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CHAPTER 6

STUDY OF PRIMARY MILK SOCIETIES AND FARMERS

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C H A P T E R 6

STUDY OF PRIMARY MILK SOCIETIES AND FARMERS

6.1 INTRODUCTION

The operations of the Krishna Khore Co-operative Dudh Utpadak and Puravatha Sangh have been analysed in the previous chapters. In this chapter an attempt is made to understand and to get a perspective from the Primary Milk Societies and their farmer members regarding the operations of the Sangh so as to arrive at the conclusions of the present study.

6.2 DATA ANALYSIS - PRIMARY MILK SOCIETIES

The Sangh collects milk from Primary Milk Societies, the total membership of which is 220 of these 78 supply milk to the Sangh. In the present study 25 primary societies have been selected randomly and the data obtained from these is analysed below. It was intended to get an understanding of the total number of membership of the societies, number of milk supplying members, milk collection, transport facilities, loan and credit availability from the Sangh,

spoilage of milk, composition of sales, use of cattle feed and other facilities given by the Sangh and satisfaction of the Societies.

6.2.1 Membership and Milk Supplying Members :- TABLE 6.1 depicts the total number of membership and the total number of milk suppliers to the selected Primary Milk Society. It is observed from the Table that the primary milk society has the maximum number of membership of 1700 and the least membership of 54 farmer members. The total number of milk suppliers however, is far less than the total membership of the society. The total number of milk suppliers range from 16 to as high as 400. The Table clearly reveals that the farmer members are either not interested in supplying the milk to the society due to low price or some of them are not having the milch animals since the milk business appears to be costly to them.

On further probing the researcher observed that the significant decrease in the number of milk suppliers is attributed to increase in cost of green and dry fodder, irregular monsoon, increased cost of maintenance and standard of living and high level of ever increasing inflation.

TABLE 6.1 MEMBERS AND MILK SUPPLYING MEMBERS OF SOCIETIES

SR.NO.	TOTAL MEMBERSHIP	MILK SUPPLIERS	PERCENTAGE
1	1,700	400	23.53
2	663	231	34.84
3	628	325	49.02
4	1,103	150	13.60
5	161	114	70.88
6	386	211	54.66
7	911	150	16.47
8	1,690	150	8.87
9	800	60	7.50
10	932	175	18.78
11	1,497	387	25.85
12	1,200	190	15.83
13	360	154	42.78
14	54	20	37.04
15	159	20	12.58
16	59	25	42.78
17	225	100	44.44
18	76	85	46.05
19	70	35	50.00
20	1,050	150	14.29
21	185	35	18.92
22	258	57	22.09
23	245	60	24.49
24	100	16	16.00
25	1,500	150	10.00



6.2.2 Milk Collection of Societies :- The farmer members supply buffalo and cow milk to the co-operative milk society. Both types of milk differ in fat content. Depending on the fat content the farmers get the payment from the society. Every Primary Milk Co-operative Society was asked to give its milk collection every day in these two categories. Table 6.2 shows the distribution of the Primary Milk Co-operative Societies in term of buffalo and cow milk.

It is noted from the Table that there are few societies which collect only cow milk, whereas, there are others which collect only buffalo milk. Majority of the primary societies surveyed in this study collect both types of milk. By and large it is observed that the cow milk dominates the buffalo milk in collection.

Among these 25 societies, maximum of 808 litres of buffalo milk is collected by one milk society whereas, 1875 litres of cow milk is collected by another society. It is also noticed that though the collection of both these varieties is very less (10 litres of buffalo milk and 32 litres of cow milk), the primary milk society encourages the collection and supplies it to the Sangh. It is worth noting whether such a kind of venture would be ever profitable.

TABLE 6.2 TYPE OF MILK COLLECTION OF SOCIETIES

SR. NO.	MILK COLLECTION PER DAY (LTS.)	
	BUFFALO	COW
1	780	500
2	498	355
3	175	1875
4	190	660
5	150	1100
6	200	1500
7	450	250
8	150	500
9	115	240
10	275	225
11	808	322
12	340	304
13	300	384
14	220	80
15	10	32
16	-	105
17	-	140
18	70	125
19	125	680
20	-	400
21	265	500
22	85	175
23	32	280
24	60	160
25	60	-

6.2.3 Practices Adopted by Primary Societies :- It is attempted to understand various practices adopted by the milk societies and facilities available at their disposal. Table 6.3 illustrates the opinions of the Primary Milk Societies towards various aspects.

It is noted that out of 25 Primary Milk Societies, only two have their own milk transportation vans while others have to depend on the transport facility rendered by the Sangh. It is lamented by few societies that the transport vans of the Sangh at times do not follow a strict time schedule and cause problems.

It is observed that all the Primary Milk Societies follow strict scheduled time table for milk procurement from their farmer members. The milk is collected twice in a day, morning and evening, within a period of two hours for each collection.

The price of the milk is paid on its fat content. This fat content price based system has been recently invoked by the Sangh. The Primary Milk Societies keep a register for every farmer member as regards the milk supplied, its fat content, and payment to be made. The farmers are paid by the Primary Society after a fortnight.

TABLE 6.3 OPINIONS OF PRIMARY SOCIETIES TOWARDS VARIOUS QUESTIONS

SR. NO.	LIST OF ITEMS	O P I N I O N S	
		YES	NO
1.	Own milk van	2	23
2.	Fixed time for milk procurement	25	-
3.	Observance of milk fat system by testing	16	9
4.	Get loans from Sangh for disbursement	-	25
5.	Conduct farmer-members meeting regularly	25	-
6.	Sangh gives credit for cattle feed purchase	15	10
7.	Demand exists for cattle feed	25	-
8.	Own building and store	12	13
9.	Undertake private sale	13	12
10.	Spoilage of milk	3	22

Surprisingly, it is noticed that out of 25, 16 Primary Milk Societies observe strictly the fat content based system whereas the others do not. This may be due to the fact that since the system is new the societies have not realised its importance. However, at the time of payment these may face severe problems and discontent from their members.

To understand whether the societies get loans from the Sangh, which subsequently are given to the farmer members for the purchase of milch animals, the opinions of the primary societies were collected. Without exception all the Primary Milk Societies have reacted negatively. They lamented that initially the Sangh was giving loans for the purchase of milch animals, however this arrangement was stopped and the Sangh is only instrumental in getting loans from the banks. This has drastically reduced the purchase of milch animals and thereby affected the milk business. It is also claimed by them that there are plenty of hurdles in getting loans from these banks and the farmers feel frustrated. This has severely reduced milk collection in the last five years.

The Table shows that all the 25 Primary Milk Societies conduct meetings of farmer members. The frequency of the meetings vary from society to society.

In these meetings various problems of the farmer members pertaining to animal rearing, milk collection, milk distribution, green and dry fodder arrangement, cattle feed procurement, etc., are discussed periodically.

As regards the credit availability from the Sangh about the purchase of its cattle feed is concerned, 15 societies have agreed that their farmer members do get credit for the purchase of cattle feed. On the contrary, 10 Primary Milk Societies have claimed that they do not get any credit facility for the purchase of cattle feed. By and large there is ill feeling among these societies for partial treatment shown by the Sangh to its member societies.

To examine the prospects of demand for cattle feed from the farmer members of these societies, the Primary Societies were asked whether their farmer members purchase cattle feed. It is noticed that all the Primary Milk Societies under study agreed that the farmers do use the cattle feed. There are good prospects for cattle feed business in these areas. It is also observed that these farmers are not keen in purchasing the Sangh's cattle feed inspite of it being low priced by a margin of Rs.10 per bag in the market. They believe that the Sangh's cattle feed has less nutritional value as compared to its competitors.

The present survey revealed that 12 Primary Milk Societies out of 25 do have their own building / milk shade for collection and supply of milk from the farmer members. Whereas, the remaining 13 Primary Societies collect the milk either in the open space, or under a make-shift shade.

As stated in the earlier chapters, the milk procurement of the Sangh has been declining steadily over the last decade. To examine this aspect and to understand whether the Primary Milk Societies or the farmer members sell milk in the private market, the facts were collected. It is noticed that 13 out of 25 Primary Milk Societies do sell the collected milk to private agent or dairy in want of competitive price. The societies also opined that their farmer members too sell milk privately without their permission. In view of this the Sangh has to revise the price of the milk.

Milk is a perishable item. In procurement and supply of milk there is bound to be spoilage of milk. The spoilage usually occurs due to late processing. The present study has revealed that 3 Primary Societies have agreed that milk does get spoiled during collection. This spoiled milk is collected separately and handed over to the Sangh. The Sangh in turn processes the milk.

6.2.4 Quality of Sangh's Cattle Feed :- It is noticed in the earlier chapter that the sale of cattle feed of the Sangh shows fluctuating trend. To understand the reasons for this phenomenon, the societies were asked to rank the quality of Krishna Khore cattle feed on a five point scale as given below.

<u>LEVEL OF SATISFACTION</u>	<u>NUMBER</u>
Highly Satisfied	2
Satisfied	20
Neither Satisfied nor dissatisfied	1
Dissatisfied	2
Highly Dissatisfied	-
TOTAL	25

It is observed from the above Table that majority of the Primary Milk Societies are satisfied with the quality of the cattle feed, though as will be discussed in the later part of the study, the farmer members have complained about the nutritional value. Only two Primary Societies have registered their strong dissatisfaction. These have stated that they advocate their farmer members to go for a better cattle feed available in the market. Only one society was undecided about the quality, while two were highly satisfied with the cattle feed provided by the Sangh.



6.2.5 Milk Purchase Rate :- The Primary Milk Societies were asked to rank the level of satisfaction about the rate of purchase of milk by Krishna Khore Dudh Utpadak and PuravathaSangh Ltd. This is illustrated below.

<u>LEVEL OF SATISFACTION</u>	<u>NUMBER</u>
Highly Satisfied	-
Satisfied	20
Undecided	-
Dissatisfied	3
Highly Dissatisfied	2
TOTAL	25

The above Table depicts that 20 primary societies are satisfied with the purchase rate of the Sangh. Whereas, 3 are dissatisfied and 2 are highly dissatisfied. The purchase rate of milk depends on the fat content and SNF value. Secondly, the Sangh does not decide upon the purchasing price of milk from the Primary Milk Society. The milk rates are fixed by the Government for respective fat content of the milk. It should be noted here that the rates quoted by the Govt. / Sangh are far less than the market rates. Hence it is obvious that in want of a better price either the farmer members or the Primary Milk Societies will sell their milk privately.

6.2.6 Personnel Engaged by the Societies :- The present survey has obtained the information on utilisation of personnel in milk procurement by Primary Milk Societies. The societies engage head of collection unit, clerk, gavali and salesman. The distribution of these personnel is shown in the Table below.

<u>PERSONNEL ENGAGED</u>	<u>NUMBER</u>
Head (1)	25
Clerk (1)	10
Clerks (2)	8
Clerks (3 & above)	3
Gavali/Salesman (1)	1
Gavali/Salesman (2)	6
Gavali/Salesman (3 & above)	12

It is noticed from the above Table that depending upon the amount of milk collection, different societies engage different types and numbers of personnel for milk collection.

6.2.7 Management Cost :- As revealed above the Primary Milk Societies engage number of personnel for milk collection. Hence, their management cost must be significantly high. These societies get on an average 20 paise commission per

litre. This is approximately 5 percent of the price of the milk or turnover. Only if the business is more, that is the economies of scale is achieved, the Primary Milk Societies start getting profit. The other means of getting profits is selling milk to agents or other local customers. In view of this, the societies were asked as to how their management expenses have been increasing in the past few years. It is claimed by 23 societies that their management expenses are increasing positively. Whereas, two societies have stated that their expenses have increased to a considerable extent.

6.3 DATA ANALYSIS - FARMER MEMBERS

To get a clear insight into the problems of farmer members as well as their reactions towards the Primary Milk Society and the Krishna Khore Dudh Utpadak and Puravatha Sangh, a questionnaire was administered to the farmer members. A sample of 75 farmer members was selected randomly from above mentioned 25 Primary Societies. The sample was representative from the following points of view.

6.3.1 Profile of Farmer Members :- The farmer members who are engaged in milk production and selling business come from two strata. These include landless farmers and landowner farmers. The present sample of 75

farmer members comprised of the following :

Landless Farmers	25
Landowner Farmers	50

Thus both categories of farmers supply milk to the Primary Milk Societies depending on the milch animals they possess.

These farmers are further divided into 4 categories depending on their operations. The distribution of these farmers in terms of number of households and number of milch animals they possess is shown below.

CATEGORY	HOUSEHODS	MILCH ANIMALS
Big Farmers	20	70
Small Farmers	15	30
Marginal Farmers	15	35
Agricultural Labourers	25	40

It is observed from the above Table that the big farmers have on an average three milch animals, whereas, the

small, marginal farmers and agricultural labourers have an average of two milch animals per household. It is also noticed that the big and the small farmers have buffaloes whereas, the marginal farmers and the agricultural labourers have cows.

6.3.2 Investment in Dairying :- The following Table gives an idea of the investment made by the above category of farmers in dairying. The investment by and large is made for the purchase of milch animals.

<u>INVESTMENT</u> (Rs.)	<u>NUMBER OF FARMERS</u>
5000-10,000	10
10,000-15,000	25
15,000-20,000	30
20,000-25,000	5
25,000-30,000	5

It is noticed from the above Table that depending on the type of category of aforesaid farmers the investment in dairying varies. The small and the marginal farmers have an investment upto 15,000 with 2 to 3 milch animals. While the big farmers have an investment upto 30,000 with 5 to 6 or more milch animals. It is noted that the big farmers due to economies of scale are profitable as compared to others.

6.3.3 Membership of Farmers :- At the village level there are two or more milk societies as well as other co-operative societies depending upon the size of the village. The type of membership that the selected farmers in the present survey subscribe to is shown below.

<u>MEMBERSHIP</u>	<u>YES</u>	<u>NO</u>
Primary Milk Co-op. Society	65	10
Other Co-op. Society	50	25

The above Table clearly shows that 65 farmers surveyed in the present study are members of Primary Milk Co-operative Society. Surprisingly, there are 10 farmers who supply milk inspite of not being the member of the Primary Milk Society. It is also observed that besides milk co-operative society, 50 farmers are members of other co-operative societies. However, it was noted that one farmer member subscribes to only one Primary Milk Co-operative Society.

6.3.4 Pattern of Milk Sale :- It was attempted to understand the composition of milk sale of the farmers. The following Table shows the pattern of milk selling by the selected farmer members in the present survey.

<u>TOTAL LITRES</u>	<u>CO-OP.MILK</u>	<u>PRIVATE</u>	<u>LOCAL</u>
	<u>SOCIETY</u>	<u>AGENT</u>	<u>CUSTOMER</u>
Less than 4	45	20	50
4 to 6	15	-	-
6 to 8	10	-	-
More than 8	5	-	-

It is noted from the above Table that there are 45 farmers who supply less than 4 litres of their milk to Primary Milk Society, and sell the rest to the private agent or in local market at higher price. There are 15 farmer members who sell 4 to 6 litres, whereas there are only 5 farmers who supply more than 8 litres of milk to the Primary Milk Society.

6.3.5 Price of Milk Sold :- As revealed above the price of milk varies depending on the clientele to whom the farmers supply the milk. The different rates prevailing in the village market are shown below.

<u>RATE (Rs.)</u>	<u>SOCIETY</u>	<u>AGENT</u>	<u>CUSTOMER</u>
6.50 to 7.00	75	-	-
7.00 to 7.50	-	20	-
7.50 to 8.00	-	-	50
8.00 and above	-	-	5

The milk rates in the market vary in the margin of Rs.6.50 to Rs.8.00 and above. These rates not only depend on the fat content but also on the client and circumstances. It is noted from the Table that the farmer members get the least rate from the Primary Milk Society. The private agents procure at the rate of Rs.7.00 to Rs.7.50 per litre whereas, the local customer pays the highest price either for want of milk or for the excellent quality supplied.

6.3.6 Required Rate by Farmers :- The farmers under the present study were asked to quote their required rate for milk. The following Table reveals the idea that these farmers surprisingly quote different prices in a wide range of Rs.8.00 to Rs.11.00.

<u>RATE QUOTED (Rs.)</u>	<u>RESPONDENTS</u>
8	12
9	15
10	38
11	10

It is seen from the Table that majority of the respondents have quoted for Rs.10 per litre although they have been selling the milk to the societies, agents or private customers at a rate of less than Rs.8.00.

The price of the milk not only depends on the fat content but also on its source. The Table below shows that the buffalo milk is quoted at a higher rate of Rs.7.20 by the private dairy whereas, Rs.6.60 by the Sangh per litre. On the other hand the cow milk is paid at the rate of Rs.4.98 by the Sangh while the private dairy does not purchase cow milk.

<u>ANIMALS</u>	<u>PRIVATE DAIRY</u>	<u>SANGH</u>
Buffalo	Rs.7.20	Rs.6.60
Cow	-	Rs.4.98

6.3.7 Use of Cattle Feed by Farmers :- The farmers in addition to the dry and wet fodder have to utilize to increase the fat content of the milk. In this regional market there are five major brands of cattle feed available. The Krishna Khore Dudh Utpadak and Puravatha Sangh also manufactures cattle feed and sells to farmers through Primary Milk Societies. The following Table shows the distribution of farmers based on the use of respective brands of cattle feed. It is noticed that out of 75 respondents only 25 purchase the Sangh's cattle feed. There are almost as equivalent number of farmers using the Amrut and Godrej brand of cattle feed. Whereas the Valva and Mayur brands are not so popular.



<u>CATTLE FEED BRAND</u>	<u>RESPONDENTS</u>
Krishna Khore	25
Godrej	20
Amrut	20
Valva	5
Mayur	5

The reasons given by the farmer members for not opting for the Krishna Khore cattle feed include low nutritional value, less credit period, lack of sales promotion etc.

6.3.8 Mode of Purchase of Green Fodder :- In addition to the cattle feed the milch animals are fed on green fodder. The Miraj area is drought prone area with scant rainfall and deficient in availability of green fodder. The farmers purchase the green fodder from other areas or vendors. The mode of payment and the green fodder arrangement is shown below.

<u>GREEN FODDER ARRANGEMENT</u>	<u>RESPONDENTS</u>
On Cash Payment	15
As payment for Labour	25
On Own Farm	35

The table reveals that 15 farmers purchase green fodder on cash payment. Whereas, 25 farmers from the agricultural labour category get green fodder either as payment for labour or on their return and 35 farmers get as a bye-product from their farm.

6.4 COST ESTIMATION OF MILK PRODUCTION

From the above analysis it is observed that both the Primary Milk Societies and the farmer members are of the view that the milk business is not at all profitable in the present setup. In view of this, it was intended to understand the cost estimation of milk production from a crossbreed cow. The following table gives a clear picture of the costs involved in milk production and the manufacturing expenses involved in the process.

From the analysis of the table it is observed that the total expenses per year for the estimated milk production of 2100 litres amount to Rs. 17,500. This brings the cost of milk production as Rs. 8.33 per litre. If one expects at least 10 percent profit margin, the price of milk to be sold comes to Rs. 9.16 per litre.

COST ESTIMATION OF MILK PRODUCTION FROM CROSSBREED COW

[1]	Average weight of cow	400 Kg.
[2]	Milking days	300 - 310 days
[3]	Dry days	91 - 100 days
[4]	Period between two deliveries	400 days
[5]	Milk production/lactation period	2,100 Lts.
[6]	Per day fodder requirement	7 Kg.
[7]	Per day average milk production	5.25 Lts.
[8]	Cattle feed required in Conception period	270 Kg.
[9]	Cattle feed required during production period @ 1 Kg./2 Lts. for 310 days (7 Lts/day)	1085 Kg.

MANUFACTURING EXPENSES FOR 2100 LTS

[1]	Cost of cow Rs. 8000, interest @ 12 % P.A. for 13 months	Rs. 1040
[2]	Labour @ Rs. 5/day for 13 months	Rs. 1950
[3]	Medicine & insurance @ Rs. 100 per month for 13 months	Rs. 1300
[4]	Green fodder 15 Kg/day for 400 days @ Rs. 0.75/Kg.	Rs. 4500
[5]	Dry fodder 7 Kg/day @ Rs.1.75/Kg.	Rs. 4900
[6]	Cattle feed required 270+1085 Kg.	Rs. 3,794

TOTAL EXPENSES	Rs. 17,500
COST OF MILK PRODUCTION / LITRE	Rs. 8.33