

# Krishi Vigyan Kendra Cuddalore

## Action Plan 2016-17



Tamil Nadu Agricultural University  
ICAR-Krishi Vigyan Kendra  
Vriddhachalam, Cuddalore District  
Tamil Nadu, India



**TAMIL NADU AGRICULTURAL UNIVERSITY**

**KRISHI VIGYAN KENDRA –CUDDALORE DISTRICT- TAMIL NADU**

**ACTION PLAN 2016-17**

**1. General information about the Krishi Vigyan Kendra**

1.1	Name and address of KVK with Phone, Fax and e-mail	:	Krishi Vigyan Kendra Tamil Nadu Agricultural University Vriddhachalam – 606 001 Cuddalore District, Tamil Nadu Phone No. : 04143-238353 Tele fax No. : 04143-238353 E-mail : <a href="mailto:kvkvri@tnau.ac.in">kvkvri@tnau.ac.in</a>  Web address : <a href="http://tnau.ac.in">http://tnau.ac.in</a>
1.2	Name and address of host organization	:	Tamil Nadu Agricultural University Coimbatore - 641 003 Grams : FARMVAR Telex No. : 855-360-TNAU.IN Fax No. : 091-0422-2431672 Phone No. : 0422-2431222 E-mail : <a href="mailto:vc@tnau.ac.in">vc@tnau.ac.in</a> <a href="mailto:registrar@tnau.ac.in">registrar@tnau.ac.in</a>
1.3	Year of sanction	:	1985
1.4	Website address of KVK and date of last update	:	<a href="http://www.kvkcuddalore.com">www.kvkcuddalore.com</a> 10.12.2014

**2. Details of staff as on date**

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	Existing Pay band	Grade Pay	Date of joining	Permanent / Temporary
2.1	Programme Coordinator	Dr.S.Kannan	Home Science	15600-39100 (PB1)	8000	06.08.09	Permanent
2.2	Subject Matter Specialist	Dr.M.Nirmal Devi	Agricultural Extension	15600-39100 (PB1)	8000	22.04.15	Permanent
2.3	Subject Matter Specialist	Dr. T.Saravanan	Plant Pathology	15600-39100 (PB1)	7000	16.03.13	Permanent
2.4	Subject Matter Specialist	Dr.K.Natarjan	Seed Science Technology	15600-39100 (PB1)	7000	30.12.09	Permanent
2.5	Subject Matter Specialist	Dr.A.Ramesh Kumar	Horticulture	15600-39100 (PB1)	7000	22.04.15	Permanent
2.6	Subject Matter Specialist	Dr. K.Venkatalakshmi	Agronomy	15600-39100 (PB1)	7000	22.04.13	Permanent
2.7	Subject Matter Specialist	Mrs.G.Porkodi	Soil Science Agricultural Chemistry	15600-39100 (PB1)	6000	08.04.15	Permanent
2.8	Programme Assistant	Mrs.G.Meenalakshmi	M.Sc (E.S)	9300-34800 (PB2)	4400	28.02.11	Permanent
2.9	Computer Programmer	Mr.R.Samundeeswaran	M.C.A	9300-34800 (PB2)	4400	15.11.12	Permanent
2.10	Farm Manager	Mr.D.Kumar	M.Sc (Agronomy)	9300-34800 (PB2)	4400	06.06.07	Permanent
2.11	Accountant/Superintendent	Selvi.A.Naveenatham	Higher Secondary	9300-34800 (PB2)	4800	17.04.15	Permanent
2.12	Stenographer	Mrs. T. Suganthi Rani	Higher Secondary	5200-20200 (PB2)	4800	01.12.08	Permanent
2.13	Driver 1	Th. C. Jayabal	-	9300-34800 (PB2)	4400	28.11.86	Permanent
2.14	Driver 2	Th.S.Arul	-	3200-20200 (PB4)	2400	21.02.07	Permanent
2.15	Supporting staff 1	Th. A.Deivasigamani	+2	4800-10000 (PB4)	1300	08.08.11	Permanent
2.16	Supporting staff 2	Th. P. Narayanasamy	10 <sup>th</sup>	4800-10000 (PB4)	1300	01.07.11	Permanent

### 3. Details of SAC meeting conducted during 2014-15

Sl.No	Date of SAC	Recommendation	Status of Action Taken in brief
1	5.9.2014	More number of interventions on the major crops like groundnut, rice and cashew.	In rice, OFTs on Assessment of varieties for samba paddy, assessment of suitable submergence tolerance paddy variety for Cuddalore district, Demonstration and farmers participatory seed production of paddy variety CO 51 for Cuddalore district, Demonstration of paddy variety MDU 6 for Kuruvai season in Cuddalore district and Demonstration of bio management strategies for pest and disease in samba paddy are being taken during 2015-16. FLD on Demonstration of paired row planting method in rain fed ground nut, Demonstration and farmers participatory seed production of groundnut variety VRI 6 of Cuddalore district, Demonstration of CO7 Groundnut under rain fed areas, Demonstration of TNAU MN mixture for Groundnut are also being taken up during 2015-16.
2		Ragi cultivation under SRI method.	This will be taken up with appropriate crop season.
3		To get green gram and red gram (BSR 1 variety) seeds from TNAU, Coimbatore and cultivate as border crop.	Action is being initiated and results will be reported soon.
4		Turmeric growers federation in Cuddalore district.	During 2014-15, a FLD on Demonstration of IDM for rhizome rot in turmeric is being taken up at Mangalore and Nallur blocks of Cuddalore where turmeric is cultivated in considerable area. Action is being initiated to form turmeric growers federation.
5		To conduct demonstrations on the machineries like groundnut harvester and stripper.	Action is being taken up to conduct the demonstration in association with Department of agriculture in the ensuing crop season.
6		Spreading type groundnut as a drought tolerant variety in the trial.	A FLD on Demonstration of CO7 groundnut under rain fed areas is being taken up during 2015-16 and the trial will be conducted in the Aladi, Muthandikuappam, M. Patty, Chinnavadavadi, Vijayamanagaram and Nallur areas in the Cuddalore district.
7		Demonstration on brinjal cultivation with brinjal grafts produced in HC&RI, TNAU, Coimbatore	At present, we have taken up an OFT on assessment of suitable brinjal hybrid in Cuddalore district. Action is being initiated to demonstrate the brinjal cultivation using brinjal grafts.
8		Interventions on human nutrition especially with moringa, as the most of the women are deficient in iron.	In the home science trainings, importance given to educate the women on use of nutrient rice vegetables.
9		To consider major crops, crop based enterprises and major technologies during the interface meeting to be conducted in near future at this KVK	We have conducted an interface meeting with extension functionaries of animal husbandry department and fisheries department on 24.2.2015 Similarly an interface meeting with farmers and extension functionaries of Mangalore, Nallur and Vridhachalam blocks was conducted on 17.3.2015. The outcome of such meetings are given priorities in trainings /OFTs/FLDs and other extension functions.
10		To conduct possible OFTs and FLDs in KVK campus itself	The following OFT/FLD programmes have been initiated in this KVK during 2014-15. <ul style="list-style-type: none"> <li>• Demonstration and farmers participatory seed production of paddy variety ANNA 4 for rainfed areas of Cuddalore district</li> <li>• Demonstration of Nandanam Turkey –II for backyard poultry</li> </ul>

11		Interaction meeting with scientists, extension functionaries and farmers for identification of agricultural needs and issues of Cuddalore district to be organized at this KVK in near future	The KVK, Vridhachalam organized interaction meeting with scientists, extension functionaries and farmers on 10.2.15 for identification of agricultural needs and issues of Cuddalore district. In the meeting, 25 farmers from Cuddalore district and Joint Director of Agriculture and Deputy Director of Agriculture and ADA of various blocks were attended in the meeting. Based on the interaction meeting, the action plan for the year 2015-16 was formed by the KVK, Vridhachalam. We have conducted an interface meeting with extension functionaries of animal husbandry department and fisheries department on 24.2.2015 Similarly an interface meeting with farmers and extension functionaries of Mangalore, Nallur and Vridhachalam blocks on 17.3.2015 was conducted. The outcome of such meetings are given priorities in trainings /OFTs/FLDs and other extension functions.
12		To give more training on high density planting in cashew to the farmers of this district	At KVK, Vridhachalam, a training on cashew grafting and cultivation was conducted to 65 farmers on 6.1.15. High density method of planting was demonstrated to the trainees.
13		To form vegetable commodity group	A meeting on vegetable growers from Kattumannarkoil block was convened on 15.12.14 at KVK, Vridhachalam. The KVK insisted the vegetable growers to form a federation for higher income and market price from vegetables. Based on the intervention, Cuddalore district vegetables and flower crop growers association was formed and registered in the societies act.
14		Training on weed management techniques in direct seeded paddy crop	A weed management training was conducted at this KVK on 15.10.2014 at this KVK.
15		Information on marketing avenues for medicinal plants	Action is being initiated to publish a book on medicinal plants suitable to Cuddalore district and marketing avenues.
16		To promote laser leveler for leveling the fields.	At present, we have one laser land leveler which is being used regularly for local demonstration and training purpose. The needy farmers are also given on rental basis as governed by TNAU norms.
17		To provide advanced training on value addition and products packaging methods.	The trainings on value addition in Amla and Banana on 29.4.2014 and Value addition in Mango on 6.6.2014, Value addition in cashew apple and its marketing techniques on 13.8.2014 and Value addition in small millets on 14.11.2014 were conducted at KVK, Vridhachalam for farmers, rural woman and unemployed youth. In the training, advanced method of value addition and products packaging was demonstrated to the trainees.
18		To provide training on cashew apple and jack fruit	Such trainings were organized on 9.12.2014 (vocational training) and 16.12.2014 (off campus training).
19		To establish cashew processing unit in the KVK for the benefit of the Cuddalore district Cashew growers	Proposal has been sent and action is being initiated in this regard.

## Tentative date of SAC meeting proposed during 2016-17: June, 2016

### 4. Capacity Building of KVK Staff

#### 4.1. Plan of Human Resource Development of KVK personnel during 2016-17

S. No	New Areas of Training	Institution proposed to attend	Justification
4.1.1	IPM in paddy and vegetables	National Bureau of Plant health management, Hyderabad	To update knowledge on integrated management of pest and diseases in paddy and vegetables
4.1.2	Plant health management techniques	National Bureau of Plant health management, Hyderabad	To update the information on newer management technologies for plant diseases
4.1.3	Recent trends on GIS	NSS and LUP, Nagpur	To update knowledge in GIS
4.1.4	Vegetables Seed production including hybrid seed production, processing & marketing	NSRTC, Varanasi	Promoting hybrid seed production in cuddalore district
4.1.5.	Resource conservation in dry lands	CRIDA,Hydrabad	To update the knowledge ii dry land agriculture
4.1.6.	Post harvest technologies in vegetables and fruits	CFTRI, Mysore , Karnataka	To update the knowledge on Post harvest in vegetables and fruits
4.1.7	Recent trends in vegetable seed production	TNAU, Coimbatore	To upscale latest information on vegetable seed production

#### 4.2. Cross-learning across KVKs during 2016-17

S. No	Name of the KVK proposed	Specific learning areas
4.2.1	<b>Within ring</b> KVK, Tiruvarur KVK, Villupuram KVK, Puducherry	KVK activities and seed production Value addition in mushroom Bio agents production in insect and microbes
4.2.2	<b>Within the zone</b> KVK, Madurai KVK, Kattupakkam KVK, Aruppukottai	Bee keeping, honey based amla products  To learn about the recent developments in animal husbandry related activities and to get advanced breeds in poultry and livestock Technology transformation in rainfed agriculture
4.2.3	<b>Outside zone</b>  KVK, Thrissur	To know about value addition, produce development linkage

**5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities during 2016-17**

S.No.	Name of the KVKs included in the cluster	What do you intend to share with Cluster KVKs	What do you expect from Cluster KVKs
5.1	KVKs of Vrinjipuram, Villupuram and salem	<ul style="list-style-type: none"> <li>• Issues and technologies related with oil seed crops viz., groundnut and gingelly</li> </ul>	<ul style="list-style-type: none"> <li>• Issues and technologies related with minor millets production and status</li> </ul>
5.2	KVKs of Namakkal, Kattupakkam,	<ul style="list-style-type: none"> <li>• Trainings for rural youth regarding prevention of pest and disease attack in milch animals and poultry birds</li> <li>• Issues related to recent disease in cows and chicks</li> </ul>	<ul style="list-style-type: none"> <li>• Animal husbandry related aspects like area specific mineral mixture, GRAND supplements and newly released breeds in birds and animals</li> <li>• Value addition in milk and fish</li> </ul>

## 6. Operational areas details proposed during 2016-17

S.No	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
6.1	Paddy	Farmers un aware about bio fertilizer seedling dipping method of treatment in paddy Shelf life of solid bio fertilizer is short Lignite is hazardous to health of production workers as well as environment	98,000ha	Melpuliyankudi Srneduncherry Meeralur	OFT-Assessment of suitable bio fertilizer source for paddy
		Rice is a stable food in India- no. of diabetic patient increasing day by day Non availability of low GI rice variety in Tamil Nadu	133936 ha	Alichikudi,Pinnalur and Rajendrapattinum	OFT-Assessment of suitable low glycemic index rice variety for Cuddalore district
		Availability of water is limited lack of suitable tool for alternate wetting and drying -paddy	15,000 ha	Gunamanagalam, Rajendrapattinum ,Alichikudi and Pinnalur	FLD-Demonstration of pani pipe indicator tool of AWD in paddy
		BPT 5204 variety susceptible for leaf folder, stem borer, sheath blight and neck blast in samba season Indiscriminate use of chemicals for control of the pest and disease. Samba paddy cultivated 1,05,000 ha In Cuddalore district	25600 ha	Pavalankudi,Srimushnam and Alambadi	FLD-Demonstration of TKM 13 paddy variety for samba season in Cuddalore district
		Replacement of long duration variety for the existing ruling cultivar in Samba Season and to tolerate the flood	17828 ha	Vallam,Thatchankadu, Kalkunam and Reddipalayam	FLD-Demonstration submergence tolerant variety CR1009 sub 1 with farmers participatory seed production mode
		Replacement of medium duration variety for the existing ruling low yielding cultivar in Kar and late Pishanam Season	20,000 ha	Kalkunam and Thiru maniku zhi	FLD-Demonstration paddy variety TPS 5 with farmers participatory seed production mode Cuddalore District
		Blast disease occurred in samba Paddy (Oct- Jan).Neck blast is severe in the paddy var.BPT 5204 Yield loss of 20-35%	23,000 ha	Kumaramanagalam Alambadi and Sathukudal	FLD-Demonstration of IPM for blast disease in samba paddy



6.2	Black gram	Non availability of latest variety in rice fallow black gram	45,000 ha	Pinnalur,Thatchukadu Vallam	OFT-Assessment of suitable rice fallow black gram
		Plant population is low Time and labour consuming, labour shortage in peak period of sowing	8000 ha	KO.Mangalam,O.Keeranur and Ponneri	FLD-Demonstration of line sowing in Black gram
		Lack of availability of good quality seeds	8000 ha	Karnatham and Agaram	FLD-Demonstration of black gram MDU1 through farmer participatory seed production
		Lack of availability newly released variety of black gram	8000 ha	Agaram and Karnatham	FLD-Demonstration of new black gram variety VBN8
6.4	Green gram	Lack of awareness on newly released varieties of green gram	11781 ha	Mangulam and Karnatham	FLD-Demonstration of Green gram variety CO8
6.5	Maize	Lack of awareness of recent varieties and hybrids Micronutrient deficiency leads to lower yield in maize crops	13347 ha	Veppur,Periyanesaloor	Integrated crop management in maize Co 6
6.6	Ground nut	Lack of knowledge on newly released variety of ground nut Non adoption of Integrated crop management technology	10,523 ha	Pottaveli Thirasu Viswanathapuram	OFT-Assessment of suitable confectionary ground nut varieties in Cuddalore
		Aflatoxin is important disease which affects kernel quality of ground nut Less chances for export of ground nut	10,523 ha	Pottaveli Thirasu Viswanathapuram	FLD-Assessment on pre and post harvest management technologies for aflatoxin contamination in ground nut
		Yield reduction is 30-40% due to moisture stress Non availability of drought tolerant varieties	10,523 ha	Aladi,Pallakollai and Co.Mavidangal	FLD-Demonstration of ground nut variety CO7 under rain fed areas
6.8	Sesame	Lack of awareness about rice fallow gingelly variety Exploring the possibility of gingelly in rice fallow condition	4737 ha	Pudukuraipettai Srineduncherry Sathamaganalam	OFT-Assessment of suitable variety for rice fallow gingelly
		Tamil Nadu soil are deficient in micro nutrient Hence the crop yield obtained is low. Farmers are unaware about the micro nutrient mixture application to sesame	4737 ha	Pudukuraipettai,Kuppanatham and TV .Putur	FLD-Demonstration of TNAU micro nutrient mixture application to irrigated sesame

		Phyllody disease is serious and claimed 20% yield loss Severe in summer season	4737 ha	Kumaramanagalam, Pudukuraipettai and Kuppanatham	FLD-Demonstration of IPM practices for phyllody disease in sesamum
6.9	Cumbu	Cumbu occupies an area of 3000 ha in Cuddalore district under rainfed condition Cultivating low yielding local variety Poor yield and poor income Lack of awareness about the new drought tolerant Cumbu variety	2918 ha	M.Patty,Kattumanyloor	FLD-Demonstration of new cumbu variety Co 10
6.10	Varagu	Lack of technical knowledge in the preparation of profitable value added products from Varagu– Noodles	1059 ha	Kattumayloor and Manakulam	FLD-Demonstration of Co3 varagu for nutritious noodles preparation
6.11	Fodder crops	Cultivating mono fodder Poor yield Lack of awareness about other fodder crops Manakulam and Sathyavadi Lack of awareness on balanced nutrition to live stock (Grass / Grain fodder + legume fodder)	-	Sathyavadi and Manakulam	FLD-Demonstration of fodder crops
6.12	Cashew	Cashew- 36900 ha in cuddalore district Grubs bore into the bark in the early stages and make excessive tunnels in all directions and wilting of branches and then the trees as 15 years old plantations affected.	32261 ha	Aladi,Kattukudalur	OFT-Assessment of methods for stem and root borer in cashew
		Low yield due to improper management practices Lack of awareness about pruning and foliar nutrition	32261 ha	Pudukuraipettai,kuppanatham and Kadampuliyoor	FLD demonstration of pruning and foliar nutrition in cashew
		Wastage of cashew apple Lack of awareness about preparation of value added products in cashew apple.	4250 ha	Muthandikuppam,Kattukudalur, Viridh akirikuppam	FLD-Demonstration of preserved cashew apple juice for commercialization
6.13	Banana	Grubs bore into the rhizome and cause death of the plant Yield loss due to pest and diseases	4250 ha	Ramapuram and Vazhisothanaipalayam	FLD-Demonstration of IPM practices for rhizome weevil management in banana
		Lack of awareness of newly Released variety	4250 ha	Ramapuram and Vazhisothanaipalayam	FLD-Demonstration of bunch covers in bananan
6.14	Cassava	Lack of awareness of newly Released variety	4000 ha	Chinnavadavadi karuppanchavadi	FLD-Integrated crop management practices in Cassava YTP 1

6.15	Bhendi	Non adoption of standard fertilizers recommendation – low yield, low income Lack of awareness about plant protection measures	153 ha	Kattu Vegakollai, Chathiram	Lack of awareness of newly released variety bhendi variety Hybrid CO 4
6.16	Brinjal	Lack of knowledge about improving the quality of jasmine	172 ha	Kavanai, Chitherikuppam, Aladi, Puliur	Demonstration of grafted brinjal
	Brinjal	Yield loss from shoot and fruit borer – 20-25 % Indiscriminate use of chemicals for control of the borer Lack of awareness about the use of IPM techniques	172 ha	Kavanai, Chitherikuppam, Aladi, Puliur	Demonstration of eco-friendly pest management in brinjal
6.17	Chillies	Lower productivity due to unbalanced and indiscriminate usage of fertilizer Nutrient use efficiency is low in surface broadcasting Agricultural labours	128 ha	Periyakottumalai , Thirumaniku zhi Thirusu	Assessment of Nutri pellet Pack Technology in chilli cultivation
6.18	Snake gourd	Lack of awareness about newly released variety of snake gourd	-	Panruti, Chathiram and Kadampuliur	Demonstration of ICM in Snakegourd
6.19	Jasmine	Lack of knowledge on newly released high yielding variety	143 ha	Theerthampalayam B.Mutulur	OFT-Assessment of foliar nutrition in jasmine for improving flower quality
6.20	Poultry	Low income Lack of employment opportunity	-	Vridhachalam and Mangalur	FLD- Demonstration of Nandhanam Turkey –II for back yard poultry
6.21	Fishery	Under utilization of water resources available in villages	-	VA lichikudi thatchankadu	FLD-Demonstration of composite fish farming in farm /village pond

\* Support with problem-cause and interventions diagram

## 7. Technology Assessment during 2016-17

S. No.	Crop/enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
7.1	Paddy	Lack of awareness about seedling dipping of bio fertilizer in paddy Carrier based biofertilizer shelf life is low	Assessment of suitable bio fertilizer source for Paddy	Farmers practice	-	-	-	-	6( 6 acres)	Rs.3600	No. of productive tillers/hill, No. of panicle/m <sup>2</sup> Yield, Net return, B:C ratio	Dr.K.Venkatalakshmi,SMS (Agr.) Mrs.G.Porkodi SMS (SS&AC)
				Solid biofertilizer ( <i>Azospirillum</i> + <i>Phosphobacteria</i> - 5 pack+ 5 pack in 40 l of water	TNAU	Carrier based bio fertilizer ( <i>Azospirillum</i> + <i>Phosphobacteria</i> )	5 packets + 5 packets	Rs.100/trial				
				Liquid bio fertilizer ( <i>Azospirillum</i> + <i>Phosphobacteria</i> )-50 ml in 10 litres of water	TNAU	<b>Liquid bio fertilizer</b>	50 ml/acre	Rs.500				

7.2	Paddy	Diabetic patient increasing day by day Non availability of low GI rice in Tamil Nadu	Assessment of suitable low glycemic index rice variety for Cuddalore district	Farmers practice: BPT 5204	-	-	-	-	5 (5 acres)	11,000	No. of productive tillers/hill, No. of panicle/m <sup>2</sup> , Yield, Net return, B:C ratio	Dr. K. Venkata kshmi, SMS (Agr.) Dr. S. Kannan, SMS (FSN)
				RNR-15048 moniker	Jayashankar Telangana State Agricultural University , 2015	RNR-15048 moniker seed	7 kg /0.5 acre	700				
				Madhuraj-55	Indira Gandhi Agricultural university Raichur, 2015	Madhuraj-55 seed	7 kg /0.5 acre	700				
						<i>TNAU M.N mixture for paddy</i>	10kg	500				
						<i>Trichoderma viride and Pesudomonas fluorescense</i>	1 kg each	200				

7.3	Black gram	Non availability of latest variety in rice fallow black gram	Assessment of suitable rice fallow black gram	FP (ADT3 & T 9)	-	-	-	-	5 (5 acres)	10000	No. of pods/plant, No. seeds/pod, Yield, Net return, B:C ratio	Dr.K.Venkatalakshmi,SMS(Agr.) Dr.K.Natarajan, SMS(SST)
				LBG 757	ANGRAU	LBG 757 seeds	4.0 kg /0.30 acres	500				
				LBG 752	ANGRAU	LBG 752 seeds	4.0/0.30 acre	500				
				PU31-920 s	Pant university	PU31-920 seeds	4.0/0.30 acre	500				
				Pulse wonder	TNAU	Pulse wonder	2.0	500				
7.4	Groundnut	Non availability of suitable confectionary ground nut	Assessment of confectionary groundnut varieties in cuddalore district	GG7	Junagadh, 2008	Seed	60 kg	5400	5	32840	Growing degree days, Total number of pods/plant, No. of seed /pod, Organoleptic evaluation Yield per unit area and BCR	Dr. K. Natarajan, SMS(SST) Dr. T. Saravanan, SMS (Plant Pathology) and Dr. M. Nirmaladevi SMS (AEC)
				Asha	ICRISAT, 2005	Biofertilizer	1.2 kg	48				
				VRI 8	TNAU, 2016	Pseudomonas	3 kg	300				
						Groundnut rich	3 kg	720				
						Field board	1	100				
7.6	Groundnut	Ground nut export is mainly affected by aflatoxin contamination.	Assessment on pre and post harvest management technologies for aflatoxin contamination in groundnut	Farmer's practice	--				10	19750	Aflatoxin percent, Viability of seed % Organoleptic evaluation, Yield per unit area and BCR	Dr. K. Natarajan, SMS(SST) Dr. T. Saravanan, SMS (Plant Pathology) and Dr. M. Nirmaladevi SMS (AEC)

				Soil application of neem cake or castor cake @ 500 kg/ha + Furrow application of <i>T. Viride</i> or <i>T. Harzianum</i> @ 2.5 kg/ha	Junagadh Agri Univ, 2010	Neem cake <i>T. Viride</i>	100 kg 0.5 kg	600 75				
				Seed treatment with Halo polimer @ 3 ml/kg of kernel + 0.5 % Spray of Nutrigold at 20 <sup>th</sup> and 30 <sup>th</sup> day + NAA Spray @ 400 ppm on 55 <sup>th</sup> day	TNAU, 2015	Polimer Nutrigold NAA	100 ml 100 ml 200 ml	400 300 300				
						Field board	1	100				
7.7	Paddy	Yield loss from leaf folder, stem borer, sheath blight and blast in samba paddy	Assessment of varieties for samba paddy	1. Local variety: BPT 5204	Bapatla, 1986	--	--	--		12000	No. of tillers per hill, Grain yield, BC ratio, incidence of leaf folder, stem borer and blast	Dr. T. Saravanan, SMS (Plant Pathology) and Dr. M. malarkodi, SMS (SS and AC)
				2. TKM 13	TNAU, 2015	TKM 13 seeds	8 kg/0.5 ac	500				
				3. Co 50	TNAU, 2011	Co 50 seeds	8 kg/0.5 ac	500				
						Field board	1	100				
						Testing of soil sample	1	25				

7.8	Gingelly	Exploring the possibility of rice fallow sesame in cuddalore district Lack of awareness about suitable variety	Assessment of suitable rice fallow sesame variety in Cuddalore district	Farmers practice					5(5 acres)	5500	No. of branches/plant, No. of pods/plant, No. of seeds/pod, Yield, Net return, B:C ratio	Dr.K.Venkata lakshmi,SMS(Agr.) Dr.M.Nirmala Devi,Asst. Professor (Agrl.Extn.)
				TMV 7	TNAU,2009	TMV 7 seeds	1.0/0.5acre	150				
				VRI 1	TNAU	VRI 1seeds	1.0/0.5 acre	150				
						TNAU Micro nutrient mixture	5.0 kg/acre	750				
7.9	Chilli	Lower productivity due to unbalanced and indiscriminate usage of fertilizer Nutrient use efficiency is low in surface broadcasting Agricultural labours scarcity	Assessment of Nutri pellet Pack Technology in chilli cultivation	Farmers practice FYM @ 7.5 tonne ha <sup>-1</sup> 50:50:30 kg NPK ha <sup>-1</sup>	FP	--	--	--	10	12700	Initial and post harvest nutrient status, yield and yield attributes net income and B:C ratio	G. Porkodi SMS (SS&AC) Dr. A. Rameshku mar, SMS (Horti.)
				<b>Basal dose :</b> FYM 30 t / ha, NPK 30:80:80 kg / ha.	TNAU 2012	--	--	--				



				<b>Top dressing :</b> 30 kg N / ha in equal splits on 30, 60 and 90 days after planting								
				Nutripellet pack technique (Manure Pellet+ Fertilizer Pellet)	TNAU 2014	Nutripellet Packs	8800/ac	750				
						Azospirillum	2 kg/ac	50				
						Phosphobacteria	2 kg/ac	50				
						Soil Nutrient analysis (Initial + Post harvest )		200				
						Training material + OFT board + treatment labels		3000				
7.10	Jasmine	Lack of awareness of crop centered practices and Unattractive enterprise	Assessment of foliar nutrition in jasmine for improving flower quality	Farmers Practice							Days to first flowering, Days to 50% flowering, 100 flower	Dr.A.Ramesh Kumar ,SMS(Horti) Dr.K.Natarajan, SMS(SST.)

		due to productivity loss and uneconomic returns									weight, shelf life at ambient temperature , No. of pickings, Yield, BCR	
				RDF + Foliar spray of DAP 2%, MOP 1%, FeSO4 0.5%, boric acid 0.2%, ZnSo4 0.5% and planofix 10ml in 10 lit of water 3 sprays after pruning	TNAU,2013	Nutrients	16 kg	1605				
				Azospirillum and <i>Trichoderma Viride</i> @ 8 kg/ha	UAS,Dharwad	Bio fertilizer <i>Trichoderma Viride</i> @ 8 kg/ha	2.0	200	5	11525		
						Growth regulator	300 ml	500				

8. Technology Refinement during 2015-16- Nil

S. No.	Crop/enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
8.1	NIL											

### 9. Frontline Demonstrations during 2016-17

S. No	Category	Crop/enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology	Name of critical input	Qty per Demo	Cost per Demo	No. of Demo	Total cost for the Demo (Rs.)	Parameters to be studied	Team members
1	Cereals	Paddy	Non availability of flood tolerant paddy variety	Demonstration of submergence tolerant variety CR 1009 sub 1 through farmers participatory seed production in flood affected areas in cuddalore district	Variety	CR1009 Sub 1	TNAU, 2015	CR1009 Sub 1 seed <i>Pseudomonas</i> Biofertilizer DAP  Field board  Testing of soil sample	10 kg 2 kg 2 kg 4 kg  1 1	300 200 100 160  100 100	25	26500	No. of tillers per hill, Number of physical and genetic contaminants , Seed yield per unit area , BC ratio	Dr. K. Natarajan, SMS(SST), Dr. T. Saravanan, SMS (PAT) and Mrs. G. Porkodi, SMS (SAC)
		Paddy	Lack of short duration high yielding latest Paddy varieties	Demonstration of paddy variety TPS 5 for samba season in cuddalore district	Variety	TPS 5	TNAU, 2014	TPS 5 seed <i>Pseudomonas</i>  Biofertilizer DAP  Field board	10 kg 2 kg 2 kg 4 kg  1	300 200 100 160	25	26500	No. of tillers per hill, Number of physical and genetic contaminants , Seed yield per unit area , BC ratio	Dr. K. Natarajan, SMS(SST), Dr. T. Saravanan, SMS (PAT) and Dr. M. Nirmaladevi, SMS (AEC)

								Testing of soil sample	1	100				
		Paddy	Availability of water is limited Lack of suitable AWD indicator tool	Demonstration of pani pipe-indicator tool of AWD in paddy	Variety	BPT 5204/T KM13	Irri, Phil lipiens ,2012	Pani pipe TNAU Mn mixture for paddy <i>T.viride and P.fluorescense</i>	1 no. 10 kg 1+1 kg	1100	6	6600	No. of irrigation given, No. of productive tillers/hill, No. of panicle/m <sup>2</sup> , Yield, Net return, B:C ratio	Dr.K.Venkatalakshmi,SMS(Agr.) Dr.T.Sarvanan, SMS(Pat.)
Cereals	Paddy	Ruling BPT 5204 variety susceptible for leaf folder, stem borer, sheath blight and neck blast in samba season Indiscriminate use of chemicals for control of the pest and disease Samba paddy cultivated 1,05,000 ha in Cuddalore district	Demonstration of TKM 13 paddy variety for samba season in cuddalore district	Variety	TKM 13 variety	TNAU (2015)	TKM 13 seeds  Soil testing	20 kg  1	520  100	10  10	5200  1000	Leaf folder and stem borer incidence, No of tillers/hill, No of grains per ear head, Yield(Kg/ha) B: C ratio	Dr. T. Saravanan and Dr.K.Natarajan	
	Paddy	Blast disease occurred in samba paddy (Oct- Jan) Neck blast is severe in the	Demonstration of IPM for blast disease in samba paddy	--	--	TNAU (2012)	<i>Pseudomonas fluorescens</i>  Azoxystrobin	2.5kg  400 ml	250  320	10	2500  3200	Blast incidence, No of tillers/hill, No of grains per ear head, Yield(Kg/ha)	Dr. T. Saravanan and Dr.K.Natarajan	

			paddy var. BPT 5204 Yield loss of 20-35%											B: C ratio	
2	Millets	Maize	Lack of awareness of recent varieties and hybrids  Micronutrient deficiency leads to lower yield in maize crops	Integrated crop management in maize CO 6	hybrid	CO 6	TNAU 2012	Seed	8 kg/ac	1200	10	12000	<ul style="list-style-type: none"> <li>• Cob length</li> <li>• No. of grains/cob</li> <li>• Yield</li> <li>• BC ratio</li> </ul>	G. Porkodi SMS (SS&AC) Dr. M. Nirmaladevi SMS (Agrl. Ext)	
								MN mixture for Maize	12 kg/ac	Rs. 800					
								Maize maxim	3 kg/ac	Rs. 1000					
		Cumbu	Cultivating low yielding local variety Poor yield and poor income Lack of awareness about the new drought tolerant Cumbu variety	FLD on Demonstration of new Cumbu variety Co 10	Variety	CO 10	TNAU	Cumbu seeds	5 kg	250	10	2500	Plant height Length of the ear head No. of grains/ear head Yield BC ratio	Dr.M.Nirmala Devi SMS(Extn) Dr.T. Natarajan SMS SST	
3	Pulses	Black gram	Cultivation of old varieties Lack of availability of good quality seeds	Demonstration of Blackgram MDU 1 through farmer participatory seed production	Variety	MDU 1	TNAU	Black gram seeds TNAU Pulses wonder	8 kg 2 kg	800 500	10	13000	Plant height No. of pods/plant BC ratio Yield	Dr.M.Nirmala Devi SMS(Extn) Dr.T. Natarajan SMS SST	

		Black gram	Introduction of new variety Existing variety susceptible to YM V and Pod borer	Demonstration of Blackgram VBN 8	Variety	VBN 8	TNAU 2016	Seed	8 kg/ac	800	15	12000	<ul style="list-style-type: none"> <li>No.of pods/plant</li> <li>No.of seeds/pod</li> <li>100 Seed weight</li> <li>Yield/ha</li> </ul>	G. Porkodi SMS (SS&AC) Dr. M. Nirmaladevi SMS (Agrl. Ext)
								Pulse wonder	2 kg/ac	500	15	7500	•	
		Green gram	Lack of awareness on cultivating greengram and varieties	Demonstration of Greengram Co 8	Variety	CO 8	TNAU 2013	Seed	8 kg/ac	800	15	12000	<ul style="list-style-type: none"> <li>No.of pods/plant</li> <li>No.of seeds/pod</li> <li>100 Seed weight</li> <li>Yield/ha</li> </ul>	G. Porkodi SMS (SS&AC) Dr. T. Saravanan SMS (PATH)
								Pulse wonder	2 kg/ac	500	15	7500	•	
		Black gram	Plant population is low Time and labour consuming, labour shortage in peak period of sowing	Demonstration of line sowing in black gram	Variety	VBN/8	TNAU	Seed drill	1 no.	10,000	6	60000	<ul style="list-style-type: none"> <li>Plant population, No. of pods/plant, No. of seeds/pod, Yield, Net return, B:C ratio</li> </ul>	Dr.K. Venkata lakshmi,SMS(Agr.) Dr.a.Ramesh kumar,SMS(Horti)
								Pulse wonder	2 kg/acre	1+1	pack	Hire charges	•	
								Rhizobium+ Phosphobacteria	1 no.	10,000	6	60000	•	
								Phosphobacteria	150 g	50			•	
								<i>Pseudomonas</i>	150 g	50			•	
								<i>Trichoderma</i>	250 g	120			•	
									150 m	100			•	
									150 ml	100			•	
								Imazethypyr	200	200			•	
4	Oilseeds	Groundnut	Lack of knowledge on new release cultivar on seed production	Demonstration of ground nut VRI8 through farmers participatory seed production	Variety	VRI 8	2016	VRI 8 pods	40 kg	3600	10	48850	No. of pods per plant, Number of physical and genetic contaminants , Pod yield per unit area , BC ratio	Dr. K. Natarajan, SMS(SST), Dr. T. Saravanan, SMS (PAT) and Dr. M. Nirmaladevi, SMS (Extn.)
								Rhizobium	150 g	50			•	
								Phosphobacteria	150 g	50			•	
								<i>Pseudomonas</i>	1 kg	50			•	
								<i>Trichoderma</i>	250 g	120			•	
									150 m	100			•	
									150 ml	100			•	
								Imazethypyr	200	200			•	

								herbicide Turgasuper herbicide	1 kg 1	225				
								Groundnut rich	1	240				
								Field board		100				
								Testing of soil sample		100				
		Ground nut	Yield reduction is 30-40% due to moisture Stress Non availability of drought tolerant varieties	Demonstration of Co7 ground nut under rain fed areas	Variety	Co7	TNAU, 2014	Ground nut seeds Ground nut rich	50 kg/acre 2 kg /acre	6000	5	30000	Plant population/m <sup>2</sup> , Plant height, No. of pods/plant, 100 seed weight, amount of rainfall in that season, No. of rainy days, yield, Net income and B:C ratio	Dr.K. Venkata laxmi,SMS(Agr .) Dr.S.Kannan, Programme coordinator, (FSN.)
		Sesame	Phyllody disease is serious and claimed 30% yield loss  Severe in summer season in summer season	Demonstration of IPM practices for phyllody disease in sesamum	--	--	TNAU (2012)	Imidachloprid at 5g/kg  Dimethoate 30 EC	10 g  200 ml	10  120	10	1000  1200	Phyllody incidence, Yield (kg/ha), B:C ratio	Dr. T. Saravanan and Dr.K.Natarajan
		Sesame	Tamil Nadu soil are	Demonstration of TNAU	Variety	VRI 2	TNAU, 2008	TNAU Micro	5 kg	750	7	6650	No. of branches/plant	Dr.K. Venkata laxmi,SMS(Agr

			deficient in micro nutrient so the crop yield obtained is low Farmers are unaware about the micro nutrient mixture application to sesame	micro nutrient mixture for irrigated sesame				Nutrient Mixture <i>Pseudomonas</i>  <i>Trichoderma</i>	1 kg  1 kg	100  100			, No. of pods/plant, Yield, Net return , B:C ratio	.) Dr.K.Natarajan, SMS(SST),
5	Horticultural crops	Brinjal	Severe shoot and fruit borer damage – 25-40 yield loss	Demonstration of ecofriendly pest management in brinjal	--	--	TNAU, 2013	<i>T. viride</i>  <i>P. fluorescens</i>  <i>Trichogramma chilonis</i> @ 3.00 cc/ha Pheromone trap Yellow sticky traps	0.25 kg 0.5 kg 3 cc  3 5	25 50 30  180 250	25	15500	Shoot and fruit borer incidence, yield (kg/ha), net return, B: C ratio	Dr. T. Saravanan, SMS (PP) and Dr. A. Ramesh Kumar, SMS (Hort)
		Brinjal	Shoot and fruit borer is major constraint in brinjal  Indiscriminate use of chemicals for the pest	Demonstration of grafted brinjal in cuddalore district		Hybrid /Grafts	TNAU, 2015	PLR-2 Grafts	200 Nos.	1200/-	10	12000/-	No. of fruits per plant, % of pest incidence, Fruit yield per unit area , BC ratio	Dr. A. Ramesh Kumar, SMS (Hort.) & Dr. T. Saravanan, SMS (PP)



			Pesticide residue and health											
		Bhendi	Lack of awareness about high yielding new hybrid	Demonstration of Bhendi hybrid CO 4	TNAU, 2016	Hybrid seeds	hybrid CO 4	Co 4 seeds	0.50 kg	1000/-	10	10000/-	Yield per acre, net income and BCR	Dr. A. Ramesh Kumar, SMS (Hort.) & Dr. K. Natarajan, SMS (SST)
		Snakegourd	Non adoption of standard ferti recommendation – low yield, low income Lack of awareness about the fertilization and plant protection measures Yield loss due to pest and diseases	Demonstration of ICM in Snakegourd	TNAU, 2013	Variety	PKM 1	<i>T. viride</i> <i>P. Fluorescens</i> <i>Etherel</i>	1kg 1 kg 125 ml	1500/-	8	12000/-	Fruit yield (kg/ha), net income, B:C ratio	Dr. A. Ramesh Kumar, SMS (Hort.) & Dr. K. Natarajan, SMS (SST)
		Cassava	Lack of awareness on new varieties	Demonstration on Cassava YTP 1	TNAU, 2013	Variety	YTP 1	Setts	Setts-6000	6000	10	60000	No. of tubers per plant Tuber weight per plant Yield/ha	Dr. A. Ramesh Kumar, SMS (Hort.) & Dr. K. Natarajan, SMS (SST)
		Cashew	Unpruned trees give low yield due to poor light penetration and aeration. The number and vigour of new flush	Demonstration of pruning and foliar spray for increasing yield in cashew	TNAU, 2013	Variety /hybrid	VRI3	<i>Pruning, 19:19:19, MAP, Borax and panchakavya</i>	2 kg 1 kg And 1 kg	5000	10	50000	Nut yield (kg/ha)	Dr. A. Ramesh Kumar, SMS (Hort.) & Dr. K. Natarajan, SMS (SST)

			after pruning is influenced by foliar nutrition											
		Banana	Poor filling of fingers leads to low yield Poor appealing and shinning of fruits fetches low price in the market Infestation by sucking pests resulting in warty nature of fruits	Demonstration of bunch covers in banana	TNAU CPG (2013)	Variety	Poovan	Bunch covers	500	2500	10	25000	No of developed hands, No of fingers, Finger weight and Fruit yield (kg/ha)	Dr. A. Ramesh Kumar, SMS (Hort.) & Dr. K. Natarajan, SMS (SST)
		Banana	Rhizome weevil is serious and affects whole plant	Demonstration of IPM practices for rhizome weevil management in banana	--	--	TNAU (2012)	<i>Pseudomonas fluorescens</i>	2 kg	200	15	3500	Rhizome weevil incidence, Yield (kg/ha), B:C ratio	Dr. T. Saravanan and Dr.A. Rameshku mar
6	Fodder	CO BN 5 CO FS31 Fodder cowpea CO 9 Velimasal	Cultivating mono fodder Poor yield Lack of awareness about other fodder crops Lack of awareness on to live stock	Demonstration of Fodder crops	Hybrid Variety Variety variety	CO BN 5 CO FS31 Fodder cowpea CO 9 Velimasal	TNAU	CO BN 5 CO FS31 Fodder cowpea CO 9 Velimasal	1600 slips 200 g 800 g 800g	1600	5	8000	Green fodder yield No.of cuts /year/ No.of animals fed Increase in Milk yield Palatability index	Green fodder yield No.of cuts /year/ No.of animals fed Increase in Milk yield Palatability index

7	Value addition	Cashew	Wastage of cashew apple Lack of awareness about preparation of value added products in cashew apple	Demonstration of preserved cashew apple juice for commercialization	KAU, Thiruvananthapuram	-	-	500 50 kg 500 gram 1No.  Refractometer  Hydraulic juice extractor	1 No.	4200	10	42000	Juice yield per Kg of fruits, Consumer preference in terms of organoleptic evaluation (colour, flavour, appearance and taste), Shelf life of juice content (Month wise)	Dr.S.Kannan, Programme Coordinator (FSN) Dr. A. Ramesh Kumar, SMS (Hort.)
		Varagu	Lack of technical knowledge in the preparation of profitable value added products from Varagu–Noodles	Demonstration of co3 varagu for fibre rich nutritious noodles preparation	H.Sc. College & RI, TNAU.	-	-	Vartagu seeds Varagu Rice Maida Other ingredients Noodles extruder	50 kg 5kg 5 kg 500 g 1 no.	585	10	58500	Yield / ha, Consumer preference in terms of Organoleptic evaluation (colour, flavour, appearance and taste), Shelf life of Noodles (Month wise), BC Ratio	Dr.S.Kannan, Programme Coordinator (FSN) Dr.M.Nirmala Devi, Asst.Prof(Extn.)
	Vetenary	Poultry	Low income to farmers	Demonstration of Nandhanam Turkey –II for backyard poultry	TANUVAS - 2013	-	-	Nandhanam Turkey II - @ Rs. 150 Feed @ Rs. 50/kg Miscellaneous (Transport, feeder, vaccines etc.)	100 nos  100 kg.	2750	10	27500	No. of Egg laying, Increase of Multiplication, BCR	Dr.S.Kannan, Programme Coordinator (FSN) Dr.M.Nirmala Devi, Asst.Prof(Extn.)

Fisheries		Under utilization of water resources available in villages	Demonstration of composite fish farming in farm / village ponds		-	-	Rohu Catla Common carp Silver carp	1000 nos.	4000	3	12000	Yield and BCR	Dr.M.Nirmala Devi,Asst.Prof(Extn.) Dr.S.Kannan, Programme Coordinator (FSN)
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### Integrated Farming System (IFS)

1	IFS (Dryland system)	<ul style="list-style-type: none"> <li>• Low income in non crop season in delta region</li> <li>• Less production from agriculture</li> </ul>	Integrated Farming system under dry land condition	<b>Existing Condition:</b> Crop – Sorghum- Maize/ Millets –Maize Fodder crop: Fodder Sorghum Co 31 Animal husbandry - Poultry Goat		TNAU 2005	Chicks (Nandhana m 4)  Silpaulin bag for Vermicom post  Fodder sorghum Co 31  Field board	20 nos  2  2.0 kg/acre  1	5000	3	15000	Crop yield (kg/ha) Gross and net income from the system	Dr.S.Kannan, Programme Coordinator (FSN)  Dr.K.Venkatalakshmi,SMS(Agr.)
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### 10 Training for Farmers/ Farm Women during 2016-17

S.No.	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (Assessment/Refinement/FLD)*	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
10.1	Crop production	Paddy	<ul style="list-style-type: none"> <li>➤ Paddy yield is low in salt affected soil of Nallore and Mangalur block</li> <li>➤ Lack of suitable paddy variety under salt affected soil</li> </ul>	OFT-Assessment of the different varieties of <b>paddy</b> for salt affected soil	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Mrs.G.Porkodi,SMS,(SS&AC)  Dr.K.Venkatalakshmi,SMS(Agr.)

		Paddy	<ul style="list-style-type: none"> <li>➤ Farmers un aware about bio fertilizer seedling dipping method of treatment in paddy</li> <li>➤ Shelf life of solid bio fertilizer is short</li> <li>➤ Lignite is hazardous to health of production workers as well as environment</li> </ul>	OFT-Assessment of suitable bio fertilizer source for <b>paddy</b>	Integrated crop management practices in paddy	2	80	
		Paddy	<ul style="list-style-type: none"> <li>➤ Rice is a stable food in India- no. of diabetic patient increasing day by day</li> <li>➤ Non availability of low GI rice variety in Tamil Nadu</li> </ul>	OFT-Assessment of suitable low glycemic index <b>rice</b> variety for Cuddalore district	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Dr.K.Venkata lakshmi,SMS (Agr.) Dr.S.Kannan,Programme Coordinator(FSN)
		Paddy	<ul style="list-style-type: none"> <li>➤ Availability of water is limited</li> <li>➤ Lack of suitable tool for alternate wetting and drying</li> </ul>	FLD-Demonstration of pani pipe indicator tool of AWD in paddy	Integrated crop management practices in sambapaddy	2	80	Dr.K.Venkata lakshmi,SMS (Agr.) Dr.T.Sarvanan,SMS(PAT.)
		Paddy	<ul style="list-style-type: none"> <li>➤ Ruling BPT 5204 variety susceptible for leaf folder, stem borer, sheath blight and neck blast in samba season Indiscriminate use of chemicals for control of the pest and disease</li> <li>➤ Samba paddy cultivated 1,05,000 ha In Cuddalore district</li> </ul>	FLD-Demonstration of TKM 13 <b>paddy</b> variety for samba season in Cuddalore district	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Dr.T.Sarvanan,SMS(PAT.) Mrs.G.Porkodi,SMS,(SS&AC)
		Paddy	<ul style="list-style-type: none"> <li>➤ Replacement of long duration variety for the existing ruling cultivar in Samba Season and to tolerate the flood</li> </ul>	FLD-Demonstration submergence tolerant <b>paddy</b> variety CR1009 sub 1 with farmers participatory seed production mode	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Dr.K.Natarajan,SMS(SST) Dr.T.Sarvanan,SMS(PAT.)

			<ul style="list-style-type: none"> <li>➤ Replacement of medium duration variety for the existing ruling low yielding cultivar in Kar and late Pishanam Season</li> </ul>	FLD-Demonstration <b>paddy</b> variety TPS 5 with farmers participatory seed production mode Cuddalore District	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Dr. K. Natarajan, SMS (SST) Dr. M. Nirmala Devi, SMS (Agrl. Extn.)
		Black gram	<ul style="list-style-type: none"> <li>➤ Non availability of latest variety in rice fallow black gram</li> </ul>	OFT-Assessment of suitable <b>rice fallow black gram</b>	Production technologies and newly released varieties for black gram and rice fallow black gram	1	40	Dr. K. Venkata lakshmi, SMS (Agr.) Dr. K. Natarajan, SMS (SST)
		Black gram	<ul style="list-style-type: none"> <li>➤ Blackgram occupies 52366 ha in cuddalore district.</li> <li>➤ Lack of availability of good quality seeds</li> </ul>	FLD-Demonstration of <b>black gram</b> MDU1 through farmer participatory seed production	Production technologies and newly released varieties for black gram and rice fallow black gram	1	40	Dr. K. Natarajan, SMS (SST) Dr. A. Ramesh Kumar, SMS (Horti.)
		Black gram	<ul style="list-style-type: none"> <li>➤ Lack of awareness about high yielding new variety</li> </ul>	FLD-Demonstration of new <b>black gram</b> variety VBN8	Production technologies and newly released varieties for black gram and rice fallow black gram	1	40	Dr. M. Nirmala Devi, SMS (Agrl. Extn.) Dr. K. Natarajan, SMS (SST)
		Green gram	<ul style="list-style-type: none"> <li>➤ Lack of awareness on newly released varieties of green gram</li> </ul>	FLD-Demonstration of <b>Green gram</b> variety CO8	Production technologies and newly released varieties for green gram	1	40	Dr. M. Nirmala Devi, SMS (Agrl. Extn.) Mrs. G. Porkodi, SMS, (SS & AC)
		Maize	<ul style="list-style-type: none"> <li>➤ Lack of awareness of recent varieties and hybrids</li> <li>➤ Micronutrient deficiency leads to lower yield in maize crops</li> </ul>	FLD-Integrated crop management in <b>maize</b> Co 6	Integrated crop management in maize	1	40	Mrs. G. Porkodi, SMS (SS & AC.) Dr. A. Ramesh Kumar, SMS (Horti.)
		Ground nut	<ul style="list-style-type: none"> <li>➤ Lack of knowledge on newly released variety of ground nut</li> <li>➤ Non adoption of Integrated crop management technology</li> </ul>	OFT-Assessment of suitable confectionary <b>ground nut</b> varieties in Cuddalore	Integrated crop management practices in ground nut	1	40	Dr. K. Natarajan, SMS (SST) Dr. T. Sarvanan, SMS (PAT.)

		Ground nut	<ul style="list-style-type: none"> <li>➤ Yield reduction is 30-40% due to moisture stress</li> <li>➤ Non availability of drought tolerant varieties</li> </ul>	FLD-Demonstration of <b>ground nut</b> variety CO7 under rain fed areas	Integrated crop management practices and newly released varieties of ground nut	1	45	Dr.K.Venkatalakshmi,SMS (Agr.) Mrs.G.Porkodi,SMS(SS&AC.)
		cotton	<ul style="list-style-type: none"> <li>➤ Growth of the cotton affected by the rainfall occurred during november and December</li> <li>➤ Nutritional imbalance due to excess moisture by rainfall.</li> </ul>	OFT-Assessment of nutritional requirement in cotton	Production technologies for cotton	1	40	Mrs.G.Porkodi,SMS(SS&AC.) Dr.M.NirmalaDevi, SMS(Agrl.Extn.)
		Sesame	<ul style="list-style-type: none"> <li>➤ Lack of awareness about rice fallow gingelly variety</li> <li>➤ Exploring the possibility of gingelly in rice fallow condition</li> </ul>	OFT-Assessment of suitable variety for <b>rice fallow gingelly</b>	Production technologies in oil seeds	2	85	Dr.K.Venkatalakshmi,SMS (Agr.) Mrs.G.Porkodi,SMS(SS&AC.)
		Sesame	<ul style="list-style-type: none"> <li>➤ Tamil Nadu soil are deficient in micro nutrient Hence the crop yield obtained is low.</li> <li>➤ Farmers are unaware about the micro nutrient mixture application to sesame</li> </ul>	FLD-Demonstration of TNAU micro nutrient mixture application to irrigated <b>sesame</b>	Production technologies in oil seeds	2	85	Dr.K.Venkatalakshmi,SMS (Agr.) Mrs.G.Porkodi,SMS(SS&AC.)
		Cumbu	<ul style="list-style-type: none"> <li>➤ Cumbu occupies an area of 3000 ha in Cuddalore district under rainfed condition</li> <li>➤ Cultivating low yielding local variety</li> <li>➤ Poor yield and poor income</li> <li>➤ Lack of awareness about the new drought tolerant Cumbu variety</li> </ul>	FLD-Demonstration of new <b>cumbu</b> variety Co 10	Production technologies in millets and minor millets.	1	45	Dr.M.Nirmala Devi,SMS(Agrl.Extn.) Dr.S.Kannan,Programme Coordinator(FSN)

		Varagu	<ul style="list-style-type: none"> <li>➤ Lack of technical knowledge in the preparation of profitable value added products from Varagu- Noodle</li> </ul>	FLD-Demonstration of Co3 varagu for nutritious	Production technologies in millets and minor millet	1	45	Dr.M.Nirmala Devi,SMS(Agrl.Extn.) Dr.S.Kannan,Programme Coordinator(FSN)
		Fodder crops	<ul style="list-style-type: none"> <li>➤ Cultivating mono fodder</li> <li>➤ Poor yield</li> <li>➤ Lack of awareness about other fodder crops</li> <li>➤ Lack of awareness on balanced nutrition to live stock (Grass / Grain fodder + legume fodder)</li> </ul>	FLD-Demonstration of fodder crops	Production technologies in fodder crops	1	40	Dr.M.Nirmala Devi,SMS(Agrl.Extn.) Dr.S.Kannan,Programme Coordinator(FSN)
<b>10.2</b>	Crop protection	Paddy	<ul style="list-style-type: none"> <li>➤ Blast disease occurred in samba Paddy (Oct-Jan).Neck blast is severe in the paddy var.BPT 5204</li> <li>➤ Yield loss of 20-35%</li> </ul>	FLD-Demonstration of IPM for blast disease in samba <b>paddy</b>	Integrated pest management in paddy	2	80	Dr.T.Sarvanan,SMS(PAT.) Dr.K.Natarajan,SMS(SST)
		Ground nut	<ul style="list-style-type: none"> <li>➤ Aflatoxin is important disease which affects kernel quality of ground nut</li> <li>➤ Less chances for export of ground nut</li> </ul>	OFT -Assessment on pre and post harvest management technologies for aflotoxin contamination in <b>ground nut</b>	Integrated pest and disease management in ground nut	1	45	Dr.K.Natarajan,SMS(SST) Dr.T.Sarvanan,SMS(PAT.)
		Sesame	<ul style="list-style-type: none"> <li>➤ Phyllody disease is serious and claimed 20% yield loss</li> <li>➤ Severe in summer season</li> </ul>	FLD-Demonstration of IPM practices for phyllody disease in <b>sesamum</b>	IPM in oil seed crops (ground nut and gingelly)	2	90	Dr.T.Sarvanan,SMS(PAT.) Dr.K.Venkatalakshmi,SMS (Agr.)



10.3	Horticultural crops-Plant protection	Cashew	<ul style="list-style-type: none"> <li>➤ Cashew- 36900 ha in cuddalore district</li> <li>➤ Grubs bore into the bark in the early stages and make excessive tunnels in all directions and wilting of branches and then the trees as a whole</li> <li>➤ 15 years old plantations affected.</li> </ul>	OFT-Assessment of methods for stem and root borer in <b>cashew</b>	Pest and disease management in cashew	1	40	Dr.T.Sarvanan,SMS(PAT.) Dr.A.Ramesh Kumar,SMS(Horti.)
		Banana	<ul style="list-style-type: none"> <li>➤ Grubs bore into the rhizome and cause death of the plant</li> </ul>	FLD-Demonstration of IPM practices for rhizome weevil management in <b>banana</b>	Production technologies and IPM in banana	1	40	Dr.T.Sarvanan,SMS(PAT.) Dr.A.Ramesh Kumar,SMS(Horti.)
10.4	Horticultural crops-production Technologies	Banana	<ul style="list-style-type: none"> <li>➤ Yield loss due to pest and diseases</li> </ul>	FLD-Demonstration of bunch covers in <b>banana</b>	Production technologies and IPM in banana	1	45	Dr.A.Ramesh Kumar,SMS(Horti.) Dr.S.Kannan,Programme Coordinator(FSN)
			<ul style="list-style-type: none"> <li>➤ Lack of awareness of newly released variety</li> </ul>	FLD-Integrated crop management practices in Cassava YTP 1	Production technologies and IPM in cassava	1	40	Dr.A.Ramesh Kumar,SMS(Horti.) Dr.T.Sarvanan,SMS(PAT.)
		Bhendi	<ul style="list-style-type: none"> <li>➤ Lack of awareness of newly released variety</li> </ul>	FLD-Demonstration of Bhendi Co 4 hybrid	Yield maximization technologies in vegetables (Bhendi,brinjal, chillies)	1	45	Dr.A.Ramesh Kumar,SMS(Horti.) Dr.T.Sarvanan,SMS(PAT.)
		Brinjal	<ul style="list-style-type: none"> <li>➤ Lack of awareness about grafted brinjal</li> </ul>	FLD-Demonstration of grafted brinjal	Yield maximization technologies in vegetables (Bhendi,brinjal, chillies)	1	45	Dr.A.Ramesh Kumar,SMS(Horti.) Dr.K.Natarajan,SMS(SST)
		Jasmine	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about improving the quality of jasmine</li> </ul>	OFT-Assessment of foliar nutrition in <b>jasmine</b> for improving flower quality	Production technologies of jasmine & tube rose	1	35	Dr.A.Ramesh Kumar,SMS(Horti.) Dr.S.Kannan,Programme Coordinator(FSN)
10.5	Value addition	Cashew	<ul style="list-style-type: none"> <li>➤ Wastage of cashew apple</li> <li>➤ Lack of awareness about preparation of value added products in</li> </ul>	FLD-Demonstration of preserved <b>cashew</b> apple juice for commercialization	Value addition in cashew	1	40	Dr.S.Kannan,Programme Coordinator (FSN) Dr.A.Ramesh Kumar,SMS(Horti.)

			cashew apple					
<b>10.6</b>	Vetenaury science	Poultry	<ul style="list-style-type: none"> <li>➤ Low income</li> <li>➤ Lack of employment opportunity</li> </ul>	FLD- Demonstration of Nandhanam Turkey –II for back yard <b>poultry</b>	Poultry farming	1	40	Dr.S.Kannan,Programme Coodinator (FSN) Dr.M.Nirmala Devi,SMS(Agrl.Exttn.)
<b>10.7</b>	Fisheries	Carp farming	<ul style="list-style-type: none"> <li>➤ Under utilization of water resources available in villages</li> </ul>	FLD-Demonstration of composite <b>fish farming</b> in farm/village pond	Multi carp farming	1	45	Dr.M.Nirmala Devi,SMS(Agrl.Exttn.) Dr.S.Kannan,Programme Coodinator (FSN)
<b>10.8</b>	Soil Health and Fertility							
<b>10.9</b>	PHT and value addition	-		-	-	-	-	-
<b>10.10</b>	Capacity Building Group Dynamics	-		-	-	-	-	-
<b>10.11</b>	Farm Mechanization	Black gram	<ul style="list-style-type: none"> <li>➤ Plant population is low Time and labour consuming, labour shortage in peak period of sowing</li> </ul>	FLD-Demonstration of line sowing in Black gram	Production technologies and newly released varieties for black gram and rice fallow black gram	1	40	Dr.K.Venkata lakshmi, SMS (A GR) Dr.S.Kannan,Programme Coodinator (FSN)
<b>10.12</b>	Mushroom production	Mushroom cultivation	<ul style="list-style-type: none"> <li>➤ No additional income to rural people</li> <li>➤ Lack of knowledge in mushroom cultivation</li> </ul>	-	-	3	60 No.s	Dr. T. Saravanan, SMS (Plant Pathology) Dr.S.Kannan,Programme Coodinator (FSN)
<b>10.13</b>	Agro forestry	-	-	-	-	-	-	-
<b>10.14</b>	Bee Keeping	-	-	-	-	-	-	-
<b>10.15</b>	Sericulture	-	-	-	-	-	-	-
<b>10.16</b>	Others	-	-	-	-	-	-	-

\* Title of intervention/title of technology, \*\* Training title should specify the major technology/skill to be transferred.

### 11. Training for Rural Youth during 2016-17

S.No.	Thematic area	Crop/ Enterprise	Major problem	Linked field intervention (Assessment/Refinement/ FLD)*	Training Course Title**	No. of Courses	Expect ed No. of partici pants	Names of the team members involved
11.1		Paddy	➤ Replacement of medium duration variety for the existing ruling low yielding cultivar in Kar and late Pishanam Season	FLD-Demonstration <b>paddy</b> variety TPS 5 with farmers participatory seed production mode Cuddalore District	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Dr.K.Natarajan,SMS(SST) Dr.M.Nirmala Devi,SMS(Agrl.Extn.)
			➤ Replacement of long duration variety for the existing ruling cultivar in Samba Season and to tolerate the flood	FLD-Demonstration submergence tolerant <b>paddy</b> variety CR1009 sub 1 with farmers participatory seed production mode	Newly released paddy varieties and paddy varieties suitable for different situations	1	40	Dr.K.Natarajan,SMS(SST) Dr.T.Sarvanan,SMS(PAT.)
		Black gram	➤ Blackgram occupies 52366 ha in cuddalore district. ➤ Lack of availability of good quality seeds	FLD-Demonstration of <b>black gram</b> MDU1 through farmer participatory seed production	Production technologies and newly released varieties for black gram and rice fallow black gram	1	40	Dr.K.Natarajan,SMS(SST) Dr.A.Ramesh Kumar,SMS(Horti.)
		Fodder crops	➤ Cultivating mono fodder ➤ Poor yield ➤ Lack of awareness about other fodder crops ➤ Lack of awareness on balanced nutrition to live	FLD-Demonstration of fodder crops	Production technologies in fodder crops	1	40	Dr.M.Nirmala Devi,SMS(Agrl.Extn.) Dr.S.Kannan,Programme Coordinator(FSN)

			stock (Grass / Grain fodder + legume fodder)					
11.2	Food science/Value addition	Cashew	<ul style="list-style-type: none"> <li>➤ Wastage of cashew apple</li> <li>➤ Lack of awareness about preparation of value added products in cashew apple</li> </ul>	FLD-Demonstration of preserved <b>cashew</b> apple juice for commercialization	Value addition in cashew	1	40	Dr.S.Kannan,Programme Coodinator (FSN) Dr.A.Ramesh Kumar,SMS(Horti.)
		Vegetables	<ul style="list-style-type: none"> <li>➤ Wastage of vegetables in peak season of harves</li> </ul>	Yield maximization technologies in vegetables(Bhendi,brinjal, chillies	Value addition in vegetables	1	40	Dr.S.Kannan,Programme Coodinator (FSN) Dr.A.Ramesh Kumar,SMS(Horti.)
11.3	Vetenairy science	Poultry	<ul style="list-style-type: none"> <li>➤ Low income</li> <li>➤ Lack of employment opportunity</li> </ul>	FLD- Demonstration of Nandhanam Turkey –II for back yard <b>poultry</b>	Poultry farming	1	40	Dr.S.Kannan,Programme Coodinator (FSN) Dr.M.Nirmala Devi,SMS(Agrl.Extn.)
11.4	Fisheries	Carp farming	<ul style="list-style-type: none"> <li>➤ Under utilization of water resources available in villages</li> </ul>	FLD-Demonstration of composite <b>fish farming</b> in farm /village pond	Multi carp farming	1	45	Dr.M.Nirmala Devi,SMS(Agrl.Extn.) Dr.S.Kannan,Programme Coodinator (FSN)
11.5	Soil Health and Fertility	-	-	-	-	-	-	-
11.6	PHT and value addition	-	-	-	-	-	-	-
11.7	Capacity Building Group Dynamics	-	-	-	-	-	-	-
11.8	Farm Mechanization	Black gram	<ul style="list-style-type: none"> <li>➤ Plant population is low</li> <li>➤ Time and labour consuming, labour shortage in peak period of sowing</li> </ul>	FLD-Demonstration of line sowing in Black gram	Production technologies and newly released varieties for black gram and rice fallow black gram	1	40	Dr.K.Venkata lakshmi, SMS (A GR) Dr.S.Kannan,Programme Coodinator (FSN)

11.12	Mushroom production	Mushroom cultivation	<ul style="list-style-type: none"> <li>➤ No additional income to rural people</li> <li>➤ Lack of knowledge in mushroom cultivation</li> </ul>					Dr. T. Saravanan, SMS (Plant Pathology)
11.13	Agro forestry	-	-	-	-	-	-	-
11.14	Bee Keeping	-	-	-	-	-	-	-
11.15	Sericulture	Nursery production and silk worm <b>raring</b>	<ul style="list-style-type: none"> <li>➤ No additional income to rural people</li> <li>➤ Lack of knowledge in sericulture</li> </ul>	-	-	-	-	-
11.16	Others-	--	--	--	--	--	--	-

\*Title of intervention/title of technology, \*\* Training title should specify the major technology/skill to be transferred.

## 12. Trainings for Extension Personnel during 2016-17

S.No.	Thematic area	Training Course Title**	No. of Courses	Expected No. of participants	Names of the team members involved
12.1	Crop Production	Introduction and popularization of newly released varieties in agricultural crops	2	25	Dr.K. Venkata lakshmi, SMS (Agr.)
		INM practices and demonstration of Visual Diagnostic Kit for identification of nutrient deficiencies and their remedial measures	2	25course	Mrs.G.Porkodi,SMS(SS&AC)
		ICM in maize	2	45	Dr.K. Venkata lakshmi, SMS (Agr.) Dr. T. Saravanan, SMS (SST) Dr. K.Natarajan, SMS(SST)
		Minor millets production technologies	1.	25 nos.	Dr.M..Nirmala Devi,SMS (Agricultural Extension) Dr.S.Kannan,Programme coordinator
		Transplanted red gram technologies	1	25 Nos.	Dr.K. Venkata lakshmi, SMS (A GR) Dr. T. Saravanan, SMS (PAT)
12.2	Home Science	-	-	-	-
12.3	Capacity Building and Group Dynamics	-	-	-	-
12.4	Horticulture	Integrated crop management in vegetables	2	25	Dr.A.Ramesh Kumar,SMS(Horti.) Dr. T. Saravanan, SMS (SST)
12.5	Livestock Production & Management	Livestock management and vaccination	1	35	Dr. S. Kannan, SMS (HSc) Dr. T. Saravanan, SMS (PAT)
12.6	Plant Protection	IPM in rice	2	50	Dr. T. Saravanan, SMS (PAT)
		IPM in Vegetables	1	50	Dr. T. Saravanan, SMS (PAT) Dr. S. Kannan, SMS (HSc) Dr.A.Ramesh Kumar,SMS(Horti.)
		Ecofriendly management of pest and disease in paddy			Dr. T. Saravanan, SMS (PAT)
12.7	Farm Mechanization	-	-	-	-
12.8	PHT and value addition	Demonstration of value addition in vegetables	2	50	Dr. S. Kannan, SMS (HSc) Dr.M..Nirmala Devi,SMS (Agricultural Extension)
12.9	Production of Inputs at Site	-	-	-	-
12.10	Sericulture	-	-	-	-
12.11	Fisheries	-	-	-	-

\* Title of intervention/title of technology, \*\* Training title should specify the major technology/skill to be transferred.

## 13. Vocational trainings during 2016-17

Sl.No.	Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participant	Sponsoring agency if any	Names of the team members involved
13.1	Crop Production	Seed production in paddy and vegetables	1 (3 days)	Farmers, women and rural youths	50	-	Dr.K.Natarajan, SMS(SST) Dr. T.Sarvanan, SMS(PAT)
		Quality seed production in oil seeds	2 (5 days each)	Farmers, women and rural youths	50	-	Dr. K.Natarajan, SMS(SST) Mrs.G.Porkodi, SMS(SS&AC)
		Sustainable Sugarcane Initiatives technology	1 (3 days)	Farmers and women	20	-	Dr.K. Venkata lakshmi, SMS (A GR) Dr. K.Natarajan, SMS(SST)
		Organic farming –input production and utilization	1 prog. -3 days	Progressive Farmers	20 nos.	-	Dr.K. Venkata lakshmi, SMS (A GR) Dr. T.Saravanan, SMS (PAT) Mrs.G.Porkodi, SMS (SS&AC)
		Integrated Farming System – wet land and garden land system	1 prog-3 days	Progressive farmers and farm women	20 nos.	-	Dr.K. Venkata lakshmi and Animal husbandary doctor
13.2	Home Science	Processing, value addition and Marketing technique of minor millers	1 prog-3 days	Progressive farmers and farm women	20 nos.	-	Dr. S. Kannan, SMS (FSN) and Dr.M.Nirmala Devi, SMS(Agrl.Extension)
		Value added product prepared from fruits and vegetables	1 prog-3 days	Progressive farmers, farm women and rural youth	20 nos.	-	Dr. S. Kannan, SMS (FSN) Dr.M.Nirmala Devi, SMS(Extn.)
13.3	Capacity Building and Group Dynamics	-	-	-	-	-	-
13.4	Horticulture	Nursery and Vegetable production	2 (each 5 days)	Farmers, women and rural youths	50	-	Dr.A.Ramesh Kumar, SMS(Horti.) Dr. K.Natarajan, SMS(SST)
		Bouquet making ,dry flower arrangement and vegetable carving	1 programme (3 days)	Farm women and rural youths	25 nos.	-	Dr.A.Ramesh Kumar, SMS(Horti.) Dr. K. Venkata lakshmi, SMS(Agr.)
		Value addition in cashew ,jack and amla	1 program	Farmers, Farm women and	30 nos.		Dr. S. Kannan, SMS (FSN) and Dr.A.Ramesh

			me (3 days)	rural youths			Kumar,SMS(Horti.)
13.5	Livestock Production & Management	-	-	-	-	-	-
13.6	Plant Protection	-	-	-	-	-	-
13.7	Farm Mechanization	-	-	-	-	-	-
13.8	PHT and value addition	Vocational training on mushroom production and value addition	3 programmes and five days	Farmers, farm women, rural youth	75	--	Dr. T. Saravanan SMS (Plant Pathology)
13.9	Production of Inputs at Site	Composting technologies	2 (5 days)	Rural youths and SHGs	25/programme		Mrs.G.Porkodi,SMS(SS&AC) Dr. K. Venkata lakshmi,SMS(Agr.)
		Vocational training on Biocontrol agents production	1 programme and five days	Farmers, farm women, rural youth	25	-	Dr. T. Saravanan SMS (Plant Pathology)
13.10	Sericulture	-	-	-	-	-	-
13.11	Fisheries	-	-	-	-	-	-

\* Training title should specify the major technology/skill to be transferred.

#### Abstract of training to be given during 2016-17

S.No	Particulars	Number of courses	No. of participants
1	Farmers/ Farm Women	43	1655
2	Rural Youth	9	365
3	Extension Personnel	16	280
4	Vocational training	16	270
5	Sponsored programme	13	3575
	<b>TOTAL</b>	<b>97</b>	<b>6145</b>

#### 14. Sponsored trainings during 2016-17

Sl.No.	Thematic area and the Crop/Enterprise	Training title*	No. of programmes and Duration (days)	Type of Clientele (SHGs, NYKs, School students, Women, Youth etc.)	Expected No. of participants	Sponsoring agency	Names of the team members involved
14.1	Crop Production	sustainable sugarcane initiative	13 days	Farmers	25 /batch	NA DP	Dr.K.Natarajan, SMS(SST) Dr.K.Venkatalakshmi,SMS(Agr.)
14.2	Home Science	-	-	-	-	-	-
14.3	Capacity Building and Group Dynamics	-	-	-	-	-	-



14.4	Horticulture	-	-	-	-	-	-
14.5	Livestock Production & Management	-	-	-	-	-	-
14.6	Plant Protection	-	-	-	-	-	-
14.7	Farm Mechanization	-	-	-	-	-	-
14.8	PHT and value addition	-	-	-	-	-	-
14.9	Production of Inputs at Site	-	-	-	-	-	-
14.10	Sericulture	-	-	-	-	-	-
14.11	Fisheries	-	-	-	-	-	-

\* Programme title should specify the major technologies/skills to be transferred /refreshed.

At present we did not operate any of the external funded schemes and hence the sponsored training details could not be provided.

### 15. Extension programmes during 2016-17

Sl.No.	Extension programme*	No. of programmes or activities	Expected No. of participants	Names of the team members involved
15.1	Advisory Services	Based on the need	2500	All SMS
15.2	Diagnostic visits	50	750	All SMS
15.3	Field Day	10	1000	PC and All SMS
15.4	Group discussions	15	500	PC and All SMS
15.5	Kisan Ghosthi	5	250	-
15.6	Film Show	4	-	-
15.7	Self -help groups	4	250	SMS (PP) & (HSc)
15.8	Kisan Mela	4	7500	All SMS
15.9	Exhibition	3	5000	PC and All SMS
15.10	Scientists' visit to farmers field	50	700	All SMS
15.11	Plant/Soil health/Animal health camps	4	600	SMS (SS & AC)
15.12	Farm Science Club	4	100	PC and All SMS
15.13	Ex-trainees Sammelan	-	-	-
15.14	Farmers' seminar/workshop	5	2000	All SMS
15.15	Method Demonstrations	30	1000	All SMS
15.16	Celebration of important days	-	-	-
15.17	Special day celebration	-	-	-
15.18	Exposure visits	4	500	All SMS
15.19	Technology week,	1	-	-
15.20	FFS	1	30	PC and All SMS
15.21	Farm innovators meet	2	100	All SMS
15.22	Awareness programs	4	600	All SMS
	Pre Kharif awareness programme	1	500	
	Pre Rabi awareness programme	1	500	All SMS
	Soil Health day	1	500	All SMS
	Jai Javan and Jai Vigyan	1	200	All SMS

## 16. Activities proposed as Knowledge and Resource Centre during 2016-17

### 16.1 Technological knowledge

Sl.No.	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
16.1.1	Herbal Technology park	To create awareness about the usage of medicinal plants in our daily life	-	Dr.A.Ramesh Kumar ,SMS(Horti) and Farm manager
16.1.2	Demonstration Units	Roof gardening	-	Dr. K.Natarajan, SMS(SST) and Farm manager
		Stall fed Telicherry Goats	-	Dr. K.Venkata lakshmi,SMS(Agr.) and Farm manager
		IFS model –Poultry with fish	-	Dr. K.Venkata lakshmi,SMS(Agr.)
		Mushroom production	-	Dr. T. Saravanan SMS (Plant Pathology)
		Silpaulin vermi compost		Mrs.G.Porkodi,SMS(SS&AC)
		Ornamental fish		Dr. T. Saravanan SMS (Plant Pathology)
		Hi tech nursery		Dr.K.Natarajan, SMS(SST) and Farm manager
16.1.3	Lab Analytical services	Soil and water sample analyzing	-	Mrs.G.Porkodi,SMS(SS&AC)
16.1.4	Technology Week	-	-	-

### 16.2. Technological Products

Sl.No.	Category	Name of the Production Partner Agency, if any	Name of the product	Quantity (Qtl.) / Number planned to be produced during 2014-15	Names of the team members involved
16.2.1	Seeds				
16.2.2	Planting materials	-	Cashew grafts VRI 3	10000 Nos.	Farm manager and Programme coordinator
		-	Ornamental seedling	2500 Nos.	Farm manager and Programme coordinator
		-	Medicinal plants	2500 Nos	Farm manager and Programme coordinator
		-	Protray vegetable seedling	50,000 Nos.	Farm manager and Programme coordinator
		-	Jack grafts	200 Nos.	Farm manager and Programme coordinator
16.2.3	Bio-products	-	Vermicompost	5 Tonnes	Farm manager and SMS (SS&AC)
16.2.4	Livestock strains	-	Thalacherry Goats	5 Nos.	Farm manager and SMS (Agronomy)
16.2.5	Fish fingerlings	-	-	-	-

### 16.3 Technological Information

Sl.No	Category	Technological capsules / Number	Names of the team members involved
16.3.1	Technology backstopping to line departments		
	Agriculture	30	Dr.S.Kannan Dr.K.Venkatalakshmi Dr.T.Sarvanan
	Horticulture	6	Dr.S.Kannan Dr.K.Ramesh kumar Dr.K.Natarajan
	Animal Husbandry	2	Dr.S.Kannan Dr.M.Nirmala Devi Mrs.G.Porkodi
	Fisheries	1	Dr.S.Kannan Dr.K.Venkatalakshmi Mrs.G.Porkodi
	Agricultural Engineering	5	Dr.S.Kannan Dr.K.Natarajan Farm manager
	Sericulture	1	Dr.S.Kannan Dr.K.Ramesh kumar Dr.K.Natarajan
	Others, pl. specify		
16.3.2	Literature/publication	15	Dr.S.Kannan Dr.K.Venkatalakshmi
16.3.4	Electronic Media	100	Dr.S.Kannan Mr.R.Samundees waran
16.3.5	Kisan Mobile Advisory Services	254	Dr.S.Kannan Mr.R.Samundees waran
16.3.6	Information on centre/state sector schemes and service providers in the district.	Data may be collected from different agencies. Also indicate time of completion.	Dr.M.Nirmala Devi Mrs.G.Porkodi

### 17. Additional Activities Planned during 2016-17

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
17.1	ICAR - Main	Establishing Home Science Laboratory	<ul style="list-style-type: none"> <li>Value addition - research</li> <li>Packaging technologies</li> <li>Quality analysis</li> </ul>	Cabinet drier : 2 Lakhs Packaging machine: 5 Lakhs Quality analysis equipments: 3 Lakhs <b>Total: 10 Lakhs</b>	Dr. S. Kannan SMS ( Home Science)

## 18. Revolving Fund

### 18.1 Financial status

Opening balance as on 01.04.2015 (Rs.in Lakh)	Expenditure incurred during 2015-16 (Rs.in Lakh)	Receipts during 2015-16 (Rs.in Lakh)	Closing balance as on 28.2.2016(Rs.in Lakh)	Expected closing balance by 31.3.2016 (Including value of material in stock)
4,43,703	3,65,993	2,93,071	3,70,781	3,94,781

### 18.2 .Plan of activities under Revolving Fund

S.No.	Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
18.2.1	Cashew grafts VRI 3	10000 Nos.	2,00,000	Farm manager and Programme coordinator
18.2.3	Ornamental seedling	2500 Nos.	25,000	Farm manager and Programme coordinator
18.2.4	Medicinal plants	2500 Nos	25,000	Farm manager and Programme coordinator
18.2.5	Protray vegetable seedling	50,000 Nos.	30,000	Farm manager and Programme coordinator
18.2.6	Jack grafts	200 Nos.	10,000	Farm manager and Programme coordinator

### 19. Activities of soil, water and plant testing laboratory during 2016-17

Sl.No.	Type	No. of samples to be analyzed	Names of the team members involved
19.1	Soil	750	Mrs. G. Porkodi, SMS (SS&AC) Tmt.G.Meenalakshmi, Prog.Asst(Tech)
19.2	Water	1000	
19.3	Plant	-	
19.4	Others	-	

### 20. E-linkage during 2015-16

S. No	Nature of activities	Likely period of completion (please set the time frame)	Remarks if any
20.1	Title of the technology module to be prepared	Updating and Maintenance of KVK URL ( <a href="http://www.kvcuddalore.com">www.kvcuddalore .com .</a> ) Advanced technologies in agriculture and Horticultural crops	-
20.2	Creation and maintenance of relevant database system for KVK Training activities Progress of FLD and OFT activities Publications	Updating on monthly basis	-
20.3	Any other (Please specify)	-	-

**21. Activities planned under Rainwater Harvesting Scheme (only to those KVKs which are already having scheme under Rain Water Harvesting)**

S. No	Activities planned	Remarks if any
21.1		NIL

**22. Innovative Farmer's Meet**

Sl.No.	Particulars	Details
22.1	Are you planning for conducting Farm Innovators meet in your district?	Yes
22.2	If Yes likely month of the meet	Sep,2016
22.3	Brief action plan in this regard	Innovations and success story sharing by Innovative and Progressive farmers from Cuddalore District.

**23. Detailed proposal of farmer field school on "Ecofriendly crop management of paddy"**

1. Season: Kharif season, 2015-16	Period: July, 2016 to Sep, 2017
2. Periodicity of the session:	One day in a week
3. Name of the village:	Karmangkudi
4. Number of participants:	Male 20; Female 10; Total 30
5. Name of the Facilitators:	1. Dr. M.S.Aneesa Rani, Professor and Head, KVK 2. Dr. M.Nirmala Devi, SMS (Agricultural Extension)
6. Area of the FFS field:	Natural Resource management
7. Name of the collaborator ( <i>in whose field the FFS is to be laid</i> ):	Mr. Venkatesan
8. Major problems in the FFS village relevant to the crop/enterprise:	<ul style="list-style-type: none"> <li>➤ Lack of awareness about the conservation of natural resources</li> <li>➤ Wastage of agricultural wastes</li> <li>➤ Indiscriminate use of chemicals for paddy</li> <li>➤ lack of knowledge in use of ecofriendly crop management</li> </ul>
9. Objectives of the FFS:	<ul style="list-style-type: none"> <li>• To educate the farmers about eco friendly crop management techniques in paddy</li> <li>• To train the farmers on the use of eco friendly technical inputs and strategies</li> <li>• To create awareness about production and marketing of different bio agents</li> </ul>
10. Guest Faculty to be involved:	Local successful farmers engaged in organic cultivation of paddy

## 11. FFS Curriculum of Ecofriendly crop management in paddy - model:

Activity	Session-1	Session-2	Session-3	
FA	Assessment of basic status, Problem identification and prioritization, Introduction to FFS Finalizing FFS site, session days, drafting rules and regulations Input assessment	Nursery and Field inspection	Introduction of ecofriendly management techniques	
LTE		Short studies on current paddy production, their status, person engaged in seedling production and their knowledge in techniques		
SS		--		Know your nursery and field
ST				Nursery crop management
Others		Testing the knowledge on seedling characters and production		
GD	Initial entry of persons in the FFS	Sub group formation Using area localities		
Activity	Session-4	Session-5	Session-6	
FA	Collection of coirpith	Input preparation for decomposition process	Maintenance of coirpith under decomposition	
LTE	Importance of bio inputs in use of crop management		LTE observation	
SS	Bio inputs for nutrient management			
ST	Activity of bio inputs in paddy crop health			
Others	--			
GD	Lectures and Demonstration	Lectures and Demonstration	Lectures and Demonstration	
Activity	Session-7	Session-8	Session-9	
FA	Assessment of coirpith on decomposition	Problems in paddy cultivation using chemical method	Identification of pest and disease by participants	
LTE	Application of bio inputs in paddy crop field	Assessment of crop health in paddy field	--	
SS	--		Impact of soil health on crop growth	
ST	--			
Others				
GD	Lectures and Demonstration	Lectures and Demonstration	Lectures and Demonstration	
Activity	Session-10	Session-11	Session-12	
FA	Assessment of paddy crop growth	Assessment impact of pest and disease in paddy	Assessment of economics of bio inputs production	
LTE	--	Assessment of economics of		

SS	Lecture by successful entrepreneurs	paddy crop yield and bio inputs application	
ST			
Others			
GD			Benefits of eco based products application

Activity	Session-13	Session-14	Session-15
FA			Field day
LTE			
SS			
ST	AESA of ecofriendly crop cultivation		
Others		Assessment of knowledge gained in the school through BBE	
GD	Arrangement for establishment of bio input production unit	Future plan of participants on bioinput production	

FA- Field Activity, LTE- Long Term Experiment, SS- Short Studies, ST- Special Topic, AESA – Agro Ecosystem Analysis, BBE- Ballot Box Exercise, GD – Group Dynamics

## 12. Budget breakup

Sl.No	Subhead	Amount (Rs)
1	Refreshment @ Rs 20/. Per trainee for 14 number of programmes	Rs 8400.00
2	Expenditure on POL /hiring vehicles	Rs 7500.00
3	Contingent expenditures, banners and inaugural function of FFS	Rs 2000.00
4	Distribution of Training material on <ul style="list-style-type: none"> <li>• Organic input production for paddy @ 200 /- for 30 person</li> <li>• Cost of training kits @ 50 for 30 persons</li> </ul>	Rs 6000.00 Rs 1500.00
5	Distribution of literatures for 30 trainees @ 100 per trainee	Rs 1100.00
6	FFS miscellaneous contingent expenditure	Rs 2000.00
7	Honorarium for two facilitators /trainers for each complete session @ 750 each	Rs 1500.00
	<b>Total</b>	<b>Rs 30000.00</b>

## 24. Special Programme

### 24.1. SPECIAL PROGRAMME FOR FLOOD AFFECTED AREAS

#### FLOOD MITIGATION TECHNOLOGIES

S. No	Titel of the Module	Crop	No. of demonstrations	Budget (Rs)
1.	Module 1 : Demonstration of green manure crop for improving the soil health	Sun hemp/ Daincha	30	30,000
2.	Module 2 : Demonstration of compartmental bunding, channel clearing and removal of sand dunes		30	1,00,000
3.	Module 2 : Demonstration and farmer participatory seed production of short duration paddy variety CO 51	Paddy CO 51	30	30,000
4.	Module 4 : Demonstration of vetiver cultivation in canals, river banks and bunds of water catchment areas	Vetiver	30	50,000
5.	Module 5 : Demonstration of IPDM module for the crops in flood affected areas	IPDM	30	50,000
<b>Total</b>				<b>2,60,000</b>

## 24.2. Special Programme

### SMART FARMER FOR KRISHI SHAKTHI

#### Objective

- ❖ Long term: Develop horticultural farmers for collective farming
- ❖ Short term: Develop rural youth into Technocrats in Horticulture
- ❖ Area of Operation: Panruti & Annagramam

#### Features

- ❖ Skill development in Hitech horticulture to 25 farmers
- ❖ Practice of standard operating procedure in crops viz., cashew and jack
- ❖ Involve the farmers in group related activities leading for proper decision making facilitating complete calendar of operation.
- ❖ Inculcate ability to scientifically address and approach technology related issues and management related issues in identified crops.



- ❖ Transform the rural youth into agents for technology integration in the vegetable production system in the villages.

### Activity

- ❖ IEC(Information, Education and Communication) for the 25 farmers brought under the banner KRISHI SHAKTHI INIATIVE-CUDDALORE
- ❖ Experiential learning process in focused crops
- ❖ Skill empowerment exercise in preliminary, primary and secondary agricultural process
- ❖ Web enabled communication and technology facilitation by KRISHI SHAKTHI –Cuddalore
- ❖ Group formation for implementation of the special initiative

### Budget

No. of farmers	Expenditure	Total
25	10,000	2,50,000/-
<b>Split up details</b>		
S. No	Particulars	Budget
1.	Purchase of ICT tools	1,00,000.00
2.	Group formation	10,000.00
3.	Experiential learning & Training to the farmers	40,000.00
4.	Purchase of Horticulture tools	1,00,000.00

### 24.3. Special Programme

Rapid increase in population and change in life style and consumption pattern in India have resulted in a dramatic increase in urban solid waste . Urban solid waste includes house hold waste (food and kitchenwaste) and vegetable market waste .The characteristic of waste is heterogeneous of which biodegradable organic waste is higher . Since the urban solid waste contain higher degree of percentage of biodegradable organic it is suitable for either utilized as a substrate for bio gas plant or feed for animals.

At present,most of them are treated as waste, garbage, nuisance and hazard. The improper or inadequate disposal of such wastes leads to unhealthy conditions. This becomes a source of pollution and a public health problem. If such waste is recycled in a biogas plant, it will be a source of energy, health and wealth

#### Prioritized problem

- ❖ Disposal of vegetable waste and house hold waste
- ❖ Environmental pollution & pest and disease harbour
- ❖ Non availability of organic manures at low cost
- ❖ Lack of awareness about low cost energy production

**TECHNOLOGY**

1. Vegetable waste from house holds and market will be used as a feed for live stocks and the excreta used as feed for bio gas digester
2. Bio gas generated will be utilised for family and biogas slurry will be utilized as a manure to the field

**Total no.of demonstration-2 units**

**Budget**

	<b>Particulars</b>	<b>Required quantity</b>	<b>Total cost (Rs.)</b>
1.	Transport-Hire charges	25 tonnes	30,000
2.	Labour charges	25 nos	7500
	<b>Total cost</b>		<b>37,500</b>

**Expected out come**

- ❖ Effective recycling of agricultural solid waste (25 tonnes)
- ❖ Valuable manure at low cost
- ❖ Energy saving
- ❖ Hygienic environment
- ❖ Employment generation for rural youth

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## 25. Budget - Details of budget utilization (2015-16) upto 15.3.2016

(Rs.)

S. No.	Particulars	Sanctioned	Released as on 15.3.2015	Expenditure as on 15.3.2015
<b>24.1</b>	<b>Recurring Contingencies</b>			
24.1.1	<b>Pay &amp; Allowances</b>	9478000		10624511
24.1.2	<b>Traveling allowances</b>	100000		99552
24.1.3	<b>Contingencies</b>			
24.1.4.1	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance	75000		74850
<i>B</i>	POL, repair of vehicles, tractor and equipments	100000		98525
<i>C</i>	Meals/refreshment for trainees	50000		48295
<i>D</i>	Training material	32000	66,47,958	31699
<i>E</i>	Frontline demonstration except oilseeds and pulses	194000		188186
<i>F</i>	On farm testing	94000		60177
<i>G</i>	Training of extension functionaries	0		0
<i>H</i>	Maintenance of buildings	0		0
<i>I</i>	Extension activities	50000		48282
<i>J</i>	Establishment of Soil, Plant & Water Testing Laboratory	0		0
<i>K</i>	Library	5000		4300
<i>L</i>	FFS	0		0
<i>M</i>	IFS	0		0
<b>24.1</b>	<b>Total Recurring</b>	<b>600000</b>	<b>66,47,958</b>	<b>554314</b>
<b>24.2</b>	<b>Non-Recurring Contingencies</b>			
24.2.1	<b>Works</b>	-		
24.2.2	<b>Equipments including SWTL &amp; Furniture</b>	-		
24.2.3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	-		
24.2.4	<b>Library</b>	-		
<b>24.2</b>	<b>Total Non Recurring</b>	-		
<b>24.3</b>	<b>REVOLVING FUND</b>			
<b>24.4</b>	<b>GRAND TOTAL (A+B+C)</b>	<b>10178000</b>	<b>66,47,958</b>	<b>11278377</b>

**25.Details of Budget Estimate (2015-16) based on proposed action plan**

Sl. No.	Particulars	BE2016-17 proposed (Rs. In lakhs)
<b>25.1</b>	<b>Recurring Contingencies</b>	
<b>25.1.1</b>	<b>Pay &amp; Allowances</b>	<b>173.00</b>
<b>25.1.2</b>	<b>Traveling allowances</b>	<b>2.00</b>
<b>25.1.3</b>	<b>Contingencies</b>	<b>0.00</b>
<i>A</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	<b>4.00</b>
<i>B</i>	POL, repair of vehicles, tractor and equipments	<b>4.00</b>
<i>C</i>	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	<b>1.50</b>
<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	<b>1.25</b>
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	<b>6.05</b>
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	<b>1.25</b>
<i>G</i>	Training of extension functionaries	<b>0.50</b>
<i>H</i>	Maintenance of buildings	<b>1.00</b>
<i>I</i>	IFS	<b>0.16</b>
<i>J</i>	Library	<b>0.05</b>
<i>K</i>	FFS	<b>0.30</b>
<i>L</i>	Extension activities	<b>0.50</b>
<b>25.1</b>	<b>TOTAL Recurring Contingencies</b>	<b>20.56</b>
<b>25.2</b>	<b>Non-Recurring Contingencies</b>	
<b>25.2.1</b>	Civil Works (Farmers' hostel, construction of rain water harvesting structure)	
	Farmers Hostel	<b>35.00</b>
	Staff quarters	<b>250.00</b>
	Compound wall	<b>2.00</b>
<b>25.2.2</b>	Equipments including SWTL & Furniture (pH and EC meter, Weighing balance, Water distillation unit, Shaker, Home Science lab establishment, Baking oven, Xerox cum printer machine, Extruded unit, Flame photo meter)	
<b>25.2.2.1</b>	Solar Power system	<b>0.50</b>
<b>25.2.2.2</b>	Fire extinguisher	<b>0.25</b>
<b>25.2.2.3</b>	Air conditioner	<b>0.50</b>
	Total	<b>1.25</b>
<b>25.2.3</b>	Vehicle (Purchase of four wheeler and two wheeler)	
	Two wheeler	<b>0.65</b>
	Four wheeler	<b>12.00</b>
<b>25.2</b>	<b>TOTAL Non-Recurring Contingencies</b>	<b>300.90</b>
<b>25.4</b>	<b>GRAND TOTAL (25.1 +25.2)</b>	<b>496.34</b>

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