# CHAPTER - III

## **SUGAR DEPARTMENT**

# 1. Overview of Sugarcane cultivation:

Sugar Industry is an Agro-based industry and Sugarcane is cultivated by about 5 Lakhs farmers in Tamil Nadu. The registered Sugarcane crop is cultivated in an area of 2.5 to 3.0 Lakh Hectares comprising of about 2% of the total cultivable area. An average of 300 agricultural mandays are generated for cultivation of one hectare of Sugarcane. Also Sugar Industry employs directly and indirectly about 50,000 persons. Further, the industry engages vehicles for transport of cane from the field to the factory and for despatch of Sugar and molasses. The auxiliary industries viz. Distillery-cum-Ethanol, Co-generation and Paper plants depend upon the Sugar mills for raw material. The Sugarcane is often used for crop rotation wherever paddy, cotton and groundnut is cultivated continuously.

The Sugar Mills are also involved in rural development and reconstruction through establishment of Schools, Colleges, Technical Institutions and Healthcare Centers. As Sugarcane is cultivated under contractual obligation, agricultural credit is easily available to Sugarcane farmers under tie up arrangement with the mills.

## 2. Performance of Sugar Mills in Tamil Nadu:

There are 41 Sugar Mills in Tamil Nadu comprising of 16 Sugar Mills in Co-operative Sector, 3 Sugar Mills in Public Sector and 22 Sugar Mills in Private Sector. Presently 38 Sugar Mills are functioning while 3 mills viz. Madurantakam Co-operative Sugar Mill (from 2001-02 season) Madura Sugars(from 2002-03 season) and Arunachalam Sugar Mills (from 2003-04 season) are not functioning.

The area registered, Cane crushed, Sugar produced and recovery percentage for the past five years in Tamil Nadu are given below:

Year	Area registered (Lakh Hectare)	Sugarcane crushed (LMT)	Sugar produced (LMT)	Recovery %
2003-04	1.40	92.80	9.20	9.92
2004-05	2.56	114.92	11.09	9.65
2005-06	2.97	231.46	21.38	9.24
2006-07	3.03	274.49	25.39	9.25
2007-08	2.89	229.68	21.41	9.32
2008-09 Estimate	2.25	166.41	16.16	9.71

#### 3. Remuneration to Cane farmers:

The State Government have not announced the State Advised Price for four years from 2001-2002 crushing season and only announced the State Advised Price of Rs.1014/-

per tonne for 2005-2006 crushing season. After assuming the office by this Government the above State Advised Price amount was disbursed to the cane farmers.

Every year, based on the recommendations of the Commission for Agricultural Costs & Prices, the Government of India is fixing the Statutory Minimum Price linked to 9.0 % recovery. For the 2007-08 Crushing Season, an amount of Rs.811.80 per MT of Cane was announced as Statutory Minimum Price linked to 9.0% recovery. For the 2008-09 crushing season also the same Statutory Minimum Price of Rs.811.80 per M.T. of Cane was announced by Government of India. Although there is no increase in the Statutory Minimum Price announced last year, the Government of Tamil Nadu announced higher State Advised Price of Rs.1050/- per MT with an increase of Rs.238.20 over and above Statutory Minimum Price with a premium of Rs. 9/- per MT for every 0.1% increase in recovery. On the basis of request to further increase this price, the Government of Tamil Nadu has now decided to raise it to Rs.1100/- per tonne for the 2008-09 crushing season. Besides, the entire Cane transportation charges are borne by the Co-operative and Public Sector Sugar Mills from 2006-07 sugar season onwards. Thus by bearing Rs.90/- towards transport charges and providing on an average of Rs.30/- as recovery based incentive, the Sugarcane farmers in Tamilnadu will get a Cane payment to the tune of Rs.1220/- per tonne for the Crushing Year 2008-09. The Tirupattur Co-operative Sugar Mills has paid a maximum amount of Rs.1262/- per tonne based on sugar recovery besides transport charges of Rs.90/- totaling to Rs.1352/- per tonne.

#### 4. Progressive Sugarcane cultivation:

Water requirement of Sugarcane crop is high and to sustain the production and productivity of Sugarcane in the State, without reducing the food crops area, the Tamil Nadu Agricultural University has developed pit method of planting, wider row spacing and fertigation through Drip irrigation technology for Sugarcane crop. This technology proved to yield around 140 MTs of Cane per hectare which is nearly 30-40% higher, over the present productivity level. Hence, the Government is promoting the above technologies in clusters to achieve higher production in Sugarcane.

Micro-irrigation along with fertigation is provided in paired row method of planting. By this method 40% of water can be saved, besides increasing Cane yield by 35 to 45 percent. Hence, in order to encourage installation of Drip irrigation among the farmers during last season an extent of 4,000 hectare was covered in Co-operative and Public Sector Sugar Mills. The scheme envisages 50% subsidy not exceeding Rs.28,800/- per hectare and the expenditure is shared between Centre and State at 80:20 ratio. About 12,000 Cane growers will be benefited by this Scheme.

Under Precision farming, target has been fixed at 200 hectare for each Co-operative and Public Sector Sugar Mills, in which drip fertigation with sub-surface irrigation, wider row spacing and intercropping will be adopted to achieve the potential Cane yield per unit area. An amount of Rs.40,000 per hectare is paid as subsidy from Micro-irrigation scheme. Further Rs.25,000/-is provided as subsidy for procuring inputs such as water soluble fertilizer, setts and pesticides.

Under Bio-composting, physical properties of the soil is improved along with integrated nutrition management and utilization of organic resources as organic manure, so as to increase the Sugarcane productivity. The components are the vermi-compost, bio-inputs and organic manure production using municipal compost. Each Co-operative and

Public Sector Sugar Mills are assigned with the target of one municipal composting, ten bioinputs units production and ten vermi-compost units.

Sugar Mills along with Tamil Nadu Agricultural University and other Research and Development Institutes have been introducing promising high yielding, drought and pest resistance varieties like CoC 23, Co 99004, Co 99006, Co 94012 etc. to improve production and productivity of Sugarcane.

Model Cane farms are being developed in each Co-operative and Public Sector Sugar Mills about an extent of 2 Ha per sugar mill at an approximate cost of Rs.5 lakhs to demonstrate the latest technologies to the Cane growers in Sugarcane cultivation.

Sugarcane Research and Development works are being undertaken by establishing the parasite breeding centre, conducting Coordinated Agronomic Experiments apart from conducting field and result demonstrations.

Main Bio-Research Laboratory (MBRL), Chengalpattu has developed and commenced the commercial production of bio inputs like Acetobactor, Phosphobactrin, Granulosis virus, Trichodermaviride etc., and is supplying the same to the member Sugar Mills.

There is long standing demand for mechanization of agricultural operations due to scarcity of labour in the State. Tamil Nadu Agricultural University is the nodal agency for introducing cost effective mechanical harvester after conducting field trials and incorporating modifications based on agricultural practices to suit the farming conditions of the State. one sugarcane harvester was purchased from Tailand by the Tamil Nadu Agricultural University and the trial run and demonstration are going on. Soon 34 harvesters will be procured for 17 Cooperative and Public Sector Sugar Mills for timely, efficient, and cost effective harvesting operations.

Due to the efforts of the Government, Tamil Nadu stood first in the Sugarcane productivity in our country.

#### 5. Setting up of new integrated Sugar complexes:

Sugar industry have emerged as vehicle for rural economic transformation and the Government have decided to establish nine new sugar mills in the state. The new mills according to guidelines are to be integrated Sugar complexes. So far three projects viz. Sakthi Sugar Mills, Erode, Kothari Sugar Mills, Ariyalur and Rajshree Sugars and Chemicals Ltd., Gingee have been completed and commissioned and it is expected that the rest of the mills will commence their crushing operations during the 2009-10 season.

The State Government demarcated the Cane areas for establishment of nine new integrated Sugar complexes with facilities of Co-generation, Distillery and ethanol production, tissue culture lab, soil testing lab and bio-composting facility. These mills will bring their entire Sugarcane area under drip fertigation within a span of five years. The interest of the farmers in the reserved area of these mills shall be protected and they will be paid Statutory Minimum Price, State Advised Price, transport cost as prescribed in the G.O.Ms.No.362 Agriculture (S1) Department, dated: 27.11.2006.

The details of the nine new integrated Sugar complexes are given below :-

SI. No	Name of the mills	Taluk	District
1	Kothari-Sathamangalam	Ariyalur	Ariyalur
2	Rajshree- Semmedu	Gingee	Villupuram
3	Sakthi-Modakurichi.	Erode	Erode
4	Dharani- Kalaianallur	Sankarapuram	Villupuram
5	Empee Sugars-Idaikal	Ambasamudram	Tirunelveli
6	Shree Ambika-Manjini	Attur	Salem
7	Dhanalakshmi	Veppanthattai	Perambalur
	Srinivasan-Udumbiyam		
8	Bannariamman-	Thandarampattu	Tiruvanna-
	Kolunthampattu		malai
9	Madras Cements	Tirukoilur	Villupuram
	Vengur		

## 6. Rehabilitation and Modernization of Sugar Mills:

The Public Sector Sugar Mills ie. Perambalur and Arignar Anna Sugar Mills will be rehabilitated at an investment of Rs326.08 crores. Seting up of Cogeneration plant and ethanol-cum-distillery unit and modernization of these Sugar Mills will also be taken up in the rehabilitation project.

The closed Sugar Mills ie. Madurantakam and Madura are being made operationed by adopting LROT (Lease, rehabilitate, operate and transfer) strategy.

Cogeneration plants have already been established to a capacity of 404.19 MW in our state. Tamil Nadu Electricity Board has recently invited tenders for establishment of cogeneration plants in all Cooperative and Public Sector Sugar Mills at a cost of Rs.1177/crores for generating 234 MW power. The tenders have been received and the evaluation work is in progress. The project is expected to be completed in 18 months after issue of the work order.

Salem and Amaravathi Cooperative Sugar Mills have commissioned Distillery-cum-ethanol plant at a cost of Rs.350/-lakhs with a capacity of 30 KLPD each. The environmental and technical consultants have initiated work regarding establishment of ethanol cum distillery plant at M.R.Krishnamurthy and Cheyyar Co-operative Sugar Mills with a capacity of 45 KLPD at a cost of Rs.36/- crores each.

#### 7. Simputerization and Computerization:

Tamil Nadu State has pioneered the project of real time data capture and web hosting of data regarding agricultural operation simputerizing and computerizing of this data. This will bring in transparency, efficiency and accountability at the farmers interphase. Pilot projects were successfully tried in the year 2006-2007 at Cheyyar and Vellore Sugar mills. In 2007-08 it was introduced in Tiruttani and Perambalur Sugar Mills. Now it has been decided to simputerize and computerize the entire package of practices in sugarcane cultivation in all the Co-operative and Public Sector Sugar Mills at a cost of Rs.95.85 lakhs.