

MANAGERIAL AND BUSINESS PERFORMANCE OF MILK PRODUCERS' COOPERATIVES IN TRIBAL AREA OF SABARKANTHA DISTRICT

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ABSTRACT

The present study was under taken in Sabarkantha district of Gujarat state to know the managerial and business performance of Milk Producer Cooperatives (MPCs) in tribal area. To measure the various dimensions of performance of MPCs, 54 performance indicators were identified and selected. Out of these, only annual expenditure of MPC was considered negative factor and rest were positive factors. The findings reveal that majority of MPCs had average performance. The correlation coefficient between performance of MPCs and extent of adoption of improved animal husbandry practices by their members was positive and significant. The factors emerged out as highly affecting the performance of MPCs were; digital fat testing equipment and computer facility for accounting, A.I. services and animal health services. The most important constraints considered by MPCs members were : scarcity of green folder, non availability of A. I. services, low milk price, lack of knowledge about improved animal husbandry practices and high price of milking animals.

INTRODUCTION

The dairy producer farmers regardless of their herd sizes, have been organizing into Milk Producers' Cooperative Societies (MPCs) throughout the country. A real successful experiment of Anand pattern of dairy industry has been followed in other districts also. Sabarkantha district is one of them to start dairy cooperative under the name "Sabar Dairy." in 1964, now comprising of 1670 MPCs with the 2,72,811 members. Total procurement of the milk is 322 thousand tones with an average of 8.82 lakh Kg /day (Annual Report, Sabar dairy, 2007) Sabarkantha district is comprising of thirteen talukas of which four talukas are tribal dominating. Out of 1670 MPCs of the districts, 287 MPCs are working in the tribal pocket of district. Further, there are few MPCs having both tribal as well as non tribal as their members. Sabarkantha district ranks fifth among all the districts of the state with

respect to tribal population. The district has 20.18 per cent tribal population to its total population (Census, 2001). There had been lots of studies on technological and economic achievements of dairy development in India but there were few critical studies carried out on performance of milk producers' cooperative societies in the tribal region. Therefore, it imperative to conduct an indepth study on the managerial and business performance of milk producers' cooperatives in tribal area of sabarkantha district.

METHODOLOGY

The present study was undertaken in Sabarkantha district which have considerable tribal population spread over four talukas. Among four tribal talukas, Bhiloda and Khedbrahma talukas were purposively selected for the study having more number of MPCs running since last five years. For selection of MPCs and respondents, simple random sampling technique was used. Ten MPCs from Bhiloda

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talukas and five MPCs from Khedbrama talukas were selected and equal number of member dairy farmers i.e. 10 were selected from each MPC to make the sample size of 150 dairy farmers. Most of the data pertaining to performance of MPCs were collected from secondary sources. For primary data, field survey by personal contact method using structured schedule was used.

Adoption of improved animal husbandry practices by MPC members and it's correlation with managerial and business performance of MPCs

Adoption in the present study was operationalized as improved animal husbandry practices actually put into practices by the dairy animal owners in their dairy farming. Extent of adoption of improved animal husbandry practices was measured with the help of teacher made test developed for the purpose. A respondent was given one score, if he adopts the practices as per recommendation. If respondent deviate from the recommendation, zero score was assigned. Pearson's coefficient of correlation technique was used to find simple correlation to explore the association between managerial and business performance of MPCs and extent of adoption.

Managerial and business performance

Gopi Krishna (2001) has identified several performance indicators which determine the

managerial and business performance of MPC. Among these, the indicators suited to MPCs working in the study area were included. Few other indicators based on the secondary information and discussion with officials at various levels were further included. The parameters and indicators for constructing the cumulative performance index of MPCs were scored based on the individual value of each parameter. All together 54 indicators were identified and selected for measuring the various dimensions of the performance of MPCs.

Out of 54 indicators, only annual expenditure of MPC was considered to be negative factor and the rest of the 53 were positive factors. The negative indicator was scored negatively according to their absolute value. All the performance indicators were scored in 2, 4 and 6 point scaling developed for the individual indicator based on the X and S. D. of the absolute values of the indicators.

Cumulative performance score of MPCs

Each indicator was scored based on its absolute value. The scores of all the indicators were summed up separately for all 15 MPCs. The product of the sum of the individual score of 54 indicators gave the cumulative performance score for each MPC. Based on cumulated score, performance index was calculated for each MPC by using following formula.

Actual cumulative scores obtained by MPC

$$\text{Performance Index (PI)} = \frac{\text{Actual cumulative scores obtained by MPC}}{\text{Maximum possible obtainable cumulative scores of MPC}} \times 100$$

Based on the performance index, the MPCs were grouped into three categories viz. best performance, average performance and poor performance.

Factors influencing the performance of MPCs

The factors having direct or indirect influence on performance of MPCs were identified based on review of literature and discussion with the elected

/ designated members of the MPCs. Further, the employees of District Cooperative Milk Union (Sabar dairy) were contacted. Then after elected members, employees of the MPCs and member farmers were asked to judge each factor on three point continuum. viz, highly affecting, affecting and not affecting factors. Based on the responses, factors were categorized as most important, important and less important.

Constraints in effective functioning of MPCs

The constraints were operationally defined as the difficulties experienced by the members in effective functioning of MPCs.

The members were facing number of problems for milk production in the study areas. In order to know the constraints the respondents were asked 20 questions covering various dimensions of dairy

production problems in the area in general and milk production at household level, in particular. The responses of the respondents were recorded and one score was awarded for positive response and zero score for negative responses of the question. The score for all the statements were summed up and frequency and percentage of the responses were calculated. The constraints as perceived by respondents were then ranked.

FINDINGS AND DISCUSSION

1 Performance of MPCs

For measuring the performance, total 54 criteria had been selected and performance score was obtained. Based of performance score, the performance index of each MPCs was calculated. The data regarding performance of MPCs are as under.

Table: 1 Distribution of MPCs according to their performance Index

n=15

Sr. No.	Category	Frequency	Per cent
1	Poor performance (below 48.70 score)	3	20.00
2	Average performance (between 48.70 – 73.42 score)	9	60.00
3	Best performance (above 73.42 score)	3	20.00

X = 61.06

S.D. = 12.36

The data presented in Table 1 reveal that the average Performance Index Score of all the MPCs was 61.06. The categorization of the MPCs is made on the basis of average performance index. The data further show that 60 per cent of the total MPCs under study had average performance while, 20 per cent each of them had poor and best performance.

2 Relationship of performance of MPCs with extent of adoption of improved animal husbandry practices by member farmers

If the functioning of the MPC is the best automatically it has it's impact on the members in framing favourable attitude leading to better adoption of improved animal husbandry practices. Thus, the performance of MPCs influence on the dairy business of the members. Hence, to examine the effect of performance of MPCs on the extent adoption of the member farmers, the correlation coefficient was worked out. The data in this regard are presented in Table 2.

Table: 2 Managerial and business performance of MPCs and its correlation with extent of adoption.

n=150

Sr. No.	Name of MPC	Performance score obtained	Performance Index	Adoption score	Coefficient of correlation ('r' value)
1	Dhandhasan	198	66.00	24.12	0.7753**
2	Ganti	168	56.00	21.88	
3	Jayala	122	40.66	15.50	
4	Kalyanpur	176	58.66	29.00	
5	Lusadia	140	46.66	22.06	
6	Malekpur	172	57.33	50.30	
7	Motakantharia	190	63.33	58.00	
8	Motidodisara	178	59.33	29.10	
9	Wagheshwari	190	63.33	40.20	
10	Vejpur	208	69.33	55.00	
11	Chada	224	74.66	57.50	
12	Dodiwada	140	46.66	45.75	
13	Kalol	228	76.00	62.28	
14	Naka	260	86.66	60.20	
15	Patadia	154	51.33	22.00	
Mean			61.06	39.526	
S.D.			12.36	16.822	

** Positive and significant at 0.01 level of significance

The data presented in Table 2 show that the 'r' value was 0.7753 which was (positive and significant

at 0.01 level of significance) indicating positive and highly significant relationship between performance of MPCs and extent of adoption of improved animal husbandry practices by their member farmers.

Therefore, it is concluded that the performance of the MPCs had influenced the extent of adoption of improved animal husbandry practices of dairy farmers.

3 Factors influencing the performance of MPCs

The overall image of the MPCs depends on how it provides the important physical services required for dairy farming. Keeping this in view, the information on factors influencing the performance of MPCs was collected from the member farmers and frequency and percentage were computed. The data regarding this aspect are presented in Table 3.

Table: 3 Factors influencing the performance of MPCs

n = 150

Sr. No.	Factors	No. of respondents					
		Highly affecting		Moderately affecting		Not affecting	
		Frequ-ency	Per cent	Frequ-ency	Per cent	Frequ-ency	Per cent
1	Number of households in the operational area of MPCs.	43	28.67	76	50.67	31	20.66
2	Location distance (km) of MPCs from milk union or chilling centre	23	15.33	48	32.00	79	52.67
3	Years of registration of MPCs.	15	10.00	59	39.33	76	50.87
4	Types of office building of MPCs.	19	12.66	43	28.67	88	58.67
5	Market competition for milk in village	83	55.33	54	36.00	13	08.67
6	Digital fat testing equipment and computer for daily accounting	103	68.67	38	25.33	09	06.00
7	A. I. services / Bull services	101	67.34	35	23.33	14	09.33
8	Animal health services	90	60.00	42	28.00	18	12.00

The data in Table 3 indicate that availability of digital fat testing equipment and computer for daily accounting was the most important factor influencing the performance as 68.87 per cent of the farmers stated it as highly affecting factor. A. I. service / bull services was the other important factor influencing performance of MPC as reported by 67.34 per cent respondents to be highly affecting the performance. The other important factors reported as highly affecting factors by more than half of the respondents were animal health services (60.00 %) and market competition for milk in the village (55.33 %).

The only factors which have been reported to be moderately affecting the performance of MPCs by more than half (50.67 %) numbers of house holds in the operational area of MPCs.

The factor which has been reported non- affecting by more than half of the respondent was types of office building of MPCs (58.67 %) location distance (km) of MPCs from milk union head quarter and the year of registration.

Thus, it can be concluded from the foregoing discussion that the factors which are directly related with the dairy business and were perceived as highly affecting factors by the members were; digital fat testing equipment and computer facility for accounting, A. I services and animal health services.

4 Constraints in effective functioning of MPCs

A list of constraints was prepared and responses were obtained from each of the respondent. The data regarding the constraints are depicted in Table 4.

The data presented in the Table 4 portray that important constraints reported by great majority of the farmers were; scarcity of green fodder (90.66 %); non availability of A. I. services timely (84.66 %), low milk price to the producers (80.66 %) lack of adequate knowledge of improved animal husbandry practices (78.00 %) and high price of milch animals (74.66 %) which were ranked first, second, third, fourth and fifth, respectively.

The constraints viz. Lack of subsidized credit facility (66.00%), non availability of veterinary services at the field level and time(62.66%), unfavorable milk pricing policy (60.00 %), high rate of concentrate feed (54.66%) and ineffective dairy extension services (52.00 %) and were ranked sixth, seventh, eighth and ninth, respectively. The remaining constraints were not considered to be the important as they are reported by less than half of the farmers.

Looking to the tribal area, all the constraints

reported by the members of MPCs are of prime importance. Shortage of green fodder due to undulated land, less irrigation facility, low price of milk and high price of milking animals might have caused difficulty to adopt dairy farming by tribal members. Further, the after services like A. I. and veterinary were also not provided satisfactorily hence, they were reported as important constraints.

The present finding is supported by the findings of Dubey *et al* (1989) and Kulkarni *et al* (1990).

Table: 4 Constraints as perceived by member respondents in effective functioning of MPCs

n=150

Sr. No.	Constraints	Frequency	Per cent	Rank
1	Agro-climatic condition is not suitable for dairying	73	48.66	XI
2	High price of milch animals	112	74.66	V
3	Low milk price to the producers	121	80.66	III
4	Lack of adequate knowledge about improved animal husbandry practices	117	78.00	IV
5	Ineffectiveness of dairy extension services	78	52.00	X
6	Lack of coordination among concerned line agencies	68	45.33	XIII
7	Unfavorable milk pricing policy for producers	90	60.00	VIII
8	Difficulty to get compensation from insurance company	46	30.66	XVII
9	High insurance premium	31	20.66	XX
10	Less availability of animal insurance in the village	48	32.00	XVI
11	Scarcity of green fodder	136	90.66	I
12	Unavailability and/or high costs of improved forage/ fodder seeds	70	46.66	XII
13	A. I. services are not available timely.	127	84.66	II
14	Non-availability of veterinary services at the field level and in time	94	62.66	VII
15	High rate of dairy veterinary services than private practioner	55	36.66	XV
16	Milk holiday during flush season	37	24.66	XIX
17	Poor quality of cattle feed supplied by cooperatives	43	28.66	XVIII
18	High rate of concentrate feed supplied by the district milk union	82	54.66	IX
19	Young generation is not interested in dairying	57	38.00	XIV
20	Lack of subsidized credit facility	99	66.00	VI

CONCLUSIONS

The average Performance Index score of all 15 MPCs under study was 61.06. Majority of the MPCs (60.00 %) had average performance and 20.00 per cent each of them had poor and best performance. Correlation coefficient of performance of MPCs with extent of adoption of improved animal husbandry practices by dairy farmers was positive and significant. Thus, the performance of MPCs influenced the dairy business of the tribal members. The important factors which were emerged out as highly affecting to the performance of MPCs were; digital fat testing equipment and computer facility for accounting, A. I. services and animal health services. The major constraints faced by tribal member farmers in effective functioning of MPCs were; scarcity of green fodder for animals (90.66 %) followed by non availability of A. I. services timely, and low milk price to the producers as reported by 84.66 per cent and 80.66 per cent members respectively.

Lack of adequate knowledge of improved animal

husbandry practices, high price of milking animals, lack of subsidized credit facility and non availability of veterinary services at the place and time were also reported by large number of tribal member dairy farmers as the majors constraints.

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MANAGE

<i>M</i>	:	<i>Man Power utilization</i>
<i>A</i>	:	<i>Active supervision</i>
<i>N</i>	:	<i>Negotiate well</i>
<i>A</i>	:	<i>Attend your duty</i>
<i>G</i>	:	<i>Good setting</i>
<i>E</i>	:	<i>Efficient marketing</i>