CHAPTER - VII

SUMMARY, MAJOR FINDINGS, CONCLUSIONS AND SUGGESTIONS

7.0 Summary

Dairy constitutes one of the important sources of income to millions of population not only in the rural areas but also in the urban areas. With a lion’s share of farmers depending on dairying, the progress and performance of the dairy industry greatly determines their well being. However, with a majority of the farmers being small and medium farmers, the socio economic conditions not only determines the level of income of the farmers at the micro level, but also determines the performance of the industry at the macro level. Hence, an understanding of the performance of the dairy industry and drawing policies for the dairy industry requires an analysis of the social and economic background of the farmers. The present project is attempted towards this end. For the purpose, the level of milk production, productivity and the problems associated with the dairy industry is being examined in the context of Kanyakumari district in the state of Tamilnadu.
Kanyakumari is primarily an agrarian district with 83 per cent of its population residing in villages and 58.8 per cent of its working population engaged in agricultural and allied activities. Despite being an agrarian district, the area under paddy has declined from 56,687 hectares to 20,000 hectares through the last 50 years. This has forced the agricultural labourers to depend much on the allied activities—the major activity being cattle rearing. However, as per the livestock Census 2008, the number of livestock in the district stood at 6,53,851 which is one of the least. As a result, in terms of annual milk production also the district stands 28th in the state in the year 2004-05. Agriculture being the primary occupation and with a low level of development in the growth of livestock and eventually its contribution to family income, certain moot questions arise about the levels of production of milk, of expenditure and income from the sale of milk and milk products, of marketed surplus of milk produce, creation of additional employment and the types of difficulties faced by them in process of milk production. The present study attempted to study these issues in the context of the district of Kanyakumari.
Objectives of the Study

Based on the above logic, the objectives framed for the present study were as in below: 1) to study the socio economic status of the sample respondents, 2) to study the level of milk production among the sample respondents, 3) to understand the distribution aspect of the milk production, 4) to understand the expenditure involved in the production of milk, 5) to estimate the benefit cost ratio of milk production and 6) to identify the problems involved in the process of milk production.

To study the objectives framed, primary data were collected from 500 samples distributed proportionately among the 28 villages selected randomly. For this purpose, the two stage random sampling technique has been used. The selected households were met and the information regarding their socio economic status, the number of milch animals owned, the quantity of milk produced, source of distribution of the milk produce, the level of income from dairying and the problems faced in the process of raising the cow and marketing the produce were collected with the help of a pre tested questionnaire.
In tune with the objectives framed for the study, apart from using the simple tools like percentages, arithmetic mean, standard deviation, the techniques like, linear growth rate, compound growth rate, coefficient of variation, instability index have also been used. Apart from these, the cost function and production function were also computed and used to estimate the resource productivity.

7.2 Major Findings of the Study

The analysis of the data has provided the following major findings:

1) Dairying has been the main occupation for many in the villages of the present study. As agriculture proper fails to provide a sufficient level of income, full time dairying is preferred. Some are forced to fall back upon dairying as a subsidiary occupation and their small and marginal holdings fail to assure a decent level of income. Further, dairying- both as a main and subsidiary occupation-has been the occupation of the most backward and backward classes in the society. Their economic and social background only pulls down the prospects of dairying in the country side.
An attempt is made to find the relationship between the socio-economic statuses of the dairy farmer’s dairying. The relationship between their gender, number of members in the family, the type of family and the level of education of the farmer and the number of cows owned is assessed by using the chi-square test. It is found that there is no significant relationship between sex and the number of cows owned. It is observed that there is a significant relationship between the number of cows owned and the size and type of family and the level of education of the head of the family.

2) It is found that a majority of people rear cross breed cows, the average production of milk ranges from 32-40 litres with an average production of milk of 5.19liters and 4.90 litres in the morning and evening respectively.

3) Whatever remains, after consuming a small portion personally, is distributed among neighbours, vendors/shops, other villagers, cooperatives and private dairies. A lion’s share is sold to the co-operatives (even at lower prices), in larger quantities as well. The reason for
this is that the co-operatives make advance payments and loans.

4) The costs incurred in production are the usual fixed and variable costs. Expenditure on installation of cattle shed is the major fixed cost and, for want of funds, the farmers have to satisfy with only a tiled shed. Regarding variable costs, the major item is expenditure on fodder; oil cake comes next.

5) The benefit –cost ratio was worked out for the small, medium and large farmers. It is found that all the costs are declining with the size of output and the revenue increases with the size. The increasing income on the one hand and decreasing costs on the other, results in increasing net income with increasing size. In other words, the benefit-cost ratio increases with the size. This means that there are economies of scale in dairying in the study area.

The impact of output on the cost incurred is examined by computing regression co-efficient of cost function. It is found that the maintenance cost of milch animals
increased with the increase in milk yield and this increase was higher for small farmers.

The resource use efficiency of the two important factors of fodder and human labour is also assessed by working out their marginal value product (MVP). It is found that the MVPs of fodder and human labour in the case of medium and large farmers are greater than one, while for small farmers it is less than one (indicating inefficiency). This shows that in the case of small farmers there is underutilization of factor inputs, while in the case of medium and large farmers there is overutilization of factor inputs.  

6) The problems faced by the dairy farmers are many and varied—difficulties of marketing, high cost of animal feed, finance crunches, low prices, high cost of labour, lack of veterinary facilities and unsuitable agro-climate. A composite Rank index of these worked out and it indicates that market difficulties have been the foremost important problem. The problem of marketing has different facets and a composite Rank index is worked out: it is found that the prevailing low price for the product is the foremost
problem in marketing, according to the perception of the sample respondents. The other problems are insufficient production, difficulties in assembling and storage of the produce, high cost of transport, cultural factors and long distance to markets, in that order.

To assess the dairy sector’s competitiveness, a performance analysis of five factors—demand conditions, market structures, factor conditions, related support industries and government is also attempted; it is found that the demand for dairy products in the districts is likely to grow significantly, driven by more consumers, higher income and rising standards of nutrition. A considerable portion of produce still goes through informal channels. Government interference in co-operatives has hampered the role of the lead agency. Government interference and political intervention in price setting, limits prices being determined by market forces. An analysis of factor conditions reveals that the quality of herd inventory is low with only a small portion of cross breeds, the prevailing low price of milk makes the farmers disinterested in
quality. Lack of technical knowledge and entrepreneurial capacity constraints are human efforts. Access to the formal credit mechanism is very poor. Supporting industries such as those supply better feeds, processing facilities and storage mechanism have not developed to the extent required. Government run programmes (except the veterinary facilities made available by it) are unfortunately neither steady nor concerted.

On the basis of the findings at large and also taking into account what the sample respondents perceive a SWOT analysis could be conceived on the following lines.

### 7.3 SWOT Analysis of Dairy Sector in the Sample Area

Within the framework of the competitiveness drivers and issues, the smallholder dairy sector’s strengths, weaknesses, opportunities and threats have been assessed. The strengths and weaknesses are factors that are directly controllable, while opportunities and threats derive from the external environment. As evident in Table 7, there are a large number of weaknesses in the sector, implying considerable scope for interventions. This SWOT
analysis entailed matching each of these elements with an appropriate action.

### 7.3.1 Strengths

1. Large number of small and marginal farmers involved in dairying.
2. An effective marketing channel helps to meet the demands of the urban consumer.
3. Very large number of animals and huge scope to enhance productivity.
4. Self-sufficiency in medicine production and do not have to rely on other sources.

### 7.3.2 Weaknesses

1. Large share of milk of marketable surplus goes through informal channel where quality is a big concern.
2. Quality may be an issue in the formal channel as well.
3. Very little competition to cooperatives due to few private sector players in the study area.
4. Farmers do not share in the benefits of high demand because of poor governance of cooperatives.
5. Milk production is scattered over a large number of farmers producing miniscule quantities.

6. Milk distribution is limited to urban and peri-urban areas.

7. Low milk prices, because of lower prices declared by cooperatives, results in low prices of milk paid by all players.

8. Lack of policy focus on strengthening indigenous breeds.

9. Non-existent extension facilities

10. Farmers’ prices are not based on fat measurement, which affects their profitability

11. Because of low access to credit and risk-taking ability, farmers cannot increase their herd size

7.3.3 Opportunities

1) Increased farmer income by exploiting the high demand.

2) Increased consumer sophistication and awareness of quality reception of quality packaged products (though slowly).
3) Immense scope to enhance governance of dairy farmer organizations and thus enable dairy farmers to demand higher prices

4) Overall positive growth environment, which is triggering the Government to enhance infrastructure.

7.3.4 **Threats**

1) Large portion of the population does not care about quality issues in milk.

2) Because of high price sensitivity for dairy products, people are not willing to pay for quality.

3) Significant increase in price of grains including maize prices, can increase feed prices.

4) Large informal markets that extend credit are constraining farmers.

5) Low productivity and scattered production leading to high cost of transportation

7.4 **Conclusion**

The present study attempted to examine the production and productivity of 500 sample respondent from the district of Kanyakumari. The required primary data were collected with the
help of a pre tested questionnaire. The collected data were analyzed using the appropriate statistical tools and techniques. The analysis of the data indicated that in terms of cost, income from the milk produce and production there is difference among the small, medium and large farmers. The productivity and level of income is positive though the return from the sale of milk is meager.

7.5 Suggestions

1) Scarcity of fodder resources is the major constraint in the development of the dairy sector in the study area. Hence, adequate measures are to be undertaken to augment them. Another important issue regarding the feed is the lack of regulations to ensure quality. In the absence of a coherent policy, all kinds of substandard feeds are available in the market. Hence, a regulated market through cooperative societies can be arranged to provide fodder to at least small and medium farmers which may help them to reduce their cost of production but also to increase their production.

2) To increase the milk production, identifying the nutritional requirement of the cattle becomes essential. For this purpose, creating interactions among agronomists and
animal nutritionists is essential to the development of sustainable systems that meet the need for higher quality dairy diets. The cooperatives can arrange for such an interaction.

3) It is found in the study area that a considerable portion of the farmers are women. Hence, extension programme and training can be given to the women farmers particularly who have a lower literacy rate than their male counterparts.

4) It has already been indicated that a majority of the sample respondents depend on public taps for the cattle. The major reason being the declining water tables. In heavily irrigated areas where different cropping systems are developed, if water is conserved in these areas, with producing more and better-quality forages, then there will be a benefit of increasing milk and the productivity.

5) It can be understood from the analysis that, in spite of the state government’s initiative, still there are a few percentage of members do not supply their milk produce to cooperatives. This so happens inspite of them being the member of the cooperatives. This reduces not only their
income from the cooperatives, as it is the cooperatives that pay comparatively a higher price for the produce. Also, such an activity prevents them from exploiting the other facilities extended by the farmers. Hence, the local cooperatives can encourage the farmers to sell their product to cooperatives and to get the advantages of the cooperatives.

6) The analysis on the receipt of loan from the cooperatives indicates that only one third of the members of cooperatives receive loan. Also, the purpose of loan received indicated that the loan amount received has been utilized for non livestock purposes than for livestock purposes. Hence, the cooperatives, should understand the need for extending personal loans to their members and extend the same.

7) The analysis on the problems of marketing indicated that the packed milks manufacturers pose threat to the local manufactures of milk. Thus the local manufactures face the dual problem of poor confidence of the local consumers on the quality of the product of the local sellers and the high price due to low productivity. This also results in poor marketed surplus of the farmers. On the other hand, packed milk manufactures due to the mass production
could reduce their cost of production considerably and could lower price. Hence, for the purpose of reducing the cost of production and to make the local producer to compete with the small producer, as done in the case of agriculture, cooperative farming in the case of livestock can also be attempted by the local cooperative societies.