CHAPTER V

PERFORMANCE OF MILK MARKET ACTORS AND THE
EFFICIENCY OF MILK MARKETING CHAINS

5.1 Introduction

5.2 Approaches to Measure Market Efficiency

5.3 Summary

6.1 INTRODUCTION

The study is undertaken with the objective of milk marketing structure and milk marketing chains analysis in Aruppukottai, Kariapattai, Rajapalayam, Sattur, Sivakasi, Srivilliputhur, Tiruchuli and Virudhunagar Taluks of Virudhunagar District. Market Participation and decision and sale volume are important elements in milk marketing chains. Hence, the present study is an attempt to analyse the price, cost, profit, marketing margin and efficiency of each milk marketing chains in Virudhunagar District.

6.2 SUMMARY OF FINDINGS

The Summary of Findings and Suggestions of this study are as follows:

6.2.1 Analysis of Socio–economic and Demographic Factors of Milk Producers Reveals the Following

1. Among 105 producers, a majority of the 77(73%) respondents are male.
2. Majority of 83 (79.04%) respondents are married in the study area.

3. It is clearly understood that a major proportion of the 41(39%) respondents are in 25 – 50 age group classification.

4. It is clear that more number of the 45 (42.8%) respondents are having 3 – 5 members in their family.

5. It is inferred that a majority of the 79(75.2%) respondents are educated.

6. It is understood that a major proportion of the 42(40%) respondents are having above 10 years of milk production experience.

7. It is observed that respondent’s current working capital is 2.37 times more than the initial working capital.

8. The study reveals that more number of 44(41.9%) producers are arranging source of working capital by their own fund.

9. Findings shows that a majority of the 71(67.6%) respondents are not ready to accept credit.

10. It is evident that the major portion of producers produce 25litres – 50 litres 44 (41.9%) of milk.

11. It clearly indicates that a majority of the 66(62.9%) respondents are interested in extending their milk producing farms.

12. The study finds that a majority of the respondents 90(85.7%) are ready to access information related to milk market.

13. It is also inferred that a majority of the respondents 55(52.4%) are gathering information related to milk market from their friends and other milk traders.
14. It is clearly evident that more number of the producers produced 44 (41.9%) have marketed 25 – 50 litters of milk.

15. The result of multiple regression analysis reveals that the Socio–economic factors influence the milk production in Virudhunagar District.

- It shows that there is a linear relationship between Independent (socio-economic) variables and Dependent (milk production) Variable. Linearity = 0.988.
- It is inferred that independent variables explain the dependent variable milk production at 66.5 per cent level (R Square = 0.665 * 100).
- It is clearly evident that the ANOVA table represents P = 0.004 are statistically significant at 5 per cent level. It shows the goodness of fit of regression takes the analysis of the maximum operational depth of measuring the influence of Socio-economic factors.
- The Social Factors such as gender, marital status, age, family size, educational level and experience do not influence the quantity of milk production in the study area. Hence, the null hypothesis is accepted.
- It is also inferred that the economic factors such as source of working capital and accepting credit have influence on quantity of milk production in the study area. Hence, the null hypothesis is rejected.

### 6.2.2 Analysis of Socio–economic and Demographic Factors of Milk Vendors Reveals the Following

1. Among 421 vendors, a majority of the respondents 341 (80.9%) are male.
2. A majority of respondents 375 (89.1%) are married.

3. A majority proportion of the respondents 168 (39.9%) are in 25 – 50 age group classification.

4. More number of the respondents 186 (44.2%) are having 3–5 members in their family.

5. A majority of the respondents 358 (85.1%) are educated.

6. A major proportion of the respondents’ 187 (44.4%) are having 5 – 10 years of milk market experience.

7. It is observed that respondents’ current working capital is 2.8 times more than the initial working capital.

8. A majority of the respondents 214(50.8%) arrange their own source of working capital finance.

9. A majority of the respondents 337 (80.1%) are not willing to accept credit.

10. A majority of the respondents 210 (49.9%) market above 100 litters of milk.

11. A majority of respondents 213 (50.7%) are selling milk directly to the ultimate consumer.

12. A majority of respondents 223 (52.9%) are residing at a distance of above 2 km distance from milk market centres.

13. A majority of vendors 210 (49.9%) market milk above 100 litres.

14. The result of multiple regression analysis reveals that,

- It shows that there is a linear relationship between Independent (socio-economic) variables and Dependent (milk market) Variable. Linearity = 0.963
It is clearly inferred that Socio-economic factors explain the dependent factor milk marketed at 73.9 per cent level (R Square = 0.739 * 100).

It is clearly evident that the ANOVA table represents $P = 0.000^a$ which is statistically significant at 5 per cent level. It shows that the goodness of fit of regression takes the analysis of the maximum operational depth of measuring the influence of Socio-economic factors.

Socio-economic Factors such as gender, marital status, experience and accepting credit do not influence the quantity of milk marketed in the study area. Hence, the null hypothesis is accepted.

It is also inferred that the Socio-economic Factors such as age, family size, educational level and source of working capital have influence on quantity of milk marketed in the study area. Hence, the null hypothesis is rejected.

### 6.2.3 Performance of Milk Market Actors and Efficiency of Milk Marketing Chains

1. Taluk-wise and Chain-wise market concentration ratio of various milk marketing chains shows the following findings:

**Taluk-wise**


**Chain-wise**
Chain II is having high control of milk market. Hence, it leads to high efficiency in the market.

2. A majority of milk vendors 286 (68%) have one milk sale outlet. Hence, vendors gather adequate information about their competitors regarding their source of supply and procurement price decisions.

3. That a majority of vendors 227 (53.9%) are gathering information related to milk market through their friends and other milk traders. Collecting market information leads the vendor to have knowledge about milk marketing for making better decisions related to supply and procurement of milk in the milk market.

4. The study of education level of actors reveals that out of 421 total respondents, 358 (85.1%) of the actors are educated and 63 (14.9%) of the actors are uneducated. It portrays the educational background in milk market entry and exit as they are found to be more educated during the survey period.

5. The survey data on milk market experience of actors (vendors) reveals that, a majority of the 187 (44.4%) of vendors have 5 – 10 years of milk market experience. Hence, business experience does not create a barrier to milk market entry and exit.

6. The result of survey of initial and current working capital of vendors shows that the Lack of working capital creates an immense effect in milk market. Hence, working capital influences the milk market in the study area.

7. The result of source of working capital of vendors shows that, 214 (50.8%) of vendors have working capital of their own, As compared to own arrangement of working capital, 51 per cent resort to other two sources of working capital finance
from friends/relatives and bank/loan with the combined of 49 per cent (31% and 18%). It is almost equal to the proportion of own arrangement source of vendors. Hence, source of working capital finance is influencing the milk market in the study area.

8. It is inferred that a majority of vendors 372 (88.4%) are not having licence in the study area. Hence, trade license does not create market entry and exit barriers in the study area.

6.2.3.1 Producers Behaviour in Milk Market

1. It clearly reveals that a majority of 70 (66.7%) producers decide to sell milk, based on trends in price. So, price factor influences and it gives an effect in making decisions related to milk market.

2. It is observed that a majority 64 (60.9%) of respondents sell milk in the milk market. Hence, sale of milk is considered as major behavioural pattern of milk producers in the milk market.

6.2.3.2 Vendors Behaviour in Milk Market

1. It is evident that a majority of respondents 199 (47.3%) make price decisions related to price based on changes that prevail milk market.

2. It is clearly observed that a majority 166 (39.4%) of respondents make decisions on price by considering the prevailing market price.

6.2.3.3 Market Performance
1. It is evident that by analyzing the cost per liter of milk in each chain, price per liter of milk, the average margin per litre of milk in chain I is ₹5.85, chain II is ₹2.79, chain III is ₹3.35, chain IV is ₹0.66 and chain V is ₹0.30 respectively.

2. Taluk-wise and chain-wise milk marketing margin analyzed through,

**TGMM**: It is always related to final price paid by the consumers.

**GMM**: Producers/Vendors portion of share in milk price paid by consumers.

**NMM**: Final price earned by the intermediaries. Higher marketing margin reflects the chance for downward and unfair income distribution. It depresses market participation of small holders and it shows that,

In all taluks and chains of Virudhunagar District, marketing margin of TGMM – chain III, GMM – chain I and NMM – II shows the efficiency of milk market. Hence it seems that, chain IV and V is depresses in profit/margin as compared to other milk market actors in the study area.

### 6.3 SUGGESTIONS

The following suggestions are offered for improving the production and technology of milk marketing chains in Virudhunagar District.

1. The government actions are required to provide in supporting environment which reduces the obstacles to effective formation and management of dairy cooperatives and self help groups.
2. Government has to give encouragement and incentives to milk producers and traders to form dairy farms. Interest free loan, create awareness on the farms related information, flow of market information, provide for training related to milk farms, availability of credit to extension and dairy market policies are to few such possible measures that the government undertake.

3. The government should take steps to ensure that all vendors get license and inspect competing milk product traders to ensure achievement of minimum hygiene and quality standards.

4. The government has to provide awareness on latest technology to the milk producers and vendors for increasing the production as well as to meet the competition in the milk market.

5. 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.

6. The Government should ensure that the milk producers are assured of better procurement price. When such in the case, the inequalities tend to be lower as in the case of villages in Virudhunagar District.

All these steps shall pave the way for the greater success of milk farms.

6.4 SCOPE FOR FUTURE RESEARCH

While undertaking the survey for the present study, the researcher feels that there is a scope of doing research in following areas:

1. The Study on “Existence of Milk Market of Producers and Vendors”.


3. A Comparative Study of Cooperatives Societies in each Taluks of Tamil Nadu.


6.5 CONCLUSION

In the study, it is understood that the socio-economic and demographic factors of producers and vendors influence the milk market (production and supply). Structure and Behavioural pattern (conduct) of producers and vendors and performance of milk marketing chains are analyzed to find out the efficiency of milk market. Price, cost and marketing margin are examined to find out the efficiency of milk marketing chains. High net marketing margin indicates high efficiency of chain and it dominates other small producers and vendors of milk market in Virudhunagar District.