CHAPTER II

REVIEW OF LITERATURE

This chapter reviews the related past studies. A review of this nature is a prerequisite, not only for sharpening the methodology, but also for conducting the study as well as for drawing meaningful inferences from the results obtained from the present study. The review of literature is highly useful to design the present study as it indicates the research gap in the study of working of the milk producers’ union. Since the scope of the study is extended to physical performance, human resource management, perception of the milk producers and consumers of the Villupuram-Cuddalore District Co-operative Milk Producers’ Union Limited, the relevant literature is given under respective heads.

I. Performance of the Dairy Co-operatives

Dilip Shah (1986) \(^1\) analyzed the origin, evolution, functioning, internal dynamics and performance of the Gujarat Co-operative Milk Marketing Federation (GCMMF). The assessment of its performance is based on the balance sheets and annual reports of the GCMMF during the period 1974-1982. On account of dairy co-operativization and the effective implementation of Operation Flood-II in the milk shed areas, the procurement of milk from indigenous sources increased and dependence on a federation like GCMMF supplying milk over a long distance declined. The results of the study also indicate that since marketing of the product provides limited means to assure high remuneration to the producers, it will have

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to increase efficiency not only in manufacturing and marketing chains, but in every stage of the entire procurement chain as well. He concludes that the federation will be successful in overcoming all the challenging problems and convert them into an opportunity for progress.

Meera Savara (1986)² evaluated the performance of dairy development in tribal Surat under the IRDP. According to her, the high rate of mortality of buffaloes, lengthy lactation cycle, low productivity of animals due to disease, lack of proper feeding and care will make the tribal dependent on continuous subsidies and loans instead of making them self-reliant. The mismanagement of affairs of many societies, the corruption associated with the bureaucracy at all levels of the programme and over-loading of ecological resources with a large number of animals imported from other districts do not augur well for the tribal economy as a whole.

Dorsten (1986)³ studied the impact of the Kaira District Co-operative Milk Producers’ Union on milk production in Kheda District, Gujarat. He stated that although India possessed an enormous cattle and buffalo population, annual milk production was very low. The average annual milk yield per cow was about 504 kg. One of the major constraints was supply and quality of feeds and fodder. By the year 2000 AD, there was expected to be a short fall of concentrates, 19.80 MT of green fodder and 16.20 MT of dry fodder. The shortage was expected despite the declining trends in the dairy cattle population. The study has made a number of suggestions for improving the feed and fodder situations and also the wealth and breeding of dairy animals.

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Jawanram (1988)\textsuperscript{4} analyzed the organization and working of Jaipur District Milk Producers’ Co-operative Union Limited. The study was conducted through personal interview with management and other employees of the union. It was found that the organizational structure and functions performed such as milk collection, supply of technical inputs, farmers’ induction programmes, supervision, etc. have some drawbacks.

Mahak Malik (1989)\textsuperscript{5} made an economic evaluation of organized milk procurement in Haryana Dairy Development Co-operative Federation. Milk procurement is described as the life-line of a dairy plant. He points out that proper utilization of the installed capacities of the dairy plants for processing milk and manufacturing various milk products are heavily dependent on the total quantity of milk procured by it. Moreover, it is said that the dairy plants found it very difficult to utilize the given capacity during lean season. The study concluded that there was a plenty of scope for the milk collected per society and per member by effectively linking the milk procurement programme of the union with the volume of milk procured by each member.

Mattigatti (1990)\textsuperscript{6} studied the performance of milk producers’ Co-operative societies and their impact on dairy farming in Dharwad district. He selected a number of physical and financial indicators to evaluate the performance. The secondary data were collected from various annual reports of milk producers’

Co-operative societies for the period from 1986 to 1988. He stated that both physical and financial indicators of the societies showed significant growth in their values. The above average societies progressed with higher values for the indicators compared to below average societies, while below average societies showed a greater rate of growth. He concluded that over the period of time, all these societies would contribute to the overall development of the societies.

Kamalaveni (1990)\(^7\) analyzed the utilization pattern of the members of the Erode District Milk Producers’ Co-operative Societies. For the purpose of the study, utilization index was calculated. Personal factors like age, caste, gender, etc. and institutional factors like knowledge of one’s own society, member satisfaction, and democratic participation were analyzed. The study concludes that if the milk producers fail to use the societies as an outlet for selling milk, the very purpose of forming the MPCS gets jeopardized. The study stresses the need for the expulsion of a member supplying milk to the private traders.

Patil (1991)\(^8\) studied the performance of the Karnataka Milk Federation (KMF) and its impact on dairy development in Karnataka. He observed that milk procured in tonnes increased by 2695 per cent during Karnataka Dairy Development Cooperation period and 190.41 per cent during KMF. However, the overall per cent increase was around 8018 per cent. Possible reasons for such high increase in milk procurement were, viz the considerable rise in registration and DCS commissioned as well as the number of milk routes made operational, which increased the DCS commissioned and milk routes operational by 2545 and 721 per cent respectively.

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Chauhan et al., (1995)\textsuperscript{9} studied the pattern of growth rate in milk procurement and assessed the marketing costs, margins and price spread in the marketing of liquid milk. The study is confined to Himachal Pradesh State Co-operative Milk Producers’ Federation of Kangra Unit. The study is based on primary and secondary information obtained from the Himachal Pradesh Milk Federation of Kangra unit and the village dairy co-operative members. The study suggested that there is a need to enhance milk production in order to use dairy plant optimally. They suggested that this can be done by educating farmers on scientific management of superior milch animal breeds besides supplying standardized cattle feed.

Kebede Ellene and Schreiner Dean (1996)\textsuperscript{10} estimated technical efficiency and scale of economies for sample dairy marketing Co-operatives in the Rift Valley of Kenya. The purpose of the study is to address the issue of whether agricultural marketing Co-operatives will be able to survive the privatization process and remain competitive. Dairy marketing Co-operatives were selected for analysis because they represent some of the oldest and most established Co-operatives and because dairy products represent an unsatisfied demand in the urban centers in Kenya. The data were collected from 46 dairy marketing Co-operatives in the districts of Kericho, Nakuru, Nandi, and Uasin Gishu. The maximum likelihood technique was used to estimate a stochastic cost frontier function to determine technical efficiency and scale of economies. The estimated long-run average cost curve indicates scale of economies, but most of the scale of economies are exhausted for


the average size of the Co-operatives in the sample. The test for scale elasticity was significant at the 10% probability level. Results indicate that Co-operatives are technically efficient for the observed technology. They concluded that in the long run, the supply of milk in the region is expected to increase as total demand increases. This will require additional capital for Co-operatives and an increase in the number of cooling centers.

Manob Kanti Bandyopadhyay (1996)\textsuperscript{11} conducted a research on “Dairy Co-operative and Rural Development: With Special Reference to Comparative Study between the Kaira District Co-operative Milk Producers’ Union Limited and the Himalayan Co-operative Milk Producers’ Union Limited.” The study depicts that the programme which was taken with a view to replicating the Anand model has not achieved success throughout the country. Besides, this programme did not consider local geographical and socio-economic aspect at the time of copying Anand model exactly. As a result, invested capital of Operation Flood Programme could not yield any favourable result. The producers of AMUL get the advantage of extension services, more than those of HIMUL villages. So the yielding capacity of milk animals in those areas is also higher. But though the producers of hilly areas of HIMUL receive the benefit of extension services less than those of plain areas, the yielding capacity of milk animals is higher in hill areas. Even the non-dairy hilly villages have milk animals with very significant yielding capacity. Again average yielding capacity of milk animals in dairy villages of AMUL and

plain as well as hill areas of HIMUL is higher than that of non-dairy villages. A comparative analysis of the income from dairy farming in dairy villages of AMUL and HIMUL shows that the income of dairy villages of HIMUL and dairy farming is proportionately higher than that of AMUL. It is concluded that dairy farming has remarkably made an impact on the agriculture of AMUL villages and HIMUL also has done the same though its role is not so remarkable.

Waris and Choudhary (1997)\textsuperscript{12} studied the economic efficiency of Milk Producers' Co-operative Union in North Bihar. Out of four milk producers' Co-operative unions under operation in North Bihar, the Mithila Dugdh Utpadak Sahkari Sangh Limited was selected by simple random sampling technique for detailed study. Published financial statements like balance sheets and trading and profit and loss accounts were obtained. A critical assessment of the business activities of the union revealed that it was unable to come to the standard of norms of financial efficiency. They suggested that the union will have to bring about considerable improvement in its functioning so as to make it an economically viable unit; only then it can serve better the poor milk producers.

Arora et al., (1998)\textsuperscript{13} analyzed the role of Co-operatives in milk marketing at North-west Uttar Pradesh. They found that in spite of the increase in gap between marketed and marketable surplus of milk, there exists potential to increase the milk supply; annual milk production and price of milk may be used as policy instruments to increase milk supply; overall, Co-operatives are playing very


important role in the procurement, processing and distribution of milk; however, popularity of village dairy Co-operatives among small milk producer is to be enhanced; milk price received by sample milk producers varies according to the milk agency to whom sold and also among category of milk producers buffalo milk fetches higher price than cow milk; and village dairy Co-operatives pay higher price for milk than other agencies and average price of milk decreases with the size of dairy farming.

Radhakrishnan (1998)\textsuperscript{14} evaluated the performance of dairy Co-operatives in Erode district of Tamil Nadu. The study has been conducted in the dry block of Perundurai and one wet block of Gobichettipalayam of Erode district selecting 300 sample respondents. Field survey technique and personal interview methods have been adopted to collect relevant information. The study points out that the procurement of the union is severely affected due to the presence of private traders in large numbers, seasonality in milk production and dissatisfaction over the procurement price of the milk sold by the union. Delayed payments to the producers, payment of heavy interest on borrowing, delay in receiving payments for milk products from federation, and non-payment of dividend to the inputs are identified as the major problems of the union. Low capacity utilization, lack of commercial outlook, low return on investment, political nomination, political interference and absence of elected board are the other factors responsible for the poor performance of the union.

Amit Kumar Saha (1999)\(^{15}\) made a cost and return analysis of milk union in Orissa for the year 1994-95. The union’s source of income was identified to be sale of milk to the dairy, the penalties paid by the societies for deviation from standards, in terms of SNF percentage in raw milk. The cost was determined component-wise under two main categories namely variable and fixed costs for toned and double toned milk. The study revealed that the average procurement cost during 1994-95 was \(\text{₹}1.07\) per litre with major share being the average transportation cost. The cost of manufacturing per litre of toned and double toned milk was almost the same at \(\text{₹}6.73\) and \(\text{₹}6.66\) respectively. However, with selling price of toned and double toned milk set at \(\text{₹}8.60\) and \(\text{₹}7.60\) respectively, the dairy earned an average margin of \(\text{₹}1.87\) per litre of toned milk and \(\text{₹}0.94\) per litre of double toned milk.

Kurien (1999)\(^{16}\) identified the factors responsible for the success of dairy industry as technology, quality, infrastructure, right investment and relationship with agriculture. He said that the success of Indian dairy industry is because dairying has been potentially remunerative to the producers. He suggested that the factor advantage of India has to be converted to competitive advantage; world-class standards have to be maintained; the government should have no role in financing of the development of the industry and all enterprises big and small should be self-reliant; industry should be self-regulated; there shall be a pricing policy to protect the interest of milk producers, and timely and accurate information about happenings have to be provided.


Kale et al., (2000)\textsuperscript{17} studied the financial position, working and operational efficiency of 23 dairy Co-operatives in Raigad district of Maharashtra. They studied the economic efficiency through income expenditure ratio, expenditure income ratio, rate of return on capital and rate of turnover. They concluded that the societies had low owned capital and were dependent on borrowing from financial institutions. Even though the working capital of the dairy Co-operatives was low, their turnover was high because dairy Co-operatives did not make payment to milk producers from their own funds. Hence, dairy Co-operatives were able to carry on business with limited capital and majority of the societies were trading profit.

Ahmed Anjum Shakeel, et al. (2000)\textsuperscript{18} evaluated the performance of Gulbarga Co-operative Milk Producers’ Union using various parameters viz., number of dairy Co-operative societies, milk procured, milk sold, total membership, share capital, members and non-members supplying milk and technical services provided by the union. The study revealed that registered DCS increased with a compound growth rate of 5.28 per cent per annum, whereas growth in defunct DCS was 31.06 per cent per annum. It was said that the technical services provided by the study union were inadequate.

Lalwani and Koshta (2000)\textsuperscript{19} made a decomposition analysis of milk yield in members and non-members of milk producers’ co-operative societies at Raipur district of Chhattisgarh. The study revealed that concentrates, labourers and capital


flow are the contributing factors to the milk production function irrespective of the members and non-members of MPCS and seasons. Decomposition analysis revealed that yield of milch cattle was more in the members of MPCS even though it was providing same level of inputs because of proper care and management of milch animals by MPCS.

Kamal Vatta and Sanjay Kumar (2000)\(^\text{20}\) analyzed the potential of dairy enterprise in Punjab farms using multi-stage random sampling with the objective to find the change in cropping pattern caused by dairy enterprise and to estimate the additional income and employment opportunities generated by dairy enterprise on various farms. It was found that dairy enterprise influenced the cropping pattern of farms significantly. The increase in income and labour use, due to dairy enterprise, was also observed on all the farms. Dairying also generated additional employment opportunities for casual labour on big farms. Irrespective of size of farms dairy enterprise caused reduction in additional cash requirements on all farms due to the regular flow of income throughout the year.

Masilamani (2000)\(^\text{21}\) evaluated the performance of Salem District Co-operative Milk Producers’ Union Limited by analyzing 12 years data from 1986-87 to 1997-98 obtained from the records of the union. The primary data were collected from 8 regions viz. Attur, Salem, Mettur, Vazhapadi, Sankari, Kahipuram, Namakkal and Velur Co-operative societies. 240 members of the societies and 120 non-members were interviewed. The study showed that the

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estimated cost in the regions varied slightly. Labour cost was found to be dominating the total cost in all regions. Also the results revealed that there was no significant variation between regions and between members and non-members.

Madlapure et al., (2002) examined the performance of dairy Co-operatives in Konkan region. Twenty dairy co-operative societies were selected randomly, and their working, financial and operational efficiency was assessed. Majority of the members of the co-operative societies were found to be cultivators. Share capital and borrowings were found to be more in the working capital. Effort was made to find out the relationship between total turnover, average working capital and average rate of turnover of the dairy societies. Average total turnover was found to increase with the increase in average working capital. Multiple regression analysis revealed that as membership, share capital and working capital increased, milk collection was also found to increase.

Centre for Management of Agriculture, IIM, Ahmadabad (2002) conducted a research on the performance and competitiveness of Indian dairy industry. The study gave a model based approach for efficiency analysis of milk production and processing sectors. Parametric stochastic frontier production and non-parametric data envelopment analysis method were used to measure the efficiency status of dairy sector. Regression models were estimated to identify drivers of competitiveness/efficiency. The results showed that Indian milk processing sector was found to be competitive and efficient and the hypothesis that

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Indian milk Co-operatives are less efficient than their private sector counterparts was rejected. It was concluded that Indian dairy industry is highly competitive but must be protected from distorted and unfair trade competition in a liberalizing economy environment. The government should take positive and concrete steps to increase the productivity and improve quality of dairy products confirming to international standards to tap the potential in the global market.

Koli (2003)\textsuperscript{24} studied the role of Co-operatives in reduction of poverty with reference to Warana Milk Co-operative union, Maharashtra, and identified that the farmers are getting regular income, subsidized cattle feed, artificial insemination, cattle-health services, subsidy for construction of dairy building, milco tester and training on scientific feeding and breeding which ensure income and employment in rural areas. He stressed on the fact that it was the input services rendered by the union that assured the flow of quality milk and not the high price paid by the union. He concluded that the success of Warana Milk Co-operative Union is due to its dynamic leadership, and due to the fact that the co-operative principles have been put in use in their real sense.

Suriyamurthi and Ramachandran (2003)\textsuperscript{25} analyzed the problems and prospects of Co-operative milk producers’ union in Tamil Nadu. The authors stated that organizing an industry on Co-operative basis has been accepted as an effective method of dairy development. The private operators were offering a better price for milk to divert milk from Co-operatives to private collection centers which may


result in destabilization of dairy Co-operatives. This may in the long-run put milk producers in the Tehsil to suffer exploitation in the hands of private operators. The Co-operatives have to put right the Co-operative laws and adopt model Act to ensure that Co-operatives compete with the private sector in a level playing ground as much as commercial organization.

Selvarani (2004)\(^{26}\) analysed co-operative milk producers’ union in Tiruchirappalli district and Coimbatore district. It was found that the consumer of both unions preferred to buy Aavin milk over other brands because of its assured quality and easy availability. Majority of the consumers of both the unions found the price to be reasonable and were satisfied with the quality of milk. The administrative and selling and distribution and rural milk collection expenses were found to be higher in Coimbatore District Co-operative Milk Producers’ Union. It was concluded that the efficient functioning of the dairy industry depends on the quantum of milk procurement and minimizing overhead charges of the dairy unit. The dairy industry, through its reasonable pricing policy allowing an agreeable margin of profit to the producers and also bringing milk within the reach of the economically weaker sections, should pave path for the advent of much cherished ‘white revolution’ in the country.

Choudhury Anita Roy, et al. (2005)\(^{27}\) conducted a study in 13 milk producers’ co-operative unions of West Bengal to identify the constraints and stimuli faced by dairy Co-operatives with respect to procurement, processing and sales and


distribution during liberalization era. The study revealed that brunt of liberalization was severely felt in the sales and distribution sector followed by procurement and processing sectors. Lack of retail outlets for sale of products is the biggest problem of marketing. Irregularity and lack of advance payments was the most serious constraint faced during milk procurement. On the other hand, the biggest boost was in the market.

Hasan Cicek et al., (2007)\textsuperscript{28} examined the technical and socio-economic factors that may affect the cost in dairy enterprises. In this context, the annual production records of the 77 dairy enterprises running in Western Turkey were examined. Data were analyzed by using multiple regression models. Results showed that the parameters such as education of the producers, scale of the enterprise, feed consumption, feed procuring and litter size had significant effect on the average milk costs. On the other hand, marketing, main occupation and age of the producer were found to be statistically insignificant. In conclusion controlling the technical and socio-economic factors was found to have important effect on decreasing the cost of the production as well as increasing the profitability of the enterprise.

Almaz Mesfin (2007)\textsuperscript{29} compared the performance of selected dairy Co-operatives in Enderta, Alamata and Atsbi Womberta woredas of Tigray; assessed the determinants of performance among the dairy co-operatives; and


identified the constraints with respect to quality feed and breed. The researcher used focus group discussion, report from government offices as secondary data and enumerator administered interview schedule for data collection. All Co-operatives except one were included in the study and a random sample of 120 respondents was selected based on the probability proportionate to size. The analysis showed that co-operatives’ age, members’ training, availability of credit, members’ participation and gender had positive impact on the performance of co-operatives. The most important constraints regarding feed perceived by members were non-availability and high price of feed. Moreover, there is difference in performance among Co-operatives brought about by a variety of challenges. The study suggested that Co-operatives should have training and supportive supervision to improve their productivity and managerial capabilities. Due attention should be given to the development of roads and transport system as well as the availability of feed and exotic breed.

Srikanth (2007) studied the performance of dairy Co-operatives and their impact on milk production, income and employment in Kolar district. The Kolar Milk Union was selected purposively to evaluate the performance of milk producers’ co-operative societies and their impact on milk production, income and employment. He studied the various components of the cost structures, their relative contribution to the total cost of milk production and evaluated the profitability and the resource use pattern of dairy enterprises and problems faced by the dairy co-operatives.

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Manvir Kaur (2011)\footnote{Manvir Kaur (2011). “Operational Performance of Milk Co-operatives: A Comparative Study of Milk Fed and HDDCF”, \textit{International Journal of Research in IT & Management}, Vol.1, No.7, pp.28-45.} studied the operational performance and marketing strategies of Milk Fed and HDDCF on the basis of various physical indicators like number of functional societies, number of unions, number of members, plants, chilling centers, average daily milk procurement, peak procurement of milk, etc. The study found that the Milk Fed is performing much better than HDDCF. It was found that the HDDCF spent larger proportion of total expenses on its employees as compared to Milk Fed but Milk Fed had utilized its resources more efficiently than HDDCF. HDDCF earned high rate of return on its investments as compared to Milk Fed. The study found that Milk Fed procured less amount of average daily milk per plant, per union and per member. Therefore, the study suggested that the Milk Fed should take steps to increase the average daily procurement of milk plant wise, union wise and members wise to increase the sale of milk and milk products. The study concluded that financial performance of HDDCF and Milk Fed improved during the period of study but financial performance of HDDCF is better than Milk Fed.

Madheswaran (2012)\footnote{Madheswaran, S (2012). “A Study on the Performance of Dairy Co-operatives in Tamil Nadu”, \textit{International Journal of Research in Commerce, Economics & Management}, Vol.2, No.5, May, pp.133-136.} examined the performance of dairy Co-operatives in Tamil Nadu. The data were collected from annual reports, journals, unpublished dissertations and other publications from various institutions. He noticed that the milk producers’ co-operative societies are formed and functioning at village level. For the benefit of the members, farmer induction programmes are conducted on modern animal husbandry practices for upgrading milch animals and their productivity. The animals owned by producer members are provided with animal
health cover at the doorsteps of the members by the Veterinary Assistant Surgeons of the veterinary units, procurement teams and input wings. Breed improvement through artificial insemination is also carried out at a nominal rate. He concluded that the milk procurement by the 17 district unions of the Tamil Nadu Co-operative Milk Producers’ Federation is on the increase with the daily procurement touching a record figure of 17 lakh litres per day.

II. HRM in Dairy Co-operatives

Jyothi (1986)\textsuperscript{33} studied the human resource management practices and industrial relations in selected co-operative enterprises in Visakhapatnam district. The objectives of the study are to review personnel policies and practices of the selected co-operative units; to study the socio-economic background and attitudes of the employees towards their work, management and organization; and to analyze the union-management relationship in the selected units. By adopting stratified random sampling, 407 employees were selected from four different co-operative enterprises and primary data were collected from them to know their attitude towards personnel management practices of the selected co-operative enterprises. The study has found that poor working conditions, biases of the superiors and strained industrial relations are the major problem of the employees.

Dashawant (1992)\textsuperscript{34} studied the workers’ participation in management in a co-operative sugar factory. He reported that management should create an atmosphere conducive for industrial democracy in the factory, workers should be


\textsuperscript{34} Dashawant B.R (1992). Workers’ Participation in Management with Special Reference to A Co-operative Sugar Factory”, Unpublished M.Phil Dissertation Submitted to Shivaji University, Kolhapur.
made shareholders of the factory, management should formulate different shop
councils and a joint management council and worker’s director should be elected
from among the employees.

Vadivelu (1989)\textsuperscript{35} studied the personnel management policies and practices
of the select central co-operative banks in Tamil Nadu. The objectives of the study
are to examine the existing personnel policies of the central co-operative banks; to
assess their adequacy in relation to the objectives set forth and jobs administration
practices; and to suggest ways and means for the rationalized approach towards
personnel organization and management of the central co-operative banks. He
adopted both descriptive and exploratory methods. Three district central co-
operative banks were selected for this study. Primary data were collected from the
employees of the select banks.

Vishwanathan (1992)\textsuperscript{36} in his article titled “HRD in Co-operatives in India”
has stressed that HRD should broadly cover the development of skills in three
areas, that is technical, human, and conceptual. He emphasizes the imminent need
for overhauling the policies and to programmes relating HRD in co-operatives. He
suggests that HRD cells in the state government and national and state level co-
operative institutions should be established. They should concentrate on functions
of human resource development.

41-42.
Sharma (1992)\textsuperscript{37} has made it clear in his article entitled “HRD in Co-operatives: Some Important Issues,” that the approach to training has been oriented towards the management of Co-operatives as government controlled/administered institutions rather than as independent business enterprises running on their own strengths and efficiency. The isolated efforts to evolve workable system for HRD at enterprise level are not sufficient. Hence, a well thought out and practical HRD strategy needs to be formulated.

Dharm Vir (1992)\textsuperscript{38}, in his article “Co-operative HRD – Indian Perspective” shared his views about co-operative education and training activities. Therefore HRD may be considered an important part of the co-operative value system. He attempted to describe HRD activities in the operative dairy sector. He adds that the National Dairy Development Board of India has achieved a great success and has got a worldwide attention.

Sivaprakasam (1993)\textsuperscript{39} studied the personnel management policies and practices of the central co-operative banks in Tamil Nadu; reviewed the personnel policies and practices; and studied the socio-economic background of the employees and their attitude towards personnel policies and practices of central co-operative banks. All the 17 central co-operative banks functioning in Tamil Nadu were included in this study. By using questionnaire method, the primary data were collected from 648 employees. Two types of data collection techniques namely schedule for the banks and questionnaire for employees were used in this

study. The findings of the study revealed that there was no uniformity in respect of cadres in central co-operative banks. Deputation occupied the key position in the central co-operative banks and the strength of employees was not increased according to the expansion of the branches. The role of personnel executive in central co-operative banks was only an advisory role.

Nair (1998)\textsuperscript{40} studied the existing executive training and development program and evaluated newly developed system to confirm its utility in the urban co-operative banks. He advised banks that training need should be properly identified, training should be time bound and restructured as per the need, the schedule of training and infrastructure should be prepared, pre and post-training appraisal program should be conducted and cost benefit favorableness of training program should be prepared.

Sharma (2002)\textsuperscript{41} stated that for bringing about overall efficiency of the co-operative sector, promotion of leadership development programme is essential and should be made an integral part of HRD strategy within the overall plan of growth and development of co-operative organizations. The members of the Board of Directors should be trained in the leadership development programmes. The Co-operatives should take advantage of latest trends in the education and training modules evolved under HRD network jointly set up by International Co-operative Alliance and ILO.

\textsuperscript{40} Nair, R.N (1998). A Study of Effectiveness of Executive Development Programs in Urban Co-operative Banks with Reference to Konkan Region, Maharashtra, Unpublished Ph.D. Thesis Submitted to Pune University, Pune.
\textsuperscript{41} Sharma, P.S (2002). “Management Excellence in Cooperatives” Indian Consumer Cooperator, July-September.
Akula Rajagopalarao (2004)\(^{42}\) studied the employees’ attitude towards training and job satisfaction in urban Co-operative banks in Bangalore city. He reported that management should change its outlook towards training and should provide customer oriented training. The researcher found that most of the employees were not given orientation program at the time of placement and the employee expressed that training is necessary for efficient performance. The study indicates the need of training for better performance.

Selvaraj et al., (2005)\(^{43}\) studied the human resource development in Co-operative milk supply society in Tirunelveli. They suggest that the management should conduct job satisfaction survey at least once in two years. This enables the management to improve job satisfaction of their employees and improve HRD climate. The authors have also suggested that management must take responsibility to aim and equip their officers and clerks, check if salaries of the employees are periodically revised, the superiors should grant due recognition on the basis of a fair performance appraisal and job satisfaction should be an important factor related to variables like job involvement, area, organization, and commitment.

Sharma (2006)\(^{44}\) expressed that the development of a competitive Co-operative leadership is co-terminus with promoting professionalism and improved HRD systems and practices at various tiers of Co-operative organizations. He has stressed that there is a great need for continuous


development of Co-operative leadership through promoting professional education and training programmes so that they can direct employees and members for development of organization.

Tangirala (2006)\textsuperscript{45} in his article “Professionalism in Co-operatives” has defined professionalism in co-operatives, when a co-operative society is called professional organization and how people in the Co-operatives can become professionals. He suggests that the Co-operatives to be professional should adopt the HRD code, under which the Co-operatives should follow the strategies for development of human resources, fair wages, knowledge, skills, competencies, attitudes, increasing values and ethics among employees, organize educational, training and development programmes, deputing their human resources to the professional institutes in Co-operatives such as VAMNICOM, Pune; IRMA Anand; and institutes of co-operative management located at various parts of the country. He concludes that Co-operatives should change their mindset and plan to grow vertically with forward and backward linkages simultaneously so as to survive in the competitive area, for which their employees need to possess adequate competencies.

Lopoyetum Samwel Kakuko (2006)\textsuperscript{46} has stressed that HRD and information system in co-operative organizations needs urgent transformation action to enable them to cope with economic liberalization and globalization. It is essential to chalk out strategies and methods and harvesting the domestic manpower and providing


adequate training programmes to upgrade their skills, attitude, knowledge competencies, capabilities, etc. which shall enable them to compete in the new economic environment. Co-operative employees must be favorably motivated to enhance their productivity and performances. It is essential to have knowledge management based co-operative organizations in the 21st century.

Richard E. Stup (2006) gathered information about human resource management practices of the dairy farm organizations and the effects these practices on employees' feelings of commitment toward the organization. Survey questionnaires were sent to owners and employees of dairies with herd sizes of 250 or larger. Owners or HR managers from 131 farms completed the owner survey. Owners distributed an employee-focused survey and 201 employees responded with information about their attitudes toward the business and their perceptions of HRM practices. All surveys were returned anonymously. This research confirms that good communications are critical to an effective workplace environment; and performance feedback is a key part of this communication. Dairy producers who want to increase organizational commitment among employees should ensure that employees receive feedback about their performance. This feedback may include frequent informal performance discussions with a supervisor, access to performance data, and formal periodic performance reviews. Dairy owners seeking to build commitment, especially in key employees should make sure that employees have chances to offer input and influence decision making whenever possible. They concluded that simply implementing HRM practices such as benefits, job descriptions is not enough to earn employee commitment. In order to

enjoy the benefits of committed, and therefore stable and high-performing workforce, dairy producers must offer a workplace with effective performance feedback and opportunities for participation.

Gurpreet Randhawa (2007)\textsuperscript{48} examined the relationship between job satisfaction and turnover intentions. The data were collected from 300 scientists i.e. 150 from National Dairy Research Institute, Kamal and 150 from Agriculture Extension Centres in Haryana. The scientists were surveyed by questionnaire. Simple random sampling technique was adopted for selection of samples. The findings of the study showed a significant negative relationship between job satisfaction and turnover intentions suggesting thereby that higher the job satisfaction, lower is the individual's intention to quit the job. The findings of the study also revealed that job satisfaction plays a significant role in influencing the turnover intentions of employees. People satisfied from their jobs, do their work with full interest and loyalty and have low intent to quit the organization and vice versa. The results also revealed that the two groups of scientists do not differ significantly on the measures of job satisfaction and turnover intentions.

Bais Santosh Singh and Agadi Ramesh (2008)\textsuperscript{49} have given a brief account of dairying and HRD practices in it, before and after independence. The authors have concluded with the suggestion that being an important food industry, milk processing organizations in India should concentrate on HRD practices, so as to bring about development of milk industry at fast speed.

Sundaranajam (2009)\textsuperscript{50} has observed on the basis of survey of employees working in a few Co-operative organizations located in the south west part of Tamil Nadu, that overall HRD climate in the Co-operative sector organizations appeared to be neither good nor bad. The senior employees perceived that the HRD climate should be improved in the present competitive environment. In general, the employees showed unfavourable attitude towards, HRD policies and practices. He concludes that the development of human is a specialized operative function of personnel department.

Samwel Kalkuko Lopoyetum (2009)\textsuperscript{51} stressed the imperative need for effective and efficient HRD in co-operatives. The employees and management of Co-operatives to be highly productive and highly professionalized need continuous improvement in the new changing environment. He further adds that co-operative leaders should enhance their professional skills and knowledge through education, training and extension activities. The author says that Co-operatives must identify the training needs and job requirements of employees before initiating a training programme. He suggested many measures such as improvement in governance and leadership development, providing them with appropriate autonomy, and improving work place productivity for reformation and revamping co-operative organizations in the context of new economic environment. Education and training facilities, staff members participation in management may eventually improve the performance of the Co-operative organizations.


Harish Shukla and Aditi Pareta (2013)\textsuperscript{52} found the type of organizational climate prevailing in Indore Sahakari Dugdh Sangh. The study is of exploratory nature. They studied the various aspects that are related to the development of the organization and employees. Hypothesis was developed based on them. Simple random sampling was used in the study. Primary data for the study were collected through a structured questionnaire from 100 employees. The results reveal that there is significant difference in the perception of organizational climate by male and female employees. Male employees perceive climate of their organization in a better way than their counterparts. Lower level employees perceive climate of their organization in a better way than their counterparts. The present level of job satisfaction of the employees is found unsatisfactory.

III. Perception of the Milk Producers

Gupta and Murthy (1985)\textsuperscript{53} studied how well milk Co-operatives serve their members better. The data were collected at the union, village, and farmer-member levels. Data at the union level were collected from annual reports and other records. The three selected Gujarat unions were: Sabarkantha District Co-operative Milk Producers' Union Limited; the Mehasana District Co-operative Milk Producers' Union Limited; and the Surat District Co-operative Milk Producers' Union Limited. The three unions in Maharashtra were: Shree Warana Co-operative Milk Producers' and Processors' Union Limited; Krishna Khore Milk Producers' Co-operative Union Limited; and Shree Hanuman Milk Producers' Co-operative Union Limited.


Cooperative Union. Five villages along the major milk collection routes of each union were selected. The villages chosen were those which had the highest average milk supply per member for the year 1980-81. In each village 15 to 17 members were selected at random in all, and 506 member-households were contacted in the 30 villages. Data were obtained by a questionnaire-cum-interview method. The findings of the study revealed that a union of small producers who are scattered cannot serve its members effectively if it merely acts as a supply union for urban government dairies. Thus, it has to pursue its members' interests with single-minded devotion. The nature of dairy industry has led the Gujarat producers to develop a Co-operative structure, reflecting producers' interests in decisions at village, district, and state levels while pursuing the interests of their members. The study suggested that the public policy makers should support the autonomous development of producers' co-operative organizations into a large, integrated, and stable network with a diversity of products and service activities. The current pricing system that reimburses only about half the total costs of small and medium producers should be a matter of concern to policy makers.

Carley and Ling (1991)\(^5\) evaluated the perception of southern dairy farmers regarding their Co-operative or proprietary handler’s performance, level of satisfaction with the milk handlers and reasons for staying with the current milk handlers. For the purpose of the study, the data were collected from a 1989 mail survey of southern dairy farmers. The results of the study showed that the dairy farmers were concerned about price, deductions, assessments and price farmers

received appeared to be a significant factor which affected farmer’s satisfaction level. The study also found a trade-off between price and deductions versus service and market and payment assurance. The study suggested the need of a co-operative to the dairy farmers which will provide an assured market for the members.

Misra Sukant et al., (1993)\textsuperscript{55} analyzed the factors influencing farmers’ degree of satisfaction with the overall performance of milk marketing Co-operative. The data were obtained from dairy farmers located in 12 southern states. They took a random sample of ‘Grade A’ dairy societies and mail survey was conducted among 5660 dairy farmers. Results from an ordered probit model indicate that southern dairy farmers perceive co-operative ability to hold down operating and marketing costs, to provide higher prices and competent field services, and assure a market for their milk as important attributes of efficient viable Co-operatives. There were significant differences in the degree of satisfaction with the Co-operatives among the dairy farmers. Furthermore, the study found that longer term affiliation of dairy farmers with a Co-operative resulted in a higher degree of satisfaction. The study suggested that the managers and board of directors should seek out their farmers’ opinions on their degree of satisfaction. Co-operative milk marketing societies regardless of type or location or size should continually review and evaluate the complete package of functions and services provided in conjunction with their performance results.

Thakur (1996)\textsuperscript{56} studied the impact of dairy development through milk Co-operatives in Gujarat which covered four milk unions which were at different stages of development. Twenty-four village milk producers' societies were selected randomly in four districts and 400 respondents, respectively. The primary data were collected on survey method from respondents and secondary data from the sample milk unions and societies. The farmers were categorized, as landless, small, medium, and large in order to examine the impact of milk Co-operatives on economic conditions of the weaker sections. It was observed that the landless people earn as much as 65-70 per cent and small farmers earn more than 25-30 per cent of the total income from dairying. The cash income obtained continuously from the sale of milk can be used for better management of milch animals and for the purchase of improved agricultural inputs to some extent, which help the farmers in increasing their total income.

Singh and Arjun Prasad (1998)\textsuperscript{57} made an attempt to make an economic appraisal of dairy Co-operatives in Bihar. The study was based on primary data collected from 1440 sample dairy farmers, that was 720 members and 720 non-member dairy farmers who were selected from 60 dairy Co-operatives of Patna and Barauni milk sheds of the State. The secondary data were obtained from the Department of Dairy Development, Animal Husbandry and Milk Unions. Analysis was undertaken after categorizing the Co-operatives into two groups, that is successful and unsuccessful on the basis of average annual milk collection. The


findings of the study revealed that the secretaries of unsuccessful Co-operatives were more educated than the secretaries of successful co-operatives. The successful Co-operatives were found statistically different from unsuccessful Co-operatives with respect to annual supply of feeds to farmers through co-operatives. The findings of the study showed that the dairy Co-operatives with majority of members from weaker section of society are likely to be more successful. On the basis of detailed analysis, it may be concluded that the gain of dairy Co-operatives is being accrued by the economically and politically powerful rural elites, and landless households of lower castes are again left out of the net of the dairy co-operative system.

Narayana (2002)\textsuperscript{58} studied dairying at Malabar by collecting data through a survey of milk society farmers and non-milk society farmers. The data were used to discern patterns in livelihood and resource profile, socio-economic and work status of milk society farmers and non-milk society farmers. He has stated that Malabar has witnessed rapid growth in milk production during the last decade compared to South Kerala. The milk society farmers are found to be relatively better educated, own more land, assets and cattle. The milk society farmers did not hail from all economic levels of population as well as caste. It was observed that SC/ST members are relatively absent among milk society farmers. The housewives are found to spend many hours on agricultural activities and dairying.

Subburaj et al., (2004)\(^{59}\) analyzed the factors influencing the performance of dairy Co-operative farmers and their involvement in managing the affairs of the dairy Co-operative societies. It was suggested that educated young persons should come forward to carry out dairy business activities and the district Co-operative unions should intensify their education and training programmes as the low level of education of members and non-members was found to hamper the growth and development of dairy Co-operative sector. The participation of the members in the management of dairy Co-operatives was found to be very low which was not a good indicator of growth and hence dairy Co-operative organizations should motivate and encourage its members to actively take part in the management.

Jacques Somda et al., (2005)\(^{60}\) studied the characteristics of smallholder milk producers in Gambia. Data were collected from 90 smallholder farm households to characterize milk producers and evaluate the profitability and viability status of this activity. Based on current topology of farms and gross margin analyses at farm level, the study identified two resource-based types of smallholder farms. The current milk production system is surely viable. Constraints to increased productivity include lack of improved technology at farm level and weak institutional support. Despite the low viability status, it is shown that milk production generates reliable incomes, which could be a departure for most farmers to intensify farming systems, particularly in areas where no loan schemes exist for purchasing agricultural inputs.


Eshetu Tefera (2007) explored the role of dairy Co-operatives in stimulating innovation and market oriented smallholders’ development by taking Ada’a Dairy Co-operative as a case study. Primary data were collected from 150 smallholder dairy producer members of the co-operative. The result showed that the Co-operative started enhancing innovations in the dairy sector which include technological, institutional and organizational innovations, promoting linkages for access to marketing and services and in sharing knowledge and information. With regard to technological innovation, the Co-operative introduced milk processing using its own processing machine and started producing quality products as pasteurized milk, butter and cheese. Organizationally there was weak interaction among members and board members of the co-operative. He observed that the Co-operative has been sharing dairy related knowledge and information by providing training and advisory services. 55% of the sample respondents have got training on dairy production and marketing through the co-operative during the last three years and all sample members of the Co-operative have got advisory services using innovative members and staff members of the Co-operative.

Sintayehu Yigrem et al., (2008) studied two hundred forty dairy producers in the four major towns representing the Shashemene–Dilla area in southern Ethiopia, who were selected using a multi-stage sampling technique, with the objective of characterizing dairy production, processing/handling, marketing

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systems as well as to prioritizing constraints and opportunities for dairy development in the area. Dairy producers were interviewed using a pre-tested and structured formal questionnaire. Two major dairy production systems, namely the urban and mixed crop-livestock systems were identified, and again classified into two categories based on the major crops grown as a cereal crop producing and earnest-coffee producing areas. The average family size of urban and rural dairy producers was 7.19 ± 0.26 and 7.58 ± 0.23 persons, respectively. Dairy contributed about half of the income of urban producers but it made up only 1.6% of the total income of families in the mixed crop livestock production system. Average farm size of households in the mixed system was 1.14 ± 0.99 ha, while more than 97% of the urban producers use their own residence compound for dairying, which are only 200–400 square meters. Average herd size per household in the cereal based mixed system (3.8 ± 0.42) was higher than in the earnest-coffee based systems (2.3 ± 0.36). Out of the total herds of urban producers, 32% of cattle were local cows while 19% were cross bred. Husbandry practices like feeding, watering, housing, breeding, milking, calf rearing, waste management, and record keeping were also different between the two production systems. The majority of producers in the mixed crop-livestock system process produced milk for home, while the majority of urban producers produced milk for sale.

Debnarayan Sarker and Bikash Kumar Ghosh (2010) explored the major constraints that both co-operative and non co-operative dairy farms face in expanding milk production in the state of West Bengal. The primary data were

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collected with the help of specially designed questionnaire through the survey method at the village level from 320 milk producer households under both co-operative and non-cooperative dairy farms. The underlying hypothesis is that the non-cooperative farms face major constraints and high severity compared with co-operative farms in expanding milk production. Various constraints faced by milk producer households were categorized under five groups namely infrastructural, economic, marketing, technical and socio-psychological. The study has revealed that financial problem is the most significant constraint faced by the co-operative farms. The study has suggested that co-operative societies should provide precise and detailed information on marketing facilities to their attached farms in time, strengthen marketing infrastructure and exercise proper management practices through regular meetings with their attached farms. For managing technical constraints, special training facilities should be provided to the attached dairy farms at regular intervals immediately. To manage socio-psychological constraints, employment of additional manpower for milk collection and transportation during busy season of agricultural year and holding of regular meetings of the members of co-operative farms at the co-operative society level should be done.

Nishi and Ram Kumar (2011)\(^6\) assessed the dairy farmers’ satisfaction with dairy Co-operative societies. The study was conducted covering eight selected DCSs in Pradeshik Co-operative Dairy Federation, Uttar Pradesh. Out of 31 milk unions under PCDF, 4 milk unions were selected under stratified proportionate random sampling technique. Two DCSs from each selected milk union and 10

farmers from each DCS were selected randomly, thus making a total of 8 DCSs and 80 farmers in the sample. The data were collected with the help of interview schedule. The satisfaction of farmers with DCSs was measured with the help of Bhanja scale with some modification. The results of the study revealed that about one third of the respondents were satisfied with the functioning of societies. Organizational participation, market potential and economic motivation were found to have strong influence on the satisfaction level of farmers. However, the prevailing constraints negatively contributed towards farmers’ satisfaction with the functioning of DCSs.

Gunasegari and Periyasami (2013)\(^6\) studied the perception of the member societies towards working of the Pondicherry Cooperative Milk Producers' Union Limited. The study is empirical in nature. The study is confined to the Pondicherry Cooperative Milk Producers' Union Limited only. The primary data for the study were collected during the period from October 2012 to December 2012. Regarding the respondents, the member societies are considered total population. The total number of member societies was 97 as on 31.03.2012. By using simple random sampling, 73 member societies i.e. 75 per cent of the population were taken up for this study. The study encompasses both primary and secondary data. The primary data were collected from the Secretaries of the member societies with the help of the pre-tested questionnaire. The secondary data were extracted from the published annual reports of the Pondicherry Co-operative Milk Producers' Union Limited. The results of the analysis revealed that no significant association is found in the

satisfaction level of the member societies belonging to varied years of existence, number of members, average milk collection per day, type of society and economic status of the society towards working of the PCMPUL. Political interference, lack of value added products, inadequate infrastructure, inadequate government assistance, etc. are the problems encountered by the PCMPUL according to member societies. To ensure a positive outcome, attention to the factors identified in the suggested framework is important for the efficient functioning of the PCMPUL.

Ranjithkumar et al., (2013)\(^6\) carried out a research to know the socio-economic profile of milk producers of co-operative milk society; to know the producers’ level of satisfaction about co-operative milk society; and to know the problem faced by the producers of co-operative milk society. Descriptive research design is used in the study which is intended to cover Tirupur district. Data for this study were collected from primary as well secondary sources. 150 producers were selected by using simple random sampling. The study reveals that majority of the producers are satisfied with the co-operative milk society because of its measurement, correct testing, market price, payment and bonus. Some producers are not satisfied with the society milk because of its timing, high charges for cattle insurances, lack of training facilities, lack of loan facilities and high cost of fodder feed. The study suggests that the society has to provide more facilities and training to the producers.

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IV. Consumers’ Perception

Termorshuizen et al., (1986) conducted a study to gain insight into the factors that influence buying and consumption behavior with respect to milk and into the applicability of integrated models to consumer behavior regarding generic products, such as liquid milk. It was established that liquid milk was perceived as a neutral drink: not ordinary or luxury, as a food not a drink for pleasure, and not as being refreshing. Liquid milk was perceived differently at varying times of consumption during the day. The most important socio-economic variables explaining individual differences in consumer beliefs regarding milk are: age, level of education, and residential area.

Singh et al., (1995) studied the factors influencing consumer preferences for milk. Milk quality, convenient availability, supply in quantity desired, flavour, colour, freshness, and mode of payment which showed higher levels of consumer satisfaction.

Ashalatha (1998) studied the factors influencing the performance of Bangalore Urban and Rural District Co-operative Milk Producer’s Societies Union Limited milk for a sample of 100 respondents. The study revealed that the factors such as door delivery, clean packing, quality, hygienic preparation, time saving and reliability, good value for money, freshness and desired flavour were important in the order in influencing the decision of buyers of Bangalore Urban and Rural District Co-operative Milk Producer’s Societies Union.

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Sharma (2000)\textsuperscript{70} conducted an opinion survey in Andhra Pradesh regarding consumer perception and attitude towards the different sources of milk purchase. It revealed that a majority of the families purchase milk from private vendors due to non-availability of dairy milk within the reasonable distance from the consumer’s residence. Several households reported that the housewives are unable to collect the milk in person from the milk booths as it involves time and energy and they are forced to employee servants for collection of milk from the booths, which involves additional cost and delay. Further, they also expressed dissatisfaction with the present arrangement of milk supply from the booths and suggested home delivery. Nearly, 60 per cent of the families felt that the home delivery of milk in polythene sachets is advantageous and indicated willingness to pay additional costs/service charges for the same. So, the Co-operatives may have to seriously think about the system of home delivery of milk in order to bring more consumer families under its fold. Other reason for household preference to private vendor was non-availability of milk in small packing of less than half litre with the dairy as several small families and those belonging to lower income groups strongly felt that such facility is essential to enable them to purchase the dairy milk. Similarly, it was also noticed that in Orissa, a majority of higher income group were not purchasing OMFED milk due to absence of home delivery, poor taste, less cream, bad smell and non-availability of credit structure in Co-operatives. There was also strong correlation between income and proportion of home delivered milk.

Prabahakar Sharma and Joglekar (2002)\textsuperscript{71} made an opinion survey of consumer perceptions towards marketing of milk in Rajahmundry and concluded that a well-conceived and organized network of dairy Co-operatives right from village level would be essential for the speedy growth of dairy production in the country.

Paramashivaiah and Arvind Kulkarni (2004)\textsuperscript{72} examined the consumer attitude towards pasteurized milk in rural areas of Gulbarga district. Price was identified to be a big hindrance in the purchase by non-users of pasteurized milk. They suggested that the suppliers of pasteurized milk should introduce smaller packs i.e.250 ml in rural areas and lower the price of best quality milk i.e. full cream milk, in order to make it more affordable for the poor rural consumers.

Bhar and Saxena (2005)\textsuperscript{73} developed ARIMA models for forecasting the sales of milk and milk products in the regions of Bokaro and Dhanbad. Based on the data collected for the period from March 2003 to December 2004, they fitted these models and forecast for the period from January 2005 till June 2005, and concluded that they were valid for forecasting the milk sales and retailer growth of the dairy, which will help the dairy companies to formulate appropriate marketing and distribution strategies.


Kubendran and Vanniyanraj (2005)\textsuperscript{74} made a comparative analysis of rural and urban consumers on milk consumption. The impact of socio-economic profile of the consumers namely income status, occupational position, educational level, sex, age and region was analyzed using purposive sampling method. It was found that consumers of milk in rural areas fall behind the consumers in urban areas. The urban consumers were found to prefer branded milk especially Aavin milk, whereas the rural consumers preferred mostly unbranded milks. It was suggested to discriminate the marketing strategies to position the product in the two different markets.

Prasad (2006)\textsuperscript{75} found that 91.33\% of the consumers knew the availability of more than one variety of milk available in the market. Majority of respondents said that it is the quality that influences the choice of the brand, whereas a meager (5.67\%) expressed the view that it is the factor of easy availability that is responsible for the preference of a brand. He found that 82.67\% of the respondents were satisfied with the present brand they were using and only 17.33\% though otherwise. He suggested that prompt and regular supply, providing value by way of service rendered by agents and avoidance of adulteration are factors that will count in the success of milk producers.

Sharma et al., (2007) are of the opinion that India is the leading milk producer in the world and the dairy Co-operatives are the backbone of Indian dairy industry. This study has analyzed the inefficiencies existing in improving milk production, procurement pattern, marketing channels, and price spread of a dairy cooperative, Uttaranchal Co-operative Dairy Federation Limited (UCDFL). It has been found that UCDFL is focused mainly on liquid milk marketing and has not adopted product diversification, which is the need of the day. Nainital and Almora districts of Kumaon region have been selected for the study; these cover almost 40 per cent of cattle population in the division, except Udham Singh Nagar. It has been found that due to insufficient margins, the number of agents working for other private dairies has increased. Different marketing channels for milk have been identified and price spread has been calculated for all the channels. Lack of business development services related to dairy industry has been found leading the farmers to disassociate from Anchal. The study has suggested that Anchal should evolve a definite policy with regard to procurement of milk in both lean and regular periods and to sustain its members, incentive package should be provided. Anchal should find ways to establish fodder banks at strategic locations for providing fodder during emergencies and periods of fodder scarcity. Local sale of milk at the society level should be encouraged to increase the popularity of Anchal brand.

Kalaiselvi (2011) studied the marketing performance of Tiruchirappalli District Co-operative Milk Producers' Union Limited. The main objectives of the study are to trace the growth and development of dairying activities; to highlight the marketing and financial performances of the Union; to know about the performance of sample societies and the role of members of the selected sample societies; and to understand the consumers, retailers and Aavin agents’ opinion towards Aavin milk and milk products. As an essential part of the study, the primary data were collected from 35 milk societies, 350 milk producers, 500 consumers, 200 retailers and Aavin agents with the help of questionnaire. Separate questionnaires were administered to producers, milk co-operatives, consumers and retailers and milk agents. The findings of the study reveal that the performance of unregistered milk producers’ Co-operative societies is most discouraging. Most of the consumers feel that the price of Aavin milk is high. Majority of the retailers and agents are not satisfied with the commission given to them. All the milk producers are not satisfied with the price of milk procurement. The study suggests that arrangements for home delivery could be made. A more effective and efficient system of milk distribution by the dairy needs either strengthening of the existing distribution channels or the adoption of new and innovative method of sullying milk to the consumers.

Vinayagamoorthy et al., (2012)\textsuperscript{78} analyzed the socio-economic factors of packaged milk customers; studied the conceptual background of packet milk in Salem; examined the brand loyalty; and evaluated the factors influencing in using particular brand of packaged milk. The study is based on primary data. Secondary data were collected from articles, periodicals, websites and journals pertaining to the relevant matter of the subject under study. A sample size consisting of 150 Aavin milk consumers were selected by adapting convenient random sampling. The questionnaire is the major tool used for collecting the primary data from the respondents. The study suggests that the union should improve the quality of Aavin milk by the way of advanced scientific methods; should increase the number of the Aavin milk booths and expand the door delivery system to increase the sale of Aavin milk. Moreover, the union shall make arrangements for 24 hours service to the consumers in the Aavin milk booths; shall improve the packing of the Aavin milk; the price should be comparatively moderate with other brands; and the union should create awareness about the Aavin milk.

Meenakshi and Sekar (2012)\textsuperscript{79} evaluated the customer attitude towards Aavin milk products. They classified the user data into three different patterns as demographic factors, attribution factors and other factors such as satisfaction. Primary data were collected through a structured questionnaire distributed to customers of Aavin milk in Trichy. The sample size is 200. Simple random sampling technique was applied. Statistical techniques like simple percentage analysis, chi-square analysis, cross tabulation analysis and analysis of variance.


have been applied. The personal factors of the respondents have no significant influence on the period of using the Aavin products. The results of this study confirmed that the Aavin products satisfied its customers well. It is not bonded to any community or group and it is a commonly preferred product by the people. 27 per cent of the customer opinion is that Aavin has harmed them in some aspects; while it is not impact any serious cause.

Muneeeswaran (2013)\textsuperscript{80} analyzed the different aspects of consumer perspective of the availability of Aavin products; found the consumer preference towards Aavin products; and studied the consumer attitudes towards opinion regarding the quality of Aavin milk. The primary data required for this study has been collected from the consumers and vendors of Aavin products. The primary data were collected through a well-structured questionnaire. Convenience sampling method was used for this research. For the purpose of this study, 150 respondents were selected and the data were collected through questionnaire. The findings of the study reveal that the consumers purchase 500 ml pack of Aavin milk; 50 per cent of the respondents are purchasing butter of Aavin product; first rank of the respondents buy Aavin milk and products because of its goodwill and followed by quality and hygienic; the consumers expect no price fluctuation from the Tamil Nadu dairy department; and the consumers are regular users of Aavin milk and products. The study suggests that to avoid competitions, the market price should be reduced; quality of milk and milk products has to be increased to the standard of foreign companies; and free gifts may be offered for improving the sales.

Subramaniya Bharathy et al., (2013)\textsuperscript{81} studied the competitive advantage of Aavin over its rivals in the Salem region. The sample size consists of 200 consumers. Convenience sampling technique is used. Primary and secondary data were collected for this study. With the help of questionnaire, the researchers collected the primary data. The secondary data were collected through magazines, journals, websites and company records. The results reveal that while purchasing for dairy products consumers look for freshness, quality, taste and texture, validity and convenience. A good majority of the respondents complained that Aavin milk is not available in 100 ml and 200 ml. They suggest the dual price system i.e. less or concessional price to the domestic users and high price to commercial users; Aavin milk should be available at any time in all areas; and Aavin should increase the number of agents in Salem district. A few respondents lodged a complaint against the packaging system of Aavin milk. To protect the health of the consumers, the SDCMPU Limited may concentrate on a good packaging system.

Saravanan et al., (2013)\textsuperscript{82} examined households’ consumption pattern of Aavin milk in Erode district. A structured questionnaire was drafted and pre-tested with the households in Erode district. The survey was carried out on 200 sample respondents. Secondary data were also used, which were sourced from research papers, journals, magazines and websites. The results of the study showed that majority of households prefer buttermilk of Aavin and the consumers buy Aavin milk for its taste. Majority of


consumers have been purchasing and consuming Aavin milk for more than 10 years. The study suggests that consumers should be recognized in the form of membership schemes, gifts, etc. so that positive word-of-mouth communication can be created. Therefore, special marketing strategy needs to be evolved to target these consumer groups. More road shows and exhibitions could be conducted to demonstrate the positive impact of milk on health.

Sivasankaran and Sivanesan (2013)83 studied the factors influencing brand preference of milk among rural and urban consumers; analyzed the problems faced by rural and urban consumers in the usage of different brands of milk; and found the reasons for switchover from one brand to other brand of milk. For the purpose of collecting primary data, the researcher carefully designed an interview schedule. Secondary data were collected from books, journals, magazines, newspapers and published articles from leading journals. The researcher adopted convenience sampling technique for data collection. The researcher took 300 samples for the present study, which comprised 150 respondents from the rural areas and 150 respondents from urban areas. For the present study the researcher selected seven popular branded milks namely Aavin, Arokya, Nanjil, Komatha, Chkra, Vijay and Tasteme. The findings showed that majority of rural consumers are using Nanjil brand and majority of urban consumers are using Aavin brand. Majority of rural consumers are highly satisfied with Nanjil brand package and majority of urban consumers are highly satisfied with Aavin brand package. Majority of rural and urban consumers feel that Arokya brand price is very high. Majority of rural and

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urban consumers feel that Arogya brand taste is very good. Majority of rural consumers are highly satisfied with the thickness of milk and majority of urban consumers are highly satisfied with the easy availability of milk. The study suggests that the producers have to accept the changing scenario and formulate their marketing strategies to sell their products.

Kalaiselvi, Sangeetha and Priyanga (2013)\textsuperscript{84} determined the effectiveness of packaging for Aavin dairy milk products; studied the level of satisfaction of the respondents towards Aavin dairy milk products; and identified consumer preference towards packing material. The study is an empirical research based on survey method. Primary data and secondary data were used for the study. A well structured questionnaire was used for the collection of primary data. A sample of 100 respondents was selected through convenience sampling. It is concluded that the Aavin dairy package has effectiveness. Factors like quality packing material and packing method have the highest impact on the consumer preference. Aavin should give emphasis on giving better packaging of the products to the consumer, keeping in mind the factors like price of pack and information about the product on the pack if they want to sustain themselves in the environment.

Jothi Mary (2013)\textsuperscript{85} made an attempt to find out consumer satisfaction of Aavin milk; to find out the factors influencing the consumption of milk by consumers of milk; to find out consumer awareness about all brands of milk; and to find out


advertisement effectiveness and developing the marketing field. The study has been
undertaken by means of surveys method. A sample of 120 consumers was selected.
The primary data were collected by means of interview schedule. The results showed
that in spite of various brands available in the market, Aavin stands high. Most of the
consumers suggested that price and quality are the main factor for purchasing milk.
They feel that Aavin price is high. Therefore, steps should be taken to reduce it. Extra
quality and sales promotion measures are the main step to bring consumer towards
Aavin milk; Hence, it should be improved.

Vijay Anand and Panchanatham (2013) determined the degree of
customer loyalty with utilization of primary customer services delivered by various
milk brands in and around Thanjavur. The primary data were collected through the
questionnaire. The sample size is 100. The study reveals that there is a significant
relationship between the demographic variable, age factor and price as well
preferred size. It is also found that there is no relationship between income and
gender factors of demographic variable and price. There is no significant
relationship between the variables, age and gender with quality of the product.
There is a significant relationship between family members and preferred brand.
There is a significant relationship between variables income, gender, and
occupation and customer’s opinion about advertisement for packaged milk brands.
It is recommended that packaged milk needs to bring out some simple changes to
enhance customer loyalty. The packaged milk manufacturers have to ensure the
availability of more 500 ml packages because of its overwhelming demand.

Special Reference to Customer Loyalty”, International Research Journal of Business and
Management. Vo.IV, October, pp.45-62.
Arul and Kannan (2013)\textsuperscript{87} studied the consumer behaviour at Aavin milk and identified the factors influencing the purchase of Aavin milk and its product. The research design used for this study is descriptive research design. The primary data were collected by interview schedule. 200 respondents were selected from Salem city by using convenience sampling technique. The results reveal that 60\% of respondents prefer to buy Aavin milk; 25\% of respondents are highly satisfied with the price of Aavin milk; 20\% of respondents are highly satisfied with the quality of Aavin milk. The study suggests that since most of the consumers belong to middle and lower middle class category, they will not be able to pay the money daily, so the credit system can be followed by collecting some deposit at the starting itself. Free door delivery can also increase the sales of the Aavin products.

Jayanthi (2014)\textsuperscript{88} made an attempt to determine the consumer satisfaction towards Deval milk; to identify the factors influencing the consumption of Deval milk; to determine the level of awareness towards Deval milk; to study the customers’ response and expectations towards Deval milk; and to study the factors influencing consumers’ to buy particular milk brand. The necessary information for this research was collected by primary and secondary sources. The primary data were collected with the help of questionnaire. The sample taken for this study is area sampling with the size of 100 respondents in Miraj. The results showed that convenient buying and price are the key influencers in sales of the product; majority of the customers are satisfied with the product; retailer-customer bonding


has a strong influence in buying decision making and product information source; and average level of respondents believes that advertisements play a vital role in influencing buying of Deval milk. The study suggests that Deval milk should take steps by creating awareness among customers that milk is not adulterated; to compete with local milkmen Deval dairy should arrange this service; and they should deliver the milk as early and as fresh as possible.

The above reviews show that most of the studies have been carried out on the working of Co-operative dairies. These studies have not covered the entire facets of the working of dairy Co-operatives i.e. operational performance, perception of the milk producers, human resource management of the dairy co-operative and customers’ perception on the dairy co-operative in a single study. With this background, the present study is an attempt to fill in the research gap in these areas. The study covers Villupuram-Cuddalore District Co-operative Milk Producers’ Union Limited, with a sample of 375 milk producers, 85 employees and 450 consumers.