

ANIMAL HUSBANDRY, DAIRYING, FISHERIES AND FISHERMEN WELFARE DEPARTMENT

DAIRY DEVELOPMENT

POLICY NOTE 2021-2022

DEMAND No.8

S.M. NASAR

MINISTER FOR MILK AND DAIRY DEVELOPMENT



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1. INTRODUCTION

Milk is a complete food which provides nutrition to all ages. Milk is also used to make various value-added products. Due to urbanisation, the demand for milk is increasing. Since we depend on rural areas for meeting the demand for milk in urban areas, it is imperative to transport the milk from far away villages to the city, scrupulously maintaining the initial quality of milk.

Thanks to the White Revolution, milk availability in our country has significantly increased. We now fully meet the demand for milk and milk products for the Indian population of more than 130 Crore and also export milk products to other countries. This is in stark

contrast to the practice of importing milk and milk products in large quantities that prevailed over forty years ago.

By implementing the Operation Flood schemes of National Dairy Development Board (NDDB), a large number of Primary Milk Producers' Co-operative societies were formed following the "Anand model" of Co-operative societies.

By conserving the initial quality of milk and processing the milk produced by milk producers without wasting it, a permanent market has been created for the milk supplied by the rural milk producers. This has resulted in meeting the milk demand of the consumers and the procurement price of milk is being paid to the milk producers by co-operative societies without delay.

As the market for milk is being expanded to metropolitan areas, second level cities and small

towns, the milk is sold without keeping stock, the demand for milk has increased. Further, due to implementation of various schemes encouraging the dairy sector by Union and State Governments, India has become the world leader by producing 188 million tonnes of milk annually.

The contribution of small / marginal farmers and landless agricultural labourers to the total milk production in India is over 70%. It is indeed a matter of pride that India continues to be in the first place among the large producers of milk in the World since 1997.

Strengths of Indian Dairy Sector:

- ➤ 120 million people are directly involved in the dairy husbandry activities
- India is the second most populous country in the World and is listed as one among the economically fastest growing countries in the World

- It has a very large international market value for milk and by-products
- There is improvement in the livelihood of the public. Further the usage of milk and milk products are also increasing due to increasing health awareness among the people
- Dairy sector not only provides additional income throughout the year to small, marginal farmers and landless poor agricultural labourers but also ensures continued employment
- > The share of milk in the GDP is 4.2%

1.1 Dairy Co-operatives in Tamil Nadu

Aavin is the third largest purchaser of milk among Dairy Co-operatives in India in terms of volume of milk by procuring 41 lakh litres per day (LLPD). (1st place: Gujarat-275 LLPD, 2nd place: Karnataka-73 LLPD)

Tamil Nadu is the tenth largest producer of milk among the high milk producing States, with a milk production of 233 LLPD.

The "Anand pattern" of 3-tier dairy Co-operatives as introduced by Dr. Varghese Kurien, the 'Father of White Revolution' has been successfully implemented and societies have been organised at different levels. Various value-added milk products are being produced from the milk purchased by Co-operative Societies and are sold under the brand name "Aavin".

In Tamil Nadu, 233 lakh litres of milk is produced per day. There are around 4.25 lakh member milk producers in 9,426 Primary Milk Producers' Co-operative Societies under 25 District Milk Producers' Co-operative Unions. After retaining for their own consumption around 4 lakh litres of milk out of 41 lakh litres of milk produced, they pour around 37 lakh litres to the

Primary Milk Producers' Co-operative Societies every day. The share of Co-operative sector is 17.60 per cent of the total milk production in Tamil Nadu.

Quality testing is carried out at various levels by the Quality Control Division so as to ensure the supply of good quality milk and milk products to the consumers.

Quality tests to detect adulterants in milk are being carried out at Milk Chilling Centres, Union Dairies, Dairy cum Powder Plants and in Metro Dairies. After confirming that the milk is free from adulterants, it is processed and marketed to consumers in the form of milk sachets.

During the lean season, the demand is being met through reconstitution of milk powder and butter kept as stock by the Federation and District Milk Unions. Thus, the milk demand of the consumers in the metro cities and small towns is largely met by Aavin.

The sale proceeds of milk and milk products transferred at once to the District are Co-operative Milk Producers' Unions and thereafter it is transferred to the member Milk Producers' Co-operative Societies. Later, the milk cost is transferred to the bank accounts of milk producers in accordance with the quantity and quality of milk supplied by the milk producers Milk through respective Producers' the Co-operative Societies through Electronic Clearance System (ECS).

The Milk Producers' Co-operative Societies procure milk from members in the morning and evening all 365 days in a year, without any holiday. Milk Producers' Co-operative Societies also help in resolving the issues with milk producers expeditiously, as they have direct contact with the milk pouring members.

Aavin accounts for 52 per cent (13.5 lakh litres) of milk sales in Chennai metropolitan region. The total contribution of private dairies and unorganized dairy sector is around 48 per cent (12.5 lakh litres).

Thus, the Dairy industry, besides providing additional income to 4.25 lakh small, marginal and landless farmers daily, also it ensures employment throughout the year. It plays a major role in the rural economy.

1.2 Activities of the Dairy Development Department

In Tamil Nadu during 1958, a separate Government Department called Dairy Department was started. The Commissioner / Director of Milk Production and Dairy Development is the Head of the Department and the Functional Registrar of all Dairy Co-operative Societies in Tamil Nadu. The administrative and statutory control of all Dairy

Co-operative Societies was transferred from the Co-operative Department to the Dairy Development Department w.e.f. 01.08.1965.

Subsequently, in 1972, all commercial activities of the department were transferred to then Tamil Dairy Development the Nadu Corporation, which was registered under the Companies Act. Further, when the "Anand model" three-tier milk co-operative system implemented in Tamil Nadu in 1981, all the activities of the Tamil Nadu Dairy Development Corporation were transferred to the Tamil Nadu Co-operative Milk Producers' Federation, an Apex level Co-operative Society registered under the Tamil Nadu Co-operative Societies Act and Rules. The Commissioner / Director of Milk Production and Dairy Development also functions as the Managing Director of the Tamil Nadu Co-operative Milk Producers' Federation.

1.2.1 Objectives

- Ensuring that reasonable price is paid to the milk producers for the milk supplied by them
- Ensuring the availability of liquid milk and processed milk to consumers at reasonable price
- Ensuring the credibility of the dairy
 Co-operative structure through
 transparency in administration
- Ensuring the quality of milk and milk products as per statutory specifications imposed by the Food Safety and Standards Authority of India
- Bringing the unorganised Dairy sector into the organised structure
- Ensuring that various inputs such as cattle feed, fodder and Veterinary health services are provided to milch animals of the milk producers

- Ensuring the balanced growth of Dairy sector in line with other industrial sector growth
- Introducing and updating the latest technologies in various dairy activities at the level of Milk Producers' Co-operative Society, District Milk Union and the Federation

1.2.2 Strategies / New Methods / Guidance / Ideas

The following strategies have been adopted to achieve the objectives of the Dairy sector: -

- Bringing a large number of milk producers under the Co-operative system by setting up a greater number of Primary Milk Co-operative Societies covering all the villages and also by reviving the dormant societies into functioning societies
- > Establishment of an Integrated Dairy

- Management System in all Dairy Co-operatives
- Implementing clean milk production in all Dairy Co-operatives
- ➤ Ensuring the initial quality of milk by providing automatic milk collection equipment, establishing Bulk Milk Coolers of various capacities in a large number of Primary Milk Producers' Co-operative Societies, thereby maintaining the chill temperature of the milk properly at all levels
- Improvement of infrastructure facilities in all dairies to handle the increased milk production
- Providing skill development training in dairying to the employees and milk producers of Dairy Co-operative Societies
- Implementation of Union and State Government schemes and also State-Centre Shared schemes to increase milk production

- Introducing more new milk products and new marketing strategies to improve sales
- Increasing milk card sales, online milk sale and ensuring consumer confidence by resolving consumer grievances received through 24-hour Customer Care and Support Cell
- Implementation of the guidelines of the Food Safety Act 2006 and Rules 2011 in all Dairy Co-operatives

1.2.3 Administrative set up

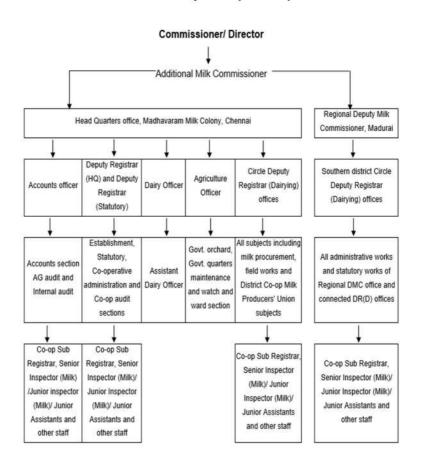
The Commissioner / Director of Milk Production and Dairy Development is the Head of the Dairy Development Department which is functioning under the Animal Husbandry, Dairying, Fisheries and Fishermen Welfare Department of the Government. The Head Office of the Dairy Development Department is functioning at Madhavaram, Chennai. In addition,

the district level, there are 29 Deputy Registrar (Dairying) offices. A Regional Deputy Milk Commissioner's office was established in Madurai last vear. One Additional Milk Commissioner, one Deputy Registrar (Head Quarters) and one Deputy Registrar (Statutory) are working at the Head Office to assist the Commissioner / Director of Milk Production and Dairy Development. An overall cadre strength of 800 employees, including field staff, has been approved for the Dairy Development Department.

Further, as the Registrar of Dairy Co-operative Societies, the Commissioner / Director of Milk Production and Dairy Development is empowered under the provisions of the Tamil Nadu Co-operative Societies Act. 1983 and the Tamil Nadu Co-operative Societies Rules 1988 to perform various activities such as registering new Dairy Co-operative Societies, reviving dormant societies, inspecting Dairy Co-operative Societies, settlement of disputes, conducting statutory activities such as holding elections to elect the Board of Directors for the management of the all the three tier co-operatives and issuing appropriate instructions in the interest of the public, etc.

Prior to the enforcement of the Food Safety 2006 2011, Act and Rules the Commissioner / Director, Milk Production Dairy Development was empowered as State Registrar under the Milk and Milk Products Order, 1992. However, after the enactment of the Food Safety Act 2006 and Rules 2011, this power was withdrawn and vested with the Food Safety Department. The Commissioner / Director of Milk Production and Dairy Development acts as a member of the State Monitoring Committee constituted under the Food Safety Act, 2006 and Food Safety Act Rules, 2011 to monitor and ensure the supply of quality milk to consumers.

Structure of the Dairy Development Department



1.2.4 Duties and Responsibilities of Deputy Registrar (Dairying)

- Certain powers of the Registrar under the Tamil Nadu Co-operative Societies Act and Rules have been delegated to the Deputy Registrar (Dairying) at district level
- Scrutinising the applications received for registration of new Milk Producers' Co-operative societies in areas within his jurisdiction after getting approval from field officers and registering the Society
- Monitoring and implementing all activities of Milk Co-operatives in District level
- Ensuring testing and procurement of quality milk from the milk producers
- Ensuring regular payment to the milk producers without any arrears or delay
- Taking action against the persons responsible for any losses incurred by the Milk Co-operative Societies as a quasi-

- judicial officer
- Reviving the dormant societies and also restoring the societies under liquidation
- As the District Election Officer, conducting elections to all the three tier Milk Co-operatives under his jurisdiction in consultation with the Tamil Nadu State Co-operative Societies Election Commission
- Taking appropriate action for availing loans for purchase of dairy cows in coordination with Co-operative Banks and other Nationalised Banks
- One of the members of the District Monitoring Committee under the chairmanship of the District Collector, constituted under the Food Safety Act 2006
- Arranging for the supply of cattle feed, mineral mixture, fodder and other inputs to the farmer in coordination with the District Co-operative Milk Producers' Union and other departments

Ensuring the administration of the District Co-operative Milk Producers' Union in accordance with the provisions of the Tamil Nadu Co-operative Societies Act and Rules, bye laws and special bye laws, in his capacity as one of the functional directors of the Board

2. MANAGEMENT OF DAIRY CO-OPERATIVE SOCIETIES IN THE STATE

The dairy co-operatives in Tamil Nadu function under a 3-tier system which is popularly known as "Anand pattern". The details are:

Tier 1- The Primary Dairy Co-operatives are formed at the village level, which is the base of the 3-tier system. These Dairy Co-operative Societies have direct contact with milk producer members in

the villages. They procure milk from the member milk producers and after selling a small quantity of milk locally for local needs, supply the milk to the District Co-operative Milk Producers' Unions.

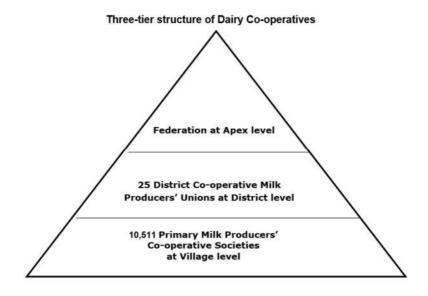
Tier2- The District Co-operative Milk

Producers' Unions (DCMPU) are the middle-level Co-operative societies at the district level wherein the Primary Dairy Co-operatives in their jurisdiction are members. They procure surplus milk from the societies, process it and sell it to consumers. They also produce milk products and convert the excess milk into Skimmed Milk Powder.

Tier 3- The Tamil Nadu Co-operative Milk

Producers' Federation (TCMPF) is the
apex level society in which all the District
Unions in the State are members. The
Federation purchases milk from the
member District Co-operative Milk
Producers' Unions and after processing,
supplies the same to the consumers in
the Chennai metropolitan region.

Like all other Co-operatives, the entire three tier Dairy Co-operatives are governed by the Tamil Nadu Co-operative Societies Act, 1983 and Tamil Nadu Co-operative Societies Rules, 1988.



3. PRIMARY MILK CO-OPERATIVE SOCIETIES

In earlier days, Primary Milk Supply Co-operative Societies (PMSCS) were formed which purchased surplus raw milk in the villages and sold the raw milk in other villages. Now, Milk Supply Co-operative Societies have been converted to Milk Producers' Co-operative Societies in villages and Milk Consumers' Co-operative Societies in metro areas.

3.1 Primary Milk Producers' Co-operative Societies

3.1.1 Structural aspect

The Primary Milk Producers' Co-operative Societies (MPCS) form the base level of the 3-tier system under the "Anand pattern". They are formed at the rural level to procure milk from the milk-producing members at the village level. After selling a meagre quantity locally, the balance milk is sold to the district unions. These primary societies act as a bridge in reaching the Government policies and various schemes to the end-user, the milk producers. The milk producers in the operational areas of the society are eligible to become members of the MPCS. Exclusive Women Milk Producers' Co-operative Societies and Adi-Dravidar Milk Producers' Co-operative Societies are also being registered wherever feasible.

3.1.2 Functional aspect

The Primary Milk Producers' Co-operative Society functions with the principal objective of purchasing of milk produced from its members at a remunerative price. It also ensures the supply of cattle feed and other inputs, besides arranging for Veterinary and health services to the cattle of the members of the society.

There are 10,511 Primary Milk Producers' Co-operative Societies at the village level, out of which 1,893 are Women Milk Producers' Co-operative Societies and 123 Adi-Dravidar Milk Producers' Co-operative Societies. The present level of milk procurement is around 41.00 lakh litres per day (LLPD). Out of this, around 4 LLPD milk is being sold locally to meet out the local demand. Hence around 37 LLPD milk is being supplied to the District Unions and Metro dairies. The milk cost is paid based on the quality of milk

supplied by the milk producers every week/once in 10 days/ fortnightly/monthly according to the needs of the milk producers.

3.1.3 Organisation of new Milk Producers' Co-operative Societies

A minimum 25 residing citizens of a particular village should submit the application to the Deputy Registrar (Dairying) of the district concerned seeking registration of a Milk Producers' Co-operative Society.

A field survey is undertaken by the Senior Inspectors (Milk) or by the Extension officers of the District Co-operative Milk Producers' Union, to study the animal population, milk potential in the area, viability, milk route availability, profitability, quality of milk etc.

Further, the area of the proposed society should not overlap the area of operation of another registered Milk Producers' Co-operative However, Women Producers' society. Milk Co-operative Societies and Adi-Dravidar Milk Producers' Co-operative Societies are being registered in the same area wherever possible without affecting the functioning of the general Milk Producers' Co-operative Society already existing in the area. The Chief Promoter is appointed to initiate the process of registering the society and he/she should submit the proposal in full shape including the proof of residence, no dues certificate from the local co-operative bank, etc. The Deputy Registrar (Dairying) shall register the society within 120 days from the date of receipt of the proposal. If the proposal is not returned and the same has not been registered within 120 days, it shall be deemed that the Deputy Registrar (Dairying) has registered the society on the last date of the time limit specified.

3.2 Action taken on reviving the dormant Societies

There are 1,085 dormant Milk Producers' Co-operative Societies. Action has been taken to revive the Milk Producers' Co-operative Societies, which are dormant for less than 2 years and to organise new societies in the areas where the existing Milk Producers' Co-operative Societies are dormant for more than 2 years. Accordingly, during the last nine months, 72 dormant societies have been revived.

While registering new societies, in order to facilitate the easy functioning of the society to procure and supply milk, action has been taken to supply 2 milk cans for each society at a subsidized rate by the District Co-operative Milk Producers' Union concerned. Further, action has been taken to arrange milch animal loans to the milk producer members with a tie-up with banks and also to issue loans with subsidy under Dairy

Entrepreneurship Development Scheme (DEDS) and other Governmental schemes thereby to increase milk production.

To bring more milk producers into the Co-operative fold, efforts have been taken to attract the milk producers who are now pouring milk to private dairies, by ensuring immediate payment of milk cost based on the quality of milk. With these activities, the action is being taken to revive all the dormant Milk Producers' Co-operative Societies in a phased manner, thereby increasing milk production.

Union-wise Number of Societies & Milk Producers						
S. No.	Name of the District Union	No. of societies	No. of societies active / functioning	Dormant societies	Milk procuring producers	No. of cattle in co-op Ambit (in Lakh)
1	Kanchipuram- Tiruvallur	349 242	300 174	49 68	13,608 4,671	0.68
2	Viluppuram	602	602	0	35,135	1.54
3	Cuddalore	220	175	41	7,012	0.15
4	Vellore	359	319	40	19,090	1.22
5	Tiruvannamalai	671	608	63	44,674	1.78
6	Krishnagiri	310	238	72	8,802	0.32
7	Dharmapuri	291	265	26	12,911	0.52
8	Salem	804	768	36	46,936	1.87
9	Namakkal	538	513	25	16,650	0.53
10	Erode	526	511	15	28,815	0.55
11	Tiruppur	475	441	34	16,370	0.72
12	Coimbatore	384	350	34	9,646	0.91
13	Nilgiris	97	92	5	2,498	0.25
14	Madurai	872	827	45	17,987	0.51
15	Theni	557	501	56	6,025	0.21
16	Dindigul	222	193	29	6,012	0.29
17	Trichy Perambalur Ariyalur	370 197 104	333 192 97	37 5 7	21,724 20,493 14,901	2.71
18	Karur	170	155	15	5,769	0.45
19	Thanjavur Tiruvarur	275 133	255 104	20 29	12,356 11,996	0.42
20	Pudukkottai	425	345	80	11,163	0.25

21	Sivagangai & Manamadurai	470	378	92	8,527	0.25
	Ramanathapuram	154	128	30	3,015	0.23
22	Virudhunagar	144	116	28	3,286	0.14
23	Tirunelveli	233	214	19	7,012	0.32
24	Thoothukudi	259	176	83	3,930	0.17
25	Kanyakumari	54	52	2	4,355	0.12
	TOTAL	10,511	9,426	1,085	4,25,369	16.89

3.3 Primary Milk Consumers' Co-operative Societies

The Milk Consumers' Co-operative Societies (MCCS) are formed to sell the milk to consumers and to protect the interest of milk consumers. The Milk Consumers' Co-operative Societies supply milk in sachets and milk products to the consumers after receiving the same from the Federation / District Co-operative Milk Producers' Unions. These Milk Consumers' Co-operative Societies are treated as wholesale dealers.

There are 58 Milk Consumers' Co-operative Societies functioning across the State. Of these,

48 Milk Consumers' Co-operative Societies are functioning in and around Chennai and collectively sell nearly 3.70 lakh litres of milk per day and milk by-products worth around Rs.40 lakh per month.

The management of these Milk Consumers' Co-operative Societies is also looked after by the democratically elected Board of Directors.

4. DISTRICT CO-OPERATIVE MILK PRODUCERS' UNIONS

The District Co-operative Milk producers' Union is the middle level central co-operative society in the 3-tier Anand pattern. The primary MPCSs in the jurisdiction area are the members of the DCMPU.

At present there are 25 District Co-operative Milk Producers' Unions functioning in Tamil Nadu. The District Co-operative Milk Producers' Unions

are managed by the democratically elected Board of Directors, headed by the President. The administrative head of the District Co-operative Milk Producers' Union is the General Manager.

4.1 Functions of the DCMPU

The District Co-operative Milk Producers' Union procures milk from MPCSs by forming milk routes and by providing route vehicles to transport the milk to the nearest Bulk Milk Cooler (BMC)/ Chilling Centre / Dairy. In the case of BMC, the DCMPU arranges milk tankers for transporting milk to the Dairy / Metro dairies. The District Co-operative Milk Producers' Union pay the milk cost to the member Milk producers' Co-operative Societies based on the quality of milk poured by them after deducting the cost of feed and other inputs supplied.

After meeting their requirement for liquid milk sales and product production, they transport

milk to Federation the surplus dairies processing and sales in Chennai. If required, the surplus milk is sent to Feeder Balancing Dairies at Madurai, Erode, Salem, Krishnagiri and Powder Plant at Tiruvannamalai for conversion into Butter and Skimmed Milk Powder (SMP). DCMPUs are playing a major role in implementing various welfare schemes of the State and Union Governments and act as implementing Agencies. DCMPUs are also imparting training to the staff/members of the Milk Co-operative Society in clean milk production, AI, etc. The District Co-operative Milk Producers' Union share the profit earned by them by way of incentive to the Milk Producers' Co-operative Societies according to the quantity of milk supplied by them.

4.2 Cadre strength

The following is the total approved cadre strength of 25 DCMPUs:

Approved Cadre Strength in District Co-operative Milk Producers' Unions

S. No.	Name of the Post	Cadre Strength
1	General Manager	25
2	Deputy General Manager	23
3	Asst. General Manager	85
4	Manager	386
5	Deputy Manager	439
6	Extension Officer	261
7	Office Staff	761
8	Driver	283
9	Technical staff, Helpers	1,913
	Total	4,176

5. THE TAMIL NADU CO-OPERATIVE MILK PRODUCERS' FEDERATION LTD.

The Tamil Nadu Co-operative Milk Producers' Federation Limited (TCMPF) is the apex body at the State level in the 3 tier "Anand pattern" wherein all the District Co-operative Milk Producers' Unions in the State are members.

The Tamil Nadu Co-operative Milk Producers' Federation Limited (TCMPF) was registered as a Co-operative society under Tamil Nadu Co-operative Societies Act and Rules. It was started on 01.02.1981 by taking over all the commercial activities such as milk procurement, processing, packing and sale of milk and milk products to the consumers. Previously the above subjects were handled by the Tamil Nadu Dairy Development Corporation. The administrative office of TCMPF is functioning from the new corporate office building at Nandanam since 20.06.2018.

The overall management of the Federation vests with the elected Board of Directors of the Federation. However, election to the Board of Directors could not be conducted as scheduled due to pending litigation. Now, as the court has disposed of the writ petition, action has already been taken to conduct the election in consultation with the Tamil Nadu State Co-operative Societies Election Commission.

5.1 Functions of TCMPF

The Federation procures milk from various District Unions, processes and supplies liquid milk in sachets and various milk products to consumers in Chennai city and its suburban areas. In addition, it plays a pivotal role in arranging for the marketing of milk products like Ghee, Butter, Ice cream, etc., produced by the District Co-operative Milk Producers' Unions, both within

and outside the State under the brand name, Aavin.

The Federation also guides and monitors activities like procurement, marketing, milk handling, infrastructure creation, quality control and implementation of various State and Union Government funded schemes.

The Federation owns three milk dairy plants in the Chennai metropolitan region, at Madhavaram, Ambattur and Sholinganallur to process, pack and supply milk to metro consumers and one milk product dairy at Ambattur. The Dairy cum Powder Plant at Tiruvannamalai, Buffalo Frozen Semen Station (BFSS) and Dairy Herd Improvement Programme Actions (DIPA) units at Erode and Nucleus Jersey and Stud Farm (NJ&SF) at Nilgiris are directly under the control of Federation.

The Federation has its own transport unit wherein modernized road milk tankers of different capacities are maintained. Besides plying its fleet, the Federation is also operating hired vehicles for daily milk collection from the District unions. The movement of all the vehicles is being monitored via GPS.

To supply milk and milk products to the general public, the Federation is using its own Poly Urethane Foam (PUF) insulated container vehicles and refrigerated PUF insulated vehicles.

5.2 Cadre strength

The following is the total approved cadre strength of the Federation:

TCMPF Administration- Cadre Strength

S. No.	Name of the Post	Cadre Strength
1	Managing Director	1
2	Joint Managing Director	1
3	Chief Vigilance Officer	1
4	General Manager	10
5	Deputy General Manager	24
6	Assistant General Manager	65
7	Manager	108
8	Deputy Manager	168
9	Private Secretary Gr-I,II& III	24
10	Executive	170
11	JrExecutive (Office)/(Typing)	155
12	Driver	240
13	Technical Staff & Helper	1,122
	TOTAL	2,089

5.3 Dairies run by the Tamil Nadu Co-operative Milk Producers' Federation Ltd.,

5.3.1 Madhavaram Dairy

The Madhavaram Dairy located in the milk colony complex, the first of its kind in the Aavin

family, was established in the year 1962. The dairy was originally started with a handling capacity of 50,000 litres per day with the financial assistance from the Government of New Zealand. It has undergone several infrastructure expansions during the last 58 years and at present, the dairy can process and pack 4.00 Lakh Litres per day (LLPD). The dairy is equipped with a quality control laboratory to ensure the quality of milk received from various District Unions and packed milk sold to the consumers of North Chennai. It operates 53 hired vehicles,33 private agency vehicles and 3 Federation milk routes. This Dairy has been certified with IS/ISO 9001:2015, IS 15000:2013 (HACCP) IS/ISO14001:2015(EMS), ISO 22000-2005 (FSSC 22000).

The Government of India has sanctioned a loan of Rs.113.75 Crore from NABARD under the Dairy Processing and Infrastructure Development

Fund (DIDF) for establishing a new Dairy with 10 LLPD capacity which is expandable to 15 LLPD.

5.3.2 Ambattur Dairy

The Ambattur dairy was established in the year 1976 at the Ambattur Industrial Estate. This dairy was installed by NDDB with a capacity of 2LLPD with provision for tanker dispatches to bulk vending. Subsequently, the dairy was expanded to 4 LLPD in 1986 with milk packing facilities and cold storage. The dairy is now equipped with automated Cleaning In Place system (CIP) and solar water heaters for boiler feed water. The capacity of Effluent Treatment Plant has been increased from 4 LLPD to 7 LLPD with UASB digester. A High-Tech parlour, to cater the needs of Aavin milk and milk products of consumers is functioning in front of the dairy since 20.06.2018.

Ambattur Dairy supplies milk to consumers of Central Chennai through 45 hired route vehicles,

26 private agency vehicles, 5 Milk Consumer Co-operative Society (MCCS) milk routes and 14 Federation milk routes. This Dairy has been certified with IS/ISO9001:2015, IS/ISO15000:2013 (HACCP) and IS/ISO 14001:2015 (EMS).

The capacity of this dairy will be expanded from 4 LLPD to 8 LLPD with a loan amount of Rs.31.18 Crore under DIDF of NABARD scheme.

5.3.3 Sholinganallur Dairy

The Sholinganallur Dairy (III Dairy) is the first ever automated dairy established in South India in 1996. This dairy was installed by NDDB with an installed capacity of 4 LLPD. The plant was initially designed for bulk milk dispatch in tankers to the tune of 3.5 LLPD for milk vending booths and 50,000 litres in sachets as pouch milk. Subsequently, the proposal for expanding of this dairy from 4 LLPD to 7.5 LLPD has been

sanctioned under DIDF with the loan amount of Rs.25.80 Crore.

Further, Sholinganallur Dairy supplies milk to consumers of South Chennai through 49 hired route vehicles, 65 private agency vehicles, 4 milk Consumer Co-operative Society (MCCS) milk routes and 7 Federation milk routes.

A new effluent treatment plant with UASB digester was installed in the year 2018 with a capacity of 7.00 LLPD. Further, a Concentrated Solar Thermal System (CST) for generating steam of 1,000-1,100 kg per day has been installed at a cost of Rs.100 lakh. It immensely helps in reducing usage of furnace oil to the tune of 100–110 litres per day and savings Rs.12 lakh per annum. A hi-tech parlour is functioning at the entrance of the dairy since 20.06.2018. This Dairy certified with IS/ISO 9001:2015, is IS

15000:2013 (HACCP) and IS/ISO

14001:2015(EMS).

5.3.4 Dairy cum Powder plant (DCPP) at Tiruvannamalai

The announcement made in the District Collectors' conference during 2012-2013 became the basis for the establishment of the Dairy Cum Powder Plant with a handling capacity of 2 Lakh Litres of milk per day with spray drying capacity of 20 MT. It was established during 2014 at Ammapalayam Village in Tiruvannamalai district at a total cost of Rs.72.60 Crore by availing financial assistance from NABARD. Further, to manage the water requirement by the said plant, a water supply scheme for providing 5.50 lakh litres of water per day from the Sathanur dam was implemented through the Tamil Nadu Water supply and Drainage Board. The aim of creating such infrastructure is to convert the surplus milk available with the District Unions to butter and Skimmed Milk Powder. The dairy can store 500 MT of butter and 1,500 MT of SMP. The dairy also has the production facility for 3 MT of ghee per day in retail packs. This Dairy has been certified with ISO 22000:2005 (FSMS).

Establishment of a fully automated packing line for butter to pack 5 MT of butter per day in 10 gram and 20 gram chiplets in blister packing and a fully automated fermented milk products manufacturing plant for curd, buttermilk and lassi are in the pipeline. The funds for this project have been sanctioned under DIDF scheme of GOI, with a loan amount of Rs.40.90 Crore.

5.3.5 Ambattur Products Dairy

The Products Dairy, as a separate unit of the Federation, was established in the year 1976 initially at Ayyanavaram, Chennai. The Products Dairy was shifted to the Ambattur dairy complex in a spacious building in the year 2003.

Products Dairy was established produce milk products like Khoa, Mysorepa and Milk Peda. It was expanded subsequently during 2016 to produce 15,000 litres of Ice Cream per day. Production facilities were also created for fermented milk products like Lassi, Yoghurt, Paneer, Buttermilk, Curd, Probiotic Lassi & Probiotic Curd. Indigenous milk products like Sugared Khoa, Peda, Gulab Jamun, Rasagulla, Mysorepa, and Chocolate. Ice cream variants like Grape duet, Mango duet, Cone, Strawberry cone, Two-in-one bar ice creams and Kulfi are also produced in this Dairy. This Dairy caters to the needs of the metro consumers and supply is also made to district unions.

The Products Dairy is certified by Quality Management System integrated with Hazard Analysis & Critical Control Point (HACCP) in accordance with IS/ISO 9001:2015 & IS 15000:1998, FSSAI (Food Safety and Standards

Authority of India). To ensure food safety and escalate to next level, FSSC 22000 certification audit has been carried out and awaiting the FSSC certificate from the Bureau Veritas certification body.

At present, 82 milk products in 146 variants are being produced at Ambattur Products Dairy and supplied to retail outlets through 36 contract vehicles and 5 refrigerated vehicles. Ice cream and few other milk products are also distributed through 3 refrigerated vehicles to all districts. To enhance the shelf life of sweets, a new modified atmospheric packaging system and paneer thermoforming machines installed. were Aggressive marketing efforts have enabled the Federation to meet the Ice cream sales target of 10,000 litres per day from an average sale of 6,000 LPD.

Range of Aavin Milk Products

Sweets	Ice cream variety	Fermented Products	Coagulated products and others
Sweetened Khoa, Dates Khoa, Mysorepa, Long life Gulab Jamun, Milk Peda, Rasagulla.	Ice cream cups, Family packs (Bricks and bowls), Choco bar, Mango Duet, Pineapple Duet, Grape Duet, Two in one bar, Strawberry core, Mango core, Choco feast, Premium ice cream in cups, Premium ice cream in scoops, Chocolate cone, Vanilla cone, Kulfi Bar, Cassata, Ball Ice cream, Flavoured Kulfi bar (10 flavours), Sugar-free Kulfibars, Long kulfi bar, Ice candies (6 variants).	Buttermilk in	Paneer Others: Unsugared Khoa, Milk Chocolate, Nutties Chocolate, Cookies (6 varieties).

5.4 Service institutions run by the Tamil Nadu Milk Producers' Federation Ltd.,

5.4.1 Cattle Feed Plant - Erode

Cattle feed is a good source of all essential nutrients for growing young calves, adult animals in-milk and pregnant animals. It helps in increasing the productivity of milch animals, improves immunity and reproduction.

The Cattle Feed Plant was established at Erode in the year 1982 with the production capacity of 100 MT per day. It was later expanded to 150 MT cattle feed per day at a cost of Rs.20.36 Crore. The cattle feed produced by the Erode District Co-operative Milk Producers' Union is having good demand among the milk producers.

The cattle feed production during 2020-2021 is 38,193 MT. Considering the demand for Erode cattle feed, action is being taken to increase the

production capacity to 300 MT per day and works are in progress. Over the last 10 years, the sale of cattle feed increased to 20 folds. i.e. the cattle feed sales which were 4,612 MT during 2010-2011 have increased to 1,08,485 MT during 2020-2021. A new Cattle Feed Plant with a capacity of 50 MT per day will be established at Virudhunagar very shortly.

The details of the sale of cattle feed during the last 11 years are tabulated below: -

Cattle Feed Sales (in MT)

Year	Sales quantity (in MTs)
2010 - 11	4,612
2011 - 12	15,046
2012 - 13	31,093
2013 - 14	53,292
2014 - 15	51,702
2015 - 16	58,652
2016 - 17	60,770
2017 - 18	81,531
2018 - 19	91,691
2019 - 20	95,153
2020 - 21	1,08,485
2021-22 (Upto Aug 15 th)	36,835

5.4.2 Mineral Mixture Plant

Mineral mixture plays an important role in better utilization of absorbed nutrients and increasing milk production, reproductive efficiency and enhancing immunity of milch animals. Mineral Mixture Plants are currently functioning one each at Viluppuram, Trichy, Tirunelveli, and Erode. The mineral mixture produced in these units is being supplied not only to the Co-operative Societies but also to the Animal Husbandry Department. The details of the sale of Mineral Mixture during the last 11 years are tabulated below.

Mineral Mixture sales (in MT)

Year	Sales quantity (in MT)
2011 - 12	172
2012 - 13	131
2013 - 14	391
2014 - 15	244
2015 - 16	966
2016 - 17	1,315
2017 - 18	1,844
2018 - 19	2,872

Year	Sales quantity (in MT)
2019 - 20	3,789
2020 - 21	3,427
2021-22 (Up to Aug 15 th)	362

At present, the establishment of 12 MT capacity Mineral Mixture Plant at Krishnagiri is under progress.

Efforts have been taken to increase the sales of the Mineral Mixture to the level of 4,000 MT in 2021-2022.

5.4.3 Nucleus Jersey and Stud Farm (NJ&SF), Udhagamandalam

Nucleus Jersey and Stud Farm (NJ&SF) was established in 1973 for the production of frozen semen straws. This Farm is maintained in an area of 37.725 acres of land leased out from the Forest Department. The frozen semen straws produced at this farm are distributed to the District

Co-operative Milk Producers' Unions across the state which in turn is supplied to the Primary Milk Producers' Co-operative societies for Artificial insemination. The distribution is effected through Buffalo Frozen Semen Station where frozen semen straws is stored.

Stud Farm

Pure Jersey, Crossbred Jersey, Pure Holstein Friesian and Cross Breed Holstein Friesian bulls are maintained in the Stud Farm for frozen semen production. Presently, there are 65 bulls at the Stud Farm, out of which, 37 bulls are under collection. Four imported bulls are also maintained for semen production. During 2020-2021, the farm has produced around 7.00 Lakh doses of frozen semen straws. During 2021-22, it has been proposed to produce around 12.00 lakh doses of frozen semen straws.

The Nucleus Jersey and Stud Farm is an ISO 9001:2015 certified and 'B' graded Semen Station.

5.4.4 Buffalo Frozen Semen Station (BFSS), Erode.

The Buffalo Frozen Semen Station was established during November 1983 at Erode. Distribution of Frozen Semen Straws to District Co-operative Milk Producers' Unions and rearing of breeding bulls are being carried out in the unit. This unit is distributing Frozen Semen Straws to all milk unions based on their requirements. Besides, this unit also distributes Buffalo Frozen Semen Straws procured from Animal Husbandry Department.

On an average, this unit distributes around 1.50 lakh of Cattle and 6,000 Buffalo Frozen Semen Straws every month.

Pre-Quarantine Station at Attur, Quarantine Station at Erode and Calf Rearing Station cum Fodder Farm at Pudukudi comes under the control of BFSS unit for production of breeding bull calf before inducting them to NJ&SF, Udhagamandalam.

5.4.5 Dairy Herd Improvement Programme Actions (DIPA), Erode

Field Performance Recording Programme (FPRP) for Crossbred Jersey is being implemented by this unit with the financial assistance from Government of India under National Programme for Bovine Breeding (NPBB) through Tamil Nadu Livestock Development Agency (TNLDA).

The FPRP is being implemented by the Federation in 9 District Unions viz. Salem, Namakkal, Karur, Dharmapuri, Erode, Coimbatore, Madurai, Dindigul and Tirunelveli.

Under this programme, elite cows are selected based on continuous milk recording and are inseminated using proven bull semen for production of superior crossbred High Genetic Merit bull calves.

These bull calves thus produced are supplied to the semen stations of the Animal Husbandry Department and TCMPF Ltd. So far, more than 429 HGM bull calves have been provided to the Animal Husbandry Department and TCMPF for frozen semen production.

6. CATTLE RESOURCES

In Tamil Nadu, around 16.89 lakh animals are available under co-operative ambit, out of which, 16.45 lakh are Cattle and 0.44 lakh are Buffalo. The breedable population is around 10.42 lakh animals (Cattle – 10.20 lakh & Buffalo – 0.22 lakh).

Tamil Nadu being a tropical region, Crossbred Jersey animals are well adaptable for this climatic condition and hence it is a breed of choice among farmers.

In Coimbatore, Dharmapuri, Dindigul, Erode, Karur, and Nilgiris districts, the Holstein Friesian animals are also being maintained.

The breed wise Frozen Semen Straws requirement is met out from Nucleus Jersey & Stud Farm, TCMPF Ltd., Udhagamandalam. In village level, at the Primary Co-operative Milk Producers' Societies, Artificial Inseminations (AI) are being carried out through trained 2,613 Village Level workers (VLW). The Artificial Inseminations done during the year 2020-2021 was 17.45 lakh and 5.82 Lakh calves were born.

7. MILK PROCUREMENT

Milk produced by village level milk being collected through producers is registered primary village level milk producers' co-operative societies functioning in villages. After testing the milk individually, the primary milk co-operative societies sell a meagre quantity of milk for local needs, if any, and send the balance quantity of milk in 40 litres stainless steel milk cans to the nearest Bulk Milk Cooling Centres or Chilling Centres or to the Dairies. The District Unions arrange for the transportation of milk from the societies. In Bulk Milk Cooling Centres and Chilling Centres, the raw milk thus procured from the societies is stored in the silos and chilled. Later, the same is transported to the Union Dairy or Metro Dairy for further processing.

The average milk procurement by the District Co-operative Milk Producers' Unions has increased

from 20.67 LLPD in 2010-2011 to 38.23 LLPD in 2021-2022 upto 15th August 2021 which is 85% growth during the last eleven years. When compared to 2020-2021 the milk procurement has been increased by 2,33,000 litres during 2021-2022. The Average milk procurement from 2010-2011 to 2021-2022 is tabulated below: -

Average Milk Procurement

S. No.	Year	(in LLPD)
1	2010-2011	20.67
2	2011-2012	21.40
3	2012-2013	24.36
4	2013-2014	23.22
5	2014-2015	23.68
6	2015-2016	28.97
7	2016-2017	28.50
8	2017-2018	29.46
9	2018-2019	33.23
10	2019-2020	32.96
11	2020-2021	35.90
12	2021-2022 (Upto Aug 15 th)	38.23

	Union-wise I	Number	of Societies	& Milk I	Producers)
S. No.	Name of the District Union	No. of societies	No. of societies active / functioning	Dormant societies	Milk procuring producers	No. of cattle in co-op Ambit (in
1	Kanchipuram- Tiruvallur	349 242	300 174	49 68	13,608 4,671	0.68
2	Viluppuram	602	602	0	35,135	1.54
3	Cuddalore	220	175	41	7,012	0.15
4	Vellore	359	319	40	19,090	1.22
5	Tiruvannamalai	671	608	63	44,674	1.78
6	Krishnagiri	310	238	72	8,802	0.32
7	Dharmapuri	291	265	26	12,911	0.52
8	Salem	804	768	36	46,936	1.87
9	Namakkal	538	513	25	16,650	0.53
10	Erode	526	511	15	28,815	0.5
11	Tiruppur	475	441	34	16,370	0.72
12	Coimbatore	384	350	34	9,646	0.9
13	Nilgiris	97	92	5	2,498	0.25
14	Madurai	872	827	45	17,987	0.5
15	Theni	557	501	56	6,025	0.2
16	Dindigul	222	193	29	6,012	0.29
17	Trichy Perambalur Ariyalur	370 197 104	333 192 97	37 5 7	21,724 20,493 14,901	2.7
18	Karur	170	155	15	5,769	0.4
19	Thanjavur Tiruvarur	275 133	255 104	20 29	12,356 11,996	0.42
20	Pudukkottai	425	345	80	11,163	0.2
21	Sivagangai & Manamadurai Ramanathapuram	470 154	378 128	92 30	8,527 3,015	0.2
22	Virudhunagar	144	116	28	3,286	0.14
23	Tirunelveli	233	214	19	7,012	0.32
24	Thoothukudi	259	176	83	3,930	0.1
25	Kanyakumari	54	52	2	4,355	0.12
	TOTAL	10,511	9,426	1,085	4,25,369	16.89

Union-wise Milk Handling Capacity (in LPD)

S.	Name of the	Ca	ocessing pacity of Dairies		Chilli	ing Ca	pacity	
No.	Union	Union		Ch	illing Centre	ВМС		
		No	Capacity (in Lts.)	No	Capacity (in Lts.)	No	Capacity (in Lts.)	Total (in Lts.)
1	Kanchipuram- Tiruvallur	1	1,00,000	2	60,000	25	55,000	1,15,000
2	Viluppuram	1	1,00,000	1	1,00,000	33	77,000	1,77.000
3	Cuddalore	0	0	1	10,000	10	44,000	54,000
4	Vellore	1	1,50,000	2	80,000	34	1,19,500	1,99,500
5	Tiruvannamalai	0	0	2	1,50,000	75	2,28,500	3,78,500
6	Dharmapuri	0	0	1	50,000	5	21,000	71,000
7	Krishnagiri	1	2,00,000	1	10,000	20	78,000	88,000
8	Salem	1	5,00,000	1	1,30,000	75	2,72,500	4,02,500
9	Namakkal	0	0	2	1,00,000	22	53,000	1,53,000
10	Erode	1	3,00,000	2	35,000	52	2,44,000	2,79,000
11	Coimbatore	1	5,00,000	3	1,20,000	17	82,000	2,02,000
12	Tiruppur	0	0	2	1,10,000	39	1,90,000	3,00,000
13	Nilgiris	1	50,000	1	10,000	6	11,000	21,000
14	Madurai	1	5,00,000	0	0	60	1,18,000	1,18,000
15	Theni	0	0	1	1,00,000	2	7,000	1,07,000
16	Dindigul	1	30,000	2	40,000	21	70,000	1,10,000
17	Trichy	1	1,50,000	2	1,50,000	43	1,93,000	3,43,000
	Padalur	1	1,00,000	0	0	0	0	0
18	Karur	0	0	1	50,000	11	24,500	74,500
19	Thanjavur	1	48,000	1	30,000	13	51,000	81,000
20	Pudukkottai	1	55,000	0	0	2	10,000	10,000
21	Sivaganga	1	50,000	1	10,000	13	55,000	65,000
22	Virudhunagar	1	50,000	1	10,000	1	5,000	15,000
23	Tirunelveli	1	1,00,000	2	80,000	3	15,000	95,000
24	Thoothukudi	0	0	2	20,000	9	43,000	63,000
25	Kanyakumari	1	30,000	0	0	0	0	0
	Total	18	30,13,000	34	14,55,000	591	20,67,000	35,22,000

S.	Name of the	Processing Capacity of Dairies		Chilling Capacity				
No	***********			Chilling Centre		вмс		
		No	Capacity (in Lts.)	No	Capacity (in Lts.)	No	Capacity (in Lts.)	Total (in Lts.)
а	Central Dairy	1	5,00,000	-		-	-	-
b	Ambattur	1	5,00,000	14	2	2	5	-
С	Sholinganallur	1	6,00,000		5		a	(28)
d	Product Dairy	1	65,000	*	×	-	×	
е	DCPP Tiruvannamalai	1	2,00,000		Ĕ	2	E	-
	Total	5	18,65,000	-		-	-	.*
	Grand Total	23	48,78,000	34	14,55,000	591	20,67,000	35,22,000

8. MARKETING OF MILK

Demand for milk and milk products in the State is very high. The Marketing Sections of the District Milk Unions as well as the Federation have been making all possible efforts to increase the sale of milk and milk products. Aavin has retained more than 50% of the market share in milk sales in all the districts in the State (except Chennai).

To increase the sales of value-added products, several dairy machineries were installed at District Milk Unions.

Details of products manufactured at various District Milk Unions

S.No.	Union	Products
1	Kanchipuram- Tiruvallur	Badam Mix Powder
2	Viluppuram	Kulfi
3	Vellore	Kulfi, Badam Mix Powder, Curd, Flavoured Milk
4	Krishnagiri	Kulfi, Badam Mix Powder
5	Salem	Curd, UHT Milk, Flavoured Milk
6	Erode	Badam Mix Powder, Gulab Jamun Mix, Curd, Kulfi, Special Ghee in Tins.
7	Coimbatore	Mango Lassi, Curd, Flavoured Milk
8	Dindigul	Paneer
9	Madurai	Chocolate, Curd, Paneer
10	Virudhunagar	Badam Mix Powder
11	Tirunelveli	All Nuts Dry Mix Powder
12	Kanyakumari	Badam Mix Powder, Kulfi, Chocolate

The following milk variants are being produced and sold to Consumers at District Milk unions.

- Toned Milk
- Standardized Milk
- Full Cream Milk
- Double Toned Milk
- Cow Milk

All major milk by-products like Ghee, Butter, Buttermilk, Curd, Lassi, Yoghurt, Gulab Jamun, Rasagulla, Milk Khoa, variants of Flavoured Milk and Ice Cream are produced by Aavin.

8.1 Consumer Milk Cards

In Chennai Metro, to achieve more patronage as well to retain them, milk is being sold through monthly milk card system. It is a unique feature of Aavin marketing system to receive milk cost in advance with sustained liquid milk market. It ensures continuous milk supply to consumers without any disruption.

8.2 Marketing of Milk by DCMPUs

Various quality control tests are being carried out to confirm that there is no adulterant present in the milk. Only then, the milk is allowed to be processed, pasteurized, homogenized and packed in sachets (200ml, 500ml, 1000ml) and supplied to the local consumers.

During 2021-2022 upto 15 August 2021, the average liquid milk sales by the District Unions was 13.11 LLPD. It is more than 12% of the average sales of 2020-2021 (11.67 LLPD). To increase milk sales further and to attract more consumers, Aavin has introduced UHT milk. It overcomes refrigeration / cold chain issues at the consumers' end. Under normal room temperature the shelf life of UHT milk is maintained for 90 days.

Milk Sales Comparison- District Union-wise

		Avg. Milk Sales Per Day (in litres)						
S. No.	Name of the District Union	2018- 2010-		2020- 21	2021-22 (upto 15Aug2021)			
1	Kanchipuram- Tiruvallur	23,777	34,215	57,556	74,165			
2	Viluppuram	20,876	16,600	6,276	9,311			
3	Cuddalore		15,765	21,572	27,475			
4	Vellore	71,564	68,304	60,331	66,175			
5	Tiruvannamalai		7,502	8,134	9,424			
6	Dharmapuri	27,336	6,448	4,994	5,751			
7	Krishnagiri		18,700	17,967	22,208			
8	Salem	1,50,241	1,55,402	1,67,291	1,86,494			
9	Namakkal	50,023	61,349	60,199	68,523			
10	Erode	64,312	63,881	57,573	61,414			
11	Coimbatore	1,46,734	1,48,498	1,55,191	1,73,523			
12	Tiruppur	14,582	13,340	15,423	20,099			
13	Nilgiris	16,578	16,542	16,005	17,529			
14	Madurai	1,67,259	1,76,788	1,75,962	1,84,340			
15	Theni		6,023	5,388	5,650			
16	Dindigul	15,981	16,529	17,507	22,833			
17	Trichy	1,19,896	1,13,406	1,16,753	1,22,813			
18	Karur		5,562	5,266	5,862			
19	Thanjavur	29,795	32,492	40,666	47,819			
20	Pudukkottai	14,568	17,020	18,013	23,838			
21	Sivaganga	37,800	43,670	54,734	63,701			
22	Virudhunagar	5,978	6,878	6,238	8,244			
23	Tirunelveli	42,860	28,695	33,982	38,214			
24	Thoothukudi		21,921	26,187	27,319			
25	Kanyakumari	16,004	18,079	18,145	19,095			
	Total	10,42,164	11,13,609	11,67,353	13,11,816			

8.3 Milk Sales in Chennai Metro

TCMPF Limited is responsible for the marketing of milk and milk products in the

Chennai Metro and its suburban areas. During 2021-22 upto 15 August 2021, an average of 13.59 lakh litres of milk has been sold per day in Chennai Metro. It is proposed to increase the metro milk sales to 15.00 LLPD during the year 2021-2022.

Chennai Metro Sales (In LLPD)

S. No	Particular	2017-	2018- 19	2019-	2020-	2021- 22 (upto 15 Aug 2021)
1	Metro Milk Sales	11.91	12.09	12.11	12.63	13.59

1) Milk Consumers' Co-operative Societies and Zonal offices (Inclusive of monthly

milk cards)

- 5.50 to 6.00 LLPD

2) Whole sale dealers

- 5.50 to 6.00 LLPD

3) Direct cash sales

- 1.50 to 2.00 LLPD

8.4 Selling Price of Milk

Poor children and women consumers were immensely benefited by the announcement made by Hon'ble Chief Minister of Tamil Nadu on the reduction of selling price of milk of all variants by Rs.3/- per litre w.e.f. 16.05.2021. The revised rates are furnished hereunder.

S. No	Type of Milk	Sachet Colour	Specification		Rate for 500 ml pack (in Rs.) (16.05.21 onwards)	
			FAT %	SNF %	Card	MRP
1	Double Toned Milk	Magenta	1.5	9.0	18.00	18.50
2	Toned Milk	Blue	3.0	8.5	18.50	20.00
3	Standardized Milk	Green	4.5	8.5	21.00	22.00
4	Full Cream Milk	Orange	6.0	9.0	23.00	24.00

Consequent of the above order, an average sale of 1.74 lakh litres per day of milk is increased.

8.5 Product Marketing in Chennai Metro

The TCMPF Limited has been catering to the needs of Aavin milk products in Chennai metro and its suburban areas. Aavin is the largest selling brand in Chennai Metro. The Marketing Section has taken consistent efforts to appoint more number of retailers and wholesale dealers to sell more quantity of by-products. Consequent to this effort, during 2020-2021, the monthly average sale of by-products increased to Rs.22.11 Crore from Rs.19.50 Crore in the year 2019-2020.

To create awareness on the availability of Aavin milk and milk products among general public, advertisement material like name boards, notice boards, hanging promotional cards are being supplied to the retail shops.

Field level marketing staff canvassed major shopping malls, hyper markets, supermarkets like Big Bazaar, Reliance Fresh, Reliance retails, etc. in the District headquarters as well in Chennai.

As part of branding activities, uniform Aavin parlours were constructed at strategic places in all District unions and Chennai metro. Several Hi-Tech parlours have been constructed with parking facility, children play area, etc., so as to attract more children and customers. Besides selling Aavin products, these parlours also sell "chat" items to invite a number of young customers.

8.6 Infrastructure available for marketing in Chennai Metro

Aavin has the following well-knit marketing network infrastructure to market Milk and Milk products to cover the entire Chennai Metropolitan and its suburban areas aiming to increase the

sales volume.

Marketing Network details (15.08.2021)

S.	Infrastructure	2013-	2014-	2015-	2016-	2017-	2018-	2019-	2020-
No.		14	15	16	17	18	19	20	21
1	Distribution Routes	113	117	119	132	148	157	157	173
2	Zonal Offices	16	16	16	16	27	27	27	27
3	Milk Depots	470	470	433	437	441	493	493	456
4	Delivery Points	311	311	361	376	485	512	530	597
5	Parlours	93	93	114	147	221	227	218	248
6	Milk Whole Sale Distributors	47	71	71	83	84	84	76	11
7	Milk Consumers' Co-operative Societies	49	49	49	49	49	49	49	49
8	Franchise Retail Outlets	184	202	451	556	594	649	651	1,245
9	Products Distribution Routes	14	16	25	33	33	36	35	42

8.7 Marketing outlets

Aavin has established the following infrastructure facilities to provide the consumers, easy access to milk and milk products.

- 1. At all District milk unions and Metro, milk is being sold through milk depots and milk delivery points which are located at strategic locations.
- 2. Sales outlets have been established exclusively for Aavin milk products.
 - a) Aavin Hi-Tech Parlours(Federation and Unions) -58
 - b) Private parlours -1,549
 - c) Hi-Tech parlours owned
 by the District Co-operative
 Milk Producers' Unions 37
 d) Whole Sale Distributors 321
- 3. Appointment of more salesmen/milk agents.

Further, Aavin milk is being supplied through the following channels also.

- 1) Aavin milk and milk products are being supplied to companies, colleges, Govt. Hospitals, hostels and refugee camps.
- 2) Aavin milk and milk products are being supplied at the doorsteps of the customers who book special orders in advance for marriage and other functions.
- 3) To enhance the reach of Aavin milk and milk products to more number of general public, efforts have been taken to cover more number of petty shops, provisional stores, tea shops, bakeries, etc. as Aavin retail agents under special enrolment program with Rs.1,000 as deposit amount.

8.8 Special Sales Camps

During the last Deepavali, Christmas and Pongal festival time, the Federation has released 5 new varieties of Aavin special sweets. To promote new varieties of Aavin sweets, several makeshift parlours were arranged for general public at Metro and District Unions. Similarly, during summer, makeshift parlours were put up in all the districts for sale of buttermilk, lassi, yogurt, flavoured milk and ice cream varieties.

8.9 Export of Milk and Milk Products

To safeguard the interest of the member producers, the entire quantity of milk is procured by district milk unions. During 2015-16, the average procurement of milk had exceeded the milk sales in Tamil Nadu. Nearly 6-8 lakh litres of milk are converted into products daily. To increase the sales of Butter and Skimmed Milk Powder, the Government has suggested to export Aavin products to other countries.

Accordingly, Salem Union has obtained the export license for Ultra High Temperature Milk

(UHT) and FM Tetra packets while Erode Union has obtained an export license for Ghee. Tiruvannamalai plant of Federation has obtained an export license for Skimmed Milk Powder and Ghee.

At present, Aavin products are being exported to Singapore, Hong Kong, Qatar and Dubai and action is being taken to export Aavin products to other countries shortly.

So far, a total of 2,89,692 litres of milk worth about Rs.139 lakh and ghee worth about Rs.13.53 lakh has been exported to Singapore. Another agent has so far exported 74,200 litres of milk worth about Rs.35.85 lakh.

Similarly, a total of 28,080 litres of milk worth about Rs. 13.47 lakh has been exported to Hong Kong. Further, 15,600 litres of milk worth about Rs.7.5 lakh, has so far been exported to

Qatar while 6,919 litres of Ghee worth about Rs.28.76 lakh has been exported to Dubai.

The Hon'ble Chief Minister of Tamil Nadu has handed over "Business Agreement" to 2 "Whole Sale Dealers" for selling Aavin milk and milk products in other States namely Andhra Pradesh, Telangana and to 4 "Merchant Exporters" of other Countries such as United Arab Emirates, Dubai, Abudhabi, Sharjah, Ajman, Oman, Qatar, Canada and America (California) on 21.08.2021.

Thereby it is expected to sell Aavin products for a sum of Rs.60 Crore per annum. Further, we will also examine the availability of business opportunities in other States and other Countries in future.

8.10 Countries for exports

After the Covid pandemic, the wholesale dealers of exports are expected to start exporting the product to the countries allotted for them. Further, export of Aavin milk products to Bahrain, Kuwait, Oman, Saudi Arabia, Cambodia, Indonesia, Myanmar, Philippines, Thailand and Sri Lanka will be initiated by appointing more wholesale dealers.

8.10.1 Efforts for increasing export

- ➤ Efforts have been taken to obtain the export license to export additional items of Milk Powder and Butter from Erode Union.
- Special attention will be given for exporting Ghee to the South East Asia and Middle East countries.
- ➤ Efforts have been taken to obtain the export license to export additional items of Paneer and Curd from Salem Union.

Necessary steps have been taken to export Milk powder and Ghee from DCPP, Ammapalayam for which the export licenses have already been obtained.

8.11 Additional income anticipated by introduction of new products and other measures – Rs.30 Crore

8.11.1 New products to be launched – Rs.22 Crore

- Now there is a huge demand for Baby food, Dairy whitener, Cheese, Milk cream and new sweet varieties. Hence, Aavin has planned to produce these products to improve the sales revenue.
- Through launch of new products, Aavin expects to earn an additional income of Rs.22 Crore.

8.11.2 Products for value addition – Rs.6 Crore

- There is a huge demand for Butter chiplets, Curd sachets (1 Litre), Flavoured Milk (1 Litre) and Slim Milk (1 Litre) in the market. In order to meet out the market demand, these products will be introduced into the market very soon.
- Through new value-added products, Aavin expects to earn an additional income of Rs.6 Crore per year.

8.11.3 Price revision of milk products – Rs.2 Crore

➤ Aavin produces value added milk products like Badam Mix, Butter, Ghee, Milk Khoa & Flavoured Milk for which the selling price was fixed long ago. Hence, the price of these products will be increased marginally to ensure additional revenue of Rs.2 Crore.

Even after the proposed price revision for these products, Aavin products' price would be cheaper than that of private brands.

8.12 Sales expansion plan

- Aavin may earn additional income, upon the recommendation of the Government, for supply of Aavin products to educational institutions, colleges and students Hostels.
- Currently Aavin has introduced milk and products sales through E-Commerce mode in small numbers. As the digital market is growing exponentially, Aavin will make all possible efforts to increase the market share in the digital market.
- At present, Aavin exports only UHT Milk and Ghee to Singapore, Qatar & Hong Kong. In the near future, efforts will be taken to export these products to Sri Lanka, Mauritius, Malaysia, etc. where people of Tamil origin are present in significant

numbers. Export promotion will be initiated in these countries. Thus, the sales volume will be increased by around five times in exports.

- Action will be taken to meet the demand for 5ml, 10ml, 25 ml, 50 ml and 100 ml sachet ghee in Pilgrimage centres.
- Action will be taken to initiate milk and milk product supply in Supermarkets, Grocery Shops, Hotels, Bakeries and Sweet Stalls.
- Action has been initiated for uniform design and labeling for all the Aavin Milk and Milk products throughout Tamil Nadu.
- More retailers will be appointed.
- More whole sale agents will be appointed in the uncovered areas where the scope of sales is more.

8.13 Consumer Care and Support Cell

The Consumer Care and Support Cell (CCSC) of the Federation is functioning at the

corporate office, Nandanam. It is provided with a Toll-Free No. 1800-425-3300. Since this unit is functioning 24 x 7 days, consumers can contact the cell at any time for registering and redressal of their complaints / grievances. The CCSC is immediately communicating the complaints / grievance to the section / official concerned and necessary action is taken to rectify the complaints. During the year 2020-2021, a total of 394 complaints were received and redressed.

Action has been initiated to redress the consumer complaints through online provisions.

9. QUALITY CONTROL ACTIVITIES

The quality of milk procured from farmers as well as the milk and milk products supplied to the consumers has to be estimated for FAT and SNF for better remuneration to the farmers and to meet out the legal standards fixed by the Food Safety and Standards Authority of India under FSSAI Act 2006. The milk procured from farmers is estimated for FAT and SNF content at Primary Co-operative Society level and milk cost payment is done on the basis of FAT and SNF contents. Modern technologies like infrared spectrum analysis, etc. are also used for estimation of FAT and SNF at primary co-operative level.

Further, advanced quality control analysis for physical, chemical and bacteriological parameters for milk and milk products is regularly carried out. This is to ensure Adulterant, Preservative and Neutralizer-free quality with only minimum permitted level in milk and milk products when

such tests are carried out at BMC / CC / District Union Dairy / Metro Dairy Laboratories.

Adequate training in testing the milk is imparted at all levels like Milk Producers, Staffs of Co-operative Societies, District Unions and Federation, thereby ensuring the quality of milk as per the prescribed standards for consumption. Modern technologies like Fourier Transform Infrared (FTIR) is being used in BMCs, Chilling Centres and main Dairies to detect adulterant and estimate of FAT and SNF in milk. Personnel hygiene of the employees who are in direct contact with milk and milk products is ensured and they are provided with gloves, head caps and masks at the work place. Proper cleaning of utensils, milk collecting equipment, road milk tankers and plant and machineries is ensured after each process. Necessary quality certification at par with FSMS have been obtained for most of dairy plants and product dairy. ΕIΑ the

certification for exporting milk and milk products has been obtained for Erode, Salem and Tiruvannamalai dairy plants. BIS and AGMARK certification have been obtained for Skimmed Milk Powder and Aavin Ghee respectively. Various analyses are conducted for milk and milk products before despatch in order to ensure quality and safety of the products.

Awareness on adulteration in milk and on the consequences of such adulteration is being created by conducting interaction meeting with milk producers, milk consumers and local people involving officials of Aavin as well as various departments like Dairy Development, Animal Husbandry, Food Safety in places where general public are gathering in substantial numbers. Periodical meetings on the review of quality of milk and milk products are being conducted and necessary action taken accordingly.

The District Collectors who are the heads of the respective District Level Steering Committee for the Food Safety and Standards Act are also taking suitable action to ensure food safety in Dairy Development Department and Private Dairies.

Analysis for the absence of Aflatoxin-M1 in milk or else, if present, to the maximum allowable level of 0.5 mg as prescribed by FSSAI is conducted at District Union and Federation laboratories. It ensures safety of milk and milk products to consumers.

The quality control laboratories in all the 4 Metro Dairies and 17 District Union Dairies are being upgraded with installation of advanced milk analysing equipment for adulterant detection using FTIR technology. A grant for Rs.17.85 Crore has been sanctioned from Government of India under National Programme for Dairy Development

(NPDD) during 2019-20 to purchase FTIR technology adulterant detection equipment, each costing Rs.0.85 Crore.

Further, establishment of an apex level Central Quality Control Lab at Madhavaram at an estimated cost of Rs.8 Crore under the financial assistance from Government of India is in progress and the laboratory will be equipped for detecting adulterants, pesticide residues, heavy metals, antibiotic residues and mycotoxins like Aflatoxin.

10. DAIRY INFRASTRUCTURE DEVELOPMENT SCHEMES UNDER STATE/UNION GOVERNMENT

10.1 Infrastructure developed under the National Agriculture Development Programme (NADP)

National Agriculture Development Programme (NADP) is being implemented from 2007-2008 covering Cattle Health, Milk Procurement, Milk

Chilling, Infrastructure for Dairy processing and Marketing.

Under this scheme, emergency Veterinary health services at the door step of milk producers have been provided through 162 veterinary doctors.

So far, Rs.269.64 Crore has been received under the NADP scheme for animal health activities, infrastructure development for milk procurement, milk chilling, processing, marketing and value added product manufacturing facilities.

Establishment of fully automated Paneer production and packing plant with 2 MT/day with an estimate of Rs.10.35 Crore has been sanctioned under this scheme for the year 2020-21 with a grant of Rs.5.17 Crore.

During the current year 2021-2022, Rs.14.86 Crore has been sanctioned under NADP to

establish a cattle feed plant at Virudhunagar District and for installing Milk analysers at various Milk Producers' Co-operative Societies.

10.2 National Programme on Dairy Development (NPDD)

National Programme on Dairy Development (NPDD) is a scheme of the Union Government envisaging development of infrastructure at the grass-root level related to milk production, procurement, processing and marketing by District unions / Federation. The scheme also envisages extension activities including training of farmers.

The scheme is being implemented since 2014-2015. A sum of Rs.146 Crore has been sanctioned till 2020-2021. Out of Union Government's share, a sum of Rs.90.23 Crore has been released so far for creating infrastructure

related to milk procurement, strengthening of milk co-operative societies and marketing of milk.

A new dairy processing plant with a capacity of 1 Lakh Litres per day at Padalur, Trichy District and a milk condensing plant with a capacity of 1 Lakh Litres per day at Madurai are the major infrastructure projects completed under this scheme recently.

Besides this, Dairy Processing Infrastructure Creation Grant has been sanctioned for improving the chilling facilities for milk at the village level, strengthening the quality milk procurement facilities by installing Bulk milk Coolers, Data Processing Milk Collection Units and Automatic Milk Collection Units and the facilities were established in all district unions.

A grant of Rs.115 Lakh for establishing an advanced Pathogen detection laboratory at Coimbatore dairy has been sanctioned under this

scheme and the process for procurement of equipment and construction of building has been started.

10.3 Infrastructures Development Fund under National Agriculture Bank for Rural Development – Rural Infrastructure Development Fund (NABARD –RIDF)

For the benefit of rural milk producers the State Government is funding the Milk Co-operatives to create infrastructure through NABARD, Rs.220.30 Crore has been released from 2014-2015 to 2018-2019.

For the year 2021-22, administrative sanction has been accorded to establish administrative building for newly formed Namakkal and Tirupur Unions and to establish Cheese plant at Nilgiris Union and Fermented Milk Products Production unit at Virudhunagar at an estimated cost of Rs.48.62 Crore. The proposal

has been sent to Government for Financial sanction under NABARD tranche XXVII 2021-22.

10.4 Dairy Processing and Infrastructure Development Fund (NABARD - DIDF)

This scheme is Union Government's another scheme aiming modernization of milk processing plants and machinery for increased production of value-added products, thereby enabling the optimum value of milk to milk producer farmers and supply of quality milk to consumers.

The following 4 projects have been sanctioned at a total financial outlay of Rs.379.29 Crore with a loan component of Rs.303.42 Crore from NABARD at an interest rate of 6.5% per annum during 2019-20.

1. Establishment of Fully Automated Dairy Plant of capacity 1.00 LLPD at Thanjavur.

- Establishment of Ice-Cream Plant of 6,000
 Litres Per Day and value-added Milk
 Products Plant at Trichy.
- Establishment of New Dairy Plant of capacity 7 LLPD and 30 Metric Tons Per Day Powder Plant at Salem.
- Establishment of 10 LLPD Dairy Plant (expandable to 15 LLPD) at Madhavaram, Chennai.

10.5 Rashtriya Gokul Mission – Progeny Testing Programme

Under Rashtriya Gokul Mission (RGM), Progeny Testing Programme is being implemented in 3 District Co-operative Milk Producers Unions, viz. Vellore, Erode and Salem with a financial outlay of Rs.2,087.51 lakh.

The main objectives of the Progeny Testing Programme are:

- To produce the required High Genetic Merit bulls for semen stations through progeny testing
- To establish a system of genetic evaluation of young bulls, bull dams and bull sires and their selection for continuous genetic improvement

It is envisaged to produce 225 High Genetic Merit (HGM), out of which, 180 disease free High Genetic Merit (HGM) bulls will be distributed under this scheme by 2023-2024. So far, 53 bull calves have been procured and 27 HGM bull calves have been distributed to various semen stations.

10.6 National Livestock Mission (NLM)

Insurance cover for cattle belonging to milk producers is being arranged with 50% subsidy on premium through the Tamil Nadu Livestock Development Agency (TNLDA) under National Livestock Mission (NLM).

For the year 2020-21, 1.71 lakh milch animals were insured by TCMPF. It is proposed to insure 2.00 lakh milch animals during the year 2021-22.

10.7 Nationwide Artificial Insemination Programme (NAIP)

Nationwide Artificial Insemination Programme (NAIP) is a Government of India Scheme under Rashtriya Gokul Mission in order to improve the productive potential of cattle & buffaloes through Artificial Insemination (AI) with the semen of high genetic merit bulls. Under this programme, 12 districts of Tamil Nadu have been selected where the coverage of AI is less than 50% namely Cuddalore, Kanchipuram, Nagapattinam, Pudukottai, Ramanathapuram, Salem, Sivaganga, Tiruvannamalai, Tiruvallur, The Nilgiris, Viluppuram and Virudhunagar.

Under NAIP phase- I, target for animals to be covered is 60,000 under this scheme. Out of which, NAIP unions have covered 59,899 animals for AI with frozen semen of High Genetic Merit bulls.

Under NAIP phase-II, out of the total target of 1,50,000 animals, 1,51,921 animals have been inseminated under this programme free of cost.

This scheme is implemented by both Animal Husbandry Department and TCMPF Ltd through TNLDA under RGM with 100 % grant assistance.

10.8 Fodder cultivation

State Fodder Development Scheme (2019-20):

Salem and Villupuram District Milk Unions have been identified to produce green fodder and to purchase on a cost basis as Buyback method at a project cost of Rs. 1.645 Crore for

implementation under State Fodder Development Scheme (SFDS 2019-2020) for supply of fodder to the milk producers.

Fodder Bank:

For the purpose of meeting out the green fodder requirement, lands owned by the farmers are being identified for cultivating fodder by supplying inputs to them free of cost and to purchase fodder from them for supply to other needy milk producers. An average of 25,000 acres will be identified for this purpose.

It is proposed to cultivate green fodder in about 83 acres of vacant land available with the Federation and Unions. This will reduce the deficit in fodder availability.

11. MAJOR INFRASTRUCTURE AND TECHNOLOGY UPGRADATION PROJECTS

The following 5 projects have been sanctioned at a total financial outlay of Rs.307.44 Crore with a loan component of Rs.245.95 Crore from NABARD at an interest rate of 6.5% per annum for the year 2020-21.

- Expansion of existing dairy plant at Ambattur Dairy from 4 LLPD to 8 LLPD and Sholinganallur from 4 LLPD to 7.5 LLPD
- 2. Establishment of infrastructure for Butter packing, Fermented milk products manufacturing at DCPP, Ammapalayam, Additional infrastructure for cream handling at Sholinganallur Dairy, Ice cream packing machine at Ambattur Dairy.
- 3. Establishment of 0.25 LLPD capacity UHT milk plant at Injar, Virudhunagar Union.
- 4. Establishment of 50 TLPD capacity dairy plant at Aniyaparanallur village, Thoothukudi Milk union.

5. Establishment of new 1.0 LLPD capacity dairy plant at Theni Milk union.

Further, establishment of new Ice cream plant at Salem and Madurai District Unions under the Unions' and Federation's funds is under progress.

11.1 Ultra-High Temperature (UHT) Processing Plant in Sholinganallur Dairy

Ultra-High Temperature (UHT) treated milk is heated above 135°C and packed under the sterile condition. It can be stored for 90 days at normal room temperature. A new UHT milk plant with an aseptic packing unit to process and pack 1.0 lakh litres of milk per day at a cost of Rs.35.98 Crore was completed. This project aims in attracting the high-end consumers and meet the export requirements, thereby expanding Aavin's market share.

11.2 Hi-Tech Parlours

In order to enhance the visibility and the brand image of Aavin, Hi-Tech Parlours with facilities such as children play area, parking area, and air-conditioned servicing area arrangements have been created in the Chennai metropolitan region and in District Headquarters. 21 Hi-Tech Parlours in Chennai metropolitan region and 43 Hi-Tech Parlours in District Head quarters have been established and are running successfully.

11.3 Usage of Non-Conventional Energy in Dairies

At present, 8 Dairies, 4 Chilling Centres and 100 BMCs were equipped with solar heating systems to produce 1.11 Lakh litres of hot water per day at around 80°C. A parabolic solar concentrate system has been installed at Sholinganallur and Salem dairies to reduce the operating cost in fuel. A Solar Thermal System has been installed at a total cost of Rs.2.00 Crore

at Madurai dairy to run the process plant in day time. Now, a 2MW Solar Power generation unit, at an estimated cost of Rs.10.50 Crore is under progress at the same premises.

11.4 Integrated Dairy Management System (IDMS)

The objective of IDMS Project is to integrate all the activities of Village Level Milk Producers' Co-operative Societies (MPCS), District Co-operative Milk Producers' Unions (DCMPUs) and Tamil Nadu Co-operative Milk Producers' Federation (TCMPF) on a digital platform through computerisation and automation. The first phase of IDMS project was to integrate all the business activities in 300 MPCS, 4 feeder balancing DCMPUs and TCMPF at a cost of Rs.46.55 Crore and the roll out was completed in December-2019 in all units. The Government of India has sanctioned Rs.18.34 Crore as 100% grant-in-aid.

All the modules of the IDMS were completed by 31.12.2019 and the software was upgraded during 01.01.2020 to 30.10.2020. The project was implemented on 01.11.2020.

It is further proposed to extend this IDMS project to the remaining 7,700 MPCS and 21 DCMPUs and 200+ BMCs during the current financial year 2021-2022 at the increased outlay / estimated cost of Rs.200 Crore. TCMPF further intends to extend the benefits of IDMS to all the farmers, society secretaries, consumers and dealers through Mobile platform. This will bring in greater visibility of the organisation to the digital world and eventually lead to increase in TCMPF sales.

11.5 Installation of Bulk Milk Coolers (BMCs)

The concept of using Bulk Milk Coolers nearer to the Milk Collection Centre is a part of clean milk production initiative. The installation of

BMCs is given due importance as the concept of Chilling Centres is being discarded.

Bulk Milk Coolers of 500, 1,000, 2,000, 3,000 and 5,000 litres capacities have been installed by taking into consideration the average total milk procurement of the society (or) cluster societies functioning in a radius of 5 to 10 kms.

So far, 591 BMCs with the total chilling capacity of 20.67 lakh litres per day have been installed in various DCMPUs.

12. FINANCIAL PERFORMANCE OF MPCSs, DCMPUs & TCMPF

12.1 Profit & Loss of MPCSs

The following is the profit and loss details of Milk Producers' Co-operative Societies (MPCSs) level during 2018-19 & 2019-2020.

S.No.	Year	No. of MPCSs earned Profit	No. of MPCSs incurred Loss
1	2018- 19	6,665	3,282
2	2019- 20	6,364	3,264

Continuous efforts have been taken to analyse the root cause of the losses and convert the loss making MPCSs into profit earning MPCSs in future.

12.2 Profit & Loss of DCMPUs

The following is the profit and loss details of DCMPUs from 2015-16 to 2020-21.

S.No.	Year	Total Amount (Rs in Crore)		
1	2015-16	82.77 Loss		
2	2016-17	111.78 Profit		
3	2017-18	62.26 Loss		
4	2018-19	93.20 Loss		
5.	2019-20	1.33 Profit		
6	2020-21	97.14 Profit		
0	2020-21	(Tentative)		

Reasons for reduction in profit of DCMPUs:

1) Sale of Skimmed Milk Powder (SMP)

S. No.	Year	Production Cost of SMP	Average selling price of SMP	Remarks	
1	2017- 18	Rs.240 per kg.	Rs.163.31 per Kg	Loss incurred was Rs.120.08 Crore	
2	2018- 19 Rs.240 per kg.		Rs.141.79 per kg.	Loss incurred was Rs.185.36 Crore.	

2) From 16.12.2016, the retired employees were provided ex-gratia pension of Rs.3,500 p.m. and for those who expired, the family ex-gratia pension was fixed at Rs.1,750 p.m. Further, from 28.11.2019 the ex-gratia pension was raised to Rs.4,000 p.m and family ex-gratia pension raised to

- Rs.2,000 p.m. For this, an additional expenditure of Rs.12.62 Crore per year was incurred by the DCMPUs.
- 3) The salary of the employees of the DCMPUs were raised as per recommendations of the 7thPav Commission and an additional expenditure of Rs.24 Crore per year was by the DCMPUs incurred from 01.10.2017.
- 4) The Government has revised the rate of interest on all loans as 10.5% p.a w.e.f. 25.02.2019 resulting in an additional expenditure of Rs.10.94 Crore per year as interest on the loan of Rs.104.16 Crore.
- 5) There is a revenue loss of Rs.10.97 Crore per month for the DCMPUs due to reduction in selling price of sachets milk by Rs.3 per litre from 16.05.2021.

12.3 Profit & Loss of TCMPF

The Federation recorded profit continuously from 2015-2016 (except 2019-20) after increase in procurement price by Rs.5 per litre for cow milk, Rs.4 per litre for buffalo milk and increase in selling price of sachet milk by Rs.10 per litre from 01.11.2014.

The details of Profit & Loss of TCMPF from 2015-16 to 2020-21 are as follows:

S.No.	Year	Total Amount (Rs in Crore)
1	2015-16	70.40 Profit
2	2016-17	27.56 Profit
3	2017-18	34.30 Profit
4	2018-19	29.31 Profit
5	2019-20	94.09 Loss
6	2020-21	38.15 Profit
		(Tentative)

Reasons for reduction in Profit of TCMPF:

1) During the year 2016-2017, a sum of Rs.29.87 Crore was provided towards LIC

Group Leave Encashment Scheme for TCMPF employees.

- 2) From 16.12.2016, the retired employees were provided ex-gratia pension of Rs.3,500 p.m. and for those who expired, the family pension fixed ex-gratia was at Rs.1,750 p.m. Further, from 28.11.2019 the ex-gratia pension was raised to Rs.4,000 p.m. and family ex-gratia pension raised to Rs.2,000 p.m. For this, an additional expenditure of Rs.9.98 Crore per year was incurred by the TCMPF.
- 3) The salary of the employees of the TCMPF was raised as per the recommendations of the 7th pay commission. For this purpose, an additional expenditure of Rs.12.03 Crore per year was incurred by the TCMPF from 01.10.2017.

- 4) TCMPF availed interest free loan, mid-term loan and NABARD loan for an amount of Rs.150.13 Crore. Interest due amount of Rs.27.06 Crore to Government of Tamil Nadu upto the period of 2018-19 was waived. Further, Government has instructed to make interest payment at the rate of 10.5% p.a. from 25.02.2019 onwards for the above mentioned loan amount. Due to this, there was an increased financial burden of Rs.15.76 Crore per year to the TCMPF.
- 5) The increase of trade margin amount from Rs.1.50 to Rs.2.75 per litre to C&F agents with effect from 19.09.2019 has caused an additional expenditure of Rs.22.81 Crore for one year.
- 6) During the year 2019-20, a sum of Rs.125 Crore was provided as liability towards

payment of ex-gratia pension of Rs. 3500 per month to retired employees and for those expired, the family ex-gratia pension at Rs.1750 per month from 16.12.2016 and further increased ex-gratia pension to Rs.4000 per month and family ex-gratia pension to Rs.2000 per month with effect from 28.11.2019. In the above circumstances, TCMPF Ltd reported a loss of Rs.94.09 Crore during 2019-20 otherwise TCMPF would have earned a profit of Rs.31.56 Crore.

12.4 LOAN DETAILS

(Rs. in Crore)

S.No	Details	TCMPF	District unions	Total
1.	Tamil Nadu Government Ioan	150.13	104.16	254.29
2.	Working capital loan from bank		112.81	112.81
	Total	150.13	216.97	367.10

- 1) To compensate the loss due to increase in the procurement price of milk without corresponding increase in the selling price and to create infrastructure, the amount payable towards loan sanctioned by Government is as follows:
 - a) Medium term loan with 10% interest for Rs.24.50 Crore
 - b) Interest free Ways and Means advance of Rs.151.47 Crore
 - c) Loan amount Rs.60.18 Crore to establish powder plant at Tiruvannamalai @ 6.5% interest
 - d) Rs.18.14 Crore loan to construct Dairy at Padalur, Trichy.

The Government, vide G.O. MS.72 Finance (Loan) Advance, dt.25.02.2019, consolidated the above said loans payable to Government, amounting to

- Rs.254.29 Crore into a single loan with 10.50% interest per annum.
- 2) During November 2020, District Unions held stock of 16,499 MTs of SMP & 5,739 MTs of Butter, totally valuing Rs.611.57 Crore. Since the milk dues payable to farmers increased to Rs.456.54 Crore and overdue by 71 days, the Federation and District Unions availed a sum of Rs.325.50 Crore as working capital loan from a nationalised bank against the stock of SMP & BUTTER and paid the milk cost dues to the farmers. Federation and District Unions have repaid a sum of Rs.212.69 Crore and the balance loan payable is Rs.112.81 Crore.
- 3) As on 15.08.2021, the District Unions hold a stock of 14,749 MTs of SMP and 4,690 MTs of Butter totally valuing Rs.438.70 Crore.

The milk dues payable to farmers to the tune of Rs.201.87 Crore and repayment of loan amount of Rs.112.81 Crore availed from Nationalized bank will be settled from the surplus fund of Rs.49 Crore available with TCMPF, Rs.84 Crore with District Unions and liquidating the stock or by availing loan against stock.

12.5 Turnover and Sales Revenue of MPCSs, DCMPUs & TCMPF

12.5.1 Turnover and sales revenue of MPCSs

The Milk Producers' Co-operative Societies are procuring around 41 LLPD, which generates a financial flow of nearly Rs.12.60 Crore daily to the rural economy.

12.5.2 Turnover and sales revenue of DCMPUs

The turnover of the District unions which was Rs. 1,533.39 Crore during the year 2010-2011

has increased to Rs. 4,763.35 Crore in 2019-2020 i.e. an increase of 210%. The turnover of Rs. 5,119.61 Crore in 2020-21 when compared to the turnover of Rs. 4,763.35 Crore in the year 2019-20 witnessed a growth rate of 7.5%.

12.5.3 Turnover and Sales Revenue of TCMPF

The turnover of the Federation for the year 2019-20 was Rs.2,184.10 Crore and during the year 2020-21 it was increased to Rs.2,291.80 Crore i.e an increase of 5%.

13. CO-ORDINATION WITH VARIOUS GOVERNMENT DEPARTMENTS

Dairy Development Department is implementing various welfare measures in coordination with various government departments like Agriculture, Animal Husbandry, Rural Development and Panchayat Raj and institutions like Tamil Nadu Livestock Development Agency (TNLDA) and Tamil Nadu

Veterinary and Animal Sciences University (TANUVAS).

14. STAFF WELFARE MEASURES

- 1. During the year 2020, 70 DCMPU employees and 159 Federation employees were promoted.
- 2. 24 persons were newly recruited in the Dairy Development Department along with 85 in DCMPUs and 80 in the Federation.
- 3. Appointments given under Compassionate Grounds are detailed below.

Organization	Year	No. of persons
Dairy	2020	1
Development Department	2021	2
District Unions	2020	5
	2021	0
Endoration	2020	4
Federation	2021	50

Hon'ble Chief Minister of Tamil Nadu has handed over orders for appointment on Compassionate ground on 21.08.2021 to the legal heir of 1 employee who died due to Covid-19 in Dairy Development Department and to the legal heirs of 47 employees who died while in service in the Tamil Nadu Co-operative Milk Producers' Federation Ltd.

- All District Unions and Federation retired employees were given half litre free milk per day.
- 5. All District Unions and Federation retired employees were given ex-gratia pension of Rs.4,000 per month. Family members of deceased retired employees were given Rs.2,000 per month.

- 6. In order to benefit employees of the Federation, various trainings were given at NDDB training centre at Bengaluru, Rural Development training centre at Anand, Natesan Co-op. Institute of Management and Anna Institute of Management, Chennai. Efforts are being taken to impart training to newly appointed staff members of the Federation at Government Employees Training Centre at Bhavani Sagar, Erode District.
- 7. In the year 2020-21, PLI was given to all District union employees to the value of Rs.27.30 lakh and Rs.12.50 lakh to Federation employees.
- 8. In the year 2020 (Deepavali Festival), an Ex-gratia Bonus amount of Rs.405.58 lakh was given to 2,019 employees of 25 DCMPUs and 2,890 employees of Federation.

- 9. In the year 2020 Deepavali Festival, milk products worth Rs. 12.54 lakh was given to 1,327 employees of the Federation and Rs. 4.55 lakh worth of milk products was given to 2,170 retired employees. Similarly, for 3,172 district unions employees, Rs. 29.97 lakh worth of milk products were given. For 2,763 retired district level union employees, milk products worth Rs. 5.80 lakh were issued.
- 10. In the year 2020-21, for Pongal festival, Rs.8.67 lakh worth of milk products were issued to 1,325 Federation employees and Rs.5.23 lakh worth of milk products were issued to 1,975 retired employees of the Federation. Similarly, Rs.20.77 lakh worth of milk products were issued to 3,172 employees of District Unions and Rs.7.32 lakh worth of milk products issued to 2,763 retired employees of District unions.

15. SERVICES OFFERED TO MILK PRODUCERS

15.1 The Re-structured Peraringnar Anna Co-operative Milk Producers' Welfare Fund

- > To respect and appreciate the loyalty of the milk producers towards the department, the Peraringnar Re-structured Anna Co-operative Milk Producers' Welfare Fund was created in which the pouring milk member contributes one rupee per month Society while the and the District Co-operative Milk Producers' Union concerned contribute 50 paise each
- The legal heirs of the deceased milk producer and those who were totally physically disabled due to accident will be given the benefit from the fund
- Policy passbooks were issued to the members

- ➤ The Hon'ble Chief Minister of Tamil

 Nadu handed over cheques to 44

 beneficiaries for a sum of Rs.104.25 lakh on
 21.08.2021
- ➤ So far, a sum of Rs.333.75 lakh (up to 21.08.2021) has been released to 172 beneficiaries. Now, Rs.658 lakh available with us which can be utilized for the settlement of future claims under this scheme

The Government has increased the assistance amount from Rs.1.75 lakh to Rs. 2.50 lakh for fatal accident or serious permanent disability of a milk pouring member w.e.f. 12.11.2019 and the details are as follows:

S.No.	Financial Assistance	Amount (in Rs.)
1	For Education	Raised from Rs.10,000 to Rs.25,000
2	For Marriage	Raised from Rs.10,000 to Rs.30,000
3	Funeral Expenses	Rs. 5,000

Above increase of relief amount to the beneficiaries has been done without increasing the member contribution.

15.2 Supply of subsidised Cattle Feed and Mineral Mixture

To encourage milk producers to purchase Aavin cattle feed, the District Co-operative Milk Producers' Unions are providing a subsidy of Rs.2 to Rs.5 per kg. of feed.

An incentive of Rs.10 per kg. is being given to the society staff for the sale of the mineral mixture. The subsidy provided by the above

District Co-operative Milk Producers' Unions is being provided from the Unions' own funds.

Accordingly, 1,08,485 MT of cattle feed and 3,427 MT of mineral mixture were supplied to milk producers in the year 2020-21, out of which Rs.3,562.43 lakh was provided as cattle feed subsidy to the milk producers and Rs.48.20/- lakh has been provided to the societies for mineral mixture sale as an incentive by the respective unions.

15.3 Payment of incentive to milk producers by DCMPUs

Similar to the MPCS, the profit earned by the district unions is also being shared with the milk producers through the MPCS by way of incentive and is being paid according to the quantity of milk poured by the producer. Accordingly, during 2019-2020, a sum of Rs.291.79 lakh has been paid as an incentive in Kanyakumari and Madurai

District Co-operative Milk Producers' Unions wherein 30,268 milk producers in 1,317 MPCS were benefited.

15.4 Payment of bonus to milk producers by Milk Producers' Co-operative societies

As a measure of sharing the profit earned by the society, 50% of profit earned by the society is 'ploughed back' to the member milk producers as provided in the by-laws of Milk Producers' Co-operative Societies (MPCS) by way of dividend on share capital, patronage rebate and bonus for the value of milk supplied by them to the society.

During 2020-2021, a sum of Rs.1,111.70 lakh has been paid as bonus, Rs.9.86 lakh as dividend and Rs. 1,488.74 lakh as patronage rebate to around 2.48 lakh members of the societies.

15.5 Veterinary Input Services to Milk Producers

Around 16.89 lakh milch animals are in the co-operative ambit in Tamil Nadu. The majority of them are Cross-bred Jersey animals and the daily average yield per animal is around 6.69 litres. At present semen from High Genetic Merit (HGM) bulls are used for Artificial Insemination (AI) thereby increasing the milk yield of the animals.

This department is providing the following input services to the milk producers:

- a) Doorstep Veterinary Service
- b) Doorstep Emergency Service
- c) Artificial Insemination Service (AI)
- d) Conducting infertility camps
- e) Cattle insurance coverage
- f) Extension education and training to MPCS staff/milk producers
- g) Summer Stress Management

15.6 Capacity Building of Milk Producers

The following steps have been taken:

- The milk producers are being equipped with knowledge on Dairy Animal Management, Clean Milk Production and effective utilization of fodder resources through Ration Balancing techniques.
- Rearing of milch animals on scientific line with acquired knowledge through various training programmes help farmers to increase average daily milk yield.
- 3. The average net daily income was increased by reducing the cost of milk production.

15.7 Union Training Centres

The Union training centres are accredited by CMU - AITI, Government of India and Ministry of Agriculture for conducting various training programmes to milk producers, society secretaries and village level workers.

The training centres have boarding and lodging facilities, learning resources, teaching, audio and video visual aids. Facilities are also available for practical and on the job field training.

By imparting training programmes, the farmers are well equipped with animal management practices, clean milk production practices, and fodder development activities.

15.8 Fodder Policy

Green Fodder plays a vital role in providing nutrients to dairy animals for yield improvement as well as reproductive health. It is the primary source of Vitamin-A, which is essential for reproduction in dairy animals. Presently, majority of the livestock population is fed with crop residues that includes straws and stovers. Efforts are being taken to ensure the availability of green fodder to all dairy animals.

To achieve this, the following strategies are being considered:-

- 1. To accelerate investment in storage resource development.
- 2. To promote community fodder banks where the surplus of fodder can be stored as silage / fodder blocks which will support during drought or summer season.

To develop enrichment of fodder for getting the better nutritive value of feed and fodder that supports improvement in productivity and reproductive performance including health of animals.

16. FUTURE PLANS OF DAIRY DEVELOPMENT DEPARTMENT

- Increase milk sales to 30.00 LLPD by aiming to achieve a 10% annual growth in liquid milk sales.
- 2. Increase the market share of the Aavin brand from the existing 47% to 55%.
- 3. Increase the share of Aavin Milk Products in the domestic market from the existing value of Rs.45 Crore per month to Rs.50 Crore in both metro and district unions by aiming at a 10% growth in product sales.
- 4. Reduce loss due to conversion of Milk into SMP & Butter by increasing the growth rate of value-added products sales from 3% to 6%.
- 5. Form 200 new societies by the end of the financial year and bring 200 non-functional / defunct societies into an active state within one year.

- 6. Reduce the losses of loss-making unions and bring them into profit-making units.
- 7. Increase the milk yield of cattle from existing 6.69 litres/day to 7.02 litres/day in the next five years.
- 8. Reduce transit losses to ensure better profitability.
- 9. Ensure availability of fodder, feed and other essential inputs to milch cows.
- 10. Augment conception rate to 48.50% from the existing 43% and AI coverage in cattle.
- 11. Making animal welfare as a core area of departmental activities by aiming for 100% prevention of outbreak in diseases like FMD.
- 12. Innovative approaches to strengthening the system like more use of solar energy and a cloud-based remote monitoring system.

16.1 Administrative Reforms

- Immediate steps will be taken to disburse milk cost payment dues to milk producers
- Dormant societies will be revived so as to facilitate more milk producers into the co-operative fold as well increase procurement.
- Common bye-laws for all District Milk Unions will be implemented.
- Monthly grievance meetings will be conducted for milk producers to redress their problems.
- The procedures for selling Butter and SMP will be rationalised.
- > The possibilities of creation of new District Milk Unions will be explored.
- To ensure competency, the required manpower, upto Manager cadre, will be recruited through TNPSC after obtaining necessary Government orders.

16.2 Reduction of Regulatory Compliance Burden and Improving Ease of Doing Business through e-Governance

As per the priority for the Government of Tamil Nadu, improving the competitiveness of the economy has been an agenda. Making the regulatory framework pertaining to dairying activities simple and effective is a distinct part of this agenda.

In this regard, various measures have already been undertaken and the following activities are in the pipeline to comply with this exercise.

The Food Safety and Standards Authority of India (FSSAI) license are to be obtained in all the Milk Unions by covering all the Bulk Milk Collection Centres and Processing Plants collectively instead of individual units to minimise and save time and money Instead of Annual renewal of FSSAI license, the option renewal every 5th year is being attempted

As an exercise of infusing reforms in the Co-operative Dairy industry for improving the ease of doing business, the following ventures are in the pipeline:

- Milk society registration through online mode
- Online redressal of complaints for both milk producers and consumers of Aavin milk and milk products
- Upgradation of milk testing facilities at the Primary Milk Societies with Automatic Milk Collection Units (AMCU) for simplifying the procedure with transparency in milk procurement and milk cost payment to these societies

- Spot acknowledgement to milk producers on quality, quantity and cost of milk poured at the time of milk collection
- Disbursement milk cost payment in ECS mode to all milk producers
- Introduction to good dairy husbandry practices to our milk producers by sending voice messages and SMS, so as to update their knowledge in dairy animal management.
- Online milk card issuance
- Single Window Portal for appointment of Agents for marketing of milk and milk products
- Agency registration and renewal through online facility
- ➤ Sale of Skimmed Milk Powder, Butter and Ghee is being taken up through National Co-operative Dairy Federation of India's e-Market platform and possibilities will be explored for other products also

- Provision of Billing Machines in all marketing outlets to establish more transparency, building confidence with customers and easing out sales operations.
- The environment friendly paperless billing method involving automated push notifications sent straight to the customer's mobile phone will be provided.
- Under Integrated Dairy Management System (IDMS) implemented in Aavin, Real Time Monitoring and performance of various dairying activities are covered under e-governance. The IDMS will be implemented in the remaining 21 District Unions to ensure a completely web-based environment to milk producers and consumers.
- Daily attendance of employees by using face detection device to save time and stationery

- Installation of CCTV in all the Dairy establishments under Aavin for effective monitoring
- Mapping the delivery points to aid in seamless delivery by optimising transportation cost and time
- Implementation of the e-Office File Management System in District Unions and the Federation
- Enabling on-line EMD facility in the Tamil Nadu on-line tender website exclusively for Aavin

16.3 Sustainable Development Goals and Response of Dairy Development Department

The 2030 Agenda for Sustainable Development, adopted by the United Nations Member States in 2015, shared a blueprint on peace and prosperity for people and the planet. 17 Sustainable Development Goals (SDGs) were

set for both the developed and developing countries.

Dairy Development Department has been specified under Goal No:2.0 which states, "End hunger, achieve food security and improved nutrition and promote sustainable agriculture", No: 2.3 and 2.a as target.

The target No: 2.3 states that there should be an increase in investment by 2030, the agricultural productivity and income of small-scale food producers should be doubled, concentrating on women and the farming family and equal access to land, other productive resources, and input knowledge, financial services, markets and opportunities for value addition and non-farm employment.

The target No:2.a states that there should be an increase in investment, including in international cooperation in rural infrastructure, agricultural research and in extension of plant and livestock gene banks to enhance agricultural productive capacity in developing countries.

16.4 Annual action plan to achieve the target

- > To involve more number of milk producers under co-operative ambit
- To attain the goal of "one calf a year"
- Implementing Ration Balancing Programme
- To purchase more number of animals by providing milch animal loans
- Expanding insurance coverage for the animals
- To impart capacity building training to milk producers
- Implementation of Clean Milk Production in all Dairy Co-operatives
- Provision of Automatic Milk Collection Stations with establishment more

- numbers of Bulk Milk Coolers in societies
- Ensuring the good initial quality of milk through proper maintenance of milk temperature at all levels
- Increasing infrastructure development in all dairies, to meet the increased milk production
- Implementation of State, Union and State-Union shared/ sponsored schemes to increase milk production

The department has formed SDG unit vide G.O. (Ms) No.184, Animal Husbandry, Dairying and Fisheries (A&C-2) Department, dated 26.12.2019. This unit shall work in close coordination with SDG cells under the Planning and Development Department with working groups in State, District and Field level officers and other institutions.

17. ELECTIONS IN MILK CO-OPERATIVES

The entire 3 tier Dairy Co-operatives are managed by democratically elected board members at society level. The elections are conducted by the Tamil Nadu State Co-operative Societies Election Commission under Tamil Nadu Co-operative Societies Act, 1983 and Tamil Nadu Co-operative Societies Rules,1988. The term of the elected board is 5 years. Milk Producers' Co-operative Societies are different from other co-operatives as only active members can contest and vote in the elections to elect the Board of Directors in the Milk Producers' Co-operative Society.

The tenure of the previous board expired in April 2018. To constitute the new Board, the elections for 6,534 societies were conducted in 4 stages. Phase-I was for the Primary Dairy Co-operative Societies of which 6,298 newly elected boards assumed charge of the

management for the respective societies. In the remaining societies, the election process was withheld due to judicial intervention and non-filing of nomination / ineligible voters in some cases.

In Phase-II, the election process was initiated for all the 25 District Co-operative Milk Producers' Unions. The newly elected board assumed charge of the management in 23 District Unions. Elections in Madurai and Thoothukudi District Unions could not be completed due to court cases.

In Phase-III, the election process was initiated for the Tamil Nadu Co-operative Milk Producers' Federation Ltd. in January 2019, but it was withheld due to court orders.

17.1 Election for Board of Directors in Primary Co-operative Milk Producers' Societies

The tenure of the Board of Directors in the Primary Co-operative Milk Producers' Societies

ended in April 2018. Efforts will be taken to conduct the elections for the Board of Directors as per the schedule received from the Tamil Nadu State Co-operative Societies Election Commission. Further due to non-availability of eligible voters and due to various administrative reasons, certain societies have been nominated with Administrator. Continuous effort are being taken to conduct the election in time for these societies too.

17.2 Election for the Board of Directors in District Co-operative Milk Producers' Unions.

In continuance to assuming of charges by the new Board of Directors in the Societies in the first phase, steps were taken to conduct election for 15 District Co-operative Milk Producers' Unions. Accordingly, the newly elected Board for 23 Unions have assumed charges. Due to pendency of court cases in the High Court, election process

could be completed for Madurai not Thoothukudi Unions. Therefore, Administrator has nominated to continue with the administration for these two unions. Τn accordance with the Court Judgment, election will be completed for these two Unions in consultation with Tamil Nadu State Co-operative Societies Election Commission.

17.3 Election for the Board of Directors in the Tamil Nadu Co-operative Milk Producers' Federation

In the third stage, even though the election proceedings have been retained during 2019 for the Tamil Nadu Co-operative Milk Producers' Federation, which is the apex body, the election work was stopped due to court proceedings. Under these circumstances, upon completion of the court case, when the election proceedings were about to restart, it was stopped due to Covid-19 pandemic. Upon lifting of lockdown and

easing of Covid-19 restrictions, the election for the pending Milk Unions and for the Tamil Nadu Co-operative Milk Producers' Federation will be conducted in consultation with the Tamil Nadu State Co-operative Societies Election Commission.

18. WAY FORWARD

- Efforts are being taken to achieve the goal of doubling the farmers' income by providing inputs such as fodder, cattle feed and mineral mixture at subsidised rate, thereby reducing the maintenance cost of animals.
- Infrastructure facilities will be developed in Dairies so as to handle more milk thereby procuring the entire milk produced by the milk producers.
- Action will be taken to reduce the running cost and establishment cost thereby increasing the profitability. For this, the existing machinery will be modernized to

- increase the efficiency and also to utilise the handling capacity of dairies to the fullest extent possible.
- Modern technical advancements will be implemented to increase the shelf life of the milk products.
- Action will be taken to organise new Milk Producers' Co-operative Societies in the uncovered potential areas and to bring more milk producers into the Co-operative ambit.
- Feasibilities of the export of Aavin milk and milk products to other countries will be explored.
- Action will be taken to release catchy advertisements and also to establish the number of parlours to increase the sales of Aavin milk and milk products in Bus Stands, Educational Institutions and Government offices, where public move in large numbers.

- More milk producers will be given training and awareness will be created on the production of adulteration-free clean milk thereby ensuring good quality milk at the village level itself.
- Fodder Banks will be created to store the excess fodder produced so as to utilize them in drought season. For this purpose, it is proposed to cultivate fodder in the farmers' land by arranging the supply of inputs such as fodder seeds, fodder slips and irrigation equipment.

19. BUDGET ALLOCATION

Under this demand for Dairy Development Department, for the Budget year 2020-2021, a sum of Rs. 31.11 Crore has been provided in the Budget, wherein the revenue expenditure amounts to Rs.31.11 Crore while the capital expenditure is only Rs.2,000. Anyhow, in view of implementing all the projects under Dairy Development, it has been increased to Rs.46.18 Crore in the final budget.

Currently, for the financial year 2021-22, an interim budget allocation of Rs.47.55 Crore has been made in which, Rs.47.55 Crore is revenue expenditure and Rs.2000 is capital expenditure. Since Audit Department is under the administrative control of Finance Department, the fund allocation for Co-operative Milk Societies Audit has not been incorporated for the budget of

Dairy Development Department. Hence, there is a reduction in the allocation.

Budget Allocation for Year 2011-2012 to 2021-2022

Year	Allocation (Rs. in Crore)
2011-12	65.72
2012-13	51.25
2013-14	35.97
2014-15	81.91
2015-16	98.18
2016-17	101.21
2017-18	118.63
2018-19	118.02
2019-20	246.84
2020-21	46.18
2021-22	
(Interim Budget allocation)	47.55

20. CONCLUSION

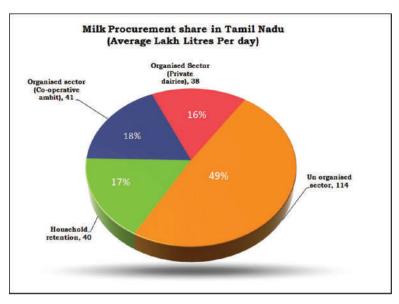
Dairy Development Department pledges to continue its efforts for the attainment of the goal of increasing the income of the milk producers / farmers to twice the current levels and cater to the requirements of the consumers of milk and milk products. For this purpose, various programmes and strategies are under implementation and consideration at different levels.

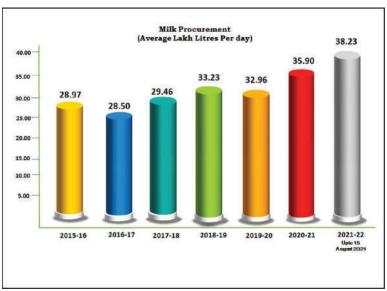
S.M. Nasar Minister for Milk and Dairy Development

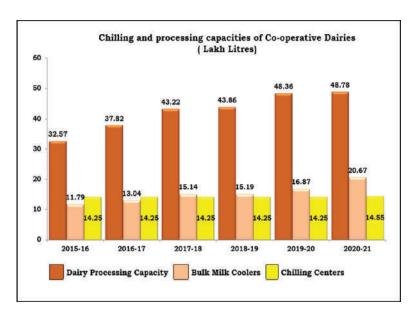
Milk Co-operative Sector at a glance

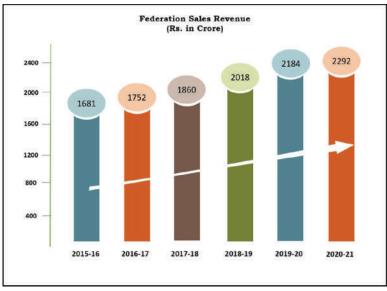
S. No	Items	Details upto 15 Aug 2021
1	Number of Milk Producers' Co-op. Societies	10,511
2	Milk Producers' Co-operative Societies formed during 2020-21 (in Nos.)	6
3	Dormant Milk Producers Co-operative societies Revived during 2020-2021 (in Nos.)	5
4	Total Number of members in Milk Producers' Co-operative Societies (in Lakh)	19.91
5	Number of milk pouring members (in Lakh)	4.25
6	Milk Production by societies (in LLPD)	41.00
7	Number of District Co-operative Milk Producers' Union	25
8	State Level Federation	1
9	Milk Procurement by Unions (in LLPD)	38.23
10	Milk marketing in Chennai City (in LLPD)	13.59
11	Milk marketing in District Unions (in LLPD)	13.11
12	Number of Union Dairies	18
13	Number of Federation Dairies	5
14	Handling Capacity of Union Dairies (in LLPD)	30.13
15	Handling Capacity of Federation Dairies (in LLPD)	18.65

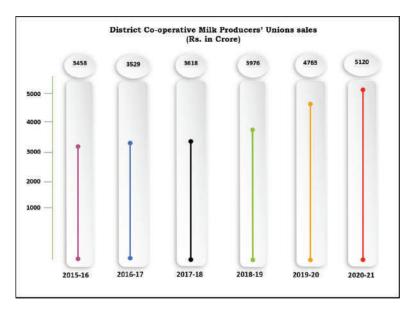
S. No	Items	Details upto 15 Aug 2021
16	Number of Chilling Centers	34
17	Handling Capacity of Chilling Centers (in LLPD)	14.55
18	Number of Bulk Milk Cooler Units	591
19	Chilling Capacity of Bulk Milk Cooler units (In LLPD)	20.67
20	Number of milk distribution routes at the level of District Unions	403
21	Number of milk distribution routes in Chennai Metro	173
22	Number of Powder plants (Erode, Salem, Madurai, Krishnagiri District Unions and Federation)	5
23	Capacity of powder plants for drying Milk (MT/day)	90
24	Butter storage capacity (in MT)	4,629
25	SMP storage capacity (in MT)	7,805
26	Butter Stock (in MT)	4,690
27	SMP stock (in MT)	14,749

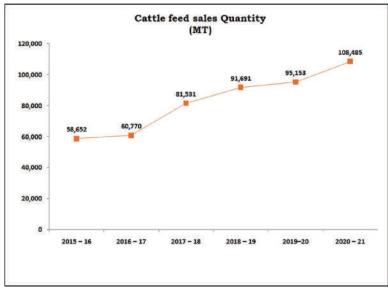


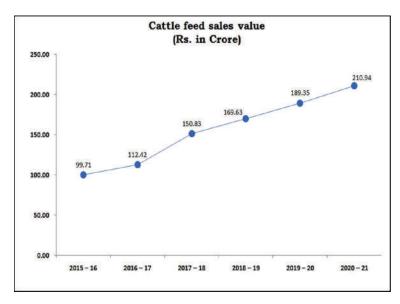
















Hon'ble Chief Minister reviewed the activities of Dairy Development Department on 13.07.2021



Hon'ble Chief Minister of Tamil Nadu handed over cheques to beneficiaries of Peraringar Anna Co-operative Milk Producers' Welfare Fund on 21.08.2021



Hon'ble Chief Minister of Tamil Nadu handed over orders for appointment on Compassionate Grounds on 21.08.2021 to the legal heirs of employees who died while in service in TCMPF



Hon'ble Chief Minister of Tamil Nadu handed over "Business Agreement" to Whole Sale Dealers of other States and "Merchant Exporters" of other Countries.



Hon'ble Minister for Dairy Development reviewed the Department activities



As ordered by Hon'ble Chief Minister, Hon'ble Minister for Dairy Development inaugurated Aavin milk sale with reduced price of Rs.3/- per litre on 16.05.2021



Field inspection at Salem Dairy by Hon'ble Minister for Dairy Development



Milk Procuremnt at Milk Producers' Co-operative Society



Veterinary health services to the cattle of Milk Producers



Cattle feed supply to Milk Producers









Aavin Cattle feed plant at Erode





Milk sachet production at Dairy





Quality Control Laboratory

