CHAPTER 3

DAIRY DEVELOPMENT ACTIVITIES IN INDIA,
TAMILNADU, KRISHNAGIRI DISTRICT

3.1 INTRODUCTION

The concept of dairying has been practiced from prehistoric period. As the time progressed certain technological innovations were adopted in dairying. This chapter deals with the dairying activities in Tamilnadu (both State level and District level) and the profile of the Krishnagiri District.

3.2 DAIRY DEVELOPMENT IN TAMILNADU

The first co-operative milk supply union was formed early in 1912. But it did not produce tangible results. In 1927 Madras co-operative Milk Supply Union Limited was started with 13 feeder societies and a share capital of Rs.242.

The societies faced problems like lack of transport and financial facilities. Though more persons came forward with deposits to enable the union to carry on its activities and the government helped a loan of Rs.15,000 in time. Fortunately again in the year 1929-30, prospects of supplying milk to state hospitals opened and the union had to be contended with the ubiquitous middlemen who were strongly entrenched in the trade; supplies could not be made in time or in adequate quantity and the union was forced to pay damages to the government, Rs. 10,000. A loan of Rs.6,000 from Diwan
Bahadur C. Arunachala Mudaliar, to enable union members to purchase cows to keep up their constant milk supply to the hospitals, greatly helped their union. It made a slow progress. The Chennai City Co-operative Milk Supply Union was the first to install a High Temperature Short Time (HTST) cooling plant.

The pasteurization plant with bottling unit was installed in the year 1939 and it was helped by the Dairy Institute, Bangalore. Ivan, son of Mudaliar, become the president of the union. Nevertheless, the co-operators pursed their vocation with admirable doggedness to the point Mr. Sivam said in the presidential address in the second Chennai co-operative conference of milk supply unions and societies held on December 24, 1955 that the Chennai organization had been copied by Mumbai state and by the Kaira district co-operative milk supply union with its head quarters at Anand. The major headache faced by the union was that in 1953 he had suggested with Mr. Chester C. David of the Ford Foundation whether some help could be available in setting up a plant in Chennai to convert liquid milk into milk powders. Mr. Sivam remembered that Kaira union has stolen a march over the Chennai union in the matter of setting up of powder that was upsetting.

This was followed by establishments of Milk Co-operated Unions at Coimbatore, Madurai, Trichy, Thanjavur, Ooty and other parts of Tamilnadu. The co-operatives in Chennai province received technical advice and guidance from Mr. William Smith, imperial dairy expert in farming suitable by-laws. The imperial dairy expert had also organized and conducted short training courses at the Imperial Institute of Animal Husbandry and Dairying, Bangalore to educate the co-operative personnel.
Co-operative milk supply unions were founded primarily based on the Indian Co-operative Societies Act of 1912, as amended in 1932. The model by-laws have served as guidance for the formulation of by-laws in other provinces. 17 District Cooperative Milk Producers' Unions function in the State of Tamilnadu covering 30 Districts. There are 15 Dairies in District Co-operative Milk Producers' Unions with an installed processing capacity of 19.42 llpd. There are 36 Chilling Centres (Functional) in District Co-operative Milk Producers' Unions with installed chilling capacities of 13.55 lakh litre per day.

Hundreds of milk supply unions were started in the villages and they started to undertake milk distribution. These societies were provided with technical and financial assistance for setting up processing facilities and organization of transition facilities.

The Dairy Development Department was established in 1958 in Tamilnadu. With the adoption of 'Anand pattern' in the State of Tamilnadu, Tamilnadu Co-operative Milk Producers' Federation Limited was registered in the State on 1st February 1981. Tamilnadu Dairy Development Corporation Ltd., were transferred to the newly registered Tamilnadu Co-operative Milk Producers' Federation Limited, popularly known as "Aavin". The milk production in Tamilnadu per day is 145.88 Lakh litres. Salem, Erode, Madurai and Dharmapuri Unions are the Feeder Balancing Dairies. Surplus milk in the District Unions, after meeting their local sales is diverted to the nearest Feeder Balancing Dairies for conversion into milk products, such as Skim Milk Powder, Butter and Ghee. The production of milk from these societies was of 3.42 lacs ton litres by the end of 1982.
Table 3.1 Milk Procurement Particulars of Union On 1982

<table>
<thead>
<tr>
<th>Name of District</th>
<th>No. of Societies</th>
<th>Litres Procured Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nilgiris</td>
<td>108</td>
<td>23,000</td>
</tr>
<tr>
<td>Coimbatore</td>
<td>236</td>
<td>38,000</td>
</tr>
<tr>
<td>Erode</td>
<td>260</td>
<td>53,000</td>
</tr>
<tr>
<td>Dharmapuri</td>
<td>270</td>
<td>26,000</td>
</tr>
<tr>
<td>Salem</td>
<td>100</td>
<td>58,500</td>
</tr>
<tr>
<td>South Arcot</td>
<td>250</td>
<td>18,500</td>
</tr>
<tr>
<td>Chengalpattu</td>
<td>443</td>
<td>23,000</td>
</tr>
<tr>
<td>North Arcot</td>
<td>437</td>
<td>44,000</td>
</tr>
<tr>
<td>Chennai</td>
<td>334</td>
<td>58,000</td>
</tr>
<tr>
<td>Total</td>
<td>2,438</td>
<td>3,42,050</td>
</tr>
</tbody>
</table>

Source: The Tamil Nadu journal of co-operation, Sept 1982 and www.aavinmilk.com

The remaining districts like Trichy, Pudukkottai, Thanjavur, Ramnad, Tirunelveli and Kanyakumari too fell in line utilizing the assistance from the plan schemes by Operations Flood Programme I started in July 1970. Under this Programme:

A dairy with a capacity of 2 lacs litres per day was set up at Ambattur.

A feeder-balancing dairy at Erode with two chilling centers one in Sankarandampalayam, near Dharapuram and Komarapalayam near Sathiyamangalam and a cattle feed plant near industrial estate in Erode were set up.

A chilling centre at Ambattur and two chilling centres at Villupuram and Chinaware in South Arcot district were established.
A power plant of 10 tons per day was commissioned at Madurai dairy.

A nucleus jersey farm with imported animals was setup in Ooty to supply quality cow semen. A total sum of Rs. 15.64 crores was spent during the Operation Flood (of) I Programme.

In 1976-77, TamilNadu had 3,208 societies, which accounted for 20% of co-operative milk producers’ societies in India. TamilNadu stood second to Maharastra in organizing milk producers’ co-operative societies.

During the period of Operation flood Programme II

Construction of a new dairy in Salem with capacity to handle 1 Lac litres per day was completed in October 1983 at a cost of Rs. 328 Lacs.

Ambattur dairy was expanded from two lacs litres per day to three lacs litres per day.

A new dairy with a capacity of one Lac litres per day was established at Coimbatore at a cost of Rs.352 Lacs.

A new dairy plant with a capacity of 50,000 litres per day and cheese plant with 2 metric tons per day was established in Ooty at a cost of Rs. 320 lacs.

The chilling at Thiruvannamalai was set up at a cost of Rs. 14 lacs with a capacity of 20,000 litres per day.

Attur chilling centre in Salem district was expanded from 30,000 litres per day to 50,000 litres per day at a cost of 14.86 lacs
A new chilling centre at Anakayur in North Arcot District was started with a capacity of 30,000 litres per day.

Liquid Nitrogen plant to produce 45 litres per hour was commissioned at Salem.

A buffalo frozen Semen station at a cost of Rs.10 Lacs was established at Erode dairy premises to supply quality buffalo semen.

As on 31.12.1986, Tamilnadu had 5,082 Milk Producers’ Co-operative Societies functioning at village level, 16 Producers’ Union at the district level and a Federation at the state level.

Tamilnadu Milk Producers’ Co-operative Federation is implementing the dairy development programme with the funds provided by the Indian Dairy Corporation in 14 districts in the State, namely Chennai, Chengalpattu, South Arcot, North Arcot, Salem, Dharmapuri, Coimbatore, Nilgiris, Erode, Madurai, Dindugal, Tiruchirappalli, Thanjavur and Pudukkottai.

The dairy development programmes in the remaining six districts Kanyakumari, Tirunelveli, Tuticorin, Ramanathapuram, Sivagangai and Virudhunagar have been implemented with the funds provided from out of the state plan and other special programmes such as Western Ghat Development Programme, Drought Prone Area Programmes etc.

### 3.3 DAIRYING IN KRISHNAGIRI DISTRICT

Krishnagiri District is 360 Kilometers away from capital of Tamilnadu state and nestles in the foot hills of the Shervoys Deccan, within the water shed of the Cauvery River. Farming has been the main occupation of the people. The main waterfalls of the Hoggenekall (Major tributary of the
Cauvery) provide extensive canal, tank and well irrigation facilities to the farmers of part of the Krishnagiri district area. For those outside the range of the new canal system, it is an opportunity to diversify and provide ancillary services and to cultivate crops, which are neglected in the irrigated areas.

As a consequence of these developments, in irrigated areas today, cash crops such as groundnut, mango, sugarcane and banana holds way with smaller areas devoted to cotton. Krishnagiri is the major mango cultivator in the southern India. Over the years Krishnagiri has grown into a major mango pulp-producing center in India.

In the past, forward-looking farmers had always looked at dairying as a complementary activity with the result of that today dairying occupies an important place in the economy of the district. Buffaloes of various local breeds dominate the cattle scene. The most arresting fact about Tamilnadu Farmers’ Organization was the distance they kept from politics. This helped the Co-operatives grow as it did in similar circumstances in Gujarat.

Private dairies and creameries have been a feature of the Krishnagiri milk scene and they collected milk through agents. There were wide disparities in the prices paid for milk in flush season and in the summer months no scientific system of payment related to quality existed. Adulteration of milk was rampant. The collection machinery was erratic and farmers were at the mercy of the agents or middlemen who often forced the milk producers to sell at distress prices.

Even the Krishnagiri Co-operative Milk Supply Union Ltd., could not get regular supplies and it was able to handle just about 1,000 litres of milk per day which met around 5% of the demand of the town. Bulk of the milk was collected by private vendors.
3.4 PROFILE OF THE STUDY AREA

3.4.1 Location

Krishnagiri district is bounded by Vellore and Thiruvannamalai districts in the East, Karnataka state in the west, State of Andhra Pradesh in the North, Dharmapuri District in the south. Its area is 5143 Sq. Kms. This district is elevated from 300m to 1400m above the mean sea level. It is located between 11° 12'N to 12° 49'N Latitude, 77° 27'E to 78° 38'E Longitude.

3.4.2 Soil

The soil of the district is predominantly black gravel type. The type occurs to a large extent in Krishnagiri, Arur taluks. Red loamy soil is found at the bottom of valleys in the Krishnagiri, Anchetty Taluk.

3.4.3 Major Industries

There are 10061 industries in the Krishnagiri district (Big-21, Medium-89, Small-9951) including Ashok Leyland, Titan watch industries, premier mills, TVS motors, Hindustan Motors, Caterpillar and Tatra Udyog etc are in hosur of Krishnagiri district.

3.4.4 Eminent

King Athiyamaan, Tamil Poetess Avvaiyar, Former Governor-General Shri Rajagopalachariar and freedom fighter Shri Subramaniya Siva were some of the famous personalities of this soil.
3.4.5 Minerals

"Paradise" is the most popular multi coloured granite available in Krishnagiri. Black granite is available in Hosur and Denkanikottai. Granite processing units, which make slabs of granite, finished and decorated beautifully is located mainly in Hosur surroundings. The important minerals found in the area are Granite, feldspar, gypsum and quartz. The estimated turn out of minerals in this district works out in crores.

3.4.6 Rivers

The main rivers that flow across the district are Cauvery and South Pennar. Cauvery enters the district from South West in Denkanikottai taluk and exits in South West direction. It forms waterfalls at Hokenakkal and joins Mettur Dam. South Pennar originates in Nandidurg of Karnataka and flows through Hosur and Uthangari Taluks. Vanniyar and Markanda rivers join this South Pennar.

3.4.7 Climate

Eastern part of the district experiences hot climate and Western part has a contrasting cold climate. The average rainfall is 830 mm per annum. March - June is summer season. July - November is Rainy Season and between December - February winter prevails.

3.4.8 Road Transport and Communication

Krishnagiri district is connected by Prime Minister's Golden Rectangle Project executed by National Highways Authority of India. This district has a network of National Highways converging.
Apart from this state highways and district highways are linking almost all the towns and villages of the district. Four National highways converge at the Head Quarters of this district is unique.

People of Krishnagiri District belong to various racial groups. People from Kashmir, Maharashtra, Karnataka and Andra Pradesh have settled in this District. Hence it can be rightly called a Cosmopolitan society.

3.4.9 Animal Husbandry

Krishnagiri district is highly rich in the cattle wealth and poultry development activities. Mathigiri cattle farm is famous for both cattle research and as a breeding centre. Variety of milch breeds is available in the district. The district has made a rapid progress in the field of Animal Husbandry.

Animal Husbandry Department has taken various measures for the growth of cattle wealth in Krishnagiri district by maintaining Veterinary Dispensaries, Mobile Veterinary Dispensaries, Intensive Cattle Development Programme, Rinderpest Squad, Poultry Extension Centres and Poultry Disease Diagnostic Laboratory and Poultry Extension. Two Deputy Directors and Clinicians control the activities of the Animal Husbandry Department.
3.6 FUNCTIONS OF MILK INDUSTRY IN KRISHNAGIRI DISTRICT

3.6.1 Milk Procurement

When the place of milk production is far from its place of consumption, procurement of milk comes into the picture. Milk is produced in small quantities in different remote rural areas, but it is consumed in large quantities by both the rural and urban population. This is the first step in the marketing of milk. Hence, the first and foremost function is assembling of milk. Milk will be procured directly from the producers. Under this system individual milk producers sell milk to the milk traders directly. There is no obligation of any kind on either side. The buyer fixes the procurement price to be paid to the producer. Milk traders sell milk to their urban customers at a higher rate. In lean season he accepts the entire quantity of milk supplied by the producer. As the supply is not adequate to meet the demand, these traders do not mind even buying at a higher rate than the rate offered by co-operative societies. But during the flush season the trader procures only the quantity required by him to meet his commitment to his regular customers. Hence, the price offered by the traders is less than the usual price. Therefore, in this method the producers are benefited during lean season and they are placed in an unpleasant situation during flush season. Some producers sell their milk to the private traders during lean season and to the societies during the flush season thereby deriving benefit to the highest level.

The milk traders purchase milk through the middlemen / agents who are at times milk producers as well. The agents buy milk from the milk producers in the rural areas and supply to the traders. The traders have no direct contact with the milk producers. The main advantage of this system is that the milk traders have access to interior and inaccessible villages also. So
the scattered small-scale production of milk from producers is collected. The agent is paid a commission for his services.

Milk producer form a milk producers’ Co-operative Societies at a village level and several Societies join together to form a milk producers’ Co-operative union at the district level. District milk producers’ Co-operative unions form of federation of milk producers at the state level. This system gives self-reliance to the milk producers for solacing their problems in a collective manner. At the primary level, milk producers’ Co-operative Societies procure milk from member producers. The societies supply the milk to the district level unions. The milk union through the primary societies provides input facilities to the milk producers.

3.6.2 Transportation

As a major portion of milk is produced in rural areas, it has to be transported as raw milk from the place of its production to processing centers and from there to the ultimate consumption centres. Transportation of milk is an important operation in milk traders. Due to adverse climatic conditions, poor route construction and excessive cost on refrigeration, transportation of milk must be regularly and carefully done twice a day (morning and evening). The transport system should be efficient as well as economical. Some of the important means of transportation of milk are discussed below:

i) Head Load

Generally producers carry their produce on their head to the collection center or shanties or nearby towns. In villages generally ladies carry small quantities of milk or milk products on their heads and supply milk to the consumer or traders. This kind of transportation is restricted to 3 to 5 Kms and moreover the total quantity will not exceed 10 to 20 litres. But in
recent times the practice of head load transportation of milk has been reduced considerably, thanks to the operation of bus services connecting most of the inaccessible villages with neighboring towns.

ii) **Bicycles**

In the recent years the use of bicycles in rural areas has increased tremendously. People use bicycle more conveniently than any other means of conveyance. Bicycles bring a major portion of milk sold in the urban area by unorganized sector. Door to door collection of milk from the producers at the production point is possible with cycles. The milk vendor can transport 40 to 50 litres of milk for a distance of 10 to 15 Kms. Door to door supply of milk in small quantities as desired by consumer is possible by cycle transportation. It is also a cheaper and convenient method of transportation of milk.

iii) **Bullock cart**

This mode of transportation is employed in plain areas. This system is useful to carry the milk over a shorter distance only. It is observed that in rural areas, the milk traders who own bullock carts, for agricultural purposes, use it for transporting milk.

iv) **Mopeds, Scooters, Auto rickshaws and light vehicle**

Mopeds and Scooters have more capacity to transport milk than bicycle and are used where big vehicles can’t be used conveniently. They carry 100 to 150 litres of milk and transport milk over longer distances of 20 to 30 Kilometers, Auto rickshaw can carry 250 to 500 litres of milk for fairly long distances of 30 to 40 Kms and light vehicle can carry nearly 5 to 8 tons.
v) **Motor Trucks**

With automobile industry showing a remarkable progress, use of motor trucks as a means of transporting milk has become very popular. Almost all the dairies (both organized and unorganized) make use of motor trucks for the transportation of milk particularly when the milk is to be transported in cans. A truck can carry from 0.5 to 3.5 tons of load for more than 100 Kms. Motor trucks have found to be the quickest means of transportation due to the improvement in road facilities. Long distance transportation of milk upto 300 to 400 Kms, in a day is also possible now.

vi) **Railway booking**

Milk in cans and milk products in tins and plastic containers are transported by trains for longer distances. It is also one of the cheapest methods of transportation. The disadvantages of this method are its restricted route operation and occasional delay. There are two types of railway transportation:

a) **Railway wagons**

Railway wagons are economical only when substantial quantity of milk is transported for comparatively long distance. Railway wagons can carry 10 to 12 tons of load for long distances. They are considered economical and feasible where handling is large. Milk products like butter, ghee and curd are transported by train to long distances in parcel wagons of express and passenger trains.

b) **Tankers (Rail and Road)**

Insulated stainless steel tankers are fixed either on the truck or rail wagons. They are meant for bulk handling of milk for long distance transportation. Now a number of rail as well as road tankers are in use. They
are useful in linking the villages where milk is produced and the cities and towns where it is consumed. Milk tankers built on truck chassis, which could be loaded fully, ply from Krishnagiri to neighboring districts and states which make the transportation of milk an easy job. The Lorries can be booked either in full or in part depending upon the quantity of milk supplied by the trader. Light commercial vehicle combining speed, economy and convenience is the newly added advantage for transporting milk from interior villages to far off urban consumer.

3.6.3 Distribution of milk

Distribution of milk is the last stage of milk marketing. It is the most important step because all the efforts made in procurement, processing and packaging will be completely lost if the mode of distribution is not apt and adept. Generally consumers expect to get a quality product in attractive package at a reasonable cost and at fixed timing regularly. Milk is usually distrusted without recourse to any processing. Raw milk is supplied to the consumer in their own containers, as well as sachets. There are different methods of milk distribution.

In the indigenous method, milch animals are brought to the consumer’s door and milking is done in the presence of the consumer. In this method, the consumer gets milk in its natural form. The changes of adulteration are minimal but the producer measures the milk with a lot of foam. So the quantity of milk is less. Yet the consumer is happy to pay a premium for the fresh milk. This process is cumbersome and it is possible only in village and small town’s. It is not suitable for cities and metros, where the requirement of milk is more. Even in village these practices have disappeared in recent times.
Under the Cycle Vending method, traders carry raw milk in cans using cycles or mopeds to the consumer’s doors and it has been observed that these traders charge different prices for their merchandise. Some traders supply cow milk at a premium price to such customers who prefer it. Many traders sell milk of mixed quality (cow and buffalo milk) and few customers also prefer buffalo milk, as it is fat rich. Depending upon the choice of the customers these traders vary their prices.

In the bulk distribution system, the milk is sold to shops, hotels, sweet stalls, hostel, etc. in aluminium cans of 40 litres. Bulk purchasers are benefited by economies of large scale buying and assured of required quantity. At the same time the traders enjoy assured sales outlets for their produce.

National Dairy Development Board has introduced bulk vending system in Delhi, Mumbai, Chennai and Calcutta. The main feature of the vending system is the sales by automatic vending machine on the insertion of a token in the slot a predetermined quantity of milk will be supplied to the customers’ vessel. The token for a predetermined quantity of milk is available for sale in the counter itself. The customer pays for it daily and gets the milk from the machine. Availability of milk round the clock and pilfer proof are the main advantages of the system. But the high cost of installation, and distribution of sachet packet milk has reduced the importance of this type of vending.

For retail distribution system of pasteurized milk, the most common packing materials like glass bottles of polythene sachet are used. The usual size of the containers is ½ litre or 1 litre. The pack machine is automatically predetermined quantity like 1 litre ½ litre or 250ml, can be conveniently packed this in a convenient method of carrying the milk from the consumers’ angle also.
Aseptic tetra pack is the latest method for packing milk in disposable container. This system provides a long shelf life for the product in the room temperature. In this method packing cost will be more but it is pilfer proof and can be used in remote areas. This system has not yet gained much importance in India. The main advantage of this type of packing is that it can be useful in areas where the people can consume even without boiling the milk. This can be useful in areas either the milk supply is not regular and is monthly purchase for a family along with grocery is possible in this method but packing cost is high in tetra pack system.

3.7 PRIVATE TRADERS AND MILK PRODUCERS

Private traders have an edge over The M.P.C.S. in milk procurement. The facilities and services provided to the milk producers by milk traders are presented in the following.

1. Private milk traders advance money to the producers for the purchase of animals as well as personal loans. The amount is adjusted against the amount payable for milk by the traders.

2. The private milk traders pay 10 paise (per point of fat) more than the M.P.C.S. price of the milk producers’ co-operation societies to Rs.1 per litre. Milk producers are attracted by this system. Milk traders normally change the price according to the demand and supply of milk and milk produce. When there is heavy demand for butter and milk products during marriage season, festival season and dry periods the procurement price is hiked. When there is low demand for the milk and milk products and during flush season the procurement price of milk is reduced.
3. The milk producers supply the milk to the M.P.C.S. twice daily. But private creameries collect milk only once i.e. around 10 a.m. the previous day’s milk is also added with the morning milk and the same is supplied to the private creameries. They immediately remove the cream from the milk and boil the milk and chill it. The producer is relieved from the botheration of coming twice daily to the collection centre.

4. Private milk traders belonging to the local majority community influence their relatives and friends to supply the milk to them. They participate in the functions of their milk suppliers like marriage, condolence and other social function. They develop a good rapport with them. They conduct chits and make the milk producers as their regular clients.

5. A peculiar barter system was observed in this area. When the animals are dry in milk and the milk producer has no milk to supply to the traders, the producer for his personal consumption receives milk from the trader. For this purchase the producer need not pay the amount immediately. The payment is adjusted when the producer supplies milk to the private milk trader.

6. Some private milk traders use cycle or mopeds and collect the milk from the producer’s door steps. In this way a considerable quantity of milk is collected by the private traders.

3.8 PRIVATE TRADERS AND CONSUMERS

Service provided to the consumer by private trader is unique. Co-operative society provides only limited services to the consumers. But the milk traders provide a variety of services. They are:
1. The co-operative milk producer’s societies supply milk through booth and stall system only. They do not concentrate on door delivery. Private milk traders supply milk to the consumers at their doors. Milk is supplied in small quantities of 100 ml or 200 ml whereas the co-operative societies supply 1,000 ml, 500 ml. or 250 ml. only. The supply of 250 ml, sachet packets by co-operative is also a limited one.

2. The milk traders provide credit facilities to the deserving consumers. There are some vendors who because of their goodwill and long standing in the market receive advance from the consumer also. But the co-operative societies are not providing any credit facility to the consumers.

3. Private milk traders also establish tea shops, sweet stalls, cooling centres where milk is sold round the clock to the consumers. They have facilities for selling the milk in sachet also. Now ghee, skimmed milk, high fat milk, curd, rose milk and butter milk are also marketed by private milk trader in the sachets from 100 ml to 500 ml

4. High fat milk is sold by private traders in evening hours. They sell the fresh high fat milk at a premium price of Rs.7 more than the price charged by the milk co-operative union. Normally this vending is made in night hours from 7 p.m to 9 p.m. Buffalo milk from this district and neighboring districts procured in the afternoon is transported to the place of consumption. This type of milk is preferred by the customers because of its freshness, high fat content and curd of better quality.

5. Many private milk traders supply milk, curd, butter and ghee to marriage halls. The milk products are also supplied by the
private traders to marriage halls even at odd hours like 2 a.m. or 3 a.m. depending on the requirement of the consumer. The milk producers union is not concentrating on this market segment.

6. The demand of local tea shops and sweet stalls in towns is also not met by the milk co-operative union. The private milk traders concentrate on this segment. Teashops require skimmed buffalo milk for tea preparation. Similarly skimmed milk is used in restaurants and hotels for preparing sweets. Private traders supply milk regularly to the sweet stalls and hotels depending on their demand in holidays, seasons and festivals.

3.9 CONCLUSION

Dairy development in India has a long history. The first military dairy was established at Allahabad in 1886. These farms were meant to produce milk, butter and cream for army units and their hospitals. An enterprising Swede, Mr. Edward Kaventer, established modern dairy farms in Calcutta, Darjeeling and Simla. Royal Commission on Agriculture made a study of the quality and number of livestock in the country and their relationship with availability of feeds and fodder. Government introduced various schemes like key village scheme, intensive Cattle Development Programmes and milk Colonies. In 1946 Kaira District Milk Producers Union was established in Anand, Gujarat and was replicated (Anand Milk Union Limited) to other parts of the country. This initiative led to the formation of National Dairy Development Board, Anand in 1965. Operation Flood Programme I was launched with the aid from the World Food Programme (126000 M.T. of skimmed milk powder and 42000 M.T. of butter). Funds of Rs.116.40 crores, generated through sale of these commodities, were used for
the development of 27 rural milk sheds in 10 states and setting up dairies in the rural hindered and in the metropolitan cities like Delhi, Mumbai, Calcutta, and Chennai. The Operation Flood II Programme was implemented with an outlay of Rs.273 Crores and completed on March 31, 1985. Operation Flood III Programme started in 1987 aimed at the consolidation of the gains of earlier phases. The main focus of the Programme was to aim at achieving financial viability of the milk unions and federations.

In Tamilnadu, due to the efforts of Mr. Devashikamani Mudaliar, the then Joint Registrar of co-operative societies, the Madras (Chennai) Co-operative Milk Supply Union Limited was started in 1927 with 13 feeder societies and share capital of Rs.242. The development department was established in 1958. Large-scale dairy development activities were undertaken by the dairy department. TamilNadu Dairy Development Corporation took over the commercial activities of the state dairy development in 1972. An apex federation called TamilNadu Milk Producers’ Federation was formed on 1.2.1981. It has taken over the activities of the erstwhile TamilNadu Dairy Development Corporation.

A feeder balancing dairy at Krishnagiri with two chilling centers, a cattle feed plant and cattle farm in Dharmapuri were set up in Operation Flood-I scheme, Dharmapuri dairy was registered on February 7, 1975 and started functioning from July 1, 1975. At that time 139 societies had been registered.

In the second section of this chapter, details about the location of Krishnagiri District, climate, land holding, animal holding, etc. and the profile of the two blocks selected for the study Dharmapuri and Krishnagiri are dealt with. Details like types of milk procurement, types of traders, transportation, distribution of milk and pricing by private traders as well as M.P.C.S. are elaborately presented. Milk is produced in small quantities scattered throughout the district. Private traders in the district pay a higher price to the
milk producer than the M.P.C.S. price during the severe lean period (sometimes even Rs2.50 per litre more than the price paid by the societies) When there is heavy demand for the butter and ghee in the market, private traders pay more price for buffalo milk. Private traders follow a flexible system of price and are able to procure the major portion of milk in the district. Large numbers of private traders are sending skimmed milk and standardized milk to far off places like Bangalore, Mangalore and Andhrapradesh. They sell butter and ghee to their agents and consumers even in Northern states of India. Private traders use the light commercial vehicles, train facilities available from Erode and insulated milk tankers for transporting the milk to distant places. On the distribution side also, the private traders concentrate on supply in small quantities, door delivery, milk of different types (skimmed milk, toned milk, high fat or pure cow milk, etc.) and round the clock supply of milk. Moreover sale of milk, curd and buttermilk in sachets of 250 ml and availability of refrigeration facilities at the retail outlets like provision stores and teashops enable the private traders to dominate the milk distribution in the district.