

strengthened and integrated institutional structures under IAMWARM which can help farmer's access to irrigation management and improved agricultural practices. The project is implemented with the assistance of World Bank to improve water resources in 61 selected sub basins through Water Resources Organization by integrating the activities of departments of Agriculture, Horticulture, Agricultural Engineering, Agriculture Marketing & Agri Business, Animal Husbandry, Fisheries and Tamil Nadu Agricultural University.

An amount of Rs.108 Crores was allotted to Agriculture Department for implementation of the following Project activities.

- **Crop Demonstrations:** Demonstrations were conducted in Greenmanure-SRI-Rice Fallow Pulses, SRI-Rice Fallow Pulses, Modified SRI, Semi Dry Rice, Semi Dry Rice-Rice Fallow Pulses, Maize, Ragi, Pulses, Groundnut, Coconut, INM and Vermicompost (Silpaulin).
- **Distribution of Agricultural Implements:** SRI implements such as Conoweeder & Marker and Pulses Line Marker were distributed at 100% subsidy for demonstrations; Hand operated sprayer and power operated sprayers were distributed to the farmers in the sub-basin areas at 50% cost.
- **IEC / CB activities:** Farmers training, agricultural labourers training, exposure visits, capacity building and publicity propaganda activities were carried out.
- **Up-scaling of 400 Model Villages** in 17 Districts were carried out through 5 Ha. Crop Demonstrations for SRI, Maize and Pulses @ Rs.10,000/- per Ha. IEC / CB Programmes; Engaging / Deploying ATMA Volunteer (Farmers Friend) and Workshops, Trainings, etc.

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2. HORTICULTURE

1. Introduction

Horticulture is a growth engine for Agriculture sector and the way to attain nutritional security in the state. The population of Tamil Nadu has increased from 62.41 million to 72.14 million in last decade which necessitates increasing the production of horticulture crops to meet the growing nutrition demand.

Consumption rate of fruits and vegetables is showing an upward trend because of greater awareness among the people on healthy diet and also increase in purchasing power. This necessitates the farmers to make a shift from traditional farming to commercial cultivation of horticulture crops. The contribution of horticulture produce in the State's Gross Domestic Product is very significant.

The varied agro climatic conditions favour the cultivation of extensive array of Horticulture crops. Population explosion and increase in urbanization in Tamil Nadu leads to shrinking of cultivable area. Hence it is necessary for effective utilization of available land and greater efforts had been put forth for enhancing the productivity. The Policy focus of the Government is as follows.

2. Policy Focus

- Achieving food security through doubling the production using hi-tech cultivation of horticulture crops.
- Tripling the income of the farmers through forward linkage and ensuring quality life

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During 2013-14, IAMWARM Project was implemented in 61 selected Sub-basins:

Phase & Year of implementation	Finance (Rs. in crores)	
	Sanctioned	Achmt
Regular Phase – IV (2) Amaravathy (2 nd year)	4.187	3.040
Additional Activities – 3	2.870	2.485
Up-scaling of 400 Model Villages	2.730	2.191
Total	9.787	7.716

The project comes to closure by September 2014. During 2014-15, activities will be carried out to increase the area and production of millets and minor millets(Additional Activities – 4) besides taking up exposure visits to learn innovative irrigation management practices etc., at a cost of Rs.10.35 Crores.

The Cumulative financial progress of the project from 2007-08 to 2013-14 is as follows:

Sub-basins	(Rs. in Crores)	
	Target	Achievement
Phase – I (9 sub-basins)	15.70	15.53
Phase-II (16 sub-basins)	6.64	6.60
Phase-III(30 sub-basins)	25.99	25.35
Phase-IV (5 sub-basins)	12.05	10.26
Phase – IV-2 (Amaravathy Sub-basin)	7.67	6.33
Additional Activities – 1	20.37	19.85
Additional Activities – 2	7.07	6.85
Additional Activities – 3	3.50	3.04
Model Villages Activities	2.73	2.19
Total	101.72	96.00

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- Introduce organic farming for better soil health and human health.
- Focus on formation of farmer's clusters and empowerment.
- Thrust on rain fed area development.
- Thrust on Post-harvest, market-led management Technology.
- Extension of horticulture farming in urban sectors.
- Modernisation of the department farms/parks and gardens.

3. Strategies

- Area expansion and hi tech cultivation practices in horticulture crops.
- Use of High yielding varieties and quality pedigree planting material.
- Ensure timely supply of inputs.
- Increased water use efficiency and fertilizer use efficiency through mass adoption of Micro-Irrigation with Fertigation
- High tech horticulture by promotion of Precision Farming, High density planting, Protected cultivation.
- Thrust on Integrated Crop/Nutrient Management.
- Thrust on Integrated Pest and Disease Management.
- Canopy Management and senile orchards rejuvenation
- Promotion of Roof top cultivation of horticulture crops in urban areas.
- Improved Horticulture farming practices in rain fed areas to increase productivity of rainfed horticulture crops.
- Strengthening and modernization of infrastructure facilities for production of quality Pedigree Planting materials.

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- Establishing forward and backward linkage for horticulture produce.
- Effective use of Information technology tools in horticulture sector to reach all farmers and effective planning.

The Government of Tamil Nadu has launched various path breaking initiatives in the past three years to increase the area as well as the productivity of Horticultural crops, taking advantage of the seven different agro climatic zones of Tamil Nadu.

- Precision farming in annual horticulture crops in 10,722 Ha.
- Micro Irrigation and Fertigation technology for efficient use of irrigation water and fertilizers in 93,868 Ha.
- Mulching in 1,767 Ha. to reduce the loss of moisture through evaporation and weed growth.
- Productivity increase by promoting high yielding and hybrid varieties of vegetable seeds in 83,599 Ha., Use of Tissue Culture planting material in 2,557 Ha. of Banana crop and Use of pedigree planting materials of fruits, spices and flowers.
- Production and Distribution of about 175 Lakh numbers quality pedigree planting materials of horticulture crops in the State Horticulture Farms of Tamil Nadu.
- The introduction of the High-density planting technology and Canopy management in fruits such as Mango and Sapota along with drip & fertigation in 5,260 Ha. has made a revolution in orchard development.
- Precise application of water and other inputs reduces the cost of cultivation.

- Infrastructure promotional activities such as laying of Pandal for cultivation of vegetables in 726.55 Ha. and protected structures for cultivation of vegetables and flowers in poly houses in 25.57 L.Sq.m. Shade net nursery in 1.70 L.Sq.m ensures cent percent crop stand in the field and to bring about transformation in vegetable cultivation.
- Centres of Excellence for flower crops and vegetables has been established in collaboration with Israel helps to triple the income level of the farmers especially in small and marginal holdings as envisaged in TN Vision 2023.
- Massive farm Mechanization in Horticulture to reduce labour drudgery and to reduce the cost of cultivation besides steps to educate the farmers in use of superior farm implements, equipments and machineries.
- As an important measure, Government has initiated the Peri-metro Vegetable Cluster development programme to link the farm producer and consumer through the market aggregator. This programme covers identification of project areas and the bottle necks in the supply chain system through Base Line Survey, motivation of farmers to form clusters and later to federate into a Farmer Producer Organization at district level so as to improve the market intelligence and to empower the farmers. Promoting the farmers to cultivate vegetables in open (5,780 Ha.) and protected conditions (22,000 Sq.M), promoting organic farming through developing Vermi-compost units (65 nos.), overcome the post-harvest losses by providing best logistics and supply of assured quality vegetables and to provide good remuneration to the growers and price benefit to the consumers are implemented.

- Activities relating to area expansion in Horticulture crops to an extent of 88,000 Ha. are taken up. It is also important to note that the area of Horticulture crops have been increased from 9.40 L.Ha to 10.81 L.Ha over the past three years.
- Bringing back into cultivation of 9.67 L.Ha area of fallow land available in Tamil nadu through "Rain fed Area Development Programme". Horticulture Based farming system is introduced along with water management activities in 4,458 Ha.
- To meet out the demand of daily requirement of vegetables, by growing vegetables at the roof top of the residential houses at Chennai and Coimbatore metros, the Government had launched "Do It Yourself Kit" model for growing vegetables as pilot project under "Urban Horticulture development Scheme".
- Modernized Parks and Gardens are established at Courtallam, Yercaud, Kodaikanal, Ramanathapuram and Chennai to cater to the requirement of tourists and public.
- To increase the production of pedigree planting materials and to function as model demonstration centers, infrastructure for both production and protection for five State Horticulture farms namely SHF, Vitthanthalangal (Kancheepuram Dt), SHF, Adurai (Thanjore Dt), SHF, Mulluvadi (Salem Dt), SHF, Vallathirakottai (Pudukkottai Dt), and SHF, Srivilliputhur, (Virudhunagar Dt) have been taken up.
- Establishment of new State Horticulture farms in Thorakudi in Trichy district and Polayampalli in Dharmapuri district to cater to the need of the planting materials of horticulture farmers.

- Steps for cultivation of diversified crops and inclusion of Bamboo in 1,075 Ha. and Medicinal crops in 17,139 Ha. have been taken up.
- Ensuring effective dissemination of technology to the farmers and to improve extension outreach at field gate through establishment of District Horticulture Information and Training centres at 10 major horticulture districts on a pilot basis.

The area, production and productivity attained in the past three years due to various initiatives taken by the government and the programme for 2014-15 under various Horticultural crops are given below.

4. Area, Production and Productivity of Horticultural crops in TamilNadu for the year 2011-12, 2012-13, 2013-14 & 2014-15 (Area: Lakh Ha, Production: Lakh MT, Productivity : MT/Ha)

Sl. No.	Name of Crops	2011-12			2012-13			2013-14			2014-15		
		Area	Prodn.	Pty	Area	Prodn.	Pty	Area	Prodn.	Pty	Area	Prodn.	Pty
1.	Fruits	2.87	58.77	20.48	3.10	67.00	21.62	3.29	73.70	22.43	3.45	81.07	23.50
2.	Vegetables	2.54	69.27	27.25	2.74	78.96	28.77	2.90	86.79	29.95	3.05	95.46	31.27
3.	Spices & Condiments	1.65	10.05	6.11	1.78	11.46	6.44	1.89	12.60	6.69	1.98	13.87	7.01
4.	Plantation Crops	2.55	10.50	4.12	2.75	11.97	4.34	2.92	13.16	4.51	3.07	14.48	4.72
5.	Flowers	0.26	2.74	10.35	0.29	3.12	10.92	0.31	3.44	11.12	0.32	3.78	11.65
6.	Medicinal & Aromatic Plants	0.14	1.29	9.20	0.15	1.47	9.73	0.16	1.62	9.91	0.17	1.78	10.38
	Total	10.01	152.62	15.24	10.81	173.98	16.09	11.46	191.31	16.69	12.04	210.44	17.47

5. State Plan Schemes

5.1. Integrated Horticulture Development Scheme (IHDS)

This scheme aims at increasing the area and production of horticulture crops and is implemented in all the 31 districts excluding Chennai. Under this scheme, quality planting materials, high yielding / hybrid vegetable seeds and flower seeds are distributed to farmers at 50% subsidy. Up to a maximum of 1 Ha / beneficiary for fruits and spices and 0.5 Ha / beneficiary for high yielding / hybrid vegetable seeds and flowers are provided.

The scheme was implemented in 26,583 Ha. area with an expenditure of Rs.371.18 Lakhs during 2011-12, 40,283 Ha. with an expenditure of Rs.1,186.68 Lakhs in the year 2012-13 and 20,238 Ha. area with an expenditure of Rs.485.705 Lakhs in the year 2013-14.

In 2014-15, the scheme is proposed to be implemented at an outlay of Rs.492.50 Lakhs aiming to increase the area and production of horticultural crops to an extent of 22,000 Ha.

5.2. Horticulture Training Centres

The prime objective of the training is to impart Hi tech horticulture trainings to farmers, to enhance their knowledge on recent advancements in horticulture crop cultivation to maximize the productivity and income. Training is imparted on precision farming, protected cultivation, high density planting, canopy management, Integrated Pest and Disease Management, Integrated Nutrient Management, Micro irrigation and Fertigation through Horticulture Training Centres functioning at Madhavaram, Kudumianmalai, Thally and Ooty.

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5.4. Urban Horticulture Development Scheme (Do it yourself Kits)

The Hon'ble Minister for Agriculture on 5.4.2013 had announced on the floor of Assembly that in Chennai and Coimbatore Metropolitan Cities, to promote cultivation of fresh, nutritious organic vegetables in the Terrace garden, "Do-it-yourself Kits" would be provided to the needy, to meet the growing demand for fresh vegetables.

Accordingly, a new scheme titled, Urban Horticulture Development Scheme (Do it yourself Kits) was launched with a financial outlay of Rs.500 Lakhs during 2013-14. The objective of the scheme is to grow fresh and nutritious vegetables in the roof tops of households in Metropolitan cities like Chennai and Coimbatore. Under this scheme, a Kit containing vegetable seeds, implements, bio pesticide, bio fertilizer, growing media were distributed along with dissemination of technical knowhow was given at 50% subsidy.

During 2013-14, 4,968 Do it yourself Kits were distributed to the beneficiaries. The Metropolitan city dwellers could apply through online to get the benefits under this scheme. Each kit costing about Rs.2,650/- was given at 50% subsidy. A beneficiary could avail up to a maximum of 5 kits.

Each kit has 20 numbers of UV-treated polythene bags with coco pith 2kgs, polythene spreading sheet, water soluble fertilizer – 2kgs, Azospirillum – 200g, Phosphobacteria – 200g, Trichoderma viridi - 100g, Pseudomonas - 100g, Azadiractin – 250ml, Plastic hand Sprayer, Plastic rose can, Hand digging fork, Hand trowel, Protray, Brinjal, Tomato, Chillies, Bhendi, Cluster beans, Bush beans, Radish, Amaranthus, Coriander & Palak Green

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During 2011-12, training was given to 6,400 farmers with an assistance of Rs.6.97 Lakhs. In the year 2012-13, 6,400 farmers were trained with assistance of Rs.19.20 Lakhs. In 2013-14, training was imparted to 2,500 farmers with an assistance of Rs.7.50 Lakhs.

During 2014-15, it is proposed to impart training to 2,500 farmers at an outlay of Rs.7.50 Lakhs.

5.3. Hill Area Development Programme (HADP)

The main objective of the Scheme is to improve the socio-economic status of the farmers of the Nilgiris District by increasing the area under Horticultural crops for which 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.

During 2011-12, the scheme was implemented in an area of 4,200 Ha. with a financial assistance of Rs.80 Lakhs. During 2012-13, it was implemented in an area of 782.50 Ha with a financial assistance of Rs.78.25 Lakhs. Under the component of Mechanization, Rs.30.10 Lakhs and Rs.56 Lakhs in the year 2011-12 and 2012-13 was achieved respectively. Civil works were also taken up in the State Horticulture Farms, Parks and Garden of Nilgiris District to a tune of Rs.96.70 Lakhs in 2011-12 and Rs.141.50 Lakhs in 2012-13. During 2013-14, the scheme was implemented at an outlay of Rs.254.79 Lakhs covering an area of 900 Ha.

It is proposed to implement this scheme at an outlay of Rs.260.00 Lakhs with the same subsidy pattern, during 2014-15.

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seeds, Technical booklet carrying information on cultivation aspects. This scheme has very well received by the Metropolitan public.

In 2014-15 it is proposed to extend this scheme to Trichy, Madurai and Salem cities also at an outlay of Rs.500.00 Lakhs.

5.5. National Agriculture Development Programme:

NADP is in implementation in all districts of TamilNadu except Chennai. In the last three years, the scheme covered an area of 49,136 Ha. with an expenditure of Rs. 18,429.35 Lakhs.

Under NADP, Productivity Enhancement of Horticulture Crops, Precision Farming, Hi-tech Productivity Enhancement Programme, Perimetro Vegetable Cluster Development Programme for Chennai and Coimbatore and Rainfed Area Development Programme (RADP) have been implemented to enhance production of Horticulture crops.

5.5.1. Precision Farming

The implementation of Precision Farming in Horticulture crop cultivation has shown a spectacular increase of productivity from 30% to 50%. This is due to adoption of High Yielding /Hybrid seeds, installation of Micro Irrigation with fertigation in annual horticulture crops. From 2011-12 to 2013-14, it was implemented at an expenditure of Rs.2,249.43 Lakhs in an area of 10,722 Ha. During 2014-15, this component will be continued under the Productivity Enhancement Programme of Horticulture Crops under NADP.

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5.5.2. Hi Tech Productivity Enhancement Programme

To enhance the per unit productivity of the Horticulture crops by adopting Hitech interventions like High Density Planting, use of Hybrid varieties for vegetables cultivation, improved package of practices for the cultivation of all Horticulture crops, like use of banana bunch sleeves, mulching and to increase the area under horticulture crops by normal planting are practiced. This component was implemented from 2011-12 onwards in an area of 27,016 Ha. at an expenditure of Rs.3,265.90 Lakhs at 50% subsidy. During 2014-15, this programme will be continued under the Productivity Enhancement Programme of Horticulture Crops under NADP.

5.5.3. Encouraging Pandal Cultivation of Vegetables

To enhance the production and productivity of Gourds and avarai vegetables which are growing in Pandal structure, this scheme is implemented from 2012-13 onwards. As announced in the floor of assembly, this scheme is implemented at an expenditure of Rs.761.98 Lakhs in an area of 490 Ha. In 2013-14 the assistance for the structure was extended to other Horticulture Crops growing in pandal. Totally an area of 726.55 Ha. have been covered at an expenditure of Rs.1,233.93 Lakhs. During 2014-15, this programme will be continued under Productivity Enhancement Programme of Horticulture Crops under NADP.

5.5.4. Establishment of District Horticulture Extension cum Training Centre

In order to disseminate the latest technologies to all kinds of field functionaries and to the farmers, establishment of 10 District Information cum Training centre at an outlay

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during the year 2012-13 under NADP towards Mass multiplication of Carnation Mother plants, at State Horticulture Farm, Thummanatty in Nilgiris district. The scheme is being implemented through TANHODA and sourcing of rooted mother carnation cuttings from Italy is in progress.

5.5.8. Development of infrastructure facilities at Horticulture Training Centre, Thally Village, Hosur Taluk, Krishnagiri district.

During 2012-13, a sum of Rs.150 Lakhs had been sanctioned for the development of infrastructure facilities at Horticulture Training Centre, Thally, Krishnagiri district. Construction of the Administrative building complex, class rooms and Trainees hostel are in progress.

5.5.9. Improving Agricultural Productivity and Profitability through Horticultural Crop Diversification in the Feeder Zones of Metro city

To increase the profit of peri-urban farmers through improved cultivation practices, an amount of Rs.367.85 Lakhs was sanctioned to Anna University under NADP for the year 2012-13. Subsidy for drip irrigation and other inputs is being given to the farmers of Kancheepuram and Tiruvallur districts through this scheme.

5.5.10. Empowerment of Extension functionaries (from State Department of Horticulture) on diagnosis and integrated management of Mite Pests through Hands on Training and Farms School Programmes

For advocating integrated mite management strategies to horticulture farmers and to train extension

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of Rs.600 Lakhs, is in progress in the districts of Ariyalur, Cuddalore, Kancheepuram, Krishnagiri, Pudukottai, Ramanathapuram, Thirunelveli, Thiruvallur, Villupuram and Virudhunagar.

5.5.5. Mechanization of Harvesting & Processing of Turmeric and Sett cutting, harvesting of Tapioca

To improve the quality of Turmeric and Tapioca by adopting scientific method of Harvesting, without any breakage and on farm processing like curing in turmeric so as to fetch better market price for improving the income level of the farmer, this scheme was implemented during 2012-13 at an expenditure of Rs.175.175 Lakhs. 9 turmeric harvesters, 38 turmeric boilers, 8,308 tapioca sett cutters to 878 farmers have been distributed.

5.5.6. End to End Computerization

To deal the extension work at field level and release the subsidy in a modern way, Rs.200 Lakhs was sanctioned to this department.

With this, the Hon'ble Chief Minister had inaugurated the Enterprise Resource Planning (ERP) software which enables all file works from end to end at the Commissionerate had been made online and M-Governance for monitoring installation of micro irrigation systems has been designed and it is under process for implementation.

5.5.7. Mass Multiplication of Carnation Mother Plants in Nilgiris district

In order to promote cut flower cultivation in Nilgiris and to reduce the dependency on private sources for quality planting material, a sum of Rs.140 Lakhs was sanctioned

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functionaries on the diagnosis of mite pests, an amount of Rs.30.97 Lakhs has been sanctioned to TNAU, under NADP during 2012-13. Trainings have been organized to Horticulture Officers and progressive farmers.

5.5.11. Capacity Building of Extension officials to transfer hybrid seed production technologies in Vegetable crops (Tomato and Okra)

To develop entrepreneurial skill among rural farmers for Hybrid seed production in Tomato and Okra, an amount of Rs.15.53 Lakhs had been sanctioned to TNAU under NADP during 2012-13. Training to extension officials and field demonstrations are in progress.

5.5.12. Perimetro Vegetable Cluster Development Programme

It is a sub-scheme of NADP. Government of India has launched it as a new programme in the 11th Five Year Plan period called Vegetable Initiative for Urban Cluster (VIUC) under NADP. An amount of Rs.1,700.44 Lakhs and Rs.1,700 Lakhs have been sanctioned for the year 2011-12 and 2012-13 respectively for Chennai and Coimbatore Districts. This programme is named as Perimetro Vegetable Cluster Development Programme in TamilNadu with a view to have a price gain for both the producers and consumers besides ensuring continuous supply of fresh vegetables to the burgeoning urban markets it becomes absolutely necessary to create forward linkages from rural to urban areas. Community mobilization and capacity building of the farmers are the objectives of this scheme. This will also facilitate assured income to farmers in the rural areas adjoining the cities.

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Clusters of farmers will be organised to supply their produce to a society run by the farmers at the District level. The vegetable growing farmers are federated into clusters at village level with each cluster comprising 15-20 numbers of farmers with a total area of 15-20 Ha. / cluster. These clusters will go on to form Panchayat level federation, Block level federation, District level federation and to promote as Farmer Producer Organization (FPO) to empower the farmers with market intelligence and to improve their bargaining capacity.

Public & Private Entrepreneurs will be engaged as Market Aggregators to collect, sort, grade and pack the vegetables at the farm gate and to supply them to the retail outlets established by them in the city. This scheme is implemented in a Public Private Partnership (PPP) mode. Vegetable cultivation in open as well as protected cultivation, Post Harvest Management facilities viz., low cost onion storage structure, Reefer vans and Pack house besides Marketing facilities such as Collection centres and Retail outlets are the major components along with the Baseline survey and Promotion of FPO as per the guidelines of RKVY sub scheme.

Under this scheme, 700 clusters with 12,070 farmers have been formed in 9 districts namely Kancheepuram, Tiruvallur, Tiruvannamalai, Vellore, Villupuram, Coimbatore, Erode, Tiruppur and The Nilgiris. The farmer clusters have opened separate Bank Accounts. Further 13 FPO formations are in progress with the help of reputed NGOs and KVKs.

As announced in the Assembly in the year 2011-12, this programme was successfully initiated at Chennai and Coimbatore resulting in increase of 5,780 Ha. area under cultivation of vegetables. An amount of Rs.751.45 Lakhs has been released as subsidy benefitting 5,571 vegetable

subsidy on premium of Rs.1,466.44 Lakhs covering 78,554 farmers.

- Modified National Agriculture Insurance Scheme (MNAIS) was implemented with a subsidy on premium of Rs.30.44 Lakhs covering 10,558 farmers.
- Weather Based Crop Insurance Scheme (WBCIS) was implemented with a subsidy on premium of Rs.41.29 Lakhs covering 4,202 farmers.

During 2014-15 it is proposed to cover 49,500 farmers at an outlay of Rs.4,000 Lakhs.

7. Part II Scheme

During 2011-12, an amount of Rs.110 Lakhs was sanctioned and infrastructure facilities are being created at a cost of Rs.30 Lakhs at Horticulture Training Centre, Madhavaram. District Horticulture Extension and Training Centres are being established at Erode and Trichy at a cost of Rs.20 Lakhs each and also training infrastructures are being created at Horticulture Training Centre, Thally at a cost of Rs.40 Lakhs.

During 2012-13, the following works were carried out under Part II Scheme.

1. Establishment of District Horticulture Extension and Training Centre at Dharmapuri at a cost of Rs.30 Lakhs
2. Extension of District Horticulture Extension and Training Centres at Trichy and Erode at a cost of Rs.10 Lakhs each.

During 2013-2014, an amount of Rs. 170 Lakhs was sanctioned. Under Component I, Extension of District

growers.16 collection centres run by the farmer clusters were inaugurated on 01.09.2013 in 9 districts and about 5,808.63 Mt of vegetables were collected and sold at the collection centres through various market aggregators. Further 7 Market aggregators have been identified for establishing collection centres, retail outlets and for mobile sale units at all perimetro areas.

During 2013-14, this programme has been extended to Trichy district with an outlay of Rs.1,200 Lakhs and the activities will be taken up during 2014-15. This scheme will be extended to Madurai and Salem districts at an outlay of Rs.500 Lakhs.

6. National Crop Insurance Programme (NCIP)

National Crop Insurance Programme (NCIP) / Rashtriya Fasal Bima Karyakram (RFBK) have been formulated converging MNAIS, WBCIS & CPIS. In Tamil Nadu under National Crop Insurance Programme (NCIP) Modified National Agriculture Insurance Scheme (MNAIS) is being implemented from Rabi 2013-14. This scheme is implemented at revenue village Level in 3 districts viz., Sivagangai, Namakkal and Cuddalore and at Firka Level in rest of the 28 Districts except Chennai. Horticulture crops such as Banana, Onion, Pineapple, Potato, Chillies, Turmeric and Tapioca are notified under National Crop Insurance Programme (NCIP) for Kharif 2014-15. The objective of the scheme is to provide insurance coverage and financial support to the farmers in the event of failure of sowing and failure of any of the notified crop as a result of natural calamities.

- During the last three years National Agriculture Insurance Schemes (NAIS) was implemented with a

Horticulture Extension and Training Centres at Dharmapuri at a cost of Rs.40 Lakhs was carried out. Under Component II, E-enabling Peri-metro project using mobile based agro advisory system in Chennai and Coimbatore regions at a cost of Rs.100 Lakhs which will be implemented in 2014-15 and Formation of Farmers Interest Groups, capacity building of FIGs and formation of Producers Company at a cost of Rs.30 Lakhs are being carried out.

Hon'ble Chief Minister of Tamil Nadu announced establishment of **District Horticulture Technology Resource Centres** in five districts viz., Salem, Namakkal, Theni, Tiruvannamalai and Sivagangai during 2013-14 at an outlay of Rs.325 Lakhs. The preparatory works are in progress.

In 2014-15, under component I, it is proposed to extend the District Horticulture Extension and Training Centres at Trichy and Erode at a cost of Rs.20 Lakhs each and to create infrastructure facilities for Central Horticulture Training Centre at Kudimiyamalai and Pudukottai, at a cost of Rs.45.13 Lakhs. It is also proposed to produce and distribute the planting materials of Dendrobium (Orchids) to the farmers at a subsidized rate and demonstrate Orchids cultivation in Tamil Nadu at a cost of Rs.50 Lakhs under Component II.

8. Organic Farming Policy

In the context of world scenario towards organically produced food, Organic Farming is gaining importance. With food safety concern looming large, stand on sustainable Agriculture is to be taken up by adopting organic farming methods which can be devised only based on a strong State

Organic Farming Policy as indicated and emphasised in Vision 2023 under Horticulture Development Programme.

Accordingly, Organic Farming Policy for Tamil Nadu is being drafted by a Drafting Committee consisting of eminent people, academicians, entrepreneurs and farmers who are working actively in the area of organic farming as announced in the floor of Assembly and the draft policy is in the final touch.

9. Special Package implemented under Cyclone thane Rehabilitation programme

In Tamil Nadu, due to Cyclone Thane hit on 30.12.2011, 48,040.90 Ha. of Horticulture crops was damaged which includes the perennial crops like Cashew in an extent of 36,517.08 Ha. in the districts of Cuddalore and Villupuram.

Hon'ble Chief Minister announced a Special Package on 04.02.2012 for horticulture crops to rehabilitate the affected farmers at an outlay of Rs.724.26 crores to be implemented for a period of five years.

Due to the Revival of the revised assessment for crop damage was estimated to be 8,678.57 Ha. and the Special Package was determined at an outlay of Rs.5,409.97 Lakhs. So far, expenditure has been incurred for a sum of Rs. 5,179.697 Lakhs.

- 22,666 Nos Vegetable minikits were completely distributed
- 41,176 Nos of pulses minikits distributed
- Flower crops re cultivated in an area of 180.90 Ha.
- Tuber crops re-cultivated in an area of 2,182 Ha.

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State Plan Schemes Physical and Financial Target and Achievement

The financial allocation for the year 2013-14 with the expenditure details incurred and the proposed outlay for the year 2014-15 for the State Plan Schemes are furnished below:

Financial: Rupees in Lakhs

Sl. No.	Name of the Scheme	Unit	2013-14				2014-15	
			Physical		Financial		Physical	Financial
			Target	Achmt.	Target	Achmt.	Target	Target
1.	Integrated Horticulture Development Scheme	Ha.	24,625	20,239	492.50	485.713	22,000	492.500
2.	Horticulture Training Centre (HTC)	Nos.	2,500	2,500	7.500	7.500	2,500	7.500
3.	Hill Area Development Programme	Ha.	900	900	254.79	254.790	900	260.00
4.	Urban Horticulture Development Scheme (Do it your Self Kit)	Nos.	15,565	4,968	500.00	300.393	15,565	500.000
5.	National Agricultural Development Programme	Ha.	7,248	5,277.20	3,372.83	3152.288	13,896	5,087.767

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- Spice crops re-cultivated in an area of 589.30 Ha.
- Non-Perennial fruit crops such as banana re-cultivated in an area of 4,580.930 Ha.
- Medicinal plants re cultivated in an area of 41 Ha.
- Cashew replanting has been completed in an area of 8,228.40 ha with the proposed target of 8,678.59 Ha. which includes the area replanted by gap filling in the partially affected fields in an extent of 7,428.59 Ha. normal planting in an area of 350 Ha. and High Density Planting in an area of 449.81 Ha. The balance area of 450.19 Ha. will be covered under High Density Planting during 2014-15. 900 Ha. will be covered as High Density Cashew orchard with drip irrigation under NMSA during 2014-15.
- Besides to provide irrigation facility to High Density Cashew Orchards, the Government sanctioned a sum of Rs.1,140 Lakhs to provide 270 Nos. of bore wells to 60 Joint Liability Groups (JLGs) and 210 individual farmers of Cuddalore and Villupuram. Sofar, 59 Nos. of bore wells for JLGs and 90 Nos. of bore wells for individual farmers totally 149 borewells have been completed at an outlay of Rs.686.185 Lakhs.
- During 2014-15, 450.19 Ha. will be brought under Cashew High Density planting, 121 nos. of bore wells will be erected and 862 Ha. of Cashew High Density orchard will be provided with drip irrigation facility.

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Sl. No.	Name of the Scheme	Unit	2013-14				2014-15	
			Physical		Financial		Physical	Financial
			Target	Achmt.	Target	Achmt.	Target	Target
6.	National Agricultural Insurance Scheme	No. of farmers	45,000	14,488	950.00	709.880	-	-
7.	Modified National Agricultural Insurance Scheme	No. of farmers		6,348		14.900	-	-
8.	Weather Crop Insurance Scheme	No. of farmers	8,000	771	52.51	6.950	-	-
9.	National Crop Insurance Programme	No. of farmers	-	-	-	-	49,500	4000.00
10.	Part - II Schemes	No. of farmers	3	3	170.000	138.000	4	135.13
TOTAL					5,800.13	5,070.414		10,482.897

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