RESEARCH ARTICLE :

Socio-economic profile and constraints faced by the members of milk producers co-operative societies in production and marketing of milk in Dharwad district of Karnataka- an analysis

■ **Priyadarshini C. Gadad and L.B. Kunnal**

SUMMARY : The present study attempted to study the socio-economic profile of the sample dairy farmers and to document the problems faced by the members of milk producers co-operative societies in production and marketing of milk in Dharwad district. Multistage sampling procedure was followed for selection of 120 sample Dairy farmers. The data pertained to the agricultural year 2014-15. Tabular analysis and Garrett ranking technique were used to analyze the data. The socio-economic profile of the sample dairy farmers with respect to age, education, family size, type of family, occupation, experience in dairy farming and land holdings was studied. The results revealed that, majority of the farmers belonged to middle age group in the study area, it is observed that of the sample farmers 35 farmers belonged to small dairy farmers category, 55 belonged to medium category and 30 belonged to large category. Further, it is also observed that in the selected sample dairy farmers, majority of the farmers were educated, 24.17 per cent of the farmers had small land holding and semi medium land holding. It is observed that 69.17 per cent had medium experience in dairy farming and it can also be seen that 15.83 per cent of the farmers had dairy as a main occupation.High cost of cattle feeds and lack of good quality concentrates, non-availability of emergency veterinary services and artificial insemination facilities, high cost of cross-breed cattles, non-availability of improved breeds for milching, lack of grazing land and lack of technical know-how were the major problems faced by the dairy farmers in milk production. Low price, delayed payment, improper grading and malpractices in measurement of milk were the major problems faced by the dairy farmers in marketing of milk.Thus, the results of the study brings to focus that, the concerned agencies, development departments and others should focus more on 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). Socio-economic profile and constraints faced by the members of milk producers co-operative societies in production and marketing of milk in Dharwad district of Karnataka- an analysis. *Agric. Update*, **13**(2): 123-127; **DOI : 10.15740/HAS/AU/13.2/123-127.** Copyright@2018: Hind Agri-Horticultural Society.

Author for correspondence :

Priyadarshini C. Gadal
Department of Agricultural Economics, College of Agriculture, University of Agricultural Sciences, Dharwad (Karnataka) India
Email:chintipriya@gmail.com

See end of the article for authors' affiliations

BACKGROUND AND OBJECTIVES

Dairying is a centuries-old tradition for millions of Indian rural households; domesticated animals have been an integral part of the farming systems from time

immemorial. Dairy production is considered to be an important tool for self-employment and socio-economic transformation of rural folk, especially for small farmers, landless labourers, and an educated unemployed. The economic viability of dairy units depend on scientific management. The dairy sub-sector occupied an important position in the agriculture economy of India, as milk is the second largest agriculture commodity contributing to the Gross National Product (GNP), next only to rice. Dairy sector in India provides regular employment to 9.8 million people in subsidiary status, which together constitutes 5 per cent workforce. The share of livestock output to the agriculture is 25 per cent and 6 per cent to the total GDP. Milk alone contributes Rs. 450 billion to the GNP of the country. The strength of Indian dairy sector lies in the fact that spiteinof limited investment, it has shown consistent and sustainable growth (Kadirvel, 2002). The rapid growth of milk production in India has been mainly because of the increase in the number of animals rather than that of improved productivity. The low productivity of dairy animals is of great concern and average productivity of Indian cow is only 987 kg/lactation as against the world average of 2038 kg/lactation. The gradual breed deterioration generally occurs from negligence over centuries and consequent rise in the population of non-descript cows (80.00%) and buffaloes (50.00%) along with the chronic shortage of feed and fodder coupled with their nutritive values and low fertility of our dairy animals has resulted in the low productivity. In India, low animal productivity results due to climatic, social and economic factors. India possesses enormous bovine wealth, but their per capita production is one of the lowest in the world due to reasons that the farmers do not adopt improved dairy management practices at the desired level.

Keeping the above problems in view, the present study was taken up with the specific objectives to study the socio-economic characteristics of the dairy farmers and to document the problems faced by the members of milk producers co-operative societies in production and marketing of milk in Dharwad district.

RESOURCES AND METHODS

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 farmers. The data on socio-economic profile of the sample dairy farmers and the problems faced by the members of milk producers co-operative societies in production and marketing of milkwas collected from the sample dairy farmers. The data pertained to the year 2014-15. Tabular analysis and Garrett's ranking techniquewere used to analyse the data.

Tabular analysis :

Tabular analysis involving the computation of means, percentages etc., was employed to analyse the data regarding demographic features, socio-economic profile, and constraints expressed by the farmers.

Garrett's ranking technique :

This technique was used to evaluate the problems encountered in Dairy farming. In this method, the farmers were asked to rank the given problem according to the magnitude of the problem. The orders of merit given by respondents were converted into ranks by using the following formula :

$$\text{Percentage position} = \frac{100 (R_{ij} - 0.05)}{N_j}$$

where,

R_{ij} = Rank given for i^{th} item by j^{th} individual

N_j = Number of items ranked by j^{th} individual

The percentage position of each rank thus obtained was converted into scores by referring to the table given by Garrett. Then for each factor the scores of individual respondents were added together and divided by total number of respondents for whom the scores were added. These mean scores of all the factors were arranged in the order of their ranks and inferences were drawn.

OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well

as discussions have been summarized under following heads:

Socio-economic characteristics of the dairy farmers:

The socio-economic characteristics of the sample dairy farmers in the study area are depicted in Table 1 and are discussed here.

With respect to the age of the sample farmers, it is observed that most of the sample farmers were of middle age group (49.17 %).The reason for the above result may be the fact that dairying is a recurrent income generating programme and it adds significantly to the family income. The income from dairy is assured unlike agriculture which is uncertain one. Therefore most of middle aged farmers are taking up dairying as subsidiary occupation.

With regard to education level of the sample respondents, it was noticed that 16.67 per cent of the farmers were illiterates. Among literates, education level of sample respondents ranged from primary to degree level. This indicated that literacy level (83.33 %) in the study area was higher. Hence, the farmers' receptive capacity eased the process and adoption of new technology. And on the other hand to take care of the

Table 1 : Socio-economic characteristics of sample dairy farmers

Sr. No.	Particulars	Frequency	Percentage
1.	**Age (years)**		
	Young age (<35 years)	13	10.83
	Middle age (35-54 years)	59	49.17
	Old age (>55 years)	48	40.00
	Total	120	100
2.	**Education**		
	Illiterate	20	16.67
	Primary (Upto 4th std.)	38	31.67
	Middle (5th to 7th std.)	23	19.17
	High school (8th to 10th std.)	15	12.50
	PUC	16	13.33
	Graduate and above (>12th std.)	8	6.67
	Total	120	100
3.	**Family size**		
	Small (Upto 4 members)	35	27.17
	Medium (5-8 members)	55	45.83
	Large (>8 members)	30	25.00
	Total	120	100
4.	**Occupation**		
	Agriculture + Dairy	89	74.17
	Dairy + Others	19	15.83
	Agriculture + Dairy + Others	12	10.00
	Total	120	100
5.	**Experience in dairy farming**		
	Low (Upto 10 years)	28	23.33
	Medium (10 to 20 years)	83	69.17
	High (more than 20 years)	9	7.50
	Total	120	100
6.	**Land holding**		
	Land less	5	4.17
	Marginal (Upto 2.50 acres)	13	10.83
	Small (>2.50 acres to 5 acres)	29	24.17
	Semi medium (>5 acres to 10 acres)	29	24.17
	Medium (>10 acres to 25 acres)	25	20.83
	Big (>25 acres)	19	15.83
	Total	120	100

illiterates, there is need for the extension workers to educate the farmers regarding recent developments in dairy, agriculture and other enterprises to increase their level of income and productivity on the farm.

It is observed from the table that, clearly three size groups of sample dairy farmers emerged *i.e.*, small size (upto 4 members), medium size (5-8 members) and large size (> 8 members). Of the sample farmers 35 farmers belonged to small dairy farmers category, 55 belonged to medium category and 30 belonged to large category. Which means in the study area 5-8 members were commonly found in a family and majority (75 %) of the farmers belonged to nuclear family. This might be due to their awareness regarding the increased cost of living and difficulties in maintenance of big family and they might have found to have medium families to lead better and comfortable life. The predominance of nuclear family was due to the realization of advantages of nuclear family in terms of running family, fewer responsibilities, privacy and more freedom of action in taking family decisions.

From the table it could also be seen that 10.83 per cent of the dairy farmers possessed marginal land holding, 24.17 per cent of farmers had small land holding and semi medium land holding, 20.83 per cent of farmers had medium land holding, 15.83 per cent of farmers had big land holding, and 4.17 per cent farmers were landless. The results revealed that the majority of the sample dairy farmers belonged to small and medium farmers category.

The occupational pattern of the sample farmers practicing agriculture as main occupation with dairy as a subsidiary occupation accounted for 74.17 per cent, dairy as main occupation contributed about 15.83 per cent and

farmers practicing other than agriculture and dairy as main occupation were 10.00 per cent.

With respect to experience in dairying majority of the respondents (69.17 %) had medium experience in dairying followed by low level experience (23.33%) and high level experience (7.50 %), respectively. The reason for this may be due to the fact that in recent decades it is found that more and more farmers are gradually taking interest in dairying as an enterprise. They also have exposure to various types of training programmes conducted by concerned departments of the government on dairy farming.

Problems faced by the members of milk producers co-operative societies in production and marketing of milk in the study area :

Opinions of farmers on the problems faced by them in producing milk and marketing of milk were elicited right from the purchase of milch animals and inputs in the production of milk. The Garette ranking technique was used to rank these problems.

Problems faced by the milk producers in production of milk :

The problems faced by the milk producers in milk production were ranked using Garette ranking technique and are presented in Table 2.

The sample farmers expressed high cost of cattle feeds and lack of good quality concentrates as the major problem in milk production. This might be due to mixing of other low quality materials like wheat bran, paddy husk etc., in manufactured compounded feeds. So the

Table 2 : Problems faced by the dairy farmers in milk production				
Sr. No.	Constraints	Garrett total score	Garrett mean score	Rank
1.	High cost of cattle feeds and lack of good quality concentrates	6449	53.74	I
2.	Non-availability of emergency veterinary services and artificial insemination facilities	6325	52.93	II
3.	High cost of cross-breed cattles	5826	48.55	III
4.	Non-availability of improved breeds for milching	5782	48.18	IV
5.	Non-availability of pasture land for grazing	5715	47.62	V
6.	Lack of technical know-how	5009	42.49	VI

Table 3 : Problems faced by the dairy farmers in marketing of milk				
Sr. No	Constraints	Garrett total score	Garrett mean score	Rank
1.	Low procurement price	6218	51.81	I
2.	Improper grading of milk	6202	51.68	II
3.	Mal practices followed in measurement of milk	6140	51.16	III
4.	Delayed payment of sale proceeds of the produce	5656	47.13	IV

Department of Animal husbandry need to keep a check on such malpractices followed in the feed manufacturing. The animal husbandry department can undertake the work of production of feeds in public sector and can be supplied to farmers on subsidized rates.

Majority of the farmers (52.93 mean score)also expressed their dissatisfaction over the Non-availability of emergency veterinary services and artificial insemination facilities. This may be mainly because of limited veterinary hospitals in the study area. Non availability of pasture land for grazing was another major problem (mean score of 47.62). Majority farmers belong to small and marginal land holding groups. So, they hardly leave lands for grazing. The community grazing lands have been encroached to a great extent.

High cost of cross-breed cattles is also one of the problem in milk production. So, the animal husbandry department need to undertake the cattle breeding work on larger scale to supply good milch breeds/crossbreeds to the dairy farmers. The problem of non-availability of improved breeds for milching was ranked IV with a mean score of 48.14. Therefore it is suggested that the dairy farmers should contact cattle breeding centres working under the department of animal husbandry or any other private cattle breeding centres in the state for good milch breeds. Lack of technical know-how was one of the constraint in milk production. This problem was ranked VI with a mean score of 42.49. The animal husbandry department and agricultural universities in the state are training the farmers on various aspects of scientific dairy management practices. The dairy farmers should make best use of these services.

Problems faced by the dairy farmers in marketing of milk :

The problems faced by the dairy farmers in marketing of milk were also elicited from the sample dairy farmers and were subjected to analysis through Garette ranking technique. The results are presented in Table 3.

Milk is the most perishable commodity and hence, the dairy farmer should be very cautious in preparing for as well as in marketing of milk. Farmers opined that the price fixed by milk producers cooperative society was not remunerative. This problem was ranked I with a mean score of 51.81. This may be because of increasing cost of inputs required for milk production. Farmers also expressed their dissatisfaction over the grading of milk. Improper grading was ranked II with a mean score of 51.68. This may be mainly because we are not attaching muchimportance to the grading of commodity. The price paid by the milk producers co-operative societies or milk men is not remunerative to the milk producers. Under the present increasing trend of fodder, feeds, labour and other related input costs in milk production this is bound to happen. Farmers opined that there was prevalence of malpractices in measurement of milk. This problem was ranked III with a mean score of 51.16. Farmers experienced the difficulty in getting the payment for their produce in time. This problem of delayed payment of sale proceeds of the produce was ranked IV with a mean score of 47.13. The management of the KMF need to take these things seriously and arrange for the payment to the milk sellers. More or less similar results were found by Belli (1990); Mohapatra et al. (2012); Priyadarshini (2015) and Suresh et al. (2013).

Authors' affiliations :

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

REFERENCES

Belli, R.B. (1990). A study on socio-economic conditions and management practices being followed by the Govalis of Dharwadtaluk. M.Sc. (Ag.) Thesis, University of Agricultural Sciences, Dharwad (Karnataka) India.

Mohapatra, A.S., Behera, R. and Sahu, U.N. (2012). Constraints faced by tribal entrepreneurs in dairy farming enterprise. *Internat. J. Phy. Soc. Sci.*, **2**(7):171-184.

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

Suresh, J., Raghuram, P., Veerbrahmaiah, K. and Ravi, V. (2013). Constraints on dairy entrepreneurs in chittor district of Andhra Pradesh. *Andhra Agric. J.,* **60**(3): 686-689.

13th Year
★★★★★ of Excellence ★★★★★