CHAPTER III.

DAIRY CO-OPERATIVES IN ERODE MILKSHED AREA.

BACKGROUND:

Erode milkshed area which comprises of the revenue districts of Coimbatore, Salem and Nilgris, is an inland region lying in the western part of the State. It is bounded by Karnataka State and Dharmapuri district in the north; Kerala State in the west; Madurai, Tiruchirapalli and South Arcot districts on all other remaining sides. This region is shut off by mountain chains of western ghats of which the Nilgris in the north-west and Anamalais in the south are the chief ranges. Save the hilly portions, the rest of the land area forms undulating plains, broken by a few mountain ranges, ridges and hillocks of slight elevation.

This area is by and large, a low rainfall fed region, except the Nilgris, Anamalai and Yercaud ranges. Distressing failures of rain, scarcities and famines are not uncommon in the area, which cripple the agricultural operations, except, of course, in command areas of irrigation projects like Mettur, Bhavanisagar, Parambikulam Aliyar project, Amaravathi etc. Farmers of this region
have always substantiated their income from crop production with cattle rearing, milk production and sheep husbandry. This area, particularly the Erode region is traditionally known for its cattle wealth. It produces one of the best draught breeds of the country namely Kangayam cattle. However, the Kangayam cattle are seldom considered as milk breeds. They are mainly kept for the production of male calves which have more commercial value and are therefore exported to other regions of the State. The Nilgiris district possesses better milk breeds due to its climatic advantages and early cross-breeding work undertaken therein.

Buffalo remains as the dominant milch animal of the region, eventhough they form only one third of the total bovine population. This region has a greater concentration of buffalo population. The milkshed area possesses 22.8 per cent of the buffalo population of the State; whereas its share in cattle population is only 17.3 per cent. Of all the districts in the State, the Coimbatore district has the highest number of buffaloes. It has been estimated that about 75 per cent of the milk production of this area comes from buffaloes. The buffaloes of the region are largely non-descripts and, therefore, low yielders. Efforts
for upgrading the local buffaloes with murrah breeds have been made under the Intensive Cattle Development Project and the Operation Flood Project.

ORIGIN AND GROWTH OF DAIRY CO-OPERATIVES:

Erode milkshed area has been catering to the fluid milk requirements of important cities like Madras, Bangalore and Coimbatore. The milk produced in this area have also been converted into various products like cream, ghee, skimmed milk, curd etc., and have been sent to far off places like Bombay, Madras, Bangalore, Cochin and Mangalore. This being a lucrative business large number of creameries have been in operation. It has been estimated that in Erode region alone, about 1000 creameries flourished.¹ The cream converted into butter almost fetches double the price in Bombay and other big cities. The skim milk obtained after the extraction of cream is mixed with a little cream and is marketed in various urban centres. Skim milk curd is also a flourishing business in places like Erode, Uthukuli and Avanashi.

By virtue of its location and production potentials, the Erode milkshed area has been getting priority in any

¹. The Hindu, dated 18th April, 1976.
scheme for streamlining the milk production and trade. As a first co-operative effort, the Coimbatore Co-operative Milk supply Union, which is one of the earliest organisations in the country was started on 15.7.1938. In the subsequent year the Salem Milk Supply Union was started on 20.6.1939. Another milk supply union was organised at Erode on 6.8.1962. In addition to the milk supply union at Erode, a Government feeder dairy was set up on 4.11.1964 to supply milk to the Madras Milk Project. These early efforts paved way for the organisation of village milk supply co-operatives in order to supply milk to the urban milk schemes. Yet the primary societies did not take strong roots until recently.

Advent of 'Operation Flood':

Considering its milk production potentials and resource endowment, Erode was identified as one of the milkshed areas for implementation of the Operation Flood Project. The organisation of 'Anand Pattern' milk producers' co-operatives, one of the main planks of the project, was first started in Tamil Nadu only in Erode region. The spear-head team of the National Dairy Development Board, on request of the Government of Tamil Nadu, arrived at Erode in September, 1973. The survey was commenced on 15.9.1973 and the first route was
operated on 13.3.1974 with the first batch of 54 societies. Following the example of the National Dairy Development Board, the Tamil Nadu Dairy Development Corporation started organising new dairy co-operatives in Tiruppur and Palani regions in 1974. The special features of 'Anand Pattern' (discussed elsewhere in this chapter) attracted the attention of farmers and created spontaneous enthusiasm among them for this type of organisation. Within a short span of one year more than 100 societies were formed. The number of societies progressively increased throughout the milkshed area. The number of societies as on 30.6.1977 and the milk production is given below:

**TABLE-III.1:**

**NUMBER OF DAIRY CO-OPERATIVES AND AVERAGE DAILY MILK PRODUCTION.**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the District</th>
<th>Number of Societies</th>
<th>Average daily milk production (litres)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tradition Anand Pattern</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Coimbatore.</td>
<td>41 300</td>
<td>54,620</td>
</tr>
<tr>
<td>2</td>
<td>Salem.</td>
<td>21 178</td>
<td>43,859</td>
</tr>
<tr>
<td>3</td>
<td>The Nilgris.</td>
<td>19 33</td>
<td>15,209</td>
</tr>
<tr>
<td></td>
<td>TOTAL:</td>
<td>81 511</td>
<td>1,13,688</td>
</tr>
</tbody>
</table>

Source: Office of the Deputy Registrar of Co-operative Societies, (Dairying), Erode Circle, Erode.
The predominance of 'Anand Pattern' milk producers' societies over the traditional type milk supply societies is revealed in the above Table. The average daily milk production per society was 120 litres. The 'Anand Pattern' societies contributed about 80 per cent of the milk produced in the area by all the co-operatives.

The Erode milkshed area had large concentration of 'Anand Pattern' dairy co-operatives. It possessed 47 per cent of the total number of 'Anand Pattern' societies formed throughout the State; which accounted for 56 per cent of the milk produced by all such co-operatives in the State.

**Hill Area Development Programme:**

Apart from the 'Operation Flood Programme', a special programme known as Hill Area Development Programme was designed for the Nilgris district for a period of six years commencing from 1975-76 at a cost of Rs. 84 lakhs. The scheme contemplated increasing the existing production of 15,000 litres of milk a day to 40,000 litres over a period of 5 years involving nearly 10,000 farmers in this district including hill tribes. The objectives of the scheme is also sought to be achieved through the co-operative organisations based on Anand model.
ATTRIBUTES OF ANAND PATTERN:

The concept of Anand Pattern dairy co-operatives could be understood only by a proper understanding of its basic characteristics. It is a philosophy and a method of organisation evolved over a period of experience with a proven success. The various co-ordinates that go to make the system may be referred to as the 'Anand Pattern'. The important characteristics of 'Anand Pattern' may be listed as below:

(1) The system establishes a direct link between the rural producers and the urban consumers.

(2) It provides year-round assured market for the milk produced by members.

(3) Only those who own dairy animals and are engaged in milk production are admitted as members.

(4) Democratic management ensures member-participation and redressal of their grievances.

(5) Price for milk is paid according to the quality which is determined on the basis of fat content tested on the spot.

(6) Production enhancement programmes are undertaken and critical inputs like AI, cattlefeed
and veterinary services are made available the farmers at their door-steps.

(7) It is a two-tier system with primary milk producers' co-operative societies at village level and co-operative milk producers' union at district level.

(8) A sizeable proportion of the profit earned by the societies is ploughed back to the producers in the form of bonus every year.

(9) The Anand Pattern societies are not loan oriented and they do not undertake lending money to members.

(10) They do not undertake any significant local marketing.

(11) The secretaries of the societies are trained in AI and first aid work.

(12) The organisation of producers' societies involves a pre-survey and formation of economic milk collection routes.
Considering the potentialities of the 'Anand Pattern' dairy co-operatives to render immense benefits to rural society, the late Prime Minister Shri Lal Bahadur Shastri stressed the need for its replication as follows:

"If we can transplant the spirit of Anand in many places, it will also result in rapidly transforming the socio-economic conditions of the rural areas and in our achieving the objectives of a socialistic pattern of society".  

One of the main objectives of 'Operation Flood' project is the replication of 'Anand Pattern' in its different facets in the various milkshed of the country—organisation of producers' co-operatives, establishing dairies and chilling centres, providing AI facilities and health cover to the animals of producers and to undertake the production enhancement programmes like fodder development, supply of cattlefeed and providing self-subsidy etc.

### TABLE-III.2:

**REPLICATION OF 'ANAND PATTERN' IN ERODE MILKSHED AREA**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No. of primary dairy co-operatives organised</td>
<td>472</td>
</tr>
<tr>
<td>2</td>
<td>No. of District level unions organised</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>No. of chilling centres installed</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>No. of societies provided with input cover</td>
<td>403</td>
</tr>
<tr>
<td>5</td>
<td>Daily average milk procurement (litres)</td>
<td>81,628</td>
</tr>
<tr>
<td>6</td>
<td>No. of animals covered under input programme</td>
<td>91,961</td>
</tr>
<tr>
<td>7</td>
<td>No. of mobile veterinary units operated</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>No. of cases treated per month</td>
<td>6,218</td>
</tr>
<tr>
<td>9</td>
<td>No. of emergency units</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>No. of emergency calls attended per month</td>
<td>357</td>
</tr>
<tr>
<td>11</td>
<td>Average quantity of cattle-feed sales, per month (tonnes)</td>
<td>72</td>
</tr>
<tr>
<td>12</td>
<td>Area brought under fodder cultivation (acres)</td>
<td>405.8</td>
</tr>
<tr>
<td>13</td>
<td>No. of calves subsidised</td>
<td>1,438</td>
</tr>
<tr>
<td>14</td>
<td>No. of grass slips distributed (MB 21)</td>
<td>832,510</td>
</tr>
</tbody>
</table>

II. Activities of Milk Procurement and Technical Inputs, TNDDC (Erode Zone).

The Table III-2 depicts the performance in replicating the 'Anand Pattern' in the Erode milkshed area as on November, 1977. It is observed from the Table that out of 472 societies, 403 were covered with input programme. Fifteen mobile veterinary units in operation attended on an average 6,218 cases per month; and the 6 emergency units attended 357 emergency calls per month. The area brought under fodder cultivation, however, was not substantial.

ROLE OF PROMOTIONAL AGENCIES

1. National Dairy Development Board:

The National Dairy Development Board was created in September, 1965 by the Ministry of Food and Agriculture, Government of India, as a promotional and advisory body, whose main object is, among other things, to emulate the success of the co-operative venture at Anand. It has built up a team of technical and
professional experts to formulate dairy projects, to provide dairy project designs and implement them. It has also acquired expertise in building up co-operative infrastructure to collect milk directly from the producers to the dairy projects. Such multi-disciplinary spear-head teams have been deputed to 15 milk-shed areas throughout the country including Erode. The spear-head Team first came to Erode on 25 Sept., 1973 and started first set of societies on 13 March 1974. With its efforts the Erode District co-operative Milk Producers Union was organised in February 1976. The Team is implementing the technical input programme on behalf of the Erode District co-operative Milk Producers' union and organises training programmes for the TNDDC, Government Department and society staff. So far the UDDB team has organised 154 dairy co-operatives in the Erode region.

2. **Tamil Nadu Dairy Development Corporation:**

The Tamil Nadu Dairy Development Corporation was incorporated in May 1972 as an autonomous public limited company for assisting the planned dairy development in the State. The corporation is entrusted with the implementation of the Operation Flood project in eight districts. It also undertakes commercial activities
like procurement, processing and marketing of milk in Madras and Madurai cities. It has five zonal offices, one each at Erode, Madurai, Yellore, Ooty and Madras. The zonal office at Erode was opened on 1.7.1972. Organising primary milk producers' co-operatives on Anand pattern, running the dairy at Erode and chilling centres and implementing the technical inputs programme are the activities of the corporation's zonal office. The Corporation's procurement teams at various places have organised about 370 dairy co-operatives as on 30.6.1977 in the Erode milkshed area.

**ORGANISATIONAL STRUCTURE:**

Diverse pattern of organisation prevail in the country in respect of dairy co-operatives with regard to the arrangement for marketing and other services. It may take either of the following patterns:

I. Primary societies ---> unions ---> and co-operative: plants like 'Amul'.

II. Primary societies ---> unions ---> public sector plants like Ludhiana and Hyderabad.

III. Primary societies ---> unions ---> private plants like Glaxo Factory at Aligarh.

IV. Primary societies ---> unions ---> State Federations having milk plants like Lucknow.
V. Primary societies → public sector plants like Madurai and Vijayawada.

The organisational pattern of co-operatives that prevailed in the Erode Milkshed area resembled, in a large measure, the pattern II namely the primary societies affiliated to district unions, but the milk being sold to public sector milk plants. To a limited extent pattern I also existed side by side in the operational areas of the District Co-operative Milk Producers' Unions at Coimbatore and Salem, which had processing facilities of their own; and substantial local market.

The dairy co-operatives of the area may be classified on the basis of the monitoring agencies which took initiative in organizing them namely the Spear-head Team of the National Dairy Development Board and the Procurement Teams of the Tamil Nadu Dairy Development Corporation. The NDDB's Spear-head Team confined its operation to the five taluks under the area of operation of Erode District Co-operative Milk Producers' Union namely Erode, Gobichettipalayam, Dhavanipeta, Sathiamangalam and Dharapuram. In the rest of the milkshed area the TNDDC had deployed procurement teams for organizing the dairy co-operatives. As regards the input programme, the NDDB undertook the
input services for the societies under the Erode union area; and for the rest of the milkshed the input services was undertaken by the TNDDC.

The milk procurement in the entire milkshed was undertaken by the TNDDC except in respect of 55 societies in Coimbatore district and 44 societies in Salem district in which case the District Co-operative Milk Producers' Unions at Coimbatore and Salem handled milk collection respectively. The overall pattern of organisation of dairy co-operatives is depicted in Chart-1.

**SALIENT FEATURES OF DAIRY CO-OPERATIVES:**

The 'Anand Pattern' milk producers' societies have certain distinct features which are in many respects dissimilar to that of the traditional type of milk supply societies. Assured market, producer orientation, rationalised price structure, an in-built incentive for increased milk production, input services and production enhancement programme are their special features.

**Objectives:**

The bye-laws of these societies include the following
specific objectives:

(1) To undertake all measures and render necessary help to enhance the productivity of members' cows and buffaloes.

(2) To sell the milk produced by members profitably through the district co-operative milk producers' union.

(3) To undertake dairy extension activities, cattle rearing, breeding, health care etc.

(4) To sell cattle feed and to take steps to increase the production of green fodder.

(5) To encourage thrift, self-help and mutual aid among members.

(6) To undertake any other activity which is conducive to promote the achievement of the above objectives.

OTHER FEATURES:

(1) Only genuine milk producers owning milch animals and who have agreed to sell their
milk through co-operatives are eligible to become members of dairy co-operatives.

(2) One who seeks membership should not be a trader in milk or milk products.

(3) Any person who had not supplied milk to the society for a minimum period of 180 days during the previous year is not eligible for exercising any right of membership except the bonus and dividend.

(4) A member can be expelled if he sells milk to private agencies or is engaged in trading in milk and milk products.

(5) A person who is trading in milk, milk products or cattle feed and such other activities similar to that of the society is not eligible for appointment.

(6) Out of the net profit bonus may be paid on the basis of the milk supplied by the members to the extent of 50 per cent.
There is provision in the bye-laws for the creation of a cattle development fund by each society out of the net profit and for the payment of compensation to the extent of 50 per cent of the value of cattle in the event of their death.

MODE OF OPERATION

Milk Collection:

Milk collection which is the major activity of the dairy co-operatives, is done twice a day - morning and evening. Normally, the collection of milk commences an hour before the scheduled time for the arrival of milk truck and is completed before its arrival. Each producer has to bring his milk to the society premises before the appointed time.

Testing:

The milk brought by each producer is stirred well and a sample of 50 millilitre is taken. The sample so taken are kept in small containers which are numbered for identification. Each item of milk is
measured and poured into a tray so that it gets collected in the milk can. The quantity of milk poured by each producer is recorded in the Milk Purchase Register. The samples are then tested with the help of butyrometres, by taking 10 ml. of milk from each sample and adding them with acid and alcohol. They are fitted in a centrifugal machine and circulated for about 3 minutes. When taken out, the butyrometres will indicate the fat content in each of the sample milk. Twenty four such samples could be tested each time. The fat per cent of each sample is also recorded in the Milk Testing Register and later on carried forward to the Milk Purchase Register, so as to fix the price and arrive at the value of the milk purchased. A general fat test is also made from the sample taken from the pool of milk collected so as to determine the overall fat test of the milk at society level.

**Transportation:**

The cans in which milk is collected are tightly closed. Separate cans are used for cow milk and buffalo milk. The milk cans are loaded in the truck which hauls the milk to the dairy or to the chilling centre. The empty cans are delivered at the society at every trip.
Transport lorries are hired on the basis of tenders; procurement routes are formed and time schedule for the trucks are prescribed for the regular transport of milk from the societies to the dairy/chilling centres.

To exercise a proper control over time schedule, every truck driver is made to carry a truck sheet in which the secretaries of the societies will record the arrival time of the truck and the number of milk cans delivered in each trip. Truck slips are also issued to each society containing details of milk supplied in the previous shift, such as weight, fat, S.N.F. number of cans, sourage of milk etc. To distinguish between morning and evening, white slip for the morning and pink slip for the evening is used. Communications are sent through the truck from the society to dairy/chilling centre and vice-versa. The milk trucks also carry AI kits containing semen to be delivered at every society. The milk cans and the materials required for milk testing such as acid and alcohol are supplied by the dairy/chilling centre at periodical intervals through the transport lorry. Besides, concentrate cattle-feeds are supplied to the societies through the milk trucks.
Payment to Producers:

Price per litre of milk is determined according to the price schedule supplied to the society by the TNDDC or the milk producers union based on the fat percent of milk. Separate rates are given for buffalo milk and cow milk so that cow milk is not discriminated against buffalo milk because of its low fat content. Payment to the producers is made once in a week, preferably on the day prior to the local shandy day. The society in turn gets payment once in 10 days. Payment for the society is made on the basis of a pricing system which takes into account both fat and Solids Not Fat (S.N.F). The average procurement price of milk is Rs. 1.75 per litre. Flow of money to the rural sector in the milkshed area per day has been estimated at Rs. 2.24 lakhs.

Out of the annual net profit of the society an incentive bonus is given to the members to the extent of 50 percent of the net profit. Each member gets his share of the bonus in proportion to the sale of milk. Payment made on quality basis gives an incentive to sell unadulterated milk.
Input Services:

Technical inputs like veterinary aid and health services are extended to producers at free of cost. Veterinary routes are formed and weekly visit by veterinarians are arranged for each society. The time and day of such visits are made known to members so that they can avail themselves of the services. Besides, first aid is given at the society for members' animals, if the secretary is qualified in it. Wherever secretaries are trained in AI, AI is also done at a nominal charge of Rs.2/- per insemination of members' animals and Rs. 4/- for those of non-members. Apart from weekly veterinary visit, the cases which require emergent attendance are treated by the emergency units on receipt of the message. A nominal fee of Rs. 10/- is charged in such cases.

Concentrate cattle feed supply is also undertaken in some of the societies in a limited way depending upon the demand. Whenever the societies get the supply of forage seeds like lucerne, maize etc., it is supplied to members who show enthusiasm in the cultivation of such crops.
Sale of Milk:

The Tamil Nadu Dairy Development Corporation remains as the single most important channel of milk sale by the dairy co-operatives of the area. Out of the 127,000 litres of milk procured daily by all types of dairy co-operatives in the milk shed area as on 31.3.1978, about 35,000 litres were purchased by the Milk Producers' Unions of Combatore and Salem for catering to the local demands. The remaining 92,000 litres were purchased by the TNDDC of which about 12,000 litres were sold at Ooty and 20,000 litres were sold at Erode, Gobichettipalayam, Bhavani and Kumarapalayam. Remaining 60,000 litres were sent to outside markets at Madras and Madurai. The average sale price per litre of milk at consumer level had been estimated as Rs. 2.14, while the procurement price at the society level was Rs. 1.87 and at the producer level was Rs. 1.75 per litre as on 1.4.1979. The margin is distributed among various cost items like testing,

3. Office of the Commissioner for Milk Production, Madras.

4. The Tamil Nadu Dairy Development Corporation Ltd., Erode Zone, Activities of Milk Procurement and Technical Inputs, p.11. (Mimeographed).
hauling, chilling, pasteurisation, input cost, administrative overheads etc. The TDDDC has successfully experimented the despatch of milk from Tiruppur and Namakkal chilling centres to Madurai and Madras in raw chilled state to save the processing cost, which otherwise have to be pasteurised at Erode before being despatched to these cities.

GENERAL PROFILES OF SAMPLE SOCIETIES

Organisation:

The 29 primary milk producers' co-operatives covered by the study were affiliated either to the Erode District Co-operative Milk Producers' Union or to the Coimbatore District Co-operative Milk Producers' union - 14 to the former and 15 to the latter. Thirteen of the sample societies were organised by Spread-head Team of the NDDB and 15 of them were organised by the Procurement Team of the TNDCC at Tiruppur. Each sample society included in its area of operation more than one hamlets. Six of the sample societies had had 2 hamlets each in their area of operation; 7 societies had 3 hamlets each; 8 societies comprised 4 hamlets each; and each of the remaining 8 societies included 5 hamlets and above in their respective area of operation. All the sample societies had been organised on limited liability basis. The
Deputy Registrar of Co-operative Societies (Dairying), at Erode, whose jurisdiction extended to the dairy co-operatives in the entire milkshed, exercised administrative control over these societies.

**Location:**

The sample societies were drawn from a fairly wider geographical area covering about a radius of 50 miles in 5 taluks namely Bhavam, Dharapuram, Erode, Gobichettipalayam and Palladam. A large number of societies studied (15) were in Palladam taluk. Six societies were in Gobichettipalayam taluk; 4 in Bhavani and 3 in Erode. Only one society was in Dharapuram taluk.

Six of the sample societies (20.7%) were located within a distance of 15 kms. from dairy/chilling centre; 13 societies (44.8%) were located between a distance of 16 kms. and 30 kms., and 10 societies (34.4%) were situated beyond 31 kms. from the dairy/chilling centre.

**Period of Existence:**

All the sample societies were in their infancy; and came into existence only after 1974. Only 11 societies (38%) had been in existence in 1974. Five societies (17%)
were started during 1975; and another 11 societies (38%) came into being during the subsequent year. Two of the societies were started only during 1978.

**Physical Facilities:**

Two period of existence, too short as it was, the societies could not acquire substantial physical assets and equipment. Only 2 societies (6.9%) out of 29 had their own building which were donated by the village community; 20 societies (68.9%) had furniture; 8 societies (27.6%) had telephone facility and first-aid kit; 13 societies (44.8%) had AI kit and 27 societies (93.1%) had crate. Twenty-five societies (86.2%) had electricity and water supply. The Table-III.3 shows the various physical facilities of the sample societies.

**TABLE-III.3**

**PHYSICAL FACILITIES**

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Number of Societies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building</td>
<td>2</td>
<td>6.9</td>
</tr>
<tr>
<td>Electricity</td>
<td>25</td>
<td>86.2</td>
</tr>
<tr>
<td>Water Supply</td>
<td>25</td>
<td>86.2</td>
</tr>
<tr>
<td>Furniture</td>
<td>20</td>
<td>68.9</td>
</tr>
<tr>
<td>Telephone</td>
<td>8</td>
<td>27.6</td>
</tr>
<tr>
<td>First Aid Kit</td>
<td>8</td>
<td>27.6</td>
</tr>
<tr>
<td>AI Kit</td>
<td>13</td>
<td>44.8</td>
</tr>
<tr>
<td>Crate</td>
<td>27</td>
<td>93.1</td>
</tr>
</tbody>
</table>
Constitution of the Board of Directors:

All the sample societies had elected boards of directors. Each board consisted of 9 members of whom one was the president and another vice-president. As regards the socio-economic characteristics of the members of the board: 12 per cent of them were illiterate and 20 per cent of them had education up to primary level; a large percentage (66.4%) had secondary education. The educational level of the board of directors was fairly good. An overwhelmingly large percentage (87%) of the board of directors belonged to the dominant caste of the area namely Gounder; and equally large number of them (81%) were big farmers; and 98 per cent of them were dairy farmers. Women members, who constituted 11 per cent of the total membership did not have representation on the board of any of the societies.

Paid Establishment:

The paid establishment of the dairy co-operatives mostly consisted of two employees namely: (1) Secretary and (2) Tester. Societies wherein the level of procurement was high a Procurement Assistant was also appointed.

The Secretary was in charge of the day-to-day
working of the society. He had to attend to the milk procurement twice a day. Besides, he had to maintain various registers such as Day Book, General Ledger, Dairy Register, Milk Procurement Register etc., and arrange for weekly payment to producers. Testing the fat per cent in each lot of the milk poured by the producers and making entries in the Milk Test Register were the main responsibilities of the Tester. Washing of milk cans, preservation of testing materials and cleaning of testing equipment were also part of his routine work. The Procurement Assistant was the last grade employee who assisted the Secretary and the Tester in their non-technical functions.

Of the 29 sample societies 23 (79.3%) had only two employees each namely the Secretary and the Tester; and 6 societies (20.7%) had three employees each, which included a Procurement Assistant.

**Progress of Societies:**

The overall progress of sample societies had been very impressive and uniformly good. Table III-4 indicates the various facets of the progress of the sample societies. Between 1974-75 and 1977-78 the number of societies had doubled. The working capital of the
societies during the above period had increased by 17 times; and the milk handling-purchase and sale - 7 times. There had been manifold increase in the profit earned (20 times) and bonus paid to members (45 times) by the societies during the short span of 4 years.

**TABLE-III.4**

PROGRESS OF DAIRY CO-OPERATIVES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No. of societies</td>
<td>14</td>
<td>27</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>2.</td>
<td>Membership</td>
<td>813</td>
<td>1876</td>
<td>2799</td>
<td>3339</td>
</tr>
<tr>
<td>3.</td>
<td>Working capital (₹)</td>
<td>11467</td>
<td>40721</td>
<td>84476</td>
<td>193248</td>
</tr>
<tr>
<td>4.</td>
<td>Quantity of milk purchased (litres)</td>
<td>267878</td>
<td>1064658</td>
<td>1662848</td>
<td>2006992</td>
</tr>
<tr>
<td>5.</td>
<td>Value of purchase of milk (₹)</td>
<td>461297</td>
<td>1801269</td>
<td>2721357</td>
<td>3349302</td>
</tr>
<tr>
<td>6.</td>
<td>Value of sale of milk (₹)</td>
<td>471584</td>
<td>2445112</td>
<td>3180241</td>
<td>3746343</td>
</tr>
<tr>
<td>7.</td>
<td>Profit earned (₹)</td>
<td>26717</td>
<td>172611</td>
<td>359577</td>
<td>528294</td>
</tr>
<tr>
<td>8.</td>
<td>Bonus paid (₹)</td>
<td>4136</td>
<td>58691</td>
<td>145288</td>
<td>187731</td>
</tr>
</tbody>
</table>
The average membership per society was 117; and the average daily milk procurement was 189.6 litres. The average purchase price per litre of milk was Rs. 1.67; and the average sale price was Rs. 1.87; on an average, each society earned a net profit of Rs. 18,217 and distributed bonus to its members to the tune of Rs. 6,473. It is, therefore, discerned from Table III-4 that the overall progress had been significant.

Audit Classification:

The co-operative audit department awards audit classification to each co-operative society on the basis of its business performance, financial stability and management efficiency after every audit. Accordingly two of the sample societies (6.9%) were classified as 'A' and 8 societies (27.6%) were awarded 'B' class. Another 9 societies (31%) were graded as 'C'.

2. Class 'A': Societies which do not receive any help from Government other than audit, have new proposals for development, and in addition contain all the distinguishing marks of class 'B'.

Class 'B': Societies which have full time secretaries, manage their affairs on their own and generally in a sound and healthy condition; but in some respects short of perfection.

Class 'C': All other societies.
A sizeable number of societies (10) which formed 34.5 per cent of the societies, were not classified yet, as it was the policy of the Government to award audit classification to societies only after 3 years of their existence.

CONCLUSION:

Synoptically stating: the Erode milkshed area had large concentration of 'Anand pattern' dairy cooperatives; it possessed 47 per cent of the total number of 'Anand Pattern' societies of Tamil Nadu and accounted for 56 per cent of the milk produced by them; the input coverage was fairly large and out of 472 societies 403 were covered with the input programme; and the milk procurement in the milkshed area was largely undertaken by the Tamil Nadu Dairy Development Corporation. A large majority of the sample societies were of recent origin and they could not acquire a substantial physical assets like building, furniture etc. The overall progress of the societies had been quite satisfactory; the average membership of the societies was 117; and the average daily milk procurement was 180.6 litres.