CHAPTER - VII
SUMMARY OF FINDINGS AND CONCLUSION

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7.1 Introduction

Dairying is an important activity which provides employment as well as milk for satisfying the nutrition requirement of the population of India. It has a lot of potential and scope for future development as an important industry throughout India.

The present study titled “A study on the production and marketing problems of milk in Kanyakumari district” is about the production and marketing problems of members of the Kanyakumari co-operative milk producers union. It is an attempt to find the production and procurement concepts, marketing pattern and problem faced by the members of dairy co-operatives.

The approach to the study has been both descriptive and empirical nature. The researcher has used both primary and secondary data in writing up the thesis. For collecting the primary data, the researcher has used an interview schedule. A sample of 300 respondents was selected by applying simple random technique, from the list supplied by the cooperatives. The operational problems mentioned in this study have been identified during the course of the interview with the members of the primary dairy co-operatives. Many officers belonging to the Department of Co-operatives, Milk Producers’ Union, and Animal Husbandry were consulted. The suggestions presented in
this study are also based on the findings. This chapter deals with the findings, the various operational problems faced by the members of the co-operative societies and suggestions for solving the problems.

7.2 Findings

The major findings of the study are based on the data collected which are analysed and interpreted as follows.

7.2.1 Socio Economic Conditions

While analyzing the socio-economic profile of the milk producer, it was found out that majority are males (60.0 per cent). Majority of the milk producers (50.3 per cent) belong to the age group of above 50 years. Majority of the sample respondents have just completed SSLC education. Out of 291 milk producer more than (97.0 per cent) were married.

Majority of the milk producers have agriculture as occupation. Majority of the respondents 107 (35.7 per cent) receive a monthly income of Rs10001 to 15000. More than 68.7 per cent of the milk producer have 4 to 5 family members.

Out of 96.7 per cent of the respondents owned cow. Majority (89.0 per cent) of the respondents 4 to 5 milk animals. More than 46.3 per cent of the respondents do not have away non milk animals.
Majority (45.3 per cent) of the respondents have 21 to 30 years of experience. More than 60.3 per cent of the respondents have initial investment of 20001-30000.

Maximum respondents have the milk production of 6 to 10 liters per day per cattle. Majority (153 per cent) of the respondents’ average quantity of milk sold per day per cattle 6 to 10 litres. Majority (86.0 per cent) of the respondents preferred morning and afternoon as milking time. Moreover, there are 294 respondents who sell cow milk and only six respondents who sell buffalo milk. Majority (59 per cent) of the respondents have Rs.151-200 as maintenance expenses per day.

The milk producers are getting more profit than Rs. 300. Individual milk producers play a vital role in the purchase of cattle 181 (60.3) per cent.

The individual milk producers form the important sources. The milk producer’s source of financial assistance for purchasing cattle comes from own funds.

7.2.2 The Problems Faced by the Producers

New Technology

The average variance extracted by the factor is 59.75 which are greater than its minimum threshold limit of 50 per cent thus further
confirming the presence of convergent validity. Since the composite reliability is greater than 0.50 (the minimum standard), the factor is said to have reliability. The Cronbach’s Alpha co-efficient (0.784) is greater than 0.60, which indicates that the six variables are internally consistent for measurement to the extent of 78.4 per cent and thus has overall reliability.

**Finance**

The average variance extracted 60.24 by this factor is greater than the standard minimum of 0.50 and 0.50 per cent. This indicates that there is convergent validity. The composite reliability is greater than the standard minimum of 0.50 and the Cronbach’s alpha is 0.825 which means that the seven variables are internally consistent to the extent of 82.50 per cent. Thus, there is overall reliability to the extent of 82.50 per cent and it can be inferred that the variables included for measuring the factor finance explain it reliably.

**Production**

The average variance extracted by the factor is 55.87 which is greater than its minimum threshold limit of 50 per cent thus further confirming the presence of convergent validity. Since the composite reliability is greater than 0.50 (the minimum standard), the factor is said to have reliability. The Cronbach’s Alpha co-efficient (0.725) is greater
than 0.60, which indicates that the six variables are internally consistent for measurement to the extent of 72.5 per cent and thus has overall reliability.

**Pricing**

The average variance extracted 51.91 by this factor is greater than the standard minimum of 0.50 and 0.50 per cent. This indicates that there is convergent validity. The composite reliability is greater than the standard minimum of 0.50 and the Cronbach’s alpha is 0.812 which means that the seven variables are internally consistent to the extent of 81.20 per cent. Thus, there is overall reliability to the extent of 81.20 per cent and it can be inferred that the variables included for measuring the factor pricing explain it reliably.

**Infrastructure**

The average variance extracted by the factor is 53.01 which are greater than its minimum threshold limit of 50 per cent thus further confirming the presence of convergent validity. Since the composite reliability is greater than 0.50 (the minimum standard), the factor is said to have reliability. The Cronbach’s Alpha co-efficient (0.854) is greater than 0.60, which indicates that the six variables are internally consistent for measurement to the extent of 85.40 per cent and thus has overall reliability.
7.2.3 Factors that Influences the Problems Faced by Milk Producers

The regression results indicate that all the independent variables positively influence the problems of milk producers. It is found that among all the factors influencing the problems of milk producers, two variables i.e. pricing (0.459) and infrastructure (0.316) are significant at one percent level. The results indicate that the first hypothesis has been rejected.

7.2.4 Differences among Problems Faced by Milk Producers

The F-values for new technology and production are 4.08 (significant at 5 % level) and 23.99 (significant at 1 % level) respectively. This shows that the other problems such as finance, pricing and infrastructure are not varying for the different types of animals owned by the producers.

7.2.5 General and Vendor Related Details

Out of 90.0 per cent of the milk societies distribute milk through vendors. Majority (60.0 per cent) of the respondents’ distribution method is by vendor Bi-Cycle. More than 89.0 per cent of the respondents have 4 to 5 milk animal . Out of 70.0 per cent of the respondents’ enjoy daily payment settlement.
7.2.6 Procurement Details of the Milk Societies

Majority (55 per cent) of the respondents’ payment settlement is through vendor. Out of 20 per cent of the respondents use scientific methods. Majority (80 per cent) of the respondents milk has fat content. 70.0 per cent of the respondents total milk procurement is 1000-1500 litres. More than 60.0 per cent of the respondents total milk sales is 1000-1500 litres. Majority (100 per cent) of the respondents’ peak time of demand for milk is morning.

Majority (100 per cent) of the respondents have not adopted technology for milk procurement. More than 75 per cent of the respondents have high procurement of milk during winter.

7.2.7 Problems Faced by Milk Societies

For milk societies production problem is neutral. Most of the milk society distribution problem is neutral. The financial problem of milk societies is neutral. For most of the milk societies marketing problem is neutral. For most of the milk societies infrastructure problem is also neutral.

7.2.8 Variables Influencing of the Problems Faced by Milk Societies

Production Problems

The one sample t test showed that the mean score for inferior quality of production process (3.8.), low productivity (4.55), and low
standard in quality of milk (3.80), low demand for milk and milk products (4.20) and absence of good livestock health service (3.85) are statistically significant. This means that for milk societies these variables are the most influencing variables for production problems faced by the milk societies. The mean score for unavailability of new technology is 3.45 but it is not statistically significant. It is seen that only 4 (20%) feel that unavailability of sufficient inputs is a problem.

**Distribution Problems**

The one sample t test showed that the mean score for competition from other milk societies (4.50), irregular time in supply of milk by vendors (3.6) lack of proper milk distribution (4.05) and lack of suppliers (2.55) are statistically significant. This means that for milk societies these variables are the most influencing variables for distribution problems faced by the milk societies. The mean score for high transportation costs is 3.45 but it is not statistically significant. Physical distance of customers from the milk society is 2.60 but it is not statistically significant.

**Financial Problems**

The one sample t test showed that the mean score for price difference among societies (4.40), low procurement price (4.45), high fodder cost (4.55), and Low cash sales (2.35) and unavailability of loan
facilities (3.80) are statistically significant. This means that for milk societies these variables are the most influencing the financial problems faced by the milk societies. The mean score for unavailability of lack of loan facilities advance payment system (3.35), delay in payments from customers (2.90), irregular payment from customers (2.95), and high credit sales (2.85) are not statistically significant.

Marketing Problems

The one sample t test showed that the mean score for no proper advertisement (2.45), lack of proper sales promotion methods, (4.30), high selling price (4.15), Adulteration of milk by vendors (3.70), and frequent meeting with union are statistically significant. This means that for milk societies these variables are the most influencing for marketing problems faced by the milk societies. The mean score for poor market access (3.15), poor marketing strategies (3.40) and problem with milk vendors (3.35) are not statistically significant.

Infrastructure Problems

The one sample t test showed that the mean score for lack of animal feed at subsidized rate (3.50), and lack of innovative technology (1.35) are statistically significant. This means that for milk societies these variables are the most influencing variables for infrastructure problems faced by the milk societies. The mean score for lack of
Infrastructure Facility (3.15), poor storage facilities (3.60) but it is not statistically significant. It is seen that only lack of good veterinary facilities (3.20) is the biggest problem.

7.2.9 Influence of Vendor Characteristics on the Problems Faced by Milk Societies.

The analysis it is found that there is association between production problems and distribution method used by vendors. But there is no association between the production problems and type of distribution used, number of vendors and payment settlement. This means that the null hypothesis “vendor characteristics have no significant influence on (are not associated with) the production problems faced by milk societies” is partially rejected only for distribution method.

The analysis it is found that there is association between distribution problems and distribution method used by vendor. But there is no association between the distribution problems and type of distribution used, number of vendors and payment settlement. This means that the null hypothesis “Vendor characteristics have no significant influence on (are not associated with) the distribution problems faced by milk societies “is partially rejected only for distribution method.
The analysis it is found that there is association between marketing problems and distribution method used by vendors. But there is no association between the marketing problems and type of distribution used, number of vendors and payment settlement. This means that the null hypothesis “vendor characteristics have no significant influence on (are not associated with) the marketing problems faced by milk societies” is partially rejected only for distribution method.

7.2.10 Reasons for Problems at Milk Societies

The F-value showing the difference among number of vendors employed and adulteration of milk by vendors is 2.899 (significant at 5 % level). The F-value showing the difference among taluk and selling price is 4.815 (significant at 5 % level). The hypothesis “the mean values for the marketing related variables do not differ among the type of distribution” is accepted. But the hypothesis “the mean values for the marketing related variables do not differ among the taluk and number of vendors” is rejected.

The F-value showing the difference among number of vendors employed and high Transportation cost is 4.942 (significant at 5 % level). The F-value showing the difference among Distribution type the physical distance of customers from the milk society is 2.024 (significant
at 5 % level). The F-value showing the difference among taluk and irregular time in supply of milk by vendors 6.733 (significant at 5 % level). Thus, we can state that the hypothesis “the mean values for the marketing related variables do not differ among the taluks, the type of distribution, and number of vendors’ is accepted.

7.3 Suggestions

The researcher recommends the following suggestions on the basis of the analysis of the present study and experience gained during the survey.

- It is suggested that better results could be obtained if arrangements are made by the government for the regular supply of green fodder and concentrates at cheaper rates. It is desirable and will be helpful if the government distributes animal feeds and fodder at subsidized rate to milk producers through the milk producer’s society.

- The government should also take necessary steps to reserve adequate acreage of suitable land for raising fodder, in order to arrest the rise in prices.

- The government should instruct the banks to give more loans at appropriate time on par with agricultural loan and rate of interest to the people who are involved in dairy development activities especially for the purchase of milch animals.

- The government should introduce a special scheme for milk producers to construct animal shelters and the cost of shelters should
be shared by both the government and milk producers equally, which is necessary to protect the health of the milch animals.

- The milk producers’ union through its milk producer society should provide adequate veterinary care services to milch animals in the study area for enhancing higher level of milk output.

- The milch animal owners should be given necessary education and training by the government to understand and practice more advanced technique and scientific methods in milk production.

- Crossbred milch animal may be preferred as the return per litre of milk of crossbred animal is the highest.

- More green fodder may be given to milch animals as it was found that green fodder is the most significant factor influencing the yield of milk.

- The producers of milk should sell the milk to co-operative dairy societies as there is regularity in payment by co-operative societies, besides other benefits and welfare measures that are routed through such co-operative societies.

- The milk co-operative societies should procure milk only after checking the quantity and quality of milk so as to avoid return of procured milk which is the major problem encountered by the milk producer while marketing the milk.

- The price, as agreed between the producer of milk and middlemen procuring the milk, should be taken into account at the time of payment for milk, irrespective market price difference at the time of procurement and payment.
Infrastructure facilities stand be provided. Adequate insemination and Medicines should be provided.

Milk producer should adopt modern technique of milk production.

There should be knowledge of improved variety of cattles to milk producers.

The State Veterinary Department should create facility for Artificial Insemination and pregnancy test at the door step of the dairy farmers. The society should implement quality-based rate fixing for the improvement of good quality milk production and supply.

Dairy should aid and assist the dairy farmers in purchase of quality animals whose productivity levels are at the best.

Payment for milk in India is generally based on its Fat and SNF content. Payment to milk producers on the basis of microbial loads also needs to be initiated. Latest instruments to test the bacteriological quality of milk should be used and a premium price has to be paid based on its microbial loads.

Delay in making payments has restricted majority of the members from pouring milk to cooperative societies. Prompt and timely payment of dues, payment of dividend, incentives, subsidies and grants would motivate the farmers to actively engage in dairy cooperative activities in the region.

Milk producers being poor and uneducated are found to maintain their animals in under deprived nutritional conditions, keep them in unsanitary and unhygienic environment. Proper health care management of the animals is possible through three-tier treatment system of first-aid: at the village level through a local veterinary
assistant, rural mobile veterinary service on predetermined days and prevention and mass vaccination towards the epidemics.

- A dairy producer can derive only limited returns from selling raw milk. It is only the concept of value-addition that would help dairy producers capture a large market and fetch remunerative prices. There is immense scope for value added products like desserts, puddings, custards, sauces, stirred yoghurt, nectars and sherbets.

- There is a need to establish high-tech dairy farms all over the country to produce high quality milk for value-added milk products for competitive markets in metro cites as well as for export. All the available technologies for mechanization and automation in dairy farming can be integrated to these farms with sound management practices of dairy husbandry.

- There have been high fluctuations in the production and supply of milk by the union which should be avoided. The Milk Producers’ Cooperative Societies should procure more milk during slackening period by enrolling more members. Besides, the Union should hold periodic meetings with the Primary Cooperative Societies to review the supply of milk.

7.4 Conclusion

The present study has been undertaken mainly to help the planners and decision makers to take up certain policy decision for the socio-economic development of the dairy farmers. This study has brought to light certain economic problems faced by the respondents of the KDCMPU. The suggestions presented in the study are based on the findings of the study, opinions of the respondents and officials of the
Department of Co-operatives and Animal Husbandry, Government of Tamil Nadu can help to solve many problems of the farmers in general and members of the Primary Dairy Co-operative Societies in particular.

The details with regard to the production and marketing problem of milk in Kanyakumari district are stated in brief in this chapter. It gives an overall idea about the milk production and marketing in this district. In addition to this, good suggestions for milk producers, milk co-operative societies, milk producers union and for the Government are given. If these suggestions are properly executed, the Kanyakumari district will be a leading producer and distributor of milk in Tamil Nadu.

7.5 Scope for Future Research

The following are the areas of further research in milk production and marketing.

- A comparative analysis of production and marketing techniques of some leading milk producing countries with India can be done.

- A study of production and marketing of milk by products in other states can also be done

- Analysis of milk yield and returns to members and non-members of Milk Producers’ Cooperative Societies.

- A study on the revival and rehabilitation of dormant Cooperative Milk Producers’ Societies.

- A study on the comparative analysis of various Milk Producers’ Federations/Unions/Societies.