

**ANIMAL HUSBANDRY, DAIRYING AND
FISHERIES DEPARTMENT**

DAIRY DEVELOPMENT

**POLICY NOTE
2019-2020**

DEMAND No.8

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MINISTER FOR MILK AND DAIRY DEVELOPMENT

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Government of Tamil Nadu
2019

“With an objective of ushering in the Second White Revolution and encouraging animal husbandry activity which is a component of agriculture and instrument for improving rural economy and activity to provide self-employment for women.....my Government has given unprecedented importance and implemented many schemes for Dairy Development Department and Animal Husbandry Department”.

**Dr J. Jayalalithaa Hon’ble Former
Chief Minister (Speech on 23.09.2015)**

“The Yardstick of a Nation’s development is the growth of every individual. The victory of democracy lies in ensuring that the basic needs of an individual like finance, food, education, housing, health, profession and security In this sense, Tamil Nadu has achieved immeasurable growth”.

**Thiru. Edappadi K. Palaniswami,
Hon’ble Chief Minister**

INDEX

S. No.	SUBJECT	PAGE NO.
1	Introduction	1
2	Dairy Development Department	3
3	Management of Dairy co-operative societies	11
4	Milk Procurement and Sales	21
5	Tamil Nadu co-operative milk producers' Federation	27
	Dairies run by TCMPF Limited	28
	Service institutions run by TCMPF	38
	Units run by TCMPF and District unions	42
6	Primary Milk Consumer Co-operative Societies	47
7	Dairy development activities undertaken under various State / Central schemes	48
8	Major infrastructure and technology up-gradation projects	62

9	Services offered to milk producers by co-operatives	65
10	Marketing of milk and milk products	74
11	Quality control activities	88
12	Financial performance	90
13	Staff welfare measures	93
14	Sustainable development goals and Response of Dairy Development Department	95
15	Budget for year 2019-2020	98
16	Way forward	99
17	Department of audit for milk co-operatives	101
18	Conclusion	106

DAIRY DEVELOPMENT DEPARTMENT

POLICY NOTE 2019-20

INTRODUCTION

The Dairy Industry as an important allied sector continues to provide additional income to the lakhs of people who depend on dairy related activities. Dairy Development Department is working towards the objective of achieving “Second White Revolution” in Tamil Nadu State and is also working constantly to increase the milk production of Tamil Nadu, which is a nutritionally rich food to meet the daily needs of people.

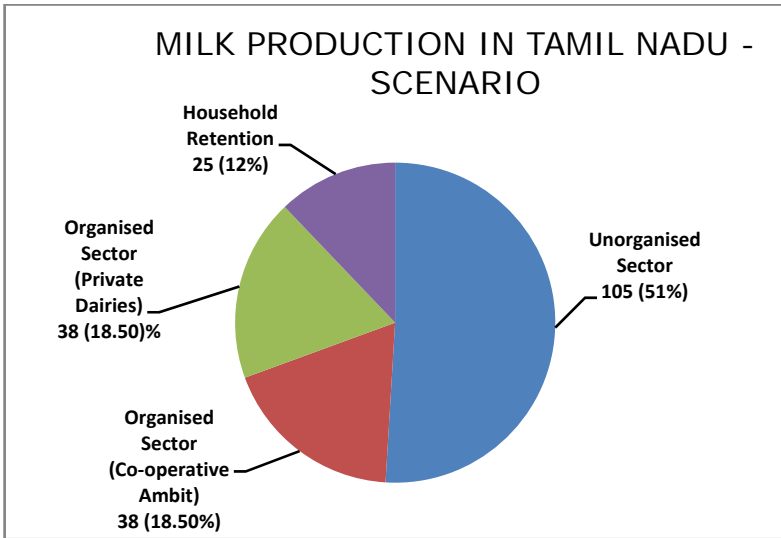
The “Anand” pattern of milk co-operatives pioneered by the “Milk Man of India”, Dr. Verghese Kurien, has been successfully implemented in Tamil Nadu, with the formation of the 3 tier structure at different levels such as Federation at apex level, District Unions at middle level and MPCs at field level under the brand name “Aavin”.

Aavin has adopted modern scientific practices to ensure clean milk production, milk processing, and manufacturing of milk products and value added by-

products. Aavin is strictly adhering food safety standards in order to meet the demand for clean milk. Dairy Development Department plays a vital role in economic development of farmers and the same is achieved by implementing various schemes of State and Central Government. The dairy co-operatives are working with the objective of achieving permanent income to village level milk producers through clean milk production and quality milk marketing.

Tamil Nadu is one of the frontline States in milk production with a daily milk production of 206 lakh litres, out of this, 25 Lakh litres per day (LLPD) is retained for household consumption. About 51% of total milk production i.e. 105 LLPD is procured through unorganized sector and 37% i.e. 76 LLPD is procured through organized sector like Dairy co-operatives and private sector dairies. The share of co-operatives in overall milk production in the State is around 18.50% i.e. 38 LLPD. Under the dairy co-operative ambit, there are 12,585 village level primary Milk Producers Co-Operative Societies (MPCS) having 20.30 lakh members. Tamil Nadu stands fourth among

the State dairy co-operatives with a daily average milk procurement of 33.23 lakh litres.



2. DAIRY DEVELOPMENT DEPARTMENT

2.1 Objectives:

1. To form new Milk Producers Cooperative Societies in uncovered villages, in order to bring more milk producers into the cooperative ambit.
2. To assure regular payment and quality based remunerative prices with respect to fat and solid not fat (SNF) content of the milk poured.

3. To transform un-organized dairy sector into organized dairy sector.
4. To provide inputs such as cattle feed, green fodder and veterinary health care services to milch animals to increase milk production.
5. To ensure availability of quality liquid milk and milk products as per food safety specifications, to the consumers at reasonable prices.
6. Sustaining and increasing the daily income of milk producers in order to improve the rural economy, particularly rural women.

2.2 Strategies:

The following strategies are being adopted to achieve the objectives of the Dairy Development Department:

1. Bringing more number of milk producers under co-operative fold, formation of societies covering all villages and reviving dormant societies into functional societies.

2. Establishment of Integrated Dairy Management System in all Dairy Co-operatives.
3. Implementation of Clean Milk Production in all Dairy Co-Operatives.
4. Provision of Automatic Milk Collection Stations, establishment of Bulk Milk Coolers at more number of societies with varying capacity.
5. Ensuring initial quality of milk through proper maintenance of milk temperature at all levels.
6. Establishment of energy saving system to reduce the cost of production and to increase the profitability.
7. Increasing infrastructure development in all dairies, in order to meet the increased milk production.
8. Imparting training to develop skills in dairying to milk producers and employees of dairy co-operatives.
9. Implementation of State, Central, State-Central shared sponsored schemes to increase the milk production.

10. Developing new milk products and innovative marketing strategies to increase the marketing.
11. Increasing the milk card sales and ensuring consumer loyalty by addressing the customer grievances through 24 hour customer care cell.
12. Implementation of Food safety Act 2006 and Rules 2011 guidelines in all Dairy Co-operatives.

2.3. Administration:

The Dairy Development Department was established in 1958 in Tamil Nadu. The administrative and statutory control of all dairy co-operatives was transferred from co-operative department to this department during the year 1965. Similarly the commercial activities were transferred to Tamil Nadu Co-operative Milk Producers' Federation when the 3 tier system of dairy co-operatives was formed across Tamil Nadu in the year 1981.

The Director of Milk Production and Dairy Development (DMPDD) is the Head of this department and functional Registrar of all dairy co-operatives in Tamil Nadu. The DMPDD is also functioning as the ex-

officio Managing Director of Tamil Nadu Cooperative Milk Producers' Federation (TCMPF). The Director is vested with the powers of Registrar in discharging the statutory functions under the provisions of the Tamil Nadu Co-operative Societies Act, 1983 (TNCS Act) and Tamil Nadu Co-operative Societies Rules, 1988 (TNCS Rules). He is also the State level committee member to assess, monitor and ensure supply of good quality milk to consumers under Food Safety Act 2006.

The Deputy Milk Commissioner at Head Office is assisting the Director of Milk production and Dairy Development in carrying out both administration and statutory functions. There are 29 circle Deputy Registrars (Dairying) functioning in this department, to carry out the administrative and statutory functions at the district level as per the powers delegated by the TNCS Act, 1983 and TNCS Rules, 1988. The Department has cadre strength of 805 employees including field staff.

2.4. Milk Co-operative Societies:

The dairy cooperatives are managed by democratically elected board members from among the

members of the society. The elections are being conducted according to the provisions of Tamil Nadu Cooperative Societies Act, 1983 and Rules 1988, for a tenure of 5 years.

As the tenure of the previous board expired during April 2018, election process was initiated in 4 stages to constitute the new Board. Election process was scheduled for 6,534 Primary Milk Coop Societies. Out of 6,534 societies, election was completed in 6,241 societies and the newly elected board assumed charges of the management of the respective societies. In the remaining 293 societies election process was stalled due to judicial intervention and due to non filing of nomination in some cases.

In Phase II stage, election process was completed in 17 District Cooperative Milk Producers' Unions and the newly elected board assumed charge of the management of respective Unions.

In Phase III stage, election was scheduled in Tamil Nadu Cooperative Milk Producers' Union Ltd. in

January 2019. It was stalled due to court orders. Further, in accordance with the provision of Tamil Nadu Co-operative Societies Act, 1983 and Rules 1988, the Managing Director, Tamil Nadu Co-operative Milk Producers' Federation has been appointed as Administrator to carry out the day to day functions of this apex society / Federation.

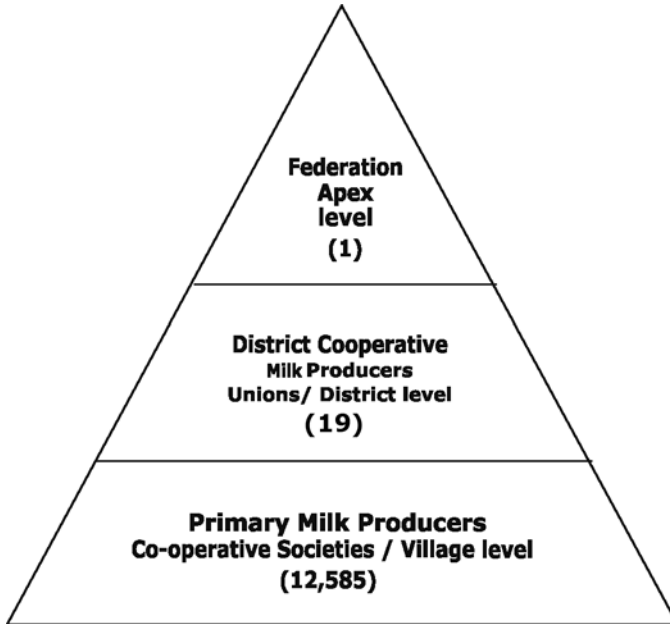
Moreover, to manage the day to day affairs of the societies, wherever election process was stalled, especially for making milk cost payment to the milk producers without any difficulty, the departmental officers were authorized to operate the bank accounts jointly with the employee of the said society.

Union wise MPCS details

Sl. No	Name of the District Union	No of Societies	No of Societies active/ functioning	Dormant Societies	Milk Pouring Producers	No. of Cattle in Co-op Ambit (in Lakhs)
1	KPM-TVLR	979	450	529	19544	68000
2	VPM - CDLR	1213	690	523	47124	181200
3	VELLORE- TVMalai	1409	876	533	67478	298700
4	DHARMAPURI	802	478	324	25282	85800
5	SALEM	946	711	235	48067	168000
6	NAMAKKAL	623	493	130	19594	48000
7	ERODE	649	505	144	35344	65200
8	TIRUPUR	585	448	137	18383	7000
9	COIMBATORE	460	340	120	9905	91000
10	NILGIRIS	150	95	55	3042	10100
11	MADURAI	1341	1207	134	28528	86800
12	DINDIGUL	189	155	34	6240	64400
13	TRICHY	966	759	207	66940	203400
14	THANJAVUR	420	276	144	21480	110100
15	PUDUKKOTTAI	418	329	89	10855	24000
16	SIVAGANGAI	613	411	202	12960	26500
17	VIRUDHUNAGAR	201	111	90	3401	6000
18	TIRUNELVELI	447	367	80	10969	50500
19	KANYAKUMARI	174	53	121	5271	12900
	TOTAL	12585	8754	3831	460407	1607600

3. MANAGEMENT OF DAIRY CO-OPERATIVE SOCIETIES

3.1. Three tier structure of dairy co-operatives



3.2. Tier-1- Primary Milk Producers' Co-operative Society

This is the base level of the 3 tier system which procures milk from the milk producing members at the village level and supplies the milk to district unions. The MPCs are the primary agency which carries out and implements

various welfare activities of district unions and TCMPF. The milk pouring farmers are the members of the MPCS.

The milk producers' society means, a registered society with the principal object of arranging for, and undertaking the purchase of milk produced by its members and storing, processing and marketing such milk and its by-products.

There are 12,585 Primary Milk Co-operative Societies at village level, out of which 2,075 are all Women Co-operative Milk Producers' Societies. These primary milk co-operative societies are procuring around 38 lakh litres of milk daily from their members and selling around 4.5 LLPD to meet out the local demand. The remaining quantum of milk is being sent to the District Unions and Metro dairies.

The Primary Milk Producers Co-operative Societies are paid remunerative prices based on the quality of milk procured from the farmers. The current procurement price for cow milk and buffalo milk is Rs.28 and Rs.35 per litre respectively. The societies are sharing the profit with the milk producers.

Action taken on reviving the dormant societies:

There are 3,831 dormant Milk Producers' Cooperative Societies. Efforts are being taken to revive 518 dormant Milk Producers' Co-operative Societies within 2 years and to facilitate formation of new Milk Producers' Cooperative Societies in lieu of dormant societies which are dormant for more than 2 years.

Action has been taken to supply cattle feed, mineral mixture and 2 milk cans for each society at subsidized rate. It is also to increase the number of milch animals by facilitating with

banks to issue loans to the milk producers to purchase milch animals with subsidy under Dairy Entrepreneur Development Scheme (DEDS) and other Governmental schemes. During 2018-19 milch animal loan amounting to Rs.45.18 crore were given to 7606 milk producer members for the purchase of 10463 milch animals.

Efforts have been taken to attract the milk producers who are now pouring milk to private parties, by ensuring instant payment of milk cost based on the quality of milk.

By implementing all the above measures, the Dairy Development Department is aiming to revive all the dormant Milk Producers' Cooperative Societies in a phased manner, thereby increasing milk production.

Tier-2 - District Cooperative Milk Producers' Union

The unions procure milk from the Milk Producers' Cooperative Societies (MPCS),

process and market it to the consumers. The surplus milk is sent to Chennai Metro Dairies / Feeder Balancing Dairies for sale/conversion. DCMPUs are the implementing agencies for various welfare schemes of the State and Central Governments. The primary MPCs in the jurisdiction area are the members of the DCMPU.

There are 19 District Cooperative Milk Producers' Unions in Tamil Nadu, covering all the revenue districts. The management of DCMPU has been vested with an elected Board, headed by its President. The administrative head of the DCMPU is the General Manager. The following is the approved cadre strength of DCMPU:

Table-1

**Approved Cadre Strength in District
Cooperative Milk Producers Unions**

S.No	Name of the Post	Cadre Strength
1	General Manager	19
2	Deputy General Manager	23
3	Asst. General Manager	83
4	Manager	379
5	Deputy Manager	330
6	Extension Officer	302
7	Office Staff	533
8	Driver	255
9	Technical staff, Helpers	2,349
	Total	4,273

Milk procured from MPCs is transported through milk collection route vehicles to the nearest Bulk Milk Cooler (BMC)/ Chilling Centre / Dairy for further processing. The village level milk cooperative societies are formed by the Deputy Registrars (Dairying), and the District Unions jointly.

The District Unions, after meeting their local demand, send milk to the Federation dairies for processing and sale in Chennai. The surplus milk is being sent to Feeder Balancing Dairies (FBDs) at Madurai, Erode, Salem, Krishnagiri and Tiruvannamalai for conversion into Butter and Skimmed Milk Powder (SMP). The FBDs have produced a total of 26,997 MTs of SMP and 16,080MTs of Butter during the year 2018-2019.

Salem, Coimbatore and Erode DCMPUs were bifurcated into additional 2 new district unions at Namakkal and Tirupur which started functioning from 09.12.2018 and 17.12.2018. At present 19 DCMPUs are functioning.

Around 1,64,000 liter of milk is procured from 16,886 milk pouring members from 495 MPCS in Namakkal union, and 2,30,000 liters of milk from 15,871 milk pouring members from 461 MPCS in Tirupur union.

There are 2 chilling centers and 10 BMCs in Namakkal union, while there are 2 CCs and 30 BMCs in Tiruppur Union.

Uninterrupted supply of milk and milk products is being effected through the Salem, Coimbatore and Erode milk unions, until establishment of new dairy plants in the new 2 district unions.

At present, Administrator is appointed to discharge duties until formation of newly elected Board.

Tier-3 - Co-operative Milk Producers' Federation

Tamil Nadu Cooperative Milk Producers' Federation is the apex body at the State level wherein all the District Cooperative Milk Producers Unions are members. The Federation is marketing the milk and milk products in the brand name of "**Aavin**".

TCMPF Limited was registered as a dairy co-operative in the year 1981. TCMPF is the apex body in the 3 tier system of Dairy Co-operatives. The TCMPF Limited took over all the commercial activities such as milk procurement, processing, packing and marketing of milk and milk products from the erstwhile Tamil Nadu Dairy Development Corporation (TNDDC). The Headquarters of the TCMPF is located at Aavin Illam, Nandanam, Chennai and overall management of the Federation vests with the elected Board of Directors of the Federation. The day to day administration of the Federation is looked after by the ex-officio Managing Director.

The Federation purchases surplus milk from District Unions and markets the milk in Chennai Metro fulfilling the demand of milk consumers.

The major roles of the Federation apart from marketing in Chennai Metro are to guide and monitor activities like procurement, marketing, milk handling, infrastructure

creation, quality control and implementation of various schemes.

In order to process, pack and supply of milk to metro consumers, three milk dairies at Madhavaram, Ambattur and Sholinganallur, one milk product dairy at Ambattur and one dairy cum powder plant at Tiruvannamalai have been established.

Transportation plays a vital role in milk handling. 59 Nos. of modernised road milk tankers of different capacities owned by Federation are operated daily for milk collection from the District unions.

23 Nos. of Poly Urethane Foam (PUF) insulated container vehicles, 11 Nos. of refrigerated PUF insulated vehicles owned by the Federation are used for milk and milk product distribution.

4. Milk Procurement and Sales

4.1 Milk Procurement

Milk is procured from the farmer members by the MPCS and tested for quality and quantity. The collected milk is transported to the nearby chilling centres or Bulk Milk Coolers. The milk is chilled and sent to dairies for further processing.

Over a period of eight years, the average milk procurement has increased by 61% from 20.67 LLPD in 2010-2011 to 33.23 LLPD in 2018-2019. There is an increase of 13% in milk procurement during 2018-2019 when compared to 2017-2018.

Further, an all time highest procurement of 37.03 lakh litres of milk procurement was achieved on 29.10.2018. The milk procurement over the last eight years: -

Table 2
Average Milk Procurement

Sl. No.	Year	(in lakh litres per day)
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

Steps are being taken to increase the average milk procurement to 34.00 LLPD in 2019-2020.

Table 3:
District Union wise average Milk Procurement
(Litres per day)- (Annexure– I)

S. No	Nameof the Union	2016-2017	2017-2018	2018-2019
1	Salem	497708	529493	459039
2	Tiruchirapalli	411508	434652	507556
3	Vellore- Tiruvannamalai	305089	321662	382780
4	Erode	299428	291956	203084
5	Madurai	259329	276340	287159
6	Villupuram- Cuddalore	209878	216913	248527
7	Coimbatore	262369	244319	161029
8	Dharmapuri	178698	190177	229381
9	Tirupur	0	0	224127
10	Namakkal	0	0	159521
11	Kancheepuram-Thiruvallur	97812	111775	126937
12	Dindigul	63575	59693	69902
13	Tirunelveli	69193	69456	66173
14	Sivagangai	61435	57513	58929
15	Pudukottai	42810	48639	56708
16	Thanjavur	52466	56868	47334
17	Virudhunagar	16663	17547	16190
18	The Nilgiris	14223	12861	12430
19	Kanyakumari	7570	5738	5984
	Total	28,49,754	29,45,602	33,22,790

Union-wise milk handling capacity (Litre per Day)

Sl. No	Name of the Union	Processing capacity of Dairies		Chilling capacity				
		No	Capacity	Chilling Centre		BMC		Total
				No	Capacity	No	Capacity	
1	Salem	1	5,00,000	3	2,30,000	55	2,24,000	4,54,000
2	Coimbatore	1	5,00,000	4	1,30,000	26	1,24,000	2,54,000
3	Madurai	1	5,00,000	1	1,00,000	18	81,000	1,81,000
4	Erode	1	3,00,000	3	1,35,000	70	3,44,000	4,79,000
5	Trichy							
	a) Tiruchirapalli	1	1,50,000	3	2,00,000	42	2,00,000	4,00,000
	b) Padalur	1	1,00,000	0	0	0	0	0
6	Dharmapuri	1	2,00,000	2	60,000	21	93,000	1,53,000
7	Vellore	1	1,50,000	4	2,30,000	38	1,76,000	4,06,000
8	Villupuram	1	1,00,000	2	1,10,000	19	78,000	1,88,000
9	Tirunelveli	1	1,00,000	4	90,000	12	58,000	1,48,000
10	Kancheepuram-Thiruvallur	1	1,00,000	2	60,000	11	45,000	1,05,000
11	Nilgiris	1	50,000	1	10,000	6	11,000	21,000
12	Sivagangai	1	50,000	1	10,000	12	52,000	62,000
13	Virudhunagar	1	50,000	1	10,000	1	5000	15,000
14	Pudukkottai	1	35,000	0	0	0	0	0
15	Dindigul	1	30,000	2	40,000	12	50,000	90,000
16	Thanjavur	1	26,000	1	10,000	13	51,000	61,000
17	Kanyakumari	1	30,000	0	0	0	0	0
	Total	18	29,71,000	34	14,25,000	356	15,94,000	30,19,000

Sl. No	Name of the Union	Processing capacity of Dairies		Chilling capacity				
		No	Capacity	Chilling Centre		BMC		Total
				No	Capacity	No	Capacity	
	Metro Dairies							
a	Central Dairy	1	5,00,000					
b	Ambattur	1	5,00,000					
c	Sholinganallur	1	6,00,000					
d	Product Dairy	1	65,000					
e	DCCP Thiruvannamalai	1	2,00,000					
	Total	5	18,65,000					
	Grand Total	23	48,36,000					

4.2. Milk Sale:

Milk procured from the farmers are processed, pasteurized, homogenized and packed in 200ml, 500ml, 1000ml sachet to supply to the local consumers.

During 2018-2019, the average district milk sale was 10.42 LLPD as against 10.00 LLPD in 2017-2018 which is an increase of 4.2%.

In order to increase the sales further, new marketing zones have been created in 11

centres and regular marketing extension efforts are being taken up.

It is planned to increase milk sales in the District Unions to 12 LLPD during the year 2019-2020.

Table-4
Comparison of District Union-wise
Milk Sales

S. No.	Name of the District Union	Avg. Milk Sales Litre Per Day	
		2017-2018	2018-2019
1	Kancheepuram-Thiruvallur	18,653	23,777
2	Villupuram- Cuddalore	21,643	20,876
3	Vellore-Tiruvannamalai	72,039	71,564
4	Dharmapuri	27,343	27,336
5	Salem	1,95,938	1,50,241
6	Erode	65,608	64,312
7	Coimbatore	1,52,050	1,46,734
8	Nilgiris	16,486	16,578
9	Madurai	1,62,727	1,67,259
10	Dindigul	14,559	15,981
11	Trichy	1,17,830	1,19,896
12	Thanjavur	26,054	29,795

13	Pudukkottai	13,127	14,568
14	Sivagangai	33,518	37,800
15	Virudhunagar	5,381	5,978
16	Thiruneveli	42,359	42,860
17	Kanyakumari	15,638	16,004
18	Tirupur	-	14,582
19	Namakkal	-	50,023
	TOTAL	10,00,953	10,42,164

5. Tamil Nadu Co-operative Milk Producers' Federation

The approved cadre strength of the TCMPF is furnished below:

Table-5
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	173
9	Private Secretary Gr-I,II& III	24
10	Executive	165

11	Jr-Executive (office)/(Typing)	155
12	Drivers	240
13	Technical Staff & Helper	1,135
TOTAL		2102

5.1. DAIRIES RUN BY TCMPF LTD

TCMPF limited has five dairies under its control. They are:

1. Madhavaram dairy
2. Ambattur dairy
3. Sholinganallur dairy
4. Products dairy, Ambattur
5. Dairy cum Powder Plant, Thiruvannamalai.

The main objective of operating these dairies is to supply quality milk to the consumers of Chennai Metro. It also produces many milk by-products to cater to the consumer needs of the Chennai metro and other parts of Tamil Nadu.

5.1.1. Madhavaram Dairy

The Madhavaram Dairy located in the Madhavaram milk colony complex was established in the year 1962. The dairy is equipped to handle 5.00 lakh litres of milk every day. Now the dairy is handling around 3.50 LLPD of milk in sachets.

Madhavaram Dairy distributes milk to consumers of North Chennai area through 47 hired route vehicles, 30 private agency vehicles and 3 Federation milk routes.

This Dairy has been certified with IS/ISO 9001:2015, IS 15000:2013 (HACCP) and IS/ISO14001:2015(EMS).

It has also been proposed to establish a new automated dairy to handle 10.00 LLPD expandable to 15.00 LLPD at Madhavaram with the financial assistance from Dairy Infrastructure Development Fund (DIDF).

5.1.2. Ambattur Dairy

The Ambattur dairy was established in the year 1976 at Ambattur industrial estate. The dairy was installed with the initial capacity of 2.00 LLPD and the present handling capacity is 5.00 LLPD.

Ambattur Dairy supplies milk to consumers of Central Chennai through 45 hired route vehicles, 33 private agency vehicles, 5 Milk Consumer Co-operative Society (MCCS) milk routes and 7 Federation milk routes.

This Dairy has been certified with IS/ISO 9001:2015, IS/ISO 15000:2013(HACCP) and IS/ISO 14001:2015(EMS).

The capacity of Effluent Treatment Plant has been increased from 4 LLPD to 7 LLPD.

A hi-tech parlour is also functioning at the entrance of the dairy from 20.06.2018.

5.1.3. Sholinganallur Dairy

The first ever automated dairy in South India was established at Sholinganallur in 1996, with an installed capacity of 4 LLPD.

During the last seven years (2011-2018), the handling capacity of this dairy has been increased to 6 LLPD by strengthening the infrastructure at a cost of Rs.10 crore to meet the increased demand of South Chennai and its peripheral consumers.

Further, Sholinganallur Dairy supplies milk to consumers of South Chennai through 40 hired route vehicles, 43 private agency vehicles, 4 milk Consumer Co-operative Society (MCCS) milk routes and 5 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, installation of Concentrated Solar Thermal System (CST) for generating steam of 1,000 – 1,100 kg per day at

a cost of Rs.100 lakh reducing usage of furnace oil to the tune of 100 – 110 litres per day has resulted in savings of Rs.12 lakh per annum.

A hi-tech parlour is functioning at the entrance of the dairy from 20.06.2018.

This Dairy is certified with IS/ISO 9001:2015, IS 15000:2013 (HACCP) and IS/ISO 14001:2015(EMS).

5.1.4. Tiruvannamalai Dairy Cum Powder Plant (DCCP)

A Dairy Cum Powder Plant was established on 11.11.2014 at Ammapalayam Village in Tiruvannamalai district at a total cost of Rs.72.60 crore by availing financial assistance from NABARD.

The main purpose of the dairy is to handle the surplus milk by converting in to Butter and Skim Milk powder to enhance the shelf life of the milk products. The dairy has the capacity to

handle 2.00 LLPD of milk and to produce 20 MT of SMP per day.

The plant has the capacity to store 500 MT of Butter and 1500 MT of SMP. The dairy also has the production facility for 3MT ghee per day in retail packs.

This Dairy has been certified with ISO 22000:2005 (FSMS). In 2018-2019, the production of Butter was 1647 MT and SMP was 2672 MT.

5.1.5. Ambattur Products Dairy

The Products dairy at Ambattur was established in the year 2003 to produce milk by-products like khova, mysurpa and milk peda. The products dairy was expanded to produce 15,000 litres of Ice creams per day during the year 2016. Production facilities were also created for fermented milk products like lassi, yoghurt, paneer, butter milk, curd and Pro-biotic curd. The product dairy caters to the needs of

the metro consumers and supply is also made to district unions.

The quality of the products and by-products is assured by means of adopting ISO (International Standards Organization), FSSAI (Food Safety and Standards Authority of India), HACCP (Hazard Analysis and Critical Control Point) procedures.

At present, 76 numbers of milk products in 137 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 in the State.

Aavin introduced curd in ½ kg sachet for the benefit of Metro consumers. Subsequently, 1 kg premium curd and Rasgulla were also launched, besides Ice cream variants like Grape duet, Mango duet, cone, Strawberry core and

two in one bar ice creams. Following new variants were introduced during 2018:

1. Paneer – ½ kg and 1kg pack
2. Premium curd in 400gm cup
3. Chocolate Ripple ice cream 500ml
4. Strawberry Ripple ice cream 500ml
5. Sugar free Kulfi 70ml
6. Sugar free ice cream 100ml(Vanilla)

Butter milk in pet bottles, Yoghurt in 5 flavours, sugar free yoghurt, Kulfi in 10 different flavours and sugar free Kulfi and whey drinks in 3 variants were also introduced on 04.01.2019.

It is proposed to produce new chocolate varieties, Cookies, Rasgulla and Gulab jamun in tin packing and long shelf life khoa to cater to the needs of consumers.

Currently, aggressive marketing efforts have enabled the Federation to meet the Ice cream sales target of 10,000 litres per day from an average despatch of 6,000 LPD. Around 16,40,750 litres of Ice Creams were sold during 2018-2019 as against 13,60,849 litres during 2017-2018.

Range of Aavin Milk Products

Sweets	Ice cream variety	Fermented Products	Coagulated products and others
Sweetened Khoa Dates Khoa Mysorepa Long life Gulabjamun Milk Peda Rasgulla	Ice cream cups, family packs (Bricks and bowls) Cassata Ball Ice cream Chocobar, Mango Duet Pineapple Duet Grape duet Two in one bar Strawberry core Mango core Choco feast Chocolate cone Vanilla cone Kulfi Bar FlavouredKulfi bar (10 favours) Sugar free Kulfibars, Icecream Premium ice cream in cups Premium ice cream in scoops Ice candies (6 variants)	Yoghurt Flavoured yoghurt (5 flavours) Sugar free Yoghurt Curd, lassi, butter milk in sachets Premium Curd in cups, Butter milk in pet bottles Bucket curd Probiotic Curd Probiotic Lassi	Paneer Others: UnsugaredKhoa Milk chocolate Nutties Chocolate Whey drink (3 flavours)

Milk products introduced by various Unions and TCMF

To increase the sales revenue, the following value added products have been introduced at Federation and Unions by installing necessary machineries.

S. No.	Federation / Union	Product
1	Federation	Yoghurt, Chocolate, Ice Cream, Payasam Mix, Gulbab Jamun, Rasagulla, Paneer, Whey drink
2	Kpm-Tvlr	Badham Mix Powder
3	Villupuram	Kulfi
4	Vellore	Kulfi, Badham Mix Powder, Curd, Flavoured Milk
5	Dharmapuri	Kulfi, Badham Mix Powder
6	Salem	Curd, UHT Milk, Flavoured Milk
7	Erode	Badham Mix Powder, Gulab Jamun Mix Powder, Curd, Kulfi, Spl. Ghee in Tins.
8	Coimbatore	Mango Lassi, Curd
9	Dindigul	Paneer
10	Madurai	Chocolate, Curd, Paneer
11	Virudhunagar	Badham Mix Powder
12	Tirunelveli	All Nut Dry Mix Powder
13	Kanyakumari	Badham Mix Powder, Kulfi, Chocolate

5.2. SERVICE INSTITUTIONS RUN BY TCMPF

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

Frozen Semen Straws for Artificial Insemination are produced at Nucleus Jersey and Stud Farm, established in 1973. The farm consists of two divisions viz. Bull Mother Farm and Stud Farm. Stud Farm is maintained in an area of 37.725 acres of land leased from the Forest Department and Bull Mother Farm in an area of 46.33 acres leased out by Animal Husbandry Department to TCMPF Ltd.

Bull Mother Farm

High pedigreed Cows of Jersey breed are maintained in the Bull Mother Farm to produce genetically superior Jersey breeding bulls for production of quality frozen semen.

Oats, Maize & Kikuyu grass are cultivated in the same location in Kakkathope.

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. The Frozen semen is sent to Buffalo Frozen Semen Station, Erode for storage and supply to all the District Cooperative Milk Producers Unions (DCMPU) across the State.

There are around 181 bulls at the Stud Farm, including six imported bulls. On an average, the farm produces around 16.00 Lakh doses of frozen semen straws per year.

It has been proposed to produce around 19.00 lakh doses of frozen semen straws during 2019-2020.

Buffalo Frozen Semen Station (BFSS), Erode.

Distribution of Frozen Semen Straws to all milk unions based on their requirements is carried out in this unit. The unit also procures

Buffalo Frozen Semen Straws from Animal Husbandry Department and distributes to the unions.

On an average, around 1.50 lakh of Cattle and 6,000 Nos. of Buffalo Frozen Semen Straws are distributed every month.

The unit also has a quarantine station for rearing of breeding bull calves.

Dairy Herd Improvement Programme Actions (DIPA), Erode

This unit implements Field Performance Recording Programme (FPRP) for Crossbred Jersey and Indigenous breed viz., Kangeyam with financial assistance from Government of India under National Programme for Bovine Breeding (NPBB) through Tamil Nadu Livestock Development Agency (TNLDA).

The Field Performance Recording Programme (FPRP), is implemented to produce superior crossbred bull calves through

nominated mating of elite cows using proven bull semen. Elite cows are selected based on the continuous milk recording. The bull calves thus produced are supplied to the semen stations.

The FPRP is being implemented by the Federation in 8 District Unions viz. Salem, Dharmapuri, Erode, Coimbatore, Trichy, Madurai, Dindigul and Tirunelveli. So far, 388 bull calves have been provided for frozen semen production to the four frozen semen stations under Cooperative sector and three frozen semen stations under Animal Husbandry Department.

Field Performance Recording Programme (FPRP) is also carried out for Indigenous Breed viz., Kangayam in Erode and Trichy Unions and so far 23 bull calves have been provided to Animal Husbandry Department.

5.3. UNITS RUN BY TCMF AND DISTRICT UNIONS

Cattle Feed Plant - Erode

Cattle feed is a good source of nutrients for growing, adult, dry, in-milk and pregnant animals. Cattle feed plays a vital role in growth, development and productivity of dairy animals.

The Cattle Feed Plant at Erode was expanded to manufacture 150 MT cattle feed per day from 100 MT per day at a cost of Rs.20.36 crore and inaugurated on 18.03.2017 by the Hon'ble Chief Minister of Tamil Nadu.

Erode cattle feed plant has produced 40,383 MT of cattle feed in 2018-2019 as against 37,736 MT produced in 2017-2018 with an increase of 7%.

It is proposed to increase the production capacity to 300 MT per day in 2019. In addition, a new Cattle Feed Plant with a capacity of 50 MT per day will be installed at Virudhunagar.

The sale of cattle feed through unions has increased 20 times over the last eight years.

There is an increase in supply by 12% in 2018-2019 when compared to 2017-2018.

Table- 6:
Cattle feed sales (in MT)
(Annexure – II)

Year	Total Sales (in MT)
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

It is envisaged to enhance the sale of cattle feed to 1.20 lakh MT in 2019-2020.

Mineral Mixture Plant

Mineral mixture plays an important role in better utilization of absorbed nutrients and

increases milk production, reproductive efficiency and immunity of the milch animals.

There are four mineral mixture plants functioning at Villupuram, Tiruchirapalli, Tirunelveli and Erode. In addition to co-operative societies, mineral mixture is also supplied to Animal Husbandry Department. During 2018-2019, the Mineral Mixture sales was 2,872 MT.

Table 7:
Mineral Mixture sales (in MT)
(Annexure-III)

Year	Total sales (in MT)
2011 – 12	171.60
2012 – 13	131.10
2013 – 14	390.67
2014 – 15	244.42
2015 - 16	966.08
2016 – 17	1,314.73
2017 – 18	1,843.79
2018 – 19	2,872.33

It is proposed to increase the sale of mineral mixture to 3,500 MT in 2019-2020.

The establishment of a new mineral mixture plant with a capacity of 12 MT per day at Dharmapuri union is under progress.

5.4. COORDINATION WITH VARIOUS DEPARTMENTS

a) Animal Husbandry Department

In coordination with Animal Husbandry Department, Foot and Mouth Disease (FMD) vaccination is carried out twice a year (March and September) covering around 17.00 lakh animals under cooperative ambit.

Further, various components like fodder seeds, azolla, hydroponics, chaff cutters are supplied to milk producers through Animal Husbandry Department under State Fodder Development Scheme (SFDS).

b) Tamil Nadu Livestock Development Agency (TNLDA)

Tamil Nadu Livestock Development Agency is the Nodal Agency for implementation of

National Programme for Bovine Breeding(NPBB). Through this scheme, various infrastructure equipments like Frozen semen containers, Liquid Nitrogen containers, LN2 distribution vehicle, AI kit, Trevis etc. are supplied through TNLDA to milk societies for carrying out Artificial Insemination. Further, field Veterinarians and village level workers are given regular as well as refresher training.

Under National Livestock Mission (NLM) of Government of India, insurance coverage is provided to the milch animals of milk producers at subsidized premium through TNLDA.

In addition, extension education programmes are arranged for milk producers on best animal management practices, clean milk production and newer fodder cultivation techniques like azolla and hydroponics.

c) Tamil Nadu Veterinary Animal Sciences University (TANUVAS)

University Training & Research Centres (UTRC) of TANUVAS are also conducting regular training programme to the producers at the district level.

6. PRIMARY MILK CONSUMERS' CO-OPERATIVE SOCIETIES

Similar to the operations of the MPCS, to protect the interest of the milk consumers, the milk consumer cooperative societies (MCCS) were formed. They receive milk in sachets and milk products from Federation / District Co-operative Milk Producers Unions and supply it to the consumers.

There are about 62 Milk Consumer Co-operative Societies functioning across the State. 49 Milk Consumer Cooperative Societies are selling nearly 3.28 lakh litre of milk per day in Chennai city and suburban areas.

7. DAIRY DEVELOPMENT ACTIVITIES UNDERTAKEN UNDER STATE / CENTRAL SCHEMES

7.1. National Programme on Dairy Development (NPDD)

This is a central sector scheme. The scheme envisages developing infrastructure at the grass root level related to production, procurement, processing and marketing of milk by district unions/ Federation and also extension activities including training of farmers.

The main objectives of the schemes are

1. Create and strengthen infrastructure for production of quality milk including cold chain infrastructure linking the farmers to the consumers.
2. Create and strengthen infrastructure for procurement, processing and marketing of milk.

3. Create infrastructure for training of dairy farmers.
4. Strengthen dairy cooperatives/ Producers' companies in villages.
5. Increase milk production by providing Technical Input Services like cattle feed, minerals and so on.
6. Assist in rehabilitation of potentially viable Milk Federations / Milk Unions.

The scheme is being implemented since 2014-2015. A sum of Rs.81.61 crore has been sanctioned till 2018-2019. Out of central share of Rs.48.68 crore, Rs 37.14 crore has been released so far.

Some of the major infrastructure commissioned under NPDD include, a new processing plant in Padalur with a capacity to process one lakh litres per day, a new milk condensing plant with a capacity to condense

one lakh litre per day in Madurai dairy. Besides, Bulk milk coolers, Data processing milk collection Units and Automatic Milk collection units are being commissioned in all district unions, to improve the chilling facilities at the village level, and to strengthen the quality milk procurement facilities.

The chilling capacity of the existing BMCs will be increased from 15.94 LLPD to 18.12 LLPD, during the year 2019-2020 with the financial assistance under NPDD scheme.

New proposals for detecting adulterants in milk, strengthening infrastructure in metro and district unions have been submitted for the year 2019-2020 at a total financial outlay of Rs.55 crore.

7.2. Infrastructure developed under National Agriculture Development Programme (NADP)

This scheme is being implemented from 2007-08. The projects taken up cover a wide range of activities including livestock health strengthening of infrastructure related to procurement, refrigeration and marketing.

Some of the major projects established under this scheme include

1. Milk cold room facility for storing 3 lakh litre of milk
2. Butter deep freezer facilities to store 894 MT capacity in Erode, Salem and Coimbatore
3. 25 high speed and 11 normal speed milk packing machines with thermal printing technology

4. A new product dairy at Ambattur for manufacturing 15,000 litres of ice cream per day and 1,000 Kg. of paneer per day
5. Milk sterilizer and 200 ml packing machines for UHT plant at Salem
6. 48 road milk tankers to strengthen own milk transportation facility
7. Aseptic filling machine with a capacity to pack 6,000 no of 1,000 ml UHT milk tetra paks per hour at Salem dairy
8. Since 2011, Doorstep Veterinary health services scheme is being implemented by engaging 155 Veterinarians on contract basis. Veterinary health care and breeding services are provided to the milk producers at their doorsteps which help in building their loyalty in addition to improving milk production and animal health care.

9. Facilities in Salem union were strengthened with additional facilities for processing, packing, storage for butter and UHT milk.
10. In Nilgiris Union 5 Nos. of milk sale outlets and the dairy refrigeration system were provided for strengthening the systems.
11. Infrastructure was strengthened for revamping of dairy capacities in DCMPU Ltd of Virudhunagar, Dharmapuri and Tirunelveli. **(Annexure –VI)**
12. For the Year 2019-20, projects have been approved for capacity addition of Tirunelveli dairy, creation of marketing facilities in the newly formed Tirupur district, installation of structural parlours, establishment of cold chain network in metro & District unions, 12 MT per day capacity mineral mixture plant at Dharmapuri and expansion of Cattle Feed plant at Erode, from 150 MT to 300 MT/day at an estimate of Rs.35 crore.

7.3. Infrastructure developed by availing funds under NABARD RIDF

State Government is providing grant assistance to Aavin under NABARD Rural Infrastructure Development Fund (RIDF) with an objective of strengthening dairy infrastructure for the benefit of rural milk producers. A sum of Rs.200 crore was released between 2014-2015 and 2018-2019.

Major works taken up utilizing the RIDF funds include

Establishing a Dairy cum Powder Plant at Thiruvannamalai to convert two lakh litres of milk per day into SMP and Butter

Establishing SMP and Butter storage facilities in Madurai, Coimbatore and Thiruvannamalai

Installation of 34 Bulk Milk coolers thereby enabling a can less milk reception at Erode dairy

Infrastructure facilities have been strengthened in Dindigul, Sivagangai, Pudukkottai, Kancheepuram–Thiruvallur, Thanjavur, Vellore, Virudhunagar, Villupuram and Dharmapuri district unions.

During the current year, marketing activities, value addition and storage facilities in newly created unions will be strengthened.

7.4. Dairy Processing and Infrastructure Development Fund (DIDF)

It is a central sector scheme aimed to modernize the milk processing plants and machinery for increased production of value added products, thereby enable 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.

1. New Dairy Plant of 1.00 LLPD at Thanjavur.
2. Ice-cream Plant of 6 TLPD and Milk Products Plant at Trichy
3. New Dairy Plant of 7 LLPD and 30 MTPD Powder Plant at Salem.
4. Establishment of 10 LLPD Dairy Plant (expandable to 15 LLPD) at Madhavaram, Chennai.

7.5. National Dairy Plan-I

With the objective of helping to increase the productivity of milch animals, thereby increase milk production to meet the rapidly growing demand for milk and also to help provide rural milk producers with greater access to the organized milk processing sector, a major World Bank project viz., National Dairy Plan – (Phase-I) was implemented throughout India.

NDP was implemented in Tamil Nadu for four major components.

7.5.1. Progeny Testing Programme.

Progeny Testing Programme is being implemented in Crossbred Jersey Cows in five District Unions, viz. Vellore, Villupuram, Erode, Salem and Trichy at a total outlay of Rs.34.69 crore. Based on the performance of the daughters on various parameters like milk yield, milk quality, lactation period etc. the bulls are ranked and best bulls are used for producing proven semen for increased milk production. Further, under this scheme, 271 High Genetic Merit (HGM) bulls have been distributed.

7.5.2. Strengthening of Semen Station, NJ&SF, Ooty.

The semen station at Nucleus Jersey and Stud Farm, Ooty was strengthened with a grant of Rs.1,349.61 lakh. Under this project, various lab items, farm equipments have been procured

apart from information and communication technology (ICT) related items. In addition, a calf rearing station at Pudukudi and quarantine station at Erode were established.

7.5.3 Village Based Milk Procurement System (VBMP)

Village Based Milk Procurement System (VBMP) was implemented in six milk unions viz., Salem, Coimbatore, Erode, Vellore, Trichy and Kancheepuram-Tiruvallur at a total project cost of Rs.2,451.82 lakhs.

Through implementation of the scheme, 71 Nos. of BMCs, 559 Nos. of AMCUs / DPMCUs and 1,789 Nos. of cans were supplied apart from training to society staff, society board members and milk producers.

The scheme has facilitated in achieving clean milk production apart from enhancing the keeping quality of raw milk.

7.5.4. Ration Balancing Programme (RBP)

Ration Balancing Programme (RBP) was implemented in eleven milk unions viz., Salem, Coimbatore, Erode, Villupuram, Vellore, Trichy, Madurai, Dindigul, Dharmapuri, Tirunelveli and Kancheepuram-Tiruvallur at a total project subsidy of Rs.1,957.00 lakhs.

Through implementation of this programme, feeding cost has reduced by adoption of least cost formula through usage of locally available feed materials.

7.6. Integrated Dairy Management System (IDMS)

The vision of Digital India aims to transform the country into a digitally empowered society. It is transformational in nature and ensures that Government services are available to citizens electronically.

In order to enable Dairy co-operative sector to be a part of Digital India, the

Government of Tamil Nadu has undertaken a major e-governance project initiative, called "IDMS" Project. The IDMS Project aims 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) through computerization and automation. In the first phase, this project is proposed to be implemented in 300 MPCS, 4 feeder balancing DCMPUs and TCMPF at a cost of Rs.46.55 crore and will be rolled out in June 2019. The Government of India has sanctioned Rs.18.34 crore as 100% grant-in-aid.

This project will improve the operational efficiency of co-operative societies and timely delivery of various services like e-payment of milk cost to farmers, short service messages, Input services, veterinary services etc., which

will enable the milk producers to enhance their income in line with policies outlined by the Government of India. It also ensures transparency in its dealings, accountability for its activities and speedy responses as part of good governance and can be useful for planning and policy decision at highest level, besides ensuring that milk producers get 'FAIR Price' for their milk and consumers get "VALUE for their money". This will be completed in August 2019.

It is proposed to extend the project to the remaining 7,700 MPCs and 15 DCMPUs during the current financial year 2019-20 at an estimated cost of Rs.125 crore.

7.7. Announcements 2018-2019

Under Rule 110 of the Hon'ble Chief Minister, 6 projects were sanctioned for Rs.380 crores, out of which 5 have been considered under DIDF scheme. 500 retail product parlours will be established throughout the State.

Under the announcements made by the Hon'ble Minister for Milk and Dairy Development, 18 projects were sanctioned for Rs.47.80 crore, covering a wide scope of activities which are under progress in metro and districts.

8. MAJOR INFRASTRUCTURE & TECHNOLOGY UPGRADATION PROJECTS

8.1. Ultra High Temperature (UHT) Processing Plant in Sholinganallur Dairy

Ultra high temperature treated milk is milk heated above 135⁰C and packed under sterile condition which can be stored for 90 days at normal room temperature. A new UHT milk plant with 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 and inaugurated by the Hon'ble Chief Minister on 16.07.2018. This project aims at attracting the high end consumers and meets the export requirements thereby expanding Aavin's market share.

8.2 Customer facilitation centre cum Corporate Office building at Nandanam

A new integrated administrative office complex was constructed at Nandanam at an estimated cost of Rs.35 crore, and inaugurated by the Honorable Chief Minister on 20.06.2018. The administrative office at Madhavaram was shifted and is now functioning in the new premises.

8.3. 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 seating arrangements have been created in Chennai metro and in District Headquarters. 16 Hi-tech parlours have been established in Chennai metro at a cost of Rs.10crore and 31 Hi-tech parlours in districts at a cost of Rs.11.63 crore.

8.4 Usage of non-conventional energy in Dairies

8 dairies, 4 chilling centres and 100 bulk milk coolers have been provided with solar water heaters to produce 1.11 lakh litres of hot water (80°C) per day. To promote green initiatives, Aavin has taken steps to introduce non-conventional energy in dairying infrastructure and installed parabolic concentric solar thermal system in Sholinganallur and Salem dairies to save on furnace oil cost. One Solar Thermal System (CST) project to run the dairy during day hours is being installed in Madurai dairy at a cost of Rs.2.00crore.

8.5 New Ice Cream Plant at Madurai dairy complex

With an aim to expand the Ice cream market in Southern districts, a 10,000 litres per shift capacity ice cream plant expandable to 30,000 LPD in Madurai dairy complex is being installed at a cost of Rs.59.46crore. The entire

works has been entrusted to National Dairy Development Board (NDDB), Anand on turnkey basis and is expected to be completed by December 2019.

9. SERVICES OFFERED TO MILK PRODUCERS BY CO-OPERATIVES

9.1 Veterinary Input Services to Milk Producers

There are around 16 lakhs animals in co-operative ambit. The majority of the animals are crossbred jersey animals and the average yield per animal is around 6.69 litres per day. To enhance the per animal yield semen from High Genetic Merit (HGM) bulls are used for Artificial Insemination (AI). Focus is also given on nutrition aspect and best animal management practices.

Following Veterinary input services are provided to the milk producers:

a) Doorstep Veterinary Service

Mobile Veterinary routes are operated to provide Veterinary Health Service at the doorstep of the milk producers through field Veterinarians.

b) Doorstep Emergency Service

Field Veterinarians attend emergency services as and when call is received from the milk producers.

c) Artificial Insemination Service (AI)

Timely artificial insemination is ensured through field Veterinarians and trained Village Level Workers (VLWs).

d) Conducting Fertility Camp

Regular Fertility camps are conducted at the society level for the treatment of infertile cases and other reproductive problems.

(e) Insurance coverage

The milch animals of producers are being insured at 50% subsidized premium by availing fund assistance under National Programme for Bovine Breeding (NPBB)

(f) Monitoring System

Veterinary software application programme is also being implemented for better monitoring of animal health and breeding activities by field Veterinarians.

(g) Extension Education

Various Training programmes on Clean milk production, Dairy animal management and Fodder aspects are given to the milk producers through four Training centres namely Salem, Madurai, Tirunelveli and Vellore milk unions.

Under Clean Milk Production (CMP) focus is given on the following aspects:

- i. Advising the producers to maintain the animal in clean and hygienic environment.
- ii. Maintaining of milch cows hygienically especially cleaning the udder before and after milking.
- iii. Usage of Stainless steel utensils.
- iv. Usage of S.S. cans and milk collection accessories at the society level.

Summer Stress Management

Members are advised to follow the following practices to overcome the heat stress of animals:

- i. Proper housing of animals in shady areas to protect against hot winds.
- ii. Sprinkling of water over the body of the animals and shower facility if possible.
- iii. Allowing animals for grazing in the early morning / late evening hours.

- iv. Providing adequate cattle feed and mineral mixture & increase the frequency of feeding.
- v. Providing required green fodder and clean cool water 5 to 6 times in a day.

Overseas Visit of Farmers

It is proposed to give overseas exposure to progressive farmers on the best dairy practices and latest scientific trends followed in dairy sector.

9.2. Supply of subsidized Cattle Feed and Mineral Mixture

Cattle Feed and Mineral Mixture are being supplied by the unions with a subsidy of Rs.2/- to 4/- per kg and Rs.20/- to 25/- per kg, respectively from the union fund.

A sum of Rs.16.70 crore has been spent towards subsidy for the supply of 67,233 MTs of cattle feed and Rs.33.88 lakhs towards the

subsidy for the supply of 138 MTs of mineral mixture in 2018-2019.

9.3. Fodder cultivation

The area under fodder cultivation in unions is 65.32 acres and 20.00 acres in Pudukudi (Thanjavur union).

Fodder cultivation is being done in 20 acres of land at Pudukudi, Thanjavur District by Federation to meet out the demand of animals available at Pudukudi and Nucleus Jersey & Stud Farm (NJ&SF), Ooty. In addition, fodder is supplied to the nearby unions viz., Trichy, Thanjavur, Pudukottai and Sivagangai. During the last two years, around 1,000 MT of green fodder and 25 lakhs fodder slips have been distributed to the milk producers.

In order to meet out the fodder requirement during summer season, 500 nos. of Azolla units have been distributed to the society members

and 40 nos. Hydroponics units have been installed as demo units in DCMPUs.

It is also proposed to utilize the land available at Pudukudi to an extent of 90 acres for fodder cultivation in order to meet out the fodder requirement.

Further, fodder will also be cultivated in Meikkal land of Animal Husbandry Department as per feasibility.

9.4. The Restructured Peraringnar Anna Co-operative Milk Producers Welfare Fund

The fund was created with an aim of sustaining loyalty of the milk producers towards Aavin. The MPCS and the district unions contribute Re.1 each per member per month. The corpus fund is utilized to disburse solatium to the member producers. Policy pass books are issued to the members.

A sum of Rs.1.75 lakh will be released to the milk producer who meets with a fatal accident or loses more than one organ and a sum of Rs.75,000 in case of loss of one organ. Children of such families are also given financial assistance of Rs.10,000/- for education and marriage purposes. However, there is no increase in the rate of contribution by the society, union and beneficiary. So far, a sum of Rs.1.88 crore has been disbursed benefitting 106 milk producers.

In order to avail the complete financial benefits from this fund, the milk pouring member should have poured a minimum of 120 litres of milk in 180 days in the preceding one year, prior to the date of accident.

9.5. Payment of incentive to milk producers by co-operative unions

The profit earned by the district unions is being shared with the milk producers by way of

incentive. Depending upon the surplus generated by the particular district union, this incentive amount normally ranges from 60 paisa per litre to Rs.1.60 per litre. A sum of Rs.162.79 crore has been paid as incentive to 3,48,019 milk producers during the year from 2011-2017.

9.6. Payment of bonus to milk producers by Primary dairy cooperative societies

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

A sum of Rs.142.60 crore has been paid as bonus, dividend and patronage rebate during 2018-2019, by which 2.87 lakh members were benefitted.

9.7. Installation of Bulk Milk Coolers

Bulk Milk Coolers (BMC) are small insulated tanks with refrigeration facility positioned at the milk collection points to chill the milk to keep the initial quality of milk. So far, 356 BMCs with chilling capacity of 15.94 lakh litres per day have been installed. It has been proposed to increase the chilling capacity from 15.94 LLPD to 19.12 LLPD by installing 218 BMCs under NPDD & VBMP.

10. MARKETING OF MILK AND MILK PRODUCTS

10.1. Domestic Markets in the State

- The prerequisite for success in marketing is to ensure availability of products in places frequented by large number of people. Keeping this in view, Aavin products are being sold in major stores and super markets like Big Bazaar, Reliance Fresh etc. Further

efforts are on to persuade similar format stores situated in Metro.

- Realizing the popularity of free home delivery of products, Aavin has entered on a tie-up with online companies like Big Basket and Grofers.
- Aavin is considering appointing of super stockists/ carrying and forwarding agents (C&F) for its fermented products like curd, buttermilk, lassi, yoghurt, paneer etc.
- The number of FROs in Chennai Metro and its suburbs will be increased to strengthen the supply network.
- 3 mobile parlours have been launched for sale of milk products.
- It has been planned to open more number of Aavin outlets in colleges, schools etc.
- An exclusive Aavin e-commerce platform will be developed through which the business enquiries, bulk orders will be obtained.

10.2. Domestic Marketing:

1. Aavin endeavors to sell milk and milk products at most reasonable prices to its customers.
2. Aavin brands act as a price control mechanism for controlling the market price of milk and milk products.
3. Aavin has taken up vigorous marketing activities to develop its retailer base in the State. Accordingly it is planned to induct more number of retailers for selling aavin milk and milk products extensively.
4. It has been proposed to devise a new advertisement & publicity policy for aavin milk and milk products in various media and social websites to attract the younger generation.
5. A detailed market study will be undertaken to identify consumer preference of milk products

based on which new range of products will be introduced in the market.

6. Marketing personnel are trained on consumer behavior, consumer awareness, consumer satisfaction to serve the consumer in a better manner.
7. Dairy visits are permitted for School/College students with an aim to inculcate the goodness of aavin.
8. Professional advertising consultants have been appointed to suggest the concept and design for advertisement of aavin milk and milk products.
9. Attractive seasonal offers and discounts on milk and milk products will be given to promote the sale of Aavin products.

10.3. Milk Sales in Chennai Metro

The TCMPF Limited is responsible for marketing of milk and milk products in Chennai Metro and its suburban areas. Aavin is the

largest selling brand in Chennai Metro. During 2018-2019 an average 12.09 lakh litre of milk has been sold per day in Chennai Metro, which is higher by 18,000 litres per day compared to the previous year.

It is proposed to increase the metro milk sale to 13.00 LLPD during the year 2019-2020.

Chennai Metro Sales :- (In LLPD)

Sl. No	Particular	2016-2017	2017-2018	2018-2019	% of growth
1	Metro Milk Sales	11.39	11.91	12.09	1.5

Table 8: Selling Price of Milk

S. No	Type of Milk	Sachet colour	Specification		Rate per 500 ml pack – (in Rs.)	
			FAT %	SNF %	Card	MRP
1	Double Toned Milk	Magenta	1.5	9.0	16.50	17.00
2	Toned Milk	Blue	3.0	8.5	17.00	18.50
3	Standardized Milk	Green	4.5	8.5	19.50	20.50
4	Full Cream Milk	Orange	6.0	9.0	21.50	22.50

10.4. Infrastructure available for marketing in metro

Aavin range of products continues to be popular among the metro consumers. To market its products Federation has created a well knit network to supply milk and milk products to every household.

Table 9: Marketing Network details:

S. No.	Infrastructure	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
1	Distribution Routes	113	117	119	132	148	157
2	Zonal Offices	16	16	16	16	27	27
3	Milk Depots	470	470	433	437	441	493
4	Delivery Points	311	311	361	376	485	512
5	Parlours	93	93	114	147	221	227
6	Milk Whole Sale Distributors	47	71	71	83	84	84
7	Milk Consumers' Cooperative Societies	49	49	49	49	49	49
8	Franchise Retail Outlets	184	202	451	556	594	649
9	Products Distribution Routes	14	16	25	33	33	36

10.5.PRODUCT MARKETING IN CHENNAI METRO

10.5.1. Product Sales in Upcountry Markets

- Due to the large volume of Ghee, Butter and SMP being consumed in Northern & Eastern part of the country, the Federation had operated branches till 2007-2008 all over the country but all operations ceased from 2008 due to continuous milk shortage all over the country for several years. Now faced with plenty, it is only appropriate to ensure visibility of Aavin all over the country, and dispose the products which are accumulated every day. Hence WSDs are being appointed in every state.
- WSDs have been appointed in various states namely Rajasthan, Delhi, North Eastern States (Assam, Arunachal Pradesh, Manipur, Mizoram, Sikkim, Nagaland, Tripura, Meghalaya), Bihar, Madhya Pradesh, Gujarat,

Uttarakhand, Haryana, Andaman & Nicobar, Odisha, Uttar Pradesh, Telangana, Andhra Pradesh, West Bengal. Process is on to appoint WSDs in the remaining states also.

- Targets are being fixed every month for the WSDs and their performances are being monitored.
- Sale of SMP in consumer packs (i.e., in one kg packs) commenced in Kolkata and the sale is expected to be introduced in other states shortly.
- Manufacture of Dairy Whitener & Whole Milk Powder is being planned for producing value added products and marketing in Eastern Indian markets where there is scope for these products.

10.5.2. Export of Aavin Milk products

Tamil Nadu is one of the frontline States in milk production with a daily milk production of 206 lakh litres per day.

The number of private dairies and TCM PF Ltd., are selling major quantity of milk as milk and the remaining milk is converted into milk products. Some of the private dairies and TCM PF Ltd., are exporting their products in their own brands.

The milk products Exported to other countries from ports of Tamil Nadu are as follows:

Melted Butter (Ghee), Butter, Butter oil, SMP, UHT Milk, Processed Cheese, Milk Cream, Cheese, Skimmed Milk, Whey, Dry Powder, Sweetened Cream, Dairy Spreads etc.,

The value of Dairy Products of private dairies and TCM PF Ltd., exported through Tamil Nadu Ports are as follows:

2017-2018 - 12,928 Lakhs

2018-2019 - 12,935 Lakhs

From December 2017 onwards, TCM PF Ltd., has commenced its UHT Milk exports.

TCMPF Ltd. is exporting to Singapore, Hong Kong & Qatar and total value till date is Rs 158 lakhs. Further, TCMPF Ltd., is taking all required steps to expand the export the products to other countries.

Efforts are being made to ensure that Aavin milk products are made available in large number of countries during this year. The market potential for Aavin milk products in other countries will be ascertained by arranging high level visits to various countries, participating in dairy and other food processing fairs and events abroad by putting up stalls, distributing corporate and product brochures and conducting buyers/importers meets. Export process will be commenced in the countries where the market potential is available. It will be ensured that the quality of products and packaging on par with global standards. An exclusive wing has been created in the Federation to focus on exports of milk and milk products. All these measures are

expected to help Aavin propagate the brand name of Aavin at global level.

10.5.3. Future marketing Strategies.

- To study the prevailing market conditions and to suggest immediate action to increase sales professionally qualified persons will be engaged on contract basis.
- New agents/FROs are to be appointed for effective coverage of the uncovered market and to increase the sales.
- Advertisement and sales promotional activities will be geared up to develop brand loyalty and brand image.
- Opening of parlours at educational institutions are undertaken to improve awareness among the youngsters and to increase sales.
- Appointment of Super stockist to cover all super markets, departmental stores,

institutions and caterers in Chennai Metro and suburbs.

- Availability of Aavin products in big retailers like Big Bazaar, Reliance Fresh, Reliance Metro are carried out to boost the sale.
- Appointment of whole sale dealer in every state.
- Sale of SMP in consumer packs will be introduced in north eastern states.

10.5.4. Consumer Care and Support Cell

The Federation is operating a 24X7 consumer care and support cell (CCSC) at the Marketing office, Nandanam since 04.09.2003. CCSC is provided with a Toll Free No. 1800-425-3300. Consumers can contact the CCSC at any time for registering their complaints/ grievances. The complaints received at CCSC are immediately communicated to the section/official concerned and necessary action taken to rectify the complaint. During the year 2018-2019, totally 805 complaints were received and redressed.

Meetings are conducted with the consumers, Resident association representatives, concessionaires and whole sale distributors to know the grievances and also to get their suggestions for improving the sale performance and services of aavin. Based on the feedback, action is taken to ensure customer satisfaction and market development activities.

10.6. Goodwill gesture during flood/cyclone:

During the floods that devastated the State of Kerala in August 2018, Aavin extended a helping hand by supplying Skimmed Milk Powder, Flavoured Milk, Cattle feed, Mineral Mixture to the tune of Rs.6.00 crores.

Similarly, the victims of Gaja cyclone during November 2018 in the state of Tamil Nadu were supplied with SMP, UHT milk, FM and sachet milk through civil supplies corporation for a value of Rs.12.75 crore.

11. QUALITY CONTROL ACTIVITIES

Quality milk procurement from the societies ensures effective processing of milk and milk products thereby ensuring all quality standards to the satisfaction of the consumers as per Food safety and standards Act 2006.

To ensure quality milk procurement, milk is tested at BMC/CC/District union Dairy/Metro Dairy laboratories, by physical, chemical and bacteriological methods to ensure adulterant and preservative & neutralizer-free milk procurement.

Adequate training is imparted at all levels like milk producers, society staff, district union and federation Quality control staff, to ensure testing of milk while collection of milk at society/ BMC/ CC/ Dairy/ FBD/ Metro dairies as per the standard operating procedure.

The district union dairies and federation metro dairies including product dairy have obtained international standard certificates such

as ISO-9001, FSSAI, FSMS-22000, BIS, AGMARK, HACCP & EMS thus ensuring the safety and quality of milk and milk products. The Erode, Salem DCMPUs and Powder plant at Tiruvannamalai have also obtained EIA - export license to export Ghee, SMP and UHT Milk to foreign countries.

To distribute, quality milk and milk products to consumers, the federation and district unions are conducting quality tests at various levels from the initial stage of milk collection through their quality control unit by using modernized testing equipment to ensure supply of quality milk and milk products to the consumers.

During this year quality control laboratories of the district unions will be strengthened by installing state of the art equipments at an estimated cost of Rs.5.00 crore.

12. FINANCIAL PERFORMANCE

12.1. Profit & Loss of Federation and District unions

TCMPF and 15 District Milk Unions reported tentative profit during the year 2018-2019. Remaining 4 District Milk Unions namely Dharmapuri, Vellore, Salem and Trichy Milk Unions reported tentative loss for the year 2018-2019. The selling price of Skimmed Milk Powder (SMP) steeply fallen from Rs.280 per kg to Rs.140 per kg in international market due to global dairy crisis. Even though Aavin incurred loss of more than Rs.6 per litre on surplus milk procured, considering the welfare of the milk producers, Aavin procured entire milk supplied by milk producers without any restrictions. The loss incurred on sale of SMP was absorbed by TCMPF and District Milk Unions from their profitability on sale of milk and value added milk products.

The 4 district unions viz. Dharmapuri, Vellore, Salem and Trichy which were under loss

during 2018-19, were turned around to profit by taking various rehabilitation measures by increasing the sale of milk and milk products by adopting innovative marketing activities, rearranging the sale of milk and value added products and by cutting the cost of production by effectively monitoring the efficiency of operation.

Table-10
Profit & Loss of Federation & District Unions
2006-2011 (Rs. crore)

S. No	Year	Total Sales Revenue	Federation Sales Revenue	Union Sales Revenue	Federation profit / Loss	Unions Profit/ Loss	Net Profit/ Loss
1	2006-07	1566.58	528.78	1037.80	-11.39	-43.66	-55.05
2	2007-08	1776.17	618.85	1157.32	-12.31	-15.58	-27.89
3	2008-09	2085.08	747.77	1337.31	14.26	-6.47	7.80
4	2009-10	2270.75	783.74	1487.01	-21.25	-4.11	-25.36
5	2010-11	2368.67	835.28	1533.39	-17.78	8.88	-8.89
	Total	10067.25	3514.42	6552.83	-48.46	-60.93	-109.39

Table-11

Audited Profit & Loss of Federation & District Unions 2011-2019 (Rs. crore)

S. No	Year	Total Sales Revenue	Federation Sales Revenue	Union Sales Revenue	Federation profit / Loss	Unions Profit/ Loss	Net Profit/ Loss
1	2011-12	2652.00	928.48	1723.52	-41.26	-19.91	-61.17
2	2012-13	3284.00	1145.76	2138.24	49.08	66.28	115.37
3	2013-14	3518.00	1205.47	2312.53	10.83	125.35	136.18
4	2014-15	3881.00	1397.72	2483.28	-62.04	16.66	-45.38
5	2015-16	5139.00	1680.56	3458.44	70.40	-82.77	-12.37
6	2016-17	5281.00	1752.44	3528.56	27.56	111.78	139.34
7	2017-18	5478.00	1859.66	3618.34	34.30	-62.26	-27.96
8	2018-19 (Un audited)	5994.00	2017.86	3976.14	14.50	-27.86	-13.36
	Total	35227.00	11987.95	23239.05	103.37	127.27	230.65

12.2. Turnover and Sales Revenue of Federation and District Unions (Annexure VII)

The turnover of the Federation and the District unions which was Rs.2,369 crore during the year 2010-2011 increased to **Rs.5994 crore** during the year 2018-2019 i.e. an increase of **153%**. The turnover of Rs.5994 crores in

2018-2019 when compared to the turnover of Rs.5478 crore in the year 2017-2018 witnessed a growth rate of **9%**.

Further to improve the turnover, various measures are being taken in the form of increasing the procurement of milk, diversification of new value added products, exporting milk and milk products etc. Further to sustain steady growth, it is proposed to increase the turnover ratio of milk and milk products from the present level of 90:10 to 60:40 in another 5 years, since there is a steady market potential for the value added products.

13. STAFF WELFARE MEASURES

1. The Government have already granted the Ex-gratia pension of Rs.3,500/- per month to the retired employees and Rs.1,750/- per month to the legal heirs of deceased employees of the Federation/Unions with effect from 16.12.2016.

2. 500 ml of milk is given at free of cost to the retired employees of the Federation/Unions with effect from 01.09.2017.
3. The new health insurance scheme of Government has been implemented in Federation/ unions.
4. During 2018-2019, promotion was given to 27 Dairy Development Department employees, 122 DCMPU employees and 157 Federation employees. 49 persons were newly recruited in Dairy Development Department, 191 in DCMPUs and 106 in Federation.
5. Productivity linked incentives are being paid to all the employees of Federation/Unions for Pongal Festival.
6. Ex-gratia Bonus is being paid to all the eligible employees of federation /unions for Deepavali festival.
7. During Pongal and Deepavali Festivals, milk products were distributed as gifts to

all the employees of the federation and DCMPUs.

8. Khoa ½Kg was issued to the retired employees of Federation / Unions during Deepavali.
9. Ghee ½Kg issued to the retired employees of Federation / Unions during Pongal.

14. SUSTAINABLE DEVELOPMENT GOALS AND RESPONSE OF DAIRY DEVELOPMENT DEPARTMENT

The launch of UN sustainability and climate goals in 2015 challenged national governments and industries to review their existing sustainability activities. By setting these goals, the UN is striving to achieve balances across the three sustainability dimensions (environmental, social and economic).

Following are the major goals where dairying plays an important role:

1. End Poverty in all Forms

Dairying plays a major role in eradication of poverty through ensuring regular market for their product namely milk throughout the year at the door steps of the producers and also paying timely remunerative price.

2. Zero Hunger

Dairying also provides basic and better nutrition to the children and women folk. Milk being a wholesome food helps in alleviating hunger especially at the village level, thus preventing malnutrition.

3. Good Health and Well-being

Dairying gives assurance for the round the year cash flow to the farmers at their door steps. Through assured income round the year and improved economic status, well-being and good health is assured.

4. Quality Education

Dairying creates round the year employment to small land holder, landless laborers and women. Dairying ensures regular income which in turns facilitates imparting quality education to the children especially in rural households.

5. Gender Equality

Dairying plays a vital role in women empowerment as the dairy activities are carried out mainly by rural women folk, thus giving major importance to women taking care of gender equality. Presently, there are around 2075 women societies and around 1.98 lakhs women pouring members.

6. Climate Action

In order to reduce global warming, steps are being taken to reduce furnace oil consumption and energy consumption in the dairy industry, through establishment of concentric solar thermal system for dairy

operations - generation of steam, pasteurization & cream separation and adopting Renewable energy concept- Solar power generation.

7. Life on Land

Dairying, being an activity engaged by rural women folk dealing with milch cows assuring regular income helps in leading a happy life.

15. BUDGET FOR 2019-2020

A sum of Rs.246.84crore has been provided in the Budget for the year 2019-2020. Out of this, projected revenue expenditure is Rs.46.84 crore and the capital expenditure is Rs.200.00 crore.

Table-12

**Budget Allocation for Year 2011-2012 to
2019-2020
(Annexure – VI)**

Year	Allocation (Rs. in crore)
2011-2012	65.72
2012-2013	51.25
2013-2014	35.97
2014-2015	81.91
2015-2016	98.18
2016-2017	101.21
2017-2018	118.63
2018-2019	118.02
2019-2020	246.84

16. WAY FORWARD

- Continuous efforts will be taken to double the farmers' income by procuring the entire milk produced and reducing the cost of production

- Steps will be taken to revive dormant societies and organize new societies in uncovered areas
- Technical input services like cattle feed & mineral mixture supply, artificial insemination, health care services will be strengthened by employing digital mode of supply through mobile app
- More importance will be given to mitigate drought situation and to increase the fodder supply utilizing the “meichal poramboke”, and lands belonging to society, union etc
- Priority will be given for prevention of adulteration in milk and milk products at the village level procurement, chilling centers& Dairies
- Major thrust will be given to optimal capacity utilization of the dairies
- Production of value added products to increase revenue
- Export of Aavin products like SMP, Ghee & UHT milk in more countries

- Tie up with dairy colleges, NDRI, Bengaluru for production of innovative and cost effective milk products
- New packaging technologies, will be introduced for improved shelf life and aesthetic appeal
- Strengthening of infrastructure in the State to handle 50 lakh litres of milk per day

17. DEPARTMENT OF AUDIT FOR MILK CO-OPERATIVES

The Department of Audit for Milk Co-operatives was created as a separate department, in 1987 to conduct statutory audit exclusively for Milk Co-operatives. Milk Co-operatives comprises of Tamil Nadu Cooperative Milk Producers' Federation Ltd., at apex level, **19** Co-operative Milk Producers' Unions at District level and Milk Producers/Consumers' Co-operative Societies at Primary level.

1. Cadre Strength

The Department has been sanctioned with 333 permanent posts of which 297 posts are filled on deputation basis.

**Table13:
Cadre Strength of Department of Audit for
Milk Cooperatives**

Name of the cadre	Strength
Director	1
Joint Director	1
Deputy Director (Accounts)	1
Regional Deputy Director	5
Assistant Director	59
Senior Cooperative Auditor	224
Junior Cooperative Auditor	7
Ministerial Service	10
General Subordinate Service	8
Basic Service	17
Total	333

2 Audit of TCMPF Ltd

Statutory Audit of Tamil Nadu Cooperative Milk Producers' Federation for the year 2017-2018 has been completed and audit certificates issued. Audit for the year 2018-2019 is in progress. Half yearly audit of 2018-19 has been completed in 6 units of Federation (Tiruvannamalai Powder Plant, Central Dairy, Transport, Erode DIPA, Erode BFSS & JMD Office). Audit is in progress in the remaining 4 units (Sholinganallur, Ooty NJSF, Marketing & Head Office)

3. Audit of District Co-operative Milk Producers' Unions

Statutory audit of 17 District Co-operative Milk Producers' Unions for the year 2017-2018 was completed and audit certificates issued. Half yearly audit of 2018-2019 has been completed in 14 unions namely Kanyakumari, Tirunelveli, Villupuram, Thanjavur, Dindigul, Trichy,

Pudukottai, Sivagangai, Virudhunagar, Coimbatore, Erode, Nilgiris, Madurai & Dharmapuri. Audit is in progress in the remaining 3 unions (Vellore-Tiruvannamalai, Kancheepuram-Tiruvallur & Salem). Audit will commence for the newly created Tirupur and Namakkal unions and will be completed within the stipulated time.

4. Audit of Milk Producers Co-operative Societies

Out of 9947 milk producers cooperative societies statutory audit of 9922 primary Societies for the year 2017-2018 have been completed. Audit in 25 primary milk producers' co-operative societies could not be taken up as books of accounts were not available. Audit programme for 2018-2019 has been drawn up & audit has commenced in the MPCs.

5. Audit Fees & Fundamental Rule Costs

During the year 2018-2019, a sum of Rs.67.86 lakhs was collected towards audit fees for undertaking statutory audit in milk co-operative societies and Rs.74.58 lakhs was collected towards fundamental rule 127 cost from State Federation / Unions / MPCSS all of which were remitted into Government account.

6. Audit Review (Accounts) Committee Meetings

Audit review (accounts) committee meetings have been conducted regularly to facilitate the rectification of audit objections relating to milk co-operatives. During the year 2018-2019, rectification reports pertaining to 16 audit objections of District Co-operative Milk Producers' Unions and 404 audit objections of Primary Milk Producers' / Consumers' Co-operative Societies, were placed before the committee for review and treated as settled.

7. Training and Development

The audit personnel of the Department have been exposed to various training programmes to improve their professional competency. Steps are being taken to conduct refresher course for the auditors of the department with the financial assistance sanctioned by the Government.

18. CONCLUSION

The success of Aavin lies in the sustained partnership with the rural producers and consumers, with constant efforts being taken to augment rural income while striving to meet the consumer demand.

Continued support by the Government has paved way for the establishment of dairy infrastructure designed to handle the increasing milk procurement. The diverse dairy products continue to be popular for quality and value.

Performance and professionalism combined together ensure that challenges are met and obstacles are overcome as Aavin strives ahead, all set to scale greater heights in the Dairy industry.

K.T.Rajenthralaji
Minister for Milk and Dairy Development

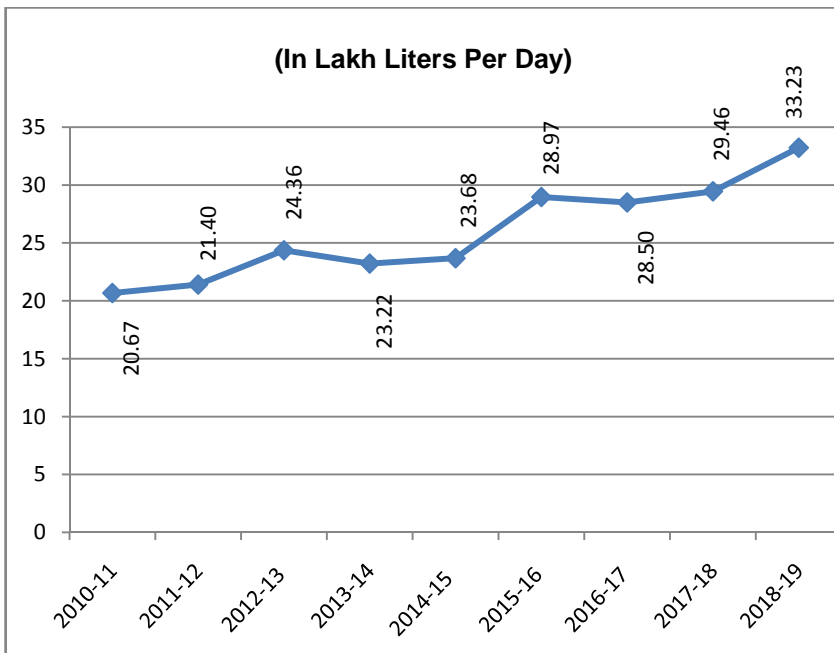
Milk Cooperative Sector at a glance

S. No	Items	in Nos.
1	Total number of Milk Producers Coop. Societies	12,585
2	Milk Producers Co-operative Societies formed during 2018-2019 (in Nos.)	308
3	Total Number of members in Milk Producers Cooperative Societies (In Lakh)	20.30
4	Number of milk pouring members (In lakh)	4.6
5	Milk Production by societies (In LLPD)	33 to 40
6	Number of District Cooperative Milk Producers Union	19
7	State Level Federation	1
8	Milk Procurement by Unions (In LLPD)	29 to 36
9	Milk marketing in Chennai City (In LLPD)	12.09
10	Milk marketing in District Unions (In LLPD)	10.42
11	Number of Union Dairies	18
12	Number of Federation Dairies	5
13	Handling Capacity of Union Dairies (In LLPD)	29.71

S. No	Items	in Nos.
14	Handling Capacity of Federation Dairies (In LLPD)	18.65
15	Number of Chilling Centres	34
16	Handling Capacity of Chilling Centres (In LLPD)	14.25
17	Number of Bulk Milk Cooler Units	356
18	Chilling Capacity of Bulk Milk Cooler units (In LLPD)	15.94
19	Number of milk distribution routes at the level of District Unions	304
20	Number of milk distribution routes in Chennai Metro	157
21	Number of Powder plants (Erode, Salem, Madurai, Dharmapuri District Unions and Federation)	5
22	Capacity of powder plants for drying Milk (MT/day)	90
23	Butter storage capacity (in MT)	4,509
24	SMP storage capacity (in MT)	6,950

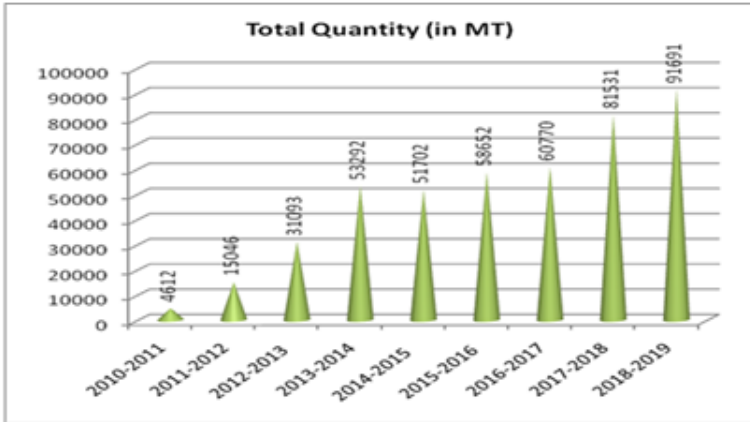
ANNEXURE - I

MILK PROCUREMENT



ANNEXURE – II

CATTLE FEED SALES

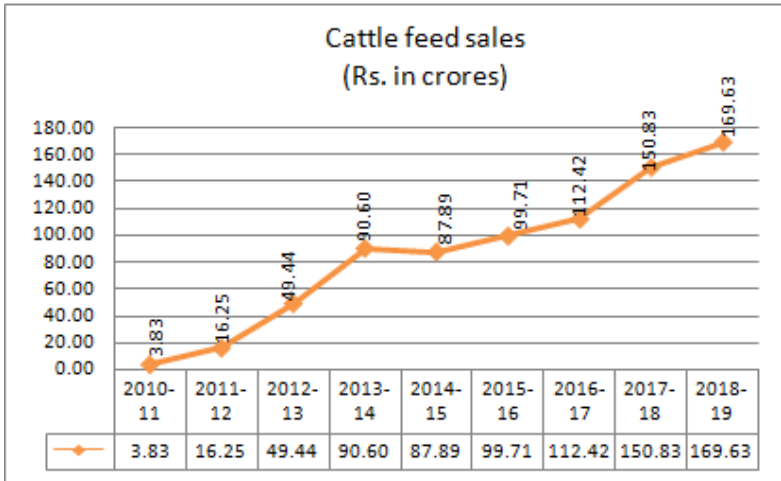


ANNEXURE –III

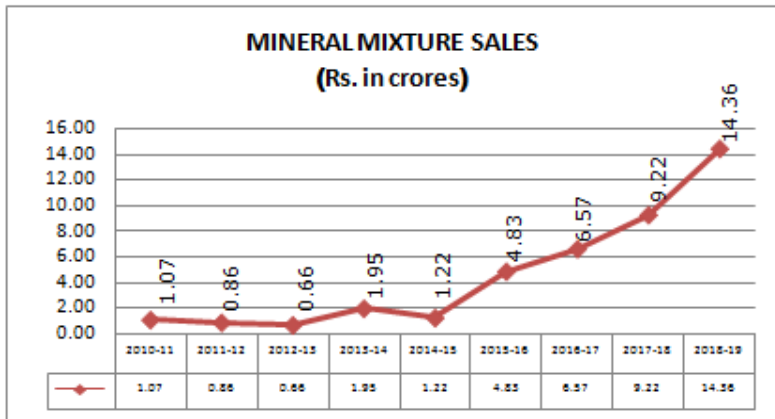
MINERAL MIXTURE SALES



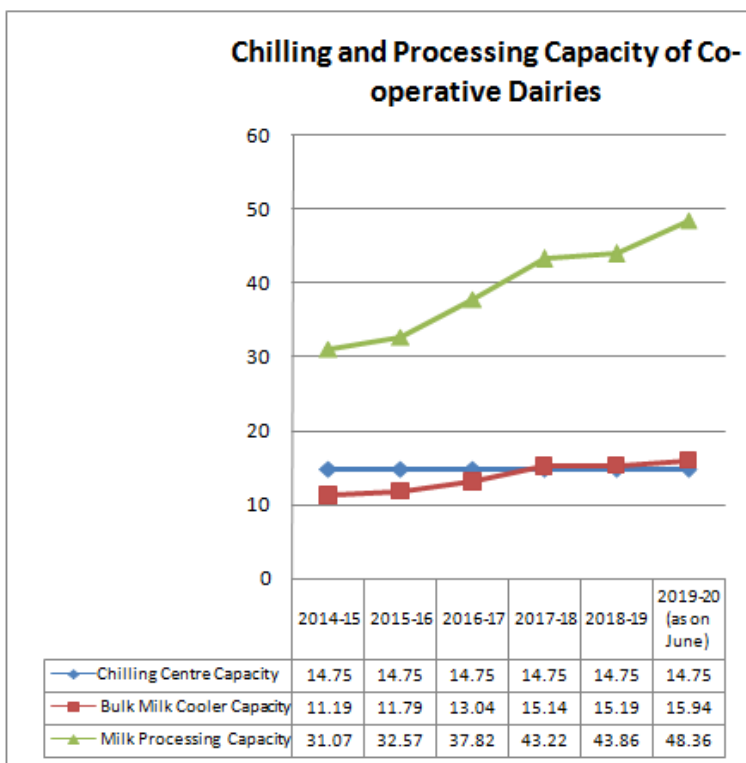
ANNEXURE- IV



ANNEXURE- V

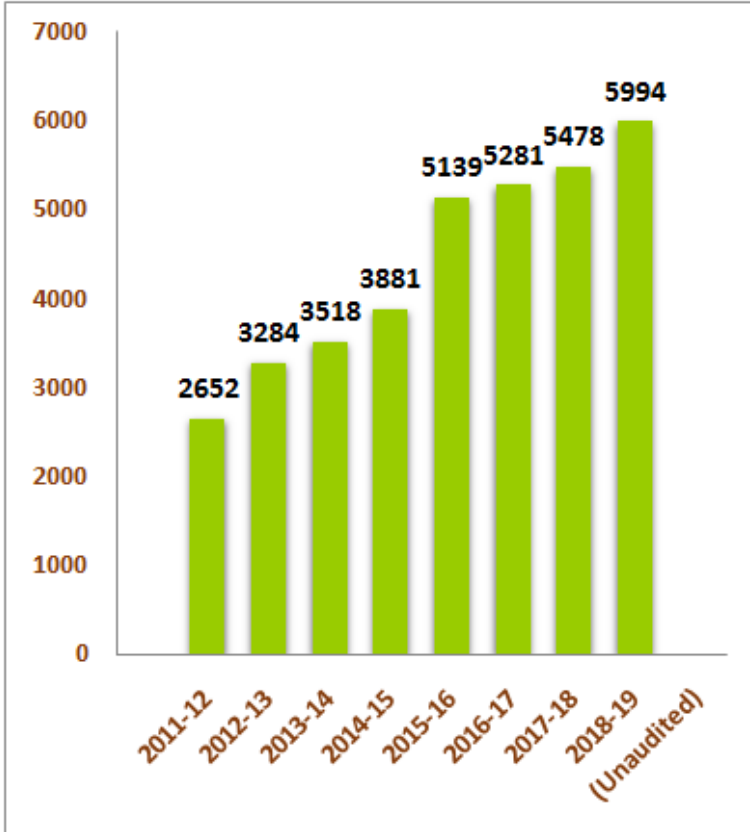


ANNEXURE – VI



ANNEXURE – VII

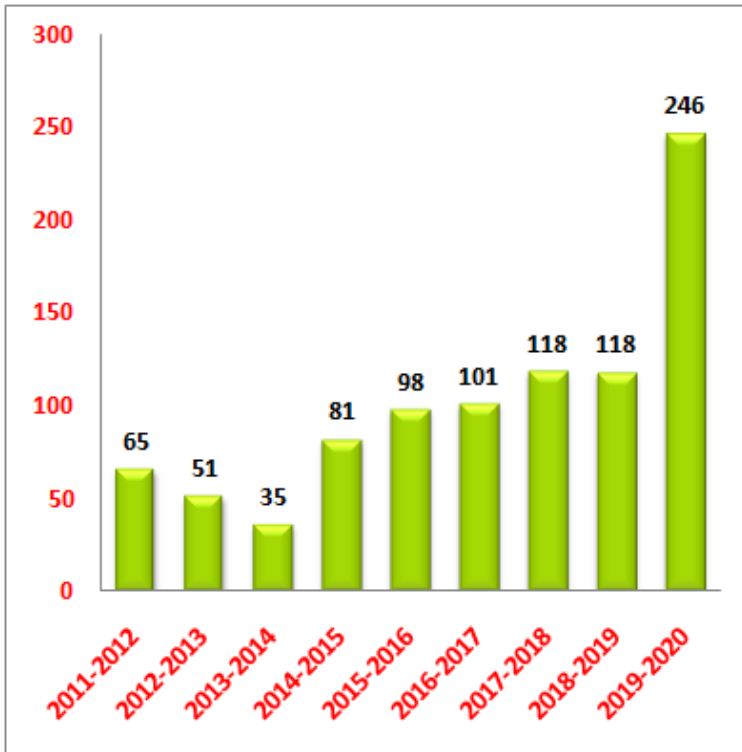
Sales Revenue (Federation and Unions) Rs in Crore



ANNEXURE –VIII

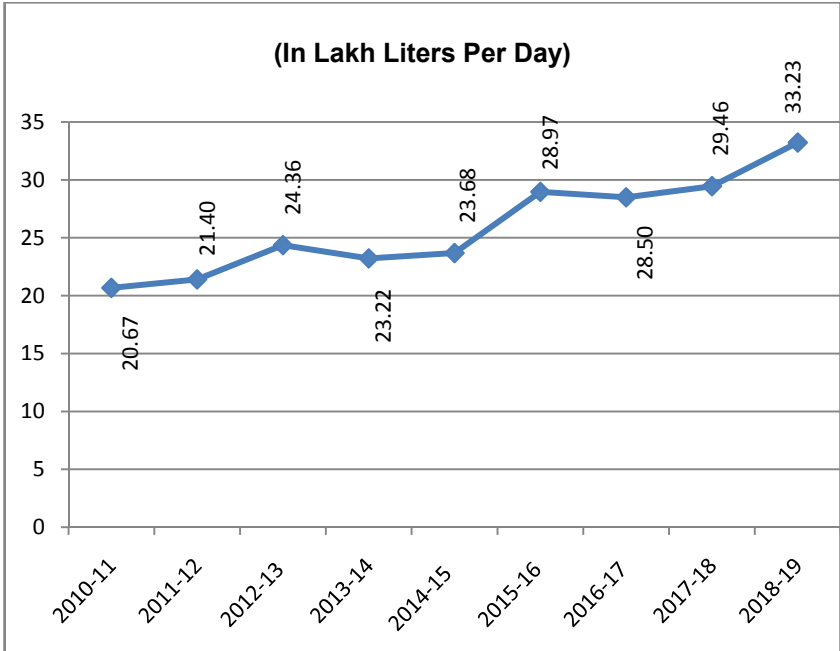
Budget Allocation for the year 2011-12 to 2019-2020

(Rs. In crore)



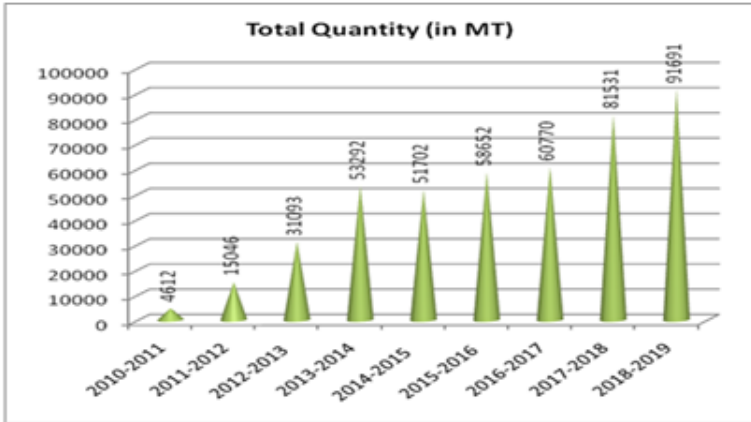
ANNEXURE - I

MILK PROCUREMENT



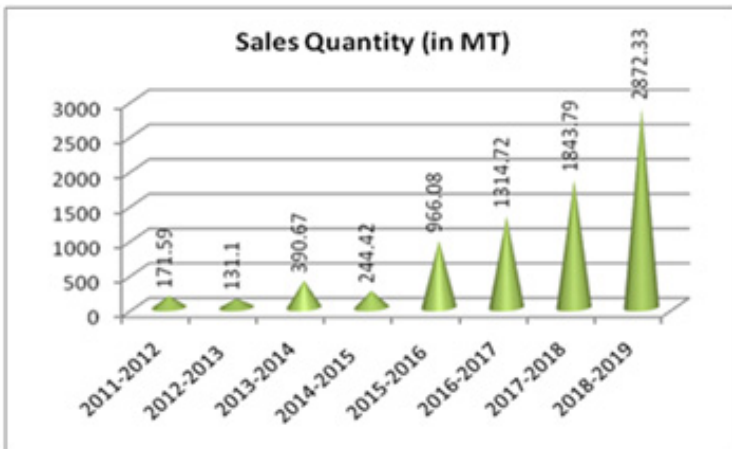
ANNEXURE – II

CATTLE FEED SALES

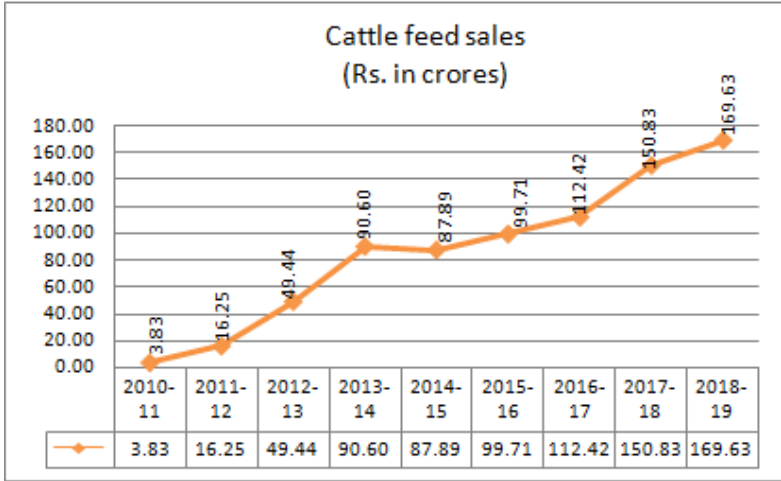


ANNEXURE –III

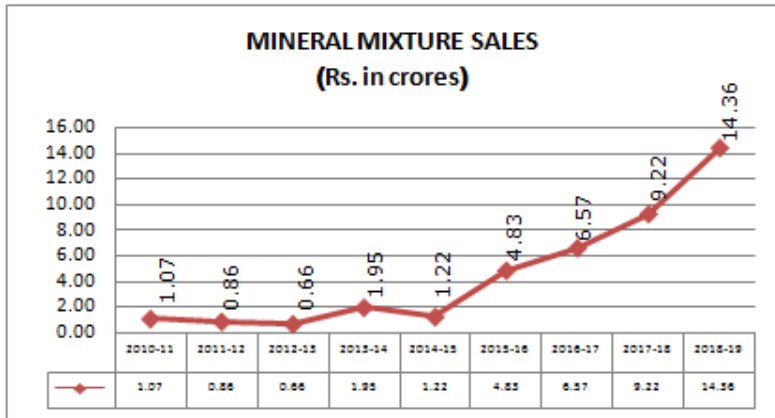
MINERAL MIXTURE SALES



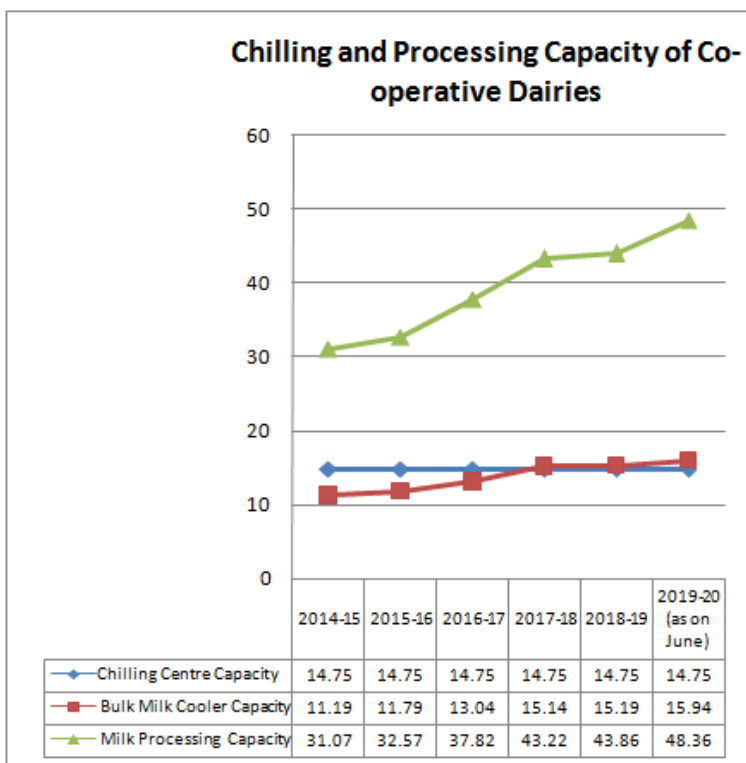
ANNEXURE- IV



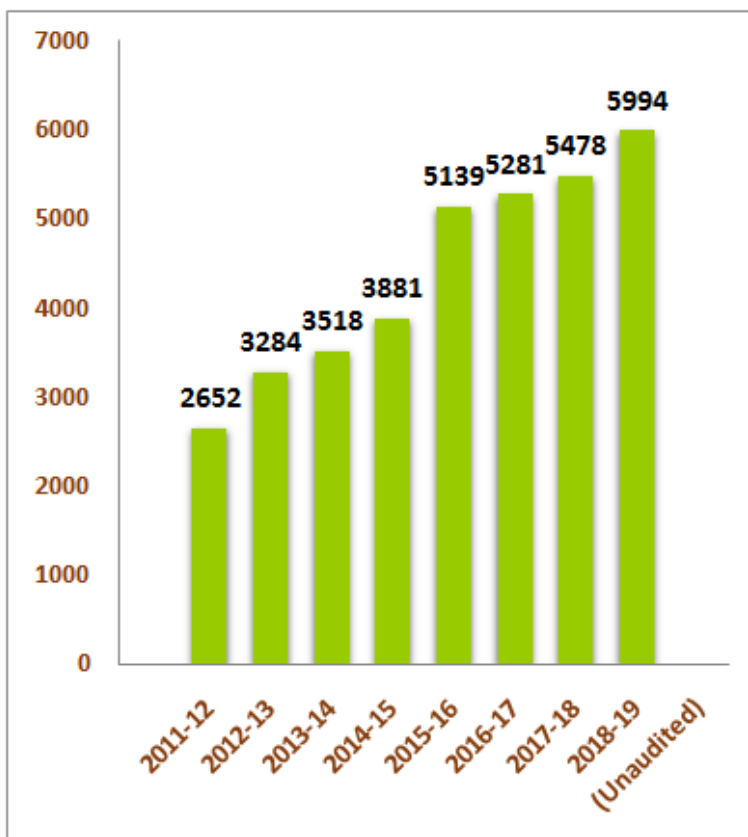
ANNEXURE- V



ANNEXURE – VI



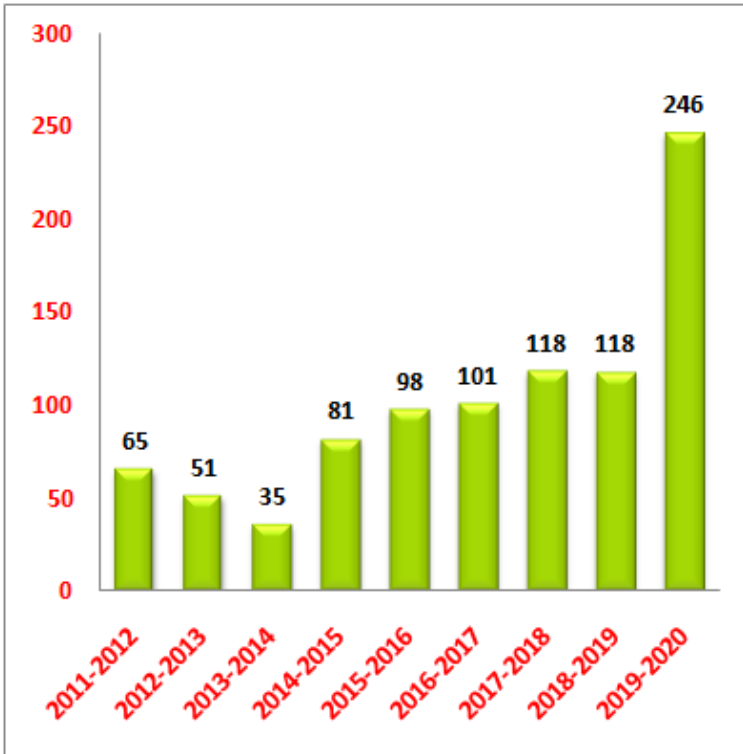
ANNEXURE – VII
Sales Revenue (Federation and Unions)
Rs in Crore



ANNEXURE –VIII

Budget Allocation for the year 2011-12 to 2019-2020

(Rs. In crore)





**Madurai Deputy Registrar (Dairying) office building and
Hi-tech Avin Parlours Inaugurated by Hon'ble Chief Minister**



Additional two new District cooperative milk producers unions at Namakkal and Tiruppur inaugurated by Hon'ble Chief Minister on 17.12.2018



Launch of UHT milk sale in Qatar on 01.02.2019



New integrated Aavin Administrative Building at Nandhanam



Inauguration of flavoured Yoghurt on 30.10.2018



Dairy Plant Machineries at Ambattur product dairy



Milk Collection at Mottur MPCPS



Milk Collection at BMC - Erode DCMPU



**Hydroponics unit at Attur,
Salem DCMPU**



Fodder Farm at Salem DCMPU



Hi-tech Parlour at Thanjavur