



AGRICULTURE DEPARTMENT

POLICY NOTE

Demand No. 5 - AGRICULTURE
2015 - 2016

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Minister for Housing, Urban Development
and Agriculture

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GOVERNMENT OF TAMIL NADU 2015

Policy Note 2015-2016

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- ❖ A programme for Popularisation of environment friendly sustainable agricultural practices by establishing model organic villages, model eco-friendly IPM Villages, 7 new Bio-fertilizer production units and 2 organic fertilizer testing laboratories at a total cost of Rs.22.47 Crore.
- ❖ Interface with the individual farmers, farmer clusters and the commodity groups through improved fixed schedule of visit by involving Agriculture extension functionaries. Fixed Schedule of Village Visit on Cluster basis under Farmer Oriented Integrated Agricultural Extension System was launched on 5.1.2015 in 379 blocks through Agriculture Department and 6 blocks through Horticulture and Plantation Crops Department.
- ❖ As a mark of International year of Family Farming, 770 Amma farm women groups have been formed to empower and engage women in Group oriented agricultural activities.

2. HORTICULTURE AND PLANTATION CROPS

1. Introduction

The Department of Horticulture and Plantation Crops was carved out from the Agriculture department on 26.09.1979.

State's agro climatic condition is conducive for cultivation of varied horticultural crops viz., Fruits, Vegetables, Flowers, Spices and Condiments, Plantation crops and Medicinal & Aromatic plants. Horticultural crops are cultivated in an area of about 10 lakh Ha occupying around 19% of the Gross cropped area. The details related to cultivation of various Horticultural crops in the State are as follows:

(Area: Lakh Ha, Production: Lakh MT,
Productivity : MT/Ha)

Name of the crops	2014 - 2015 (Provisional)			2015- 2016 (Estimated)		
	Area	Prodn.	Pty.	Area	Prodn.	Pty.
Fruits	2.86	59.63	20.85	2.94	62.61	21.30
Vegetables	2.85	75.16	26.37	2.93	78.92	26.94
Spices and condiments	1.13	7.82	6.92	1.16	8.21	7.08
Plantation crops	6.85	12.83	1.87	7.06	13.48	1.91
Medicinal and aromatic plants	0.13	2.2	16.92	0.14	2.31	16.50
Flowers	0.25	3.36	13.44	0.26	3.52	13.54
TOTAL	14.07	161.00	11.44	14.49	169.05	11.67

The State stands first in Vegetable productivity (29.95 MT/ha); ranks second in area of cultivation in Banana (1.18 lakh ha); first in Banana production (56.50 lakh MT) and first in production (49.76 lakh MT) and productivity (41.25 MT/ha) of Tapioca in the Country.

Policies of the Horticulture department are promotion of scientific cultivation & hi-tech cultivation technologies, improvement of post harvest management and modernization of the State Horticulture Farms.

Distribution of quality planting material, use of popular hybrid seeds, expansion of horticulture crop in hi-tech cultivation, promotion of high density planting, subsidy for creation of green houses, use of micro irrigation, promotion of integrated nutrient, pest and disease management, promotion of home / roof top garden are few of the many schemes implemented by the department.

2. Schemes of Horticulture Department

i. National Horticulture Mission (NHM)

Holistic development of Horticulture is the focus of this programme. Under this scheme, farmers are assisted for expansion of area

under horticultural crops and for adoption of technology driven horticulture practices like protected cultivation and adoption of modern Post Harvest Management practices.

NHM is implemented in 22 districts viz., Ariyalur, Coimbatore, Cuddalore, Dharmapuri, Dindigul, Erode, Kanyakumari, Krishnagiri, Madurai, Perambalur, Pudukotai, Tiruppur, Ramanathapuram, Salem, Sivagangai, Tanjavur, Nilgiris, Theni, Tirunelveli, Trichy, Vellore and Villupuram.

In the year 2014-15, additional area of 12,922 ha was brought under the Horticulture crops. Poly green houses measuring 5 lakh Sq.m were erected under National Horticulture Mission. Organic cultivation was promoted in 1,000 Ha. Other activities like establishing Pack Houses, Cold storage units, Ripening chambers, Low cost Onion storage structures were also taken up under the mission. Works relating to establishing Centre of Excellence for Hilly vegetables and Tropical fruits at Nilgiris and Trichy respectively are under progress. The mission activities were implemented in the year 2014-15 with a financial outlay of Rs.65.13 crore. The scheme was implemented with funds sharing between Centre and State in the ratio 85:15.

During this year the scheme is implemented at an outlay of Rs.123 crore with a equal sharing pattern of 50:50 between Centre and State.

ii. Micro Irrigation under On Farm Water Management (OFWM) of National Mission for Sustainable Agriculture (NMSA).

Water is a precious input for crop cultivation. Adequacy of water for irrigation is the critical deciding factor for increasing the production and the productivity. Use of micro irrigation system improves water use efficiency by 40-60%.

As per NMSA guidelines in the year 2014, Government of India allows only 25% to 50% subsidy for micro irrigation to farmers. But the State extends 100% subsidy to small and marginal farmers and 75% subsidy to other farmers for installing micro irrigation system. The subsidy share over the share provided by the Central Government is met by the State's funds. During the year 2014-15, micro irrigation systems had been laid in 12,518 Ha. at a financial outlay of Rs.119.76 crore.

During the year 2015-16 the scheme is proposed to be implemented with an outlay of Rs.296.96 crore under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).

iii. National Agriculture Development Programme (NADP)

The objective of the programme is to ensure 4% annual growth rate in Agriculture through holistic development. Perimetro Vegetable Cluster Development Programme is one of the special schemes under NADP.

Under NADP, Productivity Enhancement measures in horticulture crops like use of precision farming technique, use of tissue culture banana seedlings, promoting use of banana bunch sleeve, promotion of cultivation of Pandal/Trellis vegetables, expansion of area under the horticultural crops and supply of machineries at subsidized cost were undertaken with a budget outlay of Rs.14.22 crore.

During the year 2015-16, the scheme is proposed to be implemented with an outlay of Rs.21.69 crore.

iv. Perimetro Vegetable Cluster Development Programme

Cultivation of vegetable is encouraged in areas adjacent to cities to meet the demand for vegetables. Public and Private Entrepreneurs as Market Aggregators are entrusted to collect, sort, grade and pack vegetables from farmers and supply them to retail outlets in cities. Formation of Farmer clusters / Farmer Federation, construction of Vegetable Collection

Centre, establishment of Mobile / Permanent Vegetable outlets and construction of cold storage centres etc., are supported under this programme. During the year 2014-15, Rs.5.00 crore was allocated for implementing this scheme in areas adjacent to Madurai and Salem cities.

During the year 2015-16, the scheme will be continued to be implemented.

v. Rainfed Area Development (RAD)

This is one of the projects under NMSA. The objective of this scheme is to make Horticulture sustainable through location specific farming with efficient water use.

Under this scheme, farmers are encouraged to adopt horticulture based farming system in rainfed areas. They are also encouraged to construct vermi-compost production units on cluster basis at 50% subsidy. During the year 2014-15, Rainfed Area Development in horticulture crops was implemented with a financial outlay of Rs. 6.60 crore.

During the year 2015-16, the scheme is proposed to be implemented with an outlay of Rs.10 crore.

vi. National Mission on Medicinal Plants (NMMP)

Sustainability of AYUSH (Ayurvedha Naturopathy, Unani, Siddha and Homeopathy) systems depends on uninterrupted supply of plant based raw material of good quality. The medicinal plants are generally found in forests. Objective of the programme is to shift the supply from forests to farmer's field for long term sustainability.

Under this scheme, assistance upto 50% of the cost of cultivation is extended for growing medicinal plant species such as Marunthukoorkan (Coleus), Kanvalikilangu (Gloriosa), Avuri (Senna) Vasambu (Acorus), Nithyakalyani (Catharanthus roseus), Nelli (Amla), Katralai (Aloe vera), Manathakkali (Solanum nigrum,) Vembu (Azadirachta indica), Milaku (Piper longum) and Tulasi (Ocimum sanctum). During the year 2014-15, the scheme was implemented with a fund allotment of Rs.9.27 crore covering an area of 3682 ha.

During the year 2015-16, this scheme is proposed to be implemented with an outlay of Rs.1.44 crore under National AYUSH Mission (NAM-Medicinal plants).

vii. National Bamboo Mission (NBM)

Importance of Bamboo as a source of raw material for domestic and industrial use has necessitated cultivation of bamboo in the farm lands. Bamboo is cultivated in an area of 1,679 Ha in the State and the annual production is 30,222 MT. The scheme under NBM is implemented to increase the area under bamboo cultivation in non-forest areas. Under the scheme, 35% of the cost of cultivation is given as subsidy. During the year 2014-15, the scheme was implemented with a financial outlay of Rs.66.77 lakh to cover an additional area of 310 Ha. under Bamboo cultivation.

During the year 2015-16 the scheme is proposed to be implemented with an outlay of Rs.67 lakh

viii. Integrated Horticulture Development Scheme (IHDS)

The objective of the scheme is to increase the area under cultivation of horticulture crops. Under this scheme, planting materials of good quality seeds of high yielding varieties of vegetables and flowers etc. are distributed to farmers at 50% subsidy. Assistance for cultivation with high yielding varieties upto a maximum of 1 Ha for fruits and spices and cultivation upto 0.5 Ha under vegetables and flowers was provided. In the year 2014-15, the scheme was implemented in 4707 Ha in

Kanchipuram, Thiruvallur, Karur, Namakkal, Thiruvarur, Tuticorin, Nagapattinam, Thiruvannamalai and Virudhunagar with a financial outlay of Rs.1.23 crore.

During the year 2015-16 the scheme is proposed to be implemented with an outlay of Rs.3.34 crore

ix. Hill Area Development Programme (HADP)

This Scheme is under implementation in The Nilgiris District. Under this scheme, inputs such as Vegetable Seeds, Tea clones, Oil Engines, Hand sprayers, Power Tillers and Agricultural implements are distributed at 50% subsidy to small and marginal farmers with the objective of increasing the area under horticultural crops.

During the year 2015-16 the scheme is proposed to be implemented with an outlay of Rs.4.11 crore

x. Urban Horticulture Development Scheme (Do it yourself kit)

Urban Horticulture Development Scheme (Do it yourself kit) was launched with a financial outlay of Rs.5.00 crore during the year 2013-14. The objective of the scheme is to

encourage growing of vegetables on roof tops of houses in Chennai and Coimbatore Cities. Under this scheme, a Kit containing vegetable seeds, bio pesticide, bio fertilizer, and soilless media for growing plants are distributed at 50% subsidy.

During the year 2015-16 the scheme is proposed to be implemented with an outlay of Rs.5.37 crore

xi. Cocoa Area Expansion Programme

During 2014-15, Cocoa Area Expansion programme was implemented was implemented in 1500 ha with a total outlay of Rs.1.89 crore. This programme was implemented in 18 districts of Tamil Nadu viz Cuddalore, Dharmapuri, Dindigul, Erode, Kodaikanal, Krishnagiri, Madurai, Pudukottai, Salem, Sivagangai, Thanjavur, The Nilgiris, Theni, Tiruppur, Trichy, Vellore, Villupuram, and Namakkal. The scheme cost was shared between Directorate of Cashew nut & Cocoa Development (DCCD) and State in 85: 15 ratio.

3. Creation of Infrastructure facilities

In the year 2014-15, construction of building for District Horticulture Extension and Training Centre at Trichy and Erode was taken up at a cost of Rs.10.00 lakh each. Creation of infrastructure facilities for Central Horticulture

Training Centre at Kudumianmalai, Pudukottai District was also taken up at a cost of Rs.10.00 lakh.

3.1. State Horticulture Farms

Horticulture Farms of the department produce planting materials for distribution to farmers at reasonable cost. The farms also serve as centres for demonstration of new technologies to the farmers.

There are 56 State Horticulture Farms in 22 districts. Annually 1.5 to 2.0 crore saplings of fruit crops (such as Mango, Guava, Amla, Sapota, Pomegranate, Lime, Peach, Plum, etc.), plantation crops (such as Arecanut, Coffee, Cashew, etc.), spices and condiments (such as Pepper, Clove, Nutmeg, Curry leaf, etc.), flower crops (such as Rose, Jasmine, Chrysanthemum, Ixora, etc.) and vegetable seedlings in protrays are produced in these farms. During the year 2014-15, 203.59 lakh seedlings were produced at a cost of Rs.16.57 crore.

The scheme will be continued during 2015-16.

3.2. Parks and Gardens

The Horticulture department maintains 10 parks in 5 districts of the State. These act as recreation centres for the local people and

tourists. These are also used as field centres for students of Botany.

During the year 2014-15, a Genetic Heritage Garden at Achadipirambu village of Ramanathapuram District has been established at a cost of Rs. 7.29 crore.

The following Parks are under development:

- a) An Ornamental and Demo Garden at State Horticulture Farm, Madhavaram in an area of 20.21 acres at a cost of Rs.5.73 crore.
- b) A Rose Garden and Cut Flower Demonstration Unit at State Horticulture Farm, Kodaikanal in Dindigul District in an area of 11.00 acres at a cost of Rs.3.80 crore.
- c) An Eco Park at State Horticulture Farm, Kanyakumari in Kanyakumari District in an area of 15.00 acres at a cost of Rs.4.00 crore.

4. Annual Flower and Fruit shows

Many fruit and flower shows are held in parks and gardens every year during spring and summer seasons. Flower shows are organized in parks and gardens at Ooty, Yercaud and Kodaikanal. Floral decoration, Indian and

Japanese flower arrangements, vegetable carvings, flower rangoli, bonsai gallery are the major attractions of these shows.

Fruit show at Sim's park, Coonoor (Ooty), Mango show at Krishnagiri, Vegetable show at Kothagiri (Ooty) and Spice show at Gudalur (Ooty) are very popular among the tourists.

Another important event conducted by the Department is the Rose Show at Rose Garden, Ooty. This show exhibits popular and interesting (attractive) structures made with roses of different colours. Similarly, 'Saral Vizha' is held at Eco Park in Tirunelveli district at Courtallam.

4.1. International Horti Intex 2014

International Horti Intex 2014 was jointly organized by Tamil Nadu Agricultural University, Department of Horticulture and CODISSIA from 7th to 9th November, 2014 at CODISSIA Trade Fair Complex, Coimbatore on the theme "Horticulture for inclusive growth". It was an exhibition for showcasing horticultural wealth of India. It also displayed the latest highend technologies for horticultural crops.

As a part of Horti Intex 2014, flower show, fruit show, vegetable show, spices and plantation crops show and herbal show were

arranged by the Horticulture Department depicting the horticulture wealth of the State. Models demonstrating high density planting system in fruit crops, nutrition garden and shade net cultivation of vegetables, multi-tier cropping system in spices and plantation crops, precision farming techniques of flower crops were displayed for benefit of the farmers.

5. Horticulture Training Centres

The department runs horticulture training centres at Madhavaram, Kudumianmalai, Thally and at Ooty. These centres impart training to farmers for upgrading knowledge to farmers about the latest technologies in horticulture. Ultra High density planting, protected cultivation, Canopy management in HDP, Integrated Pest and Disease Management, Integrated Nutrient Management and Micro irrigation are some of the aspects covered in training programmes. In the year 2014-15, 2,500 farmers were trained in these institutes.

During 2015-16, it is proposed to impart training to 3000 farmers with a financial outlay of Rs.7.50 lakh.

6. Micro Irrigation Model Village

Model village concept was introduced to popularize adoption of Micro Irrigation by farmers. One village each has been selected in

all the 31 districts (except Chennai) to cover all the irrigated area under Micro Irrigation. Model Village serves as a demonstration village for farmers of surrounding areas. The scheme was implemented in 4331.96 Ha in 31 villages benefitting 2659 farmers.

The implementation of Micro Irrigation system is further strengthened by the use of IT tools.

On line Monitoring: Web based online monitoring system is already in vogue in TANHODA starting from Registration of Application for installation of Micro Irrigation. Approval by District Technical Committee, Checking of completion, Check measurement at block level and Release of subsidy are being done online. National Informatics Centre, Chennai is being involved in development of "Customized software" for mobile and Third Party Inspection for upgradation of existing online monitoring system. Moreover a mobile phone based Geo-fencing concept is proposed for monitoring of installation of Micro Irrigation systems in Horticultural crops. Every surveyed field will be identified and Geo-referenced of using GPS co-ordinates (Latitude and Longitude).

7. Creation of Centre of Excellence

Under National Horticulture Mission, two Centres of Excellence are being established with technical support from Israel.

Centre of Excellence for vegetables at Reddiyarchathiram of Dindigul District (Rs.10.18 crore) and another Centre of Excellence for cut flowers at Thally of Krishnagiri District (Rs.8.80 crore) are being established with technical support of Government of Israel. Two more centres one for Hilly vegetables at Ooty and another for Tropical fruits at Trichy are also being established with a financial outlay of Rs.20.00 crore.

Tamil Nadu Horticulture Development Agency (TANHODA)

Tamil Nadu Horticulture Development Agency is a registered society under Tamil Nadu Societies Registration Act, 1975 for implementing various Horticulture Schemes funded by Government of India and Government of Tamil Nadu and functions as a "Special Purpose Vehicle" since 2004. The major schemes operated through TANHODA are Mission for Integrated Development of Horticulture (National Horticulture Mission and National Bamboo Mission), National Mission for Sustainable Agriculture (On Farm Water

Management through Micro Irrigation and Rainfed Area Development), National Mission on Medicinal Plants, State Horticulture Farms and Tamil Nadu IAMWARM Project.

TANHODA also serves as a Special Purpose Vehicle for procurement and supply of quality Agricultural and Horticultural inputs and Water Soluble Fertilizers. The Governing Council of TANHODA acts as an Empowered Committee for the Special Purpose Vehicle. An interest free amount of Rs. 50 Crore as revolving fund is utilized for purchase of water soluble fertilizers and seeds for timely supply to the farmers.

Tamil Nadu Horticultural Producers Co-Operative Enterprises Limited (TANHOPE)

Tamil Nadu Horticultural Producers Co-operative Enterprises Limited (TANHOPE) was registered in the year 1994 as a primary Horticultural Co-operative Society under Tamil Nadu Co-operative Societies Act 1983 for the benefit of small and marginal horticultural farmers.

The main objective is to encourage and support horticultural activities with market linkages in the State. Area of operation of the society is whole of Tamil Nadu. The President elected by the Board of Directors function as the head of TANHOPE.