

Honourable Speaker!

Agriculture came to existence as a result of quest, evolved into a civilization, flourished as a means of livelihood changing people's ways of life. Sadly, with time it detracted to a mere means of survival. Therefore, a separate Agricultural Budget has been introduced to ameliorate it's status by first elevating it to a Service and later adorning it with a highly resilient Professional status. This can only be achieved by increasing crop productivity to former levels and thereby improving the socio-economic status of farmers.

In the history of Tamil Nadu, an exclusive budget for Agriculture was presented for the first time during the last year so as to fulfill the unrelenting needs of the farming community and to feed the hungry & poor. There is a dire need to dissuade farmers from believing that conversion of agricultural lands into housing sites is a more lucrative option than retaining it for cultivation purposes. The only route to doing this is by instilling enormous confidence amidst the farming community which will levitate Agriculture, hailing it the noblest of all professions. With this objective, I am immensely pleased to present the agriculture budget for the second time on the floor of this Assembly.

I begin my speech by paying my profuse gratitude to the Hon'ble Chief Minister of Tamil Nadu for guiding me

and given me an opportunity to present the second Agriculture Budget.

I wish to reassure that the agriculture budgets will hoist Agriculture to a zenith from the present abysmal platform, through relentless efforts and hard work.

Thiruvalluvar eulogized agriculture as the greatest profession by saying "They live, the plough for life who steer; All others worship in the rear". The Tamil Literature *Kondrai Vendhan* praised agriculture to be '*The Wealth garnered through tillage has the greatest regard*' (மேழிச்செல்வம் கோழைபடாது) and *Aathisoodi* persuaded people to "Cultivate Crops" ('*நெற்பயிர் விளை*'). Likewise, there are many citations found in ancient Tamil Literature on Agriculture and Irrigation Management. The ancient Tamils had classified their lands as *Kurinji*, *Mullai*, *Marutham*, *Neithal* and *Paalai* based on the crops cultivated and organized their lifestyles, accordingly.

Shakespeare, in his works compares governance to that of maintaining a garden. The former American President Thomas Jefferson hailed agriculture as, 'It is our wisest pursuit, because it will in the end contribute most to real wealth, good morals and happiness'.

First Agriculture Budget at a glance

The last year's Agriculture budget came as a delight to us, leaving us enthralled in the babble of a new born. This present Agriculture Budget is sure to enrapture us with the joys a toddler can bring. From the way I present my speech and guide the implementation, you will come to know that in the coming years, the Agriculture Budget is going to scale greater heights just like a dashing young kid would. I wish to bring to the notice of the floor that when I presented the budget in August last year, only six months were left in that financial year to present and implement the schemes in the grim backdrop of the peaking second wave of the pandemic and also the havocking monsoon. However, Government Orders have been issued for 80 out of the 86 announcements made and the schemes are in various stages of implementation. For the remaining six announcements that are long-term in nature, detailed Guidelines are being formulated with components and estimates.

The announcements made during last year are being implemented and all efforts are being made to carry them forward. Schemes that can bring a paradigm shift in Agriculture are being introduced this year.

The Honourable Chief Minister inaugurated the Opening of Mettur Dam shutters on 12.06.2021 for the Kuruvai Cultivation and announced Kuruvai Cultivation Package at an estimated cost of Rs.61.09 crore. As a result, 4.90 Lakh acres have been cultivated, paving way

for increased income and better livelihood for around 3.16 Lakh delta farmers. This is a historic achievement in the last 46 years.

Further, to effectively utilize the bountiful rainfall received by the State in the year 2021, the Government geared up to desilt the irrigation channels, distribute inputs and provide extension services. Because of this, as on 14.03.2022, the area under paddy has reached 53.40 lakh acres which is 4.86 lakh acres in excess of last year's paddy area.

Kalaignar's "All Village Integrated Agricultural Development Programme", "Chief Minister's Dryland Development Mission", "Organic Development Scheme", "Scheme for making youth into Agri-Entrepreneur", "Palmyrah Development Mission" and "Integrated Farming system" are all being implemented in a holistic way.

Traditional Paddy Varieties are being cultivated in an area of 200 acre in Government State Seed Farms through "Nel Jeyaraman Traditional Paddy Varieties Conservation Mission" and so far 59 MT of seeds have been produced.

The "Kit of Agricultural Implements" comprising six implements has been provided to the farmers with a budget allocation of Rs.15 crore to improve the working efficiency of the farming folk. 20,000 Tarpaulins were

distributed to farmers at an outlay of Rs.5 crore to protect the agricultural produce from natural calamities.

In order to facilitate re-cultivation, input subsidy to the tune of Rs.154.69 crore has been disbursed to 3,35,143 farmers who were affected by North East monsoon last year.

The Honourable Chief Minister of Tamil Nadu constantly urged the Union Government to ensure timely supply of fertilizers, which resulted in an uninterrupted supply of 17 Lakh Metric Tonne of Urea, Potash and DAP fertilizers without any shortage.

Though self-sufficiency in food production has been achieved, with a view to increasing the farmer's income through value addition and exports, Government Order has been issued for establishing a Food Processing and Agro Export Promotion Corporation and preliminary works have been initiated.

Climate change has been a major global challenge since the beginning of the twenty-first century. The Sixth Assessment report released by the Intergovernmental Panel for Climate Change (IPCC) states that adverse economic impacts due to climate change including slow on-set of monsoon and extreme weather events affect Agriculture, Forestry, Fisheries, Energy and Tourism. This results in lowered agricultural productivity which impacts the food security and in turn human health. These

extreme weather events also damage infrastructure rendering individuals homeless and affecting their livelihood. Also, global warming leads to rise in temperature which in turn impacts water resources, negatively.

By virtue of its geographical location, the impact of global climate change is largely felt in Tamil Nadu. As per the Sixth Assessment Report, 29 districts in Tamil Nadu are identified as vulnerable to climate change and hence it is necessary to take steps to reduce its impact on agriculture.

While it may not be possible to completely mitigate the effects of climate change immediately, preference will be given for executing plans towards increasing the adaptability to climate change.

In order to withstand climate change, crop diversification is encouraged. Special schemes will be implemented to popularize the cultivation of millets and pulses as an alternative to water intensive crops.

Schemes for establishing suitable water harvesting structures and ground water recharge systems are introduced in the Agriculture Budget for increasing production in dry land. All these components will be taken into account for agriculture development and this Government will take steps to achieve 126 lakh MT of food grains production in 2022-23.

Department of Agriculture

1. Kalaigharin All Village Integrated Agriculture Development Programme

A grand scheme called "**Kalaigharin All Village Integrated Agriculture Development Programme**" was announced in the First Agriculture Budget in order to help Tamil Nadu emerge with balanced growth following the doctrine of social justice as visualized by Muthamizharignar Kalaigharin.

With the main objective of bringing holistic development in all village panchayats and to bring happiness to all the farmers, this project has been designed to be implemented in the village panchayats identified under **Anaithu Grama Anna Marumalarchi Thittam** every year, which is being implemented by the Department of Rural Development & Panchayat Raj. During the first year, this project is being implemented in 1997 village panchayats of **Anaithu Grama Anna Marumalarchi Thittam** as these two projects are converged and implemented parallelly. All the subsidies, welfare schemes, infrastructure, agricultural technology and training programmes of the Department of Agriculture will be converged and implemented effectively in close coordination with the Department of Rural Development & Panchayat Raj for the upliftment of farmers. Hence, the impact of the project will be clearly visible to all by creation of numerous drying yards,

thrashing floors, paddy storage structures, farm ponds, percolation ponds and minor irrigation structures in these villages.

Under this project, coconut saplings will be distributed at free of cost to households in the villages besides a package of horticultural seedlings such as lemon, papaya, drumstick and curry leaves to ensure nutritional security in the rural areas.

During the year 2022-23, the scheme will be implemented at an outlay of Rs.300 crore in 3,204 village panchayats converged with Anaithu Grama Anna Marumalarchi Thittam.

2. Chief Minister's Dry Land Development Mission

The dryland crops which are not supplemented by ground water, rely completely on every single drop of rain coupled with the hard work of the farmers. This dryland mission will be implemented at a total outlay of Rs.132 crore, covering an area of 7.5 Lakh acre in 3,000 dryland clusters to support the dryland farmers to take up successful cultivation of dryland crops. This would increase the income and livelihood of three lakh dryland farmers. Agricultural inputs and seeds will be provided at subsidized cost. Priority will be given to the farmers in villages where the "Kalaigharin All Village Integrated Agriculture Development Programme" is being implemented.

3. Crop insurance

Despite severe financial crunch, the State Government continues to implement the Crop Insurance Scheme to protect the farmers from crop losses due to adverse natural calamities. Due to the continuous efforts of the Government of Tamil Nadu, an amount of Rs.2,055 crore has been disbursed to 9.26 lakh farmers as compensation for the year 2020-2021.

For implementing this crop insurance scheme continuously during 2022-23, I proudly convey the sweet news that the State Government has allocated an amount of Rs.2,399 crore as state share of premium subsidy.

4. State Agriculture Development Scheme

To fulfill the farmers need and increase their income with various components, this Government will introduce a new Scheme namely State Agricultural Development Scheme, this year with a total allocation of Rs.71 crore. This will be implemented by **“Kalaigharin All Village Integrated Agriculture Development Programme”**. This scheme includes the following key features.

i) Promotion of Organic Farming

As announced in the last year Agriculture Budget, the State Government has initiated establishment of Nammazhvar Organic Farming Research Institute for encouraging the farmers who are interested in Organic farming. Now, during 2022-23, a sum of Rs.4 crore has

been allocated for production of Organic produces in foodgrains, vegetables, fruits for development of immunity to lead a healthier life. Financial assistance at the rate of Rs.1 Lakh per group will be extended to 100 farmers and Farmer producer who are interested in production and sale of organic inputs like Vermicompost, *Jeevamirtham etc.*,

Besides, under Paramparagat Krishi Vikas Yojana, farmers who are interested in Organic farming will be integrated to form 150 clusters covering an area of 7,500 acres at an outlay of Rs.5 Crore under Union and State Government funds.

ii) Distribution of Tarpaulin to Farmers

Farmers will suffer when their hard earned produce gets drenched in rain. To safeguard the harvested produce from natural disasters and also for utilizing as drying yard, Tarpaulins will be provided to 60,000 farmers at subsidized cost at an outlay of Rs.5 crore.

iii) Coconut Development Scheme

In order to augment productivity of Coconut, to increase oil content and to prevent button shedding, Coconut Micro Nutrient mixture, green manure seeds, Bio-Fertilizers and Borax will be distributed at subsidy. Further, assistance will also be extended for Pheromone Traps, Bio-pesticides, Parasitoids and Predators for controlling pest and diseases besides encouraging

cultivation of intercrops in perennial crops such as Coconut, Mango, Cashew etc., with Demonstration plots. This Scheme will be implemented at an outlay of Rs.9 crore.

iv) Nel Jeyaraman's Traditional Paddy Varieties Conservation Mission

The Nel Jeyaraman Traditional Paddy Varieties Conservation Mission is being implemented in order to preserve and restore the traditional paddy varieties in Tamil Nadu. During 2022-23, the Traditional Paddy varieties will be cultivated in 200 acres in the State Seed Farms and distributed at subsidy to 20,000 farmers at an outlay of Rs.75 Lakh.

v) Special Package of Assistance for Alternative Crops during Kuruvai season

Special Package will be provided to encourage the farmers to take up alternative crops such as Millets, Pulses and Oilseeds in Kar, Kuruvai, Sornavari season in an extent of 66,000 acres at an outlay of Rs.10 crore.

vi) Rice Fallow Pulses

In order to encourage the cultivation of Rice Fallow pulses with the additional production of 13,000 MT of Pulses, an amount of Rs.5 crore will be allocated.

vii) New technique on propagation of Paddy seedlings in pro-tray method will be demonstrated to increase the

productivity of Paddy crop. Protray seedling will be produced in the State Seed Farm in Tirukkadaiyur of Mayiladuthurai District in an area of 250 acres.

viii) Pulses Seeds will be distributed for cultivation as bund crop, in an area of 5 lakh acres to control the pests naturally and to get additional income. This Scheme will be implemented with an allocation of Rs.3 crore from State fund.

ix) Zinc Sulphate and Gypsum will be provided at subsidized cost to increase the paddy productivity covering an area of 1 Lakh acre each at an outlay of Rs.5 crore.

x) Seed Distribution

Tamil Nadu State Seed Development Agency (TANSEDA) will Produce 30,000 MTs of certified seeds of Paddy, Pulses and Oilseeds and distribute to farmers during the year 2022-23.

xi) Distribution of Agricultural Implements to Farmers

The distribution of Kits of Agricultural Implements, which has elicited good response from farmers, will be extended to half a lakh of small and marginal farmers with a financial allocation of Rs.15 crore during 2022-23.

xii) Making Youth into Agri-entrepreneurs

Financial assistance will be provided at the rate of Rs.1 Lakh each to the 200 unemployed Agriculture or Horticulture or Agricultural Engineering graduates for establishing Agri clinic or Agro based activities with the financial allocation of Rs.2 crore.

Xiii) Rural Youth Agricultural Skill Development Mission

For taking up Agriculture and agro based industry as a profitable venture, Skill training will be imparted to 2,500 rural youth during the year 2022-23 as done during the previous year.

xiv) Reward to best performing farmers

The Government will be pleased to give awards and rewards to the best performing farmers in organic farming, innovations in local agriculture techniques and machineries and best performing exporters.

xv) Tamil Nadu Mission for Sustainable Green Cover in Farm Lands

Forests are natural magnets that attract rain and emerald umbrellas that cool the earth. It is necessary to grow trees and increase the forest cover in Tamil Nadu. Tree cultivation will be encouraged to withstand climate change and provide good returns to farmers in future like a fixed deposit. During 2022-23, high value tree seedlings

such as Red sander, sandal, mahogany, teak etc., will be distributed to farmers at subsidy at an estimated budget outlay of Rs.12 crore to encourage tree based farming (Agro forestry).

5. Tamil Nadu Millet Mission

Millets are minuscule in appearance, but highly nutritious for strengthening the body. To endorse this concept, the United Nations General Assembly has declared the year 2023 as the "International Year of Millets". To enhance millet production, Two Millets Special Zones will be formed covering the districts of Tiruvannamalai, Salem, Kallakurichi, Villupuram, Cuddalore, Dharmapuri, Krishnagiri and Vellore districts as one zone and Thoothukudi, Virudhunagar, Madurai, Tenkasi, Ramnathapuram, Sivagangai, Theni, Trichy, Karur, Dindigul Ariyalur and Perambalur as the second zone.

To create awareness on the importance of millet nutrition among farmers, Entrepreneurs, Farmer Producer Organizations, Women Self Help Groups, voluntary organizations and consumers, "**Millet Festivals**" will be organized at the State and District levels. Farmers will be encouraged with assistance for activities starting from cultivation till marketing the produce with value addition. This scheme will be implemented with a total allocation of Rs.92 crore from Union and State Government fund.

To promote production and consumption of millets among Self Help Groups, the State Government will take steps to support 500 marginal farmers at a cost of Rs.1 crore under Tamil Nadu State Rural Livelihood Mission.

6. Pulses Development Scheme

In order to achieve self sufficiency in Pulses production, Red gram production and cultivation of Pulses in fallow lands, a Special Redgram Zone will be formed comprising Krishnagri, Dharmapuri, Tiruvannamalai and Salem districts. Steps will be taken for processing, value addition and marketing the harvested pulses. This scheme will be implemented at an outlay of Rs.60 crore, during 2022-23, with Union and State Government fund.

7. Integrated Farming System for Sustainable Income

The **Integrated Farming System (IFS)** will be demonstrated with cultivation of crops and Fodder along with rearing of Milch cow, Goats or Sheep & Poultry Birds, cultivation of Tree crops, apiary, Vermi-compost production and Nutri-garden, by providing an assistance of Rs.50,000/- for each IFS unit. During 2022-23, 13,000 IFS units will be established at an outlay of Rs.65.65 crore with Union and State Government fund.

8. Sustainable Cotton Cultivation Mission

As per the quote "*பண்ணல்வேலி இப்பண்ண நல்ஊரே*" in "*புறநானூறு*" (*Puranaanooru*), Sangam poets praised the villages that were surrounded by Cotton fields.

The "**Sustainable Cotton Cultivation Mission**" will be implemented at an outlay of Rs.15.32 crore with Union and State Government fund, for enhancing the Cotton yield during 2022-23. Cultivation of organic cotton will also be encouraged.

9. Strategic Paddy Cultivation Programme

Steps will be taken to take up paddy cultivation in an area of 19 lakh ha during 2022-23, by implementing **Strategic Paddy Cultivation Programme** for getting higher yield with an allocation of Rs.32.48 crore under Union and State Government fund.

10. Oilseeds Area and Production Development Scheme.

Sunflower is always oriented towards the Sun, with a smile. The scheme is envisioned to implement the longterm vision of the Hon'ble Chief Minister to increase the productivity of Sunflower and to bring Tamil Nadu in the top three States in terms of Production. The project will be implemented in Thoothukudi, Virudhunagar, Ramanathapuram, Tenkasi, Karur, Dindigul and Ariyalur districts to attain enhancement in area, Production and

Productivity of Sunflower, Groundnut, Sesame and Castor crops at an outlay of Rs.28.50 crore under Union and State Government fund.

11. Digital Agriculture

Honourable Speaker,

Honourable Chief Minister is monitoring the progress of all flagship schemes on real-time basis through a specially designed CM Dashboard. Realising its importance, I am proudly informing that Agriculture and Farmers' Welfare Department has also designed a Scheme on digital agriculture.

All technologies from seed to yield can be obtained electronically through Uzhavan Mobile Application. All the technologies will be communicated electronically to the farmers from sowing to harvest and marketing of the produce field-wise for getting higher income.

i) Individual Farm based Crop Plan, survey numbers and sub divisions of all villages will be geo-tagged, which will be super imposed with details of land owner's basic information, soil health and cultivated crops. The seven Agro-climatic zones are divided into 1330 Micro Agro-climatic zones to formulate new profitable crop plan to farmers based on factors of production.

ii) Artificial Intelligence Technology will be applied to monitor the Pest and Disease infestation in crops and instantaneous management measures will be delivered to

farmers through SMS advisories in co-ordination with Tamil Nadu e-Governance Agency and Tamil Nadu Agricultural University.

iii) In co-ordination with Tamil Nadu Agricultural University and Tamil Nadu Drone Corporation, farmers will be imparted with training and demonstration in seven Farmers Training Centres (FTC) for the usage of drones in pesticide spray and survey of crop growth stages.

iv) The new digital Technology "**Internet of Things**" (**IoT**) will be adopted in State Seed Farms and State Horticultural Farms for automated irrigation and fertigation, for offering training to farmers on this new technology.

v) Perarignar Anna proclaimed "**உழவனின் உள்ளத்திலே புயல் இருக்குமானால், வயலிலே வளம் காண முடியாது**" To fulfill the vision of Perarignar Anna to enlighten the souls of farmers, an exclusive portal called "Tamil Mann Valam" will be launched in co-ordination with the Tamil Nadu Agricultural University in which the farmers can get the soil fertility status of their lands - survey number wise and they can print the soil health cards by themselves. Recommendations based on soil fertility will be prescribed for cultivation of Agricultural, Horticultural crops and Agro-forestry trees.

vi) **Remote Sensing technology** will be used to assess cropped area and yield, through which we can forecast

the price by Agricultural Marketing Intelligence Cell for helping the farmers to get fair price for their produces.

vii) Transparency in scheme implementation

To ensure transparency in the selection of beneficiary under various schemes implemented by the Agriculture and Farmers Welfare Department, efforts will be taken to register all beneficiaries gradually.

viii) Facilities will be made for online advance booking of seeds, planting materials, fruit plants and coconut seedlings, so that planting is taken up in the right cropping season itself.

ix) The Agricultural labourers can register their details such as District, Block, Village directly in the Mobile Application. This application will serve as a platform to provide employment to skilled Agricultural labourers and also serve the farmers to undertake agricultural activities at appropriate time.

x) Cashless Transaction in Agricultural Extension Centres

The Farmers will be provided with facilities for paying the farmer contribution through e-Challan, Credit Card, Debit Card, Unified Payments Interface (UPI) etc., at Agricultural Extension Centres for the purchase of agricultural inputs. This cashless transaction will be adopted on pilot basis in one block in each District.

I proudly inform all members of this Assembly that the scheme comprising new digital technologies will be implemented at a cost of Rs.8 crore with Union and State Government fund.

12. Golden Bean –Increase Area under Soya Bean

With the aim to increase the area under short duration Soybean, an amount of Rs.1.20 crore will be allocated under Union and State Government fund for implementation in Thanjavur, Salem, Tiruvallur, Tirunelveli, Villupuram and Cuddalore districts.

13. Establishment of a new Soil Testing Laboratory at Mayiladuthurai

Cost of cultivation of crops can be reduced by crop specific fertilizer recommendations to the farmers and judicious application of soil nutrients based on soil analysis. Hence, a new Soil Testing Laboratory will be established during 2022-23, at a budget outlay of Rs.75 lakh for the benefit of farmers in newly formed Mayiladuthurai District.

14. Genetic Diversity Fairs

There are many indigenous and traditional varieties of Crops with desirable traits which are unexplored and can be considered for various varietal evolution programmes. To identify such superior varieties and use them up for the selection process, Genetic Diversity Fairs will be conducted in District Head Quarters at least three

times in a year in which farmers can showcase their unique varieties in different crops. These fairs help the Scientists to attend and identify the varieties based on their superior traits for inclusion in their varietal research, for which the Government will allocate a sum of Rs.1.5 crore during 2022-23.

15. Additional 20 per cent subsidy for Small and Marginal farmers of Scheduled Caste and Scheduled Tribes.

In order to support to Small/Marginal farmers under SC and ST categories to reduce the financial burden in their contribution to avail the benefits under high value schemes, additional subsidy of 20 per cent will be permitted over and above the existing subsidy rate. To implement this initiative, an amount of Rs.5 crore will be allocated from State Fund during 2022-23.

16. Special Fund for pest and disease outbreak in crops.

Due to effects of climate change, there have been many sudden outbreaks of Pests and Diseases in the recent years. Hence, to contain the outbreaks immediately after the incidence, a special fund will be created at an initial outlay of Rs.5 crore during 2022-23.

Department of Sugar

Through the verse, “கரும்பாட்டிக் கட்டி சிறுகாலைக் கொண்டார்” Naladiyar narrates that the ancient Tamils knew the technique of making sugar by crushing sugarcane. Sugarcane tastes good when chewed or processed into sugar. It is sweet news to the farming community that the Department of Sugar which was under the control of Industries Department has been brought under Agriculture and Farmers Welfare Department.

The Government of Tamil Nadu is taking strenuous efforts to increase the sugarcane yield and sugar recovery. Special thrust is being extended by the Co-operative, Public and Private sector sugar mills to cultivate high yielding and high sugar recovery varieties of sugarcane.

In order to protect the welfare of the Sugarcane farmers and to improve the efficiency of Sugar Mills, the following schemes will be implemented during 2022-2023.

17. Special Incentive to Registered Sugarcane farmers

To address the longstanding demand of Sugarcane growers and associations, to increase the price of sugarcane, the Government has decided to extend a Special Incentive of Rs.195/- per MT of Sugarcane to the eligible farmers who have supplied sugarcane to

registered Sugar Mills during 2021-22 crushing season. About 1.20 lakh sugarcane farmers will be benefitted under this scheme.

18. Sugarcane Cultivation Development Programme

In order to reduce the cost of cultivation of sugarcane, Sugarcane cultivation Development programme will be implemented by extending subsidy for Breeder seed setts, tissue culture seedlings, bud chip seedlings, single bud setts, bio-fertilizers, de-trashing tools, water soluble fertilizers and trash shredding operation besides installation of Hydraulic tippler at an outlay of Rs.10 crore under Union and State Government Fund.

19. Modernization of the Laboratories in Sugar Mills

In order to perform the laboratory analysis in a fast accurate manner, the laboratories in the 15 Co-operative and Public Sector Sugar Mills viz., Amaravathi, Arignar Anna, Cheyyar, Chengalrayan, Dharmapuri, Kallakurichi-1, Kallakurichi-2, MRK, Madurantakam, Perambalur, Subramaniya Siva, Salem, Tirupattur, Tiruttani and Vellore will be modernized at an outlay of Rs.3 crore under State Government Fund.

20. Resuming the operation of NPKRR Cooperative Sugar Mills.

The NPKRR Cooperative Sugar Mills which is the only sugar mill located in Mayiladuthurai District has not been functioning from 2016-17 crushing season due to less availability of cane. Considering the representations of those farmers, a committee will be constituted to examine the possibilities to resume its operation.

21. Automated weighment system in Sugar mills

In order to ensure the accuracy in the weighment of sugarcane supplied and expedite the payment to farmers, the existing cane weighment systems which are in use in 15 Cooperative and Public Sector Sugar Mills will be automated at an outlay of Rs.1.50 crore, from State Government fund. This project will ensure conveying the weighment details instantly to farmers, vehicle owners and field staff through SMS.

HORTICULTURE AND PLANTATION CROPS

Horticulture is another wing of Agriculture and Farmers Welfare Department protecting the interest of the farming community. Horticulture department adorns the crown of Agriculture & Farmers Welfare Department by providing fragrant flowers, nutritious vegetables, delicious fruits, aromatic spices and tasty beverages.

22. Promotion of micro irrigation on cluster based approach

Tamil Nadu Government is giving special attention to increase the area under micro irrigation on cluster basis, by providing 100% subsidy for Small and Marginal Farmers and 75% subsidy for other farmers. The scheme will be implemented in an extent of 2,50,000 acre at an outlay of Rs.960 crore with Union and State Government fund.

23. Tamil Nadu Organic Farming Mission

“Tamil Nadu Organic Farming Mission” will be implemented by Department of Horticulture on a cluster based approach with two clusters in each district with a cluster size of 50 ha.

It is programmed to undertake the promotional activities such as creating awareness on cultivation practices through special trainings and exposure visit, giving information on soil health, advice on bio-fertilizer production units and distribution of inputs, creation of residual analytical laboratory for testing the produces, registering with Organic Certification Department etc., at an outlay of **Rs.30 crore** with Union and State Government fund. Also, cattle shed and vermi compost unit will be set up in coordination with Rural Development Department.

24. Promotion of Crop diversification programme

Through this programme, farmers will be encouraged to cultivate high value, short duration crops like vegetables, fruits, flowers, spice crops as alternative to low value crops, after harvesting field crops. This scheme will be implemented in an area of **20,000 acres** at an outlay of **Rs.16 crore** under Union and State Government fund.

25. Mission for promotion of Fruit Crops

Under this Mission, area under fruits will be expanded to 22,000 acres during 2022-23, through supply of planting materials and critical inputs. All activities from advance booking of quality planting materials such as Mango, Guava, Sapota, Jamun, Jack, Pomegranate, Ber, distribution of inputs to getting feedback from the farmers will be made online. The project will be implemented at an outlay of Rs.20.21 crore under Union and State Government Fund.

26. Precision farming for higher yield

Precision farming will be promoted to increase the productivity in horticultural crops by using new technologies. Precision farming helps to reduce the labour cost and increase yield to attain export standards resulting in high income. The scheme will be implemented in an area of 8,300 acre at an outlay of Rs.5 crore under

State Government fund. Assistance will be provided for quality planting materials and inputs.

27. Promoting Intercrop cultivation

To promote intercropping in coconut, mango, guava and banana, "**Intercrop Kits**" will be given to small and marginal farmers for covering an area of 38,000 acre at an outlay of Rs.27.51 crore.

28. Hi-Tech Practices in cultivation of Horticulture Crops

Farmers will be encouraged to adopt high yielding technology such as Green House, Shade net and mulching for the cultivation of Capsicum, Tomato, Cucumber, Cut-flowers at an outlay of Rs.25.15 crore

Further, assistance will be provided to 500 urban beneficiaries for cultivation of vegetables and greens for their own need through Hydroponics and vertical gardens at an outlay of Rs.75 lakh.

29. Improving livelihood of Scheduled Caste, Scheduled Tribe farmers through micro irrigation

The farmers belonging to Scheduled Castes and Scheduled Tribes who have applied for electricity connection under tatkal scheme under the Tamil Nadu Adi Dravidar Housing Development Corporation (TAHDCO) will be identified and given subsidy for Borewells, Motor Pump

and installation of Micro irrigation for improving the livelihood of farmers. The scheme will be implemented under Union and State Government fund at an outlay of Rs.20 crore for 2,000 farmers.

30. Formation of Honey Clusters

Bees that produce a drop of nectar by visiting hundreds of flowers prove the agility. Bees act as agents for pollination of flowers. Considering their importance to increase the production of Horticulture crops and enhance the farmers' income, 37 honey bee clusters will be formed to promote beekeeping at a financial outlay of Rs.8.58 crore by the Union and State Government Fund.

Bee colonies and equipment manufacturing centres will be established for distribution of quality honey bee colonies and its equipment to farmers thereby promoting new entrepreneurs.

A special emphasis will be given to women farmers in coordination with the Departments of Adi Dravidar and Tribal Welfare, Rural Development, Khadi and Village Industries.

To augment the income of Self-Help Groups, 3,350 Bee Keeping units will be created under Tamil Nadu State Rural Livelihood Mission during 2022-23 at a cost of Rs.1.67 Crore.

31. Daily Income through loose flower cultivation

Tamil Nadu stands second in production and first in area at National level in loose flowers.

In order to increase the daily income of women, the cultivation of flower crops like Jasmine, Tuberose, Marigold, Rose and Chrysanthemum will be increased in an extent of 4,250 acres at an outlay of Rs.5.37 crore.

32. Special vegetable area expansion programme to increase the arrivals in Uzhavar Sandhai.

Uzhavar sandhais with less vegetable arrivals will be identified and special attention will be given to the villages in and around such Uzhavar sandhais. This year, it is programmed to increase the area by 6,250 acres through distribution of seeds, Protray seedlings and inputs with a financial outlay of Rs.5 crore with State Government fund. This will ensure continuous increase in arrival of vegetables to the Uzhavar Sandhais.

33. Focus on cultivation of Ginger and Turmeric

*'இஞ்சி மஞ்சள் பைங்கறி பிறவும்
பல்வேறு தாரமொடு கல்லகத்து ஈண்டி'*

mentions Maduraikanchi. The growing demand for Turmeric and Ginger in national and international markets, the farmers cultivating these crops will be encouraged by providing back ended subsidy for ploughing, seed rhizomes and other inputs. The scheme

will be implemented in an area of 6,250 acre at an outlay of Rs.3 crore.

34. Special focus on Garlic cultivation

Cultivation of Garlic with medicinal value will be expanded to Kalrayan hills, Kolli Hills and other potential places. This scheme will be implemented in an extent of 1,250 acres with an outlay of Rs.1 crore to extend an assistance of Rs.8,000 per acre.

35. Revival of Traditional Varieties in Horticulture Crops

The traditional varieties of fruits, vegetables and medicinal plants once cultivated in Tamil Nadu have now been under extinction. '**The seed is the weapon**' - as said by Nammazhvaar, a 'Gene Pool' will be established to preserve these traditional varieties of horticultural crops at State Horticultural Farms.

Traditional varieties with Special qualities such as Kannadi kathari, Aandarkulam Kathari, Kottampatti kathari, Vari kathari, Vaasudevanallur kathari in Brinjal, Pallapatti Then murungai, Karumbu murungai in Moringa, Kuzhi thakkali, Kodi thakkali, Annanji thakkali in Tomato, Aanaikomban, Sivappu vendai in Bhendi, etc, will be motivated to cultivate in farmers field. The required vegetable seeds will be produced in State Horticultural Farms and distributed to farmers and public, who wish to grow traditional varieties in the home-stead gardens.

The scheme will be implemented at an outlay of Rs.2 crore under Union and State Government fund with a subsidy of Rs.8,000 per acre covering an area of 2,500 acres.

36. Promotion of off-season Tomato cultivation to regulate Price fluctuations

Tomato is being cultivated in homestead garden, Protected and open field condition in an area of 53,000 hectare with a production of 16 Lakh metric tonnes in Tamil Nadu. The tomato price fluctuations affect the economy of the farmers to a larger extent.

Tomato growing farmers will be encouraged to increase the cultivation during the off-season period i.e., May, June, October, November and December in an area of 5,000 acres by providing incentive or inputs at the rate of Rs.8,000/- per acre with a total outlay of Rs.4 crore under Union and State Government fund.

37. Establishment of Garden in Government Girls Hostel

To help girl students to identify fruits, vegetable and herbal plants, their importance, cultivation methods and its nutritional value, gardens will be established with Fruits, Vegetables and Medicinal plants in Girls Hostels all over Tamil Nadu.

This project will be implemented in 200 Girls Hostels at an outlay of Rs.20 lakh under State

Government fund in which kits valued Rs.10,000/- per kit comprising Fruit seedlings, Medicinal plants, Coconut seedlings, vegetable seeds garden tools and other inputs will be distributed at full subsidy.

38. Palmyrah Development Mission –Importance to Palmyrah value added products

The ancient Tamil Naladiyar indicates that the palm tree will grow and bear fruit even if left unattended after sowing.

The Palm tree which is the State tree of Tamil Nadu is entwined with the lives and language of the Tamil People. Sangam literature has notified this. Palm leaves were the ancient literary tool of Tamil language.

There are 5 crore palm trees in Tamil Nadu. The livelihood of about 3 lakh families depends on palmyrah trees by weaving baskets, mats and ropes with palm leaves and fibre. 11,000 Palm based workers rely on palm trees by harvesting and selling of Nungu and Neera.

To promote palmyrah cultivation, State Government has introduced Palmyrah Development Mission in the last year Agriculture Budget. To strengthen the mission, Honourable Speaker of Tamil Nadu has voluntarily contributed one lakh palmyrah seeds at free of cost to the scheme implementation.

Efforts will be taken to distribute 10 lakh of seeds during 2022-23. In order to improve the livelihood of

the palmyra farmer, 75 per cent subsidy will be provided for tree climbers implements and value addition unit for making palm jaggery, palm candy.

Training on palm jaggery production will be imparted and equipment will be provided to 250 farmers. In addition, 100 women will be properly trained and encouraged to make palm leaf handicrafts. They will be provided with raw materials and the handicrafts produce will be purchased by the State and District Associations on piece rate basis for continuous employment.

The scheme will be implemented at a financial outlay of Rs.2.65 crore under State Government fund. The best inventor of palmyrah climbing device will be honoured with an award.

Under MGNREGS, 25 lakh palm seedlings will be planted during 2022-23.

39. Online Services in Horticulture – Plantation Crops

E-commerce facilitates the marketing of the Horticulture produces directly to the consumers without any intermediaries. The produce of Farmers, Farmers Interest Group (FIG), Farmers Producer Group (FPG) and planting materials, seeds, inputs, spice crops such as Cardamom, Pepper, Cinnamon, Clove and value added products such as Jam, Jelly, Pickle, Dry fruits, Eucalyptus

oil produced by State Horticulture Farms will be marketed online.

- Three storage depots will be established in Chennai, Madurai and Coimbatore with a total outlay of Rs.1.50 crore for sorting, grading and packing of the produces.
- Products will be distributed to customers through online distribution companies. The scheme will be implemented at an outlay of Rs.2 crore.

40. Creation of Germplasm for Spices in State Horticulture Farms

Gene pool will be created by collecting different kinds and varieties of spices all over India and it will be maintained at State Horticulture Farms for the production and distribution of planting materials as per the farmer's choice.

As a first phase, the Germ plasm collection will be created for important spices such as Pepper and Nutmeg in State Horticulture Farms of Nilgiris, Kodaikanal, Kolli hills, Yercaud, Courtallam and Javvadu Hill areas. The scheme will be implemented at an outlay of Rs.1 crore for the activities viz., ploughing, Planting, inputs etc.

41. Herbal gardens - essential for health

The ancient literature has proved that "Food is medicine and medicine is food". Considering the importance of herbs, 4,000 home herbal gardens will be promoted with a financial outlay of Rs.1 crore. The required planting materials will be supplied from State Horticulture Farms.

The State Government will take up Moringa Promotion by establishing moringa nurseries under MGNREGS and Tamil Nadu State Rural Livelihood Mission.

Agricultural Engineering Department

42. Agricultural Mechanization

Agricultural tools play an important role to overcome the labour shortage. Now, agricultural operations like harvesting, transplanting, weeding, thrashing, fruit plucking have been mechanized. Nowadays, Mechanization has become inevitable in farming sector.

In order to increase the net income of farmers, by obtaining the required agricultural machinery and implements at subsidized rate, 6,357 machinery and implements will be distributed to the individual farmers and preference will be given for small agricultural machinery and implements and small and marginal farmers during the year 2022-23.

Also, to attract youth to farm sector, Agricultural Machinery Custom Hiring Centres will be established at block and village levels through Farmers, Entrepreneurs, Registered Farmers Societies and Farmer Producer Organizations (FPOs). This includes Sugarcane based Hi-tech machinery and Drones.

With a view to support those small and marginal farmers who cannot afford to buy high value machinery, for carrying out the agricultural operations, subsidy assistance will be provided for engaging agricultural machinery and implements with a maximum assistance Rs.800/acre limited to five acres per farmer. An amount of Rs.10 crore will be allocated during 2022-23 under Union and State Government Fund to implement the scheme to support around 37,000 small and marginal farmers covering an area of 62,000 acres.

For the implementation of this programme, a sum of Rs.150 crore will be allocated during the year 2022-23, with Union and State Government funds.

For supporting women farmers and clusters in hiring simple farm tools, 736 numbers of tool banks will be established under Tamil Nadu State Rural Livelihood Mission.

43. Chief Minister's Scheme of Solar Powered Pumpsets

In order to meet the electricity demand for well irrigation of farmers who do not have electricity connection and to convert the green solar energy to electric power for use in agriculture, 3,000 Standalone Solar Powered Pumping Systems upto a capacity of 10 HP will be installed with 70 percent subsidy assistance at an outlay of Rs.65.34 crore during the year 2022-23 under Union and State Government Fund.

44. Distribution of Value Addition Machinery with subsidy

*"கடுங்காற்று எறிய போகிய துரும்புடன்
காயல் சிறுதடிக்க கண்டெடப் பாய்தலின்"*

The above phrase in *அகநானூறு (Agananooru)* indicates that after harvesting the paddy, farmers thrashed grains from straw and cleaned to remove dust and dirt. To increase the income from millets, pulses, oil seeds and other agricultural produce through value addition and marketing, 40% subsidy assistance will be provided to the farmers for the purchase of 292 value addition machinery during the year 2022-23 at an outlay of Rs.5 crore under Union and State Government fund.

45. Provision of Solar Drying Units

"சூரியறு போற்றுதும் சூரியறு போற்றுதும்" ancient Tamil poet Ilangovadigal praised the Sun in his literature. Sun has to rise on a Sunday too.

To help the farmers and farmers groups to dry their agricultural produce by using solar energy in a hygienic manner, in short time and to reduce post-harvest losses, thereby increasing the shelf life of the produce and the income of the farmers, green house type 145 solar drying units will be installed with 40 percent subsidy assistance for an amount of Rs.3 crore during the year 2022-23 under Union and State Government fund.

46. Service Centres for repair and maintenance of Agricultural Machinery and Solar pumpsets

"காலத்தே பழுதுநீக்கி உழவு செய்து விவசாயம் செழித்திட"

As per the above phrase, to help the farmers for timely servicing the machinery and solar pumpset in their farm itself, 25 service centres will be established through youth having diploma or degree in Agricultural Engineering for repair and maintenance of agricultural machinery and solar pumpsets at a project cost of Rs.8 lakh with 50 percent subsidy during the year 2022-23 at an outlay of Rs.1 crore with Union and State Government Fund.

47. Electric motor pumpsets with subsidy

In order to help the farmers to pump the rain water stored in soil for irrigation through bore well, tube well and open well, subsidy assistance of Rs.10,000/- will be provided during the year 2022-23 for the purchase of new electric motor pumpsets or for replacing the old inefficient electric motor pumpsets. Assistance will be provided to 5,000 needy farmers who own upto five acres of land in all districts of Tamil Nadu, at an outlay of Rs.5 crore under Union and State Government Fund.

48. Maintenance of water harvesting structures

In order to increase the water flow and capacity of water harvesting structures, the maintenance works like desilting of the inflow and outflow channels of water harvesting structures will be carried out in 1,500 water harvesting structures created by Tamil Nadu Watershed Development Agency under watershed programmes like Drought Prone Areas Programme, Integrated Watershed Development Programme and Integrated Watershed Management Programme during the year 2022-23 at an total outlay of Rs.5 crore under Union and State Government Fund.

49. Irrigated Agriculture Modernization

**“வாண்நின்று உலகம் வழங்கி வருதலால்தான்
அமிழ்தம் என்றுணரற் பாற்று”**

As stated by Tiruvalluvar, Farm Ponds are constructed at the lowest point in the farmer’s field to harvest rain water. Under World Bank aided Tamil Nadu Irrigated Agriculture Modernization Project, 373 Farm Ponds will be created at an outlay of Rs.3.73 crore with 100 percent subsidy in the sub basins selected by Water Resources Department. To help the farmers to get additional income, assistance will be provided for growing fruits and tree crops in the bunds of the farm ponds. Besides, steps will be taken up to take up fish culture in coordination with the Fisheries Department to increase the farmers’ income.

50. Procurement of new Agricultural Machinery and Mobile Servicing Unit

To strengthen the hiring activity of Agricultural Engineering Department, three Track type Paddy combine harvesters, seven Wheel Type Paddy combine harvesters and fabrication of three mobile servicing units for repairing of Agricultural Machinery and implements owned by Agricultural Engineering Department will be purchased with an allocation of Rs.3.54 crore during the year 2022-2023 under Union and State Government Fund.

51. Desilting of ‘C’ and ‘D’ channels in Delta Districts

Desilting of 'C' and 'D' channels in Delta districts of Tamil Nadu is necessary to ensure free flow of water in the channels for irrigation purpose and to reach adequate water to the tail end in time. During the year 2022-23, 'C' and 'D' channels to a length of 1,580 kilometre will be desilted in Cauvery and Vennar sub basins of five districts namely Thanjavur, Tiruvarur, Nagapattinam, Mayiladuthurai and Cuddalore, at an outlay of Rs.5 crore under State Government fund to benefit two lakh acres of agricultural land.

52. Provision of Mobile Phone Operated Automatic Pumpset Controller

To avoid the hardships like snake bites and other injuries faced by farmers during their night visit to farm to operate the pumpsets, this Government will provide Mobile phone based Automatic Pumpset Controller to help 3,000 farmers in all districts of Tamil Nadu to switch on / off the pumpsets remotely, with 50 percent subsidy assistance upto a maximum of Rs.5,000 per unit at a total cost of Rs.1.5 crore during the year 2022-23 under Union and State Government fund.

Agricultural Marketing & Agri-Business

Farmers would rejoice when the crops cultivated through their sweat and blood are processed and marketed successfully. Hence, the Tamils have aptly said "தை பிறந்தால் வழி பிறக்கும்". Agriculture is complete only when the farmers realize fair price for their produce by integrating the activities like Crop cultivation, processing without any loss and marketing at right time. Agricultural Marketing is similar to "**Serving a bowl of sweet Pongal in Golden Plate**". Hence, this department plays a significant role not only in crop production but also in value addition and marketing the farmers' produce. With this prime objective, various activities are being undertaken by this Department.

53. Uzhavar Sandhai - Renovation and Establishment

Uzhavar Sandhai (Farmers' Market) is a pioneering scheme in which farmers can sell their fruits and vegetables directly to consumers without any intermediaries. It is an elite mechanism to prevent middlemen to exploit farmers. 180 Uzhavar sandhais are functioning in Tamil Nadu and steps are being taken by the officials of the Department of Agricultural Marketing and Horticulture to increase farmers' arrivals in Uzhavar Sandhais and to advise farmers on the cultivation practices of Fruits and vegetables.

As announced in last year's Agriculture Budget, 50 more Uzhavar Sandhais will be renovated during

2022-23, with the provision of facilities like computer and information technology equipment, electronic price display board and public address system will be provided at **Uzhavar Sandhais at an outlay of Rs.15 Crore** under Union and State Government funds.

To fulfill the demand of farmers, **six Uzhavar sandhais functioning at Kothagiri, Veppanthattai, Panruti, Chidambaram, Keelpennathur and Thiruvarur** will be shifted to new places of easy access to the public and **four new Uzhavar Sandhais will be established in the districts of Dharmapuri, Nagapattinam, Vellore and Tirupattur at a total cost of Rs.10 crore** under the Union and State Government funds.

Shops will be allotted to Farmer Producer Organizations (FPO) for sale of value-added products and vegetables and to the Department of Horticulture to sell horticultural inputs such as seeds, bio-fertilizers, vegetable seeds and seedlings, fruit seedlings in 50 Uzhavar Sandhais, based on the requirement.

In addition to the sale of Fruits and Vegetables, Uzhavar Sandhais will also act as the center for the dissemination of Agriculture technologies to farmers and awareness programmes/ trainings will be conducted every fortnight to benefit the farmers of Uzhavar Sandhais.

54. Sale of Agricultural Produce in Uzhavar Sandhais in the afternoon:

At present, Uzhavar Sandhais are functioning only during the forenoon to sell vegetables. Based on the request of farmers and the public that the Uzhavar Sandhais should function in the afternoon also, one Uzhavar Sandhai in each district will be permitted to function in the evening hours for the sale of Agricultural commodities like Millets, Pulses etc.,

55. Establishment of Village Level Value Addition and Marketing Centres

Value Addition at Village level – A dawn in farmers' lives

Small and Marginal farmers of Tamil Nadu can earn additional income if they take up value addition locally. Hence, this Government will initiate the establishment of "**Village Level Value Addition and Marketing Centres**" by sourcing funds from NABARD. Such centers will be established in 38 villages at a total outlay of **Rs.95 Crore**, where Millets, Pulses, Oilseeds and Vegetables are predominantly cultivated, by giving priority to those regions where Millet Mission is being implemented. Facilities for Cleaning, Grading, Packing and Value Addition will be created in these centers, in addition to storage Godown.

56. Creation of infrastructure facilities in Regulated Markets

At present, in Tamil Nadu, 65 Regulated Markets are functioning in rented buildings with inadequate infrastructure facilities. Infrastructure facilities like storage godown, Transaction shed, Drying Yard, Cold Storage, office building and refreshment room for farmers will be created in Six Regulated Markets during 2022-23 at an outlay of Rs.36 crore with financial assistance from NABARD.

57. Agricultural Market Intelligence cum Farmers Advisory Centres:

With the objective of **Learn – Cultivate – Earn**, the State Government will establish Agricultural Market Intelligence cum Farmer Advisory Centres, in 15 districts viz., Kallakurichi, Salem, Tirupattur, Tirunelveli, Tenkasi, Kancheepuram, Nagapattinam, Perambalur, Vellore, Chengalpattu, Ramanathapuram, Namakkal, Tiruppur, Ranipet and Ariyalur at an outlay of Rs.16.50 crore during 2022-23 under the Union and State Government fund.

These Centers will provide market information, price details, export opportunities and other related information to farmers, Farmer Producer Companies, traders, food processors and all other stakeholders.

58. Establishment of Pesticide Residual Laboratories to analyze the Residual level for Agricultural Exports:

As importing countries adopt differential levels of pesticide residue, it is necessary to measure the Maximum Residual Limit (MRL) in agricultural products.

Many exporters across the State have demanded the State Government for setting up such laboratories with the approval of the National Accreditation Board for Testing and Calibration Laboratories (NABL).

To address their demand, Pesticide Residual analytical Laboratories will be established in Chennai and Tiruchirpalli, during 2022-2023, at an outlay of Rs.15 crore sourced from Union and State Government.

59. Establishment of Mini Incubation Centres

District wise Industrial Revolution - Happiness to the people

To enable Self Help Groups (SHGs), Farmer Producer Companies (FPOs), Producer Co-operative societies and Private Food Processing Enterprises to add value to their produces without any capital investment, Incubation Centres are being established across the State.

As a part of this programme, the **State Government will take steps to establish Mini**

Incubation Centres. During 2022-23, assistance will be extended to five Farmer Producer Companies to the tune of Rs.60 lakh each to set up such Centres **at a total outlay of Rs.3 Crore.**

60. Financial assistance to agri-entrepreneurs:

Value Addition brings more returns.

To motivate rural agricultural entrepreneurs to take up Value Addition, Food Processing and other related Agricultural Business, this Government, for the first time, will extend 50% subsidy upto a maximum of Rs.5 lakh to Farmers and rural entrepreneurs .During 2022-23, this assistance will be provided to 50 beneficiaries at an outlay of **Rs.2.50 crore.**

61. Strengthening the Infrastructure Facilities in Thanjavur Coconut Market Complex

In the first Agriculture Budget 2021-22, this Government has declared the area between Trichy - Nagapattinam as Agro Industrial Corridor. To augment the income of Coconut growers in the Cauvery Delta Region, the State Government is taking steps to establish Coconut Value Addition unit in the existing Coconut Market Complex, which had been established in 2009 in Thanjavur District. Now, for the welfare of Coconut growers, the Government will strengthen this Complex by creating facilities like, a 500 MT storage godown and compound wall at a total cost of Rs.2.75 Crore during

2022-23, with financial assistance from Union and State Government.

62. Digitalization of agricultural marketing department services

The Department of Agricultural Marketing-Agribusiness will be computerized to provide agricultural marketing services and information on prices prevailing in Uzhavar Sandhais in the Department website.

The services like issue of e-license to the Traders of Regulated Markets, online booking to facilitate traders and farmers to avail the storage space in godowns and cold storages, creating an exclusive website for the Farmers Producer Organizations and providing the information on price, daily arrivals and sale of Fruits and vegetables in the Uzhavar Sandhais (Farmers Market) will be made available in this website. The above activities will be executed by Tamil Nadu State Agricultural Marketing Board at an outlay of Rs.1 Crore.

63. Proficiency in Agri-Business – Improvement in Farmer's Life:

This Government takes steps to support and render services to the Farmer Producer Organizations. With the above aim, the "**Farmer Producer Companies Management Centre**" will be established at the State level during 2022-23, by engaging Agri-Business consultants, Chartered Accountants and financial experts.

This center will be established with financial assistance from Tamil Nadu Small Farmers Agribusiness Consortium.

Further, the Farmers and Farmer Producer Companies can approach this Management Centre anytime through Whatsapp to clear their queries on agri-business and Agricultural Marketing schemes.

64. Financial assistance to set up high quality jaggery production unit for increasing income of sugarcane farmers:

In order to popularize the method of making pure Jaggery, in a scientific manner among the sugarcane farmers and to benefit farmers and consumers, assistance will be provided to 100 farmers to set up Jaggery making unit for production of powder Jaggery and Mould Jaggery based on market demand at the rate of Rs.1 lakh per unit. This scheme will be implemented in Erode, Salem, Namakkal, Tiruppur, Coimbatore, Theni and Dindigul Districts. This Government will make an allocation of Rs.1 Crore under State Agriculture Development Scheme fund, during the year 2022-23.

65. Leading the way to International Opportunities – Nilgiris Pepper - Coffee

The Primary Processing Centre in Ayyankolli village, Gudalur Block of the Nilgiris district is operated by a Farmers Producer Company.

To facilitate the farmers of this region to add value to coffee and pepper and generate additional income, Coffee Huller cum Grader and Pepper Grader cum Pulveriser unit will be set up in this Primary Processing Centre at an estimated cost of Rs.75 Lakh with fund assistance from Union and State Government.

66. Establishment of Vegetable Whole Sale Market Complex in Theni, Coimbatore and Kanyakumari Districts

The Vegetables and Fruits cultivated in Tamil Nadu meet the requirement of not only Tamil Nadu, but also nearby States like Kerala. To facilitate the traders and Kerala State Horticulture Corporation in purchasing the fruits and vegetables directly from Tamil Nadu farmers, the State Government will establish "**Wholesale Vegetable Market Complex**" in Theni, Coimbatore and Kanyakumari Districts during 2022-23, through **Public Private Partnership** (PPP) mode.

67. Tamil Nadu Watershed Development Agency

With land and water being the two major factors for a good crop season, fish flourish when the water bodies viz., canals, ponds, lakes, streams and rivers are filled up with water. A Colourful landscape gets created with wagging of matured grains and songs of birds fill us with music to the ear. The Great poet Kapilar articulated in his

Purananooru about creation of lakes, the bund of the lake should be as that of eighth day crescent, he clarified.

Watershed Development is aimed at conservation of natural resources and comprehensive development of watershed communities through support for production systems, livelihood activities and micro enterprises to ensure the sustainability of eco-systems to benefit the man-animal-plant-land-water-complex in the watershed areas. To improve in-situ conservation of rainwater, prevention of soil erosion and maximizing productivity per unit area through watershed development, the New Generation Watershed Development Component - PMKSY 2.0 is proposed to be implemented in 275 micro watersheds in seven districts to treat an area of 1.3033 lakh ha in a period of five years (2021-22 to 2025-26).

The project will be implemented in Perambalur, Thoothukudi, Dindigul, Krishnagiri, Ramanathapuram, Dharmapuri and Virudhunagar Districts. Under this scheme in addition to the Natural Resource Management components like farm ponds, desilting of Ooraries, Groundwater recharge structures, Livelihood Support System activities for the landless, micro enterprises and business development activities are being taken up to improve the economy of the Watershed communities.

The project will be implemented at an outlay of Rs.125.44 Crore during the year 2022-23.

Tamil Nadu Agricultural University

Tamil Nadu Agricultural University an institute of eminence in education and research acts as a bridge between the Department and its research needs. The following programmes will be implemented during this financial year.

68. Use of drones in precise application of agricultural inputs in Farmers field

To overcome the shortage of labourers and to ensure precise application of the required agricultural inputs in farmers' field, drone infrastructure will be created in Tamil Nadu Agricultural University and its constituent Colleges, Research Institutes and Krishi Vigyan Kendras. Under Farm Mechanization – "Kisan Drone" Scheme, 60 drones will be purchased at a cost of Rs.10.32 crore during 2022-23. Awareness will be created in Drone Technology by imparting adequate training on the use of drones and demonstration will be conducted by TNAU in 14,400 Ha area.

Seed Certification and Organic certification:

Seeds are the source for productive Agriculture. The department has been working to increase yields and increase productivity by producing high yielding, drought tolerant and flood resistant seeds for farmers.

69. Establishment of Infrastructure in Villupuram and Tiruppur Districts

Quality seeds are the strongest biological tools for the growth of Agriculture. In order to facilitate easy access to quality seeds and provide advisory on Seed production and Organic Certification to farmers, Integrated Seed Certification Office Complex to accommodate Seed Certification, Seed Inspection and Seed testing will be established in Villupuram and Tiruppur districts at an outlay of Rs.4 crore.

70. In order to ensure the quality of organic produce produced by farmers, 100% assistance for cost of residue analysis of organic produce will be given. For this purpose, an amount of Rs.12.50 Lakh will be allocated annually.

71. Organic farmers incur significant expenses for certification and marketing of their organically grown produces. Hence, Participatory Guarantee System (PGS) will be introduced to facilitate marketing of the organic produce at the national level without incurring any certification fee.

72. Tamil Nadu Government is focusing on Digitization of Agriculture and introducing latest software technologies. As part of this, to carry out Seed Certification activities in a swift and transparent manner, "SPECS" software has been developed for providing

realtime service to the farmers and seed producers. An exclusive mobile application will be developed to integrate the activities of Organic Certification under this software.

During 2021-22, 100 Self Help Groups were trained on Seed production technique by Department of Seed Certification and Organic Certification and Tamil Nadu Agricultural University. Based on the demand, more Self-Help Groups will be trained on Seed production in Cotton, millets etc., during 2022-23.

73. Water resources

The Water Resources Department is taking up activities such as checkdams, construction of canals, rehabilitation of canals, renovation of lakes, anicuts and construction of rainwater harvesting structure with the aim of conserving rain water and increasing the irrigated area with due consultation with farmers and based on their needs.

In addition, periodic desilting of canals is being carried out in the Cauvery delta area before the onset of southwest monsoon. During 2022, it is proposed to carry out 683 desilting works in 4964 km of rivers, canals and channels in the Cauvery Delta districts at a cost of Rs.80 crore.

Animal Husbandry

Draught bulls, milch cows, manure bearing goats, cash earning sheep and poultries are the wealth of farmers which support during drought season as they are huge assets. Livestock are of great importance in this context where organic agriculture is beginning to take root again amidst the people. Farmers' incomes can increase only if they try to rear fish in farm ponds, rear goats and cows along with backyard poultries. Various schemes are being implemented for raising the income levels of the farmers. They will be converged with Kalaignarin All Village Integrated Agricultural Development Programme.

74. Integrated Fodder Development Mission

Shortage of Fodder is the main reason for low productivity of cattle. The shortage of green fodder in the State is estimated at 240 Lakh MTs. Considering this, Integrated Fodder Development Mission will be implemented with the following components.

- i) In order to develop milk producers as "Fodder entrepreneurs", an assistance of Rs.10.50 lakh will be provided as back ended subsidy to entrepreneurs for Silage bale making unit on commercial lines with a production capacity of 3,000 MT per annum. This scheme will be

implemented at an outlay of Rs.42 lakh from State Fund.

- ii) To overcome the shortage of fodder, it is necessary to cultivate Green Fodder as intercrop in orchards. An amount of Rs.60 lakh will be allotted under State Fund to cultivate fodder in 2,000 acres.

Fisheries – Fishermen Welfare

The fishermen contribute to foreign exchange and also pave way for "Protein Revolution". Tamil Nadu which has so far been concentrating on brackish Water aquaculture, will concentrate on fresh water fish culture also. Adequate action will be taken to undertake fish culture in farm ponds to facilitate organic recycling and thereby contribute to increased farmer's income.

75. Scheme to protect the Indigenous Fish Culture

Native Fish species are declining in natural water bodies. The Government is taking steps to protect the native Fish species and increase their production by introducing new schemes. Native fish species such as Ayirai, Sel kendai, Curry fish and Kalpaasu are the most popular and high value species. Financial assistance will be provided to the fishermen to culture the native fish and earn higher income. Under this project, seed production facilities, seed rearing facilities will be set up at a total cost of Rs.5 crore. Capacity building trainings

will also be imparted to fishermen to culture native fish species.

76. The Government will implement inland fisheries development schemes such as establishment of new freshwater finfish hatcheries, construction of new fish seed rearing ponds, construction of new grow out fish ponds, input subsidy for fresh water aquaculture and Bio-floc technology for fish culture at a cost of Rs 21.65 Crore under Pradhan Mantri Matsya Sampada Yojana (PMMSY) scheme.

77. To increase the fish seed production of the State, modernization of 10 Government Fish farms viz., Veedur, Nallikottai, Manimuthar, Thirukampuliyar, Asoor, Pilavakal, Chittar, Bhavanisagar Old farm, Hogenakkal and Vembakkottai will be taken up at a total cost of Rs.34.40 crore.

78. Under Tamil Nadu Irrigated Agriculture Modernization Project, inland fisheries developmental activities such as establishment of fish seed rearing centre at Okkur village in Nagapattinam district, fish culture in modular tanks and establishment of modern fish kiosks will be implemented to improve the livelihood of fish farmers of the State at a total cost of Rs.4.60 crore during the year 2022-23.

79. Cooperatives, Food, Consumer Protection

Cooperation is Country's wealth, is the motto that explains the rise of unity.

மலர்கள் ஒன்றிணைந்தால் மாலை;

When Flowers gather, result is a garland;

மரங்கள் ஒன்றிணைந்தால் காடு;

When trees grow in Clusters, result is a Forest

பரல்கள் ஒன்றிணைந்தால் ஆபரணம்

When Beads are joined, result is a jewellery

விரல்கள் ஒன்றிணைந்தால் ஆற்றல்.

When fingers join, result is collective Power'

The co-operative sector encompasses a myriad of activities for the farming community.

During the 2021-22 *Kharif* Marketing Season, 25.79 lakh MT of Paddy has been procured so far and Rs.233 crore has been disbursed as incentive to farmers. This is a great achievement.

To support the farmers to undertake cultivation and to build modern farm infrastructure, provision of credit at nominal interest plays an important role. Various institutions like Commercial Banks, Cooperative Banks and Regional Rural Banks issue farm credit at nominal interest rate. National Bank for Agricultural and Rural Development (NABARD) has prepared a detailed plan in its Potential Linked Credit Plan for the year 2022-2023 to provide a sum of Rs.1,83,425 crore to agricultural credit.

During 2022-23, district wise target would be earmarked and the disbursement of credit to farmers will be monitored at State and district levels continuously by Government of Tamil Nadu.

80. Sericulture

Sericulture is the allied sector of Agriculture. As a rural cottage industry, it provides employment to the rural people. In order to encourage farmers and entrepreneurs to engage in Sericulture, it is planned to take up tree Mulberry cultivation in 625 acre and support construction of 500 vermi compost units at an outlay of Rs.1 crore under the Rainfed Area Development component of National Mission for Sustainable Agriculture during the year 2022-23.

81. Energy

As ground water contributes largely to agricultural productivity, to protect the welfare of the farming community, free electricity for irrigation is provided to the farmers as announced by Muthamizh Arignar Kalaignar, since 1990 in Tamil Nadu. Along with the existing 22 lakh electricity connections during 2021-22, the Government has announced to provide one lakh new electricity connection and as of now more than 75,000 connections have been provided to farmers.

During 2022-23, an amount of Rs.5,157.56 crore will be provided to TANGEDCO by Agriculture and

Farmers' Welfare department for providing free electricity to farmers.

82. Mahatma Gandhi National Rural Employment Guarantee Scheme

Under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), it is proposed to establish the Natural Resource Management structures viz, check dams, farm ponds, field bunds and boulder bunds, Agriculture related activities such as individual dug wells, community dug wells, milk collection centers, food grain storage godowns, work sheds for women Self Help Groups, strengthening the infrastructure of 388 rural markets and assistance to 7,760 beneficiaries for cultivation of horticultural crops will be carried out at an outlay of Rs.1245.65 crore from Union and State funds.

In order to transport the inputs to farmers' field and market their produce, 2,750 km of Single Layer Water Bound Macadam (WBM) road will be paved in the Village Panchayats at a cost of Rs.604.73 crore during 2022-23.

83. Tamil Nadu Corporation for Development of Women

State and Union Government are providing financial assistance to women self-help groups for self-employment and to improve the living standards of rural

women. The Tamil Nadu State Rural Livelihood Mission, National Rural Economic Transformation Projects, Vaazhnthu Kattuvom are implemented in Tamil Nadu.

Capital assistance for Farmer Producer Group, Integrated Farming Clusters, organic farming clusters, Farmer Producer Organization are being implemented under National Rural Economic Transformation Project.

Financial assistance is also being given to selected SHG members for establishing Nutritional Garden, Nutri Millet Production, Moringa farming cluster, Green Fodder Cluster, Azolla cultivation, Mushroom cultivation sheds under The Tamil Nadu State Rural Livelihood Mission.

Tool banks, Establishment of Non Pesticidal Management shops, production of bio-input production, Bee keeping, aqua culture, sheep rearing, Pig rearing, Backyard Poultry are being encouraged besides training on ethno veterinary medicine to Community Resource Person. Under this scheme, three lakh works will be implemented at an outlay of Rs.42.07 crore.

An amount of Rs.30.56 crore has been allocated for formation of Producer groups, producer clusters and community farm schools under Vaazhnthu Kattuvom project.

84. Micro, Small, Medium Enterprises.

Government of Tamil Nadu is encouraging small and marginal farmers to market their produce by forming Farmer Producer Organization (FPO) with the assistance of Union Government. FPOs will be encouraged to start small agro-based enterprises. From 2022-23 onwards, FPOs will be covered under the capital subsidy scheme for Micro, Small, Medium Enterprises (MSME) and they will be given subsidy of upto Rs.1.5 crore for investment in plant and machinery.

It has been a long standing demand to create agro-based employment opportunities in the Delta Districts, since agriculture is the primary profession. In order to make this a reality, an industrial estate for agro products will be set up in Thiruvarur district by the Tamil Nadu Small Industries Development Corporation (TANSIDCO). This will ensure that the farmers get remunerative prices for their produce and employment opportunities are also created.

Tamil Nadu Start-up and Innovation Mission (TANSIM), in partnership with Agriculture and Farmers Welfare Department, will organize a special hackathon for agriculture related technical problems to identify start-ups who can solve their problems. Such agritech start-ups with commercially viable ideas will be funded with a grant of upto Rs.10 lakh.

85. Establishment of designated Mega Food Parks through SIPCOT

The three Food Parks registered by SIPCOT for establishing in an extent of 451 acres at Theni, Tindivanam (Villupuram), Manapparai (Tiruchirapalli) Taluks have been declared as Mega Food Parks by Union Government due to the efforts taken by the State Government. During 2022-23, adequate infrastructure will be established in these three Food Parks at an estimated cost of Rs 381.38 crore to benefit the farmers in the districts surrounding the Food Parks, through SIPCOT.

86. Revenue and Disaster Management Department

Various welfare schemes are being implemented by the Revenue and Disaster Management Department for the benefit of farmers. In order expedite the issue of certificate to small and marginal farmers to avail the benefits under Micro Irrigation scheme, special camps will be conducted in all villages during 2022-23. In addition, monthly Old Age pension of Rs.1000/- is being disbursed under the Chief Minister's 'Uzhavar Padukappu Thittam'. Under this scheme, 1,46,97,000 persons have been enrolled and getting benefited.

To implement the PMKISAN programme, the data required for Department of Agriculture and Farmers Welfare are being provided by the Revenue and Disaster Management Department through the Tamil Nilam

interface. In order to make e-Adangal system fully operational, efforts will be taken for voluntarily linking of Aadhar number by land holders with their land details.

During 2022-2023, a sum of Rs.33,007.6852 Crore is provided in their respective demands for Agriculture-Farmers Welfare department and Agriculture related departments like Animal Husbandry, Fisheries, Dairy Development, Irrigation, Rural Development, Revenue, Cooperation, Sericulture and Forest Departments (Annexure-1).

Hon'ble Speaker!

I would like to express my heartfelt gratitude to the hon'ble Chief minister for having provided me with this historic opportunity of presenting the Second Agricultural Budget on the floor of this Assembly.

The main objective of this Agriculture Budget is to breathe in a fresh lease of life to the farmers who tend to farming with the same fervour an expectant mother would, in delivering a new born. These farmers are those who revive the soil by rendering all the care and attention to the crops with their hardwork while braving droughts and battling floods.

When the state's financial position improves, more financial allocation will be made to the schemes announced in the forthcoming years, for the protection and sustenance of Agriculture.

We have grown self-sufficient by creating a hunger-free Tamil Nadu both through food production and through the common public distribution system. Even the thought of a situation where there is 'no food for a single person' does not arise any longer.

Our ancestors worshipped agriculture and also celebrated it. You can accomplish by kindness what you cannot by force is common understanding but for the poet Thiruvalluvar, who distinctly accomplished by mastery through his 133 Chapters in Thirukkural. An exclusive chapter for ploughing finds place in such a remarkable piece of work. The poet Kambar attached greatness to Agriculture in his writing 'ஏர் எழுபது' meaning Seventy Ploughs. Poet Bharathiyar insisted that we should salute Agriculture and Industry 'உழவுக்கும் தொழிலுக்கும் வந்தனை செய்வோம்'.

Joy fills the air when the farmers doing agricultural activities such as ploughing, irrigating and transplanting. The involvement and dedication in their tasks assuages their aches. Their songs are music to our ears while water to the crops.

While the West is endearing to standardize everything and trying to clone tomatoes to chickens, the East is captivating by being accommodative and believing in diversification. The East believes in uniqueness like the differing fingers of each hand that facilitate plucking of fruits and operating a computer.

Revival of indigenous crops, native breeds of cattle, sheep, goats, dogs and poultry birds without reduction in total production, is the greatest challenge at present. When the Government undertakes to propose counter measures, it tends to be a one-sided attempt like a song in solitude. Thus it becomes pertinent that all the stakeholders come forward to work together. We are shouldering the responsibility of advancing Agriculture against many odds posed by factors like population explosion and urbanization.

I dedicated the last agriculture budget to the farming community who had fought resolutely against Farm Laws in the Capital and I am sharing my excitement with you over their great success by relentless struggle.

Let me reinforce to this August Assembly, that we are not involving ourselves in any ordinary feat now. We are laying a strong foundation for a very strong Tamil Nadu. We are planting a Banyan! The schemes announced will yield multiple benefits post its gestation period. Considering the fact that these benefits are sustainable, I request you to allocate funds for agricultural activities from your Constituency Development Fund.

This Agriculture budget is not what sprung in just my mind but one that grew in the hearts of many. It has been well-prepared after getting the opinions from farmers, academicians, scientists etc.

As the prosperity of our planet hinges on agriculture's growth, the departments like Industries, Small industries and Information Technology should all embrace Agriculture so that it can sprout, grow, expand, bloom and spread the fragrance of goodness all around. Let us join together and nurture it.

As the first Agricultural Budget of Tamil Nadu was well presented to the Assembly last year, the Second Agricultural Budget too has been crafted using zeal-filled efforts for which I would like to extend my heartfelt gratitude to the Chief Secretary, Dr. V. Irai Anbu, IAS, Additional Chief Secretary, Finance, Thiru. N.Muruganantham, IAS, and Agricultural Production Commissioner & Secretary to Government, Thiru.C.Samayamoorthy, IAS.

Vazhga Thamizhagam !

Valarga Velanmai !

Nandri !

Vanakkam.

Annexure-1**Outlay under capital and Revenue under
Agriculture & Allied Sectors During 2022-23**

Rupees in Thousands

S. No.	Department	RE 2021-22	BE 2022-2023		
			Capital	Revenue	Total
1	Agriculture	9,115,50,97	163,75,73	9,204,89,41	9,368,65,14
2	Horticulture & Plantation Crops	1,564,01,23	2,19,00	1,965,13,23	1,967,32,23
3	Agricultural Engineering	501,33,63	24,49,81	912,98,23	937,48,04
4	Agricultural Marketing & Agri Business	433,88,08	71,96,24	244,72,67	316,68,91
5	Tamil Nadu Agricultural University	500,42,74	.....	471,75,24	471,75,24
6	Seed Certification & Organic Certification	54,06,90	.....	45,66,36	45,66,36
7	Sugar Department	.....	.....	7,04,87	7,04,87
8	Tamil Nadu Watershed Development Agency	23,35	.....	.....	.....
9	Animal Husbandry	1,054,34,20	122,33,75	809,74,74	932,08,49
10	Dairy Development	44,38,34	13,46,64	49,99,02	63,45,66
11	Fisheries & Fishermen Welfare (Inland Fisheries)	1,153,19,86	606,30,04	550,92,37	1157,22,41
12	Tamil Nadu Veterinary & Animal Sciences University	358,61,69	.....	372,96,28	372,96,28
13	Tamil Nadu Dr. J. Jayalalithaa Fisheries University	57,47,38	.....	58,13,80	58,13,80
14	Cooperation (Crop Loan etc.)	462,83,97	.....	200,00,00	200,00,00

S. No.	Department	RE 2021-22	BE 2022-2023		
			Capital	Revenue	Total
15	Civil Supplies Department (DPC Procurement)	9,459,83,82	1,14,00	7,500,64,01	7,501,78,01
16	Rural Development & Panchayat Raj (MGNREGS and Rural Road, NRLM, AGAMT)	4,671,58,18	250,00,00	3,934,61,99	4,184,61,99
17	Food Processing (MSME)	.....	381,84,00	.....	381,84,00
18	Sericulture	82,89,62	.....	80,97,97	80,97,97
19	Forestry (Agro Forestry/Man- Animal Conflict)	5607048	172,10,19	559,07,10	731,17,29
20	Revenue (SDRF- Crop Damage/Uzhavar Pathugappu Thittam)	518,55,03	.....	434,05,03	434,05,03
21	Canal restoration - Major Works	2,181,88,89	3,794,76,80	.....	3,794,76,80
	Total	32,775,78,36	5,604,36,20	27,403,32,32	33,007,68,52