

4. TAMIL NADU HORTICULTURE DEVELOPMENT AGENCY (TANHODA)

Tamil Nadu Horticulture Development Agency was registered in 2004 as a society under the Tamil Nadu Societies Registration Act 1975, as a “Special Purpose Vehicle” for implementing various Horticulture Schemes.

The following schemes are being implemented through TANHODA

S. No	Name of the Scheme	Financial Assistance	
		GOI Share	GOTN Share
1	National Horticulture Mission	85%	15%
2	National Mission on Micro Irrigation SF/MF Other Farmers	50% 40%	50% 35%
3	National Bamboo Mission	100%	-
4	National Mission on Medicinal Plants	100%	-
5	Tamil Nadu IAMWARM Project	-	100%
6	State Horticulture Farms	-	100%

All the above schemes except TN IAMWARM and State Horticulture Farms are implemented through District Mission Committees/District Micro Irrigation Committees headed by the District Collector as Chairman and District Joint Director of Horticulture / Deputy Director of Horticulture as the Member Secretary of the Committee.

1. Schemes shared between Central and State Governments

1.1 National Horticulture Mission:

National Horticulture Mission is one of the important flagship programmes of the Government of India being operated in the State on a mission mode from 2005-06 onwards. The fund sharing pattern between centre and state is 85:15. This scheme is implemented with the objective of holistic development of horticulture with focus on expansion of area under high income generating horticulture crops.

This scheme is implemented in 22 districts namely Ariyalur, Coimbatore Cuddalore, Dharmapuri, Dindigul, Erode, Kanyakumari, Krishnagiri, Madurai, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivagangai, Thanjavur, The Nilgiris, Theni, Tiruppur, Tirunelveli, Trichy, Vellore and Villupuram.

Under this scheme, area expansion in high value horticulture crops, production of planting materials, rejuvenation of old orchards, canopy management, protected cultivation, organic farming, mechanization, post harvest management, creation of marketing infrastructure and human resource development are being undertaken. Since horticulture produce are more perishable in nature, impetus is now being given to project based activities under the component 'Post Harvest Management' whereby post harvest losses will be reduced to a larger extent so that the benefits of productivity enhancement would be enjoyed in full. During 2012-13, this scheme was implemented at an expenditure of ₹6074.22 lakhs. During 2013-14, it is proposed to implement this scheme at an outlay of ₹11500 lakhs.

1.1.1 Establishment of Centre of Excellence for Vegetables

It was announced that a Centre of Excellence for vegetables shall be established at State Horticulture Farm, Reddiyarchathiram, Dindigul District at a total cost of ₹14.40 Crores under the National Horticulture Mission under the Indo Israel Agriculture Work Plan with the objective of transfer of frontier technology to farmers.

The estimates for ₹10.18 Crores has been prepared. Under this project, vegetables like Tomato, Capsicum, and Cucumber shall be cultivated in protected conditions. This Centre will serve as demonstration centre and train the farmers of Tamil Nadu and nearby States on latest vegetable cultivation. During 2012 -13, the first phase of the project – construction of administrative building plan has been prepared. Structural design is finalized and sent for technical sanction.

1.1.2 Establishment of Centre of Excellence for Cut flowers

It was announced that a Centre of Excellence for Cut flowers will be established at Thally, Hosur Taluk, Krishnagiri District under the National Horticulture Mission under the Indo Israel Agriculture Work Plan with the objective of transfer of frontier technology to farmers. The cost of this project is ₹38.68 Crores. Thally being close to Bangalore flower auction centre is an ideal location for this project.

The estimates for ₹8.80 Crores has been prepared. This project will demonstrate the latest technologies pertaining to protected cultivation of cut flowers. Department officials and flower growers of Tamil Nadu and other States will be trained on the latest advancements in cut flower production under both protected and open conditions.

During 2012 -13 the first phase of the project – construction of administrative building plan has been prepared. Structural design is finalized and sent for technical sanction.

National Horticulture Mission - Tamil Nadu (2013-2014)
(in lakhs)

SL. No.	Details	Unit	Target	
			Physical	Financial
1	Production of Planting Material	Ha/Nos	93	247.72
2.a	Establishment of new Garden	Ha	21017	3590.91
.b	Maintenance	Ha	6364	395.85
3	Rejuvenation/replacement of senile plantation	Ha	4200	630.00
4	Protected cultivation	Ha	9.54	2593.80
5	Promotion of INM/IPM Projects	Nos.	203	119.50
6	Organic Farming	Ha/Nos/ Project	1505	125.50
7	Pollination support thorough bee keeping	Nos	6180	57.60
8	Horticulture Mechanization	Set/No	1230	448.00
9	Front Line Demonstration	Nos	1	25.00
10	Human Resource Development	Nos	10275	374.62
11	Post Harvest Management / Market Infrastructure	Nos	47	1172.71
12	Seminar/ Mission Management	Nos	13	575.50
13	Indo-Israel and other Projects	Nos	4	1143.27
	Grand Total			11500.00

1.1.3. Creation of Horticulture Villages in Tamil Nadu

This scheme is being implemented to quantify and exhibit the impact of various schemes implemented by the department in a Village Panchayat, so that it serves the farmers of surrounding villages and blocks as a demonstration centre. Totally 75 Horticulture Villages have been identified @ 5 Village Panchayats each in the identified 15 districts of Tiruvallur, Vellore, Salem, Dharmapuri, Krishnagiri, Erode, Coimbatore, The Nilgiris, Trichy, Perambalur, Madurai, Theni, Dindigul, Ramnad and Tirunelveli. All schemes in operation by the Department are being dovetailed and implemented in these villages. 40-100 Ha of land are being developed in five villages in each of the selected 15 districts. Annual Action Plans have been prepared to cover 3602.65 Ha over a period of three years starting from 2012-13. So far 3312.48 Ha have been covered at an expenditure of ₹ 675.74 Lakhs.

1.2 National Mission on Micro Irrigation

Tamil Nadu is a water stressed state. The conventional methods of irrigation require more water that leads to wastage of water. The use of modern Micro Irrigation systems like drip and sprinkler irrigation is recommended for the efficient use of surface as well as ground water resources. For all crops and horticulture crops, the identification of beneficiaries is done by the Horticulture department and for agricultural crops, by the Agriculture Department.

Under this scheme, 100% subsidy is given to small & marginal farmers and 75% subsidy to other category farmers for installation of drip/sprinkler systems for all horticulture crops and other crops and Agriculture crops like sugarcane, coconut, cotton, maize, groundnut and pulses. The scheme is being implemented only through registered

and empanelled Micro Irrigation firms. In 2012-13, the scheme has been implemented by TANHODA at an expenditure of ₹12172.11 lakhs covering 24713.77 Ha. The scheme is proposed to be implemented in the year 2013-14 to cover 45000 Ha. at an outlay of ₹25650 lakhs.

1.2.1. 100% Micro Irrigation Village:

One Village Panchayat has been selected in all the districts except Chennai for adoption of micro irrigation in 100% of its irrigated area, such that this village will serve as a demonstration village for farmers from surrounding villages and blocks. So far, 2213.98 Ha has been covered under this scheme benefitting 2546 farmers.

2. Schemes Fully Funded by Government of India

2.1 National Bamboo Mission

Bamboo is preferred as a raw material in sectors like pulpwood, paper industries, housing, arts, craft etc. Bamboo has more than 1500 uses and is a fast growing species among plants. Its usefulness as biomass for production of electricity is becoming prominent in recent years. Current demand of bamboo in the country for various purposes is estimated at 26.69 million tonnes as against the supply of 13.47 million tonnes. World bamboo trade is to the tune of USD 10 million.

In Tamil Nadu, bamboo is grown in an area of 1600 Ha in non-forest areas. There is vast scope and potential for cultivation of bamboo in our state since Tamil Nadu has longer photo period to harvest maximum solar energy.

To increase the area and productivity, the National Bamboo Mission scheme was envisaged. Plantations in non-forest area encouraged @ ₹8000/- per ha for public institutions and ₹4000/- per ha for private growers. Second

year maintenance being provided for ₹4000/- per ha. Improvement for existing stock @ ₹ 8000/- per ha is being provided. Training for field staff, farmers and promotional campaigns and workshops and seminars are also supported under this scheme.

This scheme was implemented during 2012-13, to cover an area of 275 hectares at an expenditure of ₹50.35 lakhs. During 2013-14, it is proposed to cover 400 Ha at an outlay of ₹70 lakhs.

2.2 National Mission on Medicinal Plants

Medicinal Plants form the major resource base of our indigenous health care. The outreach and acceptability of AYUSH (Ayurveda, Yoga, Unani, Sidha & Homoeopathy) systems depend on the uninterrupted availability of quality medicinal herbs. Cultivation is the key to bring raw materials. Export of value added items require product development, setting up of processing facilities, quality assurances and brand promotion. With the objective of satisfying the ever increasing demand for herbal products, a Centrally Sponsored Scheme on National Mission on Medicinal Plants is being implemented.

The need and justification for bringing forest based medicinal herbs to cultivated source will be carried out by the centrally Sponsored Scheme on National Mission on Medicinal Plants in the state.

National Medicinal Plants Board, an agency under the Union Health & Family Welfare Ministry was thus set up to co ordinate matters related to medicinal herbs including drawing up policies and strategies for conservation, proper harvesting, cost effective cultivation, research & development, processing, marketing of raw materials to promote the sector.

In 2012-13, the scheme has been implemented in 5855 Ha at an expenditure of ₹1015.90 lakhs. In 2013-14, it is proposed to cover 6500 Ha at an outlay of ₹1120 lakhs.

3. State Horticulture Farms

There are 51 State Horticulture Farms and 10 Parks and Gardens in the State. The main objective of the farms is to produce pedigree and quality planting materials of horticulture crops such as fruits, flowers, spices, tree kinds, etc. The farms also produce vegetable seedlings/vegetable seeds to a smaller extent. The plants and seeds produced are distributed to the farmers directly and also through various schemes implemented by the Department of Horticulture. The parks and gardens serve as study centres for botanists and as attraction centres for tourists' worldwide. Another, important activity of the State Horticulture Farms is to serve as model demonstration centres on the latest technologies for horticulture crops. Some of such technologies are high density planting in mango and cashew crops, canopy management in orchard crops, top working in old orchards, water use efficiency techniques, etc. Soft wood grafting technique in mango is also adopted for quick propagation of mango grafts.

The State Horticulture Farms are functioning under TANHODA (Tamil Nadu Horticulture Development Agency). The staff salary and office expenses are borne by the Government and the farm working expenses are met from the Farm receipts funds. In 2012-13, 170 Lakh numbers of planting materials and 350 Mt of potato seeds have been produced in the State Horticulture Farms.

During 2013-14, it is proposed to produce 180.00 Lakh numbers of planting materials and 500 MT of vegetable seeds in the State Horticulture Farms with a budget of ₹2000 Lakhs.

The Farms are equipped with modernized nurseries for planting material production. Every year farms are upgraded gradually to meet the growing demand for the planting materials. The Farms also have orchard areas fetching returns to the farms through sale of usufructs. The orchards / plantations are being maintained regularly for increasing the productivity and thereby to enhance the farm receipts. About 5 - 10% of total farm budget is spent towards the maintenance of orchards and plantations. The list of farms is annexed in Table.

4. Parks and Gardens

There are 10 Parks and Gardens functioning under the control of TANHODA. It attracts large number of tourists from all over the country. It serves as Technical Demonstration Centres for the farmers and educative centres for the students and Researchers.

During 2012-13, the **Honorable Chief Minister** have inaugurated the Eco park, Courtallam, Government Botanical Garden at Yercaud & Genetic Heritage Garden at Yercaud in Salem District on 15.10.2012 for public view.

The details of number of visitors visited Parks and Gardens are as follows:

Sl. No	Garden/park	Extent (in Ha)	No. of visitors (2011-12)	No. of visitors (2012-2013)
1	Government Botanical Garden, Ooty	22.00	21,80,409	22,20,168
2	Government Rose garden, Ooty	14.40	7,51,617	8,96,938
3	Sim's Park, Coonoor.	12.14	5,49,320	6,44,800
4	Park at SHF, Katterly	18.96	8,126	16,265
5	Bryant Park, Chettiyar Park & Anna park, Kodaikanal	10.28	5,92,858	6,66,954
6	Anna Park & Lake View Park, Yercaud	10.00	2,03,680	2,06,058
7	Semmozhi Poonga, Chennai	3.17	4,31,697	2,32,188
8	Eco Park, Courtralam	14.89	Opened on 15.10.12	40,014
9	Genetic Heritage Garden, Yercaud	8.27	Opened on 15.10.12	65,206
10	Government Botanical Garden, Yercaud	14.58	Opened on 15.10.12	
	Total	128.69	47,17,707	49,88,591

4.1 Creation of rose garden and cut flower Demonstration unit at State Horticulture farm, Kodaikanal

The State Horticulture Farm, Kodaikanal was established during 1958 in an area of 5.74 Ha. To give a fillip to tourism in this area and to encourage farmers to take up cut flower cultivation so as to ensure better returns, it was proposed to establish a Rose Garden in this farm on the lines of the famous Rose Garden at Ooty in 4.00 Ha. It is also proposed to establish a cut flower demonstration unit in an area of 0.40 Ha. Estimates have been prepared for ₹900 lakhs.

5. Externally Aided Projects.

5.1 Tamil Nadu Irrigated Agriculture Modernization and Water Bodies Restoration and Management Project – Horticulture (TN - IAMWARM PROJECT)

TN IAMWARM project is an externally aided project and the total project outlay for Horticulture department is ₹.72.765 crores. The objective of the project is to bring crop diversification and area expansion with high value horticultural crops, in 61 sub basins of Tamil Nadu.

In the **first Phase** in 2007-08, the project was implemented in 9 sub-basins viz., Varahanadhi, Upper Vellar, South Vellar, Pambar, Manimuthar, Kottakkaraiyar, Arjunanadhi, Palar and Aliyar.

In the **second Phase**, the project was extended to another 16 sub-basins during 2008-09 viz., Pennaiyar (up to Krishnagiri), Swethanadhi, Anaivari Odai, Chinnar, Agniar, Ambuliyar, Upper Vaigai, Varattar-Nagalar, Upper Gundar,

Therkar, Senkottaiyar, Sindapalli-Uppodai, Nishabanadhi, Kalingalar, Poiney and Koundinyanadhi.

In the **third Phase**, the project was extended to 30 sub basins viz, Araniyar, Kosasthalaiyar, Ongur, Nallavur, Thurinjalar, Pambar to Thirukoilur, Gadilam, Markandanadhi, Kambainallur, Pambanar –Verattar, Gomukinadhi, Theniar, Girdhamal , Kanal Odai, Lower Gunder, Vembar, Uthirakosamangai, Palar, Sevalaperiar, Deviar, Nagarier, Vallampatti, Uppathur, Kovilar, Uppodai, Salikulamaru, Korampallam, Karumeniyar, Vaipar and Hannumannadhi during 2009-10 but started implementation during 2010-11.

In the **fourth Phase**, the project was extended to 5 sub basins viz, Adayar, Cooum, Cheyyar - Kiliyar, Paralaiyar and Kayalkudiar for implementation during 2011-12.

In the **fourth phase-2** the project was extended to one sub basin viz Amaravathi for implementation during the year 2012-13.