

**RESEARCH ARTICLE :**

# Pattern of input services procurement and milk marketing by the dairy farmers from MPCs and other agencies in Dharwad district of Karnataka- an analysis

■ Priyadarshini C. Gadad and L.B. Kunnal

**ARTICLE CHRONICLE :**

**Received :**  
27.12.2017;

**Revised :**  
07.04.2018;

**Accepted :**  
20.04.2018

**KEY WORDS:**

Input services procurement, Milk marketing, MPCs, Other agencies, Sample dairy farmers

**Author for correspondence :**

**Priyadarshini C. Gadad**

Department of  
Agricultural Economics,  
College of Agriculture,  
University of  
Agricultural Sciences,  
Dharwad (Karnataka)  
India  
Email: [chintipriya@gmail.com](mailto:chintipriya@gmail.com)

See end of the article for authors' affiliations

**SUMMARY :** The present study was conducted to study the the pattern of inputs procurement by the dairy farmers from milk producers co-operative societies and to analyse the pattern of milk marketing by the members to the milk producers co-operative societies. Multistage sampling procedure was followed for selection of 120 sample Dairy farmers. The data pertained to the agricultural year 2014-15. Tabular analysis was used to analyze the data. The input supply services like feed, fodder, veterinary services, loan facilities and milk cans were analysed in terms average quantity of procurement and frequency of procurement. The average quantity of feed purchased by a member from the society was 485 kg per annum, the average quantity of fodder purchased by a member was four quintals per annum. The society could extend veterinary services to the needy 25 members. The loan facilities of the MPCs were availed by 24 members. The number of dairy farmers opting to purchase inputs from other agencies other than MPCs was less. As per the opinion of members of societies, it was observed that the performance of the society was better. The members in the study area were highly satisfied regarding the supply of inputs (76.67 %). Training to members and accessibility to market news to the members were poor in the whole study area. The pattern of sale of fluid milk by the sample dairy farmers to the different agencies showed that all the 120 sample farmers sold the milk to the dairy co-operative society. Apart from selling to MPCs, 26 sample farmers sold milk to the local consumers and six members to the sweet shops and hotels. Thus, the results of the study brings to focus that, the concerned agencies, development departments and others should focus more on sample dairy farmers by providing required facilities and other necessary help in effective running of dairy farming.

**How to cite this article :** Gadad, Priyadarshini C. and Kunnal, L.B. (2018). Pattern of input services procurement and milk marketing by the dairy farmers from MPCs and other agencies in Dharwad district of Karnataka- an analysis. *Agric. Update*, 13(2): 217-222; DOI : 10.15740/HAS/AU/13.2/217-222. Copyright@2018: Hind Agri-Horticultural Society.

**BACKGROUND AND OBJECTIVES**

Dairying has emerged as a major subsidiary occupation for the rural masses next to the main occupation of agriculture

providing gainful employment to surplus farm family labour in general and to small and marginal farmers in particular. Livestock sub-sector alone contributes to 25 per cent of the

total value of agricultural GDP. GDP growth rate in agriculture has been around 2 per cent during the past two decades but livestock sector is consistently growing at the rate of 4-5 per cent (Indian Dairyman). This has paved the way for India to become the largest producer of milk in the world, with an annual production of 146.3 million tonnes (Economic Survey 2015-16). In addition India is a net exporter of milk and milk products and Indian livestock sector contributes about 0.6 per cent in country's export. Hence dairying has important role in economic growth of the country. Dairying as a profession revolves around milk and milk products. Milk is most widely accepted and used animal product in India. The demand for milk and milk products is increasing day by day because of rapid increase in population, spread of education and nutrition awareness. These products provide complete nutrition to all walks of life. Milk and milk products are important in improving quality of Indian diet as majority of Indians are vegetarian. Dairy products are produced mainly by private and cooperative sectors. The Indian dairy industry is rapidly growing, trying to keep pace with the galloping progress around the world. Livestock is an integral part of crop farming and contributes substantially to household nutritional security and poverty alleviation through increased household income. India has largest livestock population in the world. The total livestock population of India makes up a huge number and stands first in cattle (105 million) and buffaloes population (199 million) and producing 146.3 million tonnes of milk and employed more than 22.4 million people in the livestock sector. To sustain the pace of production and processing of milk in the state, marketing efficiency of dairy industry in both private and co-operative sector need to be enhanced.

Keeping in view these facts research was carried out to study the pattern of inputs procurement by the dairy farmers from milk producers co-operative societies and to analyse the pattern of milk marketing by the members to the milk producers co-operative societies.

## RESOURCES AND METHODS

The highest number of milk producers co-operative societies in North Karnataka were found in Dharwad district, which is under the jurisdiction of UAS, Dharwad and hence was selected for the study. The primary data was collected on problems faced by the dairy farmers in production and marketing of milk. The primary data

collected pertained to the agricultural year 2014-15. Multistage sampling technique was adopted for selection of farmers for the study. Dharwad district under University of Agricultural Sciences Dharwad jurisdiction has the highest number of dairy co-operatives and is one of the livestock rearing district which has got favourable condition for production of different food and fodder crops. Hence Dharwad district was selected for the study. There are totally five taluks in Dharwad district, viz., Dharwad, Hubballi, Kalaghatagi, Kundagol and Navalagund and all these taluks were selected for the study. Two villages from each selected taluk, where the Dairy farming is widely practiced were selected randomly for the study. From each selected village, 12 dairy farmers were selected randomly. Thus, the total sample size for the study was 120 farmer.

Tabular analysis involving the computation of averages, percentages etc., was employed to analyse the data regarding input services procurement and marketing of milk and milk products expressed by the dairy farmers.

## OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well as discussions have been summarized under following heads:

### **Pattern of input services procurement by the dairy farmers from milk producers co-operative societies and other agencies :**

*Input services procurement by the dairy farmers from MPCs :*

The results on input supply services provided by the dairy societies to the sample farmers are presented in Table 1 and are discussed here.

The input supply services like feed, fodder, veterinary services, loan facilities and milk cans were analysed in terms average quantity of procurement and frequency of procurement. It showed that in case of feed out of 120 sample dairy farmers surveyed 110 (91.67 %) farmers procured feed from the MPCs. The average quantity of feed purchased by a member from the society was 485 kg per annum. The frequency of procurement differed. Of the 110 farmers procuring feed from the MPCs 61 members procured monthly, 29 members procured fortnightly and another 20 members procured weekly. Whereas only 14 members purchased fodder

from the society. The average quantity of fodder purchased by a member was four quintals per annum. The society could extend veterinary services to the needy 25 members. The loan facilities of the MPCS were availed by 24 members. The average amount borrowed by a member was Rs.18125 per annum. The society also helped the members to purchase milk cans. This facility was availed by 86 members. Each of these members purchased a milk can from the society.

Thus milk producers co-operative societies are extending all types of services required by the dairy farmers. This has helped the dairy farmers to run their enterprise efficiently and to increase production of milk and there by their income. Still there are some lacunae in the services provided by the MPCS.

*Input services procurement by the dairy farmers from other agencies :*

The pattern of inputs services procurement by the

dairy farmers from other agencies is presented in Table 2. The number of dairy farmers opting to purchase inputs from other agencies other than MPCS was less. And even the quantities purchased were also less. Of the 120 sample farmers only 24 farmers purchased feed from the other agencies. The average quantity of feed purchased by a farmer was 202 kg per annum. The fodder was purchased from other agencies only by 12 farmers and the average quantity purchased was 4.30 quintals per annum. From the society 86 farmers had purchased the milk cans and remaining 40 farmers purchased the milk cans from other agencies. Each of the member could purchase one milk can. Veterinary services and loan facilities were not extended to the farmers by these agencies.

This difference is due to the price and non-price benefits found to be varied; the price differential paid by other agencies is less and MPCS' is more. And the study generalises that none of the agencies is capable of

**Table 1 : Pattern of input services procurement by the dairy farmers from MPCS**

Sr. No.	Services	Unit	Average quantity procured per annum	No. of members procured
1.	Feed	kg	485	110
2.	Fodder	Qtls	4	14
3.	Veterinary services	Rs.	1321.12	25
4.	Loan facilities	Rs.	18125	24
5.	Milk Cans	No.	1	86

**Table 2 : Pattern of input services procurement by farmers from other agencies**

Sr. No.	Services	Unit	Average quantity procured per annum	No. of members procured
1.	Feed	kg	202	24
2.	Fodder	Qtls.	4.30	12
3.	Veterinary Services	Rs.	-	-
4.	Loan facilities	Rs.	-	-
5.	Milk Cans	No.	1	40

**Table 3 : Opinion of sample farmers regarding services extended by MPCS in the study area**

Sr. No.	Services	Highly satisfactory	Satisfactory	Not Satisfactory
1.	Supply of inputs	46 (76.67)	14 (23.33)	0 (0.00)
2.	Correct weighment	18 (30.00)	27 (45.00)	15 (25.00)
3.	Better prices	16 (26.66)	20 (33.34)	24 (40.00)
4.	Grading (fat % )	12 (20.00)	30 (50.00)	18 (30.00)
5.	Loan to purchase milch animals	8 (13.34)	13 (21.66)	39 (65.00)
6.	Regular payments	12 (20.00)	40 (66.67)	8 (13.33)
7.	Relationship with MPCS	17 (28.34)	30 (50.00)	13 (21.66)
8.	Training to members	10 (16.66)	18(30.00)	32 (53.34)
9.	Protecting producers interest	18 (30.00)	27 (45.00)	15 (25.00)
10.	Market news	0 (0.00)	14 (23.33)	46 (76.67)

providing the services with equal strength to the farmers, which in turn compels the farmers to depend on alternative agencies for different inputs. The built-in constraints refrain co-operatives and government departments from extending effective and timely services to the farmers. These findings emphasise the need for revamping the input distribution system, which may be effected by reducing the number of agencies supplying input or amalgamating the different agencies since they all tend to focus on the same target group. These findings are in line with the findings of Sulaiman *et al.* (2006).

### Opinions of members regarding extending of services by milk producers co-operative societies in the study area :

In the study area majority (76.67 %) of the members expressed that they were highly satisfied with the supply of inputs because the inputs required by the members were supplied by the societies. Majority (50 % and 45 %) of the members opined that they were satisfied with the grading and correct weighment. About the better

prices majority of the respondents expressed as not satisfied because the present prices given by the society is found to be non-remunerative. Loan to purchase Milch animals were completely deleted from the societies activities and therefore 65 per cent of the respondents expressed as not satisfied. Half of the members were found to have satisfactory relation with the MPCs because here the understanding between the members and MPCs personnel is good. When it comes to the market news, majority of the farmers (76.67 %) expressed as not satisfactory and no single member expressed as highly satisfactory because all most all the MPCs in the study area failed to convey the day to day on going market news to the members. The similar cases were also existed in training to members. Here also only 16.66 per cent of the respondents expressed as highly satisfactory, 30 per cent said as satisfactory and remaining 53.34 per cent were said as not satisfactory because in the study area the societies were not conducting adequate proper training programmes to the members. Majority of the respondents were satisfied (45 %) in case of

**Table 4 : The pattern of milk marketing by the dairy farmers**

Sr. No.	Agency and lactation period	Average quantity of milk marketed (litre/day)			No. of days marketed	No. of members marketed
		Morning	Evening	Total		
1.	Co-operative society					120
	Initial period of lactation	5.14	5.07	10.21	73	
	Middle period of lactation	5.00	4.76	9.76	71	
	End period of lactation	4.65	4.38	9.03	68	
	Total	14.79	14.21	29	212	
2.	Local consumers					26
	Initial period of lactation	4.36	3.76	8.12	75	
	Middle period of lactation	3.92	3.71	7.63	72	
	End period of lactation	3.34	2.80	6.14	60	
	Total	11.62	10.27	21.89	207	
3.	Sweet shops and hotels					6
	Initial period of lactation	5.33	4.50	9.83	76	
	Middle period of lactation	5.33	4.16	9.49	69	
	End period of lactation	4.16	2.66	6.82	60	
	Total	14.82	11.32	26.14	205	

**Table 5 : Pattern of sale of milk products**

Sr. No.	Product	Agency to whom sold	No. of farmers sold	Unit	Total quantity sold per day
1.	Curd	Hotels and sweet shops	21	Litres	2.02
		Household consumers		Litres	0.71
		Total			2.73
2.	Butter	Hotels and sweet shops	10	kg	2.20
		Household consumers		kg	1.80
		Total			4.00

protecting consumer interest. And most of the respondents in the study area expressed their satisfaction (66.67 %) regarding regular payment, 20 per cent opined highly satisfactory and 13.33 per cent members opined not satisfactory.

### **Pattern of marketing of milk and milk products :**

#### *Pattern of sale of milk :*

The pattern of sale of fluid milk by the sample dairy farmers to the different agencies is presented in the Table 4. It can be observed from the table that all the 120 sample farmers sold the milk to the dairy co-operative society. The average quantity of milk sold differed according to the stage of lactation period.

In the initial period of lactation they sold 5.14 litres in the morning and 5.07 litres in the evening. In the middle period of lactation they sold 5.00 litres in the morning and 4.76 litres in the evening. Whereas in the end period of lactation the quantity of milk sold decreased. They sold 4.65 litres in the morning and 4.30 litres in the evening. Coming to the number of days for which the milk was sold, it was 73 days in the initial period of lactation which was decreased to 71 days in the middle period of lactation and to 68 days in the end period of lactation.

Apart from selling to the society some farmers sold fluid milk to the other agencies also. Some 26 dairy farmers sold milk to local consumers. Here also the quantity of milk sold differed according to the stage of lactation. In the initial period of lactation a farmer sold 8.12 litres per day. In the middle period of lactation this quantity was decreased to 7.63 litres per day. They sold to local consumers for 75 days in the initial period of lactation, for 72 days in the middle period and for 60 days in the end period. In the end period of lactation they could sell only 6.14 litres per day.

Only six farmers sold part of their milk production to sweet shops and hotels. In the initial period of lactation they sold 5.33 litres in the morning and 4.50 litres in the evening. In the middle period of lactation they sold 5.33 litres in the morning and 4.16 litres in the evening. In the end period of lactation this quantity was decreased to 4.16 litres in the morning and 2.66 litres in the evening. In the initial period of lactation they sold milk to these shops for 76 days whereas in the middle and end period it decreased to 69 days and 60 days, respectively.

Although the milk is marketed to the different

agencies, major proportion of milk is procured by the MPCs.

However, among small producers milk sold to household consumers is higher due to the reason that many small farmers took hand loans from the household consumers with an agreement to sell the milk to the household consumers and secondly, due to the personal relationship existing between the household consumer and the milk producer. However, by and large, the sale to MPCs is higher. These findings are in line with the findings of Patil *et al.* (1999)

### **Pattern of sale of milk products :**

Results on sale of milk products by sample farmers are presented in the Table 5. It is observed that some 21 milk producers apart from selling milk they also sold milk products. About 2.02 litres of curd was sold to hotels and sweet shops and 0.71 litres of curd was sold to household consumers by a dairy farmer every day. Ten sample farmers sold butter also. These farmers sold a total quantity 2.20 kg butter to sweet shops and hotels and 1.80 kg to the household consumers.

It revealed that, all the members sold their milk products to the different agencies other than MPCs. As the milk producers co-operative societies are meant mainly for collection of milk only and as these societies are not procuring milk products the members sold their milk products to other agencies. Similar work related to the present investigation was also carried out by Bardhan *et al.* (2012); Beohar (2000); Priyadarshini (2015) and Singh and Dayal (2004).

---

#### Authors' affiliations :

**L.B. Kunnal**, Department of Agricultural Economics, College of Agriculture, University of Agricultural Sciences, Dharwad (Karnataka) India

---

### **REFERENCES**

---

- Bardhan, D.**, Sharma, M.L. and Saxena, R. (2012). Analysis of the factors that determine dairy farmers' choice of marketing channel in Uttarakhand. *Agric. Econ. Res. Rev.*, **25**(2): 243.
- Beohar, B.B.** (2000). Economics and marketing of milk production in central part of Madhya Pradesh. *Agric. Econ. Res. Review*, **28**(2):41-48.
- Patil, G.R.**, Bagalkoti, S.T. and Tahashildar, M.H. (1999). Production and marketing of fluid milk in a drought prone village. *Agric. Econ. Res. Rev.*, **28**(2):65-72.

**Priyadarshini, C.G.** (2015). Milk producers co-oprative societies in betterment of dairy farmers economy- an analysis. M.Sc. (Ag.) Thesis, University of Agricultural Sciences, Dharwad (Karnataka) India.

**Singh, R.B.** and Dayal, Rekha (2004). Economic analysis of

production and marketing of milk in central region of Uttar Pradesh. *Indian J. Agric. Econ.*, **59**(3): 654.

**Sulaiman, E.,** Vijayachandran, B. and Pillai (2006). An assessment of quality of services of dairy cooperatives in Kerala with special reference to Thiruvananthapuram district. *Indian Coop. Rev.*, pp.576-582.

★ ★ ★ ★ ★ **13<sup>th</sup>** Year  
★ ★ ★ ★ ★ of Excellence ★ ★ ★ ★ ★