AGRICULTURE - FARMERS WELFARE DEPARTMENT

POLICY NOTE 2024- 2025

DEMAND No. 5

Thiru. M.R.K. PANNEERSELVAM

Hon'ble Minister for Agriculture - Farmers Welfare

Introduction

"இரவார் இரப்பார்க்கு ஒன்றுஈவர் கரவாது

கைசெய்தூண் மாலை யவர்"

(திருக்குறள் : 1035)

They ask nothing of others: to those who ask they give.

Who raise with their own hands the food on which they live.

Moreover, the Poet Kambar, in his Poem Earezhupathu, while depicting the glory of Agriculture has declared that farmers assume a superior status when compared to others as detailed below.

"பார்வேந்தர் பெருஞ்செல்வம் பழுதுபடா தொருநாளும்

ஏர்வேந்தர் பெருஞ்செல்வம் அழிவுபடா திருத்தலினால்

தேர்வேந்தர் போர்க்களத்துச் சிலர்வெல்வர் சிலர்தோற்பர்

ஏர்வேந்தர் போர்க்களத்துள் இரப்பவருந் தோலாரே"

(ஏரெழுபது : 58)

The poet extols the enduring wealth of a king who protects his realm, attributing this prosperity to the farmers whose bountiful paddy harvests never diminish. Unlike the uncertain outcomes of kings in battle, where some win and some lose, the farmers' fields consistently yield plentiful goods. Those who seek sustenance can always rely on the farmers, who unfailingly fulfill their responsibilities.

Agriculture is the noblest and the oldest occupation as it nourishes the hungry and sustains life in the world. The other occupations related to production of essential goods for meeting the basic needs of human being like food, clothes and shelter are also dependent on Agriculture. Agriculture, being a big contributor in the development of the nation also remains as the main occupation for the livelihood of most of the people in Tamil Nadu. Agriculture, besides being the primary occupation, also plays role in the progress of other sectors and provides employment opportunities in agriculture related fields, agri trade, poverty alleviation and eradication of hunger too and gains importance. The state which flourishes in agriculture will prosper as it does not have to experience the

detrimental effects of famine. Having a full comprehension of the interdependence between agriculture and other sectors, the Tamil Nadu Government is actively taking steps for the upliftment of farmers.

The nomenclature - Agriculture – Farmers Welfare Department- which has been recently adopted is indicative of farmers' welfare gaining top priority. Undoubtedly, earnest efforts are being taken to transform agriculture into a profitable enterprise. This effort includes integrating new technologies, fostering innovation, and encouraging the younger generation to pursue agriculture. The department's initiatives aim to enhance productivity and profitability in the agricultural sector, ensuring that farming remains a viable and attractive occupation.

Presently, the efforts to revive the declining soil health, providing healthy food to the increasing population through sustainable and environment-friendly practices and leaving healthy soil and enriched, non-toxic agricultural produces to the younger generation are the important tasks before us. Additionally,

addressing the challenges posed by climate change induced variations in season and combating emerging new pests and diseases are also huge tasks ahead. Furthermore, increasing the cultivated area which is showing a declining trend, improving the ground water status, disseminating new technologies extensively among the farmers to boost production are also to be focussed on and managed well.

In Tamil Nadu, significant efforts are being made to enhance farmers' livelihoods through tailored advisories on new crop varieties and technologies suited to the state's seven agro-climatic zones. These advisories consider various soil types, rainfall patterns and crops appropriate for different climatic conditions. Additionally, several initiatives are underway to ensure consistent income and livelihood stability by encouraging farmers to diversify and integrate their activities. These activities include animal husbandry, home gardening, fish farming, beekeeping, sericulture and agroforestry. By integrating these allied activities, farmers can achieve sustained income throughout the year without relying solely on crop husbandry.

Efforts taken by the Government of Tamil Nadu for Agricultural Development

During the year 2023-24, the Mettur Dam was opened on the scheduled date of June 12th by the Honourable Chief Minister of Tamil Nadu and the Kuruvai Package scheme was provided to the farmers at an outlay of Rs.75.95 crore to take up Kuruvai cultivation. Moreover, rivers and canals were desilted and the irrigation facilities were improved. These efforts of the Government of Tamil Nadu resulted in Kuruvai cultivation in 5.599 lakh acres which is the highest in the past 48 years.

In continuation to the implementation of Kuruvai Special Package Scheme during the past three years to increase agricultural production and to improve the livelihoods of farmers, Tamil Nadu Government will implement the Kuruvai Special Package Scheme during the year 2024 also at an outlay of Rs.78.67 crore. This Kuruvai Special Package Scheme will be implemented by integrating the schemes of Agriculture, Agricultural Engineering and Rural Development and Panchayat Raj Department.

Moreover, the Agriculture – Farmers Welfare Department has been assigned three long term visions by the Honourable Chief Minister of Tamil Nadu. The first vision is to increase the net cropped area in the state. The net cropped area has increased to 119.50 lakh acre during the year 2022-23 from 119.37 lakh acre during 2020-2021 owing to the implementation of various schemes designed and presented in the last three Agriculture Budgets.

Likewise, the second long term vision of doubling the double cropped area had resulted in an increased area of 35.15 lakh acre in the year 2022-23 from 32.65 lakh acre in 2020-21 due to the implementation of various scheme activities.

In addition, concerted efforts are also being undertaken to realize the third long term vision of placing Tamil Nadu within the top three positions at national level in productivity of foodgrains, Coconut, Sunflower and commercial crops like Sugarcane and Cotton.

Table : 1.1 – Status of Tamil Nadu in Agricultural productivity at National level.

First Place	Second Place	Third Place	Fouth Place
Oilseeds, Groundnut, Sugarcane, Ragi	Maize	Coconut	Rice, Minor Millets

Source : Agriculture Statistics at a Glance-2022

In Tamil Nadu, the Grama Sabha meetings are being conducted by the Rural Development and Panchayat Raj Department on six occasions viz., January 26, March 22, May 1, August 15, October 2 and November 1. The transparency in implementation of various schemes is ensured by exhibiting the list of beneficiaries of schemes and appraising of scheme activities by the officials of Agriculture – Farmers Welfare Department. Moreover, new agricultural technologies, developments are also exhibited during these events and downloading of Uzhavar App, issuance of Kisan credit card, PM-Kisan assistance are also ensured.

NITI Aayog is working towards the global transformation envisioned for 2030 through the Sustainable Development Goals (SDGs). Currently, 17 SDGs have been established and various departments design and implement schemes based on these goals. The Department of Agriculture in Tamil Nadu is specifically tasked with addressing six of these goals: No Poverty, Zero Hunger, Good Health and Well-being, Clean Water and Sanitation, Responsible Consumption and Production and Life Below Water. The department's schemes are designed to meet these objectives and ongoing activities aim to achieve these SDGs. These schemes will continue to be implemented to ensure the attainment of the set goals.

Agriculture, as an occupation, is highly esteemed finds resonance in Avvaiyar's words in Kondrai Vendhan (77), "**மேழிச் செல்வம் கோழைபடாது,**" which means "wealth gained through agriculture never diminishes".

To improve the lives of farmers, various schemes which focus on their welfare have been implemented. These initiatives aim at supporting farmers and transforming the noble occupation

of agriculture into a realm of significant achievements, which have been achieved by overcoming numerous challenges. Through their hard work, farmers sustain the population: they are akin to nurturing mothers with regard to providing food and ensuring food security.

Evolution – Agriculture Department

The then Governor of Madras Presidency Sir William Denison presented details of the agricultural activities in the Madras Presidency to his Council Note of 1863, drawing the attention towards agriculture and paving the way for the development activities for continuous growth.

Moreover, a separate Department of Agriculture was established in 1882 to implement the recommendations of the Indian Famine Commission in 1880. Later, it was designated as the post of Commissioner of Revenue Settlement, Land Records and Agriculture and from 1905 onwards a separate Department of Agriculture was streamlined with

necessary staff and continued to function under the control of the Director of Agriculture.

The services of Agriculture Department had been rendered firstly by the Revenue Department at Secretariat level, later by Development Department and then by the newly formed Agriculture Department. The Commissioner of Civil Supplies in the Board of Revenue was nominated and functioned as Agricultural Production Commissioner during 1949-1951. The responsibilities at Secretarial level were also bestowed till 1956 continuously. Later, these services were transferred to the Secretary to Government in Agriculture Department.

Table : 1.2 – Formation of Various Departments under the Agriculture – Farmers Welfare Department.

S.No	Department	Year	Details
1.	Department of Agriculture	1882	Functioning as separate Department
		1905	Functioning with Director of Agriculture as Head of Department

S.No	Department	Year	Details
2.	Department of Agricultural Marketing and Agri Business.	1977-1978	Functioning as separate Department from Agriculture
3.	Department of Horticulture and Plantation Crops	1979-1980	Functioning as separate Department from Agriculture
4.	Department of Seed Certification and Organic Certification	1979-1980	Functioning as separate Department from Agriculture
		2022	Change of Headquarter from Coimbatore to Chennai
5.	Department of Agricultural Engineering	1980-1981	Functioning as separate Department from Agriculture
6.	First Agricultural College	1876	Functioning at Saidapet, Chennai
	Tamil Nadu Agricultural University	1971	Established at Coimbatore
7.	Department of Sugar	1969	Formation as new Department from Agriculture Department
		2022	Aligned again with Agriculture Department

S.No	Department	Year	Details
8.	Department of Food Processing	2012	Functioning in Agriculture Marketing and Agriculture Business.
		2022	Transferred to Micro, Small & Medium Enterprises Department
9	Restructuring of the Department	2008	Restructuring activities undertaken for the smooth implementation of activities at block level

Source : Agricultural Departmental Manual 6th edition (1990)

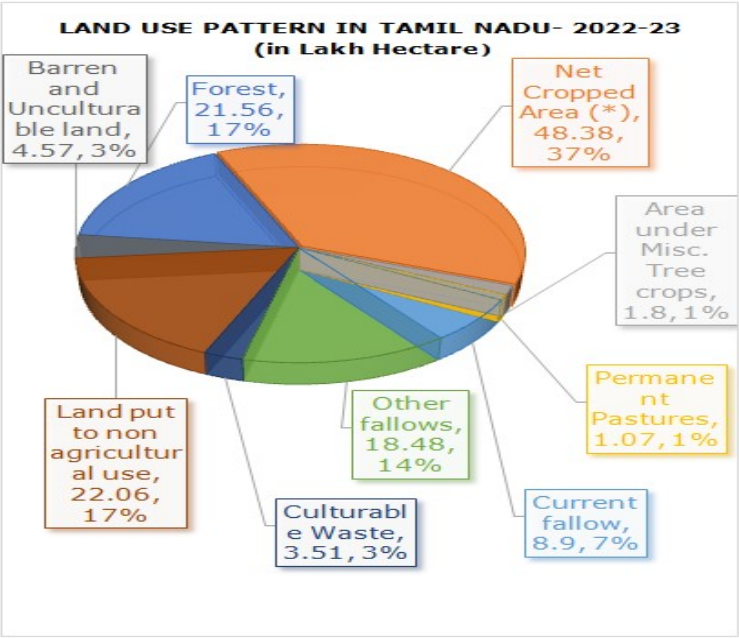
Agriculture in Tamil Nadu

Tamil Nadu falls within the semi-dry sub-humid to dry humid tropics category in the geographical system. It ranks as the 11th largest state in India, covering an area of 1.30 lakh sq. km. According to the 11th population census, it stands as the seventh most populous

state, boasting of a population of 7.21 crore. Tamil Nadu represents four percent of the total area, six percent of the population and three percent of the water resources at the All-India level.

The state accounts for 79.38 lakh land holders cultivate an area of 59.71 lakh hectare. As per the 10th Agricultural Census conducted by the Government of India, an overwhelming 93% of these land holdings belong to Marginal and Small farmers, overseeing 62% of the total cultivable lands. The remaining seven percent of land holdings are in the hands of medium and large farmers, managing 38% of the total cultivable lands. Notably, the average land holding area in Tamil Nadu stands at only 0.75 hectare, compared to the national average of 1.08 hectare.

Figure : 1- Land Use Pattern of Tamil Nadu - 2022-23.



Total Geographical Area – 130.33 lakh Ha
Cropping Intensity (%) – 129.40
(Gross cropped Area/Net cropped Area*100)
(*) Difference between Gross Cropped Area (62.60 lakh hectare) and Area sown more than once (14.23 lakh hectare)

Source: Department of Economics and Statistics, Government of Tamil Nadu (2022-23)

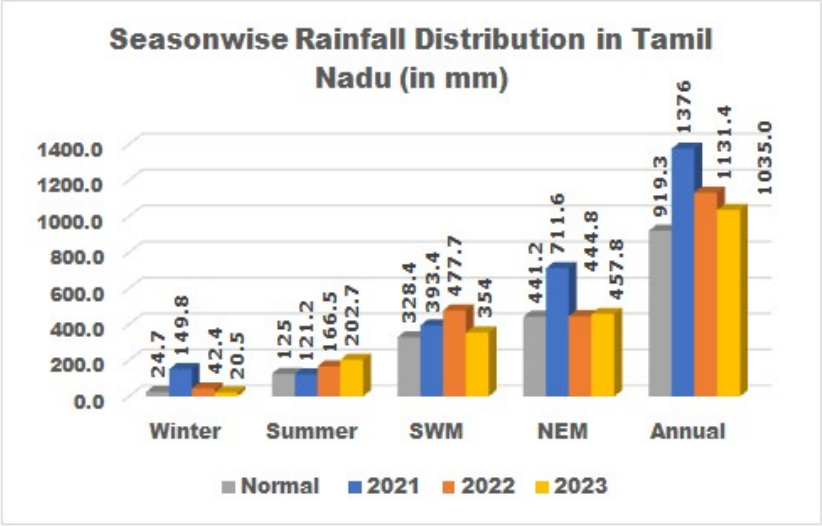
Table : 1.3 - Land Use Pattern of Tamil Nadu 2020-21 and 2022-23- A Comparision

S. No	Land Use	(lakh hectare)		
		2020-21	2022-23	Remarks
1.	Gross Cropped area	61.55	62.60	1.05 lakh ha increase
2.	Current Fallow lands	8.93	8.90	0.03 lakh ha decrease
3.	Other Fallow lands	18.65	18.48	0.17 lakh ha decrease
4.	Net Cropped area	48.33	48.37	0.04 lakh ha increase
5.	Cropping Intensity (%)	127.35	129.40	2.05 % increase

Average Rainfall of Tamil Nadu

The annual average rainfall in Tamil Nadu remains as 919.8 mm. The total rainfall received in the year 2023 is 1,035 mm.

Figure : 2 - Season wise Rainfall Distribution in 2023



Source: Indian Metrological Department (IMD)

Sources of Irrigation

The details of net area irrigated using various sources of irrigation across the State during the year 2022-23 are as follows:

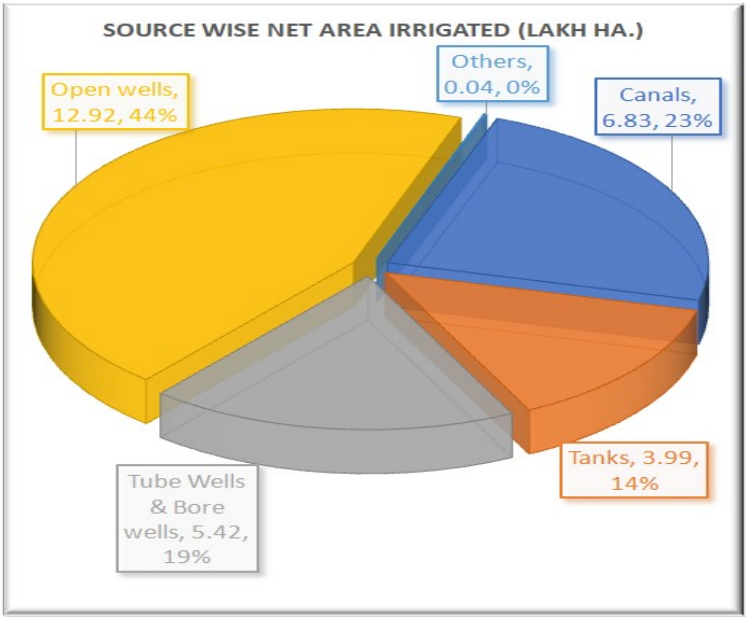
Table: 1.4 - Water Source wise Net Area Irrigated 2022-23

Source	Availability (Nos)	Net Area Irrigated (lakh ha.)	% with reference to Net Area Irrigated
Canals	2,241	6.83	23.39
Tanks	41,123	3.99	13.66
Tube Wells & Bore wells	3,71,084	5.42	18.56
Open wells	14,69,659	12.92	44.25
Others	45,129	0.04	0.14
Total		**29.20**	**100.00**

Source: Department of Economics and Statistics, Government of Tamil Nadu (2022-23)

About 63% of the cultivated area is irrigated by wells, borewells and open wells, while 23% is irrigated by canals and the remaining 14% is irrigated by tanks.

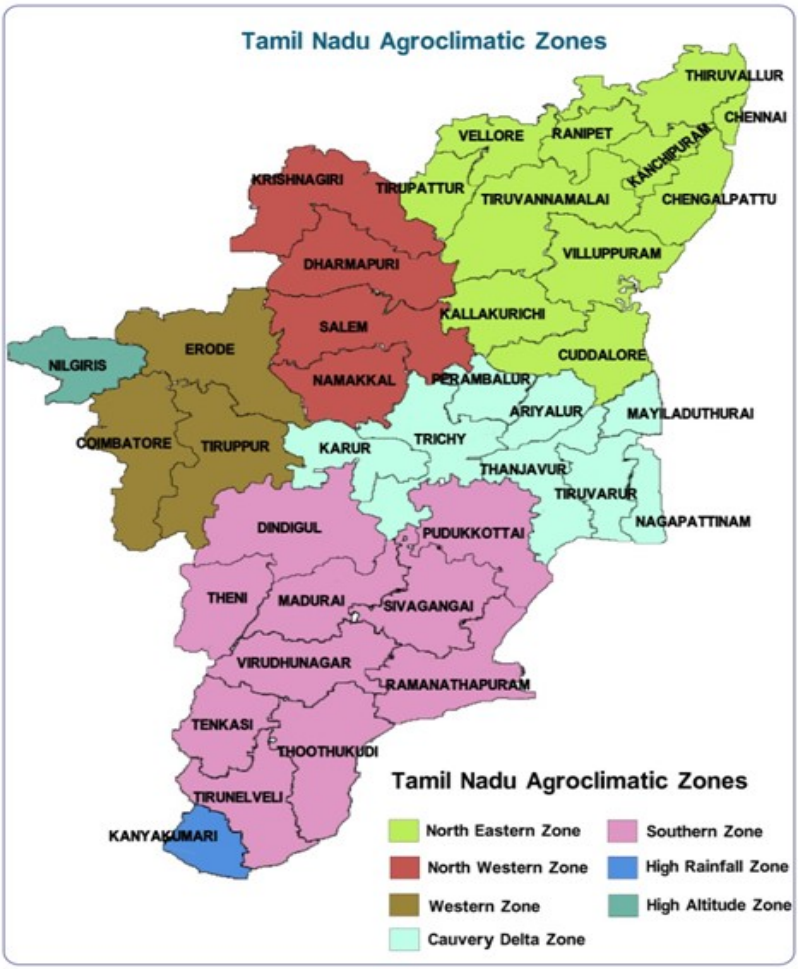
Figure : 3 – Source wise net area irrigated – 2022-23



Utilization of irrigation water resources

The irrigated area from wells, borewells and open wells expanded to 18.38 lakh hectare (an increase of 0.16 percent) in 2022-23, upward from 18.35 lakh hectare in 2021-22.

Figure: 4 - Seven Agro Climatic Zones of Tamil Nadu



Source: Agri Tech Portal of Tamil Nadu Agricultural University

1. AGRICULTURE

1.1 Increasing the Area, Production and Productivity of Agricultural Crops

The various schemes for the welfare of farmers announced in the Agriculture Budget for reaching the long term visions of increasing the net cropped area and doubling the double cropped area assigned by the Honourable Chief Minister of Tamil Nadu for agriculture have been implemented resulting in increase of the food grain production of 119.97 lakh MT during the year 2021-22 from 108.24 lakh MT in the year 2020-21. Despite the occurrence of various natural disasters like unseasonal rainfall and extremely high rainfall in monsoon seasons, a record 116.91 lakh MT of food grain production has been attained during the year 2022-23.

Similarly, in the year 2023-24, a record food grain production of 118.02 lakh MT has been achieved (as per Third Advance Estimate, 2023-24) amidst natural calamities like deficit rainfall during south-west monsoon, crop damage due to Michaung cyclone in northern districts and extremely heavy rainfall in southern

districts during December 2024. The food grain production has crossed the mark of 116 lakh MT for the third consecutive year with this achievement.

Table : 1.5 – Action Plan for 2024-25

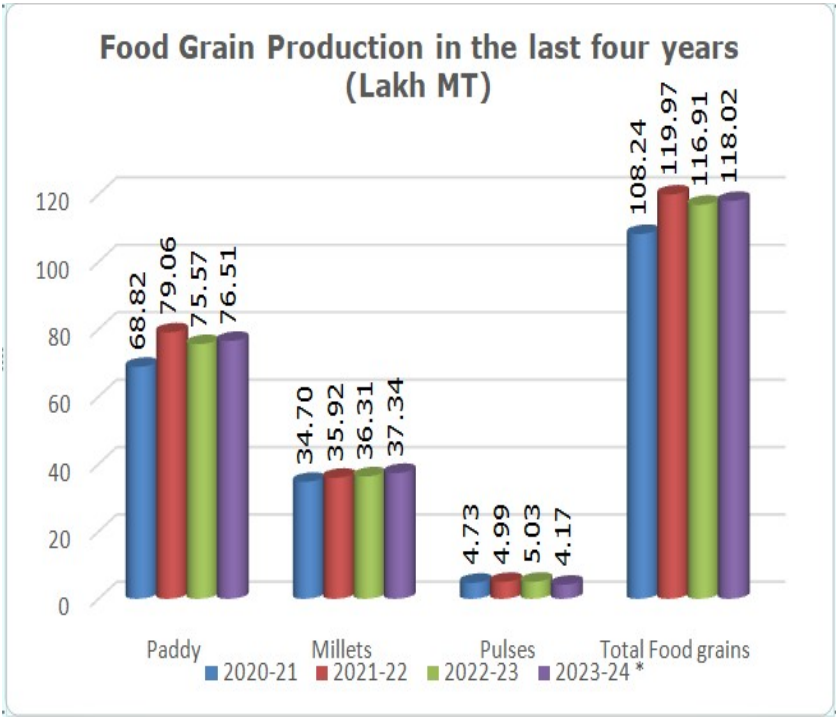
Sl. No	Crop	Area (lakh Ha)	Production (lakh MT)	Productivity (Kg/Ha)
1	Rice	20.20	81.81	4,050
2	Millets	9.95	39.09	3,928
3	Pulses	10.00	8.73	873
Total Food grains		**40.15**	**129.63**	
4	Oilseeds	5.80	16.28	2,800
5	Cotton	1.78	4.61*	440**
6	Sugarcane	1.75	231.00	132***
	Total	**49.48**		

*Production in lakh Bales: 170 Kg of Lint for each bale.

**Productivity in terms of lint.

***Productivity (MT / Ha)

Figure – 1.1 : Food grain Production in the last four years



*(2023-24 – As per the Third Advance Estimate of the Department
of Economics and Statistics)

Long term Vision of the Honourable Chief Minister

A) An additional area of 11.75 lakh hectare will be brought back to cultivation, to increase the existing net cropped area from 60 percent to 75 percent.

In Tamil Nadu, the net cropped area of 48.33 lakh hectare in the year 2020-21 has increased to 49.09 lakh hectare during the year 2021-22 by implementing various schemes. Moreover, the gross cropped area of 61.56 lakh hectare in the year 2020-21 has increased with 1.04 lakh hectare to 62.60 lakh hectare during the year 2022-23. Moreover, the area in other fallow lands of 18.65 lakh hectare has decreased to 18.48 lakh hectare during 2022-23 with reduction of 17,000 hectare which is brought into cultivation by implementing Kalaignarin All Village Integrated Agricultural Development Programme (KAVIADP) and Fallow lands Development Scheme. The vision will be realized as projected in ten years by implementing various schemes.

B) The present 10 lakh hectare of area cropped more than once will be doubled within next ten years, i.e. 20 lakh hectare.

About two lakh new electricity connections have been provided to the farmers when the Government had taken over charge in Tamil Nadu. Moreover, to minimize the water demand and usage, Micro irrigation Scheme has been implemented in 1,02,329 hectare in 2021-22, 70,856 hectare in 2022-23 and 1,29,020 hectare in 2023-24, adding to a total of 3,02,205 hectare which resulted in the increase of double cropped area of 14.23 lakh hectare in 2022-23. In addition, this vision will be achieved in ten years period as notified by continuously implementing all the schemes.

1.2. Priority Schemes in Agriculture

1.2.1. Chief Minister's Mannuyir Kaathu Mannuyir Kaappom Scheme (CM MK MKS)

In agriculture, there is a decrease in fertility of soil, due to mono cropping and cultivation of high nutrient exhaustive crops.

Moreover, increased use of chemical fertilisers, pesticides to get high crop yields, has also reduced microbial population in soil, resulting in decline of soil health and fertility. If this situation persists, it will only leave barren soil for generations to come.

Considering this situation, the Chief Minister's Mannuyir Kaathu Mannuyir Kaappom Scheme (CM MK MKS) will be implemented in the year 2024-25 with a financial allocation of Rs.206 crore with 22 components to maintain soil health for supply of healthy food to the society and to protect the welfare of the people.

i. Enhancing soil fertility through green manuring in ayacut and irrigated areas in 2 lakh acre with a financial allocation of Rs.20 crore for 2 lakh farmers.
ii. Provision of Vermibeds to the 10,000 farmers at the rate of 2 Nos/farmer with a financial allocation of Rs. 6 crore and also, permanent vermicompost tanks / Vermibeds will be allocated to 3560 farmers with a financial allocation of Rs.5 crore.

iii. An amount of Rs.10.375 crore has been allocated for testing Soil in 2482 Village Panchayats of Kalaignarin All Village Integrated Agricultural Development Programme to issue Soil Health Cards for balanced fertilizer recommendation and Integrated Nutrient Management schemes to 3.33 lakh farmers.

iv. Allotment of Rs. 22.5 crore will be made for reclamation of both Alkaline soil and Acidic soil of 37,500 acre each.

v. Liquid bio-fertilisers will be distributed at a cost of Rs 7.50 crore to 2 lakh farmers to cover an area of 10 lakh acre.

vi. Field level surveillance will be conducted to provide suitable advisories and recommendations to reduce the reliance on chemicals thereby protecting soil health.

vii. Free distribution of 10 lakh Neem tree saplings having ability to control pests and diseases with a financial allocation of Rs. 2 crore in Agro forestry scheme.

viii. Plant species like Adathoda and Nochi which have natural bio-insecticidal properties will be promoted by distribution of 50 lakh saplings for planting in fallow lands and fields with an outlay of Rs.1 crore.

ix. Traditional paddy varieties with traditional properties like Seevan Samba having capacity to control diabetes will be distributed for cultivation in an extent of 1,000 acre.

x. To conserve traditional paddy varieties, seeds of 200 MT of traditional paddy varieties will be produced for cultivation in an extent of 10,000 acre with an allocation of Rs.50 lakh for seed distribution.

xi. The seeds of traditional varieties of Millets and Pulses with immunity boosting feature will be produced in State Seed Farms and used for developing new varieties and to improve existing varieties.

xii. To create awareness on organic farming, one model organic farming plot will be established in one village per block, with a financial allocation of Rs.38.50 lakh.

xiii. Provision of Rs. 27 crore for the 725 organic farming clusters to complete certified organic standards with all the activities from sowing to marketing to improve profit of the farmers.

xiv. Rupees one crore will be allocated to establish 100 Organic input units for organic farming.

xv. A financial allocation of Rs.13 crore will be made to produce quality saplings under agro-forestry schemes.

xvi. To promote crop cultivation along with rearing of milch cow / goats, fruit tree saplings, vermicompost production and apiculture, 14,000 Integrated Farming Units will be formed with an allocation of Rs.42 crore.

xvii. To promote profitable cultivation of crops in rainfed areas, distribution of seeds covering 3 lakh acre will be provided with a financial allocation of Rs.36 crore.

xviii. An outlay of Rs. 4 crore will be allocated to encourage cultivation of nutritious fruit crops viz., banana, papaya and moringa in home gardens.

xix. Considering the significance of bees in cross pollination and health benefits for people, centre with honey testing and processing facilities will be established at Kanyakumari to provide bee keeping trainings also with an allocation of Rs. 3.60 crore.

xx. Climate Smart Villages will be developed for creation of awareness and dissemination of appropriate climate mitigation technologies to farmers, by Agricultural Extension Officers with an allocation of Rs.1.48 crore.

xxi. Research on soil microbiome engineering will be undertaken at an outlay of Rs.1.39 crore to develop and evaluate microbial consortia for the decomposition of organic matter, including crop residues, to increase soil carbon and convert unavailable nutrients into available forms.

xxii. About 100 Uzhavar Angadis will be established at an outlay of Rs.5 crore by procuring directly, and doing grading, packing and branding to ensure availability of quality agricultural produces and value added products to urban consumers also.

1.2.2. Kalaignarin All Village Integrated Agricultural Development Programme

The real progress of India lies with the development of its villages. Therefore, the Government of Tamil Nadu is implementing Kalaignarin All Village Integrated Agricultural Development Programme from 2021-22 for attaining village agricultural development holistically resulting in the overall growth of our nation.

The scheme is implemented in an integrated way in village panchayats identified for the implementation of Anaithu Grama Anna Marumalarchi Thittam implemented by Rural Development and Panchayat Raj Department.

The objective of the scheme is formation fallow land clusters, creation of water sources and energisation with electricity or solar energy,

installation of micro irrigation units, planting of perennial fruit or tree crops, cultivation of short duration agricultural crops in the village panchayats selected for the implementation of the scheme.

About 80 percent of the financial allocation of the schemes of the Agriculture - Farmers Welfare Department are allocated to the selected village panchayats for creation of impact and the schemes are implemented.

The scheme will be implemented in 2,482 village panchayats at an outlay of Rs. 176.15 crore during 2024-25.

1.2.3. One Village One Crop Scheme

A new scheme "One Village – One Crop" scheme will be implemented in 15,280 revenue villages to bring about renaissance in rural areas.

Awareness will be created among the farmers through organising demonstrations by choosing one crop per village with an area of 5-10 acre, covering the agricultural activities such as land preparation, use of high yielding variety

seeds, seed treatment, sowing, integrated nutrient management for paddy and other important crops during 2024-25.

In order to distinguish between beneficial and harmful insects, fixed plots for survey will be established, and effective plant protection measures will be recommended to the farmers.

1.2.4. Tamil Nadu Millet Mission (Five Year Scheme)

It has been announced in the Agriculture Budget for the year 2023-24, that the Tamil Nadu Millet Mission will be implemented for a period of 5 years from 2023-24 to 2027-28 to increase the area and production of millets.

The Tamil Nadu Millet Mission is being implemented in two millet special zones comprising of 25 districts which are having more millet areas from 2023-24 with the budget outlay of Rs.65 crore.

The Tamil Nadu Millet Mission will be continued with the financial outlay of Rs.65 crore in the year 2024-25 also.

1.2.5. State Agricultural Development Scheme

1.2.5.1. Alternative Crop Cultivation in Kuruvai season

This scheme has been implemented in an area of 50,463 acre with the financial outlay of Rs.8.48 crore in order to promote the cultivation of less water requiring crops like millets, pulses and oilseeds as an alternative for paddy in Kar/ Kuruvai and Sornavari seasons. In an area of 23,510 acre of millets, 21,158 acre of pulses, and 5,795 acre of oilseeds have been achieved and 43,341 farmers were benefited. As a result, the production of 9,404 MT of millets, 5,290 MT of pulses and 6,259 MT of oilseeds have been obtained.

The scheme will be implemented in one lakh acre at an outlay of Rs.12 crore during the year 2024-25 also.

1.2.5.2. Making Youth into Agri-Entrepreneurs

It is important to encourage young agricultural graduates and create opportunities

for establishing Agri based business. In this context, the scheme of Making Youth into Agri-Entrepreneurs is being implemented in the state since 2021-22. Under this scheme, financial assistance of Rupees one lakh is being extended to young Agriculture/Horticulture/Agri-Engineering graduates for establishing agri-based business. Financial assistance of Rs.88 lakh was extended to 88 agriculture graduates during the year 2023-24.

This scheme will be continued during 2024-25 with an outlay of Rs.1 crore.

1.2.5.3. "Nammazhvar Award" for the best Organic Farmer

To encourage the farmers who practice and promote organic farming and handhold fellow organic farmers, Nammazhvar award was given to three farmers during 2023-24 with a financial allocation of Rs.5.22 lakh.

This scheme will be implemented continuously during 2024-25 also with an allocation of Rs.5.22 lakh.

1.2.5.4 Traditional Paddy Seed Bank

During the year 2023-24, 11 traditional paddy Seed Banks were established with an allocation of Rs.33 lakh for collecting and preserving ethnic purity of seeds of the traditional paddy varieties.

1.2.6. Additional 20% Subsidy for Small and Marginal Farmers of Scheduled Caste and Scheduled Tribe.

In order to encourage and to reduce the financial burden of the Small and Marginal farmers of scheduled caste and scheduled tribes, additional 20 percent subsidy is extended from the state fund in addition to the amount of regular subsidy in the high value schemes viz., Integrated Farming System, establishment of Green house / Shade nets, distribution of solar dryers and pump sets, value addition machineries and Farm machineries. A sum of Rs.5.90 crore was extended under this scheme benefitting 1,726 SC farmers and 165 ST farmers during 2022-23. This scheme has been continued during the year 2023-24 also and a sum of Rs.19.08 crore subsidy extended to 5,509 SC farmers and 653 ST farmers.

This initiative which has received huge response from farmers is being continued in 2024-25 also with a total financial outlay of Rs.18 crore from the state funds.

1.2.7. Digital Agriculture

A mobile application namely "Uzhavar" has been developed with 24 services to disseminate agricultural technologies, input stock position, market price, weather forecast, water level status and government subsidy schemes details to farmers using digital means. So far, about 17 lakh farmers have downloaded the Uzhavar app.

A portal called GRAINS (Grower Online Registration of Agriculture Inputs System) has been developed to facilitate farmers for easily availing the benefits from the Department of Agriculture and other departments.

Land parcels in all villages of Tamil Nadu are being linked with farmer details and the same is made available for all departments. Also, all the survey numbers have been geo-referenced and linked to farmers data.

The details of the crops cultivated in such geo referenced land parcels are being captured on real-time basis.

GRAINS portal will facilitate to improve the crop productivity by providing land as well as crop specific technologies to the farmers. Further, this will help in estimation of extent of crop damage, ultimately enabling early settlement of compensation to farmers during natural calamities.

As the details about farmers land ownership, crop grown, bank account, etc., are integrated, the government departments as well as banks utilize them to provide all necessary services to farmers. It will also eliminate the submission of documents multiple times for availing scheme benefits besides expediting the process.

1.2.8 Village Level Agricultural Development Groups (VLADG)

As announced, 'Village Level Agricultural Development Groups (VLADG)' will be formed in all village panchayats, covering all hamlets, with

25 to 50 farmers as members in five years period in Tamil Nadu', 2,504 Village Level Agricultural Development Groups consisting of 25 to 50 farmers have been formed in 2,504 village panchayats, where Kalaignarin All Village Integrated Agricultural Development Programme (KAVIADP) is implemented, during the year 2023-24 in the first phase and 10,016 trainings have been provided to 77,000 farmers on innovative technologies related to agriculture with an expenditure of Rs.2.5 crore.

Also during 2024-25 Village Level Agricultural Development Groups will be formed in 2,482 village panchayats where Kalaignarin All Village Integrated Agricultural Development Programme is being implemented and also trainings will be provided with an allocation of Rs. 2.48 crore under ATMA Scheme.

Accordingly, the scheme will also be implemented during the year 2024-25 by imparting training on all the technologies from summer ploughing to marketing of agricultural produces to the group members to adopt the technologies and increase the production, so

that, all the farmers in the village can adopt the technologies to get sustainable income and transform the village with development.

1.2.9. Uzhavar Aluvalar Thodarbu Thittam:

Agricultural extension plays a major role in dissemination of modern crop cultivation technologies and scheme benefits to the farmers. To sustain this, the extension functionaries (Assistant Agricultural Officer, Deputy Agricultural Officer / Agricultural Officer) are visiting the village panchayat on a fixed schedule.

In each village panchayat 10 farmers (inclusive of 2 SC/ST) are identified whom are trained on agriculture and allied activities periodically by the extension workers. These farmers are involved in training of other farmers. The date and place of visit by the extension functionaries will be informed to the farmers and also displayed in the Uzhavar app.

An exclusive mobile software application (UATT App) has been developed and being used by extension functionaries during their visit to

village Panchayat for uploading the details of visit pertinent to the village panchayat concerned. A dashboard has been created at block, district and state level to monitor the visit by the extension officials with a focus on interaction with farmers and issues raised by farmers. Farmers can also view the details of the visit of extension functionaries with their name, contact number and contact point of the village Panchayat in the Uzhavar app.

1.3. Area Coverage

1.3.1.Paddy

In Tamil Nadu, the staple food, rice, as the prime crop is being cultivated in all the districts in three seasons namely Kar/Kuruvai/Sornavari (April-July); Samba/Thaladi/Pishanam (August-November) and in Navarai/Kodai (December-March). Paddy is grown in Tamil Nadu in a normal area of 20.91 lakh hectare with a normal production of 74.55 lakh MT of rice.

It is planned to cover 20.20 lakh hectare with rice production of 81.81 lakh MT during the year 2024-25.

In order to enhance the area, production and productivity of the paddy crop, the National Agriculture Development Programme (NADP)-Paddy and National Food and Nutrition Security Mission (Rice) have been implemented with a financial outlay of Rs.2.80 crore and Rs.5.15 crore, respectively. These schemes will be implemented in the year 2024-25 also.

About 53,500 tarpaulins have been distributed to the farmers with a financial outlay of Rs.5 crore in subsidized cost to save the agricultural produces from natural calamities during 2023-24. Zinc sulphate and gypsum required for crop growth in paddy have been distributed to the farmers with a financial outlay of Rs.5 crore in the State Agricultural Development Scheme during the year 2023-24.

This scheme will be continued during the year 2024-25 also.

Additionally, action will be perused to promote the superfine paddy varieties which are highly favoured by people in higher extent during 2024-25 in Samba and Navarai seasons.

1.3.2. Millets

The major millets, like sorghum, cumbu, ragi, maize and the minor millets such as varagu, panivaragu, kuthiraivali, samai and tenai are cultivated in Tamil Nadu in a normal area of 8.94 lakh hectare with the production of 31.35 lakh MT.

Table: 1.6 - Area, Production and Productivity at State level in Millets during 2022-23

S. No	Crop	Area (lakh Ha.)	Production (lakh MT)	Productivity (Kg/Ha)
1	Maize	4.267	29.899	7,007
2	Sorghu	3.602	2.927	812
3.	Ragi	0.696	2.066	2,968
3	Cumbu	0.451	1.134	2,514
5	Samai	0.138	0.170	1,234
6	Varagu	0.017	0.032	1,865
7	Tenai	0.011	0.005	470
8	Pani varagu	0.008	0.013	1,700
9	Kudiraiv	0.048	0.064	1,334
	Total	**9.238**	**36.310**	

(Source: Department of Economics and Statistics, Government of Tamil Nadu)

**As per Final Estimates 2022-23*

During 2024-25, it is planned to cover an area of 9.95 lakh hectare with a production of 39.09 lakh MT.

1.3.2.1. Schemes for encouraging Millet Cultivation:

a. Food and Nutrition Security (FNS): Nutri – Cereals:

The scheme, Food and Nutrition Security - Nutri Cereals is being implemented in 15 districts of Tamil Nadu, in order to increase the area and production of Nutri Cereals.

During 2023-24, the scheme FNS - Nutri Cereals is implemented with a financial allocation of Rs.30.20 crore.

The scheme will be implemented in the year 2024-25 year also.

b. Food and Nutrition Security (FNS): Maize

The scheme, Food and Nutritional Security - Coarse Cereals is implemented in nine districts of Tamil Nadu, in order to increase the area and production of Maize.

The scheme FNS - Coarse Cereals is implemented with a financial allocation of Rs.1.63 crore during 2023-24.

The scheme will be implemented in the year 2024-25 also.

c. National Agricultural Development Programme

The scheme on providing ploughing subsidy is implemented with a financial outlay of Rs.1.80 crore during the year 2023-24 in the two millet special zones, (25 districts) in order to encourage the millet growing farmers.

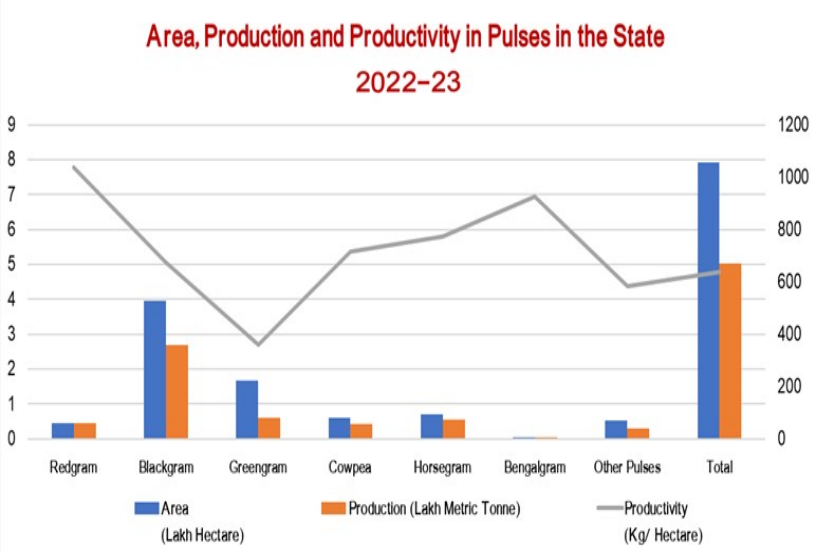
The scheme will be implemented in the year 2024-25 also.

1.3.3. Pulses

Pulses provide protein rich diet helping the mankind to lead healthy life. Further, pulses fix atmospheric nitrogen through root nodules thereby increasing soil fertility. The major pulses crops cultivated in Tamil Nadu are redgram, blackgram, greengram, cowpea, horsegram,

bengalgram and lablab. Pulses are cultivated in an average area of 8.17 lakh hectare with an average production of 5.22 lakh MT.

Figure: 1.2 – Area, Production and Productivity in Pulses in the State - 2022-23



The Food and Nutritional Security (Pulses) and Targeting Rice Fallow Areas (TRFA) (Pulses) schemes were implemented with an allocation of Rs.28.32 crore and Rs.2.96 crore respectively, in

order to attain self sufficiency in pulses, during the year 2023-24

The scheme for provision of assistance for Transplanted Redgram was implemented with the financial allocation of Rs.12 crore, during the year 2023-24, to enhance the productivity of redgram, in the National Agriculture Development Programme (NADP). As a result of this scheme, the productivity has increased from 1,038 kg/ha in 2022-23 to 1,118 kg/ha in 2023-24.

Keeping this in mind, during 2024-25 also, it is proposed to implement the scheme of providing incentive for planting redgram in 30,000 acres with an outlay of Rs.10.80 crore with Centre and state funds. Further, to increase the area of redgram, the mission on area expansion in redgram will be implemented in 70,000 acre with a financial allocation of Rs.17.50 crore from the state fund during 2024-25.

The Food and Nutrition Security (Pulses) and Targeting Rice Fallow Areas (Pulses) scheme will be implemented with the financial allocation

of Rs.35.38 crore, Rs.3.35 crore respectively, during the year 2024-25, to increase the area and production of pulses crops like blackgram, greengram, horsegram and cowpea and to attain self sufficiency in pulses.

1.3.4. Oilseeds

Oil extracted from oilseed crops is a major component of our diet. Also, the oil is used to make paints, soaps, perfumes etc. The residue after oil extraction is used as animal feed and as manure.

Table: 1.7 - Area, Production and Productivity of Oilseeds - 2022-23

S. No	Crop	Area (Ha)	Production (M.T)	Productivity (Kg/Ha.)
1	Groundnut	3,51,079	9,12,150	2,598
2	Gingelly	47,878	25,071	524
3	Sunflower	9,640	10,118	1,050
4	Castor	5,814	1,813	312
5	Others	361	361	1,000
	Total	**4,14,772**	**9,49,513**	**2,289**

Oilseeds are cultivated in an average/ normal area of 3.95 lakh ha with a production of 9.44 lakh MT in Tamil Nadu.

In order to increase the area and productivity of oilseeds crops, National Mission on Edible Oils and National Agriculture Development Programme have been implemented at an outlay of Rs.38.08 crore during 2023-24. Due to these schemes, 1.94 lakh farmers have been benefited and the productivity of oilseeds crops has increased from 2,289 kg/ha (2022-23) to 2,313 kg/ha (2023-24).

The schemes like "National Mission on Edible Oils (NMEO-Oilseeds)" at an outlay of Rs.56.85 crore and Targeting Rice Fallow Areas-Oilseeds at an outlay of Rupees One crore will be implemented, to increase the area and productivity of oilseed crops such as groundnut, sesame, sunflower, castor and soybeans during the year 2024-25. The productivity of oilseeds crops is expected to increase to 2,800 kg/ha by these schemes.

It is programmed to distribute Gypsum to 50,000 acre with a financial allocation of Rupees One crore, to promote the use of Gypsum in oilseed crops such as groundnut and to increase production and productivity of crops through Integrated Nutrient Management.

Further, special attention will be focussed on increasing production, value addition, marketing and export of oilseeds in the special oilseeds zone created in 2023-24 by integrating the 14 major oilseed growing districts.

Plantation of neem seedlings is encouraged under the scheme on National Mission on Edible Oils – Tree Borne Oilseeds to improve the utilization of unutilised fallow lands for increasing the income of farmers. The financial assistance has also been extended for maintenance and intercropping in already cultivated fields during 2023-24 with an allocation of Rs.1.25 crore. The scheme will be continued in the year 2024-25 also.

1.3.5. Cotton

Cotton, also known as White Gold, providing cotton fibre to textile industries is one

of the important commercial crops cultivated in Tamil Nadu. Cotton seeds which are rich in protein, play an important role in animal feed production. Cotton, playing a major role in the economy, is cultivated in a normal area of 1.5 lakh hectare with a production of 3.24 lakh bales in Tamil Nadu. The Sustainable Cotton Cultivation Mission with an allocation of Rs.11 crore, National Agriculture Development Programme (NADP) – Cotton with an allocation of Rupees One crore and Food and Nutrition Security (FNS) – Cotton with an allocation of Rs. 1.135 crore were implemented in the year 2023-24, to increase the area, production and productivity of cotton.

With an aim to increase the area under cotton cultivation to 1.78 lakh hectare and increase the production to 4.61 lakh bales in 2024-25, the Profitable Cotton Cultivation scheme with an allocation of Rs.11 crore, National Agriculture Development Programme (NADP) – Cotton at an outlay of Rs.1.50 crore and Food and Nutrition Security (FNS) – Cotton at an outlay of Rs.1.419 crore will be implemented.

1.4. Other Schemes in the Department of Agriculture.

1.4.1. Tamil Nadu State Seed Development Agency (TANSEDA)

Quality seeds are the foundation for getting high yield. TANSEDA was established during 2015 with an objective to supply good quality seeds to the farmers at right seasons.

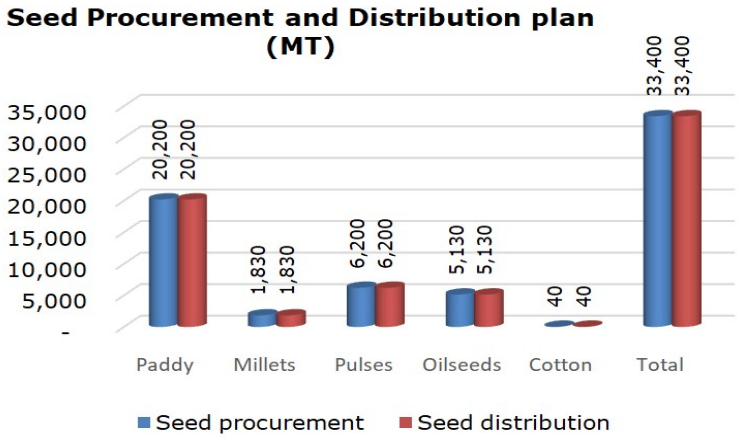
This agency is undertaking important activities such as, procuring breeder seeds of notified varieties of agricultural crops, raising seed farms to produce foundation /certified seeds, and procuring the certified seeds from the seed farm ryots based on TANSEDA seed price policy for distribution of the quality seeds to the farmers.

Seed production through 33 State Seed Farms (SSF), six State Oilseed Farms (SOSF), one State Pulses Multiplication Farm (SPMF), and processing of seeds through 108 Seed Processing Units (SPU) are the major activities of TANSEDA.

During 2023-24, 26,347 MT of certified seeds were produced and distributed to farmers. It has been planned to procure and distribute

33,400 MT of quality seeds to the farmers during the year 2024-25.

Figure: 1.3 – Seed Procurement and Distribution Plan in 2024-25



1.4.2. Seed Village Programme under Sub-Mission on Seeds and Planting materials (SMSP)

The main objective of the scheme is to encourage the farmers to produce quality seeds for getting higher yield. The foundation/certified seeds of paddy, millets, pulses and oilseeds are being distributed to the farmers at subsidized cost.

This scheme was implemented during 2023-24 with an allocation of Rs.32 crore. This scheme will be continued during 2024-25 also, for the benefit of the farmers.

1.4.3. Agricultural Extension Centres

Agricultural Extension Centres act as integrated centres for stocking and distribution of seeds, other critical inputs, agricultural implements, plant protection equipments and also as advisory service centre, guiding from sowing to harvest to the farming community.

About 383 main AECS are functioning at block level and 497 sub-centres at firka level, totaling to 880 Agricultural Extension Centres.

Integrated Agriculture Extension Centres are functioning with the Departments of Agriculture, Horticulture, Agricultural Marketing and Agri Business, Seed Certification and Organic Certification and Agricultural Engineering under a single roof.

About 220 were upgraded as Integrated Agricultural Extension Centres (IAECs) and construction of new buildings is in progress for 32 IAECs to provide all agriculture related

services to the farming community, out of 383 Main Agricultural Extension Centres.

New buildings with required amenities were created for 205 Sub-Agricultural Extension Centres and construction of new buildings is in progress for 99 Sub-Agricultural Extension Centres, out of 497 Sub-Agricultural Extension Centres.

1.5. Plant Protection

Plant Protection is protecting the crops from damages through the practice of managing pests and diseases by monitoring weather, weeds and pests and diseases, etc., By encouraging the farmers to adopt Integrated Pest Management technologies for all the crops, the incidences of pests and diseases can be controlled in time, besides minimising the cost of cultivation, protecting the environment also.

Regular crop specific trainings on the incidences of pests and diseases and management measures are imparted to the farmers. Management advisories for incidences of pests and diseases are being provided through identification of them then and there

utilizing Artificial Intelligence in Uzhavar app via SMS.

The infestation of pests and diseases is being regularly monitored at block level and precautionary measures are being provided in advance to the farmers. The Tamil Nadu government is pursuing concerted efforts to monitor and take precautionary activities for pest and disease incidences.

1.5.1. Bio – Pesticides and Bio-Control Agents

The various natural bio-control agents like parasites, predators, fungi, bacteria, virus, predators and parasitoids which are identified as natural enemies for various pests are mass multiplied in the 22 bio-control laboratories, two Integrated Pest Management Centres and five Sugarcane Parasite Breeding Centres in Tamil Nadu and distributed to the farmers at subsidized cost and released in the infested field for effective and eco-friendly pest control. Besides, they play an important role in Integrated Pest Management, also help in reducing the usage of chemical pesticides.

Table: 1.8 - Details on Production and Distribution of Bio-Pesticides and Bio-Control Agents in 2023-24

S.No.	Name of the of carrier based Bio-pesticides and Bio-Control Agents	Production and Distribution
1.	Trichoderma viride (Kg)	3,83,572
2.	Pseudomonas fluorescens (Kg)	3,95,605
3.	Beauveria bassiana (Kg)	14,636
4.	Trichogramma chilonis (cc)	55,954
5.	Metarhizium anisopliae (Kg)	96,125
6.	Chrysoperla Sp.(nos)	14,67,200

The scheme will be continued during 2024-25 also.

Table: 1.9 – Bio-Control Laboratories, Integrated Pest Management Centres and Sugarcane Parasite Breeding Centres

SI. No	District	Bio-Control Lab	Integrated Pest Management Centre	Sugarcane Parasite Breeding Centre
1	Villupuram	Villupuram		Villupuram
2	Salem	Seelanaikkanpatti	-	-
3	Namakkal	Namakkal	-	Mohanur

SI. No	District	Bio-Control Lab	Integrated Pest Management Centre	Sugarcane Parasite Breeding Centre
4	Dharmapuri	Papparapatti	-	-
5	Coimbatore	Coimbatore	-	-
6	Erode	Bhavani	-	Gopichettipalayam
7	Thiruppur	-	-	Udumalaipet
8	Trichy	Trichy	-	-
9	Thanjavur	Kattuthottam	-	Thanjavur
10	Thirunelveli	Palayankottai	-	-
11	Kanchipuram	-	Panjupettai	-
12	Madurai	Vinayagapuram	Vinayagapuram	-
13	Pudukottai	Annavasal	-	-
14	Tiruvallur	Madhavaram	-	-
15	Karur	Karur	-	-
16	Ariaylur	Tirumanur	-	-
17	Perambalur	Perambalur	-	-
18	Tiruvarur	Mannargudi	-	-
19	Virudhunagar	Virudhunagar	-	-
20	Tiruvannamalai	Tiruvannamalai	-	-
21	Vellore	Vellore	-	-
22	Kanyakumari	Kozhiporvilai	-	-
23	Dindigul	Natham	-	-
24	Cuddalore	Panruti	-	-

1.6. Fertiliser

Annually, 22 lakh MT of chemical fertilisers are being utilized in Tamil Nadu. Fertiliser is the major critical input for ensuring production and productivity of crops. The state government is also encouraging the farmers for use of green manures, bio-fertilisers and organic fertilisers to maintain soil health, thereby reducing the cost of inputs, ensuring the welfare of farmers.

The Department of Chemicals and Fertilisers, Government of India is assessing the fertilizer requirements of the states by conducting regional meetings prior to cultivation in Kharif and Rabi Seasons and allocating the fertilisers based on the demands. Accordingly, Government of India has allocated 4.91 lakh MT of Urea, 1.40 lakh MT of DAP, 1.04 lakh MT of Potash and 4.54 lakh MT of complex fertilisers to Tamil Nadu for the Kharif, 2024 season.

Table : 1.10 – Details of Year wise Distribution

Fertilizer	Distribution of Fertiliser (lakh MT)	
	2022 - 23	**2023 – 24**
UREA	10.96	10.11
DAP	3.11	2.64
MOP	1.59	1.63
NPK COMPLEX	6.82	7.24
Total	**22.48**	**21.62**

During, 2023-24 the State Government has sanctioned Rs.125 crore to TANFED as interest-free Ways and Means advance for the purchase of all kinds of fertilisers and to preposition and ensure the timely availability of fertilisers to the farmers.

1.7 Quality Control Laboratories

The prime duty of the department is to ensure the availability of quality fertilisers, bio-fertilisers and insecticides to the farmers. In Tamil Nadu, 14 Fertilizer Control Laboratories

(FCL),12 Pesticides Testing Laboratories (PTL), three State Pesticides Testing Laboratory cum Coding Centres, two Organic Fertilizer Testing Laboratories (OFTL) are functioning to ensure it. Besides these, Bio-Fertiliser Quality Control Laboratory (BFQCL) and Bio-Control Agents Quality Control Laboratory (BCAQCL) at Tiruchirapalli and Central Control Laboratory at Pudukkottai are also functioning.

1.7.1 Activities of Fertilizer Control Laboratories, Pesticide Testing Laboratories and Bio-control agents Quality Control Laboratories

Table: 1.11 – Details on analysis of Fertilizer Organic Fertilizer and Bio-fertilizer Samples

Sl. No	Details	2023 - 24		Non-Standard samples	2024-25 Target
		Target	Achievement		
1	Fertilizer samples	24,600	25,962	670	24,600
2	Organic Fertiliser samples	1,440	1,506	87	1,440

Sl. No	Details	2023 - 24		Non-Standard samples	2024-25 Target
		Target	Achievement		
3	Bio-Fertilizer samples	1,040	1,174	11	1,040

Moreover, action is being pursued to get ISO 17025:2017 NABL Accreditation during the year 2024-25 for all the 14 Fertilizer Control Laboratories. Moreover, action will be initiated to get NABL accreditation for 2 Organic Fertilizer Testing Laboratories and Bio-Fertiliser Quality Control Laboratory also.

Table: 1.12 – Details on analysis of Pesticides samples

S. No	Details	2023 - 24		Mis-branded samples	2024-25 Target
		Target	Achievement		
1	Pesticides samples	21,850	22,474	166	21,850

Action has been initiated to get NABL accreditation for the remaining 10 Pesticides

Testing Laboratories as done for Coimbatore and Kancheepuram laboratories.

The departmental and legal actions are being perused on the manufacturing firms whose fertilisers and pesticide samples were identified as non-standard.

It is planned to test bio-control agents produced like Trichoderma viride, *Pseudomonas flouresecens, Beauveria* as per "The Insecticides Act, 1968" in the new Bio-Control Agents Quality Control Laboratory at Tiruchirapalli during the year 2024 - 25.

1.8. Soil Health Management

1.8.1. Soil Testing Laboratories

The crop-specific fertilizer application, use of other fertilisers and soil improvement activities based on soil testing are essential to increase production and productivity in crops and to increase farmers' income. For this, 36 Soil Testing Laboratories and 16 Mobile Soil Testing Laboratories in Tamil Nadu are analysing

soil samples and irrigation water samples and the test results are being provided to the farmers through Soil Health Cards.

In Soil Health and Fertility Scheme, a new Soil Testing Laboratory at Mayiladuthurai and Mobile Soil Testing Laboratories in Thanjavur, Tirunelveli, Cuddalore, Vellore and Coimbatore districts have been set up for the benefit of the farmers.

Also, 3.92 lakh Soil Health Cards have been distributed to the farmers in various schemes like Kalaingnar All Village Integrated Agricultural Development Programme, Micro Irrigation Scheme etc., during 2023-24. About, 45,400 irrigation water samples have also been tested.

About 3.33 lakh soil samples will be tested in the National Agricultural Development Programme-Soil Health and Soil Fertility during the year 2024-25.

1.8.2. Tamil Mannvalam

A separate website named "Tamil Mannvalam" was launched on 28.06.2023 by the Honourable Chief Minister of Tamil Nadu. Through this website, every farmer by selecting

the survey number and also through the geo referencing of their lands, is able to know the land type, soil type, groundwater classification, soil alkalinity and acidic level, available soil nutrients and also the appropriate fertilizer and crop recommendations. Soil test result data of 40 lakh survey numbers have been uploaded in this website. Also, the test result data of elite soil samples received directly from the farmers are also arranged to be uploaded in this website.

1.9. Micro Nutrient Mixture Production Centre

It is essential to supply quality micronutrient mixtures to the farmers to rectify the deficiencies of micronutrients in the soil for getting high yields.

For this, the Micronutrient Mixture production unit functioning at Pudukottai will produce 14 types of essential Micronutrient Mixtures to the tune of 3,300 MT / year which will be distributed to the farmers.

In 2024-25 also, 3,300 MT of Micronutrient Mixture will be produced.

1.10. Bio - Fertilisers Production Units

The role of soil microbes is indispensable, to preserve the soil health and soil fertility. In Tamil Nadu, about 12.10 lakh litre of nine strains of liquid bio-fertilisers are being produced annually in 22 Bio-fertilizer Production units to improve the soil health and fertility.

This scheme will be continued during the year 2024-25 also with annual production of 12.10 lakh litre of liquid bio-fertilisers.

1.11. Sub – Mission on Agricultural Extension (SMAE) – Support to State Extension Programmes for Extension Reforms Scheme (SSEPERS) – ATMA (Agricultural Technology Management Centre)

The Sub-Mission on Agricultural extension scheme is implemented with the co-ordinated efforts of Departments of Agriculture,

Horticulture and Plantation crops, Animal Husbandry, Sericulture, Fisheries and Fishermen Welfare, Forestry, Agricultural Engineering, Agricultural Marketing and Agri Business, Seed Certification and Organic Certification, Tamil Nadu Agricultural University, Tamil Nadu University for Veterinary and Animal Sciences and Tamil Nadu Fisheries University to deliver integrated approaches of the improved farming practices to the farmers through various activities of ATMA to increase production.

Agricultural Technology Management Agency has been established in each district to study, plan, co-ordinate and implement the activities and the scheme is being implemented at village level.

1.11.1. ATMA activities - 2023-24

Trainings, exposure visits, demonstrations, farm schools and other activities of ATMA have been implemented and expenditure to the tune of Rs.52.35 crore has been made benefitting 4,15,235 farmers.

Table: 1.13 Training provided to the farmers and number of farmers benefitted during 2023-24

S. No	Components	No.of activities (Nos)	Farmers Benefitted (Nos)
1.	Within the state training	100	4,000
2.	Within the district training	7,846	3,12,760
3.	Interstate exposure visit	380	6,740
4.	Within the state exposure visit	1,118	56,750
5.	Within the district exposure visit	84	4,200
6.	Demonstration	13,185	13,185
7.	Farm school	704	17,600
	Total	**23,417**	**4,15,235**

This scheme will be continued during the year 2024-25 also.

1.12. Farmers Facilitation Centres

1.12.1. Farmers Training Centres:

Twenty two (22) Farmers Training Centres (FTC) are functioning in the state. FTCs have imparted periodical training to farmers, conveners and farm women on best farm management practices with latest technologies

with an allocation of Rs.17 lakh during 2023-24. The trainings will be provided through FTCs in the year 2024-25 also.

Table: 1.14 - Farmers Training Centres

S. No	District	Location
1	Kancheepuram	Kancheepuram
2	Villupuram	Tindivanam
3	Vellore	Vellore
4	Tiruvannamalai	Tiruvannamalai
5	Salem	Salem
6	Namakkal	Namakkal
7	Dharmapuri	Dharmapuri
8	Krishnagiri	Krishnagiri
9	Erode	Erode
10	Tiruchirapalli	Tiruchirapalli
11	Perambalur	Perambalur
12	Karur	Karur
13	Pudukkottai	Kudumianmalai
14	Thanjavur	Sakkottai

S. No	District	Location
15	Theni	Theni
16	Dindigul	Dindigul
17	Ramanathapuram	Paramakudi
18	Sivagangai	Sivagangai
19	Virudhunagar	Virudhunagar
20	Tirunelveli	Palayamkottai
21	Thoothukudi	Thoothukudi
22	Kanyakumari	Nagercoil

1.12.2. State Agricultural Extension Management Institute (STAMIN), Kudumianmalai:

The State Agricultural Extension Management Institute provides training to the extension officials and ministerial staff working in Agriculture department about latest technologies, administration, extension management and computer skills. Around 750 personnel have been trained with a financial allocation of Rs.19.62 lakh during 2023-24. This

scheme will be continued during the year 2024-25 also.

1.12.3. State Agricultural Management and Extension Training Institute (SAMETI) Kudumianmalai:

The agriculture and allied department officials were provided with trainings in Support to State Extension Programme for Extension Reforms Scheme. The Post Graduate Diploma in Agricultural Extension Management (PGDAEM) course, Diploma in Agricultural Extension services for Input Dealers (DAESI), Certificate Course on Insecticide Management for Pesticide Dealers / Distributors, Skill Training of Rural Youth (STRY), and Certified Farm Advisor course for Extension Officials and also Certificate Course on Integrated Nutrient Management for Fertilizer Dealers (CCINM) are given and monitored by this institute in collaboration with National Institute of Agricultural Extension Management (MANAGE) and National Institute of Plant Health Management (NIPHM) at Hyderabad.

During 2023-24, 330 technical officers were trained at an outlay of Rs 9.90 lakh. This

scheme will be continued during the year 2024-25 also.

1.12.4. Water Management Training Centre (WMTC)

The training on irrigation and water saving technologies is imparted to 132 field functionaries and 615 farmers at Water Management Training Centre (WMTC) functioning at Vinayagapuram, Madurai district at a cost of Rs.20 lakh. This scheme will be continued during year 2024-25 also.

1.13. Disaster Management

Agriculture is frequently affected by natural disasters like flood, drought and cyclone which have severe impact on production and productivity of the crops. However, the state government is taking sincere efforts to help farmers continue agriculture by timely release of agricultural input subsidy under State Disaster Response Fund (SDRF) as relief Assistance for the crop losses during the times of misery thereby protecting the livelihood of farmers.

During the year 2023, the government sanctioned an amount of Rs.284.94 crore for extending SDRF input subsidy to 3.96 lakh farmers whose agricultural crops were damaged in an area of seven lakh acre due to hailstorm, yield loss in Kuruvai paddy due to insufficient irrigation water, yield loss in maize due to insufficient rainfall during South West Monsoon, Michaung cyclone and heavy rainfall in southern districts.

1.14. Formation of Agriculture Zonal Committees for farmers welfare

The State Government has constituted seven Agriculture Zonal Committees under the chairmanship of Director of Agriculture and Director of Horticulture and Plantation crops comprising District Collectors, officials from the department of Agriculture, Horticulture and Plantation crops, Agricultural Engineering, Tamil Nadu Agricultural University, Public Works Department / Water Resources Department, Pollution Control Board, Forest Department, Farmers and Environmental Experts.

The committee is a platform to discuss and solve issues related to Agriculture, natural calamities, pollution, land acquisition for new projects and current issues faced by the farmers.

During the year 2023-24, zonal committee meetings were held in Southern Zone and High Rainfall Zone. The zonal committees will continue to function in 2024-25 also.

1.15. Kisan Credit Card Scheme (KCC)

Kisan Credit card scheme was introduced during the year 1998 with an objective of providing timely credit support to the famers through Nationalized, Co-operative and Regional Rural Banks. The individual farmers and tenant farmers are also eligible to avail benefit under Kisan Credit Card scheme. Under this scheme, farmers are given collateral free loan upto Rs.1.6 lakh based on the extent of land holding and extent of crop. So far, 32 lakh Kisan Credit Cards (including renewal) have been issued to the farmers. This scheme will be continued in the year 2024-25 also.

1.16. Providing three phase free electricity to farmers

Since 1990, Tamil Nadu Government is providing three phase free electricity to the farmers. So far, 23.56 lakh number of electricity connections have been issued, including 1 lakh connections given in 2021-22, 50,000 connections given in 2022-23 and 18,975 connections given in 2023-24. In the year 2023-24, an amount of Rs.6,990.79 crore was spent to provide free electricity to the farmers for the connections given up to 2023-24. The scheme will be continued in 2024-25 also.

1.17. Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP)

The Tamil Nadu Irrigated Agriculture Modernization [TNIAM] Project is being implemented by the Department of Agriculture with the World Bank assistance, to enhance productivity, avoidance of monocropping, climate resilience of irrigated agriculture and improving water management in selected 51 sub-basins of Tamil Nadu from 2017-18 with an allocation of Rs.84.15 crore.

In 2024-25, Tamil Nadu Irrigated Agriculture Modernization Project will be implemented in 51 selected sub-basins in four phases with interventions such as crop demonstrations, Farmer Field School, Seed Villages, Integrated Nutrient Management, Agricultural Mechanization, Capacity building trainings and Model Village programme with a total allocation of Rs.9.13 crore.

1.18 Awards bestowed in Agriculture Department

The Tamil Nadu Government is encouraging the farmers by conducting crop yield competitions and giving various special awards, thereby encouraging other farmers to obtain high productivity by adopting technologies which give better yield.

Table: 1.15 - Details of Awards.

S. No	Details of Awards	General Particulars	Details of Prize amount
1	"Thiru.C.Narayanasamy Naidu Award for Highest Paddy Productivity"	Encouraging farmers to get Highest Paddy productivity through System of Rice Intensification.	Rs. Five lakh Cash Prize and a silver medal.

2	Bharat Ratna Dr. M.G.R Traditional Paddy Variety Conservator Award	Encouraging Farmers to cultivate and preserve traditional paddy varieties	First prize - Rs.One lakh, Second prize - Rs.75,000 /- Third prize - Rs.50,000/-
3	Award to farmers who excel in performance for highest production at state level	Encouraging the farmers getting highest production in cumbu, green gram, blackgram, redgram, kudiraivali, samai, thenai, ragi, groundnut, gingelly and sugarcane totaling 11 crops	First Prize – Rs.2.5 lakh Second Prize – Rs.1.5 lakh Third Prize – Rs.1.00 lakh Three prizes per each crop
4	**District level Crop Yield Competition**		
i)	Paddy, Groundnut, Sugarcane and Cotton	Motivating the farmers to obtain high productivity by adopting the technologies	First prize 15,000/- Second prize - 10,000/-
ii)	Cholam, Cumbu , Maize, Blackgram, Redgram, and Greengram		First prize - 10,000/- Second prize - 5,000/-
5 (a)	Awards to districts for highest Food grain production	Highest production against the food grain target selection of winners based on the results of the Crop Cutting Experiments	First, Second and Third prize at state level
(b)	Award for Food grain crops like paddy, cholam, cumbu, ragi,	Encouraging Block Extension officials for getting highest	Award to each crop totalling

	blackgram and green gram	productivity. Selection of winners based on the results of the Crop cutting Experiments	to six awards

1.19. Crop Insurance

The Pradhan Mantri Fasal Bima Yojana (PMFBY) is implemented in Tamil Nadu with an objective to support the farmers financially at the time of occurrence of unforeseen eventualities like flood, drought, cyclone, heavy rains resulting in crop loss.

The scheme was implemented as a 60:130 Co-insurance model in 14 clusters covering 37 districts with approved insurance companies in Tamil Nadu, during 2023-24.

Considering the interest and welfare of farmers in the state, Honourable Chief Minister of Tamil Nadu has extended the cut-off date for enrolment in concurrence with Government of India for Samba paddy, rice fallow cotton and sugarcane crops of Special and Rabi Seasons.

The state Government also has so far settled an amount of Rs.439.31 crore as state share of premium to the Insurance Companies.

Due to the concerted efforts taken by the Government of Tamil Nadu, the insurance companies have settled a compensation claim amount of Rs.104.27 crore to 67,332 farmers for prevented sowing in Thanjavur, Tiruchirappalli and Madurai districts, for yield losses in Tirunelveli and Cuddalore districts and for localized calamities in Thoothukudi district during 2023-24.

Necessary measures have been taken to settle the claim amount for Samba paddy shortly under yield loss approach to the eligible farmers through National Crop Insurance portal.

The scheme will be implemented during 2024-25 with a budget allocation of Rs.1,775 crore.

1.20. Pradhan Mantri Kisan Samman Nidhi PM -KISAN

Pradhan Mantri Kisan Samman Nidhi (PM-KISAN), with 100% funding from Government of India is under implementation in Tamil Nadu. An income support of Rs.6,000/-per year is being transferred directly to the bank accounts of the eligible farmer families having own cultivable lands in three equal installments.

Till date, an amount of Rs.10,435.87 crore has been transferred directly into the bank accounts of 21.39 lakh farmers through DBT mode in sixteen installments.

The scheme will be implemented during the year 2024-25 also.

1.21. Staff Structure in Department of Agriculture

The Department of Agriculture is functioning with a total staff strength of 10,525 staff as technical officers, ministerial and other staff.

Table: 1.16 – Technical Officers

Sl. No	Name of the Post	Sanctioned Strength
1	Additional Director of Agriculture	5
2	Joint Director of Agriculture	37
3	Deputy Director of Agriculture	132
4	Assistant Director of Agriculture	424
5	Agricultural Officer	1,060
6	Deputy Agricultural Officer	337
7	Assistant Seed Officer	509
8	Assistant Agricultural Officer	2,320
	Total Technical Officers	**4,824**

Table: 1.17 - Ministerial and Other Staff

Sl. No	Name of the Post	Sanctioned Strength
1	Deputy Director (Administration)	2
2	Administrative Officer	34
3	Superintendent	185
4	Assistant	642
5	Junior Assistant	388
6	Typist	366
7	Superintendent (Security)	148
8	Assistant (Security)	249
9	Junior Assistant (Security)	572
10	Steno Typist (Grade - 1)	1
11	Steno Typist (Grade - 2)	39
12	Steno Typist (Grade - 3)	95
13	Driver	292
14	Laboratory Assistant	143
15	Record Clerk	157
16	Office Assistant	586

Sl. No	Name of the Post	Sanctioned Strength
17	Watchman	1,133
18	Telephone Operator	2
19	Other Staff	667
	Total Ministerial and other staff	**5,701**

2. Department of Sugar

"கரும்பின் எந்திரம் களிற்று எதிர் பிளிற்றும்."

- ஐங்குறுநூறு (55)

Aingurunuru states that "the sound of the crushing of sugar can drown the trumpet of the elephant".

To give special attention to the welfare of sugarcane farmers and to increase the efficiency of sugar mills, the Department of Sugar has been brought under the Agriculture – Farmers Welfare Department from 2022. Tamil Nadu Sugar Corporation Limited and Tamil Nadu Cooperative Sugar Federation Limited are functioning under the Department of Sugar. Various measures are being taken by the Department of Sugar viz., to increase the productivity of sugarcane, reducing the cost of cultivation of sugarcane. The department also, looks into setting up new sugar mills, expansion of sugar mills, allotment of sugarcane area to sugar mills, monitoring and control of all sugar mills including co-operative/public sector sugar mills in Tamil Nadu.

Sugarcane is the raw material for the production of sugar, value-added sugar, alcohol, ethanol, paper, electricity, natural fertilizer etc. There are totally 40 sugar mills in Tamil Nadu, 16 are co-operative sugar mills, 2 are public sector sugar mills and 22 are private sugar mills. Out of these, 30 sugar mills, 12 co-operative sugar mills, 2 public sector sugar mills and 16 Private sugar mills are carrying out crushing operations during 2023-24 crushing season.

2.1. Sugarcane Cultivation

In Tamil Nadu, more than 1.50 lakh farmers are cultivating sugarcane crop. Sugarcane crop and sugar mills play a major role in the upliftment of rural people. The sugar industry directly and indirectly provides employment to the people. Tamil Nadu ranks 4th in sugar production in India. The decreasing trend in Tamil Nadu sugar production has changed and in the 2022-23 crushing season, the sugar production is 14.74 lakh MT which meets the state demand of 15 lakh MT.

In Tamil Nadu sugarcane is cultivated at an average area of 1.59 lakh ha with an average

yield of 111 MT/ha. In Tamil Nadu 65 to 75 percent of sugarcane produced is used as raw material for sugar mills.

Table:2.1. Top 10 Sugarcane Cultivating Districts

S. No	District	Area (Ha)	Production (lakh MT)	Productivity (MT/ha)
1	Kallakurichi	25,731	28.86	112
2	Erode	19,644	22.66	115
3	Tiruvannamalai	17,699	17.19	97
4	Villupuram	15,992	18.35	115
5	Cuddalore	15,918	20.10	126
6	Namakkal	10,625	12.75	120
7	Salem	5,828	6.98	120
8	Ariyalur	4,403	3.29	75

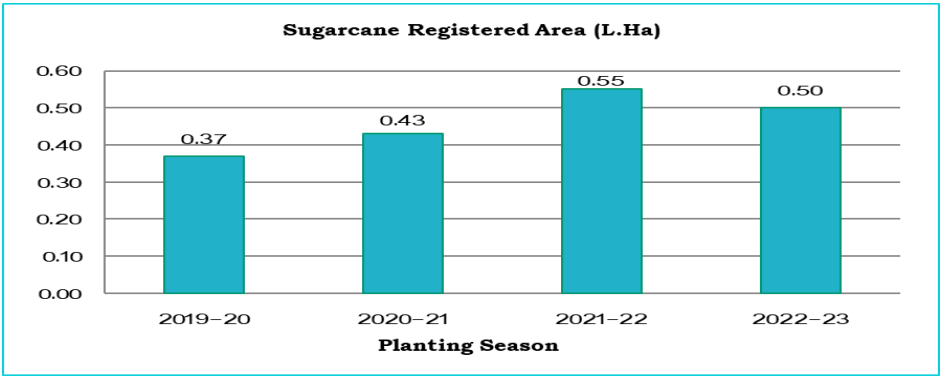
9	Tiruvallur	4,264	4.90	115
10	Dharmapuri	4,217	5.44	129

(Source: Department of Economics and Statistics 2022-23,Government of Tamil Nadu)

2.1.1. Sugarcane registration area for sugar mills

The sugarcane registered area for co-operative and public sector sugar mills has decreased from 55,000 ha in 2022-23 crushing season to 50,000 ha in 2023-24 crushing season. In this situation, the Government is taking continuous measures to increase the sugarcane cultivation area, the sugarcane registered area for 2023-24 crushing season. It has decreased slightly compared to the previous season due to less rainfall and sudden outbreak of pest and disease. However, this area is more than the area of 2020-2021 crushing season.

Figure:2.1. Sugarcane registered area for Co-operative and Public sector sugar mills for past four planting seasons

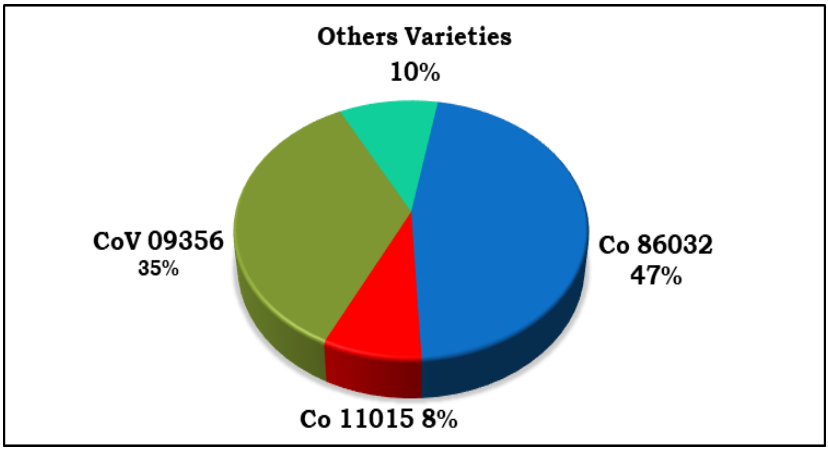


2.1.2. Sugarcane Varieties

In Tamil Nadu, Co 86032 variety is cultivated in 47 percent area, CoV 09356 variety in 35 percent area, Co 11015 variety in 8 percent area, other varieties in 10 percent area.

To popularize the new sugarcane varieties among the farmers, seedlings for Co 11015, CoC 13339, CoG 6, CoG 7, Co 18009 (Punnakai) and rejuvenated Co 86032 are being produced in nurseries run by the co-operative and public sector sugar mills and distributed.

Figure: 2.2. Sugarcane varieties cultivated in Tamil Nadu

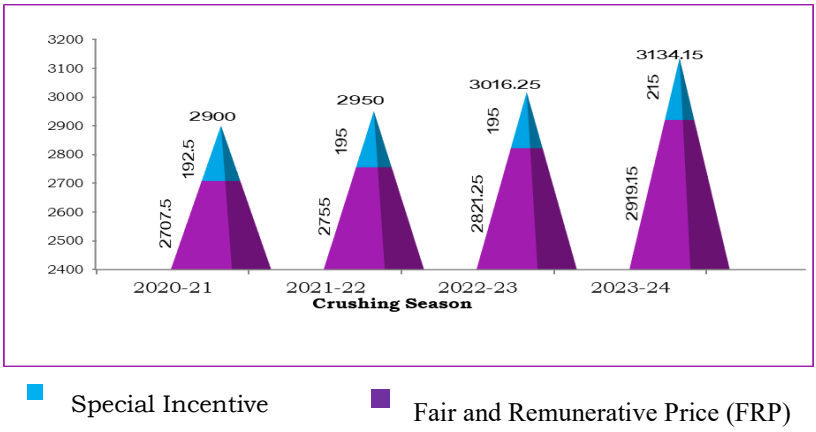


2.1.3. Sugarcane Price and Special Incentives

The sugarcane price was stagnant from 2015-16 crushing season to 2019-20 crushing season at Rs.2,750/- per MT. Considering this, the Government of Tamil Nadu has announced a special incentive at Rs.192.50/- over and above the Fair and Remunerative Price (FRP) from 2020-21 crushing season. The special incentive has been increased to Rs.195/- in 2021-22 and 2022-23 crushing seasons resulting sugarcane price has been increased to Rs.3,016/- in 2022-23 crushing season. For 2023-24 crushing

season, special incentive of Rs.215/MT has been announced by the Government of Tamil Nadu over and above the Fair and Remunerative Price (FRP) because of which the sugar cane price has increased to Rs.3,135/MT and an amount of Rs.250 crore has been allocated for this purpose.

Figure:2.3 Sugarcane Price and special incentives provided to the sugarcane farmers in Tamil Nadu (in Rupees)



Special incentive for sugarcane production announced by the state government are directly disbursed to the bank accounts of the farmers.

Table:2.2. Details of incentive disbursed to the farmers

Year	Amount Disbursed (Rs. in cr)	No. of beneficiary Farmers
2021-22	150.90	91,120
2022-23	214.23	1,20,769
2023-24	258.86	1,41,968
TOTAL	**623.99**	**3,53,857**

2.1.4. Sugarcane Cultivation Development Programme

2.1.4.1 National Agriculture Development Programme (NADP)

In order to increase the sugarcane cultivation area and sugar recovery, breeder seed material, tissue culture seedlings, budchip seedlings and single bud sets of high-yielding, high-sugar recovery varieties have been provided at a subsidized rate under National Agricultural Development Programme (NADP). The scheme has been implemented in the year 2023-24 at a cost of Rs.3.70 crore. The scheme will be implemented in 2024-25 at an estimated cost of Rs.7.91 crore.

2.1.4.2 Kalaignarin All Villages Integrated Agriculture Development Programme (KAVIADP)

In order to achieve the overall development in the village panchayats of Kalaignarin All Villages Integrated Agriculture Development Programme and to increase the sugarcane cultivation area and sugar recovery, budchip seedlings and single bud setts of high-yielding, of high-sugar recovery varieties are provided to the farmers at a subsidized rate. The scheme has been implemented in the year 2023-24 at a cost of Rs.25 lakh. The scheme will be implemented in 2024-25 at an estimated cost of Rs.25 lakh.

2.1.5 Micro Irrigation

For setting up drip irrigation in sugarcane cultivation, 100% subsidy to small and marginal farmers and 75% subsidy to other farmers are given. A special fund of Rs.32,715 to Rs.43,534 per hectare has been allocated from the state funds for procurement of equipment required for setting up drip irrigation. In 2023-24, drip irrigation has been installed at an area of 1,432

ha and 1,335 farmers were benefited. In 2024-25, it is planned to conduct 200 training programme for the farmers to popularize the wider row planting and drip irrigation.

2.1.6 Sugarcane Harvesters

In order to address the problems in sugarcane harvesting and to harvest the sugarcane at a lower cost, 119 sugarcane harvesters are provided upto the year 2023-24. Funds are allocated and the scheme is implemented through the Department of Agricultural Engineering. To promote mechanization from land preparation to harvesting, necessary training is provided to the sugarcane farmers. So far, 34% of the sugarcane area has been brought under wider row cultivation to facilitate mechanization.

2.1.7. Wild Boar Repellent

In Tamil Nadu, crop damage caused due to wild boar in sugarcane cultivation is increasing every year. Considering the continuous demand of the sugarcane farmers of Cooperative and Public Sector sugar mills, the "Wild Boar

Repellent" produced by the Tamil Nadu Agricultural University (TNAU) was provided to 2,000 hectares with a subsidy of Rs.2,250/- per hectare at a cost of Rs.45 lakh.

2.1.8 Training to the Sugarcane Farmers

Under ATMA scheme, trainings will be provided to 8,000 progressive sugarcane farmers on sugarcane mechanization from land preparation to harvest at a cost of Rs.20 lakh and trainings to Farmer Producer Groups (FPOs) and Women Self-Help Groups on production of quality budchip seedlings under shade net at a cost of Rs.10 lakh.

2.2 Development schemes implemented in sugar mills

Co-operative and public sector sugar mills are recovering from loss due to various improvement schemes taken by Tamil Nadu Government. Five sugar mills namely Kallakurichi-2, Subramania Siva, Dharmapuri, Perambalur, Chengalrayan have become profitable in the 2022-23 crushing season.

2.2.1 Automatic weighment system

Automatic weigh bridges have been set up in 13 cooperative and two public sector sugar mills at a cost of Rs.1.50 crore and this is used for accurate weighing of sugarcane loads and the weighment data is sent instantly via text message to the concerned farmers.

2.2.2 Modern laboratory

Modern laboratories have been set up in 13 cooperative and two public sector sugar mills at a cost of Rs.3 crore. Through this, the quantum of sugar in sugarcane is accurately and quickly analyzed and the percentage of sugar is calculated.

2.2.3. Laying of cement concrete cane yard

For the easy movement of cane-loaded vehicles and parking of more vehicles, concrete cane yards were constructed at a cost of Rs.2.12 crore in 2023-24 at Cheyyar, Chengalrayan, Madurantakam, Salem, Tiruttani, Arignar Anna and Perambalur Sugar Mills. In 2024-25, concrete cane yard will be constructed at an estimated cost of Rs.8.78 crore in 10

cooperative and two public sector sugar and press mud composting yard in four cooperative and one public sector sugar mill will be constructed at an estimated cost of Rs.2.67 crore.

2.2.4.Rotating Hydraulic Tippler

During the year 2023-24, rotating hydraulic tipplers have been set up in Vellore, MRK and Arignar Anna sugar mills at a cost of Rs.1.50 crore. In the year 2024-25, a rotating hydraulic tippler will be installed in Dharmapuri District Cooperative Sugar Mill at an estimated cost of Rs.56 lakh.

2.2.5. Conversion of Press mud into enriched manure through Bio composting

Press mud is a major waste produced in sugar mills. To conserve the soil fertility, to reduce the use of chemical fertilisers and to convert the press mud into nutrient-rich fertilisers through bio-composting. This project has been implemented at the Salem Cooperative Sugar Mill at a cost of Rs.1.50 crore.

2.2.6 Wage Revision to the employees of Sugar Mills

The demand for wage revision for the employees of co-operative and public sector sugar mills was considered by the Government, and orders were issued for implementing the wage revision from 01.10.2018 with the hike of 35%.

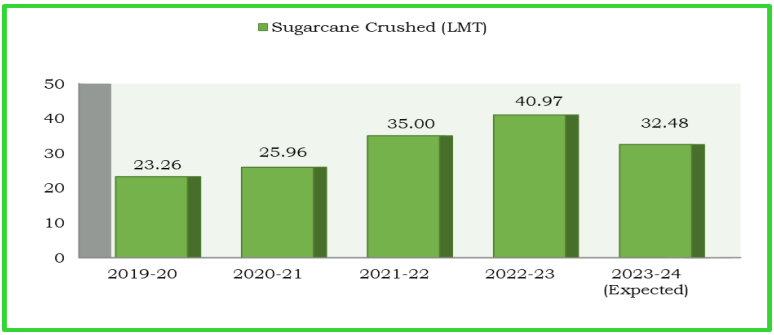
2.3 Performance of sugar mills

2.3.1 Sugarcane crushing in Co-operative and Public sector sugar mills

Due to various measures taken by the Government of Tamil Nadu the quantity of sugarcane crushed in the sugar mills has increased from 25.96 lakh MT in 2020-21 crushing season to 40.97 lakh MT in 2022-23 crushing season. About 32.48 lakh MT is expected to be crushed during 2023-24 crushing season. Inspite of various measures taken to increase the area under sugarcane cultivation, the quantity of sugarcane crushed in the 2023-24 crushing season has decreased slightly compared to the previous season due to less

rainfall and sudden outbreak of pest and disease.

Figure: 2.4. Sugarcane crushing details of Cooperative and Public Sector Sugar Mills



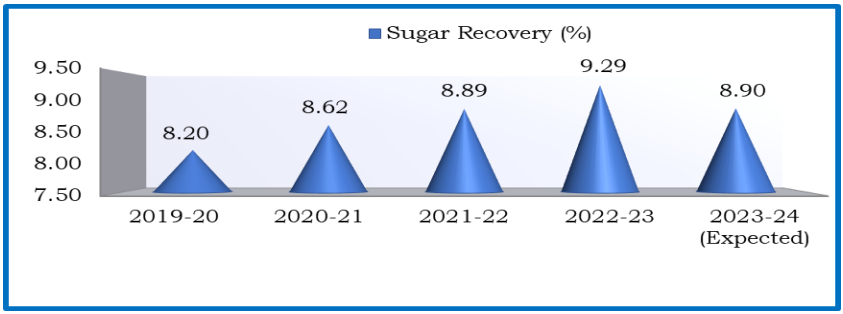
Crushing Season

2.3.2 Sugar Recovery in Co-operative and Public Sector Sugar Mills.

The sugar recovery in sugar mills in Tamil Nadu has constantly been at a level of less than 9%. Due to various measures taken by the Government, the average sugar recovery of sugar mills has reached a maximum of 9.29% in 2022-23 crushing season after 11 years. During 2023-24 crushing season, in view of factors like less rainfall and climate change, the average

sugar recovery of cooperative and public sector sugar mills is expected to be at 8.90%.

Figure: 2.5. Sugar Recovery of Co-operative and Public Sector Sugar Mills (%)

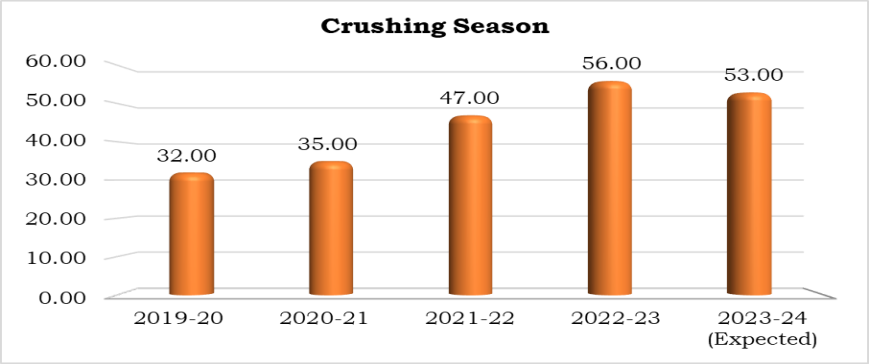


Crushing Season

2.3.3 Capacity Utilization of Co-operative and Public sector Sugar Mills

The capacity utilization of cooperative and public sector sugar mills has increased from 32% in 2019-20 crushing season to 56% in 2022-23 crushing season. In the 2023-24 crushing season the capacity utilization is expected to be at 53%.

Figure: 2.6. Capacity Utilization of of Co-operative and Public Sector Sugar Mills (%)



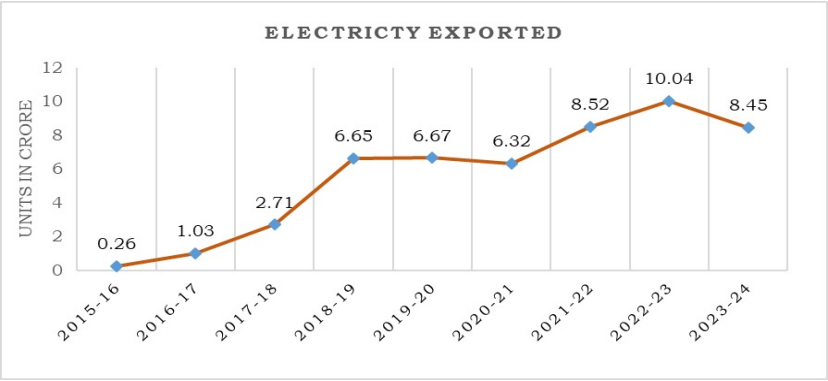
2.3.4 Co-generation Project

In order to reduce the cost of production and increase the income of cooperative and public sector sugar mills, rejuvenation of sugar mills has been undertaken and Tamil Nadu Power Generation and Distribution Corporation (TANGEDCO) has undertaken installation of 12 co-generation projects with a total production capacity of 183 MW. So far, seven plants (Chengalrayan, Vellore, Cheyyar, Aringnar Anna, Perambalur, Dharmapuri and MRK) with 108 MW capacity co-generation power plants have been

constructed and commissioned. The Tamil Nadu Power Generation and Distribution Corporation (TANGEDCO) is taking steps to complete and commission the pending co-generation projects in five cooperative sugar mills by 2024-25.

During 2023-24 crushing season, 8.45 crore units of surplus electricity generated has been exported to the grid of TANGEDCO from the existing operational co-generation plants.

Figure: 2.7. Details of electricity exported through seven Co-generation projects



2.3.5 Ethanol Production

Distilleries were set up at Amaravati and Salem cooperative sugar mills in 1993-94 with a

production capacity of 55 KLPD. The ethanol plants with a production capacity of 30 KLPD have been constructed and started commissioning since 2007.

In 2023-24, 84.49 lakh litres of rectified spirit and 44.29 lakh litres of ethanol were produced.

A Detailed Project Report for setting up of 60 KLPD ethanol plant using sugarcane juice and B heavy molasses as raw material at Kallakurichi-1 and MRK cooperative sugar mills has been received from National Federation of Cooperative Sugar Mills, New Delhi and environmental clearance has also been obtained. Efforts are being made to obtain funds from financial institutions to set up the ethanol plant.

2.4. Tamil Nadu Sugar Corporation Limited

The Tamil Nadu Sugar Corporation Limited was established in 1974 as a public sector undertaking and registered under the Companies Act (1956). The corporation is working with the aim of setting up new sugar mills, expansion of

existing sugar mills, technical consultancy implementation of projects using by-products produced in co-operative and public sector sugar mills in Tamil Nadu, etc. Arinagar Anna Sugar Mill at Kurungulam, Thanjavur District and Perambalur Sugar Mill at Eraiyur, Perambalur District are the units of Tamil Nadu Sugar Corporation.

Table 2.3: Performance of TASCO Sugar Mills

Sl. No.	Particulars	Arignar Anna Sugar Mill		Perambalur Sugar Mill	
		2022-23	2023-24	2022-23	2023-24
1	Cane Registration (Ha)	2,274	874	4,272	1,415
2	Cane Crushing (MT)	2,46,001	2,04,123	3,43,722	2,39,152
3	Sugar Recovery (%)	8.96	7.90	9.66	8.51
4	Sugar Production (MT)	21,972	16,091	33,137	20,289
5	Capacity Utilisation (%)	57.21	47.47	66.61	46.35

2.5. Tamil Nadu Cooperative Sugar Federation (TNCSF)

Tamil Nadu Cooperative Sugar Federation was registered on 11.11.1961 and started functioning from 31.05.1962. 16 cooperative sugar mills and two public sector sugar mills in Tamil Nadu are its members. Tamil Nadu Cooperative Sugar Federation undertakes co-ordinating the activities of the member sugar mills, providing technical advice, centralized procurement, sale of sugar and by-products, acting as representative of the member sugar mills in National Federation of Cooperative Sugar Factories and other organizations, training for functional capacity building of the mills etc.,

2.5.1 Main Bio-Control Research Laboratory (MBRL)

Main Bio-Control Research Laboratory, Chengalpattu is functioning from 1982 as a unit of Tamil Nadu Cooperative Sugar Federation. In this laboratory, sugarcane bio-fertilisers and bio-pesticides are manufactured and supplied to sugarcane farmers in cooperative and public sector sugar mill areas. Biofertilisers such as

Acetobacter, Phosphobacteria, Arbuscular Mycorrhiza and biopesticides such as *Trichoderma viridi, Pseudomonas, Metarhizium*, *Bacillus thuringiensis* are produced in this laboratory and supplied to sugarcane farmers of cooperative and public sector sugar mill areas.

The Main Bio-Control Research Laboratory has generated a revenue of Rs.1.15 crore in 2022-23 and Rs.0.66 crore in 2023-24.

2.5.2 Revenue from sale of sugar and by-products

The sale of sugar produced by co-operative and public sector sugar mills are sold to Tamil Nadu Civil Supplies Corporation based on monthly release order of Union Government. The surplus bagasse available with the mills is being sold to Tamil Nadu News Print Limited and other organizations. The excess molasses available with sugar mills over and above the requirement of Amaravati and Salem cooperative sugar mills is being sold to private distilleries and fodder manufacturers.

Table 2.4: Sale of sugar and by-products during the year 2023-24 (01.04.2023 to 31.03.2024)

Sl. No.	Particulars	Quantity Sold	Value (Rs. in lakh)
1	Sugar (LMT)	3.61	1,346.05
2	Bagasse (MT)	1,01,818	25.56
3	Molasses (MT)	1,95,475	176.61
4	Alcohol (lakh litre)	131.61	66.14
5	Ethanol (lakh litre)	57.11	28.54

3. HORTICULTURE AND PLANTATION CROPS

Horticulture, as a holistic approach, covers diverse aspects of human life such as nutrition, wellness, aesthetics and recreation, beyond cultivation. Engaging in horticultural activities and incorporating them into our daily routines make us lead a healthier, happier life in a sustainable way.

Moreover, as horticultural crops have a high potential for adaptation to different environmental conditions, farmers have the opportunity to diversify their agricultural activities, increase their income, and adopt sustainable farming practices. By cultivating high-value crops, implementing irrigation techniques, and utilizing modern technology, farmers can enhance their productivity and profitability.

Due to the rising demand for fruits, vegetables, plantation crops, ornamental plants, and medicinal crops, horticulture emerges as a pivotal driving force for agricultural development in Tamil Nadu.

With this objective, Department of Horticulture and Plantation Crops implements various schemes. These schemes play a crucial role in supporting farmers, increasing production, ensuring food and nutritional security and enhancing the value chain of perishable produce.

For the year 2024-25, considering the importance of horticulture development, welfare of the farmer and environmental sustainability, priority will be given to dry land horticulture farming, medicinal plant cultivation, automation in irrigation, pandal cultivation, pest management, rejuvenation of old orchard and creation of farms and parks.

3.1 Area, Production of Horticultural Crops and Contribution of Tamil Nadu at National Level

In Tamil Nadu, horticulture crops like fruits, vegetables, plantation crops, spices, medicinal and aromatic crops, and flowers are cultivated in an area of 16.03 lakh hectares with a total production of 233 lakh MT. In Tamil Nadu, the area and production of horticulture

crops has increased by 3.32 and 4.35 percent respectively in 2023-24 when compared to previous year.

Table: 3.1: Area, Production and Productivity of Horticulture crops

S. No	Category of Horticulture crops	2022-23 (Final)			2023-24 (Second Advance Estimate)		
		Area (lakh Ha)	**Production** (lakh MT)	**Productivity** (MT/Ha)	**Area** (lakh Ha)	**Production** (lakh MT)	**Productivity** (MT/Ha)
1	Fruit crops	3.34	74.43	22.31	3.34	75.29	22.52
2	Vegetable crops	3.62	91.96	25.38	3.63	92.36	25.46
3	Plantation crops	7.33	56.08	7.65	7.59	56.28	7.41
4	Spices & Condiments	1.16	3.31	2.84	1.11	3.30	2.97
5	Medicinal and Aromatic	0.14	1.43	10.14	0.16	1.68	10.52
6	Flower crops	0.44	5.87	13.29	0.47	6.31	13.55
	Total	**16.03**	**233.08**		**16.30**	**235.22**	

Graph 3.1: Tamil Nadu - Area Coverage of Horticultural Crops - 2022-23

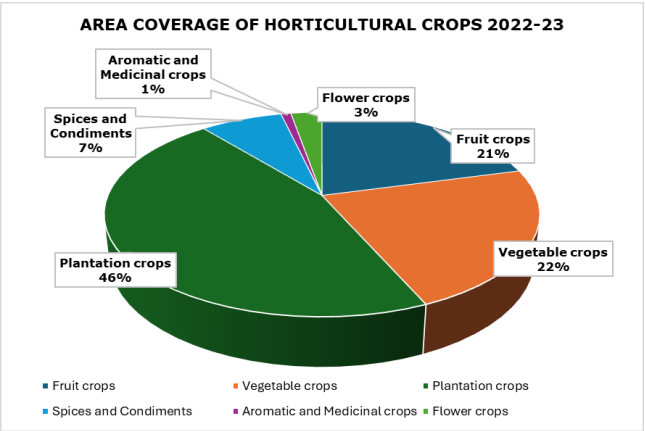


Table: 3.2: Tamil Nadu - Position in Area of various Horticultural crops at National Level

First	Second	Third
1. Tapioca 2. Clove 3. Tamarind 4. Jasmine	1. Banana 2. Watermelon 3. Cocoa 4. Chrysanthemum 5. Tuberose	1. Coconut 2. Aonla 3. Elephant foot yam 4. Black pepper
Source: Final Estimates 2022-23, Horticulture Statistics Division, Department of Agriculture & Farmers Welfare, New Delhi		

Graph 3.2: Tamil Nadu - Production of Horticultural Crops - 2022-23

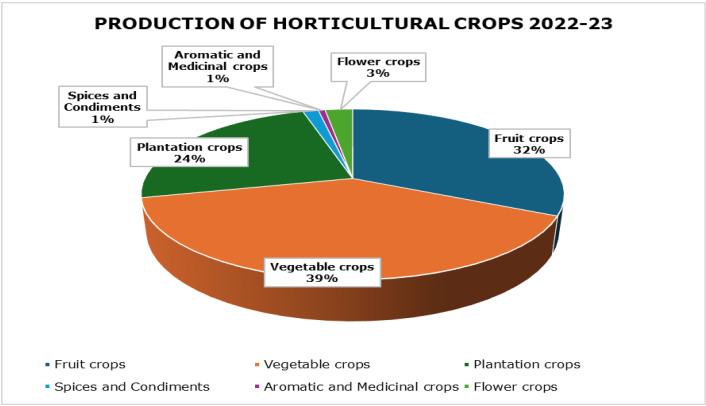


Table: 3.3: Tamil Nadu - Position in Production of various Horticultural crops at National Level

First	Second	Third
1. Clove 2. Tamarind 3. Jasmine 4. Tuberose 5. Tapioca	1. Cocoa 2. Chrysanthemum	1. Coconut 2. Aonla 3. Banana 4. Watermelon 5. Elephant foot yam

Source: Final Estimates 2022-23, Horticulture Statistics Division, Department of Agriculture & Farmers Welfare, New Delhi

3.1.1: Fruit Crops

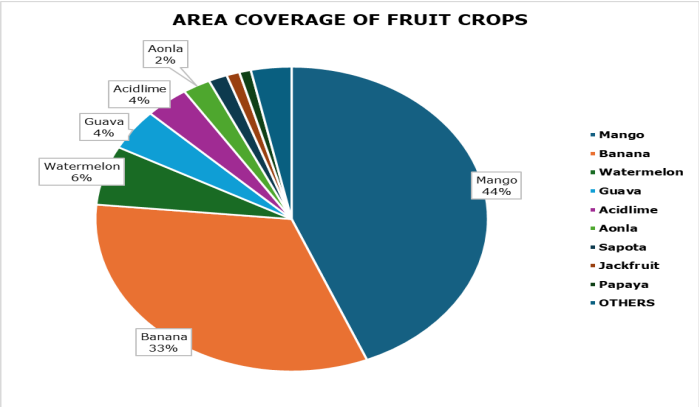


Table: 3.4: Details of major fruit growing districts - 2022-23

S. No.	Crop name	Area (Hectare)	Major fruit growing districts
1	Mango	1,45,886	Krishnagiri (32,302), Dindigul (15,865), Dharmapuri (14,589), Thiruvallur (11,337) and Theni (9,236).
2	Banana	1,09,366	Erode (20,075), Coimbatore (9,123), Thoothukudi (8,648), Theni (6,732) and Tirunelveli (6,326).
3	Watermelon	20,975	Chengalpattu (10,996), Villupuram (2,968), Thiruvallur (1,647), Tiruvannamalai (1,183) and Salem (787).

S. No.	Crop name	Area (Hectare)	Major fruit growing districts
4	Guava	14,628	Dindigul (2,259), Madurai (1,707), Virudhunagar (1,371), Cuddalore (1,254) and Villupuram (1,006).
5	Acid lime	12,025	Tenkasi (3,079), Dindgul (2,354), Tiruchirappalli (1,024), Thoothukudi (758) and Virudhunagar (717).
6	Other Fruits	30,688	Dindigul (5,720), Theni (2,846), Salem (1,765), Namakkal (1,685) and Tirunelveli (1,640).
Total area under Fruits cultivation= 3,33,567 Hectare			

3.1.1.1.Special scheme for "Mukkanis":

In the year 2024-25, a Special scheme for "Mukkanis" (Three fruits) will be implemented with the following activities such as promoting southern varieties of mango and varieties suitable for export, expanding cultivation of banana using tissue culture plants and banana suckers, protecting bananas from natural disasters through propping, producing quality banana bunches by banana bunch cover and cultivating new local and new varieties of jackfruit. Importance will be given to fruit crops

such as dragon fruit, fig, wood apple, ber, amla, and manilla tamarind, which require less water and can withstand drought.

3.1.2: Vegetable Crops

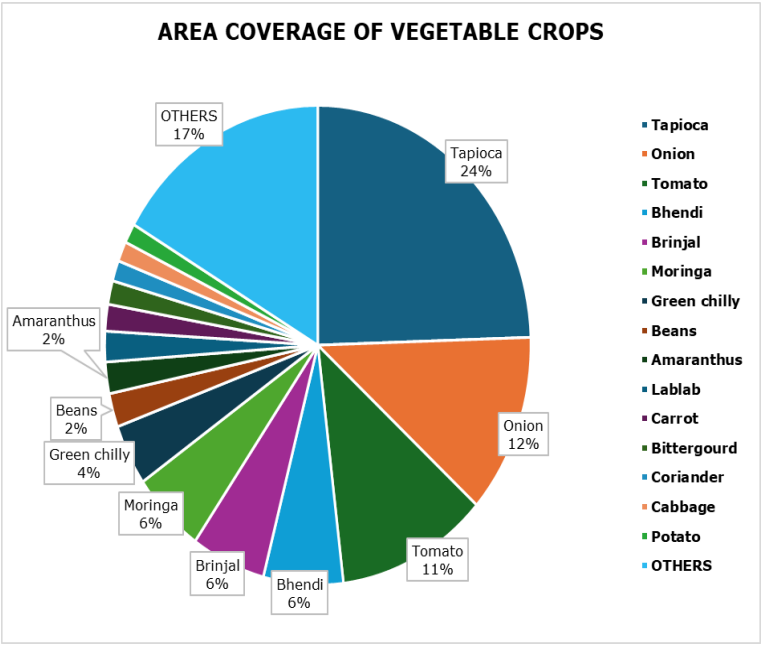


Table: 3.5: Details of major vegetable growing districts - 2022-23

S. No.	Crop name	Area (Hectare)	Major vegetable growing districts
1	Tapioca	88,683	Namakkal (17,755), Kallakurichi (15,604), Dharmapuri (13,860), Salem (13,117) and Erode (6,021).

S. No.	Crop name	Area (Hectare)	Major vegetable growing districts
2	Onion	43,972	Perambalur (8,732), Tiruchirappalli (5,992), Thoothukudi (5,104), Namakkal (4,654) and Dindigul (3,559).
3	Tomato	41,526	Dharmapuri (12,668), Krishnagiri (11,018), Salem (3,958), Dindigul (2,544) and Tiruppur (2,112).
4	Bhendi	21,904	Dharmapuri (3,614), Salem (2,736), Thiruvannamalai (1,827), Krishnagiri (1,067) and Ranipet (884).
5	Brinjal	20,444	Dharmapuri (3,342), Salem (2,548), Thiruvannamalai (1,696), Krishnagiri (1,541) and Thirupathur (905).
6	Other Vegetables	1,45,750	Krishnagiri (28,697), Dindigul (16,655), Salem (8,930), Dharmapuri (8,793) and The Nilgiris (7,977).
Total area under Vegetable cultivation= 3,62,279 Hectare			

During the year 2024-25, the area and production of region-specific vegetable crops such as potatoes and Kodaikanal Hill garlic will be increased. Steps will be taken to enhance the cultivation of traditional vegetables, as well as to increase the cultivation of pandhal vegetables.

3.1.3: Plantation Crops

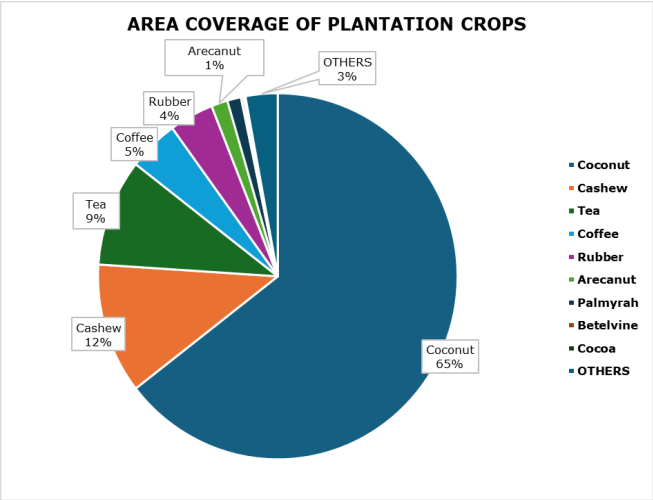


Table: 3.6: Details of major plantation crops growing districts -2022-23

S.No.	Crop name	Area (Hectare)	Major plantation growing districts
1	Coconut	4,72,711	Coimbatore (91,809), Tiruppur (73,311), Thanjavur (41,414), Dindigul (30,270) and Kanniyakumari (2,5092).
2	Cashew	84,484	Ariyalur (30,562), Cuddalore (29,240), Pudukkottai (5,907), Villupuram (3,325) and Theni (3,202).

S.No.	Crop name	Area (Hectare)	Major plantation growing districts
3	Tea	69,353	The Nilgiris (55,522), Coimbatore (11,194), Theni (1,621), Tirunelveli (804) and Kanniyakumari (208).
4	Coffee	33,142	Dindigul (11,044), The Nilgiris (7,321), Salem (7,100), Theni (2,994) and Coimbatore (2,247).
5	Rubber	29,191	Kanniyakumari (29,096), The Nilgiris (50), Tenkasi (42).
6	Other Plantation	43,974	Krishnagiri (4,400), Coimbatore (3,503), Salem (3,236), Ramanathapuram (2,801) and Thoothukudi (2,701).
Total area under Plantation crops= 7,32,855 Hectare			

During the year 2024-25, the importance will be given to coconut area expansion, intercropping of cocoa crop in coconut plantations, expansion of area under cashew cultivation, and rejuvenation of the old cashew plantations to enhance productivity.

3.1.4: Spices and Condiments

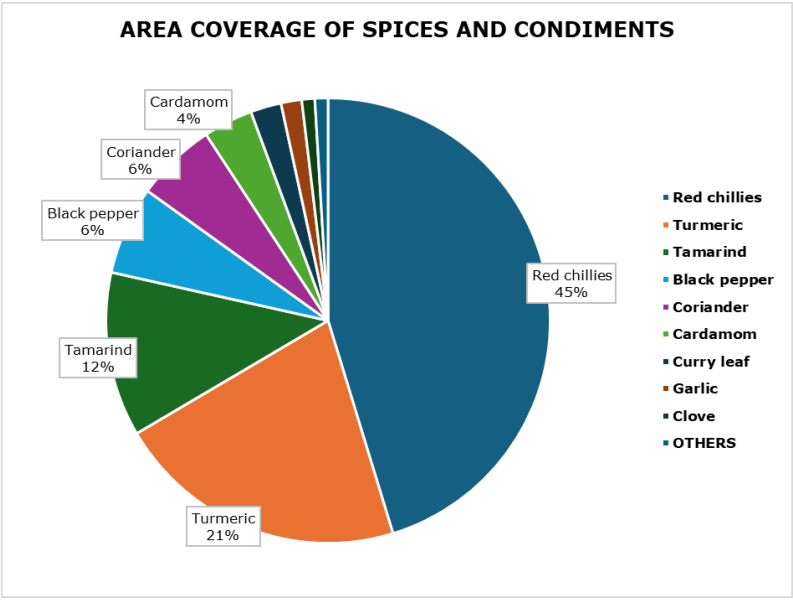


Table: 3.7: Details of major spices and condiments growing districts -2022-23

S. No.	Crop name	Area (Hectare)	Major spices and condiments growing districts
1	Red chillies	52,703	Ramanathapuram (14,945), Thoothukudi (14,403), Sivagangai (3,239), Thiruvannamalai (1,923) and Salem (1,862).
2	Turmeric	24,746	Dharmapuri (6,876), Salem (5,259), Erode (4,694), Kallakurichi (2,500) and Namakkal (1,762).

S. No.	Crop name	Area (Hectare)	Major spices and condiments growing districts
3	Tamarind	13,904	Dindigul (3,227), Theni (1,520), Madurai (1,132), Krishnagiri (963) and Dharmapuri (951).
4	Black pepper	7,465	Namakkal (2,517), Dindigul (1,460), Salem (1,454), The Nilgiris (992) and Kanniyakumari (311).
5	Coriander	6,809	Thoothukudi (2,813), Ramanathapuram (1,448), Virudhunagar (1,433), Thirupathur (285) and Tiruppur (238).
6	Other Spices	10,773	Coimbatore (2,327), The Nilgiris (1,830), Theni (1,669), Dindigul (1,252) and Krishnagiri (901).
Total area under Spice crops= 1,16,400 Hectare			

During the fiscal year 2024-25, emphasis will be given to region specific spices crops such as cinnamon, clove, black pepper, cardamom. The scheme for area expansion of chilli and removal of prosopis to bring into the chilli cultivation will also be promoted by considering the usage of chilli.

3.1.5: Medicinal and Aromatic Crops

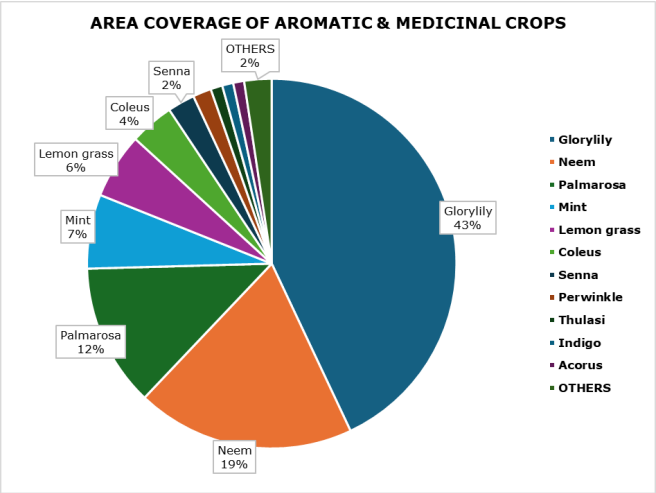


Table: 3.8: Details of major Medicinal and Aromatic crops growing districts -2022-23

S. No.	Crop name	Area (Hectare)	Major Medicinal and Aromatic crops growing districts
1	Glorylily	6,075	Dindigul (3111), Tiruppur (2255), Karur (628), Tiruchirappalli (41) and Namakkal (13).
2	Neem	2,701	Virudhunagar (668), Thoothukudi (377), Madurai (245), Tirunelveli (228) and Namakkal (161).
3	Palmarosa	1,763	Dharmapuri (1248), Thiruvannamalai (470), Kallakurichi (25) and Villupuram (20).
4	Mint	917	Krishnagiri (880).
5	Lemon grass	809	Thiruvannamalai (792) and Theni (11)

S. No.	Crop name	Area (Hectare)	Major Medicinal and Aromatic crops growing districts
6	Other crops	1,869	Virudhunagar (383), Thiruvannamalai (249), Salem (238), Kallakurichi (212) and Dindigul (163).
Total area under Medicinal and Aromatic crops = 14,133 Hectare			

During this year, the cultivation of medicinal plants component such as glorylily, senna, medicinal coleus and periwinkle will be promoted through the State Horticulture Development Scheme, aimed at enhancing the cultivation of the medicinal plants.

3.1.6: Flowers

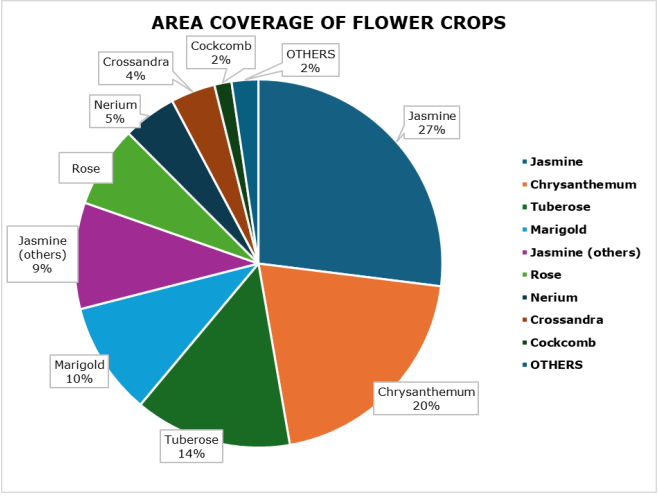


Table: 3.9: Details of major flower crops growing districts -2022-23

S. No	Crop name	Area (Hectare)	Major flower growing districts
1	Jasmine	11,913	Madurai (1,565), Thiruvallur (1,082), Dharmapuri (1,071), Erode (998) and Salem (809).
2	Chrysan themum	8,958	Krishnagiri (3,545), Dharmapuri (1,948), Salem (1,697), Thiruvannamalai (578) and Tiruchirappalli (175).
3	Tuberose	6,108	Dharmapuri (1,871), Thiruvannamalai (1,361), Erode (552), Dindigul (276) and Salem (219).
4	Marigold	4,383	Krishnagiri (2,305), Thiruvannamalai (459), Dharmapuri (320), Tiruchirappalli (139) and Thiruvallur (131).
5	Rose	3,160	Krishnagiri (1,491), Dharmapuri (310), Thiruvannamalai (202) and Namakkal (161) and Salem (158).
6	Other Flowers	9,641	Thiruvannamalai (1,686), Salem (1,377), Dharmapuri (1,227), Dindigul (751) and Namakkal (497).
Total area under Flower crops= 44,153 Hectare			

3.2: Scheme implemented with Centre and State Government funds

3.2.1: Per Drop More Crop (PDMC) under RKVY- Micro Irrigation

Per Drop More Crop (PDMC) – Micro Irrigation scheme is being implemented with the objective of efficient and economic utilization of water, thereby facilitating increase in the cropping area and ultimately the production and productivity of crops. The demand for water is increasing continuously. Hence, necessity for increasing the water use efficiency to bring more area under cultivation is essential.

Realizing the importance of micro irrigation, the State Government is contributing to the cost of production and extending 100% subsidy to Small/ Marginal farmers and 75% Subsidy for other farmers for installation of Micro Irrigation Systems. The State Government is also bearing the 12% GST on MI components for all categories of farmers.

From 2023-24, the micro irrigation scheme is being implemented under Per Drop More Crop

of Rashtriya Krishi Vikas Yojana (RKVY). An area of 1,29,020 ha was brought under micro irrigation with an outlay of Rs.1,084.80 crore benefitting 1,32,087 farmers.

During 2024-25, the scheme will be implemented at an outlay of Rs.888.69 crore covering an area of 1,02,748 ha benefitting 1,17,000 farmers with the following components.

1. Installation of micro irrigation systems in 90,000 hectare.
2. Installation of automation system in 11,868 Ha to operate micro irrigation.
3. The subsidy is being extended for water harvesting system, construction of tube well/borewell, pipe cast distribution system and water lifting devices – motor, to encourage the farmers to adopt micro irrigation.
4. Creation of integrated micro irrigation system in Lower Bhavani command area.

3.2.2 : National Horticulture Mission (NHM)

National Horticulture Mission is being implemented in 26 districts as a sub-scheme of Mission for Integrated Development of Horticulture under Krishonnati Yojana from 2022-23.

During the year 2023-24, this scheme is being implemented at an outlay of Rs.200 crore covering 98,090 beneficiaries. Expansion of new horticultural crop area has been carried out in an area of 19,888 hectare at an outlay of Rs.36.23 crore and organic farming has been promoted in an extent of 750 ha. Mushroom cultivation is being promoted at an outlay of Rs. 0.24 crore by establishing three units. Water harvesting structures for 1,150 individuals have been created at an outlay of Rs.8.63 crore. Protected cultivation has been implemented at an outlay of Rs.45.92 crore. To minimize post-harvest losses, integrated post-harvest management infrastructure has been created at an outlay of Rs.53.52 crore.

For the year 2024-25, it has been proposed to promote the cultivation of crop

specific horticulture crops like hill garlic, pepper, chillies, cardamom, clove, cinnamom, nutmeg and cocoa in the specific regions. And also, it has been proposed to promote less water intensive crops like dragon fruit, fig, amla, wood apple, ber in dry land areas by adoption of INM/IPM, mulching. Integrated horticulture developmental activities will be promoted in crops like mango, banana, chillies, cashew and jack. The scheme will be implemented at an outlay of Rs. 218.75 crore.

3.2.3: National Agriculture Development Programme (NADP)

National Agriculture Development Programme is being implemented with an objective to ensure holistic development of Agriculture and allied sectors.

During the year 2023-24, the scheme was implemented at a financial outlay of Rs. 19.64 crore. Components like area expansion of horticulture crops and promotion of special horticulture demand crops was implemented in an area of 3,332 ha and 3,060 ha respectively.

Supporting structures (Pandal and Trellis) for Horticultural crops were erected in an area of 1,400 ha. Mulching for an extent of 1,564 ha was provided to farmers.

During the year 2024-25, this scheme is being implemented with a financial outlay of Rs.45 crore. The area expansion of horticulture crops in 7,418 ha, promotion of special horticulture crops in demand like dragon fruit, manila tamarind, fig, wood apple and ber will be expanded in an area of 74 ha. To get good quality fruits, distribution of banana bunch sleeves for an extent of 750 ha, and propping in banana 1,500 ha will be promoted. Components such as erection of permanent pandal in 500 ha, polygreen house and shadenet in 19,000 Sq.m. for horticulture crops, rejuvenation of 290 ha of old orchards of cashew and mango will be implemented.

3.2.4: Rainfed Area Development (RAD)

Under rainfed area development scheme - Integrated Farming Systems, farmers are encouraged to integrate horticulture-based farming with livestock, fishery and agro forestry

in order to protect crop from losses due to climate changes, to ensure the production and to generate sustainable income.

During the year 2023-24, under Rainfed Area Development, Integrated Farming System units comprising milch cows/ goats, vermibeds, apiary units, vegetable seeds, fruit tree seedlings per units and benefitting 9,695 numbers of farmers was implemented at an outlay of Rs.29 crore in 30 Districts viz, Ariyalur, Chengalpattu, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kallakuruchi, Karur, Krishnagiri, Madurai, Namakkal, Perambalur, Pudukottai, Ramanathapuram, Ranipet, Salem, Sivagangai, Tenkasi, Theni, Thiruppur Thiruvallur, Thiruvannamalai, Thirunelveli, Thirupathur, Trichy, Thoothukudi, Vellore, Villupuram and Virudhunagar.

During the year 2024-25, the scheme will be implemented at an outlay of Rs.12 crore for 4,000 Units benefitting 4,000 farmers.

3.2.5: Agro Forestry

Agro Forestry Programme is being implemented from the year 2023-24. The main objective of the scheme is to enhance the livelihood of rural people, especially small and marginal farmers, through production of quality planting materials and thereby promoting integration of tree cultivation with agriculture, thereby increasing productivity and generating additional income.

During 2023-24, an amount of Rs.3.17 crore was allotted to the Horticulture Department for the establishment of hitech nursery, big nurseries, small nurseries, raising of saplings in existing nursery and skill development and awareness campaigns.

During the year 2024-25 this scheme will be implemented at a financial outlay of Rs.2.38 crore.

3.2.6: Paramparagat Krishi Vikas Yojana (PKVY)

During 2023-24, Rs.1 crore was allotted as first year programme for certification charges

to the farmers who are already doing organic farming or propose to take organic farming. Financial assistance of Rs. 6,000 for 3 years will be provided at the rate of Rs. 2,000 per Ha.

During 2024-25 also, Rs.1 crore will be allotted for organic certification charge to implement second-year programme.

3.2.7 : National Bamboo Mission (NBM)

The main objective of this scheme is to increase the area under bamboo plantation in government and private lands of non-forest areas. Improvement of post-harvest management and promotion of skill development for bamboo cultivation, awareness generation for development of bamboo sector are the other objectives of the scheme.

During 2023-24, the scheme is being implemented in an area of 579 ha with the financial outlay of Rs.2.50 crore.

During 2024-25, this scheme will be implemented in an area of 925 ha at an outlay of Rs.2.26 crore.

3.2.8: National Mission on Edible Oils – Oil Palm (NMEO-OP)

In Tamil Nadu, the National Mission on Edible Oils -Oil Palm Scheme is being implemented to increase the area and production of edible oil crops.

During 2023-24, oil palm cultivation has been promoted in an area of 303 ha with a financial outlay of Rs.1.28 crore. In this scheme, subsidy is given for maintenance of oil palm plantations and intercropping in oil palm plantations up to four years. Further, 50% subsidy is given for the erection of borewell, diesel / electric pump set, machinery and tools for harvesting the bunches of oil palm.

In this scheme, Rs.1,000/MT will be given as a production incentive to farmers who have produced 8 MT and above fresh fruit bunches from fifth year onwards.

This scheme will be implemented with an outlay of Rs. 6.58 crore in the year 2024-25.

3.2.9. Integrated Coconut Development Scheme

Coconut Development Board and State programmes are being implemented to increase the production and productivity of coconut. In the previous year 2023-24, under the Coconut Development Board scheme, establishment of regional coconut nurseries, laying of demonstrations, setting up of compost pits, replanting and rejuvenation of coconut gardens were implemented at a financial outlay of Rs.13.89 crore. The Coconut Development Board schemes will continue to be implemented in the year 2024-25.

Coconut is affected by various pests and diseases, resulting in reduced yields which leads to reduced production and productivity, coconut root wilt being the important among them. The disease has affected most of the districts of Tamil Nadu near the border of Kerala state. Considering the welfare of coconut farmers, the Hon'ble Chief Minister has announced the implementation of the Coconut Root Wilt Disease Recovery Programme for the year 2023-24 and

2024-25 at a financial outlay of Rs.21.14 crore for an area of 4,500 Ha. Under this scheme, the components viz. cut and removal of diseased trees, free supply of coconut seedlings and supply of inputs for rejuvenation of diseased coconut gardens are implemented in an area of 2,275 Ha at a cost of Rs. 9.39 crore in six districts namely Coimbatore, Tiruppur, Theni, Tenkasi, Tirunelveli and Kanyakumari.

3.3. State Schemes

3.3.1: State Horticulture Development Scheme (SHDS)

State Horticulture Development scheme was implemented with 100% State Government contribution at an outlay of Rs. 35.69 crore during 2023-24 with an objective of increasing the area and production of Horticultural crops and enhance the farmers income.

Under this scheme, the components such as area expansion of horticulture crops, hydroponics and vertical garden, protected cultivation, distribution of terrace garden kits & fruit plants kit, intercropping of vegetable with

banana, tapioca and other perennial horticulture crops, integrated nutrient & pest management in betel vine, distribution of plastic crates, establishing low cost onion storage structures, establishing cottage mushroom units, establishing gardens in government educational institutions and orphanages, curry leaf cluster, jasmine mission, chilli zone and moringa mission were implemented.

In the year 2024-25, the scheme is being implemented at an outlay of Rs.24.05 crore with various components.

3.3.2: Kalaignarin All Village Integrated Agriculture Development Programme – (KAVIADP)

Kalaignarin All Village Integrated Agriculture Development Programme (KAVIADP) is being implemented from 2021-2022 onwards to attain overall development of agriculture in the selected villages and converting the villages to attain self-sufficiency and sustainability in agriculture by converging various schemes of different departments and other allied activities with an aim to cover all village panchayats.

The scheme has been implemented with horticulture-based components in 1,997 Villages at an outlay of Rs.25.88 crore in 2021-22, 3,204 villages at an outlay of Rs.28.81 crore in 2022-23 and 2,504 villages at an outlay of Rs.17.20 crore in 2023-24. The components such as promotion of vegetable cultivation for increasing the arrival of vegetables in the market, area expansion of perennial horticulture crops, distribution of fruit plant kits to attain nutritional self-sufficiency has been implemented under the scheme.

Further, the schemes viz., Micro irrigation, National Horticulture Mission, National Agriculture Development Programme, Rainfed Area Development, State Horticulture Development Scheme, Tamil Nadu Irrigated Agriculture Modernization Programme have also been dovetailed in the selected villages.

In the year 2024-25, the scheme is being implemented for horticulture related components at an outlay of Rs.15.20 crore in 2,482 villages.

3.3.3: Palmyrah Development Mission (PDM)

Palmyrah Development Mission was implemented at an outlay of Rs. 2.63 crore during the year 2023-24. In this scheme, the components such as distribution of palmyrah seed nuts, distribution of palmyrah seedlings, value addition units for palmyrah value added products, distribution of palmyrah tree climbing equipment were implemented through the Department of Horticulture.

Further, distribution of equipment for production of palmyrah value-added products along with training, providing equipment to women for making products from palmyrah leaves with training are being implemented by Tamil Nadu Palm Products Development Board.

In the year 2024-25, this scheme will be implemented at an outlay of Rs.1.21 crore.

3.4. World Bank Funded Scheme : Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP)

TNIAMP is a Multi-Disciplinary Project funded by World Bank and implemented by the Government of Tamil Nadu. The main objective of the programme is to accelerate crop diversification from crops requiring more water to less water and high remunerative horticultural crops, through promotion of hi-tech cultivation technologies and water conservation technologies in the proposed sub basins.

It is proposed to implement the scheme in a total area of 45,025 ha under fruits, hybrid vegetables, aromatic crops, flowers and plantation crops cultivation, shade net, mulching, bio village, publicity, exposure visit and Rs.110 crore under micro irrigation components with a total outlay of Rs.217 crore in 47 sub basins covering 34 Districts in seven years from 2018-19 to 2024-25.

During the year 2023-24, the scheme has been implemented at an outlay of Rs.12.54 crore in 38 sub basins covering 34 districts. The

interventions such as 5,540 ha of crop demonstration, 1,000 ha of bio villages, 8,500 sqm of shadenet, 100 ha of mulching, 209 Nos of exposure visit and model village activities were implemented in this project.

In the year 2024-25, it is proposed to implement the scheme at an outlay of Rs.25.29 crore in 38 sub basins covering 34 districts. In this, the interventions such as 7,867 ha of crop demonstration, 960 ha of bio villages, 7,500 sqm of shadenet, 100 ha of mulching and model village activities will be implemented.

3.5: Infrastructure facilities in Horticulture

3.5.1: State Horticulture Farms (SHFs)

There are 73 State Horticulture Farms functioning in 37 districts under Department of Horticulture and Plantation crops.

Table 3.8. List of State Horticulture Farms

S. No	District	Name of the Farm	Year of Establishment	Area (Ha)
1	Ariyalur	Keelapalavur	2018	7.580
2	Chennai	Mathavaram	1980	2.000
3	Coimbatore	Anaikatty	1986	12.000

S. No	District	Name of the Farm	Year of Establishment	Area (Ha)
4	Coimbatore	Kannampalayam	2001	11.200
5	Cuddalore	Vridhachalam	1975	10.430
6	Cuddalore	Neyveli	1985	39.525
7	Dharmapuri	Polayampalli	2013	2.730
8	Dharmapuri	Block Level Nursery	2020	0.250
9	Dindigul	Sandhaiyur	2018	15.190
10	Dindigul	Sirumalai	1980	56.400
11	Erode	Baguthampalayam	2018	10.000
12	Chengalpattu	Attur	1961	12.240
13	Kallakurichi	Sathanur	2018	10.000
14	Kancheepuram	Vichanthangal	1982	23.250
15	Kancheepuram	Melkadirpur	1982	42.630
16	Kancheepuram	Melottivakkam	1982	20.600
17	Kancheepuram	Pitchivakkam	1982	34.000
18	Kanniyakumari	Kanniyakumari	1922	6.570
19	Kanniyakumari	Pechiparai	1967	6.000
20	Karur	Mudalaipatti	1978	24.250
21	Krishnagiri	Thimmapuram	1952	9.620
22	Krishnagiri	Jeenur	1980	123.445
23	Madurai	Poonjuthi	2012	5.765
24	Nagapattinam	Vanduvancherry	2018	6.540
25	Nagapattinam	Pushpavanam	2021	9.920
26	Namakkal	Semmedu	1974	11.100
27	Namakkal	Padasolai	1989	22.670
28	Perambalur	Vengalam	2018	4.720
29	Pudukkottai	Kudumianmalai	1974	118.680
30	Pudukkottai	Vallathirakottai	1977	521.200
31	Pudukkottai	Nattumangalam	1985	53.020
32	Ramanathapuram	Oriyur	2013	14.770
33	Ranipet	Navlock	1981	85.400

S. No	District	Name of the Farm	Year of Establishment	Area (Ha)
34	Salem	G.O.Karumandurai	1981	419.770
35	Salem	Maniyarkundram	1982	100.000
36	Salem	SHF,Karumandurai	1981	39.350
37	Salem	Mulluvadi	1985	48.400
38	Salem	Sirumalai	1987	8.000
39	Salem	SHF yercaud	1975	4.052
40	Sivagangai	Devakottai	1985	81.190
41	Sivagangai	Nemam	1979	38.770
42	Sivagangai	Kilathari	2019	12.810
43	Thanjavur	Aduthurai	1988	8.800
44	Thanjavur	Marungulam	1966	10.770
45	Theni	Periyakulam	1950	9.310
46	Thoothukudi	Keelavalanadu	2019	2.668
47	Tirunelveli	Vannikonenthal	2018	9.850
48	Thiruppur	Sankaramanallur	2018	10.120
49	Thiruvarur	Moovanallur	2018	5.825
50	Thiruvallur	Eekadu	2020	3.620
51	Tiruvannamalai	Pudurchekkadi	2018	12.760
52	Tiruvannamalai	Jamunamarathur	2019	0.680
53	Tiruvannamalai	Polur	2020	1.520
54	Tirupattur	Kudappattu	1961	10.080
55	Tirupattur	Thagarakuppam	1985	34.400
56	Trichy	Thorakudi	2013	12.340
57	Vellore	Agaramcheri	2020	34.530
58	Virudhunagar	Poovani	1967	9.460
59	Virudhunagar	Sriviliputhur	1982	46.270
60	Virudhunagar	Adithanendhal	2020	0.810
61	Villupuram	Elavalapakkam	2021	7.000
62	Kodaikanal	Thandikudi	1985	5.450
63	Kodaikanal	SHF Kodaikanal	1961	1.650
64	Nilgiris	Kallar	1900	8.920

S. No	District	Name of the Farm	Year of Establishment	Area (Ha)
65	Nilgiris	Burliar	1871	6.250
66	Nilgiris	Devala	1978	80.000
67	Nilgiris	P S Coonoor	1948	10.460
68	Nilgiris	Thummunaty	1956	9.800
69	Nilgiris	Nanjanad	1917	64.000
70	Nilgiris	Colgrain	1989	20.400
71	Nilgiris	FPU Coonoor	1965	0.100
72	Nilgiris	SHF Kattery	1974	16.956
73	Nilgiris	SHF Dodabetta	1969	2.520
			Total	**2,543.356**

The main objective of the State Horticulture Farms is timely production and distribution of quality, pedigree planting materials at a reasonable price to the farmers. Also, these farms serve as "Model Demonstration Farms" to disseminate the latest technologies to the farmers, provides employment opportunities to the landless labourers.

During the year 2023-24, 18.78 crore of planting materials were produced in state horticulture farms, parks & gardens and distributed to the farmers. this includes 16.18 crore of pro tray vegetables seedlings and

flowers seedlings. Other than planting materials production, 241.92 MT of truthfully labelled, foundation(F1) seeds and traditional seeds were produced and distributed as seeds and seed kits. 829 MT of vermicompost and 73.99 MT of bio control agents and bio fertilisers were produced in state horticulture farms, parks and garden are being utilized for farm production and also distributed to farmers.

The production of 19.55 planting materials has been programmed for the year 2024-25. This includes 17.27 crore pro tray seedlings of vegetables and flowers. The production of 11.81 MT of truthfully labelled, F1 seeds and traditional seeds, 1,112 MT of vermicompost and 125.67 MT of bio control agents and bio fertilisers in State Horticulture Farms, parks and gardens has also been planned.

3.5.2: Parks and Gardens

The Horticulture Department maintains 23 parks and gardens in eight districts of the state. parks act as recreation centres for the public and also serve as an educational centres for botany students.

Table 3.9: List of Parks and Garden

S. No	District	Name of the Park / Garden	Year of Establishment	Area (Ha)
1	Chennai	Horticulture Park Madhavaram	2018	8.700
2	Chennai	Semmozhi Poonga, Chennai	2010	3.640
3	Chennai	Heritage Garden, Washermenpet	2021	1.560
4	Chennai	Sengandhal Poonga	2021	2.750
5	Kanyakumari	Eco Park, Kanayakumari	2018	6.070
6	Ramanathapuram	Palai genetic Garden, Achadiparambu	2015	10.000
7	Salem	Rose Garden, Yercaud.	2005	2.000
8	Salem	Kurinchi Heritage Garden, Yercaud	2012	9.608
9	Salem	Anna Park, Yercaud	1999	1.844
10	Salem	Lake View Park, Yercaud	2018	1.252
11	Salem	Government Botanical Garden, Yercaud-1	2012	8.520
12	Salem	Government Botanical Garden, Yercaud-2	2012	7.600
13	Tenkasi	Eco Park, Courtallam	1986	14.890
14	Tiruvannamalai	Tiruvannamalai	2021	3.640

		Park		
15	Dindigul	Rose Garden & cut flower Demonstration unit, Kodaikanal	2012	4.080
16	Dindigul	Bryant Park and Anna Park, Kodaikanal	1900	8.200
17	Dindigul	Chettiyar Park, Kodaikanal	1980	2.020
18	The Nilgiris	Kattery Park	2012	2.000
19	The Nilgiris	Tea Park at Doddabetta	2015	1.600
20	The Nilgiris	Sim's Park, Coonoor	1874	11.340
21	The Nilgiris	Government Rose Garden, Ooty	1995	14.400
22	The Nilgiris	Government Botanical Garden, Ooty	1848	22.000
23	The Nilgiris	Arboretum, Ooty	2008	1.520
			Total	**149.234**

Works are being carried out for the establishment of and Kalaignar Centenary Park at an outlay of Rs.25 crore in Dr. Radhakrishnan Salai, Chennai, Neithal Heritage Garden at an outlay of Rs.2 crore at Nagore of Nagapattinam district and Horticulture Garden at an outlay of Rs.1 crore at Vadalur of Cuddalore district.

The establishment of Marutham park at Thirumalaisamuthiram, Thanjavur district, Sun garden at Kanyakumari district, Mullai Park at Velimalai, Kanyakumari district and Hibiscus production centre at Attur, Chengalpattu district has been programmed for the year 2024-25.

3.5.3: Landscape Wing:

In order to cater to the landscaping needs of the people living in the cities, Tamil Nadu Horticulture Development Agency has set up a landscape wing with all the technical staff required for project designing and implementation.

This wing is involved in creating new landscape for the public, government offices and private companies, further beautifying existing landscape gardens and taking up projects such as terrace gardening and executing them as per their needs.

During 2023-24, work on a landscaped garden at an outlay of Rs.1.746 crore was started and is underway at Air Force Station, Thanjavur.

3.5.4: Centres of Excellence (CoE):

To impart training to farmers about hi tech practices, establishment of demonstration plots for Hi- tech practices in five Centres of Excellence (COEs) have been established based on the crops grown. Moreover, five more centre of excellences are being established.

Table.3.10: Details of Centres of Excellence

S.No.	Centre of Excellence	Location
Functioning COEs		
1.	Cut flowers	Thally, Krishnagiri District.
2.	Vegetables;	Reddiyarchatram, Dindigul District.
3.	Hill vegetables	Nanjanad, The Nilgiris District.
4.	Tropical fruits	Kanchanaickenpatti, Trichy District.
5.	Traditional Flower crops	Tiruparankundram, Madurai District.
COEs with ongoing establishment works		
6.	Bee keeping	Pechiparai, Kanyakumari district
7.	Mango	Vedharampatti, Dharmapuri district

S.No.	Centre of Excellence	Location
8.	Amla	Kalakkad, Tirunelveli district
9.	Sub-Tropical Horticultural crops	Kodaikanal, Dindigul District
10.	Post Harvest Technologies for Flower crops	Thally, Krishnagiri district

3.6. Coconut Nurseries

3.6.1. Coconut Seedlings Distribution

During 2023-24, 20.04 lakh coconut seedlings have been produced in the 23 state coconut nurseries and 16 coconut crossing centres and distributed to the farmers. It is planned to distribute 10 lakh coconut seedlings during the year 2024-25.

3.6.2 Coconut Parasite Breeding Centres

Braconid parasitoids were supplied to 3,184 ha for biological control of coconut black headed caterpillar by coconut parasitoid breeding centers operating in Dharmapuri, Erode, Salem, Krishnagiri and Namakkal

districts. The scheme implementation will be continued in the current year 2024-25.

3.7.1 : Horticulture Training Centres

The four Horticulture Training Centres viz., Tamil Nadu Horticulture Management Institute, Madhavaram, Chennai district, Horticulture Training Centre, Kudumianmalai, Pudukottai district, Farmers Training Centre, Ooty, Nilgiris district and Horticulture Research and Training centre, Thally, Krishnagiri district are run by the Department of Horticulture and Plantation Crops: also, Centres of Excellence like Centre of Excellence for Vegetables, Reddiyarchatram, Dindigul district, Centre of Excellence for Traditional Flowers, Thiruparankundram, Madurai and Centre of Excellence for tropical fruits, Kanjanayakanpatti, Trichy are also functioning under the Department of Horticulture and Plantation crops.

The prime objective of these training centres and Centres of Excellence is to impart training on Hi tech Horticulture techniques to farmers.

3.7.2: Diploma in Horticulture

Two-year Diploma course in Horticulture is being offered every year to 50 students in each of the three Diploma institutes namely Tamil Nadu Horticulture Management Institute, Madhavaram, Chennai, Horticulture Research and Training Centre, Thally, Krishnagiri and Centre of Excellence for Vegetables, Reddiyarchathiram, Dindigul in affiliation with Tamil Nadu Agricultural University, Coimbatore.

3.8 : Staff Strength:

Under the Department of Horticulture and Plantation Crops, the following staff are working in Block, District and State levels.

Table 3.11 : Cadre detail

S. No	Staff details	Total posting
A	**Technical Staff**	
1	Additional Director of Horticulture	2
2	Joint Director of Horticulture	6
3	Deputy Director of Horticulture	43
4	Assistant Director of Horticulture	398
5	Horticultural officer	443
6	Deputy Horticulture officer	123
7	Assistant Horticulture officer	1,674

S. No	Staff details	Total posting
8	Assistant Seed Officer	5
	Total	**2,694**
B	**Non Technical Staff**	
9	Non Technical Staff – (Deputy Director(Admin), Chief Account Officer, Administrative officer, Accounts officer, Assistant Accounts officer, Superintendent, Assistant, Junior Assistant, other posts)	1,345
	Total (A+B)	**4,039**

4. Agricultural Engineering Department

The Agricultural Engineering Department works on various techniques to find solutions to the challenges encountered by the farmers in Agriculture, by implementing the schemes related to agricultural mechanization, solar energy in agriculture, soil and water conservation, water management, dissemination of agricultural engineering technologies and infrastructure development for the farmers' welfare.

4.1. Agricultural Mechanization

Agricultural machinery and implements with modern technologies are essential for agriculture, in order to increase the food production in an efficient manner without languishing due to shortage of farm labourers. In view of this, Sub Mission on Agricultural Mechanization Scheme is being implemented with a fund sharing pattern of 60% and 40% between Union Government and State Government.

4.1.1. Distribution of Agricultural Machinery and Implements with subsidy assistance

To carry out various agricultural operations such as ploughing, transplanting, weeding, crop management, harvesting and residue management for different types of crops cultivated in different parts of Tamil Nadu, agricultural machinery and implements such as Tractor, Power Tiller, Combine Harvester, Drones, Paddy transplanter, Brush cutter, Chaff cutter, Power weeder, Electric weeder, Rotavator, Tractor trailer, Ridge Moulder, Sub Soiler, Cultivator, Roto Puddler, Power Harrow, Laser Leveller, Plastic Mulch Laying Machine, Reversible Hydraulic Mould Board Plough, Raised Bed Planter, Pneumatic Planter, Seed cum Fertilizer drill, Rotary mulcher, Groundnut Digger, Sugarcane stripper, Coconut Frond chopper, Hay rake, Baler, Multi crop thresher, Power operated sugarcane sett cutter, Manually operated Seed cum fertilizer drill, Drum seeder, Manual cotton plucker, Hand Sprayers, Power sprayers, Tractor operated sprayer, Solar operated / electric operated animal deterrent

bioacoustics equipment, Solar light traps, Remote motor operator for Electric pumpsets, Tea Harvesters, Paddy Mobile Dryer and Solar driers for value addition of farm produce by drying are provided with subsidy assistance for the benefit of farmers.

Under this scheme, for the purchase of Agricultural Machinery and Implements, subsidy assistance of 50% of the cost of machinery or the maximum permissible subsidy prescribed by Government whichever is less, is being given to SC, ST, small, marginal and women farmers and 40% or the maximum permissible subsidy prescribed by government whichever is less to other beneficiaries. In the financial year 2023-24, subsidy assistance of Rs.213.27 crore was provided for the purchase of agricultural machinery and implements, post-harvest technology and value addition machinery and solar driers for the benefit of 23,510 individual farmers. The scheme is under progress.

In order to facilitate small and marginal farmers, 4,000 power tillers and 4,000 power weeders are to be distributed during the

financial year 2024-25. Also, to operate and monitor the operation of electric pumpsets from anywhere with ease, 10,000 remote motor operators for electric pumpsets are to be distributed with 50% subsidy assistance.

During the year 2024-25, totally Rs.170 crore is allocated for the benefit of 26,179 farmers to avail the subsidy assistance for the purchase of agricultural machinery, implements and solar driers.

4.1.1.1. Paddy Mobile Dryer with subsidy assistance

To overcome the hardship faced by farmers to sell the harvested paddy affected by germination caused by unexpected rains and high moisture content, 10 Paddy Mobile Dryers are to be distributed to individual farmers, Farmers Self Help Groups (SHGs), Farmer Cooperative Societies, Farmer Producer Organizations (FPOs) and entrepreneurs with an allocation of Rs.90 lakh during this year.

4.1.1.2. Additional Subsidy to Small and Marginal Farmers for purchase of Agricultural Machinery

To support and promote the small and marginal farmers, additional 10% subsidy from the state government fund in addition to the 50% subsidy provided under the ongoing scheme, totally 60% subsidy assistance is to be provided during this year for the purchase of agricultural machinery and implements. This subsidy will be provided to the small and marginal farmers in general category except SC/ST farmers, towards the purchase of paddy transplanters and power weeders. Also, additional top up subsidy of 20% is provided to small and marginal farmers of SC and ST through the State Government fund in addition to the prevailing 50% subsidy assistance.

4.1.2. Custom Hiring Centres for the underprivileged

To benefit the small and marginal farmers for hiring agricultural machinery and to encourage the usage of high value agricultural machinery, subsidy assistance is provided to rural

entrepreneurs, registered farmers societies, co-operative societies of farmers and Farmer Producer Organizations for the establishment of block level, village level Custom Hiring Centres and sugarcane based Custom Hiring Centres. During the year 2023-24, 216 village level Custom Hiring Centres, 53 block level Custom Hiring Centres and 47 Sugarcane based Custom Hiring Centres, totaling 316 Custom Hiring Centres were established with subsidy assistance of Rs.43.41 crore. The scheme is under progress.

Further, 140 village level Custom Hiring Centers, 37 block level Custom Hiring Centres and 30 Sugarcane based Custom Hiring Centres, totaling 207 Custom Hiring Centres are to be established during the year 2024-25 with a subsidy assistance of Rs.32.90 crore.

4.2. Agricultural Machinery and implements Hiring Activity through e-Vaadagai mobile App

The e-Vaadagai Mobile App is helpful in facilitating the farmers to book the agricultural machinery and implements of Agricultural

Engineering Department from anywhere and to pay advance hire charges. It is anticipated that around 30,000 farmers will be benefitted and an amount of Rs.50 crore will be collected as hire charges during the financial year 2024-25 through this mobile App.

The details of agricultural machinery being hired out to the farmers by the Agricultural Engineering Department and their hire charges are furnished in the following table.

Table.4.1. Details of Agricultural Machinery available in the Agricultural Engineering Department and their hire charges

Sl. No.	Name of the Machinery	Number of Machinery	Details of Hire Charges
Land Development Machinery			
1	Bull Dozer	85	Rs.1,230/- per hour
2	Tractor	513	Rs.500/- per hour
3	Tractor operated implements	2,161	Rs.500/- per hour with Tractor
4	Paddy Combine Harvester – Wheel Type	27	Rs.1,160/- per hour
5	Paddy Combine Harvester – Track Type	36	Rs.1,880/- per hour

Sl. No.	Name of the Machinery	Number of Machinery	Details of Hire Charges
6	Backhoe with Front end loader	80	Rs.890/- per hour
7	Crawler Excavator	10	Rs.1,910/- per hour
8	Mini Tractor	6	Rs.460/- per hour
9	Sugarcane Harvester with infielders	6	Rs.5,120/- per hour
10	Truck Operated Coconut Hoist	20	Rs.450/- per hour
11	Heavy Duty Chain Saws	805	Rs.85/- per hour
12	Tractor Operated Pumpsets	21	Rs.500/- per hour with Tractor
Minor Irrigation Machinery			
13	Rotary Drills	24	Rs.130/- per metre
14	Percussion Drills	2	Rs.300/- per day
15	Mini Drills	18	Rs.70/- per metre
16	Hand Boring Sets	13	Rs.30/- per metre
17	Rock Blasting Units	3	Rs.250/- per blasting
18	Resistivity Meters	21	Rs.500/- per point
19	Electrical Loggers	2	Rs.1,000/-per bore hole

* The required cost of fuel (Diesel), labourers, pipes, pebbles and vehicle for transporting the materials required for drilling the tube well for the machinery from Sl.No. 13 to 19, is to be borne by the concerned farmer.

4.2.1. Disaster Management Machinery

To carry out relief works during natural calamities, heavy rains and floods, 21 Tractor operated water pumpsets and 805 Heavy duty chain saws are available with Agricultural Engineering Department.

The disaster management machinery of the Agricultural Engineering Department was engaged for 10,465 hours for relief works during Michaung Cyclone in 2023 and for 7,490 hours during flood caused due to heavy downpour in Thoothukudi District in December 2023.

Further, the sand deposited on the agricultural lands during flood caused by heavy downpour in Thoothukudi, Tirunelveli and Tenkasi Districts have been removed from an area of 1,021 hectare so far and the sand casting removal works are under progress.

4.2.2. Strengthening the availability of Agricultural Engineering Department machinery at Block level

During the last three years, the agricultural machineries which are very useful to

the farmers for carrying out ploughing and other agricultural operations viz., 275 Tractors, 325 Rotavators, 385 Cultivators, 120 Cage wheels, 32 Paddy combine harvesters and 15 Carrier vehicles for transporting Paddy combine harvesters, 5 Sugarcane Harvesters with Infielders, 20 Laser Levellers, 15 Geo physical Surveying Instruments and 3 Mobile service units for carrying out the repair and maintenance of agricultural machinery and implements have been procured by the Agricultural Engineering Department for an amount of Rs.52.25 crore, allocated for the use of farmers and are being hired out at Government fixed nominal hire charges.

4.2.3. Agricultural Engineering Department owned workshops

The Scheduled Maintenance Programme and Breakdown maintenance of Agricultural Engineering Department owned machinery are taken up in the Tractor workshops of Agricultural Engineering Department situated at six places viz., Coimbatore, Vellore, Trichy, Tiruvarur, Madurai and Tirunelveli. Apprenticeship trainings

and skill development trainings are imparted in these workshops to the rural youth in order to assist them for getting employment as well as to create opportunities for them to become entrepreneurs.

Besides, tractor driving schools are established in these workshops for giving training to operate the Tractor with the help of Tractor Simulator and action is being taken to issue Tractor driving license after the completion of the training.

4.2.4. Fabrication of New and Innovative agricultural machinery and implements in Government Tractor workshops

An amount of Rs.30 lakh has been allocated to fabricate new and innovative agricultural machinery, implements, equipments and tools which are being introduced in websites, in the Government Tractor workshops during the year 2024-25 under National Agriculture Development Programme (NADP) and action will be taken to demonstrate them to the farmers besides hiring out to the farmers at Government fixed nominal hire charges.

4.2.5. Details of private Machinery owners and Mechanics uploaded in e-Vaadagai App

To help the farmers, the details such as name of the owner, address, mobile number etc., of 4,456 private Paddy, Maize, Pulses and other grain harvesting machinery owners, 45,849 private Tractor owners and 4,322 private Mechanics have been uploaded block wise and district wise in the e-Vaadagai App by the Agricultural Engineering Department. Farmers can benefit by contacting private machinery owners and private mechanics who are nearby.

4.2.6. Procurement of new Agricultural machinery and implements

To strengthen the custom hiring activity of the Agricultural Engineering Department further, 10 Track type Paddy combine harvesters and 10 Carrier vehicles will be procured at a cost of Rs.5.84 crore by utilizing Watershed Development Fund of Tamil Nadu Watershed Development Agency (TAWDEVA-WDF).

Further, 20 Multi Axle Carrier machinery will be procured for transporting Department

Bull Dozers at a cost of Rs.12 crore by utilising NADP fund. Also, various tractor operated implements and required spare parts will be procured for an amount of Rs.5 crore under State Agricultural Development Scheme (SADS) fund.

In order to clean and maintain the agricultural machinery and implements, water washing equipment, grease gun and air compressor - each 20 Nos. will be procured at an outlay of Rs.40 lakh by utilising TAWDEVA – WDF fund and will be allocated to the offices of the Agricultural Engineering Department.

4.2.7. Conducting District level mela on maintenance of Agricultural machinery and implements

District level melas will be conducted through Agricultural Engineering Department by coordinating with the private Agricultural machinery and implements manufacturing firms to help the farmers to know about the operation and maintenance of Agricultural machinery and implements.

4.2.8. Preparation of technical manual on operation and maintenance of Agricultural machinery and implements

A Technical Manual on operation and maintenance of Agricultural machinery and implements will be prepared by involving the professors of the Tamil Nadu Agricultural University, scientists of the Indian Council of Agricultural Research , technical experts of the Agricultural Engineering Department and agricultural machinery manufacturers and will be shared to all field officers and farmers.

4.2.9. Development of Mobile App for farmers to hire Private Agricultural machinery

For effective utilization of Agricultural machinery and implements and to avoid the middlemen charges, a new mobile app similar to e-Vaadagai mobile app of Government of Tamil Nadu will be developed to facilitate booking of private owned agricultural machineries by farmers.

This will increase the utility of the agricultural machinery and implements owned by the private machinery owners, thereby increasing their income and the underprivileged farmers can avail the agricultural machinery through easy means of hiring.

4.3. Solar Power in Agriculture

4.3.1. Chief Minister's Scheme of Solar Powered Pumpsets

To meet the energy demand for lift irrigation of farmers, off-grid standalone solar powered pumping systems are being provided to the farmers with subsidy assistance under “Chief Minister’s Scheme of Solar Powered Pumpsets”. Under this scheme from the year 2021-22 to 2023-24, 2,000 solar powered pumpsets were installed for the farmers with a subsidy assistance of Rs.43.10 crore.

It is proposed to provide 1,000 solar powered pumpsets upto 15 HP capacity with 70% subsidy assistance to the farmers of small, marginal, SC, ST category and 60% subsidy assistance to the other category farmers in the

current year with a total subsidy outlay of Rs.24.21 crore, of which, the Union Government Share is Rs.10.68 crore and the State Share is Rs.13.53 crore. Also, an additional 10% top-up subsidy is to be provided to the small and marginal farmers of SC and ST category.

4.3.2. Solar Powered Fencing

To protect agricultural crops from animals, solar fencing units of 5 lines, 7 lines and 10 lines of fence wire for all animals except elephants and additional hanging type solar fencing units that can drive away elephants, will be installed in the individual farmer's field under National Agricultural Development Programme with 50% subsidy assistance with a financial outlay of Rs.2 crore.

4.4. Soil and Water Conservation

The State Government is aiming at achieving the Sustainable Development Goals (SDG) before 2030 by implementing various schemes. To restore water related ecosystem, to give importance for rain water harvesting and to implement the water resource management

which is the 6th goal of SDGs, various soil and water conservation and water management schemes are implemented by the Agricultural Engineering Department.

4.4.1. Kalaignarin All Village Integrated Agricultural Development Programme

This scheme is being implemented from 2021-22 in the selected Anaithu Grama Anna Marumalarchi Thittam villages with 100% State share assistance. In the past three years, this scheme was implemented in 7,705 villages throughout Tamil Nadu.

Under the component, creation of water source for dryland clusters, so far, 916 wells have been newly created and installation of Electric/ Solar powered pumpsets is being done. For the creation of water source for Individual SC/ST – small and marginal farmers, so far 1,306 wells have been newly created.

To harvest the rainwater in their own land by farmers, so far 1,759 farm ponds were created. Under the component of rehabilitation

and improvement works in panchayat union minor irrigation tanks, ooranies, ponds, supply channels and other water harvesting structure- 5,731 have been desilted so far. The works are under progress. Power Tillers were distributed with subsidy assistance to 1,526 farmers.

Also, for the 2024-25 programme, this scheme is to be implemented in 2,482 villages at an outlay of Rs.61.02 crore, for which the preliminary works are under progress.

4.4.2. Creation and maintenance of water harvesting structures

In order to overcome the water scarcity by way of increasing the ground water level by harvesting the runoff rain water, from the year 2021-22, maintenance works have been carried out in the already constructed 2,505 structures so far using the Agricultural Engineering Department owned machinery and the hire charges of Rs.5.49 crore has been remitted into the Government account and works are under progress.

During the current year, 100 new water harvesting structures like community ponds are to be created besides taking up maintenance works in 500 existing water harvesting structures created in various watersheds by Tamil Nadu Watershed Development Agency, by using Agricultural Engineering Department machinery at an outlay of Rs.2.75 crore.

4.4.3. Special Area Development Programme

For conserving the natural resources of hilly areas, soil and water conservation works and land development works are being implemented in the Western Ghat areas and its forest fringe villages, under Special Area Development Programme, thereby benefitting the agricultural lands.

Under this scheme, totally 153 Nos. and 12,971 metres of soil and water conservation and land development works have been carried out during the year 2023-24 at a cost of Rs.16.24 crore in the 11 districts viz., Nilgiris, Coimbatore, Erode, Tiruppur, Dindigul, Madurai, Theni, Virudhunagar, Tirunelveli, Tenkasi and

Kanyakumari with the State Government fund assistance. During the current year, 121 Nos. and 5,328 metres of soil and water conservation and land development works for Rs.15.43 crore have been commenced under the scheme and the works are being carried out.

4.4.4. Tamil Nadu Irrigated Agriculture Modernization Project

The World Bank funded Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP) is being implemented since 2017-18 with the aim of increasing agricultural production in the irrigated areas, with an integrated approach covering various sectors. A project cost of Rs.15.53 crore has been allocated to the Agricultural Engineering Department for the construction of farm ponds. So far, 1,397 farm ponds have been constructed upto phase IV-1st year for an amount of Rs.10.42 crore. In the year 2023-24, financial sanction of Rs.3.02 crore has been received for for the construction of 275 farm ponds in Thanjavur, Tiruvarur, Ramanathapuram, Sivagangai, Mayiladuthurai, Nagapattinam, Kancheepuram, Tiruvallur,

Ariyalur, Karur Cuddalore and Villupuram, districts. So far, 215 farm ponds have been completed and an amount of Rs.98.35 lakh has been expended and the work is under progress.

4.4.5. Creation of low cost ground water recharge structures

Low cost ground water recharge structures developed by Tamil Nadu Agricultural University are to be taken up on pilot basis in 250 bore wells / tube wells and open wells created in the clusters under the Kalaignar Scheme at an outlay of Rs.1 crore in the year 2024-25.

4.4.6. Creating awareness among the farmers about rainwater harvesting methods

The important aspects of construction and maintenance of rainwater harvesting methods and techniques like summer ploughing, contour bunding, field bunding, bench terracing, stonewall, farm pond, sunken pond, oorani, village pond, check dam, artificial recharge structures and maintenance of water harvesting structures are to be imparted to the farming

community in co-ordination with Krishi Vigyan Kendras in every district by means of conducting awareness campaigns.

4.5. Water Management

4.5.1. Desilting of 'C' and 'D' channels

In order to ensure irrigation in the channels up to the tail end, the desilting works of 'C' and 'D' Channels in the Cauvery and Vennar sub-basins of Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore districts were carried out during the last two years for a length of 2,946 kilometres for benefitting 2,38,000 acre at a cost of Rs. 9.97 crore.

During the year 2024-25, approval has been given for carrying out the desilting works in 'C' and 'D' channels in Trichy and Ariyalur districts along with the above five districts in a length of 2,235 kilometres, at an estimated cost of Rs.10 crore to benefit an area of 1,57,000 acre. So far, 1,594 Kilometres length has been covered and the works are under progress.

4.5.2. Electric motor pumpsets to the farmers with subsidy

To support the farmers having upto 5 acres of land and who are not able to purchase new electric motor pumpsets, subsidy assistance is provided to purchase new energy efficient 4 star rated pumpset or to replace the old inefficient pumpsets with 4 star rated pumpset. This scheme is being implemented to benefit 5,000 farmers at an outlay of Rs.7.50 crore with the assistance of Union and State Governments.

Subsidy assistance of 50% of the cost of pumpset subject to a maximum of Rs.15,000/- is provided for the purchase a new energy efficient pumpset. In the year 2023-24, 2,107 farmers were benefitted at a cost of Rs. 2.83 crore under this scheme and the scheme is being continued.

4.6. Popularization of Agricultural Engineering Technologies

4.6.1. Demonstration of Innovative Agricultural Engineering Technologies

In order to encourage the farmers to use innovative agricultural engineering technologies and to create awareness among farmers about

such technologies, 101 demonstrations of 93 innovative technologies were conducted by the Agricultural Engineering Department in the last two years benefitting 8,244 farmers.

Also, 50 demonstrations are to be conducted in various districts across Tamil Nadu during this financial year.

4.6.2. Awareness Training on Agricultural Engineering Technologies for attracting educated youth to Agriculture

A five-day training programme on agricultural engineering technologies such as agricultural mechanization, water management, post harvest and renewable energy in agriculture and their working concepts will be explained to youth at the 'State Agricultural Machinery Information Data Centre' situated at Nandanam, Chennai. During the year 2024-25, for the benefit of 500 youth, 25 training sessions are to be conducted with 20 youth per session.

Also, with the aim of creating employment opportunities for the rural youth,

22 skill development trainings in "Agricultural Machinery Demonstrator" and "Tractor Operator" are to be conducted this year at six Government Tractor Workshops of Agricultural Engineering Department located at Vellore, Tiruvarur, Trichy, Coimbatore, Madurai and Tirunelveli.

4.7. Strengthening of Infrastructure works

The Agricultural Engineering Department besides undertaking own infrastructure works also provides technical support and guidance for the infrastructure works of the sister departments.

Under National Agriculture Development Programme, two Bio Control Laboratory buildings are under construction in Madurai and Namakkal districts for the Agriculture Department at a total cost of Rs.2.50 crore.

For the year 2023-24, construction of 15 nos. of machinery sheds were completed at a cost of Rs.2.85 crore and 10 nos. of machinery sheds at a cost of Rs.2 crore are being constructed for the Agricultural Engineering Department under National Agriculture Development Programme. Additionally, 25 Nos. of Block Level Agricultural

Machinery Sheds are to be constructed at a cost of Rs.5 crore during this financial year.

Building renovation works and construction of new office buildings are being carried out in the Agricultural Engineering Department owned Government tractor workshops at a cost of Rs.9.65 crore under National Agriculture Development Programme (NADP) 2023-24.

The Agricultural Engineering Training Centre infrastructure is being strengthened by constructing a modernized training hall and a meeting hall at the first floor at a cost of Rs.3.40 crore under National Agriculture Development Programme 2023-24.

4.8. Establishment

Table.4.2. Agricultural Engineering Department Staff Details

Sl. No.	Category of post	Sanctioned Numbers
1	Chief Engineer (AE)	1
2	Chief Engineer (AE), RVP	1
3	Superintending Engineer (AE)	14
4	Executive Engineer (AE)	38
5	Assistant Executive Engineer (AE)	125

Sl. No.	Category of post	Sanctioned Numbers
6	Assistant Engineer(AE) / Junior Engineer(AE)	850
7	Ministerial Staff	1,120
8	Field staff	1,866
	Total	**4,015**

5. Agricultural Marketing and Agri Business

Agricultural Marketing and Agri Business contribute substantially and play an important role in enhancing the livelihood of farmers and accelerating the pace of economic development in our country. Considering the emerging challenges of increasing demand in agriculture sector, the State's focus is on Market Led Agriculture, which will help to improve the standard of living of the farming community to achieve sustainable agricultural development. Agricultural Marketing and Agri Business Department is taking efforts to establish markets, strengthen marketing infrastructure, promote value addition and post harvest management to ensure fair price to the farmers produces.

5. 1 Agri Marketing

5.1.1 Market Committees and Regulated Markets

Regulated Markets act as a common platform between farmers and traders for better

regulation of buying and selling of Agricultural produce by adopting closed bid system.

In Tamil Nadu, 284 Regulated Markets are functioning under 27 Market Committees as per the provisions of Tamil Nadu Agricultural Produce Marketing (Regulation) Act 1987, and its Rules 1991.

No fee is collected from farmers for the services rendered. One percent of the sale value of the produce is collected as market fee from traders. Besides, license fee is also collected from traders and weighmen.

During 2023-24, 30.59 lakh MT of agricultural commodities were transacted and Rs.154.20 crore was collected as revenue.

Facilities like 525 Nos. of storage godowns with the capacity of 6.68 LMT, 395 Nos. of transaction sheds, 421 Nos. drying yard, 863 Nos. traders shop, 268 Nos. cold storages, market complex with cold storages, farmers' rest room etc., are provided in the Regulated Markets.

Table 5.1 List of Infrastructure created through Department of Agricultural Marketing and Agri Business (in Nos)

S.No.	District	No. of Regulated Markets	Godowns	Total Capacity of Godowns (MT)	Transaction Shed	Traders Shop	Drying Yard	Cold Storages	Capacity of Cold Storage(M.T)	Special Market Complex
1	Kancheepuram	3	5	6,200	2	2	6	3	15	--
2	Chengalpattu	4	2	2,600	1	--	2	1	5	--
3	Tiruvallur	8	8	11,500	4	--	7	1	5	--
4	Cuddalore	11	19	29,000	27	73	14	10	1,102	--
5	Villupuram	11	21	52,600	28	32	12	4	50	--
6	Kallakuruchi	8	18	24,000	18	13	8	3	55	--
7	Vellore	3	6	4,400	4	36	3	5	39	--
8	Ranipet	6	8	7,300	13	16	6	1	5	--
9	Thiruppathur	3	8	6,800	2	4	2	2	30	--
10	Tiruvannamalai	18	39	46,900	49	54	28	11	195	--
11	Dharmapuri	7	5	5,800	7	10	9	9	1,320	1
12	Krishnagiri	9	7	7,800	6	18	11	25	1,567	1
13	Salem	14	17	15,200	20	20	22	15	275	
14	Namakkal	6	10	8,600	3	0	6	6	84	1
15	Erode	18	47	66,514	49	37	46	14	1,290	3
16	Tiruppur	15	64	86,500	30	10	52	8	162	2
17	Coimbatore	10	31	26,405	16	46	30	22	1,704	3
18	Nilgiris	4	--	--	2	5	--	10	597	1
19	Perambalur	2	2	2,500	1	--	1	4	85	1
20	Ariyalur	4	7	6,200	10	--	6	1	25	--
21	Trichirapalli	10	12	15,375	12	20	11	15	3,297	4
22	Karur	4	2	1,000	4	0	1	1	25	--
23	Thanjavur	13	28	41,250	18	16	19	8	155	2
24	Thiruvarur	8	19	21,500	8	20	16	3	15	--
25	Nagapattinam	4	3	4,500	4	--	--	--		--
26	Mayiladuthurai	4	10	11,320	7	--	5	--		--
27	Pudukottai	10	4	3,500	3	--	5	5	140	1
28	Madurai	6	14	18,000	4	43	6	5	42	1
29	Dindigul	8	17	23,200	8	105	18	14	2,135	1
30	Theni	7	12	12,500	5	0	10	12	722	2
31	Virudhunagar	7	14	16,200	4	57	6	11	190	--
32	Sivagangai	7	16	15,850	1	0	8	2	30	--
33	Ramanatha puram	6	13	17,100	4	140	10	7	2,160	1
34	Tirunelveli	4	7	9,600	4	18	7	9	310	1
35	Tenkasi	7	8	16,000	3	55	9	7	1,725	1
36	Thoothukudi	9	15	17,800	10	5	13	12	282	1
37	Kaniyakumari	6	7	6,500	4	8	6	2	27	2
	Total	**284**	**525**	**6,68,014**	**395**	**863**	**421**	**268**	**19,865**	**30**

To meet the immediate money requirement of farmers and to protect farmers from distress sale during glut seasons, pledge loan facility is extended to a maximum of Rs.5 lakh per farmer with interest free period of 15 days and 5% interest is levied after that period. Traders can also avail pledge loan to a maximum of Rs.2 lakh at 9% interest rate. During the year 2023-24, 1,505 farmers availed Rs.35.80 crore and 260 traders availed Rs.4.61 crore as pledge loan.

To enable the farmers and traders to avail loans from scheduled commercial banks upto 80% of the value of their produce stored in the 150 Warehouse Development Regulatory Authority (WDRA) accredited storage godowns available in the Regulated Markets, eNegotiable Warehouse Receipt (e-NWR) are issued. So far, Rs.77.58 crore has been sanctioned to 80 beneficiaries.

During 2024-25, action is being taken to get WDRA accreditation for additional 100 storage godowns.

During 2023-24, creation of infrastructure facilities viz., transaction shed, godown, drying yard etc., at a cost of Rs.17.60 crore under National Agriculture Development Programme are under progress in six regulated Markets of Villupuram, Thanjavur Tiruvannamalai and Cuddalore districts.

In addition to that, during the year 2023-24, renovation works are being carried out in 100 Regulated Markets at a cost of Rs.47.30 crore. During 2024-25 also, action is being taken to renovate 100 additional Regulated markets at a cost of Rs.50 crore.

During 2024-25, necessary action is being taken to provide five turmeric polishers and eight turmeric boilers to Regulated markets of Erode, Dharmapuri and Kallakurichi Districts at a cost of Rs.2.11 crore for processing and increasing the storage life of turmeric.

In the year 2024-25, action is being taken to establish mobile driers at a cost of Rs.2.5 crore in 10 Regulated markets viz., Tiruvallur, Ranipet, Cheyyar, Cuddalore, Villupuram, Dharmapuri, Thanjavur, Cumbum, Tiruvarur and Nagapattinam.

5.1.2 e National Agriculture Market (eNAM)

In Tamil Nadu, eNational Agriculture Market has been implemented in 157 Regulated Markets since October 2017 in a phased manner and online trading is being done.

In eNAM markets, 219 agri commodities including coconut are traded. During 2023-24, 104.85 lakh numbers of coconut and 7.72 lakh MT of other agricultural produce to the value of Rs.2,532 crore have been transacted in eNAM Markets and e-payment to a tune of Rs.1,791 crore has been made through eNAM portal to 5.50 lakh farmers.

To benefit the farmers by reducing transportation cost and post harvest handling loss, farm gate trade has been promoted during 2023-24. So far, 33.41 lakh numbers of coconut and 26,383 MT of other agricultural produce to the value of Rs.52.92 crore have been transacted through eNAM portal from the farm gate of 12,354 farmers.

To facilitate trading in all Regulated Markets of the State, Unified Single License is being issued to the traders. So far, 7,816 Unified Single Licenses were issued to the traders.

Inter-mandi trade to a tune of 3.69 lakh MT of agricultural commodities amounting to Rs.1,117 crore have been traded during 2023-24 with the participation of 4,071 Traders.

Inter-state eNAM trade to a tune of 2,036 MTs of agricultural commodities (cotton, blackgram, redgram, copra, gingelly, groundnut, greengram and potato) amounting to Rs.9.98 crore have been traded during 2023-24 with the states of Puducherry UT, Andhra Pradesh, Kerala, Maharastra, Telengana, Madhya Pradesh and vice versa.

The number of Mandis linked to eNAM is included in Sustainable Development Goal (Goal No.2) Zero hunger as a nationwide indicator. In the state of Tamil Nadu, out of 284 Regulated Markets, 157 Regulated Markets are linked to eNAM (55%).

5.2 Agri Business

5.2.1 Uzhavar Sandhai

Uzhavar Sandhai is a visionary scheme initiated by the former Chief Minister Muthamizh Arignar Dr.Kalaignar in 1999. This scheme enables farmers to sell their vegetables, fruits and greens directly to consumers without any intermediaries.

This scheme is implemented for the benefit of both farmers and consumers. This scheme is entering into its Silver Jubilee year (25^{th}) with the functioning of 192 Uzhavar Sandhais.

Table 5.2 District wise details of uzhavar sandhais

S. No	District	Uzhavar sandhai
1	Ariyalur(2)	Ariyalur, Jeyankondam
2	Coimbatore(8)	R.S.Puram, Singanallur, Pollachi, Mettupalayam, Kurichi, Sulur, Vadavalli, Sundarapuram
3	Cuddalore(6)	Cuddalore, Chidambaram, Viruthachalam, Panruti, Vadalur, Kattumannarkoil
4	Dharmapuri(6)	Dharmapuri,Pennagaram, Palacode, Harur, A.Jattihalli, Karimangalam

S. No	District	Uzhavar sandhai
5	Dindigul(6)	Dindigul, Palani, Chinnalapatti, Kodaikkanal, Batlagundu, Vedasanthur
6	Erode(6)	Sampath Nagar, Gobichettipalayam, Sathiyamagalam,Periyar Nagar, Perundurai, Thalavadi
7	Kancheepuram(4)	Kancheepuram,Padappai, Sunguvarchatram, Kundrathur
8	Chengelpet(9)	Pallavaram, Chengalpet, Medavakkam, Nanganallur, Madhuranthagam, Keelkattalai, Jameenrayapettai, Guduvancheri, Thirukalukundram
9	Kanyakumari(2)	Vadaseri, Myladi
10	Karur(6)	Karur, Kulithalai, Velayuthampalayam, Pallapatti., Vengamedu, Gandhigramam
11	Krishnagiri(5)	Hosur,Krishnagiri, Kaveripattinam, Denkanikottai, Avallapalli
12	Madurai(7)	Annanagar, Chokkikulam, Palanganatham, Usilampatti, Thirumangalam, Melur, Anaiyur
13	Nagapattinam(2)	Nagapattinam, vedharanyam
14	Mayiladuthurai(2)	Mayiladuthurai, Sirkali
15	Namakkal(6)	Namakkal, Tiruchengode,

S. No	District	Uzhavar sandhai
		Rasipuram, Kumarapalayam, Paramathivelur, Mohanur
16	Nilgiris(4)	Udhagamandalam,Coonoor, Kothagiri, Gudalur
17	Perambalur(2)	Perambalur, Veppanthattai
18	Pudukottai(7)	Pudukottai, Aranthangi, Alangudi, Gandarvakottai, Karambakkudi, Viralimalai, Ponnamaravathy
19	Ramanatha puram(3)	Ramanathapuram, Paramakudi, Kamuthi
20	Salem(13)	Sooramangalam, Ammapet, Athur, Thathakapatti, Mettur, Attayampatti, Hasthampatti, Elampillai, Thammampatti, Jalagandapuram, Edappadi, Valapadi, Mecheri
21	Sivagangai(5)	Sivagangai, Devakottai, Karaikudi, Tirupatthur,Singampunari
22	Thanjavur(5)	Thanjavur, Kumbakonam, Pattukottai, Tirukattupalli, Papanasam
23	Theni(7)	Theni, Cumbum, Bodinayakanur, Periyakulam, Devaram, Andipatti, Chinnamanur
24	Tirunelveli(5)	Palayamkottai, Kandiyaperi, Melapalayam, Ambasamudram, NGO colony
25	Tenkasi(2)	Sankarankoil, Tenkasi
26	Tiruppur(6)	Udumalpet, Tiruppur (North),

S. No	District	Uzhavar sandhai
		Tiruppur (South), Palladam, Kangeyam, Dharapuram
27	Tiruvallur(6)	Tiruthani,Tiruvallur, Ambattur, Paruthipattu, Naravarikuppam, Perambakkam
28	Tiruvannamalai(8)	Tiruvannamalai, Polur, Arani, Cheyyar, Chengam, Vandavasi, Keelpennathur, Tamarainagar
29	Tiruvarur(7)	Tiruthuraipoondi,Mannargudi-1,Tiruvarur, Needamangalam, Muthupettai, Mannargudi -2, Valangaiman
30	Trichirappalli(8)	Anna Nagar, K.K.Nagar,Thuraiyur,Manapparai, Musiri, Thuvakudi, Lalgudi, Manachanallur
31	Thoothukudi(2)	Tuticorin, Kovilpatti
32	Vellore(6)	Vellore, Katpadi, Gudiyatham,Kagithapattarai, Peranampattu , Pallikonda
33	Ranipet(2)	Ranipet, Arcot
34	Tirupathur(3)	Tirupathur,Natrampalli, Vaniyampadi
35	Villupuram(3)	Tindivanam,Villupuram, Gingee
36	Kallakurichi(3)	Sankarapuram, Ulundurpet, Kallakurichi
37	Virudhunagar(8)	Aruppukottai, Rajapalayam, Srivilliputhur, Virudhunagar, Sivakasi, Sathur, Kariyapatti, Thalavaipuram

The daily price details of the uzhavar sandhai are available in uzhavar app. On an average, 2,300 MT of vegetables and fruits worth Rs.8.50 crore are being sold by 8,000 farmers to more than three lakh consumers per day.

Considering the necessity to rejuvenate the uzhavar sandhais to keep pace with time, during the year 2021-22, 2022-23, 100 uzhavar sandhais have been renovated at a cost of Rs.27.50 crore. In continuation, 25 uzhavar sandhais are being renovated at a cost of Rs.8.18 crore during 2023-24.

Apart from this, in the year 2021-22, 2022-23, an amount of Rs.8.28 crore sanctioned for construction of 14 new uzhavar sandhais and reconstruction of Tiruvarur uzhavar sandhai. Out of which, 14 uzhavar sandhais have been opened and functioning well. Construction of Peravurani uzhavar sandhai in Thanjavur District is nearing completion.

Digital price display boards have been installed in 50 Uzhavar Sandhais at a cost of Rs.1.15 crore, which enable the farmers and

consumers to know the price details of both local market and Uzhavar Sandhais. In order to decompose the waste generated in Uzhavar Sandhais, decomposting machines have been installed in 25 Uzhavar Sandhais at a cost of Rs.2.75 crore. During 2023-24, 49.13 MT compost was produced.

It was planned to purchase 30 mobile vehicles for sale of fruits and vegetables (maximum subsidy of Rs.2 lakh per vehicle) in six districts namely Trichy, Coimbatore, Tirupur, Salem, Chengalpattu and Cuddalore for the benefit of farmers, consumers and educated youth. So far, 29 vehicles have been purchased and a subsidy amount of Rs.51.50 lakh has been released.

In a bid to create marketing opportunities for the produces of Farmers Producer Organizations and to facilitate selling of horticultural inputs, 50 shops have been allocated exclusively in Uzhavar Sandhais.

Food Safety and Standards Authority of India (FSSAI) certification is being obtained for Uzhavar Sandhais to ensure the quality of the

vegetables being sold. During 2023-24, FSSAI certification is received for 50 Uzhavar Sandhais at a financial outlay of Rs.25 lakh.

5.2.2 Cold Storages

268 cold storages with a capacity of 19,865 MT have been established to prevent the post harvest losses and to increase the shelf life of vegetables and fruits. These cold storages have been utilized by 5,596 farmers, 33 Farmer Producer Companies and 150 traders during 2023-24.

Table 5.3 Details of Capacity wise cold storages available in the State

Capacity (MT)	Nos	Total Capacity (MT)
1000-2000	8	10,000
500-1000	8	4,000
100-200	18	2,155
50-100	17	850
10-50	92	2,216
<10	125	644
Total	**268**	**19,865**

In addition, seven mega cold storages with a capacity of 20,500 MT have been established in 6 districts viz., Tiruvallur, Salem, Coimbatore, Dharmapuri, Thoothukudi and Cuddalore and

action is being taken to bring them under utilization.

Based on the farmers request, five cold storages of 1,750 MT capacity have also been established in Thalavadi, Burgur, Chithode, Vellankoil and Veppili of Erode district at a cost of Rs.11.64 crore. Thus, the total capacity of cold storages will be increased to 42,115 MT.

5.2.3 Value addition centres for agri produce

To enable the farmers to get remunerative prices for their produce, value addition centres for agricultural produce are being established by the Department of Agricultural Marketing and Agri Business

Minor Millet processing Centre has been established at Nilgiris at a cost of Rs.35 lakh and 20 MT of millets have been processed during 2023-24.

Coconut Value Addition Centres have been established in Thanjavur and Kanyakumari districts at a cost of Rs.21.20 crore and being utilized by agripreneurs.

Banana Auction Centre with grading cum sorting hall, value addition machineries etc., has been established at Kalakkad, Tirunelveli district at a cost of Rs. 6.25 crore and utilized by a Farmer Producer Company.

Modern packing unit and market promotion centre for edible oils has been established at Thellanandal, Thiruvannamalai district, at a cost of Rs.3.20 crore. Action is being taken to bring the unit into utilization.

Also, installation of Coffee huller cum grader and pepper cleaner, grader cum pulveriser unit at a cost of Rs.75 lakh is under progress at Ayyankolli, Nilgiris district during 2023-24

To increase the income of Jackfruit cultivating farmers through the production and marketing of value added products of export quality, steps are being taken to establish a Jackfruit Value Addition Centre at Panruti, Cuddalore District at a cost of Rs.16.13 crore.

Further, it is programmed to establish a Maize and Millet Market Promotion Centre at a cost of Rs.4 crore during 2024-25 for the benefit

of maize and millet farmers in Perambalur district.

5.2.4 Farmer Producer Organisations

In Tamil Nadu, 1,229 Farmer Producer Organizations have been registered through various implementing agencies. The number of Farmer Producer Organizations has been fixed as an indicator for Sustainable Development Goal (SDG) target and is being monitored.

5.2.4.1 Tamil Nadu Small Farmers' Agri Business Consortium

Small and marginal farmers are organized and registered as Farmer Producer Organizations under Companies Act 1956.

Organizing farmers into Farmer Producer Organizations (FPOs) has facilitated in increasing the scope for mechanization, minimizing input cost, getting financial assistance and in accessing markets to realize better returns. Further, it safeguards farmers from price fluctuations, enables capacity building and effective utilization of infrastructure facilities.

Tamil Nadu Small Farmers' Agri Business Consortium, has formed and promoted 318 Farmer Producer Organizations under National Agriculture Development Programme (NADP), National Mission on Sustainable Agriculture (NMSA) and Central Sector scheme for Formation and Promotion of 10,000 FPOs (10K FPOs) from 2014-2015 to 2021-2022.

Table 5.4 District wise List of Farmer Producer Companies formed in Tamil Nadu (2014-15 to 2021-22)

Sl.No.	District	Tamil Nadu Small Farmers Agri Business Consortium (Nos.)	Tamil Nadu Irrigated Agriculture Modernisation Project (Nos.)
1.	Kancheepuram	6	2
2.	Chengalpet	7	1
3.	Tiruvallur	10	2
4.	Cuddalore	11	7
5.	Villupuram	10	1
6.	Kallakurichi	7	3
7.	Vellore	5	1
8.	Ranipet	6	4
9.	Tiruppathur	6	-
10.	Tiruvannamalai	16	4
11.	Dharmapuri	11	3
12.	Krishnagiri	12	2
13.	Salem	13	1
14.	Namakkal	9	3
15.	Erode	13	3
16.	Tiruppur	8	-
17.	Coimbatore	11	1
18.	Nilgiris	9	-
19.	Perambalur	7	1
20.	Ariyalur	8	3
21.	Tiruchirapalli	9	6
22.	Karur	8	1

23.	Thanjavur	13	4
24.	Thiruvarur	8	3
25.	Nagapattinam	5	2
26.	Mayiladuthurai	4	1
27.	Pudukottai	11	1
28.	Madurai	11	4
29.	Dindigul	10	2
30.	Theni	7	2
31.	Virudhunagar	10	1
32.	Sivagangai	8	2
33.	Ramanathapuram	9	1
34.	Tirunelveli	4	4
35.	Tenkasi	6	1
36.	Thoothukudi	5	2
37.	Kanyakumari	5	-
	Total	**318**	**79**
	Grand Total		**397**

5.2.4.1.1 State Scheme for Financing Farmer Producer Organizations:

In order to strengthen FPOs and to improve their business, a scheme for Financing Farmer Producer Organizations is being implemented by the Department of Agricultural Marketing and Agri Business jointly with NABKISAN at a total outlay of Rs.266.70 crore.

Under this scheme, Mezzanine Capital assistance to 375 Farmer Producer Organizations amounting to Rs.32.38 crore, Credit Guarantee coverage to 47 Farmer Producer Organizations amounting to Rs.6.73 crore and Revolving Fund

assistance to 175 Farmer Producer Organizations amounting to Rs.23.20 crore have been provided.

5.2.4.1.2 Support Schemes for Farmer Producer Organizations:

I. For establishment of Seed Processing unit cum storage godowns, Rs.30 crore has been released to 50 FPOs and Rs.1.54 crore has been released to 10 FPOs for establishment of Dhall mill units.

II. 143 FPOs have registered in eNAM portal and traded 13,404 MT of commodities worth Rs.14.81 crore. Unified Single Licence has been issued to 488 Farmer Producer Organizations.

III. For display and marketing of FPOs produce, 50 Speciality shops at an outlay of Rs.5 crore are being established in five corporations.

IV. Business promotion exposure visit and training was imparted to members of 310 Farmer Producer Organizations to transform them into entrepreneurs

through Tamil Nadu Agricultural University (TNAU) at an outlay of Rs.2 crore.

V. Packaging and Branding - In order to facilitate value addition through packaging and branding, training was imparted to 260 FPOs in the Tamil Nadu Agricultural University through Indian Institute of Packaging (IIP)

VI. Agri Business Expo for Farmer Producer Organizations was conducted at Chennai Trade Centre on 8th and 9th July 2023. In the expo, 4,120 farmers, 188 Farmer Producer Organizations, 1.83 lakh consumers participated and got benefited. Rs.2.50 crore worth produces were sold.

VII. To facilitate Farmers/Farmer Producer Organizations in value addition and marketing of their produce so as to compete with private companies, steps are being taken for creation of common brand and establishment of common facilities for branding and packaging in Chennai and Coimbatore regions.

5.2.4.2 Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP)

This scheme is being implemented from the year 2017-18 in 66 sub basins at a project cost of Rs.125 crore.

Under this Project, formation of 79 new Farmer Producer Companies, supporting 40 existing Farmer Producer Companies with consultancy services, registration cost, capacity building have been undertaken by incurring an expenditure of Rs.16.46 crore.

5.2.4.2.1 Financial Support to Farmer Producer Companies:

Under TNIAMP, for each Farmer Producer Company, Rs.10 lakh is given as Start up Grant and Rs.20 lakh as Productive Investment Grant and Business Expansion Grant of Rs.30 lakh is provided to best performing FPCs.

During the year 2023-24, an amount of Rs.13.65 crore was earmarked as grant to FPOs under various components out of which Rs.12.81 crore has been released.

5.2.4.2.2 Financial support to Agri entrepreneur

An amount of Rs. 4.56 crore was earmarked as grant to agro entrepreneurs of which an amount of Rs.2.48 crore has been sanctioned to 124 agri entrepreneurs.

5.2.5 Agri tech Start-ups

During 2024-25, Agri tech based start-ups will be identified and provided with grants based on their objectives, sustainability and business plan at a financial outlay of Rs.10 crore for which action is being taken.

5.2.6 Supply Chain Management project

Supply Chain Management project has been implemented to reduce the post harvest loss, to link the supply chain of the farmers with that of exporters, processors and consumers for an uninterrupted supply of fruits and vegetables of high quality to the consumers and to improve the income of the farmers.

Under this scheme, in Phase-I, 64 primary processing centres have been established in 11

Districts at a cost of Rs.482.36 crore. These primary processing centres are equipped with post harvest infrastructure like pack house, cold storage cum storage godowns, primary processing machineries for cleaning, sorting and packing have been established and are functioning.

So far, 1.61 lakh MT of vegetables and fruits have been handled in these primary processing centres and 2.14 lakh farmers have benefited.

The special infrastructures like Gamma Irradiation Unit, Individually Quick Freezing unit (IQF), Vapour Heat Treatment (VHT) plant and APEDA pack house have been established under this scheme in order to increase the shelf life and to improve the export quality of fruits and vegetables.

Under this scheme, in Phase II, 20 Primary processing Centres have been established in nine districts viz., Salem, Erode, Tiruvallur, Kancheepuram, Chengalpattu, Tiruvannamalai, Cuddalore, Villupuram and Karur at a total financial outlay of Rs.102.47 crore and action is

being taken to operationalise all these Primary Processing Centres.

Table 5.5 Details of Primary Processing Centres (Phase –I)

Sl. No.	District	Name of the Primary Processing Centre
1	Krishnagiri (10)	Hosur
		Kamandoddi
		Denkanikottai
		Thattiganapalli
		Royakottai
		Alapatti
		Kundarapalli
		Krishnagiri
		Kaveripattinam
		Pochampalli
2	Dharmapuri (5)	Pennagaram (Co-operative Marketing Society)
		Palacode
		Dharmapuri
		Harur
		Papparapatti
3	Coimbatore (7)	Chikkadasampalayam
		Sulur
		Vadakkipalayam
		Pooluvapatti
		Pichanur
		Anaimalai
		Pollachi
4	Nilgiris (9)	Hosahatty
		Anikorai
		Dhavanai
		Ooty Rose Garden
		Nilgiris (Co-operative Marketing Society)
		New Allanji
		Sullikoodu

Sl. No.	District	Name of the Primary Processing Centre
		Uppatti
		Aiyyankolli
5	Tiruchirappalli (12)	Lalgudi
		Mannachanallur - I
		Mannachanallur – II
		Thiruchendurai
		P.K.Agaram
		Arasalur
		Pidaramangalam
		Thuraiyur (Co-operative Marketing Society)
		Uppiliapuram (South)
		Thathaiyangarpettai
		Kallikudi
		M.Puthur
6	Dindigul (5)	Palani
		Palani (Co-operative Marketing Society)
		Gopalpatti
		Kavunji
		Vedasanthur
7	Theni (5)	Theni
		Chinnamanur
		Cumbum - I
		Cumbum - II
		Periyakulam
8	Ramanathapuram (3)	Paramakudi
		Mudhukulathur
		Kamuthi (Co-operative Marketing Society)
9	Thoothukudi (3)	Srivaikundam
		Pudur
		Vilathikulam
10	Tirunelveli (2)	Ramayanpatti
		Valliyoor
11	Tenkasi (3)	Pavoorchatram
		Sankarankovil
		Kadayanallur

Phase –II

Sl. No.	District	Location of Primary processing Centre
1.	Salem (5)	Uthamasolapuram
		Thalaivasal
		Valapadi
		Edappadi
		Kolathur
2.	Erode (2)	Alukkuli
		Anthiyur
3.	Thiruvallur (2)	Thiruvallur
		Arani
4.	Chengalpet (1)	Madhuranthagam
5.	Kancheepuram (1)	Sunguvarchatram
6.	Tiruvannamalai (2)	Padavedu
		Kuppanatham
7.	Cuddalore (2)	Panruti
		Kurinjipadi
8.	Villupuram (2)	Olakkur
		Vanur
9.	Karur (3)	Aravakurichi
		Mahadanapuram
		Velayuthampalayam

Action is being taken to improve the utilisation of the Primary Processing Centres established under phase-II project of TNSCM by revising its scope to include millets, pulses and oil seeds along with fruits and vegetables.

5.2.7 Kalaignarin All Village Integrated Agricultural Development Programme (KAVIADP):

With the aim of creating necessary infrastructure facilities in every village, 185 drying yards have been established at a cost of Rs.19.43 crore during 2021-22 and 2022-2023 under Kalaignarin All Village Integrated Agricultural Development Programme and are being utilized by the public and farmers.

Also, in 2023-24, 100 drying yards with grading and sorting hall are being established at a cost of Rs. 34.00 crore., for the use of farmers. During 2024-25, work is under progress for constructing 200 Drying yards with grading and sorting hall at a cost of Rs.70 crore.

Table 5.6 Infrastructure facilities under Kalaignarin All Village Integrated Agriculture Development Programme

S.No	District	Drying Yards		Grading & Sorting Hall with Drying Yards
		2021-22	2022-23	2023-24
		Nos	Nos	Nos
1	Ariyalur	1	3	2
2	Chengelpet	1	3	4
3	Coimbatore	1	3	1
4	Cuddalore	5	10	5
5	Dharmapuri	1	4	1
6	Dindigul	1	3	3

S.No	District	Drying Yards		Grading & Sorting Hall with Drying Yards
		2021-22	2022-23	2023-24
		Nos	Nos	Nos
7	Erode	1	3	3
8	Kallakurichi	1	4	4
9	Kancheepuram	1	4	3
10	Kanyakumari	-	1	-
11	Karur	1	3	2
12	Krishnagiri	1	2	2
13	Madurai	1	4	5
14	Mayiladuthurai	1	3	2
15	Nagapattinam	1	3	2
16	Namakkal	1	3	1
17	The Nilgiris	1	3	1
18	Perambalur	1	3	2
19	Pudukottai	3	4	4
20	Ramanathapuram	1	4	2
21	Ranipet	1	3	3
22	Salem	1	3	2
23	Sivagangai	2	4	3
24	Tenkasi	1	3	2
25	Thanjavur	2	6	4
26	Theni	1	3	2
27	Tirunelveli	1	3	2
28	Tirupatthur	1	3	2
29	Thiruvallur	1	4	5
30	Tiruvarur	2	4	4
31	Thoothukudi	1	4	4
32	Tiruppur	1	3	2
33	Thiruvannamalai	2	6	3
34	Tiruchirapalli	5	4	4
35	Vellore	1	3	2
36	Villupuram	1	5	4
37	Virudhunagar	1	4	3
Total		**50**	**135**	**100**

5.2.8 Setting up of Millet Processing centres under Tamil Nadu Millet Mission:

"Tamil Nadu Millet Mission" is being implemented for five years from 2023-24 to 2027-28 with the aim of increasing the production of millets in Tamil Nadu and increasing the use of millets among the people through value addition to of millets increase the income of the farmers.

Based on this, during 2023-24, 50 millet processing centres are being established at a cost of Rs. 9.38 crore. Also, during 2024-25, 40 millet processing centres will be established at a cost of Rs.7.50 crore.

5.2.9 Agriculture Infrastructure Fund (AIF)

This scheme facilitates farmers, entrepreneurs, Primary Agricultural Co-operative Societies, Farmer Producer Organizations willing to create or strengthen agri infrastructure. 3% Interest Subvention on the loan and credit guarantee can be obtained by the borrower upto Rs.2 crore for a maximum period of seven years. Primary processing, prevention of post harvest loss and fetching remunerative price for the farmers are the main objectives of this scheme.

Since inception of the scheme, 6,580 numbers of loans have been sanctioned with Rs.1,614.63 crore and Rs.1,092.70 crore has been disbursed so far.

5.2.10 AGMARK Grading

"AGMARK" is a quality certificate issued by Government of India for Agricultural produce. Under this scheme, agmark specifications are issued for 240 commodities like rice, pulses, ghee, honey, spices etc. To ensure the quality, 30 State Agmark Grading Laboratories (SAGL) and one principal laboratory is functioning in the state.

Table 5.7 District-wise AGMARK Grading Laboratories

S.No.	District	Location of AGMARK Grading Laboratory
1	Chennai	Principal Laboratory
2	Kancheepuram(2) @Chennai	Chennai (North), Chennai (South)
3	Vellore	Vellore
4	Cuddalore	Panruti
5	Thanjavur	Thanjavur

S.No.	District	Location of AGMARK Grading Laboratory
6	Tiruchirapalli (2)	Tiruchirapalli – I, Tiruchirapalli – II
7	Karur	Karur
8	Madurai (2)	Madurai (North), Madurai (South)
9	Theni	Theni
10	Dindigul	Dindigul
11	Virudhunagar	Virudhunagar
12	Tirunelveli	Tirunelveli
13	Thenkasi	Tenkasi
14	Thoothukudi	Thoothukudi
15	Kanyakumari (2)	Nagarkoil, Marthandam
16	Salem	Salem
17	Dharmapuri	Dharmapuri
18	Coimbatore	Coimbatore
19	Erode (4)	Perundurai, Erode – I, Erode – II, Chithode
20	Tiruppur (5)	Tiruppur, Palladam, Kangayam – I Kangayam – II, Vellakovil

During 2023-24, Agricultural commodities to the tune of 40.17 lakh MT were graded and

grading charges of Rs.99.43 lakh has been realized as revenue to the State Government. This scheme will be continued during 2024-25.

5.2.11 Conducting awareness campaigns in all Village Panchayats for enhancement of Agri Business

Intensive campaigns on post harvest technologies, marketing of agri produce, grading and sorting, value addition, Agmark certification and export procedures are programmed during 2024-25 so as to increase the farmers income. 770 campaigns will be conducted at two villages per block per month and all the villages will be covered in a period of two years.

5.2.12 Agri Exhibitions

For the year 2024-25, Agriculture Exhibitions have been programmed for 3 Districts with the participation of various State Government Departments- Agriculture, Veterinary and Fisheries University and Research Institutions - under Indian Council of Agricultural Research, Commodity boards, Banks, Insurance companies, Seed producers, Nurseries, Organic Input suppliers, Agricultural

implements manufacturers, Microirrigation companies, Food Processing Industries, Farmer Producer Companies, Agri exporters and other private institutions at a cost of Rs.9 crore.

5.2.13 Details of Staff in the Department

In the Department of Agricultural Marketing and Agri Business, 1,343 Department staff and 1,675 Market Committee staff are employed.

Table: 5.8- Details of Department Staff

S. No	Name of the Post	Sanctioned Post
1	Additional Director of Agriculture	1
2	Joint Director of Agriculture	2
3	Deputy Director of Agriculture (AB)	37
4	Assistant Director of Agriculture	5
5	Agricultural Officer	170
6	Deputy Agricultural Officer	47
7	Asst. Agricultural Officer	627
8	Administrative Officer	1
9	Asst. Accounts Officer	1
10	Other non-technical staff	452
	Total	**1,343**

Table: 5.9- Details of Market Committee Staff

S. No	Name of the Post	Sanctioned Post
1	Senior Secretary / Deputy Director of Agriculture	2

2	Senior Secretary	2
3	Secretary / Assistant Director of Agriculture	11
4	Secretary	11
5	Superintendent	202
6	Engineering Supervisor	9
7	Supervisor	346
8	Other non-technical staff	1,092
	Total	**1,675**

5.3. TAMIL NADU STATE AGRICULTURAL MARKETING BOARD (TNSAMB)

The State Agricultural Marketing Board was established in the year 1970 with an objective to regulate the activities of the Market Committees. It was later reconstituted as a Statutory Board in accordance with the **"Tamil Nadu Agricultural Produce Marketing (Regulation) Act 1987".**

5.3.1 Source of Income

As per the provisions of "Tamil Nadu Agricultural Produce Marketing (Regulation) Act 1987", Tamil Nadu State Agricultural Marketing Board receives 15% of the revenue collected as license fee and market fee by the Market Committees and utilized for Market Development activities.

5.3.2 Functions of Tamil Nadu State Agricultural Marketing Board

5.3.2.1 Capacity Building Training

Tamil Nadu State Agricultural Marketing Board State Level Training Centre is functioning at Uthamacholapuram, Salem. It provides capacity building training to officials and staff of Department of Agricultural Marketing and Agri Business, besides giving training to farmers on value addition, marketing of agricultural produce and e-trading.

During 2023-24, totally 32 training programmes were conducted at a cost of Rs.17.86 lakh benefitting 722 technical staff and farmers. This training programme will be continued during 2024-25 also.

5.3.2.2 Construction/Maintenance Works

Development activities of Regulated Markets, creation and maintenance of infrastructure facilities related to Department of Agricultural marketing and Agri Business is carried out by the engineering wing of TNSAMB.

During the year 2023-24, infrastructure was created for an amount of Rs.264.96 crore. These works will be continued during 2024-25 also.

5.3.2.3 International Flower Auction Centre

The International Flower Auction Centre is functioning under the control of Tamil Nadu State Agricultural Marketing Board and it is established with international standards in an area of 7.56 acres of land in Krishnagiri District at a cost of Rs.20.20 crore.

At IFAC, flowers are assayed to International Standards and auctioned online. Till now 38,907 flower bunches and 7.30 lakh flower stems valued at Rs.36.70 lakh were traded.

5.3.2.4 Digitalization of Agricultural Marketing Services

To facilitate trade between farmers and traders, software has been developed for online booking of godowns, cold storages and online issue of traders' license. Action is being taken to launch the software. To monitor the trading

activities of the Farmer Producer Organizations and to facilitate the trade of their value added products, Management Information System (MIS) platform for FPOs and e-Market sales platform for FPOs are being developed through Tamil Nadu e-Governance Agency (TNeGA).

Action is being taken to link the block level farmers' whatsapp groups with that of traders' whatsapp groups to facilitate trade through the regulated markets.

5.3.2.5 Uzhavar angadi

Tamil Nadu State Agricultural Marketing Board is taking steps for the establishment of 100 nos of Uzhavar Angadi in major Corporations and Municipalities in Tamil Nadu with a focus on facilitating marketing opportunities for agricultural producers and ensuring the availability of quality food for consumers.

Traditional rice varieties, millets, country sugar, edible oil, value added products etc., will be procured directly from farmers and Farmers Interest Groups and sold to urban consumers.

5.3.2.6 Price Support Scheme (PSS)

Price Support Scheme is being implemented to protect farmers from price fall of pulses (Black gram and Green gram) and copra during the peak harvest season.

Since the inception of the programme in 2017-18 till 2023-24, 23,491 MT of Pulses, 1.19 lakh M.T of Copra to the total value of Rs.1,440 crore has been procured from 1.02 lakh farmers.

Under this Scheme, approval has been obtained to procure 90,300 MT of Copra in 2024 and 1.43 lakh MT of blackgram and 7,140 MT of greengram during Rabi season 2023-24.

5.3.2.7 Agro Export Promotion Activities:

The Government is taking several efforts to increase the volume of export of agriculture and allied sector products.

5.3.2.7.1 Seminars on "Agricultural Export":

During 2023-24, seminars on "Agri Export Promotion" have been conducted by the Tamil

Nadu State Agricultural Marketing Board across the State to farmers, Farmer Producer Organizations (FPO), traders and exporters in collaboration with export promotion bodies, experts and export institutional trainers to promote and increase the share of agricultural and food product export from Tamil Nadu.

5.3.2.7.2 Getting Geographical Indication:

Realising the potential of crops with Geographical Indication (GI) tagging to fetch greater value in global market, steps are being taken by the Government to get GI tag for potential agricultural products of the State.

During the year 2021-22, GI application has been filed for 10 crops including Sholavandhan betel leaf, Panruti jackfruit, Panruti cashewnut, Sattur samba chilli etc. and GI tag was obtained for Sholavandhan betel leaf and action is being taken for getting GI tag for other products.

During 2023-24, GI application has been filed for 15 products including Krishnagiri

Arasampatti Coconut, Krishnagiri Panneer rose, Thanjavur Peravurani Coconut etc.,

In the year 2024-25, action is being taken to get GI tag for 10 products including Sathayamangalam red banana (Erode), Kolli Hills pepper (Namakkal), Meenambur seeraga samba etc., at a cost of Rs.30 lakh.

5.3.2.7.3 Training on Export promotion of Spices producing farmers and Buyer – Seller meet:

It has been proposed to provide specialized training on agricultural export procedures to facilitate the spice growing farmers/farmer producer organisations and entrepreneurs. This special training will be conducted in Coimbatore and Madurai in co-ordination with Spices Board, Agricultural and Processed Food Products Export Development Authority, Director General of Foreign Trade, Tamil Nadu Agricultural University etc., Under this training 200 farmers / farmer producer organisations/ entrepreneurs/exporters and traders will be benefitted.

5.3.2.7.4 Facilitation to get Export related Certificates:

An allocation of Rs. 15 lakh is made from State fund for 100 beneficiaries (maximum of Rs.15,000 per beneficiary) to obtain export related certificates like Import-Export Code (IEC), Registration - Cum Member Certificate (RCMC) /Digital Certificate/ FSSAI License for Farmers/Farmer Producer Organisations producing mango, coconut, millets, moringa, turmeric, small onion and cucumber and farmers interested in exports.

5.3.2.7.5 Establishment of Food Parks:

Food Parks are being implemented to increase the income of farmers by reducing wastage of food products, value addition of farm products etc.,

i) A Mega Food Park is being developed in an extent of 50 acres at Gangaikondan, Tirunelveli District at a cost of Rs.77 crore. In these, Industrial (Food) plots are being developed and leased out for long term to food processing investors.

ii) Small Food Parks in an area of 10 acres each with common infrastructure are being established at a project cost of Rs.191.88 crore in seven Districts namely Cuddalore, Theni, Dindigul, Krishnagiri, Tiruvannamalai, Salem and Madurai.

Industrial (Food) plots are being developed in these food parks and action is being taken to lease out to food processing investors.

6. TAMIL NADU AGRICULTURAL UNIVERSITY

Tamil Nadu Agricultural University infuses new tools and techniques in its education, research and extension activities. To achieve agriculture based human resource development, self-sufficiency in food production and improved productivity as well as to augment the farmers welfare, teaching, research and extension were imparted through Constituent Colleges, Research Stations and Krishi Vigyan Kendra of Tamil Nadu Agricultural University with a budget outlay of Rs.586 crore allocated during 2023-24. In the current financial year 2024-25, Tamil Nadu Agricultural University has been provided with Rs.705 crore.

6.1. Agricultural Education

Tamil Nadu Agricultural University offers 14 Under Graduate, 33 Post Graduate and 28 Doctoral degree programmes through its 18 Constituent Colleges. In addition, Diploma in Agriculture, Horticulture and Agricultural Engineering are being offered through four Constituent Diploma Institutes of Tamil Nadu

Agricultural University. The Directorate of Open Distance Learning offers 41 Certificate courses, six Online Certificate courses, one Diploma programme in Agri-Inputs, one special certificate course and 12 other Diploma programmes.

During 2011-2012, only 9,652 applications were received for the Under Graduate programme whereas 41,434 applications were received during 2023-24 which shows a manifold increase.

Table 6.1. Students Admission in Tamil Nadu Agricultural University (2023-24)

Education Details	Admission
Under Graduate	5,458
Post Graduate	387
Doctoral Degree	146
Diploma	504
Open Distance Learning	1,221
Total	**7,716**

6.1.1. *Puthumaipen Thittam*

The Government of Tamil Nadu has launched Moovalur Ramamirtham Ammaiyar Higher Education Assurance Scheme

(*Puthumaipen Thittam*) to enhance the enrolment ratio of girls from Government schools to Higher Educational Institutions. Through this scheme, financial assistance of Rs.1000/month is provided to girl students till their completion of Under Graduate degree or Diploma course. The incentive amount under this scheme is being disbursed directly into the individual student's bank account. Under this scheme, a total of 198 girl students of Constituent Colleges, 313 girl students of Affiliated Colleges and 23 diploma girl students are benefited during 2023-24.

6.1.2 Assistance for students' Education

For the academic year 2023-24, received applications for various Community Scholarships (BC/MBC/DNC/SC/ST) are being uploaded in the Tamil Nadu State Scholarship Portal (TNSSP). Under 7.5% Reservation Scheme, 384 students have been admitted and benefitted during the academic year 2023-24.

6.1.3 Infrastructure

The Government of Tamil Nadu has announced establishment of a new Horticulture College and Research Institute at Paiyur (instead of Jeenur) in Krishnagiri District, three Agricultural Colleges and Research Institutes at Karur in Karur District, Keezhvelur in Nagapattinam District and Chettinad in Sivagangai District. For the Horticultural College and Research Institute, Paiyur and three agricultural colleges Rs.2.51 crore and Rs.8 crore have been sanctioned and the infrastructure works are in progress.

6.1.4 Students welfare and Career Guidance

The Centre for Students Welfare functioning at TNAU, Coimbatore also organizes motivational lectures, coaching classes, mock group discussions, interviews and individual skill-oriented trainings to produce potential candidates and to facilitate domestic and international job opportunities.

During 2023-24, 221 students were placed in various industries namely; Agro Industry,

Banking, Fertilizer Industry, Food Industry, Seed Industry, Finance and other institutions.

6.2 Agricultural Research

Location specific research is carried out across the State in all the 18 constituent Colleges and 42 Research Stations of TNAU. Research is being funded by mobilizing collaborative, networking and innovative projects from Government, International Funding Agencies and Indian Council of Agricultural Research.

During 2023-24 an amount of 15 crore was sanctioned to establish a new Palmyrah Research Station at VOC Agricultural College and Research Institute, Killikulam for augmenting research and development of dwarf varieties as well as value added products, Rs.15 for new Banana Research Station at VOC Agricultural College and Research Institute, Killikulam, Rs.3 crore for TNAU Insect Museum at Coimbatore for Identification and Digitization of agriculturally important insects and Rs.5 crore for conservation, strengthening and establishment of special types of botanical gardens in the Tamil

Nadu Agricultural University Botanical Garden, Coimbatore. The works are in progress.

For the year 2024–25, Rs.5.44 crore has been allocated for developing SOPs for drone spraying in vegetables and plantation crops, for smart delivery of inputs, development of low GI and direct seeded rice varieties, feasibility testing, production and demonstration of farm machinery for turmeric, onion and tapioca to fulfill the interventions for complete mechanization and development of novel types in tuberose, chrysanthemum and rose.

6.2.1 Agro Climate Research Centre

Agro Climate Research Centre (ACRC) of TNAU provides Village Level Medium Range Weather Forecast (TNAU - VLF) at hourly intervals for the next six days for a distance of three-square kilometers. The TNAU–VLF is hosted in open-source website http://aas.tnau.ac.in/vlf and has a forecast usability range between 70–80%. The TNAU–VLF provides quantitative information on heavy rainfall events (intensity / hour) with high wind speed and high / low temperature events. TNAU

is sharing this TNAU–VLF to TANGEDCO for their electricity demand forecast model. Seasonal Climate Forecast (SCF) for South West Monsoon and North East Monsoon is prepared and disseminated during the last week of May and September, respectively. This SCF was highly useful for deciding the cropping pattern by the farmers and policy level decisions of technocrats. In collaboration with India Meteorological Department, ACRC issues weather advisory to 12.95 lakh farmers through SMS every Tuesday and Friday. During 2023-24, 780 farm advisories were issued for agricultural crops, horticultural and plantation crops, cattle and small ruminants, poultry and other birds.

6.2.2 Price Forecast and Market Intelligence

The price forecasting and market intelligence scheme funded under the Tamil Nadu Irrigated Agriculture Modernization Project (TN-IAMP) is operated by the Domestic and Export Market Intelligence Cell (DEMIC) at Center for Agriculture and Rural Development Studies (CARDS) of the TNAU. This scheme

covers 14 major crops, including maize, blackgram, greengram, groundnut, sesame, copra, banana (Poovan, Karpuravalli, Nendran), tomato, brinjal, bhendi, small onion, cotton, red chilli, and coconut. These advisories help farmers in making informed decisions regarding planting /selling /storing their farm produces. The information is effectively disseminated through various channels such as print and electronic media, ensuring timely access to farmers. During 2023-24, DEMIC has generated and disseminated 13 pre-sowing market advisories and 14 pre-harvest advisories.

6.2.3 Research Publications

During 2023-24, TNAU faculty have published 750 scientific publications in SCOPUS indexed journals.

6.2.4 New crop varieties released

Twenty new varieties in diverse agricultural and horticultural crops have been released by the State Variety Release Committee during 2023-24. The details of the newly released varieties are given below.

Table 6.2.4. New Released Crop Varieties in 2023-24

S. No	Crop and Variety	Duration (Days)	Special Features
1.	Rice CORH 5	120-125 days	• Yield: 6,467 kg/ha • Season: *Samba* / *Thaladi*
2.	Rice CO 58	120-125 days	• Non-basmati Long slender and aromatic rice • Yield: 5,858 kg/ha • Season: Late *Samba* / *Thaladi*
3.	Maize VGI H(M) 2	95-100 days	• Yield: 6300 kg/ha (rainfed)
4.	Sweet Sorghum CO (SS) 33	110-115 days	• Grain yield: 2,500 kg/ha; • Fresh stalk yield: 42,000 kg/ha; Juice yield: 15,133 l/ha • Ethanol yield: 1,127 l/ha
5.	Sorghum CO 34	100-105 days	• Grain yield: 2,765 kg/ha • Dry fodder yield: 9,480 kg/ha
6.	Tenai ATL 2	80-85 days	• Grain yield: 2,174 kg/ha Straw yield: 2,688 kg/ha
7.	Greengram VBN 7	65-70 days	• Yield: 900 kg/ha • Bold seeds (100 grain weight-5.5 to 6.0 g) • Suitable for snacks, savories and value addition • Rich in Vitamin C (18.17 mg / 100 g) • Moderately resistant to MYMV, Powdery mildew; Resistant to ULCV
8.	Groundnut CO 8	110-115 days	• Yield: *Kharif*: 2,527 kg/ha *Rabi*: 2,343 kg/ha • Oil content (51-52%), Shelling (69%)
9.	Cotton VPT 2	120-130 days	• Average yield: 1,624 kg/ha • Compact long staple (29.6 mm)

S. No	Crop and Variety	Duration (Days)	Special Features
10.	Daincha TRY 1	45 days (*In situ* ploughing)	• Yield: 17.86 t/ha (Green biomass)
11.	Grapes GRS (MH) 1	120-130 days from fruit pruning	• Fruit yield: 41 t/ha/year • High TSS (24-26°Brix) in winter pruned crop
12.	Jack PKM 2	Perennial	• Yield - 175.62 t / ha / year • Medium sized fruits (11.46 Kg) • High TSS (30.8°Brix)
13.	Banana Kaveri Kanchan	305-320 days	• Pro vitamin A enriched dessert banana • Contains 30 and 40-fold higher PVA (2.4mg/100g) than ruling cultivars
14.	Brinjal CO 3	140-150 days	• Yield: 48.5 t/ha
15.	Cluster bean MDU 2	75 days	• Yield: 14 t/ha • No. of pods per plant: 115 to 125
16.	White Amaranthus PLR 2	50 days	• Yield: 43 t/ha • Rich in β carotenoids (8 mg / 100g)
17.	Red Amaranthus CO 6	30-35 days	• Yield: 12.6 t/ha • High anthocyanin content (0.653 mg/100g)
18.	Perennial Moringa PKM 3	10 to 15 years	• Yield: 68.7 t/ha/year • Medium length of pods (47-55 cm)

S. No	Crop and Variety	Duration (Days)	Special Features
19.	Red Tamarind PKM 2	Perennial	• Yield: 217 kg/tree/year (21.78 t/ha) • Contains high antioxidants (1614 µg/g), anthocyanin (234.00 mg/g) and low tartaric acid (14.50%)
20.	Coconut VPM 6	Perennial	• Yield: 120 to 173 nuts per year per palm • Copra yield: 18 kg per palm • Higher oil content (67.94%)

6.3 Agricultural Extension Education

The Directorate of Extension Education carries out the frontline extension activities through Community Radio Station, 15 Krishi Vigyan Kendras, 18 Constituent Colleges and 42 Research Stations, TNAU Agri-tech portal and Kisan Call Centre in coordination with state development departments, ICAR and other stakeholders.

To strengthen the extension services in the state, Tamil Nadu Agricultural University identified 389 Agricultural Scientists at Block level in the year 2023 for providing agro advisory services to farmers.

One Unit (TFL) – One FPO Programme was launched by the Tamil Nadu Agricultural

University for capacity building of Farmer Producer Organizations (FPOs) and development of small and marginal farmers during the year 2023-24. So far, 112 Farmer Producer Organizations have been attached to Tamil Nadu Agricultural University.

Through 15 Krishi Vigan Kendras of Tamil Nadu Agricultural University, On Farm Trials, Front line Demonstrations, farm advisories, extension activities, trainings were conducted. The details are given below.

Table 6.3 Key activities carried out by the KVKs (2023 -24)

S.No.	Details of Programme	Programme Nos.	No. of farmers benefitted
1.	On Farm Testing	179	1,027
2.	Front Line Demonstrations	339	3,390
3.	Trainings	1,160	41,805
4.	Vocational trainings	47	1,771
5.	Sponsored trainings	162	5,171
6.	Exhibition /Farmers Day / Field Day / Mela / Special Programmes	9,059	10,33,963
	Total	**10,946**	**10,87,127**

6.3.1 Trainings

Six need-based training programmes were conducted for the benefit of 242 Extension Functionaries and Developmental Department officials.

Five orientation trainings were offered to 44 Deputy Collectors / Deputy Registrar of Cooperative Societies.

Trainings and exposure visits for 5,453 farmers under Agricultural Technology Management Agency (ATMA) in association with Line Departments were organized. Delivered special lectures to 866 students about various activities of this Directorate.

6.3.2 Educational Media Centre

During 2023–24, the Educational Media Centre of TNAU produced 63 video programmes. In addition, 108 Video programmes have been uploaded in TNAU TV YouTube Channel to increase the confidence of farmers and public. Totally 36 lakh YouTube viewers viewed this YouTube channel.

6.3.3 TNAU Agritech Portal

TNAU's Agritech portal **(http://agritech.tnau.ac.in)** contains more than 12 lakh pages of information related to agriculture, horticulture and allied sciences both in Tamil and English. This facility has been utilized by an average of 4,032 persons / day and 14.71 lakh persons / year.

6.3.4 Kisan Call Centre (KCC)

Kisan Call Centre provides service to the farmers through a toll-free number 1800-180-1551. The caller can interact in their local language with the experts. This Centre functions on all working days between 6.00 A.M. and 10.00 P.M. During the year 2023-24, technical advices were rendered for 95,605 calls.

6.3.5 TNAU Community Radio Station

TNAU Community Radio Station 107.4 is functioning since 2010 catering to the needs of farmers. Totally 1,346 programmes were broadcasted through Community Radio during 2023-24.

6.4 Seed Production

During 2023-24, a total quantity of 194.06 MT of breeder seeds, 525.7 MT of foundation seeds, 128.7 MT of certified seeds and 330.7 MT of Truthfully Labelled Seeds (TFL) in 175 varieties of principal crops was produced and distributed. About 15.70 lakh seedlings and planting materials of various crops were produced and distributed.

6.5 Agri Business Development

Through the Directorate of Agribusiness Development, activities related to Agribusiness Incubation, Commercialization of hybrid seeds and machineries, Consultancy services, Venture Capital Schemes, Student Entrepreneurship, Executive Development Programmes, Agri Hub, Institutional Development Plan and Unnat Bharat Abhiyan 2.0 are undertaken. This Directorate has established six Agribusiness Federations with 306 members and 203 entrepreneurs including 86 women entrepreneurs. In addition, 1,329 business advisories were provided.

6.6 Awards

- TNAU won the prestigious SKOCH Order of Merit Award for its successful implementation of groundbreaking research projects *viz.,* Integrated Pest Management Module for Maize Fall armyworm and Soil Fertility Mapping on Sulphur, Micro nutrients during 2023-24.

- TNAU was adjudged as the Best South Indian Institute by Ministry of Small Medium and Micro Enterprises Chamber of Commerce for promoting entrepreneurship-based education during 2023–24.

- The Centre of Excellence in Millets, Athiyandal Thiruvannamalai District, was awarded the 'Best AICRP Centre for Small Millets' for the year 2023-24 by the Indian Council of Agricultural Research, New Delhi.

- The All India Coordinated Programme on Micro and Secondary Nutrients and Pollutant Elements in Soils and Plants

implemented at Tamil Nadu Agricultural University awarded 'Best ICAR – AICRP Micronutrients Centre' by Indian Council of Agricultural Research, New Delhi during 2023-24.

- Tapioca and Castor Research Station, Tamil Nadu Agricultural University, Yethapur was conferred with 'AICRP – Best Center' award for the year 2023-24 by Indian Council of Agricultural Research, New Delhi.

- TNAU has been recognized as the Best Center for All India Network Programme on Organic Farming by the ICAR - IIFSR for the year 2023-24.

6.7 Details of Employees

Details of TNAU Employees

Sl. No	Category	Present Status
1.	Professor	444
2.	Associate Professor	311
3.	Assistant Professor	262
4.	Supporting Staff	1,262
	Total	**2,279**

7. DEPARTMENT OF SEED CERTIFICATION AND ORGANIC CERTIFICATION

Seed is a most vital and crucial input for crop production. The quality of seed is considered as the most important factor for increasing crop yield. The use of quality seeds helps greatly in achieving higher production per unit area to attain food security of the country.

In order to increase the certified seed production, to ensure the supply of quality seeds to benefit farmers and to encourage organic certification, the Department of Seed Certification and Organic Certification is implementing various activities under the following wings

- Seed Certification,
- Seed Quality Control,
- Seed Testing,
- Training
- Organic Certification.

7.1 Seed Certification:

The Seed Certification wing functions in accordance with the provisions of the Seeds Act, 1966 and the Seeds Rules, 1968. It includes the certification of notified crop varieties as prescribed under the Indian Minimum Seed Certification Standards (IMSCS).

Breeder seeds are being supplied to the government and private seed producers by inspecting breeder seed field standards at Agricultural research stations through the breeder seed inspection team.

In the Department of Seed Certification and Organic Certification, access to availability of quality certified seeds to the farmers is ensured through a series of activities like identification of seed source, field inspection, seed processing, seed quality testing and tagging of certified seeds in seed farms set up by the Government and private seed producers.

Under seed certification programme, an area of 63,709 hectare seed farms has been registered and total quantity of 1,35,819 MT of

seeds have been certified during the year 2023-24.

TABLE 7.1: 2023-24 - SEED FARM AREA REGISTERED AND TAGGED QUANTITY

S.No	Assistant Director of Seed Certification Head Quarters	Seed farm area (in ha)	Tagged quantity (in MT)
1	Coimbatore	1,232	1,336
2	Cuddalore	2,366	1,841
3	Dharmapuri	1,237	768
4	Dindigul	1,840	3,605
5	Erode	3,641	1,530
6	Kanchipuram	1,469	2,612
7	Kanyakumari	201	262
8	Karur	456	302
9	Krishnagiri	1,169	751
10	Madurai	1,778	6,276
11	Nagapattinam	2,882	3,285
12	Namakkal	1,079	2,464
13	Perambalur	1,105	1,753
14	Pudukkottai	927	1,190
15	Ramanathapuram	503	683
16	Salem	1,349	821
17	Sivagangai	416	520
18	Thanjavur	8,828	2,525
19	Theni	947	2,814
20	Thiruvallur	932	1,000
21	Thiruvarur	7,931	2,436
22	Thoothukudi	894	915
23	Tirunelveli	2,816	5,450
24	Tiruppur	7,129	77,492

S.No	Assistant Director of Seed Certification Head Quarters	Seed farm area (in ha)	Tagged quantity (in MT)
25	Tiruvannamalai	2,900	2,157
26	Trichy	1,302	2,567
27	Vellore	1,459	766
28	Villupuram	3,447	7,071
29	Virudhunagar	1,472	628
	Total	**63,709**	**1,35,819**

During the year 2024-25, for quality seed production through quality field inspections, it is targeted to register 70,000 Ha of seed farms and to certify 1,36,000 MT of quality seeds.

7.2 Seed Quality Control :

Good seed is the source of good yield and the main objective of this department is to ensure availability of these good seeds. To ensure that quality seeds are distributed to the farmers, the Seed Quality Control Division enforces the existing seed laws such as the Seeds Act, 1966, the Seeds Rules, 1968, the Seeds (Control) Ordinance, 1983, and the Environment (Protection) Act, 1986 to ensure distribution of quality seeds to the farmers.

This department has issued Seed Selling Licenses to 12,482 sellers under the Seeds (Control) Order, 1983. These seed selling points are inspected by the Seed Inspectors and seed samples are drawn from seed lots kept for sale. These samples are analyzed in the notified seed testing laboratories. Based on the results of the analysis, departmental / legal actions are initiated against the sub standard seed lots.

During the year 2023-24, a sum of 78,788 seed selling points have been inspected and 60,622 seed samples were drawn for quality check. Based on the seed testing reports, 1,894 samples were identified as sub standard, of which department action was taken for 1,707 samples and legal action has been initiated for 187 samples. Also 1,885 MT of seeds worth Rs.25.37 crore have been issued with stop sale order for sub standardness and other violations.

During the year 2024-25, it is targeted to inspect 79,000 seed selling points and to draw 70,000 seed samples for quality check. Target is fixed considering the cost involved in the official

sample as well as to focus more on the quality of samples drawn.

7.3 Seed Testing

Under this department there are 34 notified seed testing laboratories. Besides the samples obtained from the seed certification and seed inspection wings, the service samples sent by the farmers, seed dealers and seed manufacturers are also tested as per the Indian Minimum Seed Certification Standards (IMSCS) to ensure quality of the seeds which is the primary input for Agriculture.

Table : 7.2 Samples analyzed-2023-24:

S.No	Sample Types	Target (Nos)	Achievement (Nos)
1	Certified Sample	28,500	28,889
2	Official Sample	60,000	60,622
3	Service Sample	26,500	27,022
	Total	**1,15,000**	**1,16,533**

It is proposed to analyze 1,17,000 seed samples for the year 2024-25.

7.3.1 International Seed Testing Association (ISTA) accredited seed testing laboratory, Coimbatore:

Coimbatore seed testing laboratory has been upgraded as an ISTA accredited seed testing laboratory in the year 2014. The laboratory is accredited for the scope of sampling from the seed lot, physical purity, other crop seeds (OCS), germination and moisture tests for cereals, pulses and vegetable crops. This laboratory is the first public sector undertaking in India which has secured ISTA accreditation. This laboratory ensures seed quality to international standards and is authorized to issue Orange International Seed Lot Certificate (OIC) and Blue International Seed sample Certificate (BIC) to the seed exporters. Coimbatore seed testing laboratory has so far analyzed and issued 93 international seed sample certificate to the seed exporters of Tamil Nadu.

7.3.2. State DNA Finger Printing Laboratory

DNA finger print laboratory has been functioning in Coimbatore since 2007 under the

Department of Seed Certification and Organic Certification for quick detection and confirmation of genetic purity of the seed lots received. The grow out test method takes 2-3 months to complete the genetic purity test. But, detection of genetic purity of a variety within a short span of 3-5 days is done by using DNA Finger Print technique that facilitates distribution of quality seeds to the farmers quickly. This DNA Finger Print Laboratory is first of its kind in the entire country under the Department of Agriculture and has been **notified during 2014 as "State DNA Finger Printing Laboratory" by Tamil Nadu Government.**

This laboratory is capable of performing testing with high accuracy and rapid Genetic purity testing using SSR (Single Sequence Repeat) Gene Markers for 27 Notified paddy varieties which are prominently cultivated in the State. 250 paddy samples were analyzed and results declared during 2023-24. Also in 2024-25, it is planned to carry out necessary work to improve the analyzing capacity using SNP (Single Nucleotide Polymorphism) technology.

7.3.3.Grow out Test Farm:

Genetic purity and germination are the very important seed quality parameters. A technique called Grow Out Test is used to assess the genetic purity of crop varieties. The Seed certification and Seed quality enforcement wings periodically send seed samples to the grow out test farm for assessing the genetic purity.

Grow out test plots are examined throughout the growing season with special emphasis on the flowering to maturity phase of the crop. All the plants are examined for the distinguishing morphological characters and screened for genetic purity. During 2023-24, 3,000 samples were tested for genetic purity test.

Moreover, for 2024-25, the target for genetic purity test is set at 3,100 samples.

7.3.4 Referral Laboratory :

In this Department 30 Seed Testing Laboratories are functioning. To monitor and maintain the uniformity, accuracy in analysis among these notified Seed Testing Laboratories,

The referral laboratory is functioning at Coimbatore. In this referral laboratory, five seed samples are obtained every month from each seed testing laboratories and comparative testing is being done. 1,800 seed samples are tested annually.

7.3.5 Bt Seed testing Laboratory:

To ensure the presence of Bt toxin in the cotton seeds, the Bt Cotton testing laboratory is functioning at Coimbatore. The official samples of cotton seeds from throughout Tamil Nadu are tested in this laboratory for the presence of Bt toxin. An average of 2,000 samples are tested for Bt toxin, annually.

7.4 Training:

Through this department, appropriate training is provided to the seed producers and field functionaries in the areas of Seed Certification, Seed Inspection and Seed Testing. To promote quality seed production and distribution, the following training programmes are organized by the training wing of this Department.

7.4.1 Orientation Training: The newly positioned technical officers of this Department are imparted with training on seed certification procedures, field inspections, identification of crop varieties, processing, sampling, tagging, and procedures involved in seed testing and seed quality control.

7.4.2 Refresher Training: The already positioned technical officers of this department are trained in the latest techniques on seed production, seed testing and seed inspection.

7.4.3 Training to Seed Producers: To increase the quality seed availability and to improve quality seed production, the seed producers are imparted training on various field and unit standards.

7.4.4 Training to Seed Dealers: To ensure quality seed availability to the farmers, training is given to the seed dealers on sale of quality seeds, seed storage and on the regulatory aspects of seed legislation.

7.4.5 Inter-state training: Officials from this department were sent to National Seed Research

and Training Centre (NSRTC), Varanasi, Uttar Pradesh for obtaining various skills on Seed Certification, Seed quality enforcement and Seed Testing technologies.

During the year 2023-24, a total number of 50,000 farmers and seed producers have been trained. It is proposed to train 55,000 persons during the year 2024-25.

7.5 Organic Certification

Tamil Nadu Organic Certification Department is established in 2007 by the Government of Tamil Nadu. This Department is accredited by the Agricultural and Processed Food Export Development Authority (APEDA) to certify the System of Organic Crop Production, Processing and Export.

The National Centre for Organic Farming and Natural Farming functioning under the Ministry of Agriculture and Farmers Welfare has authorized the Tamil Nadu Organic Certification Department to issue Organic Certificates under Participatory Guarantee System.

7.5.1 Scope and Functions

Tamil Nadu Organic Certification Department provides the System Certification to Crop Production, Processing and Trading of Organic Products meant for export. The certification issued by Tamil Nadu Organic Certification Department is equivalent to the standards of European Union and Swiss Organic Farming Ordinance.

The National Programme on Organic Production (NPOP) system of certification enables the organic products to be marketed within India and also to other countries. It enables the Organic farmers, processors, traders and exporters to obtain the organic certificate in accordance with the National Programme on Organic Production norms. The scope of organic certification is valid for a period of one year. The organic regulations ensure the avoidance of synthetic chemical fertilisers, pesticides, weedicides and genetically engineered crops.

The Tamil Nadu Organic Certification Department offers scope for Crop Production Processing & Trading under the Participatory

Guarantee System. Currently the department extends its certification programme to Individuals(farmers), Groups, On-farm and Off farm Processing, Handling and finally Certifying Large Contiguous traditional / default organic areas.

7.5.2 Status of Organic Certification

During the year 2023-24, an area of 83,979 acres have been registered under organic certification. The total number of farmers registered across the state is 39,428. This includes 2,772 individual farmers, 36,656 farmers, farmer groups, food processors and organic traders. Tamil Nadu Organic Certification Department is the only certification body to register the highest number of individual operators at National level.

Tamil Nadu Department of Organic Certification has issued Transaction Certificate for export and domestic trade of 92.15 MT of organic produce worth Rs.155 lakh. The major products certified for export are coconut, coffee, and turmeric.

7.5.3 Pesticide Residue Analysis:

The Pesticide Residue Analysis was made on the organic products of selected 374 registered organic operators based on the non conformities recorded during the field inspection made in the farms of the farmers registered under TNOCD. Based on the results of the analysis, the samples obtained from the 23 operators were confirmed to contain residual toxins and warning was issued against the sale of such products as "Organic Products" and those operators have been downgraded to the first year conversion status.

In 2024-25, the Pesticide Residue Analysis test fee will be fully subsidized to enable farmers to know the nature of toxic substances present in organic produce and ensure its quality for export.

Table 7.3. Details of Year wise area registered (in acres) under National Programme on Organic Production (NPOP)

S. No	District	2019-20	2020-21	2021-22	2022-23	2023-24
1	Ariyalur	5	829	811	656	694
2	Coimbatore	1,906	3,905	3,645	3,633	4,263
3	Chengalpattu	-	1,357	1,266	1,301	1,196
4	Cudddalore	2,251	1,799	1,755	1,014	1,418
5	Dharmapuri	1,359	7,687	7,384	3,526	2,746
6	Dindigul	1,925	3,585	9,519	7,557	4,752
7	Erode	1,136	3,982	3,425	3,576	4,925
8	Kallakurichi	-	2,307	2,375	193	1,184
9	Kancheepuram	1,164	894	1,752	1,071	1,175
10	Kanyakumari	2	403	796	3,563	2,935
11	Karur	1,371	1,324	2,045	2,168	3,121
12	Krishnagiri	48	7,064	8,082	2,629	1,683
13	Madurai	385	4,194	3,842	1,955	3,315
14	Mayiladuthurai	-	514	1,436	759	1,869
15	Nagapattinam	113	2,769	1,005	1,084	1,208
16	Namakkal	980	1,640	5,275	578	1,908
17	Perambalur	53	806	1,373	1,063	555
18	Pudukottai	119	3,121	3,797	1,952	1,651
19	Ramnathapuram	3,374	1,851	2,389	3,235	4,583
20	Ranipet	-	1,531	1,705	2,368	2,057
21	Salem	161	3,701	9,044	7,443	4,021
22	Sivagangai	293	1,146	1,650	1,672	2,349
23	Thanjavur	206	785	1,963	1,648	1,947
24	Nilgiris	5,455	6,447	6,428	1,606	434
25	Theni	181	3,973	3,805	3,787	2,793
26	Tenkasi	-	975	1,483	1,222	1,877
27	Thirupathur	-	2,144	2,065	1,498	1,729
28	Thiruvallur	329	1,473	1,484	1,677	1,692
29	Thiruvannamalai	405	3,424	5,811	4,431	2,628

S. No	District	2019-20	2020-21	2021-22	2022-23	2023-24
30	Tuticorin	130	473	811	747	659
31	Tirunelveli	761	2,734	3,202	3,400	2,326
32	Tiruppur	897	4,360	4,124	4,125	4,851
33	Thiruvarur	76	561	829	1,062	2,024
34	Trichy	201	1,568	1,615	1,574	1,863
35	Vellore	1,202	2,222	2,339	1,785	1,250
36	Villupuram	1,657	3,120	2,723	2,415	2,400
37	Virudhunagar	370	2,667	2,546	2,315	1,899
TOTAL		**28515**	**93,335**	**1,15,599**	**86,288**	**83,980**

It is proposed to register an area of 1,25,000 acres under Organic Certification during the year 2024-25 both under National Programme on Organic Production and Participatory Guarantee System.

7.6 STAFF STRENGTH

The Department of Seed Certification and Organic Certification is functioning distinctly with a staff strength of 345 technical and 500 ministerial staff.

Table 7.4: Details of Staff Strength

Name of the post	Sanctioned Strength
A. Details of Technical Staff	
Director of Seed Certification & Organic Certification	1
Joint Director of Seed Certification& Organic Certification	1
Joint Director of Seed Inspection	1
Deputy Director of Seed Inspection	15
Quality Manager	1
Assistant Director Seed Certification (Seed Analyst)	1
Assistant Director Seed Certification& Organic Certification	29
Evaluator (Organic Certification)	1
Seed Testing Officer	7
Seed Certification Officer	119
Seed Certification Officer & Organic Certification Inspector	26
Agricultural Officer	63
Seed Inspector	70
Organic Certification Inspector	10

Name of the post	Sanctioned Strength
Total (A)	**345**
B. Ministerial Staff	**500**
Total Staff Strength (A+B)	**845**

8. Tamil Nadu Watershed Development Agency (TAWDEVA)

8.1. The Tamil Nadu Watershed Development Agency was established in the year 2002 and registered under the Tamil Nadu Societies Registration Act, 1975 with the preliminary objective of developing wastelands through participatory watershed development. Subsequently, a State Level Nodal Agency (SLNA) was constituted in TAWDEVA during the year 2009 and the following watershed programmes in the State are being implemented.

1. Watershed Development Component - Pradhan Mantri Krishi Sinchayee Yojana 2.0 (WDC - PMKSY 2.0)

2. Climate Proofing of Rainfed Watersheds in Salem and Virudhunagar Districts of Tamil Nadu under National Adaptation Fund for Climate Change (NAFCC)

Further, Tamil Nadu Watershed Development Agency has also been designated

as the Nodal Agency for the following schemes to co-ordinate with the implementing departments, State Government and Government of India.

1. **Rashtriya Krishi Vikas Yojana - [National Agriculture Development Programme] - (RKVY/ NADP)**
    i. DPR based projects of NADP/RKVY
    ii. Rainfed Area Development (RAD)
    iii. Soil Health and Fertility (SHF)
    iv. Paramparagat Krishi Vikas Yojana (PKVY)
    v. Agro Forestry (AF)
    vi. Crop Diversification Programme (CDP)
    vii. Pradhan Mantri Krishi Sinchayee Yojana - Per Drop More Crop (PMKSY - PDMC)
    viii. Submission on Agricultural Mechanisation (SMAM)
2. **Pradhan Mantri Krishi Sinchayee Yojana - (PMKSY)**
    i. Pradhan Mantri Krishi Sinchayee Yojana - Har Khet Ko Pani (PMKSY - HKKP)

ii. Accelerated Irrigation Benefit Programme (AIBP)

8.2. Watershed Development Component - Pradhan Mantri Krishi Sinchayee Yojana 2.0 (WDC - PMKSY 2.0)

Government of India sanctioned 275 Watersheds under 27 Projects in Perambalur, Thoothukudi, Dindigul, Krishnagiri, Ramnathapuram, Dharmapuri and Virudhunagar districts to cover an area of 1.30 lakh ha at an outlay of Rs.286.73 crore from the year 2021-22 to 25-26 with the following objectives.

i. **Economy –** Increasing the crop productivity through optimal, integrated, sustainable and efficient use of natural resources and improving the income of village community in the watersheds.
ii. **Ecology –** Building community organizations to harness, conserve and develop natural resources by way of promoting simple, affordable technologies and practices to restore ecological balance.

iii. **Equity -** Improving the socio-economic conditions of the poor, landless, physically challenged and women through equitable access to land, water and other resources developed and involve them in various community institutions.

8.2.1 Institutional set up for Project Implementation:

TAWDEVA is functioning as the State Level Nodal Agency (SLNA) for implementation of Pradhan Mantri Krishi Sinchayee Yojana. District Watershed Development Agency (DWDA) has been established under the Chairmanship of the concerned District Collector with technical experts from Agriculture and Agriculture Engineering Departments. In each project, Watershed Development Team (WDT) comprising an expert in Agronomy, Agricultural Engineering and Sociology has been put in place for execution of field level works. Watershed Committee is set up as a sub-committee of Grama sabha at village level to implement the various work components of the project.

8.2.2 Project Activities:

The project activities are to be taken up in three phases over the period of five years.

The project is now in Phase II under which the following components are implemented.

Component	Activities
Natural Resources Management	Farm Ponds, Percolation Ponds, Minor, Medium and Major Check dams, Village Ponds, Desilting of Oorani and supply Channels, Gabion structures, Recharge Shafts, Rejuvenation of Wells and Sunken Ponds.
Production System	Horticulture Plantation, Agro forestry, Floriculture, Fodder Cultivation, Crop Demonstrations, Vermicompost, Supply of Power Sprayers, Hand Sprayers, Battery Sprayers, Tarpaulin, Chaff Cutter, Distribution of goats/ sheep and Poultry rearing.
Livelihood Supporting System	Readymade cloth and Tailoring, Dairy Farming, Backyard poultry farm, Petty Shop, Charcoal making, Hand craft production, Goat rearing, Iron Box, Supply of Tailoring Machine and Idly/ Dosa Batter Grinding Mill and Revolving Fund to Self Help Groups.
Institution Capacity Building	Imparting Training

During 2023-24, an amount of Rs. 133.26 crore was sanctioned and the work is in progress. During 2024-25, the scheme components are being implemented at an outlay of Rs.43.00 crore.

8.2.3. Springshed Development

Springs are the main resource of the people in the hilly region, for agriculture activities and livestock. Rejuvenation and improvisation of these springs will enhance the water retention. During 2023-24, the Government of India has sanctioned a total outlay of Rs.14 crore under Watershed Development Component -2.0 for development of springs in Pikkili Hill cluster and Sitling Hill cluster of Pennagaram and Harur blocks of Dharmapuri district. Regarding these developmental activities, the Detailed Project Report was prepared and approved by Government for implementation. In the year 2024-25, the scheme will be executed at an outlay of Rs.6.86 crore.

8.3 "Climate Proofing of Rainfed Watersheds in Salem and Virudhunagar Districts of Tamil Nadu" under National Adaptation Fund for Climate Change (NAFCC)

This Project is being implemented as a Grants-in-aid project by the Ministry of Environment, Forest & Climate Change, Government of India with NABARD as the National Implementing Entity (NIE) and TAWDEVA as the Executive Entity (EE).

This Project is implemented in Salem and Virudhunagar districts to treat an area of 15,990 ha with a project outlay of Rs.23.80 crore. The Project implementation period is from 2019-20 to 2024-25

8.3.1. Project Objectives

1. To adapt to the adverse impact of climate change through soil and water conservation.
2. To ensure sustainable livelihoods through promotion of crop diversification and alternate livelihoods.

3. To build the capacity of the community to adapt to climate change.

8.3.2. Project Components

In order to establish rapport with the villagers, felt need of the watershed community like Water Storage Tanks are constructed under entry point activity. As the project progresses, water resource and soil health management activities like construction of check dams, farm ponds, recharge shafts are undertaken. To support the livelihood of the village people, micro-small enterprise like production of vermicompost, backyard poultry are provided. As add on activities to climate proofing, subsidy assistance is provided for alternate cropping, climate resilient varieties, afforestration in public and on private lands, solar pumps, bio compost units.

An amount of Rs.11.52 crore was sanctioned till 2022-23, out of which Rs.10.84 crore expenditure was incurred. Sanction of an amount of Rs.12.96 crore is awaited from Government of India.

8.4. Sustainable Development Goals

Goal 6 - Clean Water and Sanitation

Target 6.6 - Protect and restore water related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

State Indicator Framework - 6.6.4 - Number of farm ponds/check dams/ percolation ponds/other works/existing Structures renovated.

During the year 2024-25, it is proposed to create 1,468 nos of Rain water harvesting structures and desiltation of 1,88,167 metre of supply channels in seven districts under Pradhan Mantri Krishi Sinchayee Yojana 2.0.

DEMAND 05 – AGRICULTURE – FARMERS WELFARE DEPARTMENT

ESTIMATE OF THE AMOUNTS REQUIRED FOR EXPENDITURE IN 2024 – 25

BUDGET ESTIMATE 2024 – 25
(Rs. in Thousands)

	Revenue	Capital	Loan	Total
DEMAND FOR GRANT - Voted	14,604,21,75	144,64,13	13,67,16	14,762,53,04
APPROPRIATION - Charged	55	---	---	55

Net Expenditure

(Rs. in Thousands)

HEAD OF ACCOUNT		2022 -2023	2023 – 2024	2023 – 2024	2024-25
		Accounts	Budget Estimate	Revised Estimate	Budget Estimate
2059	PUBLIC WORKS	2,47,11	5,15,13	4,15,13	4,34,05
2401	CROP HUSBANDRY	13,282,69,90	13,021,51,76	10,753,62,33	13,444,20,60
2402	SOIL AND WATER CONSERVATION	83,25,77	107,58,34	89,15,95	90,20,43
2408	FOOD STORAGE AND WAREHOUSING	35,62,43	13	2	2
2415	AGRICULTURAL RESEARCH AND EDUCATION	530,82,07	625,53,89	664,71,29	680,55,29
2435	OTHER AGRICULTURAL PROGRAMMES	239,49,95	264,84,81	269,21,00	273,62,69
2501	SPECIAL PROGRAMMES FOR RURAL DEVELOPMENT	71,40,00	71,68,16	97,08,00	86,07,18

HEAD OF ACCOUNT		2022 -2023	2023 – 2024	2023 – 2024	2024-25
		Accounts	Budget Estimate	Revised Estimate	Budget Estimate
2551	HILL AREAS	71,37	92,42	56,55	60,54
2702	MINOR IRRIGATION	5,83,30	7,03,73	5,79,01	6,17,81
2705	COMMAND AREA DEVELOPMENT	---	1	1	1
2810	NEW AND RENEWABLE ENERGY	---	1	1	1
3054	ROADS AND BRIDGES	---	---	15,20	---
3451	SECRETARIAT – ECONOMIC SERVICES	15,72,03	18,30,45	16,76,01	18,43,66
4401	CAPITAL OUTLAY ON CROP HUSBANDRY	117,53,56	60,56,92	99,85,61	111,92,60
4402	CAPITAL OUTLAY ON SOIL AND WATER CONSERVATION	4,16,06	24,01,93	25,46,22	7,22,67
4408	CAPITAL OUTLAY ON FOOD STORAGE AND WAREHOUSING	2,55,00	---	---	---
4415	CAPITAL OUTLAY ON AGRICULTURAL RESEARCH AND EDUCATION	---	10,00,00	11,74,02	15,00,00
4435	CAPITAL OUTLAY ON OTHER AGRICULTURAL PROGRAMMES	62,50,25	34,42,13	36,58,96	10,48,86
6401	LOANS FOR CROP HUSBANDRY	130,00,00	1	125,00,00	1
6425	LOANS FOR COOPERATION	252,90,60	16	155,61,34	---
6435	LOANS FOR OTHER AGRICULTURAL PROGRAMMES	---	---	37,45,54	12,67,15

HEAD OF ACCOUNT		2022 -2023	2023 – 2024	2023 – 2024	2024-25
		Accounts	Budget Estimate	Revised Estimate	Budget Estimate
7610	LOANS TO GOVERNMENT SERVANTS ETC.,	2,00,89	1,00,00	2,78,11	1,00,00

DEMAND 05 AGRICULTURE - FARMERS WELFARE DEPARTMENT
BUDGET ESTIMATE 2024-25

Rupees in Thousands (Gross)

Sl. No	Head of Department			Revenue	Capital	Loan	Total
1.	00501	Agriculture - Farmers Welfare Department - Secretariat	Voted	18,43,66	---	1,00,00	19,43,66
2.	00502	Directorate of Agriculture	Charged	2	---	---	2
			Voted	11,082,54,91	111,92,54	1	11,194,47,46
3.	00503	Directorate of Agricultural Marketing and Agri Business	Voted	199,41,48	10,48,86	12,67,15	222,57,49
4.	00504	Directorate of Seed Certification	Voted	69,44,28	---	---	69,44,28
5.	00505	Directorate of Horticulture and Plantation Crops	Voted	1,621,60,26	6	---	1,621,60,32
6.	00506	Agricultural Engineering Department	Charged	53	---	---	53
			Voted	707,31,07	7,22,67	---	714,53,74
7.	00507	Agro Engineering Services	Voted	74,77	---	---	74,77

Sl. No	Head of Department			Revenue	Capital	Loan	Total
8.	**00508**	**Tamil Nadu Agricultural University, Coimbatore**	Voted	649,31,89	15,00,00	---	664,31,89
9.	**00509**	**Directorate of Organic Certification**	Voted	1,33,22	---	---	1,33,22
10.	**00510**	**Directorate of Sugar**	Voted	254,06,21	---	---	254,06,21
Total			Charged	**55**	**---**	**---**	**55**
			Voted	**14,604,21,75**	**144,64,13**	**13,67,16**	**14,762,53,04**

Conclusion

"உழவினார் கைம்மடங்கின் இல்லை விழைவதூஉம்

விட்டேம்என் பார்க்கும் நிலை"

(திருக்குறள் – 1036)

"For those who've left what all men love no place is found, When they with folded hands remain who till the ground."

The first separate Agriculture Budget was introduced by the Agriculture – Farmers Welfare Department of Tamil Nadu in the year 2021-22. This initiative marked a historical achievement aimed at improving the livelihood of farmers, who play a crucial role in providing food to the population. In 2024-25, the Agriculture Budget was presented for the fourth consecutive time, continuing the focus on supporting and enhancing the agricultural sector.

The Honourable Chief Minister of Tamil Nadu has outlined three long term visions viz., increasing the net cultivated area, doubling the double cropped area and placing Tamil Nadu in one among the top three positions at National level in productivity of food grains, sun flower,

coconut, cotton and sugarcane to boost the State's agriculture sector. To achieve these goals, various schemes have been implemented to enhance the area and production of key crops such as paddy, millets, pulses, and oilseeds. These initiatives have resulted in a gross cropped area of 154.65 lakh acres during the year 2022-23.

Farmers rank high in terms of significance and priority for the Honourable Chief Minister of Tamil Nadu. In times of natural calamities such as heavy seasonal rainfall and drought, the government provides relief assistance to farmers through the crop insurance scheme and the state disaster response fund. These measures aim to protect farmers' livelihoods from being disrupted. The Tamil Nadu Government is committed to continuously supporting farmers, ensuring their welfare and stability.

During 2024-25, various special schemes like the Chief Minister's *Mannuyir Kaathu Mannuyir Kaappom Scheme* (CM MK MKS), Kalaignarin All Village Integrated Agricultural Development Programme, schemes for area expansion in agricultural crops to meet production requirements, scheme for

incentivising enhanced crop productivity, one village- one crop demonstration, special incentive to sugarcane farmers, sugarcane cultivation development programme, integrated horticulture development in dryland areas, promotion of cultivation of horticultural crops, agricultural mechanisation, custom hiring centres for the under privileged have been announced for the welfare of farmers.

Various other schemes like provision of mobile grain dryers, turmeric polishers, creating common branding, packaging facilities for value added products, establishment of integrated seed certification and organic certification complex, setting up of an automated DNA marker based technology embedded finger printing laboratory, watershed development programme in seven districts, developing protocols for drone spraying of inputs in horticultural crops for smart delivery have been announced for implementation for the development of farmers.

As depicted by the great poet Kambar in *Earezhupathu*, those who engage in agriculture will lead a prosperous life. In alignment with this vision and showing deep concern for the welfare

of the farming community, the Honourable Chief Minister of Tamil Nadu made a significant change by renaming the Agriculture Department to the Agriculture – Farmers Welfare Department which marks a historic milestone.

The Tamil Nadu Government is committed to ensuring that all schemes, infused with emerging new scientific technologies, announced in the Agriculture Budget for the year 2024-25 for the welfare of farmers are effectively implemented and reach the farmers.

M.R.K. Panneerselvam
Minister for Agriculture – Farmers Welfare.