3.1 INTRODUCTION

Besides agriculture, dairying provides a regular source of income for the farmers in rural areas in Tamilnadu. Farmers own at least two or three cows to milk and some Women’s Self-Help Group are also involved in dairying. Tamilnadu is one of the leading producers of milk in India. The researcher has discussed about the growth of dairy sector in TamilNadu as well as in Madurai district, which is termed to be a Temple city.

3.2 DAIRY SECTOR IN TAMILNADU

Dairy sector is important not only as the producer of highly nutritious food products but also for the sustenance of poor farmers and overall prosperity of the farming community. Currently, milk production in India is around 12.9 crores metric tonnes per day with the country being the largest milk producer in the world. It is a matter of great pride that a nation which was deficit in milk has now become the leading milk producer in the world. Tamil Nadu ranks eighth in milk production and is well on the way towards achieving the ‘Second White Revolution’ as envisioned by the Government of Tamil Nadu. Milk production in the State during 2012-13 was around 1.82 crore litres per day. Solutions to improve the economic status of the milk producers are being arrived at, by the Government, such as timely payment to the producers, remunerative price, subsidy schemes and supply of inputs like breeding facilities, cattle feed etc. As a result, earlier the preserve of
small, marginal, landless farmer’s dairying is today looked upon as an alternate means of livelihood.¹

3.2.1 Origin of Milk Co-operatives in TamilNadu

Milk co-operative societies were organised in Tamil Nadu by the State Cooperative Department in 1920. India’s first co-operative dairy with processing and marketing facilities was established at Ayyanavaram in Chennai city in 1927. This was followed by the establishment of milk co-operatives in Coimbatore, Madurai, Trichy, Tanjore, Ooty, Cuddalore and other parts of Tamil Nadu. The Dairy Development Department was established in 1958. It embarked upon a large scale development activity. With the aid from New Zealand under Colombo Plan, a cattle colony at Madhavaram and also dairy to process 50,000 litres of milk per day was established in 1963. Later another dairy to handle 50,000 litres of milk per day was established in Madurai in 1967 with the assistance from the United Nations International Children’s Emergency Fund (UNICEF). Further, a large number of chilling centers was also established and organized in the marketing of milk in Chennai and Madurai cities. The commercial activities of the State Dairy Development Department were taken over by the Tamil Nadu Dairy Development Corporation in 1972. The Corporation’s activities grew in volume and in variety during these years of its operation and it became a major change agent under the Operation Flood-I programme.

¹ [www.http://agritech.tnau.ac.in](http://agritech.tnau.ac.in)
According to 1977 Livestock Census, the cattle population was about 10.5 millions of which 12 per cent were lactating cows. In addition, the State had 2.9 million buffaloes of which 30 per cent were lactating. Buffaloes formed 25 per cent of the total bovines in the country of which 15 per cent was in Tamil Nadu. The buffaloes account for nearly 66 per cent of India’s total milk production.

3.2.2 Progress under Operation Flood Programme in Tamil Nadu

The Operation Flood-I programme was started in July 1970. A dairy with a capacity of two lakh liters per day was set up at Ambattur. A feeder balancing dairy was started at Erode with two chilling centers in Sankarandampalayam and Sathyamangalam and cattle feed plant in Industrial Estate in Erode were set up. Centers at Villupuram and Chinnasalem in South Arcot District were established. A powder plant of 10 tonnes per day was commissioned at Madurai Dairy and a Nucleus Jersey Farm with imported animals has been set up at Ooty in Nilgris District to supply quality semen. A total sum of Rs.15.64 crores was spent during the period of Operation Flood-I programme which made the dairies to increase the milk handling capacity.

A review of the growth of milk societies in 1976-77 shows that there were 3208 societies in Tamil Nadu, which constituted 20 per cent of the societies in the state, which stands second to Maharashtra in organising village milk producers ‘co-operatives. During Operation Flood-II
programme period an additional 1462 Anand pattern societies were organized by enrolling an additional 1,80,390 members. The milk procurement was also increased from 3,02,500 litres to 5,22,440 litres per day. The construction of a new dairy in Salem with the capacity to handle one lakh liters per day and a new chilling center at Thiruvannamalai were completed. Under the drought prone area programme, a new dairy of one lakh liter capacity, a powder plant with the capacity of producing 10 tonnes milk powder per day and a buffalo frozen semen station at Chithode in Erode were completed.

With the Operation Flood Programme and International Development Agencies (IDA) aided projects in operation in Tamil Nadu, dairy co-operatives were developed at a much faster rate. By the end of December 1986, Tamil Nadu had 5626 milk producers’ co-operative societies at the village level, 16 milk producers’ unions at the district level with 28 chilling centers and a federation at the State level. It was also envisaged under Operation Flood-III programme to increase the capacity of nine dairies from 6.98 lakh litres per day to 16.50 lakh liters per day by commissioning two more dairies in addition to the expansion of the existing dairies. The capacity of the metro-dairies would be raised to 7.75 lakh liters per day from 4.25 lakh litres per day.\(^2\)

Thrust on the Operation Flood-III is to initiate policies and steps to increase milk production and procurement to match demand and to build necessary infra-structure facilities for processing and efficient distribution network. New three dairies at Madras, Tiruchirapalli and Villupuram were established with a handling capacity of 4 lakh liters, 1.5 lakh liters and 1 lakh liters per day respectively. The existing dairies were expanded in Ambattur from three lakh liters to four lakh liters per day, in Madurai from 1.5 lakh liters to two lakh liters per day, in Coimbatore from one lakh liters to two lakh liters per day. New chilling centers were established in Theni, Perambalur, Karur, Namakkal and Kodaikannal during the period.

In Tamil Nadu, Co-operative dairying has also paved the way for the economic emancipation of women in the villages. Dairies are operated and managed by women themselves. In Thanneerpandal Villages in Periyar District the concept of Micro Dairies’ has been introduced to make dairying accessible to small and marginal farmers. The impact of dairy development in the rural economy of Tamil Nadu is great and wonderful. The dairy co-operatives are the main springs for this rural development.³

In Tamil Nadu there are 17 districts Dairy co-operatives are run in the Brand Name “Aavin”. The Functional societies of each Union as well as number of milk pouring members in each district are shown vide table 3.1.

3.2.3 Functional Societies in Tamil Nadu

There are 11,503 milk producing societies functioning in Tamil Nadu and 4,29,080 members are pouring the milk in the societies. Table 3.1 depicts the clear picture of the societies and its members Union-wise.

TABLE 3.1
FUNCTIONAL SOCIETIES IN TAMILNADU

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Union</th>
<th>Functional Societies</th>
<th>No. of milk pouring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kancheepuram –</td>
<td>612</td>
<td>23,222</td>
</tr>
<tr>
<td>2</td>
<td>Villupuram</td>
<td>1,221</td>
<td>52,586</td>
</tr>
<tr>
<td>3</td>
<td>Vellore</td>
<td>1,165</td>
<td>57,165</td>
</tr>
<tr>
<td>4</td>
<td>Dharmapuri</td>
<td>898</td>
<td>27,592</td>
</tr>
<tr>
<td>5</td>
<td>Salem</td>
<td>1,208</td>
<td>59,536</td>
</tr>
<tr>
<td>6</td>
<td>Erode</td>
<td>538</td>
<td>27,114</td>
</tr>
<tr>
<td>7</td>
<td>Coimbatore</td>
<td>913</td>
<td>30,031</td>
</tr>
<tr>
<td>8</td>
<td>Niligiris</td>
<td>105</td>
<td>3,547</td>
</tr>
<tr>
<td>9</td>
<td>Madurai</td>
<td>1,002</td>
<td>19,663</td>
</tr>
<tr>
<td>10</td>
<td>Dindigul</td>
<td>224</td>
<td>8,605</td>
</tr>
<tr>
<td>11</td>
<td>Trichy</td>
<td>907</td>
<td>55,365</td>
</tr>
<tr>
<td>12</td>
<td>Tanjore</td>
<td>634</td>
<td>20,336</td>
</tr>
<tr>
<td>13</td>
<td>Pudukkottai</td>
<td>230</td>
<td>4,977</td>
</tr>
<tr>
<td>14</td>
<td>Sivagangai</td>
<td>539</td>
<td>15,023</td>
</tr>
<tr>
<td>15</td>
<td>Virudhunagar</td>
<td>399</td>
<td>5,023</td>
</tr>
<tr>
<td>16</td>
<td>Tirunelveli</td>
<td>844</td>
<td>14,183</td>
</tr>
<tr>
<td>17</td>
<td>Kanyakumari</td>
<td>64</td>
<td>5,112</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>11,503</td>
<td>4,29,080</td>
</tr>
</tbody>
</table>

Source: Animal Husbandry, Dairying and fisheries Department, Dairy Development Policy Note, 2014-15, p.no.35.
Table 3.1 indicates that Villupuram has a large number of functional societies and a high number of pouring members is found in Salem district. In Madurai district, there are 1,002 functional societies and 19,663 pouring members.

3.2.4 Dairy Development Department

The Dairy Development Department was established in 1958 in Tamil Nadu. The administrative and statutory control over all the milk cooperatives in the state was transferred to the Dairy Development Department on 1.8.1965. The Commissioner for Milk Production and Dairy Development was made as the functional Registrar under the Tamil Nadu Cooperative Societies Act. 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. The commercial activities of the department such as Milk Procurement, Processing, Chilling, packing and sale of milk to the consumers etc. hitherto dealt with by the Tamilnadu Dairy Development Corporation Ltd., were transferred to the newly registered Tamilnadu Co-operative Milk Producers’ Federation Limited popularly known as “Aavin”. In the wake of liberalization policy, private dairies have also entered into the field of dairying. As per the directions of the Honourable Chief Minister of Tamilnadu high priority has been given for improving the performance of milk Co-operatives by adopting a systematic approach and proper strategy in Milk Co-operative. Significant achievement has been made by Milk Producers’ Cooperative Societies, Union and
Federation in the State of Tamilnadu. The cattle population in India is approximately 15 per cent of total cattle population in the world. India stood number one in milk production. Tamilnadu is one of the leading states in milk production. The milk production in Tamilnadu per day is 145.88 Lakh litres.

In Tamilnadu, three tier-structures of the organization functions under the Dairy Development which implements several schemes through the Milk Cooperative Societies (Village Level), the Milk Producers’ Unions at the middle level (District Level) and Federation of district Co-operative Milk Producers’ Unions at the apex level (State Level) with a view to augment the milk production. There are 11,397 Milk Producers’ Co-operative Societies including 1,722 Milk Producers’ Women Co-operative function in the state, besides 62 Milk Consumer Co-operative Societies which cater to the needs of the milk consumers. The 4.25 Lakh pouring members of the societies are paid dividend for their share capital, bonus and patronage rebate when the society earns profit.4

There are 17 District Cooperative Milk Producers' Unions functioning 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 Lakh litres per day. There are 36 chilling centres

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4 [www.http://agritech.tnau.ac.in](http://agritech.tnau.ac.in)
(functional) in District co-operative Milk Producers' Unions with installed chilling capacities of 13.55 Lakh liters per day.

The Tamil Nadu Co-operative Milk Producers' Federation Limited is an apex body of 17 District Cooperative Milk Producers' Unions. The Federation has four dairy plants in Chennai, one at Ambattur with a capacity of 4.00 lakh litres per day, another at Madhavaram with a capacity of 2.00 lakh litres per day and the third dairy at Sholinganallur with a capacity of 4.00 lakh litres per day. These dairies collect milk from District Unions, process and pack in sachets and send for sale to the consumers in and around Chennai city. The fourth product dairy at Ambattur is engaged in the manufacture of milk products such as yogurt, ice-cream, khova, kulab jamoon, buttermilk, curd and mysore pa.

### 3.2.5 Objectives of the Dairy Development Department

- Assure a remunerative price for the milk produced by the member of the Milk Producers’ Co-operative Societies through a stable, steady and well organized market support.

- Distribution of quality milk and milk products to the consumers at reasonable price.

A number of activities are undertaken by the Dairy Development Department, viz., Provision of free veterinary health cover to all animals owned by the members of milk cooperatives, implementation of Artificial Insemination Programme, supply of balanced cattle feed and inculcation of
farmers with the modern animal husbandry methods and practices. All activities, which are essential for the upgradation of the milch animals and improving their productivity in the long run, have been undertaken. Provision of necessary infrastructure facilities for marketing milk and milk products and supply of quality milk to the consumer has been made by way of establishing new chilling centers, pasteurization plants and adoption of modern processing system.

3.2.6 Functional setup

The Commissioner for Milk Production and Dairy Development is assisted by Deputy Milk Commissioner in the rank of Joint Registrar of Cooperative Societies and a Deputy Registrar at the Headquarters besides 23 Deputy Registrars (Dairying) at the district level by way of conferring the powers of the functional Registrar to discharge the statutory functions.

3.2.7 Functions of the Dairy Development Department

The main functions of the Dairy Development Department include Organisations of societies, registration of societies, supervision and control of primary milk cooperatives, District Cooperative Milk Producers Unions and Tamilnadu Cooperative Milk Producers Federation. The Dairy Development Department exercises statutory functions like enquiry, inspection, surcharge and super session, appointment of special officers, liquidation and winding up of dormant societies etc. The Commissioner for Milk Production and Dairy Development, Deputy Milk Commissioner
(Cooperation), and Circle Deputy Registrars (Dairying) are vested with quasi-judicial powers in respect of settlement of disputes, appeal, revision and review under various provisions of TamilNadu Cooperative Societies Act, 1983 & the TamilNadu Cooperative Societies Rules, 1988. The Commissioner for Milk Production and Dairy Development has been designated as the State Registering Authority for the state of TamilNadu, under the provisions of Milk and Milk Products Order’92. All the dairy units including private Dairies handling more than 10,000 Litres per day (lpd) of milk or Milk Products containing milk solids in excess of 500 Metric tonnes per annum have to obtain registration certificate under the provision of Milk and Milk Products Order’92. The Commissioner for Milk Production and Dairy Development/State registering Authority has been conferred with powers to register the dairy units having handling capacity from 10,000 Litres per day (lpd) to 2,00,000 Litres per day (lpd). The Commissioner/State Registering Authority, Deputy Milk Commissioner (Cooperation)/ District collectors and Deputy Registrars (Dairying) have been authorized to carry out supervision.
3.2.8 Milk Procurement of District Co-operative Milk Producers’ Unions

The following table 3.2 shows the procurement of milk by District Co-operative Milk Producers’ Unions in Lakh liter per day since 2001 to 2014.

**TABLE 3.2**

AVERAGE MILK PROCUREMENT BY DISTRICT COOPERATIVE MILK PRODUCERS’ UNIONS (DCMPUS) FROM 2001-14 TO 2013-14

<table>
<thead>
<tr>
<th>S.No</th>
<th>YEAR</th>
<th>LLPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2001-02</td>
<td>17.49</td>
</tr>
<tr>
<td>2</td>
<td>2002-03</td>
<td>15.79</td>
</tr>
<tr>
<td>3</td>
<td>2003-04</td>
<td>17.26</td>
</tr>
<tr>
<td>4</td>
<td>2004-05</td>
<td>20.56</td>
</tr>
<tr>
<td>5</td>
<td>2005-06</td>
<td>21.59</td>
</tr>
<tr>
<td>6</td>
<td>2006-07</td>
<td>22.10</td>
</tr>
<tr>
<td>7</td>
<td>2007-08</td>
<td>21.64</td>
</tr>
<tr>
<td>8</td>
<td>2008-09</td>
<td>22.00</td>
</tr>
<tr>
<td>9</td>
<td>2009-10</td>
<td>22.30</td>
</tr>
<tr>
<td>10</td>
<td>2010-11</td>
<td>20.66</td>
</tr>
<tr>
<td>11</td>
<td>2011-12</td>
<td>21.40</td>
</tr>
<tr>
<td>12</td>
<td>2012-13</td>
<td>24.36</td>
</tr>
<tr>
<td>13</td>
<td>2013-14</td>
<td>23.22</td>
</tr>
</tbody>
</table>

Source: Official Website of Aavin

From the above table 3.2 it is inferred that there has been a gradual increase in the procurement of milk by DCMPUs since 2010-13 and it has been reduced in 2013-14. This slight reduction in procurement of milk was
due to the drought that prevailed in the state. There are three wings such as Metro Liquid milk marketing, Metro Milk Product marketing and Up country marketing which carry out the marketing of milk and milk products of the Federation.\footnote{http://www.aavinmilk.com/organisation.html}

\subsection*{3.2.9 District Union-wise milk Procurement in Tamil Nadu}

Table 3.3 shows milk procurement of district union-wise in Tamil Nadu since 2011-12 to 2013-14.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
S.No & Name Of The Union & 2011-12 & 2012-13 & 2013-14 \\
\hline
1 & Kancheepuram – Tiruvallur & 56,000 & 75,000 & 82,000 \\
\hline
2 & Villupuram & 1,52,000 & 1,78,000 & 1,73,000 \\
\hline
3 & Vellore & 2,52,000 & 2,97,000 & 2,81,000 \\
\hline
4 & Dharmapuri & 1,09,000 & 1,46,000 & 1,28,000 \\
\hline
5 & Salem & 4,24,000 & 4,67,000 & 4,50,000 \\
\hline
6 & Erode & 2,31,000 & 2,51,000 & 2,34,000 \\
\hline
7 & Coimbatore & 2,30,000 & 2,40,000 & 2,34,000 \\
\hline
8 & Niligiris & 17,000 & 18,000 & 16,000 \\
\hline
9 & Madurai & 1,68,000 & 1,93,000 & 1,76,000 \\
\hline
10 & Dindigul & 40,000 & 46,000 & 41,000 \\
\hline
\end{tabular}
\caption{DISTRICT UNION-WISE MILK PROCUREMENT FROM 2011-12 TO 2013-14}
\end{table}
<table>
<thead>
<tr>
<th>S.No</th>
<th>Name Of The Union</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Trichy</td>
<td>2,94,000</td>
<td>3,14,000</td>
<td>3,04,000</td>
</tr>
<tr>
<td>12</td>
<td>Tanjore</td>
<td>42,000</td>
<td>53,000</td>
<td>51,000</td>
</tr>
<tr>
<td>13</td>
<td>Pudukkottai</td>
<td>14,000</td>
<td>18,000</td>
<td>15,000</td>
</tr>
<tr>
<td>14</td>
<td>Sivagangai</td>
<td>33,000</td>
<td>44,000</td>
<td>47,000</td>
</tr>
<tr>
<td>15</td>
<td>Virudhunagar</td>
<td>12,000</td>
<td>17,000</td>
<td>15,000</td>
</tr>
<tr>
<td>16</td>
<td>Tirunelveli</td>
<td>58,000</td>
<td>69,000</td>
<td>67,000</td>
</tr>
<tr>
<td>17</td>
<td>Kanyakumari</td>
<td>9,000</td>
<td>10,000</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>21,40,000</strong></td>
<td><strong>24,36,000</strong></td>
<td><strong>23,22,000</strong></td>
</tr>
</tbody>
</table>


Table 3.3 discloses that there has been an increase in the procurement of milk by almost all the unions since 2012-13 and there has been a reduction in the procurement of milk during 2013-14 except Sivagangai and Kancheepuram-Tiruvallur districts due to the drought.
3.2.10 District Union-wise Milk Sales in Tamil Nadu

Table 3.4 shows the sales of districts in Tamil Nadu since 2011-12 to 2013-14.

**TABLE 3.4**

DISTRICT UNION-WISE MILK SALES FROM 2011-12 TO 2013-14

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the Union</th>
<th>Average Milk sales liters per day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2011-12</td>
</tr>
<tr>
<td>1</td>
<td>Kancheepuram – Tiruvallur</td>
<td>7,560</td>
</tr>
<tr>
<td>2</td>
<td>Villupuram</td>
<td>30,086</td>
</tr>
<tr>
<td>3</td>
<td>Vellore</td>
<td>87,847</td>
</tr>
<tr>
<td>4</td>
<td>Dharmapuri</td>
<td>21,690</td>
</tr>
<tr>
<td>5</td>
<td>Salem</td>
<td>1,76,854</td>
</tr>
<tr>
<td>6</td>
<td>Erode</td>
<td>79,371</td>
</tr>
<tr>
<td>7</td>
<td>Coimbatore</td>
<td>1,58,175</td>
</tr>
<tr>
<td>8</td>
<td>Niligiris</td>
<td>16,543</td>
</tr>
<tr>
<td>9</td>
<td>Madurai</td>
<td>1,46,605</td>
</tr>
<tr>
<td>10</td>
<td>Dindigul</td>
<td>15,155</td>
</tr>
<tr>
<td>11</td>
<td>Trichy</td>
<td>1,11,284</td>
</tr>
<tr>
<td>12</td>
<td>Tanjore</td>
<td>19,529</td>
</tr>
<tr>
<td>13</td>
<td>Pudukkottai</td>
<td>6,830</td>
</tr>
<tr>
<td>14</td>
<td>Sivagangai</td>
<td>27,605</td>
</tr>
<tr>
<td>15</td>
<td>Virudhunagar</td>
<td>10,623</td>
</tr>
<tr>
<td>16</td>
<td>Tirunelveli</td>
<td>48,818</td>
</tr>
<tr>
<td>17</td>
<td>Kanyakumari</td>
<td>13,825</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9,78,400</strong></td>
</tr>
</tbody>
</table>

Table 3.4 discloses that there has been a decline in sales in all the districts except Madurai, Trichy, Kanyakumari and Sivagangai during the year 2012-13. We can also find that there is a reduction in sales at Villupuram, Erode, Virudhunagar and Thirunelveli during the year 2013-14.

### 3.2.11 Feeder Balancing Dairies (Fbds)

Four FBDs are functioning at Dharmapuri, Salem, Erode and Madurai District Cooperative Milk Producers’ Unions. Surplus milk is converted into products like Skimmed Milk Powder (SMP) and Butter in the FBDs.

### 3.2.12 Village Milk Co-Operative Societies

At the village level, 11,503 milk producers’ co-operative societies are functioning in the State. This includes 1,793 women milk producers’ co-operative societies also. Moreover, 62 milk consumer co-operative societies which cater to the needs of the milk consumers are also functioning. The milk produced by the farmers is collected twice a day throughout the year. The producers are paid a remunerative price based on the quality of milk. At present, the procurement price for cow milk and buffalo milk is Rs.23/- and Rs.31/- per liter respectively. In addition, 4.29 lakh milk pouring members of the societies are paid dividend for their share capital, bonus and patronage rebate when the Society earns profit. During the year 2013-14, 977 new milk producers co-operative societies were registered. The dairy co-operative societies procure around 25 to 30 lakh liters per day. After local
sales of 4 to 5 lakh liter per day (LLPD) at village level, the district unions procure around 21 to 25 lakh liter per day (LLPD).

3.2.13 National Agriculture Development Programme (NADP)

The dairy sector has been accorded importance with a sanction of Rs.66.22 crores under National Agriculture Development Programme during the period from 2011-12 to 2013-14. The projects cover a wide range of activities including improvement of livestock health, establishment of cold storages, enhancement of milk production, improvement in procurement infrastructure, etc. Some of the major projects that have been taken up during the last three years are:

- Establishment of Dairy with capacity to handle 1 Lakh Liter Per Day at Kakkalur
- Doorstep delivery of veterinary service to milk producers through 155 mobile units
- Strengthening of infrastructure in Dharmapuri, Vellore, Salem, Erode, Villupuram, Tiruchirapalli, Sivagangai and Dindigul Milk Unions
- Installation of 20 Bulk Milk Coolers (BMCs)
- Purchase of two refrigerated vehicles and three insulated vans
- Establishment of additional Milk Cold room facility for storing one lakh liters of milk and Butter Deep Freezer facility with 800 MT capacity.
- Formation of 1,534 new milk producers’ Co-operative societies.
Seven projects at a total outlay of Rs.33.22 crores had been approved by the State Level Sanctioning Committee for the year 2014-15. These projects include door step veterinary and emergency health services, organization of milk producers by forming new societies in uncovered areas, strengthening of processing infrastructure at all the three metro liquid milk dairies and Pudukottai, Sivagangai, Kacheepuram, Virudhunagar, The Nilgiris and Tiruchirapalli District Cooperative Milk Producers’ Unions. Installation of BMC has been completed. Other components like training on Clean Milk Production, purchase of antiseptic chemicals, and utensils are in progress. The total project outlay for above projects is Rs.2842.21 lakhs.\(^6\)

### 3.2.14 Export of Milk and Milk Products of Tamil Nadu Cooperative Milk Producers’ Federation Limited

Table 3.5 reveals the export of UHT, Ghee and SMP of Tamilnadu Cooperative Milk Producers’ Federation Ltd from 2007 to 2012.

\(^6\) [http://agritech.tnau.ac.in](http://agritech.tnau.ac.in), p.no.41, 42, 44, 45, 47,48, 49,51,52
### TABLE 3.5
EXPORT OF MILK AND MILK PRODUCTS OF TCMPF LTD.
FROM 2007-08 TO 2011-12

<table>
<thead>
<tr>
<th>S.No</th>
<th>Product</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UHT milk</td>
<td>1 LLPA</td>
<td>1.50LLPA</td>
<td>2.00LLPA</td>
<td>2.50LLPA</td>
<td>3.00LLPA</td>
</tr>
<tr>
<td>2</td>
<td>Ghee</td>
<td>3.0MT</td>
<td>4.0MT</td>
<td>5.0MT</td>
<td>6.0MT</td>
<td>7.0MT</td>
</tr>
<tr>
<td>3</td>
<td>SMP</td>
<td>10MT</td>
<td>20MT</td>
<td>30MT</td>
<td>40MT</td>
<td>50 MT</td>
</tr>
</tbody>
</table>

LLPA-Lakh liter per annum

From the table 3.5 it is inferred that export of UHT milk has been increased every year by 50 per cent, ghee by 33 per cent and SMP by 100 percent from the base year 2007-08 to 2011-12.

The Central Government has implemented various schemes to increase the milk productivity which is mentioned below.

### 3.2.15 Centrally Sponsored Schemes

#### 3.2.15.1 Support to Training and Employment Programme for Women (STEP)

To improve the socio economic conditions of SC/ST poor rural women, asset less women and self-help group, the Government of India sponsored "STEP" Scheme at a total cost of Rs.649.464 lakhs, with 90 percent Government’s share of Rs.584.518 lakh and the balance 10 percent share of Rs.64.946 lakhs to be met by the implementing agency. The period
of the scheme is three years from 2002 to 2005 and further extended to March 2008, with an objective to identify Self-Help-Group women who are interested in dairy sector, for organising women dairy cooperative societies and to provide training and employment opportunities by arranging milch animals loans and to collect milk from them.

The scheme is implemented in seven district co-operative milk producers' unions at Salem, Erode, Dharmapuri, Vellore, Villupuram, Coimbatore and Trichy comprising of 13 revenue districts. Through this scheme 145 women dairy cooperative societies were organised. These societies were provided with animal health cover, artificial insemination cover supply of balanced cattle feed, fodder production, vaccination programme, managerial subsidy, milk chilling cost, milk commission and margin money to the members for the purchase of milch animals. At the end of the scheme, 10,000 women would have been trained on the principle of cooperative law, artificial insemination and first-aid to cattle, Farmers induction programme, dairy animal management, use of milk testing equipments, defection of adulteration in milk etc. In addition to this, the women dairy cooperative societies are provided with infrastructure facilities.

The Federation and District Cooperative Milk Producers Union ensures market for all the milk produced by the beneficiaries under this scheme throughout the year at remunerative price in order to make the project viable. The targeted 145 women dairy cooperative societies have been organised and enrolled 10,150 women members. The average milk
procurement from STEP societies are 26,283 liters per day with an average income of Rs.60/- per day per beneficiary. With the implementation of STEP scheme the average income of beneficiary will be enhanced from Rs.7,000/- per year to Rs.20,000/- per year at the end of this project.

3.2.15.2 Intensive Dairy Development Programme

Government of India has accorded sanction of Rs.312.15 lakhs to Sivagangai District Cooperative Milk Producers' Union as full grant to implement 'Intensive Dairy Development Programme' in Sivagangai and Ramanathapuram Districts. First year grant of Rs.55.45 lakh was received and utilised. Second year (2006-07) grant of Rs.102.14 Lakh has been received and being utilised by the Union.

3.2.15.3 Strengthening Infrastructure for Quality and Clean Milk Production

Government of India sponsored a scheme called 'Strengthening Infrastructure for quality and clean milk production' to strengthen infrastructure facilities and to ensure clean milk production at village level. The period of the scheme is two/three years. Objective of the scheme is to train farmers on clean milk production activities, to provide chemicals and utensils to pouring members, to strengthen district union dairies/chilling centers laboratory and to install bulk milk coolers at societies to improve initial quality of milk. The Government of India will release the entire amount as full grant for training, provision of antiseptic solutions, supply of stainless steel utensils and modernization of quality control labs at
dairies/chilling centers. The Government will release 75 per cent as grant for installation of bulk milk coolers and the remaining 25 percent will be met by the concerned beneficiary District Unions. Government of India so far had sanctioned Rs.1224.21 lakhs to Vellore, Villupuram, Tricy, Dharmapuri, Salem, Kancheepuram-Thiruvallur, Erode, Nilgris and Madurai milk Unions for the implementation of the scheme. Under these schemes, 48001 members will be benefitted, 90 bulk milk coolers will be installed and the chilling capacity will be increased by another 3.71 lakhs LPD (Lakhs per day).  

The National Mission for Protein Supplements is implemented as a sub-scheme under National Agriculture Development Programme (NADP) from the year 2011-12. Under the scheme, projects involving expansion of animal health services and dairy development activities are being taken up. Under NMPS, from 2011-12 to 2013-14, a sum of Rs.33.03 crore has been sanctioned. 

Dairy development department recognizes the increasing importance of dairy sector in Tamil Nadu and is also aware of the increasing preference towards milk and milk products among the consumers in view of their health and nutritional benefits. The Department is working to occupy a prominent place in India by implementing various schemes in an efficient manner.
3.3 DAIRY SECTOR IN MADURAI DISTRICT

Madurai district is mostly agriculture based area. Population of Cattle and Buffaloes are more in number. The milk chilling plant is available in Madurai city and Palamedu village. This district is getting 237.25 lakhs liters of milk from 375 milk societies. Madurai Aavin is having a chilling plant in Madurai City itself and Palamedu chilling plant is used for the benefit of rural people. The Madurai District Co-operative Milk Producers’ Union Ltd. is popularly known as Madurai Aavin. This is one of the largest dairies in the southern part of Tamilnadu. Madurai Aavin was started during the year 1967 as Madurai Milk Project. The project and the dairy machinery were funded by the United Nations’ Children’s Fund (UNICEF) and New Zealand Freedom from Hunger Campaign Committee to handle one lakh litres of milk per day. From 01.01.1974 Madurai Aavin was brought under the control of Tamilnadu Dairy Development Corporation Ltd, Chennai. From 1982 onwards Madurai Aavin was converted and functioning as a district co-operative unit. The members of this co-operative unit are the milk producers’ cooperative society at the village level in both Madurai and Theni districts. The Madurai District Co-operative Milk Producers’ Union monitors the activities of co-operative dairying in the two milk shed areas of Madurai and Theni districts after bifurcation also and it has seven zones namely Melur, Vadipatty, Chellampatti, Usilampatti, Peraiyur, Theni, Andipatty. The study area constitutes Madurai district and

9 www.dicmdu.in
the profile of Madurai Aavin Union operating in the district is discussed in this chapter. The profile of the Union is analysed in terms of its procurement and marketing of milk, production and sale of milk and milk products and its infrastructure facilities. The Union’s participation in co-operative societies and the provision of various facilities to the milk producers through those societies are also explained.

3.3.1 Profile of the Madurai Aavin Union

In Tamil Nadu, the apex body of the co-operative dairy industry is the Tamil Nadu Co-Operative Milk Producers’ Federation Ltd., Chennai. Throughout the state there are 17 district level unions to cater to the needs of the various districts. The Madurai District Co-operative Milk Producers’ Union Ltd. is the key institution in bringing about all-round development in milk production and milk marketing by rendering services to the primary milk co-operative societies situated at various villages in Madurai and Theni Districts. All the records that are maintained by this Union have the combined data for the two milk-shed areas of Madurai and Theni Districts.

The Madurai District Co-Operative Milk Producers’ Union Ltd. has been functioning since 1938. It has a modern dairy with technological facilities for processing of milk and milk products. The Union has been brought under the Operation Flood Project since 1983. The main object of this scheme is to replicate the Anand pattern of three tiers structure of co-operatives and thereby to bring about a white revolution. The Union has a
well-designed organization structure. The supreme authority of the Union vests with the General Body. The presidents or delegates of the affiliated primary co-operative societies represent the members at the General body. The Presidents or delegates of the affiliated primary co-operative societies represent the members at the General Body. The business of the Union is professionally managed by the Board of Directors consisting of a chairman, eight directors elected from among the members of the general body and six directors nominated to represent the National Dairy Development Board, Department of Animal Husbandry and other related institutions. The general manager, appointed by the Government, is responsible for the day-to-day administration of the Union. The various departmental heads assist him.

The Union functions through the Department of Plant and Maintenance, the Department of Quality Control, the Department of Marketing and the Department of Procurement and Inputs is mainly associated with the village level dairy co-operative societies and serves them through nine procurement teams stationed at Uthamapalayanm, Theni and Andipatty in Theni District and Vadipatty, Usilampatti, Melur, Thirumangalam, Chellampatty and T.Kallupatty in Madurai District.

The Union operates with the aim of uplifting the status of the members of the primary co-operative societies, especially those below the poverty line by ensuring a reasonable price for milk supplied by them. It also aims at catering to the needs of urban consumers for milk and milk products at reasonable prices by eliminating the private vendors from the marketing
field. The Union is engaged in many activities to achieve its objectives. They are the organization of village level dairy co-operatives, the procurement of milk, pricing and payment for milk, processing of milk and milk products, marketing of milk and milk products, supply of inputs such as artificial insemination, veterinary services, supply of cattle feed and other developmental programmes.

3.3.2 Organization Structure

The Aavin has three-tier structure, namely

- State level Federation,
- District level Union and
- Village level Society.

3.3.2.1 State Level Federation

The State level federation is named as “TamilNadu Co-operative Milk Producer Federation” (TCMP), which framed policies, draft procedures and even determines the price for all the products, in the state of Tamil Nadu.

3.3.2.2 District Level Union

The District level Union is named as “Madurai District Co-operative Milk Producers Union Ltd” (MDCMPU) receives milk from societies, which is chilled, processed and distributed to the public through milk booth outlets.
3.3.2.3 Village Level Society

The village level society is called as the “Milk Producers Co-operative Society” (MPCS), which procures milk from the farmers of several villages and transports the same to district level in Madurai Union. It has 804 societies at village level.

3.3.3 Objectives of the Organization

- To uplift socio-economic status of rural milk producers by offering reasonable price and extending marketing facilities for milk in city and rural areas.
- To cater to the dissenting urban consumers need of milk and offer pasteurized, homogenized milk at competitive prices.
- To provide the hygienic and standard milk to the urban area in order to sell the extra surplus milk at reasonable price.
- To promote rural economy by means of co-operative services.

3.3.4 Functions of the Union

- Formation of milk producer’s society at village level.
- Collection of milk from the members and paying remunerative price to the society.
- Processing the purchased milk at dairy and produce milk and milk byproducts like Butter, Ghee, etc.,
- All dairy welfare benefits are monitored by the Union.
3.3.5 Services Rendered by the Union to the Society

- Collecting milk throughout the year without any restriction.
- Offering fair price for better quality.
- Payments of milk cost once in 10 day and three bills for a month.
- Educating the producers all modern techniques related with the Dairy development activities.
- Providing extension practices for clean milk production.

3.3.6 Membership Eligibility

The village should not have any, already existing functioning Milk Producers’ Co-Operative Society (MPCS) and a minimum 25 producers must be in a village. There will be 11 Board of Directors, which should consist 33 percent women and 18 percent SC/ST community people. To be a member one should be 18 years or above. The MPCS should be registered by Deputy Registrar (Dairying) of the concerned District.

3.3.7 Year of Establishment

Aavin was established by the Government of Tamil Nadu. The Madurai dairy (UNICEF aided) was inaugurated, in January 1967. Aavin was owned and established by the Government of Tamilnadu. It is a public limited Company under Co-operative Societies act. The nature of Madurai Aavin Union is to collect milk from the societies and to process and supply it
to the public through booths. At present there are 1,002 societies and 19,663 milk pouring members in Madurai district.

3.3.8 Awards

Madurai Aavin Union has got the Shield Award for the best functioning District Union both in State and District level for the year 1993-94 and 1996 and 2007. Aavin has also received the award for the best Dairy and Food processing industry in India level from the National Productivity Council, New Delhi in the year 2008.

3.3.9 Milch Animals under Co-Operative Ambit

The increase in procurement of milk is also attributable to the increase in the bovine population of the members of the village-level societies. The members enjoy loan facilities and subsidies which enable them to buy more milch animals.

3.3.10 Pricing of Milk

In the Co-operative dairy industry it is the federation which is the apex body at the state level that fixes the price payable to milk producers of the state. In TamilNadu, the Tamil Nadu Milk Producers Federation, with the approval of the State Government, evolves a pricing system which is remunerative to the milk producers and all the 17 district-level unions in the State automatically followed this latest revised milk procurement price with effect from 16th February 2011 at the rate of Rs 20 per litre for cow milk, of
which the Government’s share is Rs.0.50 and the remaining Rs 19.50 is borne by the dairy co-operatives.

3.3.11 Procurement of Milk

The Madurai Aavin Union has milk plants to handle 1.5 Lakh litres of milk per day from the dairy Co-operatives. Table 3.6 shows the average procurement of milk per day from the societies over a period of 11 years from 2001-11.

**TABLE 3.6**

PROCUREMENT OF MILK FROM THE SOCIETIES FROM 2001 TO 2011

<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Procurement of Milk (In Litres Per Day)</th>
<th>Trend Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2001</td>
<td>1,00,055</td>
<td>104.22</td>
</tr>
<tr>
<td>2</td>
<td>2002</td>
<td>1,24,839</td>
<td>117.41</td>
</tr>
<tr>
<td>3</td>
<td>2003</td>
<td>1,18,998</td>
<td>130.60</td>
</tr>
<tr>
<td>4</td>
<td>2004</td>
<td>1,20,539</td>
<td>143.78</td>
</tr>
<tr>
<td>5</td>
<td>2005</td>
<td>1,53,268</td>
<td>156.97</td>
</tr>
<tr>
<td>6</td>
<td>2006</td>
<td>1,84,135</td>
<td>170.16</td>
</tr>
<tr>
<td>7</td>
<td>2007</td>
<td>2,05,176</td>
<td>183.34</td>
</tr>
<tr>
<td>8</td>
<td>2008</td>
<td>2,22,183</td>
<td>196.53</td>
</tr>
<tr>
<td>9</td>
<td>2009</td>
<td>2,26,354</td>
<td>209.71</td>
</tr>
<tr>
<td>10</td>
<td>2010</td>
<td>2,07,966</td>
<td>222.9</td>
</tr>
<tr>
<td>11</td>
<td>2011</td>
<td>2,08,203</td>
<td>236.09</td>
</tr>
</tbody>
</table>

It is inferred from Table 3.6 that there was a constant increase in the quantity of milk procured from the dairy co-operative societies since 2001 to 2011. The increase in the procurement price has motivated the milk producers to sell all their milk to the dairy co-operatives. The Union not only procures milk from the dairy co-operative societies in its area of operation but also procures milk from the neighboring unions. The neighboring unions who have surplus milk send their milk to the Madurai Aavin Union for conversion into milk products. In 2010, there is a decrease in the procurement of milk, due to the upcoming of private dairying.\textsuperscript{10}

3.3.12 Procurement of Milk of Madurai Union

Table 3.7 shows the procurement of milk over a period of three years since 2011-12 to 2013-14 in Madurai district.

\begin{table}
\centering
\caption{Procurement of Milk of Madurai Union from 2011-12 to 2013-14}
\begin{tabular}{|c|c|c|}
\hline
S. No & Year & Procurement of Milk (In Llpd) \\
\hline
1 & 2011-12 & 1,68,000 \\
2 & 2012-13 & 1,93,000 \\
3 & 2013-14 & 1,76,000 \\
\hline
\end{tabular}
\end{table}

Source: Animal Husbandry, Dairying and Fisheries department, Dairy Development Policy Note 2013-14, p.no.38

\textsuperscript{10} http://shodhganga.inflibnet.ac.in
Table 3.7 shows that there had been an increasing trend in the procurement of milk by the Union from the societies since 2011 to 2013 and there was a reduction in the procurement of milk by the Union during the year 2013-14.

3.3.13 Sales of Milk of Madurai Aavin Union

The following table 3.8 shows the sales of fluid milk of Madurai Aavin Union since 2001 to 2011 in Madurai district.

**TABLE 3.8**

**SALES OF FLUID MILK (PER DAY AVERAGE) FROM 2001 TO 2011**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Year</th>
<th>Milk Sales (in LPD)</th>
<th>Trend Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2001</td>
<td>83,530</td>
<td>77,320.22</td>
</tr>
<tr>
<td>2</td>
<td>2002</td>
<td>77,339</td>
<td>90,808.43</td>
</tr>
<tr>
<td>3</td>
<td>2003</td>
<td>93,154</td>
<td>1,04,296.64</td>
</tr>
<tr>
<td>4</td>
<td>2004</td>
<td>1,13,496</td>
<td>1,17,784.85</td>
</tr>
<tr>
<td>5</td>
<td>2005</td>
<td>1,32,317</td>
<td>1,31,273.06</td>
</tr>
<tr>
<td>6</td>
<td>2006</td>
<td>1,55,081</td>
<td>1,44,761.27</td>
</tr>
<tr>
<td>7</td>
<td>2007</td>
<td>1,79,982</td>
<td>1,58,249.48</td>
</tr>
<tr>
<td>8</td>
<td>2008</td>
<td>1,80,121</td>
<td>1,71,737.69</td>
</tr>
<tr>
<td>9</td>
<td>2009</td>
<td>1,92,834</td>
<td>1,85,225.90</td>
</tr>
<tr>
<td>10</td>
<td>2010</td>
<td>1,55,000</td>
<td>1,57,814.11</td>
</tr>
<tr>
<td>11</td>
<td>2011</td>
<td>1,48,000</td>
<td>14,201.11</td>
</tr>
</tbody>
</table>

Table 3.8 shows the quantity of fluid milk sold per day in Madurai Aavin Union. There was an increase in the sales of fluid milk since 2001 to 2009. The sales were reduced from 2010 as the milk was diverted to Chennai and the procurement was low.\textsuperscript{11}

### 3.3.14 Milk Sales of Madurai Union

Table 3.9 shows the average milk sales litres per day since 2011-12 to 2013-14.

**TABLE 3.9**

**SALES OF MILK OF MADURAI UNION FROM 2011-2012 TO 2013-14**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Year</th>
<th>Avg Milk Sales (in LLPD) in Madurai district</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2011-12</td>
<td>1,46,605</td>
</tr>
<tr>
<td>2</td>
<td>2012-13</td>
<td>1,57,789</td>
</tr>
<tr>
<td>3</td>
<td>2013-14</td>
<td>1,64,767</td>
</tr>
</tbody>
</table>


Table 3.9 shows the average milk sales of Madurai Union in Madurai district. There has been an increase in the sales of the Union since 2011 to 2014.

### 3.3.15 Milk Production of Madurai Aavin

Table 3.10 shows the clear picture of fluid milk production of Madurai Union since 2001 to 2011.

\textsuperscript{11} [http://agritech.tnau.ac.in]{, p.no.38,39.}
Table 3.10 shows that there is an uneven increase or decrease in the quantity of fluid milk produced in the Union. The quantity of the fluid milk processed depends on its demand both in and outside Madurai.

### 3.3.16 Production of Milk Products

The Madurai Aavin Union is one among the four feeder balancing dairies of Tamil Nadu. A feeder balancing dairy has two distinct functions.

The feeder function is confined to the dispatch of the processed fluid milk. The balancing function is to balance year-round supply of milk to meet
market demand. This is made possible by setting up plants to conserve the flush season surplus milk in the form of skimmed milk powder, white butter or butter oil or frozen cream which is reconstituted into milk in the lean season. In Madurai Aavin Union, the surplus milk left after processing of fluid milk is processed and skimmed by means of cream separator. The separated cream is pasteurized with the help of a cream pasteurizer and stored. The skimmed milk left after the separation of cream is being supplied to the powder plant for converting it into skimmed milk powder. It is this skimmed milk powder which is used for reconstitution purpose during the lean seasons to meet the demand for fluid milk, when milk is in shortage.

The separated and processed cream is churned and converted into butter with the help of butter churns. The butter is stored in a deep Freeze Room where the temperature is maintained between \(-10^0 \text{C}\) to \(-15^0 \text{C}\). As per the market demand, the butter is sold as butter or converted into ghee with the help of ghee boilers.\(^{12}\)

### 3.3.17 Quality Control

Milk is a perishable commodity and quality adherence is very essential. Adulteration of milk in different forms, including mixing of milk with water and preparation of synthetic milk has become a routine in India. The Delhi Government in 1999 had found over 50 milk samples adulterated.

\(^{12}\) [http://shodhganga.inflibnet.ac.in](http://shodhganga.inflibnet.ac.in)
out of 414 taken from various private dairies. Many dairies were found to be using harmful materials such as caustic soda and urea used for preserving milk. Synthetic milk is a mixture of vegetable oil, soap and skimmed milk powder and does not include fresh milk at all. Studies conducted in the laboratories of the National Institute of Nutrition at New Delhi, Calcutta and the twin cities confirmed the presence of harmful antibiotics and detergents in some samples of synthetic milk. It is reported that the synthetic milk produced in the North contained urea, hydrogen peroxide and even shampoos in some cases.

The reasons for the milk containing high microbial content are due to the unhygienic way of milking and non-availability of cold chain for transportation of milk to distant places. In the wake of all this different ways of adulteration, quality control is an important aspect of dairy industry. Production of high quality milk requires hygienic practices during milk production. The dairy premises, plant and equipment and other systems should be kept hygenically clean. Quality testing in terms of micro biological counts, odour and sediments off-bottom should be adequately taken care of. The Madurai Aavin Union adheres to a strict quality control process considering all these factors.


The Madurai Aavin Union adopts a Quality Assurance System (QAS) at all levels of milk reception, processing, packing, storage and dispatch. A person to separate sour milk first tests milk received and brought in cans. The good milk is sent into the dairy. A sample is collected from the milk of each society. The sample is tested for its content of fat by an electronic milk tester and for its content of SNF by a lactometer. After the milk is pasteurized and homogenised, samples are taken and tested for microbial count. Similarly at the time the milk is packed and stored quality tests are conducted. When the milk is dispatched, samples are taken and tested every hour to determine the maximum time the milk would keep its quality. It is found that in room temperature the milk maintains its quality for a maximum period of 10 hours. This ensures that the milk will be fresh when it reaches the consumers and even a few hours after. In view of the Quality Assurance System adopted by the Madurai Aavin Union it can confidently compete with the private dairies in terms of quality control.

3.3.18 Special Development Schemes

Under the Operation Flood Programme the Union adopted various special schemes with the assistance of the National Dairy Development Board or the Indian Dairy Corporation. These schemes had been really beneficial to the members of the primary milk co-operative societies enabling them to own, rear, care for and feed more and more milch animals. So even after the era of the Operation Flood (OF) scheme, the Union is continuing some of these schemes either by spending its own funds or by
getting the aid or subsidy of the Government. The schemes are monitored by the Union and implemented through the primary dairy Cooperative societies.

3.3.19 Subsidies and Loan Schemes of the Government

The Union acts as a channeling agent and enables the poor farmers, who are members of the societies, to get the benefit of the various subsidies and loan schemes of the Government. These schemes help the milk producers in owning schemes and rearing more milch animals. The Union monitors these schemes and takes up the responsibility of recovery of the loans from the beneficiaries.

3.3.20 Women Self-Help Groups in Madurai Aavin Union

A self-help group is a homogeneous group of 10 to 20 women. These women select their own leader and also fix the tenure for such leadership. Self-Help Groups are extremely helpful in allowing the NGOs to get to know a large number of individuals intimately and to relate to them in a variety of ways including facilitation credit availability. Self-help groups are also serving as decentralized centers of administration for non-governmental organizations, who take the responsibility for forming this self-help group. Self-help groups can become an extra ordinary tool for women’s empowerment provided; the nurturing agencies take care to design their interventions to improve the confidence level of the members through better participation in self-help group meetings and more interactions with outsiders. Through this process, members develop communication skills and
are able to put forward their views confidently. The self-help groups have emerged as an alternative model to help the rural poor. The self-help groups are informal groups whose members pool their savings and lend within the group on rotational need basis. They have a common perception of needs and collective action. The National Bank for Agricultural and Rural Development (NABARD) had started a program of linking self-help groups with banks in 1992 on a pilot basis. Since then, the scheme has established credit links with 16 Commercial Banks and 12 Regional rural Banks and 15 Co-operative Banks. Though the self help groups helped women to create several crores of rupees worth assets, they were not the owners of these assets but were passing them to the men-folk. This trend should be reversed by creating awareness among women of their true share in nation building. The co-operative movement provides for economic emancipation especially for women through group action rather than individual action. In Madurai Aavin there are totally 936 milk producers’ societies and many self help groups for supplying milk. Procurement of milk from SHG members was started in the year 2006. There were eight SHG members supplying their milk in the year 2006. It has increased gradually as 264 SHGs in the year 2007 to 515 SHGS during the year 2009. Madurai milk procurement activities are done through nine milk procurement teams located in Madurai, Usilampatty, Peraiyur, Melur, Vadipatti, Chellampatti, Andipatty, Theni, Bodi. Involving women self-help group members as co-members of the Madurai co-operative Milk Producers Union Ltd had produced encouraging
results as their contribution towards milk procurement was 35,000 litres per day. But in the year 2010 and 2011, there was a decline in the groups because of the non-payment of incentive of 0.50 paise per litre of milk poured during the year 2008-09 and 2009-10. This is the main reason for decline in self-help groups.¹⁵

Unlike other cities, Madurai holds an active dairy industry with a large of milk societies operating in and around the area. Obula Padithurai, Sellur, Avaniyapuram, Keerathurai, Kamarajapuram, North Maasi Street and Pechiamman are some of the popular areas of dairy farming.¹⁶

According to data obtained from the Aavin, from the modest 80,000 litres sales per day on an average (1992), the figure had doubled to 1.65 lakh litres (2013). On the procurement side, it had risen to 1.93 lakh litres a day from less than 75,000 litres two decades ago. In 2004-05, when milk procurement dipped below 1.30 lakh litres, there was scarcity of Aavin milk everywhere in the city. Utilising the opportunity, private players built up their market. Today, Arokya, Raj, Navin, among others, are having a stake in the market. Many consumers, including tea stalls and restaurants, buy milk from private producers, claiming that the product was of ‘higher quality.’ Many people in Madurai district prefer certain brands of milk and dairy products due to various reasons like low price, quality, taste, colour

¹⁵ http://shodhganga.inflibnet.ac.in
¹⁶ http://www.maduraionline.in
etc. So, private brands play a prominent role in Indian dairy sector not only in Madurai district but also throughout the country.

An Aavin official told The Hindu “that there was a proposal to install bulk milk coolers in villages for the benefit of small milk producers. As for the complaints of poor quality of milk, he said that there were 32 milk parlours in the city, 481 milk depots, 443 retail selling agents, 132 dropping point concessionaries and three self-help-groups who supply milk. Only after thorough checks, the milk sachets were sent”.

The Tamil Nadu Cooperative Milk Producers’ Federation, the cooperative which handles milk procurement and supply under the brand Aavin, is expanding its handling capacity, according to an official press release. The dairy cooperative supplies 21 lakh litres of milk daily in Tamil Nadu against a daily procurement of about 30 lakh litres. This is a huge growth as compared to a procurement of about 21.67 lakh litres in 2010-11, when Aavin had the capacity to handle about 24 lakh litres.

Over the last four years, the Dairy Development Department has invested over Rs. 410 crores to expand infrastructure to match the procurement increase. By March 2016, Aavin’s milk handling capacity will be increased by an additional eight lakh litres, with expansions in dairy units in Madurai and Coimbatore and a new unit in Perambalur. The cooperatives

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17 [http://www.skyscrapercity.com](http://www.skyscrapercity.com)
are also taking steps to increase the milk handling capacity in Chennai dairy units to 13.50 lakh litres a day from the present 11.50 lakh litres.  

3.4 SUMMARY

Milk production in India is around 12.9 crores metric tonnes per day with the country being the largest milk producer in the world. Tamil Nadu ranks eighth in milk production in India during 2012-13 and the production in the state was around 1.82 crore litres per day. Milk co-operative societies were organised in Tamil Nadu by the State Cooperative Department in 1920 and India’s first co-operative dairy with processing and marketing facilities was established at Ayyanavaram in Chennai city in 1927. With the Operation Flood Programme and International Development Agencies (IDA) aided projects in operation in Tamil Nadu, dairy co-operatives were developed at a much faster rate. By the end of December 1986, Tamil Nadu had 5626 milk producers’ co-operative societies at the village level, 16 milk producers’ unions at the district level with 28 chilling centers and a federation at the State level. In Tamilnadu, three tier-structure of the organization functions under the Dairy Development Department which implements several schemes through the Milk Cooperative Societies (Village Level), the Milk Producers’ Unions at the middle level (District Level) and Federation of district Co-operative Milk Producers’ Unions at the apex level (State Level) with a view to augment the milk production. There are 11,397 Milk  

Producers’ Co-operative Societies including 1,722 Milk Producers’ Women Co-operative function in the state, besides 62 Milk Consumer Co-operative Societies which cater to the needs of the milk consumers. There are 17 District Cooperative Milk Producers’ Unions functioning in the State of Tamilnadu covering 30 districts. Four Feeder Balancing Dairies are functioning at Dharmapuri, Salem, Erode and Madurai District Cooperative Milk Producers’ Unions.

Madurai Aavin is one of the largest dairies in the southern part of Tamilnadu. The Madurai District Co-operative Milk Producers’ Union Ltd. is the key institution in bringing about all-round development in milk production and milk marketing by rendering services to the primary milk co-operative societies situated at various villages in Madurai and Theni Districts. All the records that are maintained by this Union have the combined data for the two milk-shed areas of Madurai and Theni Districts. The Madurai District Co-Operative Milk Producers’ Union Ltd. has been functioning since 1938. It has a modern dairy with technological facilities for processing of milk and milk products. Private players such as Raj, Arokya and Navin play a vital role in Madurai district.