CHAPTER – VI

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 General

Milk is so invaluable a food without replacement that its necessity is never going to diminish, let alone cease. From infants to elders, from heavyweights to patients, from countryside to cosmopolitan area, and from festivities to funerals, milk is assimilated ubiquitously into the daily life of people. Dairying therefore provides regular income throughout the year to families that pursue it. It is a good occupational choice for unemployed youth and impoverished women in rural communities. Two milch cows under a roof assures occupational safety and starter life quality.

Lately however, the environment has so badly turned to play against tiny, small and medium ventures, as well as middle class communities. This transformation manifests in an all-encompassing manner in social, economic, governmental, legal, technological and environmental fronts. While the perpetrators involved keep on tightening their control, those at the receiving end realise there is hardly anything they can do against this overbearing influence of the environment. Thus they merely stay afloat and continue just for the sake of continuing, or homogenise their functions and operations in tune with the deviant system, or, decide to opt out.
For example, about 61 percent of Americans now run home based business or pursue self-employment. This way, they want to be out of purview of organisations and institutions and left alone. Hence, the more the State controls, the stronger the subjects repulse, either directly or indirectly. Even an insect cannot be dictated to go in a particular direction. (BBC World, July 22, 2016.)

In this backdrop, the study was attempted upon milk, one of the vital vocational lines of society based predominantly on such tiny-small venture system. As emphasised in the Analytical Framework of Chapter 4, which analysed milk production environment of the study area, the research was not after number crunching of yield, cost, return, revenue, and the like parameters and indicators. On the contrary, influences and implications of the environment were emphasised throughout.

With stratified random sampling, 301 respondents were selected for the study in Tuticorin district. Of them, 67 were Cooperative milk producers, 84 were Vocational milk producers, 21 were Private milk producers, 124 were rural and urban milk marketers, and the remaining 4 were resource persons and scholars. Data collection was effected between October 2014 and July 2015 in villages and towns of the District. Appropriate univariate, bivariate and multivariate statistical methods were employed to facilitate qualitative analysis of data.

Now to wind up the entire work, a summary of findings, and along with, suggestions for improvement in the Sector, are provided. They too follow a
conceptual pattern in the sense that they provide facts behind numbers, not the numbers themselves. Nevertheless, it is rather a copy-and-paste work from the summary of analyses. These findings themselves lead to possible suggestions, which too are qualitative and critical. Criticisms are but only to kindle in those involved action and reaction. Yet in this environment, acceptability of suggestions is doubtful and hence highly rhetorical phrasing is avoided. To begin, findings are presented.

6.2 Summary of Findings

Production and Marketing of Milk

1. The total milk production in 2002-03 is ₹1,884.83 lakhs and it is ₹7,289.31 lakhs in 2017-18. Actually there is a wild fluctuation in the milk production. This fact is highlighted in the table which shows the percentage of milk production over the previous year. It is negative for three years and positive for 13 years. The overall growth percentage is calculated to be 286.74 per cent during the period 2002-03 to 2017-18. The average annual growth rate is 9.57 per cent.

2. The linear, quadratic, logarithmic and exponential trend models estimated milk production to be at ₹13,014.45 lakhs ₹10,566.22 lakhs, ₹15880.08 lakhs persons and ₹16,995.47 lakhs for the year 2021 respectively. Hence, there has been a steady increase in the milk production in The Tirunelveli Cooperative Milk Producers\ Union Ltd.
3. The milk marketing has ranged from ₹2,667.78 lakhs in 2002-03 and ₹9,699.62 lakhs 2017-18. The growth rate observed over the last 16 years of milk marketing in Tirunelveli cooperative milk producers’ union ltd. shows many ups and downs. For example in as many as in the year 2004-05, 2012-13, 2015-16 and 2017-18 the growth rate of milk marketing has been negative, during 2017-18 year it has been less than 8.67% per cent. The Average Annual Growth Rate (AAGR) has been registered over 9.61 per cent.

4. The linear, quadratic, logarithmic and exponential trend models estimated milk production to be at ₹17,430 lakhs ₹14,119.73 lakhs, ₹16,081.31 lakhs persons and ₹17,378.92 lakhs for the year 2021 respectively. Hence, there has been a steady increase in the milk sales in The Tirunelveli Cooperative Milk Producers' Union Ltd..

5. The gross profit ratio is very high during the period of 2009-10 (18.87%) whereas gross profit ratio was very low during the period 2015-16 (4.79%) which reveals that financially poor during the period of 2015-16.

6. The net profit ratios concern of the Tirunelveli co-operative milk producers’ union limited from the year 2007-08 to 2017-18 was very poor due to high administration and financial cost.

7. The study reveals that total milk sales and production have been significantly correlated. As indicated in the study, the profit of the union could be derived from the relationship between milk sales and production Profit =
(1-Marginal Production). Using this relationship, the profit was derived and it was \((1-0.89)\) 0.11, which implied that with every increase in production by one rupee, the earning of profit have to `0.11. Thus the first hypothesis that, the total milk sales and production are positively related, has been accepted.

**Milk Production Environment**

1. Like any other part of the State, Tuticorin has three categories of milk producers namely Cooperative producers who pour milk to cooperative unions, Vocational producers who cater to their own family and neighbourhood milk demand, and Private producers who supply milk in bulk under direct or indirect branding,

2. The collective power of the Cooperative system and the institutional advantage of Private mercantilism have lead to better logistics of milk production but get blemished by price and procurement manipulations, which negatively impact the occupational values of Vocational producers.

3. Fecund land in a strategic location is of paramount importance to the endeavour of dairy farm development. The land, together with cattle and incumbent infrastructure, extract virtually all the capital employed. In that, the milk producer’s frugality and efficiency give thrust to run the endeavour. Yet, milk alone is slenderly inadequate to profit from it.

4. Milk producers’ social characterisation shows they are almost equally of
both the sexes, who are mostly in their middle ages, and essentially had school education. Moreover they are in the process of consolidating their family and career, and their monthly family income shows they belong to lower middle income families with little room for income augmentation.

5. Regarding the Vocational Structure, the four strategic levels of Tuticorin milk sector namely Tiny, Small, Medium and Large are quite diverse from one another, and their functional or operational scope is hard set that could not be extended nor compressed at will. They are not outrightly distinct either, owing to the high interdependence between Tiny and Small levels.

6. Concerning the factors affecting milk output, the three categories of producers have not ranked the six milk output factors in a significantly concordant manner. This had been despite they knew that milk output was dependent upon genetic and natural causes and was hardly enhanceable by human efficiency.

7. Administrative aspects reveal the struggle and sufferance of the milk sector in generating income and meeting financial and credit needs, like many other productive vocational ventures in this time of imperious institutional governance and corporatism.

8. The analysis of viability established that occupational affinity is very high with the dairy men and women, and an optimal blend of this affinity with their hard labour make milk line viable even if it is nonviable. This thickest
association they sustain with milk is uncharacteristic of many other vocations, as milk in it has both social and religious virtues.

9. The vital Natural Conditions join forces with Socioeconomic Direction and Corporatisation to greatly impact the District milk producers’ survivability and future. In that regard, milk, like many other productive ventures sustaining the nation and its communities, undergoes transition from a traditional vocational line that has within it both employment and livelihood dimensions into a profit seeking enterprise that lead to indiscriminate exploitation of land and resources on one side and manipulation of quality and consumption on the other.

10. Finally therefore, the success and profit of milk endeavour are expedient on the exercising of a prudent blend of labour and work effectiveness, which is acquired by patience and dedication. This however has to be sustained in prior by natural and social conditions.

11. In order to identify the determinants of milk production, multiple log linear regression model was estimated. The result shows that Among the significant variables, initial investment, number of dairy cattle, type of cattle feed and year of experience are positively related to milk production. It implies that one per cent increase in these variables may lead to an increase in milk production in the study area by 0.2072 per cent, 0.3215 per cent, 0.2125 per cent and 0.3816 per cent respectively. Thus it is inferred from the analysis that the variable, number of dairy cattles had a greater
influence on the milk production followed by the variable, initial investment.

12. Therefore the second hypothesis namely ‘Total production of milk is determined by the variables number of dairy cattle, year of experience, type of cattle feed and initial investment’ is valid but total production of milk is not determined by the type of hydride dairy cattle and it is invalid.

13. The study reveals that, majority 45.35 per cent of respondents were opined that procurement price not satisfied in the study area and 27.91 per cent of respondents opined that there is insufficiency of cattle feed by society in the study area.

**Milk Marketing Environment**

1. Milk marketing, often under large and wide ambit, encompasses procurement, processing, packaging, distribution and customer care. It physically and logically derives from Vocational, Cooperative and Private production sources.

2. As Vocational milk producers are marketers unto themselves, only Cooperative and Private, to mean, Corporate, milk brands are taking centre stage in the District milk marketing. However, there is no corporate milk brands with production source in the District.

3. For Cooperative milk, their Federation takes responsibility in the logistics of sales and marketing. Milk and milk products are marketed both within and outside the State under the brand name, aavin. This system has the best
infrastructure and network in the country, second only to Gujarat.

4. Private milk is marketed following either the Vocational model, but without personalised service under the advantage of better logistics, or Cooperative model, but distinctively through vigorous advertising and sales promotion. The latter business model however is absent in Tuticorin.

5. In order to strengthen milk production, marketing and related logistics, yet with emphasis on Cooperative sector, National Dairy Plan, Phase I (NDP-I) was envisaged, and being implemented by the National Dairy Development Board (NDDB). The Plan undertakes comprehensive survey of marketing channels, payment and selling preferences, prices, forms of milk sold, and per capita availability and consumption. These indicators serve as reliable estimates for extrapolation for Tuticorin with room for little variation.

6. This Survey shows that Tamilnadu is having Vocational producers in higher concentration than the national average. Also, Tamilnadu and Kerala are the only two states that consume 90 percent of their milk in liquid form. Tuticorin district too conforms to this pattern of production and consumption, but has even more percentage of Vocational producers due to lifestyle, geographical and social reasons.

7. While milk availability in Tuticorin, and the State in general, are well above the national average, all five indicators of consumption are well below respective national averages. The five indicators are per capita availability, and per capita consumption by social group, economic group, animal
holding group, and land holding class. Thus people are parsimonious, and prefer to convert milk into money or lucrative milk products.

8. Social characterisation of sample milk marketers show they are almost equally of both the sexes, mostly in their middle ages, and essentially are of intermediate education. While their community based distribution conforms to the study area’s demographic mix, religion based distribution does not, owing to conversions, adoptions, and liberal beliefs and values. Their marital status show they are in the process of consolidating their family and work.

9. Their business structure reveals as a self-employment or tiny level entrepreneurship effort, with little room for expansion, growth, or big profit. Nevertheless, it is a socially relevant marketing structure both making the essential commodity of milk available to consumers throughout the day and giving employment opportunities to thousands of families. The structure is evolving more as a drop-in replacement for Vocational production system with emphasis on availability.

10. This business structure is reflected in their sales and customers. In their low key and safe operational style, they neither afford nor need large scale milk processing and handling, but sell what is given unto them to regular and floating customers. Regarding credit to customers, they play safe and are protectionist.

11. Producer constrains show there is clear demarcation between milk
production and milk marketing. Credit is not easily available from suppliers as it is either barely affordable or suffers lack of trust. Similarly, monetary gains come before non-monetary qualities in producer-marketer relationship.

12. Milk marketing is a good occupational line to engage oneself in. It would not throw the marketer into abject loss if done with little care and effort. Realising that, most marketers have consolidated their future in this line by being members of their association.

13. Finally, social factors divide rural and urban milk marketers more than institutional factors unit them. This is despite the institutional forces themselves promoting such retailing, speculative and intermediary occupational lines in the sabotage of production and productive ventures.

14. In order to identify the determinants of milk sales, a multiple log linear regression model was estimated. The result shows that, Among the significant variables, price of milk, product handled, year of experience and home delivery are positively related to milk sales. It implies that one per cent increase in these variables may lead to an increase in milk sales in the study area by 0.3921 per cent, 0.2978 per cent, 0.2945 per cent and 0.0234 per cent respectively. Thus it is inferred from the analysis that the variable, price of milk had a greater influence on the milk sales followed by the variable, product handled.

15. Therefore the third hypothesis namely ‘Total sales of milk is determined by
the variables price of milk, year of experience, product handled and home delivery’ is valid but total sale of milk is not determined by the own dairy cattle and invalid.

16. The study reveals that majority 45.97 per cent of respondents were opined that more competition in the study area and 21.77 per cent of respondents opined that no regular customers in the study area.

6.3 Suggestions

Suggestions are not provided separately for the government, milk producers, and milk marketers. Interdependence of claimants and institutional structures within and outside milk sector presage seeing things only collectively. Hence the weight of suggestions centres on the influence of operating environment, predominantly relating to government and its institutions. In addition, standalone suggestions without a context or rationale are neither efficacious nor piercing. Hence the background leading to a suggestion is also presented.

1. Policy Note 2015-16, Dairy Development by Government of Tamilnadu states its primary objective as, “To work towards bringing the un-organized dairy sector into an organized structure”. The statement’s Americanised prose itself shows the affiliation and motive of its originators. For, bringing unorganised Vocational dairying system into organised Cooperative or Private system has its perils for the society. It takes away power from
producers and hands it over to institutional, corporate and speculative forces. It is not that milk cooperative endeavour entails destruction of community vocational endeavours. On the contrary, those installed in power and authority, under dictates from known or unknown sources and with the beast power of the State, strive to weaken the very fragrance of cooperativeness and put in place a despotic corporate governance model that requires unquestioned all-out subordination of milk producers. Hence younger generation with salt and spice, for whom milk has not so far been much an entrepreneurship or self-employment line, is duty bound to stay back as warriors in their locality and start up dairying ventures than ending up corporate coolies, governmental slaves, or institutional farmhands. This shall be despite low income and status, albeit initially. They should learn to come out of their establishment-centric approach, for only corrupt and anti-people governments attempt to absolve themselves of any wrongdoing by hiding behind jargons like ‘policy decisions’, ‘national security’, ‘rule of the law’, and the like. By who’s will and dictates policies are set, who’s invulnerability is secured, and how legal process works, are also the youth need to behold. This way they retain their dignity and community orientation. Their parents and elders shall motivate them in this regard.

2. National Dairy Development Board (NDDB) underscores increasing productivity of cows are essential to maintain India’s status of being the
largest milk producer in the world. To achieve this goal, NDDB recommends selection of bulls possessing superior milk production traits from western countries. In the National Dairy Plan - I (NDP-I) being implemented by NDDB, which is being funded by the World Bank, a Progeny Testing Programme is included to attain this objective. Tamilnadu, with a high population of Crossbred Jersey Cows, has been chosen for this programme at a total outlay of ₹39.28 crore. There are two contradictions. One, being funded by a contentious pro-western body is enough to question its authenticity and efficacy. Two, NDDB itself recommends milk yield of a cow cannot be taken as yardstick. While crossbred varieties like Jersey give more milk, their care and maintenance are disproportionately higher. Even more, country cows are far superior in drought endurance, maintenance and environment compatibility. Hence, rather than being obsessed with productivity figures, the Sector shall be developed in a qualitative manner in concordance with natural, social, and climatic conditions. Placing competent personnel at appropriate levels in lieu of symposium bureaucrats is the first step forward.

3. Planning Commission, in its Animal Husbandry Report, puts forward various recommendations for dairy development. They are largely rhetorical and in line with WTO recommendations. They call for increasing financial allocations, institutionalising tasks and procedures, executing things in
integrated, coordinated, systematic approach, and letting women participation and empowerment, which are but a few to mention. Even within them, manifold increase of administrative outlay, often to feed their lavish expenditure, and bringing in women pervasively at the cost of men and families are repeatedly underscored. Such edifice of regulations and recommendations invariably leads to corruption and inefficiency. More than that it is a social evil in the sense that Supreme Court, High Courts, Parliament, State Assemblies, Corporate Management Boards, and top positions in media, cinema, religion and administration are all occupied by men to an inordinate percentage, say by 95 percent. There they do not allow women, and never would. Yet, from that position, they conveniently carry out the corruption and perversion of society by their orders, rules, regulations and laws. Misrepresentation of gender qualities is their foremost agenda. This is not to empower women, but only to emasculate men and destroy individual dignity and families. Thus, from Vocational to Cooperative means women centric approach, which is both manipulable and controllable. Bulls were symbols of strength and virility once, but now their place is slaughterhouse. Hence milk producers ought not forfeit their dignity and family in the crave for easy money or short term benefits. They should not be switching over occupations at whim either, but endure unto the end to have success and inner satisfaction.
4. Every publication of Dairy Development Department under the Ministry of Animal Husbandry affirms the bitter truth that milk sales in Chennai metropolitan area is more than the combined sales of rest of Tamilnadu. It reveals the cold attitude of ruling class and its stooges towards local area and community based socioeconomic development. This results in resource polarisation, shortage and high cost of labour, and unwarranted migrations on one side and impoverished out-of-purview communities, exploitation and underemployment, promiscuous and unethical social order, and highly skewed population distribution on the other. This puts enormous pressure on quality of life on all counts. If a town or village gets even half of what infrastructure and facility the metro has, the need to migrate to the latter is greatly contained. Relatedly, maintenance of natural resources and development of infrastructure should be given top priority. When in neighbouring States no one is allowed to mine sand along riverbeds, here it is utterly a case of indignation. Such wickedness ultimately bears upon ecological and social life of people and animals, and is highly pernicious for the development of productive ventures including milk. Therefore, only local area development will create tranquil foundations for milk production and marketing.

5. There are many areas in which Institutions and Establishments can be of support. Among them are, providing micro and long-term credit through banks and financial institutions in benevolent interest, implementing doorstep
delivery of services such as immunisation, insemination, health coverage, and market linkage, and revising upwards the minimum procurement price of milk. However they should not come with attached stings for gaining subservience of milk producers and marketers. Promotion of producer based fair enterprise system that is localised and consistent with nature and society is not impossible. At the best, the government shall let the Sector look after itself instead of interfering under the guise of regulation, development or control. It shall allow natural, social and economic self-correcting mechanisms play a role instead of treading down everything in its path. At the other side, when people themselves willfully and supinely submit to the system that stands to be the corrupter and destroyer, no one can redeem them, as the giver gives only when the receiver is willing to receive.

6.4 Directions for further Research

1. Any one system of production and its marketing shall be studied in depth.

2. Milk consumer opinion shall be additionally analysed.

3. Dividing Tamilnadu into four regions, intra-regional variations shall be studied.

4. Comparison of cow and buffalo milk based indicators shall be effected.
6.5 Conclusion

Dairying is a good occupational line for everyone from the job seeking youth to retired persons needing a way out, and from the single woman to joint families needing income augmentation. It provides job, milk, income and acquaintance. In milk production and marketing, while Cooperative system has its advantages and disadvantages, Vocational system is the best for society as it avoids intermediaries, is free of external control and manipulation, and does no harm to nature and resources. With the need for large quantities of milk and milk products come the need for large infrastructure, capital and logistics, which however leads to quality concerns due to processing, storage, package and transport. In summary, remunerative price and occupational dignity to milk producers, technology and logistics assisted unhindered supply of milk and milk products to milk marketers and quality milk availability at affordable price to all consumers are the cornerstones of Milk Sector.