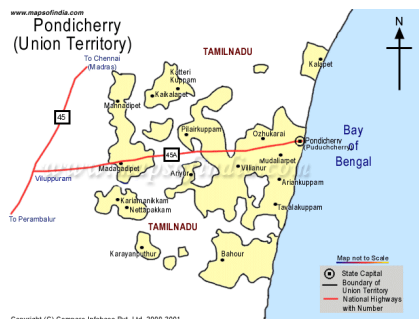


# Report of the Joint Inspection Team on their inspection visit to Puducherry Union Territory during May, 2012(27-30 May, 2012)



**Department of Agriculture and Cooperation (DAC)**

**Nation Horticulture Mission**

## **Report of the Joint Inspection Team on their inspection visit to Puducherry Union Territory during May 2012(27 -30 May, 2012)**

The Joint Inspection Team (JIT) comprising of Dr. R.C.Upadhyaya, Chief Consultant (NHM) visited Puducherry during 27-30th May, 2012 to review the progress under the National Horticulture Mission (NHM), Shri P. Anbazhagan, Horticulture Officer, NHM , Puducherry accompanied the Team during the field visits along with Shri S. Jayasankar, Additional Director of Agriculture (Horti.), Shri R.M.Harish Selvanathan, Joint Director of Agriculture(hort.) and Shri V. Rajendiran, Deputy Director of Agri. (Horti.).

### **Agenda of Meeting:**

- Crop specific cluster at district level.
- Nurseries management and progress including accreditation of nurseries.
- Vermi compost units under SHM.
- Flowers and vegetable production under protected conditions.
- Timely release of budget for better and timely utilization
- Micro irrigation scheme and use of plastic in mulching, irrigation and precision farming.
- Shortage of technical Staff at Management and also at field Level.
- Other activities and support from KVK, s.

Meeting was held at 10am. On 28<sup>th</sup> May, 2012 under the chairmanship of Dr.R.Sathiyaseelan, Director, Department of Agriculture alongwith other departmental officials and progressive farmers. Discussions were held on Horticulture development in Puducherry and problem faced in field. Director informed about damage caused by Hurricane which caused severe damage to the horticultural crops and poly house structures. Farmers requested for support on repair of poly houses since it was a natural calamities. Director assured that efforts are made to support from disaster management funds. Physical and financial progress of 2011-12 and action plan for 2012-13 was discussed in detail.

**List of Officers and Farmers attended the Meeting held at Directorate, Puducherry  
on 28.5.2012**

1. Dr.R.Sathiyaseelan, Director, Department of Agriculture, Puducherry
2. Thiru. S. Jayasankar, Additional Director of Agriculture (Horti.), Puducherry
3. Thiru.R.M.Harish Selvanathan, Joint Director of Agriculture, Puducherry
4. Thiru.V. Rajendiran, Deputy Director of Agri. (Horti.), Puducherry.
5. Thiru.D. Muruga, Agriculture Officer, Puducherry
6. Thiru.V. Kathiravan, Horticulture Officer, NHM, Puducherry
7. Thiru.P. Anbazhagan, Horticulture Officer, NHM, Puducherry
8. Thiru.V. Govindan , Horticulture Assistant, NHM , Puducherry
9. Thiru.D. Senthil, Horticulture Assistant, NHM, Puducherry

**List of Farmers:**

1. Thiru.Suresh,Kodathur Village, Puducherry
2. Thiru.Abdhul Hai, Katterikuppam, Puducherry
3. Thiru.Vengatraman, Pandasozhanallur, Puducherry
4. Thiru.Batchu, Pandasozhanallur, Puducherry
5. Thiru.Prabakaran, Pandasozhanallur, Puducherry
6. Thiru.Venu, Pandasozhanallur, Puducherry
7. Thiru.Periyannan, Karuvadikuppam, Puducherry
8. Thiru.Ramamurthi, Bahoor, Puducherry
9. Thiru.Arun Prakash, Koonichampet, Puducherry
10. Thiru.Ramachandran, Koonichampet, Puducherry
11. Thiru.B. Thandapani, Abishegapakkam, Puducherry
12. Thiru.Nadhakobal, Arumbathapuram, Puducherry

13. Thiru.Mohan, P.S.Palayam, Puducherry
14. Thiru.Suresh @ Nagaraj , Poraiyur, Puducherry
15. Thiru.Ganesh, Thavalakuppam, Puducherry

### **Farmers Visited:**

- Shri Periyannan, Karuvadikuppam, Village and Block Puducherry cultivated Sathagudi (tight skinned sweet orange group) in 2 acres land as sole crop and orchard was maintained properly and trees yet to come in production.
- Shri Rajarattanam Village Kanakutty,Block Pandasozhanur planted Banana Var Poovan in area of 2 acres during the year 2011-12.Performance of the crop is satisfactory.
- Sri Abdhul Hai, Village Katterikuppam, Block Manadipatta ,Puducherry.Farmer planted Banana cv , Poovan and Marigold. Chillies are cultivated in open field and farmer is also having poly house of 1000 sq.m with drip irrigation facilities produce chilly crop. Farmer advised to grow marigold by cuttings and manage properly.
- Shri Suresh, Village Kodathur, Block Puducherry produced tomato in poly house of 1000 sq.m. size.Crop was over and farmer is making field ready for second crop.
- Shri Tellai S/O Shri Radhakrishnana,village and Block Manalipattam constructed poly house during the year 2011-12 of 1000 sq.m size and cultivated musk melon crop .Crop needs rouging of virus effected plants and advised to change the variety of the musk melon in future.
- Shri Arungamm S/O Shri Govindaswamy Village Somapalli Block Manalipattam grown floricultural crops like Coxcomb, Marigold, Tuberose and Hibiscus in two acre area as open field crops and supply flowers to Puducherry.
- Shri Sabhapatti Village Somapalli,Block Manalipattam cultivated Banana cv.Mundan in one hectare and planted in this year.Crop is in good condition.
- Shri Rajaram Village Vinayakampth, Block Manalipattam cultivated tube rose in 1.75 acres of land and supervised by the field staff. He also cultivated Tulsi as foliage crop supplied to temples at Puducherry.
- Shri Venkatraman Village and Block Pandasozhanur Nellore constructed poly house of 1000 sq.m. during the year 2011-12 which was totally damage by hurricane in the month of Feb.2012.In open field he is cultivating Mango and Banana .

- Shri .Mohan, Village P.S.Palayam,Block Puducherry planted Guava cv.L-49 and akrapat during the year 2010-11 in 4 ha.area .Crop is performing well and supported by drip irrigation.Farmer advised to follow proper plant protection measures for better yield.

### **Visit to Perunthalaivar Kamaraj Krishi Vigyan Kendra, Puducherry:**

The Perunthalaivar Kamaraj Krishi Vigyan Kendra was established in 1996,and is located at Kurumbapet, Puducherry in an area of 145 acres. Centre is having 50.5 acres is under rain fed and garden land farming with orchards, plantations & farm forestry and five acres for horticulture wing Soil varies sandy loam to laterite, read loam and coastal alluvial. Mango, Guava, Sapota, Lime, Pomegranate, Cashew, Jack and Bread fruit are maintained under orchards.Coconut and Banana are grown under plantation crops. Irrigation is provided through deep tube wells (12nos).

### **Horticulture Nursery:**

Nursery Established in an area of 1020 sq mt. shade net for vegetables crops. Seedlings of Brinjal, Tomato, Chillies, Cabbage, and Marigold are produced in pro-trays and supplied to farmers.

### **Tissue Culture Laboritory:**

Tissue Culture lab was established in the year 1996 under the technical guidance from Baba Atomic Research Centre, Mumbai for tissue culturing of banana plantlets. Green house erected for hardening the tissue cultured plants. Hardened banana plants are distributed to farmers of Puducherry. Later, Tissue culturing is also taken up in Orchids, Rose and Crossandra.Orchidarium serves as a source of explants.

### **Bio-Control Laboratory:**

Established in 1997 under the technical guidance from National Bureau of Agriculturally Important Insects (ICAR), Bangalore.Trichogramma japonicum was released during the Silver Jubilee Celebrations in 1999 as a first Biocontrol agent.Tricho cards – Trichogramma japonicum & Trichogramma Chilonis; Nucleo Polyhedro Virus – Spodoptera litura; Antegonistic Fungal and Bacterial Biopesticides – Trichoderma ciride, Trichoderma harzianum and Pesudomonas fluorescens are being produced and supplied with Government subsidy.Production of Mycoinsecticide – Beauveria bvassiana; Enzootic Bacterial Biopesticide – Bacillus thuringiensis and Nucleo Polyhedro Virus – Helicoverpa armigera are in pipeline Functioning in an area of 5.0 ac. Trials on the adaptability of vegetables, flowers and fruits are being taken up. Various seeds and farmers.



Orchards (Mango,Banana and Guava )visit of JIT at Puducherry Block



Field Visit of spices and crops under protected conditions in Manalipattam Block



Floricultural crops and damaged poly house in Pandasozhanur Nellore area of Puducherry

## Geography:

The Union Territory of Puducherry encompasses an area of only 479 sq km with Puducherry town and its villages covering 290 sq.km surrounded by the South Arcot District, Karaikal town and its villages covering 161 sq.km surrounded by Thanjavur District, Mahe and its villages covering 9 sq km surrounded by the Kerala state, and Yanam covering 20 sq.km within the East Godavari District in Andhra Pradesh. While Puducherry, the head quarters of the union territory, lies 162 km south of Madras and 22 km north of Cuddalore, Karaikal is about 150 km south of Puducherry and Yanam about 840 km north-east of Puducherry on the Andhra Coast. Mahe lies almost parallel to Puducherry, 653 km away on the west coast. The State of Puducherry has a population of 0.97 million. There are two principal basins in Pondicherry: the Gingee River which cuts the territory diagonally and Pennaiyar forming a rim in south. Gingee runs North West to south east of Pondicherry. There are quite a few lakes in Pondicherry. The largest two of them are Bahour and Oussoudu mainly used for fishing purpose. They lie in Pondicherry district. The lush green scenic treat of Pondicherry is mainly due to the kind of soil found. It is a perfect blend of historical and geographical treasure. Along with rich culture and legacy, nature has treasured lots of resources in this storehouse.

### AREA & LOCATION:

REGION	AREA (Sq.Km.)	GEOGRAPHICAL LOCATION	
		LATITUDE	LONGITUDE
PUDUCHERRY	293	Between 11°46' and 12°30' North	Between 79°36' and 79°53' East
KARAIKAL	160	Between 10°49' and 11°43' North	Between 79°43' and 79°52' East
MAHE	9	Between 11°42' and 11°43' North	Between 75°31' and 79°52' East
YANAM	17	Between 16°42' and 16°46' North	Between 82°11' and 82°19' East
STATE	479		

### Climate and Soil:

Since Pondicherry is located in coastal area the climate here is warm and humid all through the year. The summer temperature ranges between 26° to 38° centigrade with dry and clear blue sky. Generally the summer stays from March to July and it is the most predominant season. For tourism purpose, ideal season is March to October. Pondicherry sees a very little monsoon which occurs between November to January and July to September. Winter in Pondicherry is heavily influenced by the north-east monsoons. November to January can be said to experience winter but temperature never goes below 20°. The soil of Pondicherry is mainly red ferrallite, black clay and alluvial with sandy elements. It is a plain land with almost no mountain and forest. The area is covered with dry and evergreen species of vegetation typical in tropical regions.

### **Soil:**

Puducherry	:	Sandy Loams, Sandy Soils, Clay and Clayey loams
Karaikal	:	Deep clay and Clayey loams, sandy loams along the sea coast
Mahe	:	Red laterite coast
Yanam	:	Alluvial

### **Climate :**

Item/Division		Unit	Period				
			2001	2002	2003	2004	2005
PUDUCHERRY REGION							
	Temperature						
a	Mean Maximum	°c	33.4	33.7	33.6	33.1	33.3
b	Mean Maximum	°c	24.2	24.1	24.1	23.9	24.4
	Relative Humidity in percentages						
a	At 08.30 Hrs.	°c	82.8	78.9	NA	78	79
b	At 17.30 Hrs.	°c	76.6	74.3	NA	70	72

### **Rainfall:**

REGION/SEASON	NORMAL	ACTUAL				
		2005-06	2006-07	2007-08	2008-09	2009-10
PUDUCHERRY						
South West Monsoon	379	253	189	253	140	158
North West Monsoon	849	1168	878	823	1238	1192
Winter	46	31	6	74	18	22
Hot Weather	64	100	11	269	224	111
Total	1138	1552	1084	1419	1620	1483
KARAIKAL						
South West Monsoon	259	215	211	267	123	115
North West Monsoon	993	1439	810	1046	1050	1378
Winter	67	44	29	38	48	53
Hot Weather	68	108	29	227	228	152
Total	1387	1806	1079	1578	1449	1698
MAHE						
South West Monsoon	2730	2107	2540	3374	2039	2652
North West Monsoon	367	432	388	311	481	533
Winter	10	10	-	3	-	62
Hot Weather	280	689	318	453	256	411
Total	3387	3238	3245	4141	2776	3658
YANAM						
South West Monsoon	692	813	861	741	641	279

North West Monsoon	450	374	585	233	261	227
Winter	27	-	11	90	-	9
Hot Weather	70	175	7	55	-	152
<b>Total</b>	<b>1239</b>	<b>1362</b>	<b>1463</b>	<b>1119</b>	<b>902</b>	<b>667</b>

## **Horticulture:**

Agriculture is the main occupation of the Pondicherry inhabitants. Pulses, spices, condiments, coconuts, different kinds of nuts are other chief crops grown in this region. Irrigation facilities have been developed since 45% of total population is engaged in farming and related occupation. Irrigation facility includes mainly tube wells and tanks which irrigate about 6765 hectares of land.

National Horticulture Mission (NHM) has been accorded approval in Puducherry during 2009-10 with a total outlay of Rs.133.50 lakh. Puducherry Horticulture Society has been established as per the guidelines of the NHM and registered under the Societies Registration Act. Applications have been received from the farmers seeking assistance under various components of the scheme. The protected house cultivation and high-tech Horticulture like high density mango, guava planting will bring a significant change in the production of vegetables and flowers and fruits in the U.T. of Puducherry. Concentrated effort has been made for establishment of Green House and raising of Hybrid tomatoes under controlled condition. As a result, farmers raised Hybrid tomato variety US 3140 under Poly house in a successful way. The cyclone "Thane" that hit Puducherry region during last week of December 2011 has an impact on Poly house structure that has been established earlier. With a view of negate fear of farmers, in respect of construction of Green houses necessary emphasis will be given on strengthening and reconstruction of Green House that has been damaged and also in designing the Green House. The farmers those interested in horticulture crops will be encouraged and given training on high Tech Horticulture. They will be taken to research institution and private farms to have a firsthand information and practical knowledge about latest technology. The farmer who is facing day to day difficulties in raising crops under protected cultivation will be given Technical support group assistance for hiring experts, technical advice, monitoring and evaluation. The Horticulture farmers are taken on tour to private firms like Jain Irrigation Hosur, Bangalore, Coimbatore and Pune as exposure visit for acquaint them with the Technical knowhow involved in high density planting in mango, Guava etc. and to interact with the farmers.

**The details of area, production and productivity of horticulture crops in Puducherry during 2009-10 as follows:**

Sl. No.	Crops	Area (ha.)	Production(Tonnes)	Productivity (T/Ha.)
1	Fruits	1167	25041.10	21.5
2	Vegetables	1411	6619.00	33.0
3	Flowers	286.2	2368.00	8.3
4	Medicinal and aromatic Plants	38.8	88.00	2.3
5	Coconut	1592	211 lakh nuts	13254 nuts/ha
6	Betlevine	29.8	636.00	21.3

<b>IMPORTANT PHYSICAL TARGETS AND ACHIEVEMENT DURING THE TENTH FIVE YEAR PLAN 2002-2008</b>				
Sl. No.	Item	Unite	Tenth plan Target	Actual Achievement
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	i) Compost distributed	MT	30000	21542
	ii) Bio-fertilisers distributed	MT	225	177
	iii) IPM demonstration conducted on paddy, groundnut, sugarcane, cotton and other crops	Nos	60	42
	iv) Establishment of farmers help centres	Nos	33	30
<b>3.</b>	<b>Soil Resource Management and Inputs Quality Control</b>			
	a) Issue of Soil Health Card/Green leaf Cards to farmers	Nos	15000	11133
	b) Composite soil samples to be analysed for estimation of major, micro nutrient and microbial load under soil resource monitoring	Nos	15000	19466
	c) Analysis of inputs samples under Quality Control Programme	Nos		
	i) Seeds	“	7500	8060
	ii) Fertiliser	“	3500	3015
	iii) Pesticides	“	2500	2197
	iv) Compost	“	1000	573

	v)	90% subsidy to the formation of drainage channel by the farmer affected by salinity / alkalinity and the land tending to become salinity/ alkaline due to lack of proper drainages facility in running metres	Mtr	-	-
	vi)	Distribution of micro nutrient kits of 100% subsidy to the farmers	Ha	-	-
	vii)	Conduct of regional level soil testing and micro nutrient campaign	Nos	-	-
4		Promotion of Agricultural Mechanisation			
a)		Distribution of Tractor to individual farmers at subsidized cost	Nos	-	340
b)		Distribution of power Tiller	“	-	333
c)		Distribution of improved agricultural implements	“	-	124
d)		Distribution of conventional implements	“	-	134
e)		Distribution of mini tractor to individual at subsidized cost	“	-	4
5		Development of Horticulture Crops			
i)		Area to be brought under			
	a)	Vegetables & Plantation	Ha	-	2931
	b)	Coconut	“	-	2706
	c)	Fruits	“	-	919
	d)	Flowers	“	—	145
	e)	Medicinal Plants	“	-	23
	f)	Tubers	“	-	-
	g)	Others (Cashew & Betelvine)	“	-	-
ii)		Establishment of Processing units of horticulture products for value added products	Nos	-	-
iii)		Protected House	“	-	-

iv)	Post Harvest Management	“	-	-
<b>6.</b>	Agricultural college & Krishi Vigyan			
i)	No. of students admitted in B.Sc(Agri) Course	Nos	-	233
ii)	No. Of Students admitted in M.sc(Agri) Course	“	-	135
iii)	Farm youths training programmes undertaken by KVK	“	-	1310
iv)	No. of farm youths trained	“	-	6000
<b>7.</b>	Development of Infrastructure for Agriculture Marketing			
i)	Establishment of new rural market	Nos	-	-
ii)	Establishment of new Uzhavar Sandhai	“	-	2
iii)	Establishment of rural godowns	“	-	-
<b>8.</b>	Promotion of post Harvest Technologies			
i)	Construction of threshing floors to water users association/ co-operation/ NGOs and Uzhavar Udhaviyagams	Nos	-	19
<b>9.</b>	Training and Capacity building to develop human resources			
i)	Agricultural Officers and field staff of the Agriculture Department trained in research stations/ Agriculture universities/ KVKs of Southern states and through experts of other states in the U.T. I of Puducherry	-	-	287
<b>10</b>	Introduction and maintenance of e-governance			
i)	Number of Officials trained under office automation covering windows, Ms Office etc.,	Nos	-	142
ii)	Number of Uzhavar Udhaviyagams connected to networks	“	-	26
<b>11.</b>	Puducherry Agricultural Workers Welfare Society			
i)	No of Agricultural Labourers to be covered	Nos	-	-

ii)	Old age Pension	“	-	-
iii)	Maternity assistance	“	-	-
iv)	Marriage assistance	“	-	-
v)	Funeral assistance and Insurance	“	-	-
<b>12</b>	Scheme for Monitoring and Evaluation			
i)	Scheme monitored annually	Nos.	-	30
ii)	Evaluation studies undertaken	Nos.	-	5
<b>13.</b>	Group Insurance Scheme for Agricultural Labouers			
i)	Agricultural Labourers families covered under like insurance scheme	Nos.	-	50000
	MINOR IRRIGATION			
	Integrated Scheme for Development, Harvesting, Recharging and Conservation of ground water			
i)	Construction of Farm Ponds in Karaikal	Nos.	-	11
ii)	Desilting / reconstruction of percolation ponds channels/ waterbodies in Government poromboke for rainwater harvesting and recharging ground water	“	-	22
iii)	Construction of recharge tubewells for recharging ground water	“	-	40
iv)	Construction of roof top rainwater harvesting structure in Govt. buildings through PASIC.	“	-	18
v)	Renovation of dug wells/ dug-cum-bore wells	“	-	90
vi)	Construction of roof top/ rain water harvesting structures in private building though PASIC	“	-	17
VII)	Laying of underground pipelines at subsidized cost	“	-	161772
viii)	Installation of sprinkler / drip irrigation sets at subsidized cost	“	-	157
ix)	Construction of new / replacement community tubewells	“	-	45

x)	Distribution of PVC pipes to farmers for construction of tubewells department at subsidized cost	Mtrs.	-	12116
xi)	Subsidy assistance to water users association in hects.	Hects.	-	-

### Horticulture Crop wise Porduction of Puducherry

Sl. No.	Name of the Crops	2007-08		2008-09		2009-2010	
		Area in Hects.	Production in tones/ lakhnuts/ lakh leaves	Area in Hects	Production in tones/ lakhnuts/ lakh leaves	Area in Hects	Production in tones/ lakhnuts/ lakh leaves
<b>IV.</b>	<b>HORTICULTURE CROPS</b>						
1.	MANGO	465	7409	259	8560	221	6640
2.	Banana	213	6538	157	6758	120	4755
3.	Guava	84	2565	24	600	29	720
4.	Sapota	92	585	40	524	44	572
5.	Citrus	21	167	10	208	15	300
6.	Amala	27	135	28	690	20	600
7.	Other fruits	117	559	7	77	50	355
	Total	1019	17958	525	17417	499	13942
<b>v.</b>	<b>VEGETABLES</b>						
1.	Plantain	313	11760	236	10158	178	7134
2.	Brinjal	265	5998	142	4299	161	4804
3.	Bhendi	272	2705	103	1560	81	1207
4.	Tomato	65	769	15	55	18	628
5.	Chillies	137	1472	27	328	20	240
6.	Cluster beans	159	1235	15	103	10	701

7.	Lab- lab	109	660	12	156	15	195
8.	Onion	38	335	42	672	40	640
9.	Amaranthus	373	2730	149	1497	200	2000
10.	Radish	122	1645	6	177	8	240
11.	Gourds- Ash gourd	67	675	47	950	50	1000
	Bottle gourd	82	656	23	454	20	400
	Bitter gourd	29	116	15	209	24	336
	Snake gourd	33	198	13	226	15	270
	Ridge gourd	27	135	9	127	11	165
12.	Cool season vegetables	39	351	10	61	-	-
13.	Other vegetables	507	2101	12	39	36	300
	Total	2637	33540	876	21071	887	19633
<b>VI.</b>	<b>TUBERS</b>						
1.	Tapioca	629	25685	371	11285	306	9330
2.	Yam	16	405	36	1260	30	1050
3.	Siruvali	6	78	13	317	10	250
4.	Other tubers	8	86	-	-	-	-
	Total	659	26254	420	12862	346	10630
<b>VII.</b>	<b>FLOWERS</b>						
1.	Jasmine	49	55	41	377	4	10
2.	Crossandra	52	318	48	206	28	140
3.	Marigold	146	1315	85	782	17	170
4.	Tuberose	4	21	2	9	1	4
5.	Torina	6	30	4	18	-	-

6.	Rose	2	17	2	11	2	8
7.	Other flowers	27	162	21	84	14	48
	Total	286	2358	203	1487	66	38
<b>VIII.</b>	<b>MEDICINAL PLANTS</b>						
1.	Vasambu	-	-	2	30	2	30
2.	Coleus	1	4	-	-	-	-
3.	Aloevera	1	13	-	-	-	-
4.	Safed musli	-	-	-	-	-	-
5.	Other medicinal plants	17	51	17	558	-	-
	Total	19	68	19	588	2	30
<b>IX</b>	<b>AROMATIC PALMROCA</b>	-	-	-			
<b>X.</b>	<b>COCONUT</b>	2594	365	2452	351	2172	315
<b>XI.</b>	<b>CASHEWNUT</b>	226	495	35	1330	90	270

**Action Plan (Physical & financial Phasing) for the Union Territory of Puducherry 2012-13**

Sl. No.	Components (In accordance with revised operational guidelines)	2012-13		Financial Required		Total	Remarks
		Phy. In Hects.	Fin in Rs. In Lakhs	Central share 85% Rs. In Lakhs	State share 15% Rs. In Lakhs		
1.	2.	3	4	5	6	7	8
<b>I.</b>	<b>Plantation infrastructure Development (I) Small Nursery (1 Ha)</b>	5	31.25	26.56	4.69	31.25	Krishi Vigyan Kendra, Puducherry

							and Private sector with credit link.
<b>II.</b>	<b>Fruits</b>						
	<b>Establishment of new garden (Area expansion)</b>						
	(i)Non Perennial Fruits- Banana (Sucker)	250	42.10	35.78	6.32	42.10	
	(ii)Banana (TC)	20	7.50	6.37	1.13	7.50	
	(III)High density planting (Mango, Guava) etc.	20	4.80	4.08	0.72	4.80	
	(iv)Fruit crops other than cost intensive crops using normal spacing including papaya.	25	5.62	4.8	0.82	5.62	
<b>III.</b>	<b>Flowers</b>						
	a)Loose Flowers	90	11.25	9.56	1.69	11.25	
<b>IV.</b>	<b>Spices</b>						
	a)Seed spices and Rhizomatic Spices	35	4.36	3.7	0.66	4.36	
<b>V.</b>	<b>Plantation Crops</b>						
	a)Rejuvenation/ Replanting Of Senile Plantation	300	45.00	38.25	6.75	45.00	
<b>VI.</b>	<b>Protected Cultivation</b>						
1	Green House Structure a)Fan and pad system 50% of the cost limited to 1000sq.m per beneficiary (5 in Nos.) (Rs 732 per sq.m)	1.00	73.34	62.33	11.01	73.34	
2	Cost of planting material and inputs of high value vegetables grown in house/Shade net house (8 Nos)	0.6	3.15	2.67	0.48	3.15	
3	Cost of Planting material and inputs of flower for poly house (Shade net house (2	0.3	7.50	6.37	1.13	7.50	

	Nos.).						
4	Promotion of integrated Nutrient Management/ Integrated Pest Management						
	i)Promotion of INM/ IPM	300	3.00	2.55	0.45	3.00	
<b>VII.</b>	<b>Human Resource Development</b>						
	<b>a)Exposure visit of farmers</b>						
	i)Outside the State	2	4	3.4	0.6	4	
	ii)Outside India	1	15	12.75	2.25	15	
	<b>b)Training / Study tour of Technical staff / field functionaries</b>						
	iii)Study tour to progressive state/units (component Minimum 5 participants)	4	3.00	2.55	0.45	3.00	
	iv)Outside India	1	4.00	3.4	0.6	4.00	
	<b>Establishment of Marketing Infrastructure for Horticulture Produce</b>						
	Cold storage unit (I in No.)	1	6	5.1	0.9	6	
	Ripening chamber (1 in No.)	1	6	5.1	0.9	6	
<b>VIII.</b>	<b>Mission Management</b>						
	<b>i)State Level</b>						
	State & Districts Mission officer and implementing agencies for administrative expenses field consultants project preparation computerization, conference etc.	1	12.60	10.71	1.89	12.60	
<b>IX.</b>	Institutional strengthening bring of vechicle, purchase of Hardware/ Software(Purchase of						

	van for the study tours, farmers training etc.	1	10	8.5	1.5	10	
<b>X.</b>	Technical Support Group (TSG) at State Level for hiring experts/ staff, studies, monitoring & evaluation, mass media, publicity, video conference etc.	1	1.50	1.275	0.225	1.50	
	<b>Total</b>	<b>1046.9</b>	<b>300.97</b>	<b>255.82</b>	<b>45.15</b>	<b>300.97</b>	

## **Other Schemes:**

### **Soil Resources Management and Inputs Quality Control:**

The scheme aims at monitoring the fertility status of the soils. Under this scheme, the Department is running one Soil Testing Laboratory each at Puducherry and Karaikal regions and Quality Testing Laboratories for seeds, fertilizers and pesticides in Puducherry region. Based on testing of the soil samples, Soil Health Cards are issued to the farmers. The analysis of seeds, fertilizers and pesticide samples is one of the statutory functions of the Department, which help in ensuring that the quality of the inputs sold by the licensed dealers is in accordance with the provisions of the Seeds (Control) Order, 1983, the Fertilizers (Control) Order, 1985 and the Insecticides Act, 1968.

### **Promotion of Post-Harvest management:**

Farmers are facing much hardship every year in harvesting their crops and processing the produce. Through this scheme, improved threshing floors and rural godowns are made available to farmers to overcome the above difficulties.

### **Pilot Project on Establishment of Agriculture Clinics/Self Employment Enterprises by Agri Technologists:**

The objective of the scheme is to provide self-employment opportunities to the agricultural graduates passing out from Pandit Jawaharlal Nehru College of Agriculture and Research Institute, Karaikal and the certificate holders from the Vocational Agricultural Schools run by Perunthalaivar Kamaraj Krishi Vigyan Kendra, Puducherry and Krishi Vigyan Kendra, Karaikal. A subsidy not exceeding Rs.3.00 lakhs for agricultural graduates and Rs.0.75 lakh for certificate holders respectively is extended for this purpose.

### **Scheme for Welfare Society for Agricultural Labourers:**

“The Pondicherry Agricultural Workers’ Welfare Society” was established by the Department of Agriculture with the objective of extending various benefits to the agricultural workers of the Union Territory of Puducherry. The distribution of rain coats and mosquito nets are being taken up initially.

### **Promotion of Agricultural Mechanization:**

Farm machineries such as tractors, power tillers, transplanters and improved / conventional agricultural implements are being distributed under the scheme at subsidized cost. Machineries such as harvesters and threshers are also made available to the farmers through Uzhavar Udhaiyagams on custom hiring basis.

### **Scheme for Diversification in Agriculture through Horticultural Crops:**

Back ended subsidies are extended for various horticultural crops, apart from distributing seeds, planting materials and other inputs at subsidized cost under this scheme. Maintenance of the Botanical Garden, which is one of the important landmarks of Puducherry town, and other gardens at Madagadipet & Lawspet are also covered under the scheme, apart from the annual flower shows, which are a major public attraction in all the four regions of the Union Territory of Puducherry.

### **Pilot Project on Sustainable Agriculture through Organic Farming:**

The Union Territory of Puducherry has made significant progress in increasing the productivity of the important crops through dissemination of latest technologies and timely distribution of all agricultural inputs. The scheme will involve conducting demonstrations as well as taking up certification of Organic farmers.

### **Scheme for Hi-tech Horticulture through Precision Farming and Technological Intervention**

This is a new scheme introduced in 2007-2008 and envisages scientific farming with limited resources. Conservation of water, fertilizers and other inputs and increased productivity and returns to farmers are some of the benefits expected from the scheme. Under this, farmers are extended subsidy for installation of drip irrigation and application of water soluble fertilizers and other inputs, apart from marketing support.

### **Training and Capacity building to Develop Human Resources:**

Under this scheme, the officials of the Department are deputed to the off-campus training programmes being organized by various training institutions across the country, which is expected to increase their efficiency and productivity in the execution of their duties.

### **Introduction and Maintenance of e-governance initiatives:**

Under this all the offices of this Department including Uzhavar Udhaviyagams are computerized and networked through WAN. The Department of Agriculture is one of the earliest Departments in the Government of Puducherry to host its own website in 2003. With all the hardware in place, the Department now aims at developing the necessary software applications.

### **Scheme for Setting up of Relief Fund to Provide Assistance to Farmers:**

In case of natural calamities such as drought and floods the Department is now dependent upon the Revenue Department for funds to provide relief measures to the affected farmers. In order to obviate this need, this scheme is formulated to build a separate fund in the Agriculture Department itself to provide necessary relief and reclamation measures immediately after calamity and to ensure quicker and timely assistance to farmers.

### **Agricultural College and Krishi Vigyan Kendras:**

The scheme aims to support and strengthen Agricultural Research, Education and Training in the U.T. of Puducherry by providing grant-in-aid to Pandit Jawaharlal Nehru College of Agriculture and Research Institute (PAJANCOA & RI), Karaikal, Perunthalaivar Kamaraj Krishi Vigyan Kendra (PKKVK), Puducherry and Krishi Vigyan Kendra (KVK), Karaikal. The PAJANCOA & RI is offering B.Sc (Agri.) course with an intake of 60 students per year apart from post-graduation in various disciplines. Both the KVKs at Puducherry and Karaikal are involved in training and extension support apart from the production of foundation seed. The PKKVK, which is the first KVK in the country, is responsible for the release of six varieties of paddy since its inception and is also involved in the production of bio-pesticides.

### **Development of infrastructure for Agriculture Marketing:**

The object of the scheme is to regulate the marketing of the agricultural produce by eliminating middlemen. At present Market Committees are functioning in the three regions of this Union territory viz. Puducherry, Karaikal and Yanam. Rural markets in

Puducherry region are functioning in Madagadipet, Kanniakoil, Kunichampet, Karayambathur and Maducarai. The Market Committees, which were earlier regulating the sale and purchase of the food and commercial crops, had entered the sphere horticultural produce by establishing a Uzhavar Sandhai near the Botanical garden in February 2000. Three more Uzhavar Sandhais have since been established at Lawspet, Arumbarthapuram and Ariyankuppam in Puducherry region and one in Karaikal region. The Uzhavar Sandhais facilitate direct marketing of vegetables by farmers thus fetching a fair price to them and at the same time helping the consumers get fresh and quality vegetables

### **Integrated scheme for development, harvesting, recharging, of Ground Water:**

The following activities are undertaken under the scheme in order to conserve and utilize the ground water resources effectively.

- Rainwater harvesting and recharging ground water.
- Providing subsidy for construction of tube wells, laying of underground pipelines and installation of micro irrigation systems/submersible pump sets
- Construction of farm ponds in Karaikal region
- Assessment of ground water potential and monitoring of ground water quality

To regulate the exploitation of groundwater in the Union Territory of Puducherry, the "Pondicherry Ground Water Authority" was created under the Pondicherry Ground Water (Control and Regulation) Act 2002.

### **State Land Use Board” under “Macro Management of Agriculture”:**

This scheme aims at regulating the conversion of agricultural lands for non-agricultural purposes. The utilization of agricultural lands for industrial, educational, real estate and other non-agricultural purposes require the clearance of the State Land Use Board chaired by the Chief Minister. The Board has been in existence as a Centrally Sponsored Scheme since 1987, but with the discontinuation of assistance by the Government of India from the year 2010-11 onwards the scheme has now been brought under the State Plan.

### **Support to State Extension Programmes for Extension Reforms(Agricultural Technology Management Agency (ATMA):**

This is a novel scheme of the Government of India, which aims at an integrated approach to agricultural extension involving all the allied departments such as Agriculture, Animal Husbandry, Fisheries, Forestry, Dairy, etc. and implemented

through an autonomous organization called the Agricultural Technology Management Agency (ATMA). Two ATMA Societies have been registered under the Societies Registration Act for Puducherry and Karaikal Districts. Under the above programme, which is overseen by an Inter Departmental Working Group (IDWG), headed by the Secretary (Agriculture), a State Agricultural Management and Extension Training Institute (SAMETI) is notified. State Extension Work Plan (SEWP) and Strategic Research and Extension Plans (SREP) have been formulated apart from taking up the programmes such as Farmers' Field Schools, on-farm trials and demonstrations, skill development of farmers, etc. as contemplated under the scheme.

### **Puducherry Agro Service and Industries Corporation Limited (PASIC):**

The Puducherry Agro Service and Industries Corporation Limited, commonly known as "PASIC" was incorporated in the year 1986 under the Companies Act 1956 as No. 399 of 1986.

The main activity of the Corporation is the supply and distribution of all agricultural inputs through a network of 42 Agro Depots and 4 horticultural show rooms called "Vasantham". It also sells vegetables through 5 retail outlets in Puducherry and Karaikal regions, apart from supplying fruits, vegetables, eggs etc. to the hostels/hospitals run by the Departments of Social Welfare, Adi Dravidar Welfare, Health etc. In Karaikal Region, PASIC maintains 87 community bore wells and supplies water to the farmers for irrigation at nominal cost of Rs.5/- per hour. An Integrated Solid Waste Management Project Proposal for processing urban garbage into compost has been approved by the Ministry of Urban Development, Government of India.

### **Market Committees:**

The Department of Agriculture has established three Market Committees in Puducherry, Karaikal and Yanam regions in order to enable the farmers to sell notified agricultural commodities directly to licensed traders thus eliminating the role of middlemen and saving the farmers from exploitation.

### **Integrated Farming in Coconut Holdings for Productivity Improvement:**

The components implemented under the scheme are conducting demonstrations and establishment of organic manure units with financial assistance from the Coconut Development Board. Development and Strengthening of Infrastructure Facilities for Production and Distribution of Quality Seeds. The Government of India is providing assistance under this scheme for the construction of seed godowns, erection of seed processing units, strengthening of the Seed Testing Laboratories and the Seed Certification Agency.

**National Project on Organic Farming:**

A model organic farm is proposed to be set up under this programme at Perunthalaivar Kamaraj Krishi Vigyan Kendra, Puducherry, apart from the conduct of training programmes and demonstrations with the assistance from the National Centre for Organic Farming. An amount of Rs.7.92 lakhs was released by the Regional Centre for Organic Farming for this purpose during 2008-09.

**Rashtriya Krishi Vikas Yojana:**

This is a State Plan Scheme implemented with the Additional Central Assistance from the Government of India to encourage the State Governments to increase the allocation of plan outlay for agricultural sector. Action has been initiated for the preparation of a State Agriculture Plan (SAP) and the District Agricultural Plans.

## **MAIN OBSERVATIONS:**

- Overall progress of implementation of the programme in the State is satisfactory and needs for focus on Post Harvest Management and Marketing. More focus is needed on vermin composting, bee keeping, rejuvenation, mechanization, protected cultivation, and nursery establishment programme and creation of infrastructure for Post Harvest Management and Marketing. Farmers are innovative for intercropping in newly established orchards to get additional income per unit area .They need technological and input support by ensuring convergence from other schemes.
- Priority may be given to establish nurseries for fruit crops at private and public sector to cater the need of planting material for farmers which are in short supply. Nurseries should be properly leveled with Varieties, date of sowing seeds, date of grafting and method of grafting etc. and existing nurseries should be accredited by National Horticulture Board.
- SHM should ensure that all the beneficiaries are supplied with quality planting material and also other material being provided under the approved package, well before the planting season. Tissue culture lab should be strengthened to provide disease free plant material of Banana in large scale to meet the demand of the farmers.
- Rejuvenation/replacement of senile plantations is urgently needed for hurricane damaged orchards and old and declined orchards of mango, Guava and citrus. Some of the senile mango orchards need top working. Use of power saw would be needed at such locations. Farmers are to be regularly trained.
- It was observed that farmers are having small land holding and needs small tractors which are convenient in pre-sowing field operations and also intercultural operations.
- Front line demonstration may be initiated in large number on pollination support through beekeeping in horticultural Crops to understand the role of Bee's as pollinator to enhance the crop productivity. The farmers may also be trained in the techniques of handling bee, transferring the hives and extraction of honey.
- Non functional ripening chamber may be immediately made operative for providing support to the growers with local supply of Banana which presently coming from Chennai. Poly house damaged due to hurricane needs to be repaired
- JIT assessed that officers and technical staffs need refreshers training regularly at ICAR/CSIR institutions, SAUs and KVKs.