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Level of Satisfaction of Member Dairy Farmers Regarding the Milk Procurement System of Milkfed in the Different Zones of Punjab

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ABSTRACT

To assess the satisfaction level of dairy farmers' regarding the milk procurement system of milkfed, a study was conducted in Amritsar, Bathinda and Ludhiana districts of Punjab, India. A total of 225 member dairy farmers of milkfed i.e. 75 from each Amritsar, Bathinda and Ludhiana districts were selected for the study. Data was collected with the help of questionnaire comprising of different type of questions regarding the milk procurement system of milkfed. The results revealed that only 3.11% farmers from three districts attained the facility of uplifting of milk at their doorstep while 96.89% farmers poured milk to the societies on their own vehicles. Further, 84.44% farmers responded that Verka procured full quantity of milk produced by them. A trend has been observed that there is a well-established milk collection system of milkfed, 75.11% farmers responded that milkfed provides subsidy for installation of BMC and 96.44% farmers revealed that expenditure to run BMC is also provided by Verka. 95% farmers received their payment for the milk at every tenth day. 99.11% farmers believed that price of milk is lowered in winters. Although , there is lowering in pricing of milk during winter season, still 61.33% farmers of the three districts were satisfied with the pricing pattern of milkfed.

Keywords: Milkfed, dairy farmers, milk procurement, pricing of milk

India is the largest milk producer in the world and accounts for more than 17% of world's total milk production. Dairy industry helps in alleviation of poverty and unemployment mainly in the rural areas of the country. Milk production of India has grown impressively and contributes significantly to the national economy, with the help of small, marginal farmers and landless laborers. Currently, nearly 80% of the milk produced in the country is marketed by the private organizations and less than 20% milk is marketed by the government sector and dairy cooperatives. These cooperatives have tried to omit the misuse of dairy farmers by traders and bringing the producers in direct contact with consumers. The dairy cooperatives in India are working on the principle of maximizing the profit and increasing the productivity of farmers. The dairy cooperatives constituted on a village basis under a three-tier-system i.e. milk producers' cooperatives society at the village level, the union of societies at the district level and the federation of the unions at the state level (Koli, 2000). It inspires a continuing remunerative market for all the surplus milk of the members on day to day basis, throughout the year.

Punjab is a leading state in livestock rearing and dairy farming in the country. Punjab contributes 9% of the total milk production of the country although population of dairy animals in Punjab is less than 2% of total cattle and buffalo production in the country. However, per capita availability of milk (1032 grams per day) is highest in Punjab with respect to the other states of country (NDDB, 2015-16). From the last few years Punjab has become

the hub for numerous dairy cooperatives. Punjab's very own state cooperative milk producers' federation limited is popularly known as milkfed. Milkfed was established in 1973 with an aim to boost the dairy farming in the state. Milkfed is having a strong network of about 7385 milk producer cooperative societies in the villages. Each society has milk collection centre where milk is collected each morning and evening. Around, 4.10 lakh milk producers are associated with these societies. Milkfed has network of 11 milk unions and 9 milk plants in Punjab. Currently, milkfed is handling an average of 12.75 lakh liters of milk per day against its ability of 19.75 lakh liters per day (2014-15).

The major portion of the profit of society during the year is divided among the farmers in the form of bonus. Such policies of milkfed aid in enhancing the clean and hygienic milk production. Apart from milk procurement & its marketing, milkfed also claims to provide technical inputs to the farmers relating to animal health care, AI services, quality fodder seeds and quality cattle feed to increase the milk yield of the animals. The current study is planned with the objective of studying the level of satisfaction of the member farmers regarding the milk procurement system of milkfed.

MATERIALS AND METHODS

Location of the study

To conduct the current study the whole of Punjab state was divided into three major zones on the basis of industrial setup of milkfed. On the basis of the network developed by milkfed, the study was conducted in Amritsar, Bathinda and Ludhiana districts of Punjab, India.

Selection of the respondents

In the study, total of 225 member famers of milkfed, 75 members each from Amritsar, Bathinda and Ludhiana districts were selected randomly for the assortment of data. Dairy farmers were approached at the village level at the societies established by Verka. The questionnaire was used to evaluate the response of the dairy farmers in Amritsar, Bathinda and Ludhiana districts.

Methodology

A questionnaire encompassing of well-thought-out questions regarding the satisfaction level of member dairy farmers regarding the milk procurement system of milkfed was used for interviewing the member farmers of milkfed.

Statistical analysis of data

Data was analyzed with SAS - version 9.3. Frequencies, percentages and Chi-square test are the basic statistical tools that have been used to depict the satisfaction level of member dairy farmers regarding the milk procurement system of milkfed in selected areas of Punjab. Significance for frequencies and percentages are obtained by using Chi-square test of independence.

RESULTS AND DISCUSSION

To begin with dairy farmers were asked about the mode of transportation of milk from farm to the society. Our findings depict that overall 96.89% dairy farmers selected for study poured milk to the cooperative society on their own vehicles and only 3.11% dairy farmers were getting facility of uplifting of milk at their doorstep by Verka (Table 1). Rather *et al.* (2016) also revealed similar trends stating that in cooperative system there was no provision of collecting the milk from the farmer's doorstep and it was collected at a specified collection centre in Pulwama district of Kashmir. In a district wise distribution, it has been noted that 71, 73 and 74 dairy farmers from Amritsar, Bathinda and Ludhiana districts respectively, transported their milk from their farm to the cooperative society on their own while 4, 2 and 1 farmers responded that milk cooperatives procured the milk from their doorsteps in Amritsar, Bathinda and Ludhiana districts respectively (Table 1). Although, Rathod *et al*. (2011) has also revealed the parallel trends followed at the cooperative societies for collection of milk.

With respect to the query about the seasonal variation in pricing of milk, just 3 (1.33%) farmers out of 225 responded that the price of milk remains same throughout the year while 222 (98.67%) farmers responded that the price of milk changes with seasons. In district wise observations, it has been observed that in Amritsar, Bathinda and Ludhiana respectively, there were 75, 73 and 74 farmers respectively from all the three districts responded that the price did not

Table 1: Acuity of dairy famer's about the milk procurement system of milkfed

Variable	Response	Amritsar	Bathinda	Ludhiana	Total
Mode of transport of milk from farm to milk society	Self	71 (31.56)	73 (32.44)	74 (32.89)	218 (96.89)
	By cooperative	4 (1.78)	2 (0.89)	1 (0.44)	7 (3.11)
Price of milk remains constant throughout the year?	Yes	0 (0.00)	2 (0.89)	1 (0.44)	3 (1.33)
	No	75 (33.33)	73 (32.44)	74 (32.89)	222 (98.67)
Does the price of milk is lowered in winters?	Yes	73 (32.44)	75 (33.33)	75 (33.33)	223 (99.11)
	No	2 (0.89)	0 (0.00)	0 (0.00)	2 (0.89)
Are you satisfied with the pattern of pricing of milk?	Yes	47 (20.89)	40 (17.78)	51 (22.67)	138 (61.33)
	No	28 (12.44)	35 (15.56)	24 (10.67)	87 (38.67)
Procurement of Milk	Full quantity	75 (33.33)	42 (18.67)	73 (32.44)	190 (84.44)
	Partial quantity	0 (0.00)	33 (14.67)	2 (0.89)	35 (15.56)
Mode of payment received from cooperative	Cash	70 (31.11)	71 (31.56)	27 (12.00)	168 (74.67)
	Credit	5 (2.22)	4 (1.78)	48 (21.33)	57 (25.33)
Frequency of payment	Daily	2 (0.89)	0 (0.00)	0 (0.00)	2 (0.89)
	Weekly	1 (0.44)	0 (0.00)	7 (3.11)	8 (3.56)
	After 10 days	72 (32.00)	75 (33.33)	68 (30.22)	215 (95.56)

Values depicted in parenthesis indicate percentage.

remain same throughout the year while only 0, 2 and 1 farmers from all the three districts responded that the price remains unchanged for the whole year (Table 1). Further, it has been revealed by 73, 75 and 75 farmers that the price of milk is lowered in winters while only 2 farmers from Amritsar district revealed that there is no change in price of milk (Table 1). Overall 223 (99.11%) farmers from Amritsar, Bathinda and Ludhiana districts believed that price of milk lowered in winters. Therefore, an inference at this juncture can be drawn is that there is lowering in pricing of milk during winter season. Further, the farmers were questioned about their satisfaction level with respect to the cost of milk provided to them by milkfed. It has been found in the present study that an overall 61.33% farmer from the three districts were satisfied with the cost of milk provided to them by milkfed (Table 1).

Further about the level of satisfaction of farmers with regard to cost of milk, 51 dairy farmers in Ludhiana, followed by 47 farmers in Amritsar and 40 dairy farmers in Bathinda district were satisfied with the price of milk decided by the milkfed (Table 1). Whereas Nishi *et al*. (2011) revealed that only 20% farmers were satisfied with the marketing of milk, payments and price paid by the societies to the farmers in Pradeshik Cooperative Dairy Federation (PCDF), Uttar Pradesh. Therefore, it can be said that farmers of region under study were satisfied with the pricing pattern and such trends may attract more farmers to get associated with the cooperative system in future.

Further while studying the level of satisfaction about the milk procurement system of milkfed more than 80% farmers have shown satisfaction. It has been revealed that farmers were satisfied with the procurement policy of milkfed. It has been recorded that 84.44% farmers responded that Verka procured full quantity of milk produced by them while 15.56% farmers revealed that they delivered partial quantity of milk to the Verka (Table 1). All the farmers (75) from Amritsar followed by 73 farmers from Ludhiana and 42 farmers from Bathinda show satisfaction and responded that they delivered whole quantity of milk produced at their farms to the Verka. Only two farmers from Ludhiana and 33 farmers from Bathinda delivered partial quantity of milk to the Verka (Table 1). Khan *et al.* (2010); Kumar *et al.* (2011) have shown different opinions with respect to the method of maintaining quality of milk and hygienic practices that were required for safe milk production in Punjab and Bihar.

Maintenance of the quality of milk and hygienic conditions, till milk reaches to consumers is very important. Bulk milk cooler (BMC) plays very significant role in maintaining

the quality of milk. Therefore, to maintain cold chain BMC is required and therefore parameters like time duration of storage of milk in BMC and procurement procedures of BMC also have been evaluated in the current study. In the current study 75.11% farmers responded that milkfed provide subsidy to them to purchase BMC. In the district wise distribution, 74 dairy farmers from Ludhiana followed by 67 and 28 dairy farmers from Amritsar and Bathinda districts responded that milkfed provide them subsidy to install BMC (Fig. 1).

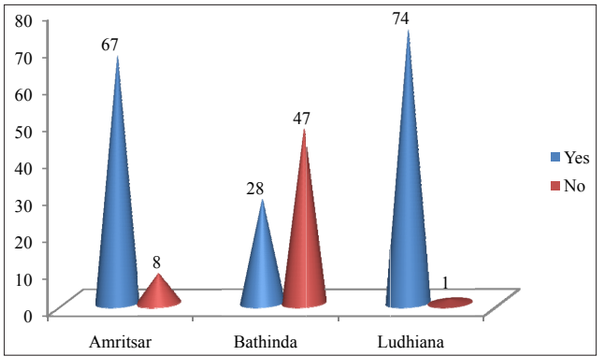

Fig. 1: Provision of subsidy for bulk milk cooler (BMC)

It reflects that majority of milk produced is stored in the cold chain. Further, 96% farmers of the study revealed that expenditure to run BMC is also born by milkfed. All the farmers (75) from Ludhiana, followed by 73 from Bathinda and 69 from Amritsar responded that milkfed provide expenditure to run BMC (Fig. 2).

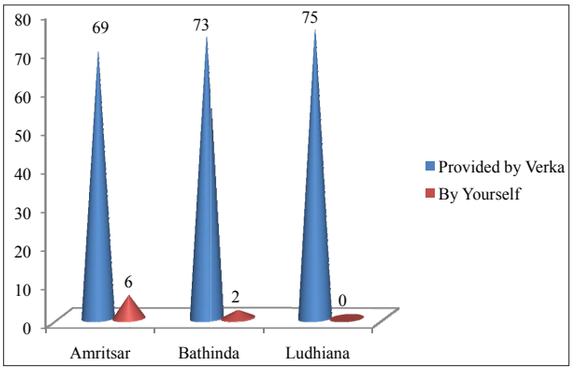

Fig. 2: Expenditure to run bulk milk cooler (BMC)

These above mentioned results reflect the higher degree of satisfaction among the dairy farmers with respect to milkfed. Further as far as storage of milk in the BMC is concerned it has been recorded that 56.89% farmers and 43.11% farmers responded that milk was stored into BMC for half & one hour respectively. In the district wise observation, 49 farmers in Ludhiana, followed by 44 farmers in Amritsar and 35 farmers in Bathinda stored the milk into BMC for half hour while 40 farmers in Bathinda, 31 in Amritsar and 26 farmers in Ludhiana district responded that milk was stored into BMC for one hour (Fig. 3). This observation reflects quicker collection system of milkfed from its societies.

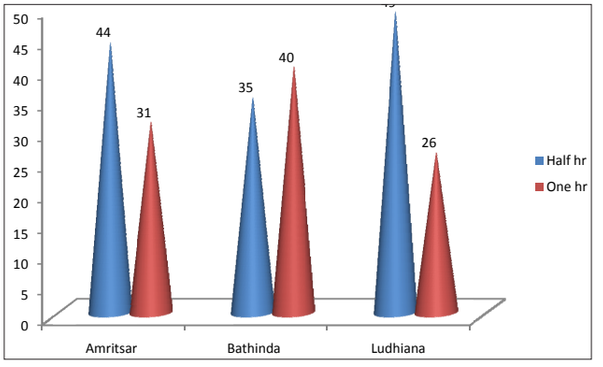

Fig. 3: Period for which milk is stored in bulk milk cooler (BMC)

Therefore, it can be said that there is well established milk collection system of milkfed which helps in avoiding the deterioration of quality of milk at farmers' level. Further it has been revealed by Kumar *et al.* (2011) that in the recent times, a trend with dairy cooperatives has been observed through which cooperatives are installing bulk milk coolers (BMC) at the grass root level to improve the microbial quality of the milk in Punjab.

In case of frequency and mode of payment for the milk produced, 95% farmers reported that they received their payment for the milk at every tenth day (Table 1) and 74.67% farmers reported that payment has been made in cash to them. Although 25.33% farmers responded that payments has been credited to their bank accounts (Table 1). Similar trends have been observed by Sulastri and Maharjan (2002) which reflected that farmers get uninterrupted payments for their produce. However, Singh (2014) in his study conducted in Dangs district of Gujarat reported monthly mode of payment. Therefore, it can be said that milkfed is providing regular payment to its farmers at short intervals. This kind of facility may attract

more farmers from Punjab and adjoining states to adopt cooperative system. Further, it will help in enhancing the production of farmers per unit.

CONCLUSIONS

As far as the milk procurement system of Verka is concerned more than 80% farmers have shown satisfaction with the procurement policy of milkfed. It indicates that Milkfed is working progressively for the betterment of its dairy farmers.

A trend has been observed in the current study that there is a well-established milk collection system of milkfed which helps in avoiding the deterioration of quality of milk at farmers' level. Therefore, it can be said that milkfed gives emphasis to the quality of the milk procured. Such policies will aid in enhancing the production of hygienic and quality milk.

It has been observed that milkfed is paying regularly its farmers at short intervals. This kind of facility may attract more farmers from Punjab and especially from the adjoining states to adopt cooperative system of milk.

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