoption of various milk marketing channels in Kenya highlands. Ministry of Livestock and Fisheries Development, PO. Box 47010-00100. Nairobi-Kenya (2007).
- 6. NDDB (2021-2022). National Dairy Development Board. Annual report 2020-2021.
- Rajendran K and Samarendu Mohanty. "Dairy Co-operatives and Milk Marketing in India: Constraints and Opportunities". *Journal* of Food Distribution Research 35.2 (2004).
- 8. Sujatha RV., *et al.* "Milk marketing in cooperative sector and private sector in A.P". *International Journal of Scientific and Research Publications* 5 (2015): 2250-3153