

ANNUAL REPORT (April 2018-March 2019)

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	51	1836	640	2477
Rural youths	3	90	13	103
Extension functionaries	10	330	248	578
Sponsored Training	4	222	18	240
Vocational Training	1	10	39	49
Total	69	2488	958	3447

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	15	6	-
Pulses	10	4	-
Cereals	45	18	-
Vegetables	10	4	-
Other crops	30	12	-
Total	110	44	0
Livestock	10	-	10
Fisheries	10	-	10
Other enterprises	-	-	-
Total	20	0	20
Grand Total	130	44	20

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	9	52	52
Livestock	-	-	-
Various enterprises	1	5	5
Total	10	57	57
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	10	57	57

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	352	5355
Other extension activities	-	-
Total	352	5355

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
KVK, Cuddalore	Text only	355	0	0	0	51	0	406
	Voice only	0	0	0	0	0	0	0
	Voice & Text both	0	0	0	0	0	0	0
	Total Messages	355	0	0	0	51	0	406
	Total farmers Benefitted	3548	0	0	0	412	0	3960

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)		
Groundnut VRI 8	1.960	174480
Sesame VRI 2	0.735	9555
VRI 3	0.031	4030
Blackgram ADT 6	0.235	2264
Planting material (No.)	16188	116885
Bio-Products (kg)	229 kg	27480
Livestock Production (No.)	31 kg	23858
Fishery production (No.)	13 kg	1300

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs
Soil	258	33800
Water	79	4350
Plant	-	-
Total	337	38150

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	12
2	Conferences	14
3	Meetings	36
4	Trainings for KVK officials	11
5	Visits of KVK officials	18
6	Book published	4
7	Training Manual	3
8	Book chapters	-
9	Research papers	3
10	Lead papers	-
11	Seminar papers	6
12	Extension folder	7
13	Proceedings	-
14	Award & recognition	7
15	On going research projects	1

DETAIL REPORT OF APR- 2018-19

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra Vriddhachalam - 606 001 Cuddalore District Tamil Nadu	04143- 238353	04143-238353	kvkvri@tnau.ac.in

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Tamil Nadu Agricultural University, Lawley Road, Coimbatore - 641 003 Tamil Nadu	0422- 2431222	0422 - 2431672	registrar@tnau.ac.in www.tnau.ac.in

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. S.Kannan	9787976407	9842664165	kvkvri@tnau.ac.in

1.4. Year of sanction: ICAR - F. No. 22 (17)/83-KVK dt 29.03.1985 of the Deputy Director General (AE), ICAR, New Delhi

1.5. Staff Position (as on 30th March, 2019)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present Basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr.S.Kannan	Associate Professor	Food Science and Nutrition	34100-64000	49240	15.04.2015	Permanent	SC
2	Subject Matter Specialist	Dr.K.Natarajan	Assistant Professor	Seed Science & Technology	15600-39100	36640	08.04.2015	Permanent	OBC
3	Subject Matter Specialist	Dr.S.Maruthasalam	Assistant Professor	Pl. Pathology	15600-39100	34600	17.05.2018	Permanent	OBC
4	Subject Matter Specialist	Dr. K. Venkatalakshmi	Assistant Professor	Agronomy	15600-39100	34600	22.04.2013	Permanent	OBC
5	Subject Matter Specialist	Dr. R. Jagadeesan	Assistant Professor	Horticulture	15600-39100	36640	12.03.2019	Permanent	OBC
6	Subject Matter Specialist	Tmt. G. Porkodi	Assistant Professor	Soil Science & Agrl.Chemistry	15600-39100	24230	08.04.2015	Permanent	SC
7	Subject Matter Specialist	Dr. M. Balarubini	Training Assistant	Agricultural Extension	36000 (Consolidated pay)		06.10.2018	Temporary	SC
8	Programme Assistant	Tmt. G. Meenalakshmi	Programme Assistant (Lab Tech.)	Environnent Science	35900-113500 (Level 13)	45400	28.02.2011	Permanent	OC

9	Computer Programmer	Tmt. M.Selvi	Programme Assistant (Computer)	Computer Science	35900-113500 (Level 13)	51100	12.04.2018	Permanent	OC
10	Farm Manager	Mr. D.Kumar	Farm Manager	Agronomy	35900-113500 (Level 13)	61000	06.06.2007	Permanent	OBC
11	Accountant / Superintendent	Tmt. T.Suganthirani	Superintendent	Higher Secondary	36900-116600 (Level 18)	52500	12.03.2019	Permanent	SC
12	Stenographer	Mrs. T. Chandirakala	Junior Assistant cum typist	MA, M.Ed	19500-62000 (PB2)	20100	24.01.2018	Permanent	SC
13	Driver	Th. J. Jayaprakash	Driver	XI	35900-113500 (Level 13)	19500	19.11.2018	Permanent	OBC
14	Driver cum Mechanic	Th.S.Arul	Driver cum Mechanic	X	19500-62000 (Level 8)	33200	21.02.2007	Permanent	OBC
15	Supporting staff-1	Th. A. Deivasigamani	Office Assistant	XII	15700-50000 (Level 1)	20500	08.08.2011	Permanant	OBC
16	Supporting staff-2	Th. P. Narayanasami	PUSM	-	15700-50000 (Level 1)	29300	01.07.2011	Permanent	OBC

1.6. Total land with KVK (in ha): 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	0.0873 ha
2.	Under Demonstration Units	0.021 ha
3.	Under Crops	16.1 ha
4.	Orchard/Agro-forestry	3.8 ha
5.	Others (specify)	Nil

1.7. Infrastructural Development: NIL**A) Buildings**

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq. m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	-	-	-	-	-	-	-
2.	Farmers Hostel	-	-	-	-	-	-	-
3.	Staff Quarters	-	-	-	-	-	-	-
4.	Demonstration Units							
	Mushroom Demo Unit	KVK (RF)	October 2018	16	23689	-	-	-
	Azolla Demo Unit	KVK (RF)	October 2018	4	20000			
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Motor cycle- Bajaj M80 (TN 31 V 4421)	1995	20,448	-	Non repairable condition
Mahindra Jeep (TN 66 V0376)	2017	8,34,445	-	Running

Motor cycle-Hero Honda (TN 31V 4421)	2009	48,255	-	Running
Tractor (TN-31 AS 2462)	2011	4,87,500	-	Running

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Digital camera	2016-17	42500	Good
Desktop computers	2016-17	100000	Good
Printer cum Xerox machine	2016-17	60000	Good
Public address system (Portable)	2016-17	30000	Good
Reverse osmosis unit for drinking water	2016-17	25000	Good
Portable memory drive	2016-17	10000	Good
Uninterrupted power system	2016-17	25000	Good
File storage and fixtures	2016-17	50000	Good

1.8. A). Details SAC meeting* conducted in the year

Sl.No.	Date	No. of Participants	Salient Recommendations
1.	13.02.2019	35	38

Proceedings of 22nd Scientific Advisory Committee Meeting conducted at KVK, Vridhachalam, Cuddalore District

The 22nd Scientific advisory Committee Meeting was held at KVK, Vridhachalam on 13.02.2019 under the Chairmanship of Dr. M. Jawaharlal, the Director of Extension Education, Tamil Nadu Agricultural University, Coimbatore in the presence of Dr. A.Bhaskaran, Principal Scientist, ATARI, Hyderabad, Dr.V.Ambethkar, Director, Tamil Nadu Rice Research Institute and Tmt. A. Velvizhi, Deputy Director of Agriculture, Cuddalore District.

The meeting was commenced with lighting of Kuthuvilakku by the dignitaries. The Programme Coordinator of KVK, Vridhachalam, Dr. S. Kannan welcomed the august gathering. He presented the action taken report on the recommendations and suggestions made during the 21st Scientific Advisory Committee meeting. During the meeting the following recommendations were given by the Chairman and members for action plan for forth coming year.

The following members have participated in the Scientific Advisory Committee meeting:

Chairman:

Dr. M. Jawaharlal
Director of Extension Education
Tamil Nadu Agricultural University
Coimbatore -3.

Member Secretary:

The Programme Coordinator
Krishi Vigyan Kendra,
Vridhachalam – 606 001
Cuddalore District

Members:

Dr.V. Ambethkar
Director, Tamil Nadu Rice Research Institute
Aduthurai

Tmt.S.Andal
District Social Welfare Officer
Dept.of Social Welfare, Cuddalore.

Dr. A.Bhaskaran
Principal Scientist,
ICAR-ATARI, Zone X, Hyderabad

Th.T.Chandrasekaran
Assistant Engineer
Dept. of Agricultural Engineering

Dr. A.Mothilal
Professor and Head
Regional Research Station, Vridhachalam

Th.V. Naveenchandru
Assistant Directorate of Fisheries
Parangipettai

Dr. M.Jayachandran
Professor and Head
Sugarcane Research Station, Vridhachalam

Tmt. J.Bhuvanewari
Assistant Director of Horticulture
Kammapuram

Tmt. A.Velvizhi
Deputy Director of Agriculture
Cuddalore – 607 001

Tmt. A.Tamilselvi
Forester
Villupuram Range

Tmt. R.Rajamani
Deputy Director of Horticulture
Cuddalore – 607 001

Th. D.Senthil Kumar
Programme Executive
All India Radio, Puducherry.

Dr. N.Vengabady
Professor and Head
Veterinary University Training and Research Centre,
Cuddalore

Th. Sekar
Assistant Inspector of Sericulture
Dept. of Sericulture, Villupuram

Dr. B.Pichai
Veterinary Doctor

SAC Members

Tmt. S.Pounambal
K.Ilamangalam,
Vridhachalam

Thiru. A.S.V. Velmurugan
Agaram Alambadi,
Bhuvanagiri

Tmt. S.Sagunthalai
Sri Sathamangalam
Kammapuram

Th.K.Sakthivel
Sathukudal
Vridhachalam

SAC RECOMMENDATION FOR 2019-20

Director of Extension Education, TNAU, Coimbatore

- Establishing Nutri-garden in farm family backyard.
- Creating education and public awareness campaign regarding latest technology/ varieties.
- Creating awareness about the list of schemes operated in line departments (Agriculture/ Horticulture/ Agrl. Engineering etc.,) through displaying banner and distribution of leaflets to the farmers at KVK premises.
- Promoting farmers commodity groups.
- Arranging exposure visit to successful farmer's field and Research Stations.
- Introduction of new flower crops and to impart training on flower cultivation.
- Promotion of Agroforestry (Casuarina) model.
- Promote Farm Mechanization through demonstrations and trainings.
- Promote and create awareness among farmers on quality seed production through demonstrations and trainings.
- Management strategies for micro nutrient deficiency in Horticulture crops.
- Promote micro irrigation system among farmers through trainings.
- Encourage organic farming in vegetables crops and linking with Agricultural marketing system.

Principal Scientist, ATARI, Hyderabad

- Generating additional income to farm women through poultry hatcheries / incubator (egg).
- Training on value addition in groundnut and gingelly to farming community.
- Increase the farmer's database every month.
- Inclusion of new farmers for conducting field trials and training.
- Invite bank officials to create awareness among farmer's about bank loans/ subsidies.
- Promote bio- products and increase the revolving fund.

Joint Director of Agriculture, Cuddalore

- Demonstration of *Metarhizium* for the management of fall army worm in maize.
- Training on white fly management in coconut.
- Training on value addition in Varagu.

Deputy Director of Horticulture, Vriddhachalam

- Training on value addition in Jack fruit
- New varieties / hybrids of bottle gourd shall be introduced in Cuddalore district.
- Training and demonstration of ICM in watermelon may be taken up.

Professor and Head, SRS, Cuddalore

- Create awareness on sugarcane SSI technology through trainings.

Professor and Head, RRS, Vriddhachalam

- Popularize the gingelly var. VRI 3 and groundnut var. VRI 8 in Cuddalore District.

Professor and Head, VRS, Palur

- Presentation of power point slides about TNAU released varieties during training programmes or meetings for creating awareness among farmers.

Professor and Head, TANUVAS, Cuddalore

- Inviting TANUVAS members for conducting animal husbandry training.

District Social Welfare Officer, Dept. of Social Welfare, Cuddalore

- Promote and create awareness on Nutrition education in schools.

Department of Agricultural Engineering, Cuddalore Welfare, Cuddalore

- Popularize and create awareness on solar pump and solar drier to the farmer.
- Create awareness among the farmers about water conservation methods (farm ponds).

Assistant Director of Fisheries, Dept. of Fisheries, Parangipettai

- Training and demonstration of composite fish culture.

Forester, Dept. of Forest, Villupuram

- Promote cultivation of tree crops wherever possible.

Veterinary Doctor, Dept. of Animal Husbandry, Cuddalore

- Promote slatted floor goat rearing unit through demonstrations and trainings.

Programme Executive, AIR, Puducherry

- Documentation of success stories of the farmers.
- News about technology to be delivered through All India Radio (AIR).

Th.K. Sakthivel, Sathukudal, SAC Member

- Promote organic agriculture through demonstrations and trainings.

Tmt. T.Sagunthalai, Sathamangalam and Tmt. S.Pounambal, K.Ilamangalam, SAC Members

- Create awareness on value addition and poultry egg production to generate additional income with special emphasis to farm women.

2. DETAILS OF DISTRICT (2018-19)

Operational jurisdiction of KVKs (Andhra Pradesh & Telangana only)/ Give names of districts & Tehsils

Major farming systems/enterprises (based on the analysis made by the KVK)

Major Farming system/enterprise	Crop system/enterprise with crop calendar
Irrigated situation-Command Areas: Heavy clay	<ul style="list-style-type: none"> ➤ Rice (June-Sep.) - rice (Oct.-Jan.) - pulses/gingelly (Feb.-May) ➤ Rice (Aug.-Jan.) - pulses/sesame/cotton (Jan.-April) ➤ Maize /vegetables/pulses/sesame/green manure (June-Sep.) - rice (Aug.-Feb.) - pulses (Feb.-May) ➤ Sugarcane (Dec.-Nov.) - ratoon sugarcane (Dec.-Nov.) - rice (Dec.-May) ➤ Groundnut (June-Sep./Oct.) - 3 years rotation
Irrigated situation-Tankfed areas	<ul style="list-style-type: none"> ➤ Rice/vegetables (Aug.-Jan.) - gingelly/pulses (Feb.-May)
Irrigated situation-Well irrigated areas	<ul style="list-style-type: none"> ➤ Rice (June-Sep.) - rice (Oct.-Jan.) - pulses/gingelly (Feb.-May) ➤ Rice (Aug.-Jan.) - pulses/sesame/cotton (Jan.-April) ➤ Maize /vegetables/pulses/sesame/green manure (June-Sep.) - rice (Aug.-Feb.) - pulses (Feb.-May) ➤ Sugarcane (Dec.-Nov.) - ratoon sugarcane (Dec.-Nov.) - rice (Dec.-May) ➤ Groundnut (June-Sep./Oct.) - 3 years rotation

Rainfed situation	<ul style="list-style-type: none"> ➤ Maize/pearl millet (Jun.-Sep)/Groundnut (June-Sep.) ➤ Maize/Pearl Millet (Jun.-Sep) ➤ Groundnut (June-Sep.)
Coastal areas/assured water supply situation -Fisheries/ Aquaculture/ Marine culture in ponds	<ul style="list-style-type: none"> ➤ Marine culture in ponds (Throughout the year)
Assured water supply situation - Fisheries/ Aquaculture	<ul style="list-style-type: none"> ➤ Inland fish culture in farm ponds (Throughout the year)

2.2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S.No	Agro-climatic Zone	Characteristics
1.	North Eastern Zone	Cropping pattern: Rice-Rice-Pulses; Rice-Pulses / Sesame /Cotton Soil type: 1.Red Sandy Loam, 2. Clay Loam, 3. Saline coastal Alluvium

S.No.	Agro ecological situation	Soil type	Characteristics
1.	AES-I	Sandy Clay loam, Medium texture, Normal Rainfall, Well irrigated area	Diversified agriculture
2.	AES-II	Clay loam, Heavy texture, Normal Rainfall, Delta area	Paddy areas
3.	AES-III	Sandy clay loam, Medium to light texture, Rainfed area	Rainfed agriculture

2.3 Soil types

S.No	Soil type	Characteristics	Area in ha
1.	Sandy loam	Slightly acidic to alkaline in pH, Poor in water holding capacity, low in N, medium in P and K	91679
2.	Sandy	Neutral to Saline pH, poor in water holding capacity, low in N, medium in P and K.	31974
3.	Clay loam	Neutral to alkaline pH, poorly drained soil, medium in N, P and high in K.	115565
4.	Sandy Clay loam	Neutral to Saline pH, low in N, medium in P and K	128573
Total			367791

2.4. Area, Production and productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Mt)	Productivity (Kg /ha)
Cereals				
1.	Rice	139986	6.60 (Rice)	4767
Millets				
1.	Sorghum	21	0.001	2013
2.	Cumbu	3491	0.15	3300
3.	Maize	22705	1.55	6981
4.	Varagu	50	0..01	2327
Pulses				
1.	Redgram	172	0.01	1256
2.	Blackgram	52400	0.45	1138
3.	Greengram	10800	0.09	1091
Oilseeds				
1	Groundnut	9926	0.29	2763
2	Gingelly	3600	0.23	607
Cash crops				
1.	Cotton	7211	0.13	659
2.	Sugarcane	24443	28.35	120000
Horticultural crops				
Fruits/plantation crops				
1.	Cashew nut	32146	178371	552.9
2.	Banana	4250.83	23571.6	97421
3.	Jack	664.91	4930	-
4	Guava	570.405	658.86	403
5	Mango	494.935	4438.09	2277
Vegetables/spices				
1.	Brinjal	172.385	16637.73	2542

2.	Chillies	128.170	436.55	45
3.	Bhendi	153.12	8699.58	757
4.	Tapioca	3252.010	29790.82	101408
Flower crops				
1.	Rose	35.140	--	--
2.	Jasmine-Gundumalli	143.590	--	--
3.	Jasmine-Mullai	250.315	--	--
4.	Crossandra	43.200	--	--

2.5. Weather data

Month	Rainfall (mm)	Temperature (°C)		Relative Humidity (%)
		Maximum	Minimum	
April 2018	0.0	37.7	26.7	72.3
May 2018	3.6	38.5	27.8	67.6
June 2018	53.6	37.6	27.2	67.2
July 2018	45.8	37.5	26.9	75.2
August 2018	93.8	36.9	26.1	76.45
September 2018	79.3	35.9	25.4	78.8
October 2018	180.0	35.4	24.9	80.2
November 2018	280.5	34.1	-	82.7
December 2018	70.8	33.7	-	84.8
January 2019	7.0	32.1	20.1	84.1
February 2019	0.0	34.0	20.4	76.4
March 2019	0.0	37.0	24.2	74.7

2.6. Production and productivity of livestock, Poultry, Fisheries in the district

Category	Population (Nos.)/Area (km)	Production
Cattle	337451 Nos.	174 lakh litres
<i>Crossbred</i>	150976 Nos.	5412

<i>Indigenous</i>	23562 Nos.	777
Buffalo	19784 Nos.	15.106
Sheep	59255 Nos.	6968
Crossbred	-	--
<i>Indigenous</i>	-	--
Goats	305366 Nos.	--
Pigs	17827 Nos.	--
<i>Crossbred</i>	-	--
<i>Indigenous</i>	-	--
Rabbits	-	--
Poultry	3805549 Nos.	165.121 lakh Nos.
Hens	-	--
<i>Desi</i>	-	--
<i>Improved</i>	-	--
Ducks	11614 Nos.	-
Turkey and others	-	-
Fish	-	-
<i>Marine</i>	57.5 km	426735
<i>Inland</i>	45 km	184753.44
Prawn	--	--
Scampi	--	--
Shrimp	--	--

2.7. Details of Adopted Villages (2018-19)

S.No.	Taluk/ mandal	Name of the block	Name of the village	Year of adoption	Major crops & enterprises	Major problem identified	Identified Thrust Areas
KVK adopted villages							
1.	Vridhachalam	Vridhachalam	Sathukdal	2018	Paddy	Low yield - paddy crop under salt affected soil. Lack of awareness on salt affected soil management practices.	FLD - Demonstration of ICM practices in paddy cultivation in salt affected soil
DFI villages							
2.	Kurinjipadi	Kurinjipadi	Ayyankurinjipadi	2018	Groundnut	Lack of knowledge on latest released varieties. Non adoption of ICM technology. Non availability of seeds of latest varieties for adaption.	Demonstration of seed production (foundation /certified) by farmer participatory mode in groundnut (VRI 8)
3.	Kurinjipadi	Kurinjipadi	Ayyankurinjipadi	2018	Gingelly	Lack of knowledge on latest released varieties. Non adoption of ICM technology. Non availability of seeds of latest varieties for adaption.	Demonstration of seed production (foundation /certified) by farmer participatory mode in gingelly (VRI 3)

2.8. Priority/thrust areas

Crop/Enterprise	Thrust area
Paddy, Blackgram, Millets, Groundnut, Bhendi and watermelon	Evaluation and demonstration of new high yielding varieties and hybrids
Marigold, Tuberose, Ragi, Barn yard millet and vegetable crops (Bhendi, Brinjal)	Introduction of alternate cropping system and crop management practices
Brinjal, Marigold, Barnyard millet and Ragi	Integrated nutrient management for improving crop productivity and soil health
Bhendi, Brinjal, Marigold, tuberose and Banana	Improving the productivity of horticultural crops
Cotton, Watermelon, Tuberose and banana	Integrated pest and disease management
Paddy, fish, poultry, cashew apple	Self employment and entrepreneur development programmes
Paddy	Problem soil management
Paddy, Groundnut, Gingelly, Black gram	Production and supply of quality seed / seedling materials
Wetland and rainfed ecosystem (Trainings)	Integrated Farming System
Paddy, Black gram, Groundnut, Bhendi and water melon	Evaluation and demonstration of new high yielding varieties and hybrids
Marigold, Tuberose, Ragi, Barn yard millet and vegetable crops (Bhendi, Brinjal)	Introduction of alternate cropping system and crop management practices

2.9. Salient Achievements of (April 2018-March, 2019) (Mandated activities/ Projects)

S. No	Activity	Target	Achievement
1.	Technologies Assessed and refined (No.)	10	10
2.	On-farm trials conducted (No.)	10	16
3.	Frontline demonstrations conducted (No.)	16	16
4.	Farmers trained (in Lakh)	0.0025	0.0025
5.	Extension Personnel trained (No.)	578	578
6.	Participants in extension activities (in Lakh)	0.0054	0.0054
7.	Production of Seed (in Quintal)	29.51	29.51
8.	Planting material produced (in Lakh)	0.0162	0.0162
9.	Live-stock strains and finger lings produced (in Lakh)	0.1930	0.1930
10.	Soil, Water, plant, manures samples tested (in Lakh)	0.00415	0.00415
11.	Mobile agro-advisory provided to farmers (in Lakh)	0.004	0.004
12.	No. of Soil Health Cards issued by Mini Soil Testing Kits (No.)	314	314
13.	No. of Soil Health Cards issued by Traditional Laboratory (No.)	338	338

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2018-19

OFT (Technology Assessment)				FLD (crop/enterprise/CFLDs)			
1				2			
No. of technologies		Total No. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
10	10	52	52	16	16	130	130

Training					Extension Activities			
3					4			
Number of Courses			No. of Participants		Number of activities		No. of Participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	51	2477	51	2477	214	3602	214	3602
Rural youth	5	143	5	143	-	-	-	-
Extn. Functionaries	10	578	10	578	-	-	-	-

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to No. of farmers	Target	Achievement	Distributed to No. of farmers
2951	2951	45	16188	16188	532

3.b. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers
Integrated Nutrient Management	-	-	-	-	-
	-	-	-	-	-
Varietal Evaluation	Bhendi	Assessment of bhendi hybrids suitable for Cuddalore district	2015	5	5
	Watermelon	Assessment of water melon varieties and hybrids suitable for Cuddalore district	2015	5	5
	Paddy	Assessing the performance of paddy varieties in salt affected soil	TNAU, 2010 & Gangavathi Sona, UAS, Raichur, 2013	5	5
	Blackgram	Assessment of suitable rice fallow black gram variety for Cuddalore district	ADT 6 TNAU 2017 PU 31-2009 TBG104-2016	6	6
	Groundnut	Assessment of suitable ground nut variety for rain fed condition	TMV 14-TNAU, 2018, GJG 32, JAU 2016	5	5
Integrated Pest Management	-	-	-	-	-
	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-
	-	-	-	-	-
Integrated Disease Management	Cotton	Assessment of methods for management of parawilt in cotton	CICR, 2016 & MPKV, Rahuri, 2012	10	10
	Watermelon	Assessment of methods for management of wilt in watermelon	TNAU, 2013 & IIHR, 2013	10	10
Small Scale Income Generation Enterprises	-	-	-	-	-
	-	-	-	-	-
Weed Management	-	-	-	-	-
	-	-	-	-	-
Resource Conservation Technology	Sugarcane trash	Assessment of suitable bio decomposer for composting of sugarcane trash	Arka microbial decomposer- IIHR 2014 & NCOF-Waste decomposer - NCOF, 2017	6	6
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
	-	-	-	-	-
Post Harvest Technology / Value addition	Paddy	Assessment of Brown Rice cookies Vs Millet gluten allergy	2015	5	5
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-

3.C. TECHNOLOGY ASSESSMENT IN DETAIL

1. Assessing the performance of paddy varieties in salt affected soil

1.	Thematic area	:	Varietal Evaluation														
2.	Title of Technology Assessed	:	Assessing the performance of paddy varieties in salt affected soil														
3.	Scientists involved	:	SMS (Agron.) and SMS (SST)														
4.	Details of farming situation	:	Season : Rabi, 2018 Farming situation : Irrigated Soil type : Clay Fertility status : N- Low : P – Medium & K – High Seasonal Rainfall – 610.6 mm Number of rainy days - 28 days														
5.	Problem definition/ description	:	<ul style="list-style-type: none"> ❖ Unaware of paddy variety suitable for salt affected soil ❖ Poor soil properties leads to lower productivity 														
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">TO3</th> </tr> </thead> <tbody> <tr> <td>Farmer practice</td> <td>TRY 3</td> <td>Gangavathi Sona (GGV-05-01)</td> </tr> </tbody> </table>			TO 1	TO2	TO3	Farmer practice	TRY 3	Gangavathi Sona (GGV-05-01)						
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7.	Critical inputs given: (along with quantity as well as value)	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Critical inputs</th> <th style="width: 20%;">Quantity</th> <th style="width: 40%;">Value</th> </tr> </thead> <tbody> <tr> <td>Paddy TRY 3</td> <td>50 kg</td> <td>1300</td> </tr> <tr> <td>Paddy Gangavathi Sona (GGV-05-01)</td> <td>50 kg</td> <td>1750</td> </tr> </tbody> </table>			Critical inputs	Quantity	Value	Paddy TRY 3	50 kg	1300	Paddy Gangavathi Sona (GGV-05-01)	50 kg	1750			
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Farmers Practice-BPT 5204	5	5.40	0.293	1.6	No. of productive tillers/hill - 16.2 No. of grains/panicle-119.5												

	<i>Technology 1 (TRY 3)</i>		6.39	0.378	1.8	<i>No. of productive tillers/hill - 25.6 No. of grains/panicle-141.0</i>
	<i>Technology 2 (Gangavathi Sona)</i>		5.79	0.294	1.6	<i>No. of productive tillers/hill - 17.1 No. of grains/panicle-127.0</i>
9	Description of the results	:	The results showed that paddy var.TRY 3 recorded high growth, yield attributes, yield and net return when compared to Gangavathi sona and farmer's practice. TRY 3 recorded 18.3 higher yield over farmer's practice and 10.4 percent over Gangavathi sona and also TRY 3 recorded 29.1 higher net return over farmer's practice and 28.7 per cent over Gangavathi sona. The bacterial blight and blast disease incidence was less in TRY 3 when compared to Gangavathi sona and farmer's practice.			
10	Feed back of the farmers involved:	:	TRY 3 performed well under saline condition in terms of yield and net return when compared to Gangavathi sona and farmer's practice. The bacterial blight and blast disease incidence was lower in TRY 3 when compared to Farmers practice and Gangavathi sona. The farmers need fine grain type of paddy variety which is tolerant to saline soil condition.			
11	Feed back to the scientist who developed the technology	:	The germination percentage and crop establishment is good in TRY 3 variety when compared to farmers practice.			

2. Assessment of suitable rice fallow blackgram variety for Cuddalore district

1.	Thematic area	:	Varietal Evaluation
2.	Title of Technology Assessed	:	Assessment of suitable rice fallow black gram variety for Cuddalore district
3.	Scientists involved	:	SMS (Agron.) and TA (Agrl. Extension)
4.	Details of farming situation	:	Season : Rabi, 2018 Farming situation : Partially Irrigated Soil type : Clay Fertility status : N- Low : P – Medium & K – High Seasonal Rainfall : 7 mm

			Number of rainy days : 1 day																														
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Lack of awareness about suitable latest rice fallow blackgram variety ❖ Low yield of existing rice fallow blackgram varieties ❖ Area under Rice Fallow Pulse: 42000 ha 																														
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">TO 1</th> <th style="width: 25%;">TO2</th> <th style="width: 25%;">TO3</th> <th style="width: 25%;">TO4</th> </tr> </thead> <tbody> <tr> <td>Farmer practice ADT 3</td> <td>ADT 6</td> <td>PU 31</td> <td>Tripathi Minumulu (TBG 104)</td> </tr> </tbody> </table>				TO 1	TO2	TO3	TO4	Farmer practice ADT 3	ADT 6	PU 31	Tripathi Minumulu (TBG 104)																			
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9	Description of the results		<p>ADT 6 performed well under rice fallow condition when compared to farmer's practice of ADT 3 and other varieties such as PU 31 and TBG 104. ADT 6 recorded 48 percent higher yield than the farmer's practice and 26.5 percent over PU 31. Net return from TRY 3 is also recorded 82 percent higher than the farmer's practice and 19 percent higher than the PU 31. Yellow mosaic virus incidence was lower in ADT 6 (less than 1 percent) when compared to other varieties.</p>																														
10	Feed back of the farmers involved:		<p>The yield obtained from ADT 6 is better when compared to other varieties. They were satisfied about ADT 6 performance. The availability of seed has to be ensured in time for forthcoming years (i.e. before January second week).</p>																														
11	Feed back to the scientist who developed the technology		<p>Horizontal spread of this variety has to be encouraged among delta areas.</p>																														

3. Assessment of suitable groundnut variety under rainfed condition

1.	Thematic area	:	Varietal evaluation																			
2.	Title of Technology Assessed	:	Assessment of suitable groundnut variety under rainfed condition																			
3.	Scientists involved	:	Dr. K. Natarajan, SMS (SST) & S. Maruthasalam, SMS (PP)																			
4.	Details of farming situation	:	Season : Kharif, 2018 Farming situation : Rainfed Soil type : Sandy clay loam Fertility status : N- Low :, P – Medium & K – High Seasonal rainfall : 272.8 mm Number of rainy days : 16																			
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Single major crop in rainfed tracts ❖ Low yield in existing variety under rainfed condition ❖ Lack of awareness on latest groundnut variety suitable for rainfed situation ❖ Moisture and heat stress during pod development ❖ Improper management practices and adverse climatic conditions at harvest and after harvest are predisposing factors for poor pod yield 																			
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">TO3</th> </tr> </thead> <tbody> <tr> <td>Farmer practice (VRI 2)</td> <td>TMV 14</td> <td>GJG32</td> </tr> </tbody> </table>				TO 1	TO2	TO3	Farmer practice (VRI 2)	TMV 14	GJG32										
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	<i>Technology 2 : GJG32</i>		41.96	1.021	1.78	Number of pods/plant - 34																				
9	Description of the results		<p>The growth and yield attributes were higher in GJG32. Among them, GJG32 recorded highest yield of 41.96 q/ha (59.96% more yield over control). The yield attributing characters viz., No. of pods /plant and root rot incidence were on par in both the varieties of groundnut.</p>																							
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10.	Feed back of the farmers involved:		<ul style="list-style-type: none"> ❖ Integrated strategies such as resistant genotypes, soil amendments and quite recently Aflasafe should be demonstrated to the small-holders. Low-cost strategies such as improved seed, clean farm operations, quick drying, sorting and use of improved storage methods, which are within the limit of the small holders should be prioritized during farmer field schools and public awareness programmes. ❖ Establishment of a network of small and medium seed growers in rainfed areas for the supply of quality seeds, and also to create awareness about new technologies among the farmers 																							
11.	Feed back to the scientist who developed the technology		<ul style="list-style-type: none"> ❖ Require flash-flood and drought tolerance varieties. Most rainfed lowlands areas have both of these problems and varieties having tolerance to both stresses could be a way to enhance and stabilize production. ❖ Quite often due to uneven distribution of rainfall, both drought and flood occur in the same area during a cropping season. 																							

4. Assessment of suitable bio decomposer for composting of sugarcane trash

1.	Thematic area	:	Resource conservation technology																								
2.	Title of Technology Assessed	:	Assessment of suitable bio decomposer for composting of sugarcane trash																								
3.	Scientists involved	:	SMS (Agron.) and SMS (PP)																								
4.	Details of farming situation	:	Season :Rabi Farming situation : Irrigated Soil type : Fertility status : N- Low : P – Medium & K – High Seasonal Rainfall :7 mm Number of rainy days : 1 day																								
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Lack of awareness on suitable decomposer for composting of sugarcane trash (Area : 20000 ha) ❖ Environmental pollution by burning of large quantity of solid waste ❖ Lack of awareness on recycling sugarcane trash as a nutrient source 																								
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">TO3</th> </tr> </thead> <tbody> <tr> <td>Farmers practice – Burning of sugarcane trash</td> <td>Arka microbial consortium</td> <td>NCOF waste decomposer</td> </tr> </tbody> </table>			TO 1	TO2	TO3	Farmers practice – Burning of sugarcane trash	Arka microbial consortium	NCOF waste decomposer																
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9	Description of the results	:	Sugarcane trash inoculated with NCOF waste decomposer and Arka microbial consortium increased soil organic carbon content, available N, P and K than the farmer's practice of burning of sugarcane trash after harvest. Overall soil nutrient status was improved in sugarcane trash inoculated with NCOF waste decomposer and Arka microbial consortium than the farmer's practice of burning of sugarcane trash. The organic carbon content increased by 7.0 percent in sugarcane trash inoculated with NCOF waste decomposer than the farmer's practice and 2.2 percent over Arka microbial consortium. Time taken for decomposition of sugarcane trash is less in sugarcane trash inoculated with NCOF waste decomposer (54 days) than the Arka microbial consortium (65 days).
10	Feed-back of the farmers involved	:	Soil fertility status was improved through the inoculation of sugarcane trash by NCOF waste decomposer; thereby subsequent planting of sugarcane crop growth is enhanced than the farmer's practice. Inoculation of sugarcane trash by Arka microbial consortium is also showed better growth of subsequent crop than the farmer's practice.
11	Feed back to the scientist who developed the technology	:	Ex-situ application of NCOF waste decomposer has to be studied in detail.

5. Assessment of bhendi hybrids suitable for Cuddalore district

1.	Thematic area	:	Varietal evaluation									
2.	Title of Technology Assessed	:	Assessment of bhendi hybrids suitable for Cuddalore district									
3.	Scientists involved	:	Dr. A.RAMESH KUMAR, SMS (Hort.)									
4.	Details of farming situation	:	Irrigated									
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Low yield in existing hybrid ❖ The YVM incidence is severe in existing hybrids. 									
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">TO3</th> </tr> </thead> <tbody> <tr> <td>CO 4</td> <td>Arka Nikita</td> <td>Local hybrid</td> </tr> </tbody> </table>	TO 1	TO2	TO3	CO 4	Arka Nikita	Local hybrid			
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8.	Results:	:										
Table : Performance of the technology												
	<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (q/ha)</i>	<i>Net Returns (Rs. in)</i>	<i>B:C ratio</i>	<i>Data on Other</i>						

				<i>lakh./ha</i>		<i>performance indicators*</i>
	CO4	5	259.66	1.435	2.84	YVM incidence is 2.50 %
	Arka Nikita		238.8	1.300	2.71	YVM incidence is 3.50 %
	Local		223.5	1.071	2.44	YVM incidence is 7.40 %
9	Description of the results		The hybrid CO4 recorded the highest yield of 259.66 q/ha. The yield attributing characters viz., No. of fruits/plant and fruit length are also high in CO4 than Arka Nikita and Local hybrid. The Yellow vein Mosaic virus incidence was low in CO4 hybrid			
10.	Feed back of the farmers involved:		CO4 fetched premium price in the market because of attractive green colour, low fruit fiber and less hairiness on fruit surface than Arka Nikita and local variety.			
11.	Feed back to the scientist who developed the technology		-			

6. Assessment of varieties and hybrids of watermelon suitable for Cuddalore

1.	Thematic area	:	Varietal evaluation														
2.	Title of Technology Assessed	:	Assessment of varieties and hybrids of watermelon suitable for Cuddalore district														
3.	Scientists involved	:	Dr. A.RAMESH KUMAR, SMS (Hort.)														
4.	Details of farming situation	:	Irrigated														
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Low yield in existing hybrid ❖ The quality is also very low ❖ The cost of seeds of existing hybrids is high. 														
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">TO3</th> </tr> </thead> <tbody> <tr> <td>Arka Akash</td> <td>Arka Muthu</td> <td>Local hybrid</td> </tr> </tbody> </table>			TO 1	TO2	TO3	Arka Akash	Arka Muthu	Local hybrid						
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	<i>Technology Option</i>	<i>No.of trials</i>	<i>Yield (q/ha)</i>	<i>Net Returns (Rs.in lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
	Arka Akash	5	335.2	1.823	3.28	
	Arka Muthu		287.8	1.500	3.00	
	Local		281.0	1.465	2.91	
9	Description of the results		<ul style="list-style-type: none"> ❖ The hybrid Arka Akash recorded highest yield of 335.2 q/ha whereas Arka Muthu registered an yield of 287.8 q/ha. The key yield attributing characters viz., fruit weight was high in Arka Akash than Arka Muthu and Local hybrid. The TSS was also high in Arka Akash. 			
10.	Feed back of the farmers involved:		<ul style="list-style-type: none"> ❖ Arka Akash had high marketability (Ice-box (small) type with dark green rind, less and soft seeds). ❖ Arka Muthu had moderate market preference (Big sized fruits with green stripes on rind, medium seediness and medium hard seeds). ❖ Moderate market preference (Big sized fruits with green stripes on rind, high seediness and hard seeds). 			
11.	Feed back to the scientist who developed the technology		-			

7. Assessment of Brown Rice cookies Vs Millet gluten allergy

1.	Thematic area	:	Value Addition																		
2.	Title of Technology Assessed	:	Assessment of Brown Rice cookies Vs Millet gluten allergy																		
3.	Scientists involved	:	PC and PA (Tech.)																		
4.	Details of farming situation	:	Season :Samba 2018 Farming situation : - Soil type : Clay Seasonal Rainfall :610.6 mm Number of rainy days : 28 day																		
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Lack of awareness on brown cookies and Millet cookies ❖ Mal nutrition of the rural farm women ❖ Lack of knowledge on health benefits of Brown Rice cookies and Millet cookies ❖ Most of the people are affected by diabetic and constipation 																		
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9	Description of the results	:	<ul style="list-style-type: none"> ➤ The result showed that millet cookies have excellent taste, colour, flavour, appearance and overall acceptability among the SHGs. ➤ The research revealed that the gluten content is high in refined flour than other flours. ➤ Millet cookies have high nutritive value compared to other cookies and it was admired by diabetics. 																																																																																														
10.	Feed- back of the farmers involved	:	<ul style="list-style-type: none"> ➤ SHGs women said that Millet cookies were excellent with high nutritive values than brown rice cookies ➤ They expressed happiness over technology options which gave much better results than existing practice and are very much interested to start their 																																																																																														

			<p>own business.</p> <ul style="list-style-type: none"> ➤ SHGs women feel that this technology will be helpful for diabetics and vulnerable groups.
11	Feed back to the scientist who developed the technology	:	<ul style="list-style-type: none"> ➤ The performance of millet cookies is excellent when compared with brown rice cookies. ➤ No gluten content in brown rice cookies and millet cookies. ➤ The nutritive values are high in millet cookies. ➤ This technology will be very useful to generate additional income especially for the rural farm women.

8. Assessment of methods for management of parawilt in cotton

1.	Thematic area	:	Disease management																	
2.	Title of Technology Assessed	:	Assessment of methods for management of parawilt in cotton																	
3.	Scientists involved	:	Dr. S.MARUTHASALAM, SMS (PP) and SMS (SST)																	
4.	Details of farming situation	:	Irrigated																	
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Sudden wilting and mortality of plants after the monsoon rain ❖ Difficult to recover the plants once wilting started 																	
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">FP</th> </tr> </thead> <tbody> <tr> <td>Spray cobalt chloride @10 mg/l (10 ppm) on affected plants within 2 days of onset of symptoms and drench with mixture of Copper oxychloride (25 g) and 200 g Urea in 10 L of water</td> <td>Drench with 200 ml solution of urea + MOP (1.5 kg each in 100 L of water) after appearance of symptoms two times at 10 days interval</td> <td>Drenching with Carbendazim (0.3%)</td> </tr> </tbody> </table>			TO 1	TO2	FP	Spray cobalt chloride @10 mg/l (10 ppm) on affected plants within 2 days of onset of symptoms and drench with mixture of Copper oxychloride (25 g) and 200 g Urea in 10 L of water	Drench with 200 ml solution of urea + MOP (1.5 kg each in 100 L of water) after appearance of symptoms two times at 10 days interval	Drenching with Carbendazim (0.3%)									
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	TO1: Spray cobalt chloride @10 mg/l (10 ppm) on affected plants within 2 days of onset of symptoms and drench with mixture of Copper oxychloride (25 g) and 200 g Urea in 10 L of water	10	25.00	0.437	1.47	More than 95% of the plants recovered from wilting after the imposition of treatment.														
	TO2: Drench with 200 ml solution of urea + MOP (1.5 kg each in 100 L of water) after appearance of symptoms two times at 10 days interval		23.5	0.356	1.38	About 60% of the plants recovered from wilting after the imposition of treatment.														
	FP: Drenching with Carbendazim (0.3%)		22.0	0.280	1.30	Only 40% of the plants recovered from wilting														

9	Description of the results	Spraying of cobalt chloride @ 10 mg/l (10 ppm) on affected plants within 2 days of onset of symptoms followed by simultaneous drenching with mixture of copper oxychloride (25 g) and 200 g urea in 10 L of water showed better recovery of wilted plants (95% recovery) than other treatments.
10.	Feed back of the farmers involved:	Farmers have realized the importance of cobalt chloride spraying to mitigate the abiotic stress created by monsoon rain.
11.	Feed back to the scientist who developed the technology	-

9. Assessment of methods for management of wilt in watermelon

1.	Thematic area	:	Disease management												
2.	Title of Technology Assessed	:	Assessment of methods for management of wilt in watermelon												
3.	Scientists involved	:	Dr. S. MARUTHASLAM, SMS (PP) and SMS (Hort.)												
4.	Details of farming situation	:	Irrigated												
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Gradual wilting and death of plants ❖ Non-availability of reliable management options under field conditions 												
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">FP3</th> </tr> </thead> <tbody> <tr> <td><i>ST- P. fluorescens</i> @ 10 ml/kg <i>SA-P. fluorescens</i> @ 2.5 L/ha Soil drenching -<i>P. fluorescens</i> @ 5.0 ml/L (TNAU, 2013)</td> <td>Arka Plant growth enhancer and yield promoter-ST- @ 20 g/kg of seed + Cocopeat application @ 10 g/plant Soil drenching - 5 ml/Lit (IIHR, 2013)</td> <td>Drenching of Carbendazim (0.3%)</td> </tr> </tbody> </table>				TO 1	TO2	FP3	<i>ST- P. fluorescens</i> @ 10 ml/kg <i>SA-P. fluorescens</i> @ 2.5 L/ha Soil drenching - <i>P. fluorescens</i> @ 5.0 ml/L (TNAU, 2013)	Arka Plant growth enhancer and yield promoter-ST- @ 20 g/kg of seed + Cocopeat application @ 10 g/plant Soil drenching - 5 ml/Lit (IIHR, 2013)	Drenching of Carbendazim (0.3%)			
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8.	Results:	:													
Table : Performance of the technology															
	<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (q/ha) Var: Arka Akash</i>	<i>Net Returns (Rs. in Lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>									

	TO1: ST- <i>P. fluorescens</i> @ 10 ml/kg SA- <i>P. fluorescens</i> @ 2.5 L/ha Soil drenching - <i>P. fluorescens</i> @ 5.0 ml/L	10	315	1.186	3.26	Wilt incidence:5%
	TO2: Arka Plant growth enhancer and yield promoter-ST- @ 20 g/kg of seed + Cocopeat application @ 10 g/plant Soil drenching - 5 ml/Lit		318	1.190	3.18	Wilt incidence: 4.5%
	FP: Drenching with carbendazim (0.3%)		295	1.085	3.09	Wilt incidence: 9.0%
9	Description of the results		Both <i>Pseudomonas fluorescens</i> and Arka Plant Growth enhancer and yield promoter were found to be almost equally effective in terms of wilt disease control, yield (q/ha) and B:C ratio.			
10	Feed back of the farmers involved:		Farmers have learnt about the availability of reliable, environmental friendly, cheaper and sustainable methods of wilt disease management in watermelon under field conditions.			
11	Feed back to the scientist who developed the technology		-			

10. Assessment of performance of Biofertilizer Consortium in Brinjal

1.	Thematic area	:	ICM Practices in Brinjal																	
2.	Title of Technology Assessed	:	Assessment of performance of Biofertilizer Consortium in Brinjal																	
3.	Scientists involved	:	Dr.A. Rameshkumar (Hort), Dr. S.Maruthasalam (Pl. Path.)																	
4.	Details of farming situation	:	Irrigated																	
5.	Problem definition / description	:	<ul style="list-style-type: none"> ❖ Continuous and excess application of chemical fertilizer affect soil fertility ❖ Lack of awareness about biofertilizer application 																	
6.	Technology Assessed	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">TO 1</th> <th style="width: 33%;">TO2</th> <th style="width: 33%;">FP3</th> </tr> </thead> <tbody> <tr> <td>TNAU 2013 Seed Treatment and Soil application with Azospirillum and Phosphobacteria</td> <td>Arka Microbial Consortia (N fixing Bacteria, P,K, Zn – solubilizing bacteria and Plant Growth promoting microbes IIHR 2012</td> <td>Without using any seed treatment and soil application of Bio fertilizers</td> </tr> </tbody> </table>				TO 1	TO2	FP3	TNAU 2013 Seed Treatment and Soil application with Azospirillum and Phosphobacteria	Arka Microbial Consortia (N fixing Bacteria, P,K, Zn – solubilizing bacteria and Plant Growth promoting microbes IIHR 2012	Without using any seed treatment and soil application of Bio fertilizers								
TO 1	TO2	FP3																		
TNAU 2013 Seed Treatment and Soil application with Azospirillum and Phosphobacteria	Arka Microbial Consortia (N fixing Bacteria, P,K, Zn – solubilizing bacteria and Plant Growth promoting microbes IIHR 2012	Without using any seed treatment and soil application of Bio fertilizers																		
7	Critical inputs given: (along with quantity as well as value)	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Critical inputs</th> <th style="width: 15%;">Required Quantity</th> <th style="width: 15%;">Cost / Trial (Rs.)</th> <th style="width: 15%;">No. of Trials</th> <th style="width: 15%;">Total expenses</th> </tr> </thead> <tbody> <tr> <td>Azospirillum</td> <td>1 kg</td> <td>50</td> <td rowspan="2">5 (1 trial :0.5</td> <td>250</td> </tr> <tr> <td>Phospho</td> <td>1 kg</td> <td>50</td> <td>250</td> </tr> </tbody> </table>				Critical inputs	Required Quantity	Cost / Trial (Rs.)	No. of Trials	Total expenses	Azospirillum	1 kg	50	5 (1 trial :0.5	250	Phospho	1 kg	50	250
Critical inputs	Required Quantity	Cost / Trial (Rs.)	No. of Trials	Total expenses																
Azospirillum	1 kg	50	5 (1 trial :0.5	250																
Phospho	1 kg	50		250																

			Bacteria			acre)		
			Arka Microbial Consortium	3kg	450		2250	
			Soil analysis (3 Nos)	1	300		1500	
			Field Board				1000	
						Total	5250	
8.	Results:	:						
	Table : Performance of the technology							
	Technology Option	No. of trials	Fruit yield (q/ha)	(Cost/ ha) (Rs.)	Gross return (Rs.in lakh/ha)	Net Return (Rs.in Lakh/ha)	BCR	
	TO1: TNAU 2013	5	222.5	74250	1.810	1.070	1.59	
	TO2: IIHR 2012		237.7	77500	2.135	1.360	1.64	
	TO3: Farmer's Practice		218.7	71400	1.663	0.950	1.57	
9	Description of the results		Usage of Microbial Consortia reduces the chemical fertilizer application upto 20-30 percent and also solubilized Zn nutrient in the soil.					
10	Feed back of the farmers involved:		In the TO2 there was 8.68% increase in yield over farmer's practice and 6.8 percent yield increase in TNAU Practice was observed.					
11	Feed back to the scientist who developed the technology		Improved the soil fertility.					

3.d. FRONTLINE DEMONSTRATION

a. Follow-up of FLDs implemented during previous years

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Maize	Varietal demonstration	<ul style="list-style-type: none"> ❖ Improved variety-COH (M) 6 ❖ Optimum Spacing ❖ TNAU MN Mixture ❖ TNAU maize maxim 	<ul style="list-style-type: none"> ❖ Creating awareness through leaflets, pamphlets and folders ❖ Impart knowledge through trainings ❖ Create awareness through social media like news paper, radio talk 	4	124	50
2	Enterprise	Resource management	<ul style="list-style-type: none"> ❖ Demonstration of composite fish culture in farm ponds 	<ul style="list-style-type: none"> ❖ Impart knowledge through trainings ❖ Create awareness through social media like news paper, radio talk. ❖ Conducting demonstrations 	3	42	11

b. Details of FLDs implemented during the current year (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Source of funds	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1.	Paddy	Crop Improvement	Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	Samba, 2018	ICAR	4	4	2	8	10	-
2.	Paddy	Crop Improvement	Demonstration of paddy TKM 13 seed production by farmer participatory mode	Samba, 2018	ICAR	4	4	2	8	10	-
3.	Paddy	Varietal demonstration	Demonstration of saline tolerant paddy variety VTL 10	Summer, 2019	ICAR	2.4	2.4	1	4	5	-
4.	Pearl millet	Varietal demonstration and value addition	Demonstration of Pearl millet variety CO (CU)10 variety and value addition.	Kharif, 2018	ICAR	2	2	1	4.0	5.0	-

5.	Ragi	Crop Improvement	Demonstration of integrated crop management in ragi variety CO 15 in salt affected soil	Kharif, 2018	ICAR	4	4		10	10	-
6.	Red gram	Varietal demonstration	Demonstration of ICM practices in Redgram variety CO8.	Kharif, 2018	ICAR	2	2	-	5.0	5.0	-
7.	Blackgram	Crop Improvement	Demonstration of seed production (foundation /certified) by farmer participatory mode in blackgram (MDU 1)	Rabi, 2018	ICAR	4	4	2	8	10	-
8.	Groundnut	Crop Improvement	Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	Rabi, 2018	ICAR	2	2	2	8	10	-
9.	Sesame	Crop Improvement	Demonstration and seed production in farmer participatory	Rabi summer, 2018	ICAR	10	10	6	19	25	-

			.mode in Gingelly var.VRI 3								
10.	Marigold	Crop Management	Demonstration ICM in marigold	Kharif, 2018	ICAR	4	4	2	8	10	-
11.	Brinjal	Crop Management	Demonstration of IIHR Arka Vegetable Special in brinjal	Kharif, 2018	ICAR	4	4	1	9	10	-
12.	Banana	Crop Disease management	Demonstration of integrated management practices for nematodes in banana	Kharif, 2018	ICAR	4	4	2	8	10	-
13.	Tuberose	Crop Disease management	Demonstration of management strategies for nematode incidence in tuberose	Kharif, 2018	ICAR	4	4	2	8	10	-
14.	Poultry farming	Income generation	Demonstration of gramapriya chicks for backyard poultry	Throughout the year	ICAR	10	10	-	10	10	-
15.	Fisheries	Income generation	Demonstration of composite fish culture in farm ponds	Rabi, 2018	ICAR	5	5	2	8	10	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	Samba, 2018	Irrigated	Clay	L	M	H	Green manure	17.8.18	12.1.19	604.7	30
Paddy	Samba, 2018	Irrigated	Clay	L	M	H	Green manure	20.8.18	20.41.19	604.7	30
Paddy	Summer, 2019	Irrigated	Clay	L	M	H	Blackgram	29.4.19	Trial is under progress	7.0 (as on 27.4.2019)	1
Ragi	Kharif, 2018	Irrigated	Sandy loam	L	M	H	Ragi	12.10.18	17.02.19	431.3	17
Pearl millet	Kharif 2018	Rainfed	Sandy loam	L	M	H	Groundnut	28.8.19	1.12.18	549.3	25
Red gram	Kharif, 2018	Irrigated	Red loam	L	M	H	Groundnut	23.6.18	21.1.19	665.9	35
Blackgram	Rabi, 2018	Irrigated	Sandy loam	L	M	H	Paddy	25.10.18	10.1.19	431.3	17
Groundnut	Rabi, 2018	Irrigated	Sandy loam	L	M	H	Cumbu	15.12.18	12.4.19	77.8	4
Sesame	Rabi summer, 2018	Irrigated	Sandy loam	L	M	H	Groundnut	10.3.18	Demonstration is under progress		

Marigold	Kharif, 2018	Irrigated	Sandy loam	L	M	H	Groundnut	16.07.18	18.09.18	604.7	30
Brinjal	Kharif, 2018	Irrigated	Red Sandy loam	L	M	H	Groundnut	20.07.18	22.11.18	604.7	30
Banana	Kharif, 2018	Irrigated	Clayey loam	L	L	H	Green manure	30.07.18	Demo is under progress	625	40
Tuberose	Kharif, 2018	Irrigated	Sandy loam	L	M	H	Vegetable	29.08.2018	15.12.2018- till date	610	25

Technical Feedback on the demonstrated technologies

S. No.	Feed Back
Demonstration of paddy variety CO52 in SRI system in Cuddalore district	<ul style="list-style-type: none"> ❖ Except basal and top dressing of fertilizers I have not applied pesticides and other insect killers as the crop is not affected with pest attack. It was suited to the climatic condition and soil of the region,” says Mr. Chitrasu from Manakudianiruppu village ❖ Mr. Elavarasan, Assistant Director of Agriculture, told that the CO 52 paddy variety had the potential to replace the pest-prone BPT 5204 variety. The efforts to convince the farmers had borne fruit. There were indications that productivity would be around 80 percent more than the BPT variety. More and more farmers would adopt CO 52 paddy variety in the next year
Demonstration of paddy TKM 13 seed production by farmer participatory mode	<ul style="list-style-type: none"> ❖ Moderately resistant to pest and diseases like Leaf folder, stem borer, green leaf hopper, sheath rot, blast and brown spot. The Rice develops small hairy formations all over its leaves and stem making itself inaccessible for the insect pest to rest and lay eggs and keep it away from causing damage to the crop. It is highly responsive to fertilizers and manures application enhancing plant potential to give more yield. ❖ Mature early (130 days) compared to BPT (145 days). Less disease incidence and less use of plant protection chemicals. In few fields blast has been observed as the only disease incidence and it has been treated with pseudomonas and fresh cow dung spray. The maximum yield recorded in this trial was 2270/acre. Yield is on par with BPT and got a good price value for seeds. ❖ A wonderful rice variety with fine slender grain stable for cooking meals and dosai. Profuse tillering with more side shoots is highly suitable for SRI method of rice planting. ❖ Non lodging even in heavy rain and flood and tolerant to pest and disease. ❖ Possesses very good aroma and taste.
Demonstration of integrated crop management in Ragi variety CO 15 in salt affected soil	<ul style="list-style-type: none"> ❖ Farmers have actively participated and cooperated each and every activity in conducting FLD. ❖ CO 15 variety have bold grains, non shattering, non lodging, blast resistant with preferable grain quality compared to traditional variety ❖ The variety performs well under sodic soil condition and also gave better yield than the traditional variety.
Demonstration of Pearl Millet CO (CU)10 variety and value addition	<ul style="list-style-type: none"> ❖ TNAU CO 10 performs well under rainfed situation. ❖ Seed availability has to be ensured before the season commences.
ICM practice and new variety CO 8	<ul style="list-style-type: none"> ❖ CO 8 redgram gave higher yield when compared to farmer’s practice of VBN 2.

<p>Demonstration of seed production (foundation /certified) by farmer participatory mode in blackgram (MDU 1)</p>	<ul style="list-style-type: none"> ❖ MDU 1 blackgram variety is highly resistant to yellow mosaic virus disease, a dreaded disease in summer black gram which affects the yield drastically, has synchronized flowering and pod setting and comes to harvest in 70 – 75 days. This characteristic of the variety has encouraged the farmers to go for the variety. ❖ The variety performs well under drought condition without affecting the yield. ❖ Farmers felt that pulse wonder application was easier than DAP application and has the advantage of increasing the pod setting. Drought tolerance was good
<p>Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8</p>	<ul style="list-style-type: none"> ❖ The farmers have realized that the variety is suitable for rabi season especially during North east monsoon. ❖ Establishment of a network of small and medium seed growers in rainfed areas for the supply of quality seeds, and also to create awareness about new varieties among the farmers ❖ Farmer told that the number of pods per plant and yield was more in demonstration (i.e. 70 to 80 pods per plant) than the check due to management practices viz., seed treatment with biocontrol agents, gypsum application, balanced fertilizer application, herbicide application and management of pest and diseases guided by TNAU Scientists. ❖ Farmers have felt that groundnut rich application was easier than DAP application and has the advantage of increasing the pod setting. Drought tolerance was good. The successful performance of VRI 8 in terms of yield motivated other farmers in the village to adopt the variety.
<p>Demonstration and seed production in farmer participatory mode in Gingelly var.VRI 3</p>	<ul style="list-style-type: none"> ❖ The farmers have realized that the variety is suitable for rabi summer season especially during February – March ❖ The number of capsule per plant was more compare to other varieties
<p>Demonstration of ICM in marigold</p>	<ul style="list-style-type: none"> ❖ ICM generally was highly useful in getting higher yield and quality of lowers in marigold. ❖ The shelf life of flowers was good in marigold.
<p>Demonstration of IIHR Arka vegetable special in brinjal</p>	<ul style="list-style-type: none"> ❖ The fruit set was high in demonstration than farmers practice ❖ The fruit size was also high in demo plots. ❖ The season of flowering and fruiting was longer than farmers practice.
<p>Demonstration of integrated management practices for nematodes in banana</p>	<ul style="list-style-type: none"> ❖ Plant growth was good ❖ Soil health is maintained ❖ Environmental friendly technology
<p>Demonstration of management strategies for nematode incidence in tuberose</p>	<ul style="list-style-type: none"> ❖ Plant establishment and growth was good, Tillering was more, Environmental friendly technology & Soil health is maintained

Farmers' reactions on specific technologies

S. No.	Feed Back
Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	<ul style="list-style-type: none"> ❖ Disseminate the values of seed production with integrated approach towards availability of high quality seeds to the farmers ❖ CO 52 paddy variety can be upscaled in convergence mode for easy availability of seed
Demonstration of paddy ADT(R) 50 in SRI system in Cuddalore district	<ul style="list-style-type: none"> ❖ Disseminate the values of seed production with integrated approach towards availability of high quality seeds to the farmers ❖ TKM 13 paddy variety can be upscaled in convergence mode for easy availability of seed.
Demonstration of integrated crop management in Ragi variety CO 15 in salt affected soil	<ul style="list-style-type: none"> ❖ Promote integration of local and nutritious crops such as finger millet in public schools because the new generation is missing the opportunity to learn about the values of finger millet. ❖ Value addition through product diversification is another option to increase demand. ❖ Threshing and dehulling finger millet is tedious and time consuming job so farmers are required ease and less time consuming machine for harvesting the crop.
Demonstration of Pearl Millet CO (CU)10 variety and value addition	<ul style="list-style-type: none"> ❖ TNAU MN mixture helps to obtain higher yield in pearl millet
Demonstration of ICM practice in redgram variety CO 8	<ul style="list-style-type: none"> ❖ Foliar spray of Pulse wonder helps to reduce flower droppings and also helps to obtain higher yield. Varieties having synchronized maturity of pod have to be introduced.
Demonstration of seed production (foundation /certified) by farmer participatory mode in blackgram (MDU 1)	<ul style="list-style-type: none"> ❖ TNAU Officials are popularising the TNAU Pulse wonder foliar spray technology among farmers to provide adequate nutrients for the crop to boost the yield of blackgram. ❖ Farmers need suitable harvesting machine for harvesting of the pulses.
Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	<ul style="list-style-type: none"> ❖ The farmer wanted bold seeded variety and need groundnut seeds in right time and season. ❖ Scaling-up of improved groundnut varieties through established seed system in various cropping systems of smallholder farmers. ❖ After the new varieties have been disseminated in the wider farming

	<p>population, it will be necessary to conduct formal surveys of technology adoption with larger samples. Follow-up studies with farmers who have been exposed to new varieties in on-farm trials and demonstrations provide a cost-effective approach to assessing the acceptability and adoption potential of new varieties</p> <ul style="list-style-type: none"> ❖ Farmers need full farm mechanization in groundnut particularly for pulling and stripping operations.
Demonstration of ICM in marigold	<ul style="list-style-type: none"> ❖ The flower size was good in ICM than farmers practice. ❖ Basal application of <i>Trichoderma viride</i> was useful in managing root rot and collar rot diseases. ❖ The flowers possessed shininess due to micronutrient spray and hence fetched premium price in the market. ❖ The technology can be upscaled through convergence mode.
Demonstration of IIHR Arka vegetable special in brinjal	<ul style="list-style-type: none"> ❖ The number of fruits per plant was more in demo plots than farmers practice. ❖ The yield and glossiness of fruits are more in demo plots. ❖ This technology can be upscaled through convergence mode
Demonstration of integrated management practices for nematodes in banana	<ul style="list-style-type: none"> ❖ Soil application of beneficial microbes was highly effective for nematode management ❖ In addition, wilt incidence was also controlled ❖ Economically cheaper and sustainable ❖ Technology should be popularized among farmers
Demonstration of management strategies for nematode incidence in tuberose	<ul style="list-style-type: none"> ❖ Tillering was more ❖ Plant and soil health was good ❖ Yield was higher in demo fields ❖ Technology should be popularized among farmers

Extension and Training activities under FLD

Activity	No. of activities organised	Date	Number of participants	Remarks
Field days	4	10.1.19, 10.1.19, 10.1.19, 12.4.19	90	-
Field days	1	17.02.19	20	-
Farmers Training	-	-	-	-
Media coverage	-	-	-	-
Training for extension functionaries	-	-	-	-

Performance of Frontline demonstrations

Frontline demonstrations on crops

Crop	Thematic Area	Technology demonstrated	Name of the Variety/Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
Pulses																			
Red gram	Varietal demonstration	Demonstration of ICM practices in Redgram variety CO8.	CO 8	VBN 2	5	2.0	12.45	10.81	11.56	9.99	16	26042	40453	14411	1.55	24042	34951	10909	1.45
	Crop improvement	Demonstration of seed production (foundation /certified) by farmer participatory mode in blackgram (MDU 1)	MDU 1	Local	10	4	18.5	15.0	16.75	9.49	76.5	40574	111269	70695	2.74	33380	65243	31863	1.95

Crop	Thematic Area	Technology demonstrated	Name of the Variety/Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)					% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check	Gross Cost		Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
							High	Low	Average											
Oilseeds																				
Groundnut	Crop Improvement	Demonstration of HYV, seed production in participatory mode in groundnut var. VRI 8	VRI 8	VRI 2	5	2	46.13	42.1	44.11	28.6	54.15	97007	231495	134488	2.38	109773	155111	45337	1.41	
Sesame	Crop Improvement	Demonstration and seed production in farmer participatory mode in Gingelly var. VRI 3	VRI 3	Local	25	10	Trial is under progress. Crop is at maturity stage.													
Cereals																				
Paddy	Crop Improvement	Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	CO 52	BPT5204	10	4	80.63	72.65	76.64	55.12	39.04	53688	123583	69895	2.30	61740	96469	34729	1.56	

Crop	Thematic Area	Technology demonstrated	Name of the Variety/Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
	Crop Improvement	Demonstration of paddy TKM 13 seed production by farmer participatory mode	TKM 13	BPT5204	10	4	76.87	73.24	75.05	57.56	30.38	55633	112706	57073	2.02	62398	87495	25097	1.40
Paddy	Varietal demonstration	Demonstration of saline tolerant paddy variety VTL 10	Trial is under progress	Trial is under progress .Sowing was done. Crop is in nursery. (seed supplied by KAU only by April,2019 because previous season seed production is affected by flood occurred in KERALA)															
Commercial crops																			
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millets																			
Millets	Pearl millet	Demonstration of Pearl millet variety CO (CU) 10 variety and value addition.	TNAU CUM BU CO 10	local	5	2.0	31.40	27.55	29.42	20.26	45	19810	58832	39022	3.0	17810	40512	22702	2.3

Crop	Thematic Area	Technology demonstrated	Name of the Variety/Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
Ragi	Crop Improvement	Demonstration of integrated crop management in Ragi variety CO 15 in salt affected soil	CO 15	Local	10	4	24.20	20.23	21.92	16.86	30.4	22450	80316	57866	3.6	21150	52492	31342	2.5
Barnyard	Varietal demonstration	Demonstration of Integrated Crop Management in Barnyard millet variety CO (KV) 2	Trial is under progress (Crop is at vegetative stage)																

Crop	Thematic Area	Technology demonstrated	Name of the Variety/Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Demo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
Flowers																			
Marigold	Crop management	Demonstration of ICM in marigold	Maxima yellow	Maxima yellow	10	4	222	209	214.3	186.1	15.00	165475	407409	241934	2.46	161360	338657	177297	2.09
Tuberose	Crop disease management	Demonstration of management strategies for nematode incidence in tuberose	Prajwal	Prajwal	10	2	45.0	37.0	39.50	31.0	21.0	103750	158000	54250	1.52	102000	124000	22000	1.22

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/Poultry/Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)				
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
Poultry																		
	Poultry Farming	Demonstration of gramapriya chicks for backyard poultry	10	10 Chicks / Farmer	11.9 Nos (Egg Yield)/average of 10 Demos	8.3 Nos (Egg Yield)/average of 10 Demos	43.37	1.47 Kgs (Body weight)/average of 10 Demos	0.77 Kgs (Body weight)/average of 10 Demos	5000	21674	16674	4.33	7559	18574	11015	2.46	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Composite fish culture ***	Resource management	Demonstration of composite fish culture in farm ponds	5	5	6530	5110	28.0	Average weight of individual fish - 900 g	Average weight of individual fish - 650 g	206300	718300	512000	3.48	195050	562100	367050	2.87

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

FLD on Other enterprises: NIL

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit				
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
Mushroom																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apiculture																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize Sheller																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Value Addition																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermi Compost																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Women Empowerment: NIL

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
-	-	-	-	-	-

FLDs conducted with the funding of other sources including CFLD/ATMA/NABARD/other ICAR institutes etc

Crop	Source of fund	Thematic Area	technology demonstrated	Name of the Variety/Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
				Dom	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
								High	Low	Average										
Pulse																				
Black gram – CFLD-Rice fallow pulses,2019	NFSM	ICM and Varietal demonstration	IPM	Variety ADT 6	ADT 3	50	20													Trial is under progress

FLD on Livestock: NIL

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/Poultry/Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)						
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)			
Cattle																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Buffalo																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dairy																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poultry																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sheep																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goat																				
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
colonies and wax sheets										
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom Production	1	6	10	16	7	-	7	13	10	23
Apiculture	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	5	155	43	198	51	12	63	206	55	261
X Capacity Building and Group Dynamics										
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	1	56	13	69	26	8	34	82	21	103
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	1	56	13	69	26	8	34	82	21	103
XI Agro-forestry										
Production technologies	1	-	10	10	-	3	3	10	3	13
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	1	-	10	10	-	3	3	10	3	13
GRAND TOTAL	25	738	233	971	208	112	320	946	345	1291

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
colonies and wax sheets										
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	4	149	33	182	44	12	56	193	45	238
X Capacity Building and Group Dynamics										
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	3	103	26	129	48	15	63	151	41	193
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	3	103	26	129	48	15	63	151	41	193
XI Agro-forestry										
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
World Honey Bee Day	1	23	17	40	-	-	-	23	17	40
Kisan Kalyan Kariyashala	1	35	3	38	-	-	-	35	3	38
Total	2	58	20	78	-	-	-	58	20	78
GRAND TOTAL	26	696	229	925	194	66	260	890	295	1186

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
livestock feed and fodder										
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom Production	1	6	10	16	7		7	13	10	23
Apiculture	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	9	304	76	380	95	12	119	399	100	499
X Capacity Building and Group Dynamics										
Leadership development	-	-	-	-	-	-	-	-	-	-
Group dynamics	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Mobilization of social capital	-	-	-	-	-	-	-	-	-	-
Entrepreneurial development of farmers/youths	-	-	-	-	-	-	-	-	-	-
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies	1	-	10	10	-	3	3	10	3	13
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
World Honey Bee Day	1	23	17	40	-	-	-	23	17	40
Kisan Kalyan Kariyashala	1	35	3	38	-	-	-	35	3	38
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	3	58	30	88	0	3	3	68	23	91
GRAND TOTAL	51	1434	462	1896	402	178	580	1836	640	2477

Training for Rural Youths including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	2	37	4	41	26	3	29	63	7	70
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	2	37	4	41	26	3	29	63	7	70

Training for Rural Youth including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	1	23	2	25	4	2	6	27	6	33
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	1	23	2	25	4	2	6	27	6	33

Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production	3	60	6	66	30	5	35	90	13	103
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring and Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Dairying	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Quail farming	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Rabbit farming	-	-	-	-	-	-	-	-	-	-
Poultry production	-	-	-	-	-	-	-	-	-	-
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	3	60	6	66	30	5	35	90	13	103

Training programmes for Extension Personnel including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	5	125	50	175	36	17	53	161	67	228
Integrated Pest Management										
Integrated Nutrient management	1	30	15	45	12	5	17	42	20	62
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	10	247	198	445	83	50	133	330	248	578

Training programmes for Extension Personnel including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	7	187	123	310	56	37	93	243	160	403
Integrated Pest Management										
Integrated Nutrient management	3	60	75	135	27	13	40	87	88	175
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Protected cultivation technology	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Care and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Formation and Management of SHGs	-	-	-	-	-	-	-	-	-	-
Women and Child care	-	-	-	-	-	-	-	-	-	-
Low cost and nutrient efficient diet designing	-	-	-	-	-	-	-	-	-	-
Group Dynamics and farmers organization	-	-	-	-	-	-	-	-	-	-
Information networking among farmers	-	-	-	-	-	-	-	-	-	-
Capacity building for ICT application	-	-	-	-	-	-	-	-	-	-
Management in farm animals	-	-	-	-	-	-	-	-	-	-
Livestock feed and fodder production	-	-	-	-	-	-	-	-	-	-
Household food security	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	10	247	198	445	83	50	133	330	248	578

Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total										
Income generation activities	-	-	-	-	-	-	-	-	-	-
Vermicomposting	-	-	-	-	-	-	-	-	-	-
Production of bio-agents, bio-pesticides, bio-fertilizers etc.	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Seed production	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Nursery, grafting etc.	-	-	-	-	-	-	-	-	-	-
Tailoring, stitching, embroidery, dyeing etc.	-	-	-	-	-	-	-	-	-	-
Agril. para-workers, para-vet training	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Agricultural Extension	-	-	-	-	-	-	-	-	-	-
Capacity building and group dynamics	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	1	7	36	43	3	3	6	10	39	49

5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	125	941	132	1073
Diagnostic visits	41	217	26	243
Field Day	12	298	12	310
Group discussions	23	698	33	731
Kisan Ghosthi	0	0	0	0
Film Show	0	0	0	0
Self -help groups	0	0	0	0
Kisan Mela	0	0	0	0
Exhibition	5	1210	20	1230
Scientists' visit to farmers field	100	486	53	544
Plant/animal health camps	0	0	0	0
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	0	0	0	0
Method Demonstrations	28	499		521
Celebration of important days	3	526	5	531
Special day celebration	3	125	2	127
Exposure visits	1	45		45
Others (pl. specify)	0	0	0	0
Total	0	0	0	0

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	25
News paper coverage	48
Popular articles	9
Radio Talks	4
TV Talks	20
Animal health amps (Number of animals treated)	-
Others (pl. specify)	-
Total	106

Messages sent**MOBILE ADVISORY SERVICES THROUGH MKISAN PORTAL**

(While filling mobile advisory data, only fill numbers under 'Type of messages'. Please don't add any text)

No of registered farmers:

Types of Messages	Type of messages													
	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only	159	3281	-	-	-	-	-	-	-	-	51	337	210	3618
Voice only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voice & Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Messages	159	3281	-	-	-	-	-	-	-	-	51	337	210	3618
Total farmers Benefitted		3281	-	-	-	-	-	-	-	-	-	337	-	3618

MOBILE ADVISORY SERVICES THROUGH OTHERS

(While filling mobile advisory data, only fill numbers under 'Type of messages'. Please don't add any text)

No of registered farmers:

Types of Messages	Type of messages													
	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only	127	267	-	-	-	-	-	-	18	75	-	-	145	267
Voice only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voice & Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Messages	127	267	-	-	-	-	-	-	18	75	-	-	145	75
Total farmers Benefitted	-	267	-	-	-	-	-	-	-	75	-	-	-	342

8. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples/ SHC	No. of Samples		No. of Farmers	No. of Villages	Amount realized (Rs.)
	Using Mini Soil Testing Lab	Through Traditional Lab			
Soil samples	314	24	258	186	33800
Soil Health Cards (SHC)	338	24	258	186	33800

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Water	87	79	72	4350
Plant	-	-	-	-
Manure	-	-	-	-
Others (pl.specify)	-	-	-	-
Total	87	79	72	4350

9. SCIENTIFIC ADVISORY COMMITTEE

Date of SAC meeting	Number of members attended
13.02.2019	35

Note: please attach the proceedings of sac meeting along with the list of participants

5. PUBLICATIONS

S.No	Item	Year	Authors	Title	Publisher
1. Books					
		2019	K. Natarajan, A. Rameshkumar, S. Maruthasalam, K. Vengadalakshi, M. Balarubini, T. Kumar, K. Meenalakshmi, M. Selvi and S. Kannan	Agricultural Technologies for Cuddalore district (Tamil)	KVK, Vriddhachalam
		2018	K. Natarajan A. Rameshkumar K. Venkatalakshmi G. Porkodi K. Meenalakshmi D. Kumar S. Kannan	Protection of Plant Varieties & Farmers Right Act 2001	KVK, Vriddhachalam

2. Book chapters / manuals					
3. Training manuals					
		2019	K.Venkatalakshmi, S.Maruthasalam, K.Natarajan M.Balarubini and S.Kannan	Weather based cultivation practices on agriculture crops	KVK, Vridhachaalm
4. Conference, proceeding papers, popular articles, Bulletins, Short communications					
		2018	K.Venkatalakshmi	Maximising red gram yield through integrated agronomic management practices under alkali soil.	TNAU,Coimbatore.
		2018	K.Venkatalakshmi	Influence of integrated agronomic management practices on Physiological and nutrient uptake of pigeon pea under alkali soil	TNAU, Coimbatore
		2019	K.Venkatalakshmi	Demonstration of field tube indicator tool for Alternate wetting drying in low land transplanted paddy	Annamalai University ,Chidamabaram
		2018	K.Venkatalakshmi	Demonstration of Maize hybrid COH (M)6	Tamil society ,New delhi
		2018	K.Venkatalakshmi	Composite fish culture in farm ponds	Tamil society ,New Delhi
		2018	K.Venkatalakshmi	Assessment of suitable rain fed ground nut varieties	Tamil society ,New Delhi
5. Technical bulletin/ Folders					
		2019	S. Maruthasalam K. Venkatalakshmi, A. RameshKumar, K. Natarajan, G. Meenalakshmi, T. Kumar S. Kannan,and	Mushroom cultivation techniques (Tamil)	KVK, Vriddhachalam
	Folder	2018	K. Venkatalakshmi, K. Natarajan, S.Maruthasalam M.Balarubini S. Kannan,	Rice fallow black gram cultivation practices	KVK,Vridhachaalm
		2019	S.Kannan Dr.M.Balarubini K. Venkatalakshmi, A. Ramesh Kumar,	Value addition in Cashew	KVK, Vriddhachalam

			K. Natarajan S.Maruthasalam		
		2019	S.Kannan M.Balarubini K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan S.Maruthasalam	Value Addition in Jackfruit	KVK, Vriddhachalam
		2019	S.Kannan M.Balarubini K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan S.Maruthasalam	Post harvest technologies in Cashew	KVK, Vriddhachalam
6. Leaflet					
		2018	K. Venkatalakshmi, K. Natarajan, A. RameshKumar, S.Maruthasalam M..Balarubini D. Kumar G. Meenalakshmi, M.Selvi, S. Kannan,	Nitrogen Management through LCC	KVK, Vridhachaalm
6. Reports					
		2018	K. Venkatalakshmi, K. Natarajan, A. RameshKumar, S.Maruthasalam M.Balarubini D. Kumar G. Meenalakshmi, M.Selvi, S. Kannan,	Soil analysis- methods and importance	KVK, Vridhachaalm
7. Popular article					
		2018	K.Venkatalakshmi, G.Porkodi and S.Kannan	Success story on improved water management in paddy through panipipe	Uzhavarin Vallurum Velanmai, Directorate of Extension Education, TNAU, Coimbatore.
		2018	S.Kannan and M..Balarubini	Thukki eriya padukira munthiri pazhagalilum lapam ittalam	Uzhavarin Vallurum Velanmai, Directorate of Extension Education, TNAU, Coimbatore.
		2018	S.Kannan and M..Balarubini	Vaniga rithiyil palapazha unavugal	Uzhavarin Vallurum Velanmai, Directorate of Extension Education, TNAU, Coimbatore.
		2019	S.Kannan and M..Balarubini	Koiya pazhathil athiga lapam pera tips	Uzhavarin Vallurum Velanmai, Directorate of Extension Education, TNAU, Coimbatore.

Publications in journals

Authors	Year	Title	Journal
M. Prabhu, S. Parthiban, A. Ramesh Kumar, B. Usha Rani and A. Vijayasamundeeswari.	2018	Effect of intergrated nutrient management on acidlime [<i>Citrus aurantifolia</i> . Swingle (L.)].	Indian J. Agric. Res., 52 (3) 2018: 290-294.
M.Balarubini, S.Kannan and K.Venkatalakshmi,	2019	Evaluation of Value Addition on Tomato Training programme by Krishi Vigyan Kendras in Cuddalore District of Tamil Nadu , India	International Journal of current Microbiology and Applied Sciences ISSN:2319-7706 Volume 8 No:1
S.Kannan M.Balarubini, and G.Meenalakshmi	2019	Assessment of Glycemic Responses in Three Traditional Paddy Varietiies Conducted by KVK	International Journal of current Microbiology and Applied Sciences ISSN:2319-7706 Volume 8 No:1

Newsletter/Magazine

Name of News letter/Magazine	Frequency	No. of Copies printed for distribution
Erkalam	4 Quarters	450

3. Training/workshops/seminars etc details attended by KVK staff

Trainings attended in the relevant field of specialization (Mention Title, duration, Institution, location etc.)

Name of the staff	Title	Dates	Duration	Organized by
Dr. S. Kannan	Action Plan meeting 2018-19	19-20.04.2018	2 days	Kodaikanal
Dr. S. Kannan	Annual Progress report Meeting	11.09.2018	1 day	TNAU, Coimbatore
Dr. S. Kannan	Annual Report Presentation 2018-19	18.09.2018 23.09.2019	6 days	ATARI , Hyderabad
Dr. S. Kannan	Public Finance Monitoring System	07 - 8.01.2019	2 days	TNAU, Coimbatore
Dr. S.Kannan	Agromet Advisory service	01 02.08.2018	2 days	ATARI , Hyderabad

Dr.K.Venkatalakshmi	Training on popularizing trees outside forest	14-16.11.18	2 days	IFGTB, Coimbatore
Dr.K.Venkatalakshmi	National seminar on abiotic stress management challenges and opportunities	25-26.10.2018	2 days	Department of crop physiology, TNAU, Coimbatore
Dr.K.Venkatalakshmi	Training on Automated Agro Advisory service (AAS)-Web cum Mobile App	15.2.2019	1 day	ACRC,TNAU, Coimbatore
Dr.K.Venkatalakshmi	International conference on Sustainable Management of water resources in India	22-23 .2.19	2 days	Department of Economics, Annamalai university
Dr.A.Ramesh Kumar	Value addition in coconut	21-28.04.18	8 days	CPCRI, Kasaragod
Dr.A.Ramesh Kumar	Biogas technology	17-20.09.18	4 days	TNAU, Coimbatore
Dr.S.Maruthasalam	Training on Bio-intensive management of Plant Health	01.10.2018-05.10.2018	5 days	National Institute of Plant Health Management (NIPHM), Rajendranagar, Hyderabad
Dr.S.Maruthasalam	Workshop on “Convergence of officers for effective service delivery”	23.10.2018-27.10.2018	4 days	Irrigation Management Training Institute (IMTI), Thuvakkudi, Trichy

13. Awards/rewards by KVK and staf

Recognitions & Awards/Special attainments and Achievements of Practical Importance				
Recognitions & Awards (Team Award/individual				
Item of Recognition	Year	Awarding Organization National / International / Professional; Society		Individual/ collaborative
Certificate	2018	Best worker in Kisan Kalyan Karysala programme at Rajendirapattinam		Individual
Certificate & Award	2018	Th. Murugan, Murugankudi village has been honoured with BEST FARMER AWARD at CODISSIA Agri Summit & Expo		Individual
Certificate & Award	2018	Th. Bharathi, Poodamur village has been honoured with YOUNG ENTREPRENEUR AWARD at CODISSIA Agri Summit & Expo		Individual
Certificate & Award	2018	Th. A. Raja, Vannankudikadu village has been honoured with YOUNG FARMER AWARD at SICCI Agri Summit & Expo		Individual
Certificate & Award	2018	Th. R.Subramaniyan of Rajendrapattinam village has been honoured with BEST SEED PRODUCER AWARD at SICCI Agri Summit & Expo		Individual
Certificate & Award	2019	Th. Aravazhi of Vandurasankuppam village has been honoured with Best User of Farm Machinery at TNAU, Coimbatore		Individual
Certificate & Award	2019	Th.V.K.Kumaraguru of Karuppanchavadi village has been honoured with Best User of Farm Machinery at TNAU, Coimbatore		Individual
Special Attainments & Achievements of Practical Importance (patents, technologies, varieties, products, concepts, methodologies etc.)				
Category		Year	Individual/ Collaborative	Additional Details/Information
-	-	-	-	-
-	-	-	-	-

14. Details of sponsored projects/programmes implemented by KVK

S.No	Title of the programme / project	Sponsoring agency	Objectives	Duration	Amount (Rs)
1	Tamil Nadu Irrigated Agriculture Modernization Project (TN-IAMP)	Tamil Nadu Government and World Bank	More productivity per drop of water in the lower velar sub basin of Cuddalore district. Popularization of new and innovative agricultural technologies among farmers.	5 years	3,32,32,000/-
2	Improved production techniques and value addition in cashew	GOI-DCCD-Kochi, Kerala	To impart training to farmers, processors, extension functionaries on improved practices of cashew	3 days	90000/-
3	District level seminar on cashew	GOI-DCCD-Kochi, Kerala	To popularize the cashew crop	One day	50000/-
4	Friends of coconut tree	Coconut development board, Chennai	To popularize the coconut tree climber	6 days (2 Batches)	113000

Report on 3 day training programme on “Improved production technology and value addition in cashew”

Name of the Programme	Improved production technology and value addition in cashew
Districts Covered	Cuddalore district of Tamil Nadu
Period	01.03.2019 to 03.03.2019
Sponsoring Agency	DCCD, Kochi
Scientists involved in organizing the programme	Dr.S.KANNAN Programme Co-ordinator Krishi Vigyan Kendra Vridhachalam Dr.A. RAMESH KUMAR Asst. Prof. (Hort.) Krishi Vigyan Kendra Vridhachalam
Objectives	To provide appropriate training to the farmers for use of quality planting material, adoption of high yielding varieties/hybrids, farmers system, INM, IPM practices, value

	addition etc. to farmers and to select master farmers.
No. of Days	3 days
No. of Participants	50
Budget	Rs. 90000/-

REPORT

Day	Title of the lectures	Resource person
Day 1	Scenario of Cashew in Tamil Nadu	Dr.S.KANNAN Programme Co-ordinator Krishi Vigyan Kendra Vridhachalam
	High yielding varieties and nursery management in cashew	Dr.A. RAMESH KUMAR Asst. Prof. (Hort.) Krishi Vigyan Kendra Vridhachalam
	High Density Planting (HDP) and canopy management in cashew	Dr.A. RAMESH KUMAR Asst. Prof. (Agron.) Krishi Vigyan Kendra Vridhachalam
	Soil, nutrient and irrigation management in cashew	Dr.K.VENKATALAKSHMI Asst. Prof. (Soil Science & Agrl.Chemistry.) Krishi Vigyan Kendra Vridhachalam
	Status of processing industries and marketing opportunities for cashew	Th. A. GNANASEKAR M/S. Gokul cashews Veerasingankuppam

		Panruti, Cuddalore district.
	Pest and Disease management in cashew	Dr. S.MARUTHASALM Asst. Prof. (Plant Path.) Krishi Vigyan Kendra Vridhachalam
Day 2	Value addition in cashew apple	Dr.S.KANNAN Associate Professor (FSN) & Programme Co-ordinator Krishi Vigyan Kendra Vridhachalam
Day 3	Field & industrial visit	Cashew processing unit visit to M/S. Gokul cashews Veerasingankuppam Panruti Cuddalore district.

Report on One Day District level Seminar on Cashew

Name of the Programme	DISTRICT LEVEL SEMINAR ON CASHEW
Districts Covered	Cuddalore district of Tamil Nadu
Period	24.02.2019
Sponsoring Agency	DCCD, Kochi
Scientists involved in organizing the programme	Dr.S.KANNAN Programme Co-ordinator Krishi Vigyan Kendra Vridhachalam Dr.A. RAMESH KUMAR Asst. Prof. (Hort.) Krishi Vigyan Kendra Vridhachalam

Objectives	To take intensive publicity measure for promotion of cashew and to disseminate latest technologies in cashew farming and processing to the farming community.
No. of Days	One day
No. of Participants	150
Budget	Rs. 50000/-
Report	
<p>A one day District Level Seminar on Cashew funded by the Directorate of Cashew and Cocoa Development, Kochi was organized by Krishi Vigyan Kendra, TNAU, Vriddhachalam on 24.02.2019 at KVK, Vriddhachalam. The seminar was attended by 150 participants of cashew growers of Cuddalore district and development department officials.</p> <p>The inaugural session was presided over by Dr.A.Mothilal, Professor & Head, Regional Research Station, Vriddhachalam. The Assistant Director of Agriculture, Vriddhachalam and Kammapuram blocks of Cuddalore district and Horticulture Officer and other extension officials of Horticulture department of Cuddalore district and Agriculture Officer (Agrl. Marketing) also participated. Dr.S.Kannan, Programme Co-ordinator, KVK, Vriddhachalam welcomed the gathering and handled the technical session. Dr. A. Ramesh Kumar, Assistant Professor (Hort.), KVK, Vriddhachalam offered introductory remarks of the seminar and handled technical session on “High density planting and foliar spray of cashew, Nursery management and high yielding varieties of cashew”. Dr.S.Maruthasalam, Assistant Professor (Plant Pathology) also interacted with the farmers during the technical session on “Integrated pest and disease management in cashew”. Dr.S.Kannan, Programme Co-ordinator, KVK, Vriddhachalam spoke on prospects of value addition in cashew apple. Ms.T.Suganya, Agrl. Officer (Ag. Marketing) briefed about marketing potential of cashew.</p>	

Report on Palm climbing training – Friends of Coconut Tree (FOCT)

Name of the Programme	“Palm climbing training – Friends of Coconut Tree (FOCT)”
Districts Covered	Cuddalore district of Tamil Nadu
Period	I Batch (11.03.19 to 16.03.19) II Batch (18.03.19 to 23.03.19)
Sponsoring Agency	FOCT-Coconut Development Board, Chennai.
Scientists involved in organizing the programme	Dr.S.KANNAN Programme Co-ordinator Krishi Vigyan Kendra Vridhachalam Dr.R.Jagadeesan Asst. Prof. (Hort.) Krishi Vigyan Kendra Vridhachalam
Objectives	<ul style="list-style-type: none"> • To develop a professional group of youth under the banner of “ Friends of Coconut Tree” for harvesting and plant protection in coconut. • To impart training to a group of unemployed youth in developing technical skills, entrepreneurship capacity, leadership qualities and communication skills to address the needs of coconut growers. • To make them self reliant and instill confidence in undertaking the responsibility of “ Friends of Coconut Tree” • To tackle the problem of unavailability of coconut tree climbers for coconut farming and plant protection activities. • Generate appropriate technologies to support sustainable growth of coconut sector and generate employment opportunities for the youth.
No. of Days	6 days (II Batches)


No. of Participants	20 + 20
Budget	Rs.1,13,000/-
Report	
<p>In order to support the coconut sector and tree climbers KVK, Cuddalore conducted II batches of skill development residential training programme. Each programme consist of 6 days in 20 rural unemployed youth farmers including all category of community and gender from I Batch (11.03.19 to 16.03.19) and II Batch (18.03.19 to 23.03.19) in the age group between 18-40 years. This training programme was conducted with the help of two master trainers to facilitate the easy climbing of coconut tress were now a days drudgery for climbing of coconuts manually. The training programme was conducted with climbing device which was developed from Kerala. This device was given to the entire participant with free of cost and also including insurance. The 6 days programme including Yoga for trainees, technical session, consist of all production technology, post harvest technology quality planting material production in coconut and reputed staff from government sector bank to share their schemes and subsidies related to coconut. The NGO staff to discuss with rural youth about the agricultural schemes and crop insurance. Exposure visit to state coconut nursery farm, Neyveli and the last day of the programme an event was conducted for tree climbing competition among the trainees and the winners were honoured with price amount. The valedictory function was conducted to distribute the climbing device and certificate.</p>	

Report on Tamil Nadu Irrigated Agriculture Modernization Project (TN-IAMP)

Name of the Programme	Tamil Nadu Irrigated Agriculture Modernization Project (TN-IAMP)
Districts Covered	Cuddalore district of Tamil Nadu
Period	2017-2022 (5 years)
Sponsoring Agency	Govt. of Tamil Nadu and World Bank
Scientists involved in organizing the programme	<p>Dr.S.KANNAN Programme Co-ordinator Krishi Vigyan Kendra Vridhachalam</p> <p>Dr.S.Maruthasalam Asst. Prof. (Plant Path.) Krishi Vigyan Kendra Vridhachalam</p>
Objectives	<ul style="list-style-type: none"> • To promote water saving technologies in agriculture and horticulture for large scale adoption • To enhance crop and water productivity • To increase the crop productivity and area by diversification and intensification • To converge with WRO and other line departments in overall improvement in total farm income
No. of Beneficiaries	245
Budget	Rs. 3,32,32,000/-
<p>Report</p> <p>To maximize the water use efficiency, TNIAMP scheme was operated in lower vellar sub basin of Cuddalore district. Several technological interventions are being implemented in sub basin farmers' field. They interventions are, SRI method of rice cultivation, SRI- alternate wetting and drying irrigation method, improved production technologies in groundnut, pulses area expansion, pulses seed production, drip irrigation in sugarcane (SSI), vegetables and redgram. Also, pesticide free vegetable cultivation and formation of pulse commodity groups is being promoted in lower vellar sub basin. To implement the interventions, necessary agricultural inputs are also supplied to the farmers from the project at free of cost. Periodical trainings and exposure visits are given to the farmers for effective implementation of technologies.</p>	

15A. SUCCESS STORIES


I) SUCCESS STORY INNOVATIVE FARMER CUM SEED PRODUCER IN PADDY

Name and address of the farmer with Telephone / Mobile Number	S. Chittarasu S/o.Selvamani Melatheru Manakudianiruppu Village , Agramangalam Post Chidambaram Taluk Cuddalore district Mob No: 9443538098																																				
Situation analysis/Problem statement	<ul style="list-style-type: none"> ❖ Lack of awareness on new varieties of paddy. ❖ Continuous use of local paddy variety and poor yield ❖ Non adoption of ICM technology reduced the yield 																																				
Plan, Implement and Support	<ul style="list-style-type: none"> ❖ KVK has intervened and adopted the village for conducting FLD on paddy (CO 52 & TKM 13) during 2018-19. ❖ 10 farmers were selected in Manakudianiruppu village of Keerapalayam block ❖ Critical inputs such as paddy seeds (CO 52 & TKM 13), <i>Pseudomonas</i> and Biofertilizer were distributed to the farmers. ❖ Training on paddy seed production technology was given to the farmers. ❖ Demonstration of SRI, Machine transplanting, post emergence herbicide application, DAP Spray and seed production methods were demonstrated to the farmers. ❖ Frequent field visit were made by the KVK Scientist and advised the farmers on pest and disease management. 																																				
Output	<ul style="list-style-type: none"> ❖ The farmer has got highest yield of 80.63 q/ha of processed paddy seeds in his demonstration plot (TKM 13) ❖ Because of using right technologies and farm mechanization he has got higher yield in Paddy (80.63 q/ha) ❖ Other farmers also got an average yield of 77.19 q/ha with a BC ratio of 2.30 than other variety ❖ Farmer informed that except basal and top dressing of fertilizers he has not applied pesticides as the crop is not affected by pests and diseases. The variety is suited to the climatic condition and soil of that region. TKM 13 variety had the potential to replace the pests and diseases susceptible BPT 5204 variety 																																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Yield (q/ha)</th> <th style="width: 15%;">No. of tillers /plant</th> <th style="width: 15%;">Number of grains per panicle</th> <th style="width: 15%;">Gross cost (Rs./ha)</th> <th style="width: 15%;">Gross return (Rs./ha)</th> <th style="width: 15%;">Net return (Rs./ha)</th> <th style="width: 15%;">BC ratio</th> </tr> </thead> <tbody> <tr> <td colspan="7">Individual farmer</td> </tr> <tr> <td style="text-align: center;">80.63</td> <td style="text-align: center;">28</td> <td style="text-align: center;">286</td> <td style="text-align: center;">54000</td> <td style="text-align: center;">129008</td> <td style="text-align: center;">75008</td> <td style="text-align: center;">2.38</td> </tr> <tr> <td colspan="7">10 farmer demos</td> </tr> <tr> <td style="text-align: center;">77.19</td> <td style="text-align: center;">26</td> <td style="text-align: center;">239</td> <td style="text-align: center;">53688</td> <td style="text-align: center;">123583</td> <td style="text-align: center;">69894</td> <td style="text-align: center;">2.30</td> </tr> </tbody> </table>			Yield (q/ha)	No. of tillers /plant	Number of grains per panicle	Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	BC ratio	Individual farmer							80.63	28	286	54000	129008	75008	2.38	10 farmer demos							77.19	26	239	53688	123583	69894	2.30
Yield (q/ha)	No. of tillers /plant	Number of grains per panicle	Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	BC ratio																															
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10 farmer demos																																					
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Outcome	<ul style="list-style-type: none"> ❖ Farmer is being well recognized in the society and acting as resource farmer for the neighbouring villages. ❖ He has spread the seed production techniques in paddy and gingelly to more than 500 farmers of Manakudianiruppu and nearby villages ❖ With the help of NABARD Fund, Major Crop Development Scheme was adopted and implemented in the following villages viz., Manakudianiruppu, T. Neduncheri and nearby villages. With the help of scheme, critical inputs, funds, newer technologies, trainings and marketing were provided to the farmers with his guidance. ❖ Farmers club will conduct the meeting at every month and give necessary suggestions based on the requirement and also transfer the new technologies ❖ New technologies will be disseminated regularly to the village by the KVK and RRS Scientists through his motivation ❖ Regularly attend the technology empowerment programmes of KVK, adopt it and integrate it
Impact	<p>Media coverages like success stories</p> <ul style="list-style-type: none"> ❖ His success is documented and telecasted by Pothigai TV on March 2019 ❖ In Grievences day meeting the District Collector appreciated the farmer for highest yield in paddy and the District Collector advised the other farmer to follow the technologies adopted by him ❖ Due to the impact, the JDA of Cuddalore has gave acceptance to procure the paddy seed (15000 kg) for upscaling the paddy variety TKM 13 in convergence mode ❖ Due to the well functioning and impact created by the farmers, Minister of Agriculture, Agrl Production Commissioner, Commissioner of Agriculture, District Collector, line department officials were visited the village frequently. ❖ He encouraged the farmers to participate in the trainings, exhibitions, seminars organized by line departments of agriculture at District and State level



II) SUCCESS STORY ON INNOVATIVE FARMER CUM SEED PRODUCER

<p>Name and address of the farmer with Telephone / Mobile Number</p>	<p>S. Selvam S/o Sundaramaury Reddy street Ayyankurinjipadi Village 607301 Kurinjipadi Taluk, Cuddalore Dist Mob : 7708876142</p>	
<p>Situation analysis/Problem statement</p>	<ul style="list-style-type: none"> ❖ Non adoption of ICM technology reduced the yield in major crop ❖ Non availability of labour during peak season ❖ The continuous use of local variety in pulses and oilseeds reduced the yield ❖ Lack of awareness on farm machinery for post harvest operations 	
<p>Plan, Implement and Support</p>	<ul style="list-style-type: none"> ❖ KVK has intervened and adopted the village for conducting FLD on groundnut (VRI8) during 2018-19 ❖ 10 farmers were selected in Ayyankurinjipadi village of Kurinjipadi block ❖ Critical inputs such as groundnut pods (VRI 8), <i>Trichoderma Viride</i>, TNAU Groundnut rich and pheromone traps were distributed to the farmers ❖ Training on groundnut production technology was given to the farmers ❖ Technology of seed drill sowing, post emergence herbicide application, groundnut rich application and pheromone trap application were demonstrated to the farmers ❖ Frequent field visit were made by the KVK Scientist and advised the farmers on pest and disease management 	
<p>Output</p>	<p>Adopted Technology by the farmer</p> <p>Groundnut</p> <ul style="list-style-type: none"> ❖ Use of newly released groundnut varieties like , G7, G9, G20 and VRI 8 ❖ Drip and sprinkler irrigation for groundnut crop whenever water is scarce. ❖ Post emergence herbicide application on 15th to 16th day - Vezir @ 300 ml/acre ❖ Top dressing of fertilizer on 20th, 60th and 80th day - 10:26:26 combination - 20 kg /acre ❖ Biological method of pest control <ul style="list-style-type: none"> • 30th day – Neem oil (30 ml) + Pungam oil (30 ml)+ 10 g camphor + 20 ml alcohol per tank • 45th day – Neem oil (50 ml) + Pungam oil (50 ml)+ 10 g camphor + 20 ml alcohol per tank • 60th day – Neem oil (60 ml) + Pungam oil (60 ml)+ 15 g camphor + 20 ml alcohol per tank • 80th day – Neem oil (60 ml) + Pungam oil (60ml)+ 15 g camphor + 20 ml alcohol per tank 	

- ❖ Sowing and harvesting will be done in right time with the use of machineries because groundnut cultivation is laborious than other crops.
- ❖ Because of using right technologies and farm mechanization he has got higher yield (75 q/ha) in groundnut.

Sesame

- ❖ Seed production in newly released Gingelly cultivar VRI 3 in the alfi soil tract and adoption of right production practices
- ❖ Seed treatment with *Pseudomonas fluourescens*, *Trichoderma viride*, Phosphobacteria and Azospirillum
- ❖ Soil application of MnSO₄ @ 4 kg/acre
- ❖ Use of Pre emergence herbicide (Pendimethalin) application to reduce weed menace
- ❖ Practising line sowing of gingelly seeds
- ❖ Maintaining optimum plant population and earthing up
- ❖ Foliar spray of DAP 2 % (4 kg/acre) and Balanced use of fertilizer

Crop	Yield /acre	Cost of cultivation (Rs.)	Gross income (Rs.)	Net income (Rs.)	BCR
Groundnut	30 q	38000	154000	116000	4.05
Sesame	900 kg	10000	67500	57500	6.75

New package of practices/ management strategies

Groundnut

- ❖ Because of labour shortage and drought there is a need for practicing new technology
- ❖ The use of machineries for groundnut harvesting and stripping is needed nowadays because of labour shortage
- ❖ Use of pungam oil, neem oil and camphor is a low cost and organic way of pest and disease management option since groundnut is a consumable product.
- ❖ The use of water soluble fertilizer will reduce the leaf dropping from leaf formation to harvest stage and keeps the plant green upto maturity and helps in uniform maturity of the pod.

Sesame

- ❖ Formation of ridges and furrows will make uniform maturity and prevent lodging and thereby maintaining the population and increase the yield
- ❖ Irrigation in broadcasting method promotes water stagnation which may affect the plants. But in ridges and furrows water absorption by plants will take place slowly and uniformly and thereby facilitates growth of the plant in a continuous manner and increase the yield of the plant.

	<ul style="list-style-type: none"> ❖ Foliar spray of DAP and Planofix during flowering and pod formation stage will increase the seed set and thereby the yield. ❖ Basal application of manganese sulphate before sowing will help in the formation of stout pods and thereby increase the oil content.
Outcome	<ul style="list-style-type: none"> ❖ Farmer is being well recognized in the society and acting as resource farmer for the neighbouring villages. ❖ He spread the Groundnut seed production techniques to more than 1000 farmers of Ayyan kurinjipadi and nearby villages. ❖ Practicing seed production in groundnut and other millets. He formed a commodity group comprising of 100 farmers and marketed the produce to different districts of Tamil Nadu. ❖ Facilitate mass tree planting and establishment of fish pond for the farmers with help of line departments. ❖ New technologies are disseminated regularly to the village by the KVK and RRS Scientists through his motivation ❖ Regularly attend the technology empowerment programmes of KVK, adopt it and integrate it in his farm. ❖ Due to the well functioning and impact created by the farmers, Minister of Agriculture, Agrl. Production Commissioner, Commissioner of Agriculture, District Collector, line department officials are visiting the village frequently.
Impact	<p>Media coverage's like success stories</p> <ul style="list-style-type: none"> ❖ His success story is documented and telecasted by Pothigai TV on March 2019 ❖ His achievements were published in popular dailies like Daily thanthai, Dinamalar, Dinamani and Dinakaran.



III) SUCCESS STORY OF CASHEW FARMER

Panruti is a developing city, municipality and taluk headquarters of Cuddalore district, Tamil Nadu, India. Panruti is located between Cuddalore and Neyveli. Panruti is famous for jackfruit and cashews. The jackfruit grown here is exported worldwide and is very sweet. It is a business center of Cuddalore district. The name Panruti came from *the Tamil words Pann and Urutti* meaning *composing song and music*, as the place is where many saints and great religious singers such as nayanmars and vainavas sung. A 150-year-old government school was built here by the British East India Company and a more-than-1000-year-old temple *Veeratteswarar temple* is nearby in Thiruvathigai.

Panruti is located on the main line of high ways. State highways Chennai-Kumbakonam and Cuddalore-Chittoor passes through Panruti. Panruti is located at 11.77°N 79.55°E. It has an average elevation of 32 metres (104 feet). The Kedilam River flows through the town and Thenpanni river is nearby. Panruti produces cashews, jackfruit, sugar cane and many vegetables. Panruti plays a major role in the cashew export business, exporting to Malaysia, Australia, Singapore, and the United States. It is known for its famous international jackfruit market, from where jackfruit is exported to many other countries. It is also a commercial center of Cuddalore district. The Rathinampillai market located in the center of the city attracts thousands of people every day from morning 5:00 a.m. itself. Nearby villages are Maligampattu, Anguchetty palayam, Chinnapettai, Thiruthuraiyur, Puthupettai or Pudupet, Bandrakottai, Mandhipalayam, Oraiyur, Kadampuliyar, Periyakattupalayam. Many nearby villages are famous for weaving Lungi, and Silk sarees.

Veerasingankuppam is located in Panruti to Vriddhachalam state high way and is 18 km away from Vriddhachalam and 25 km form Panruti.

Th.A.Gnanasekar is residing at Veerasingankuppam village of Panruti taluk, Cuddalore district. He is a progressive farmer. He is 50 years old. He is a diploma (Engineering) holder. He hails from traditional agriculture family. His ancestor's key profession was farming and he continues his family profession, following the motivation of his father. Currently, he owns 20 acres of garden land. The soil type is red sandy loam and is irrigated by borewell. His region is known for cashew cultivation. He is growing cashew in his 20 acres of land. During 2012, his cashew plantation was totally devastated by *Thane* cyclone. His family livelihood was totally under threat due to the loss. He bravely challenged

the situation and wanted to re-establish his plantation. He approached Krishi Vigyan Kendra (KVK), Viriddhachalam and state department of Horticulture for technical support and financial assistance respectively. He was covered in *Thane* rehabilitation scheme and was financially supported by State Horticulture department for establishing the cashew plantation in an area of 20.0 acres. The financial assistance was provided to him in the form of digging borewell, electricity connection, free supply of cashew grafts. The complete package technical know-how was given to him by KVK, Vriddhachalam. The technologies taught to him was planting, post planting care, training of plants, integrated nutrient management, efficient use of water, Integrated Pest and Disease Management (IPDM) etc. He has shown keen interest to learn the technologies from KVK, Vriddhachalam. In the year 2016, he once again approached KVK for new innovation techniques to enhance his farm income. He was advised to go for intercropping with blackgram in the alley spaces of cashew plantation. He was also taught about drip cum fertigation using water soluble fertilizer, pruning and foliar spray of nutrients. He grasped the techniques very well and adopted in his plantation. As a result he has got a yield of 320kg/acre cashew nuts and 280kg/acre of blackgram. He has got gross income of Rs. 45000/acre from cashew and Rs.10000/- from blackgram as additional income respectively. The net income that he realized was Rs.40000/acre. The total net income from his 20 acre cashew plantation was 8.0 lakh per year.

Besides, he has recently started his small scale cashew processing unit in his village and is yet to give dividend to him. Overall, he has become a successful lead farmer in cashew and he will soon transform into an entrepreneur.

IV) SUCCESS STORY OF VALUE ADDITION IN JACK FRUIT

Th. K.Vijayakumar is an educated youth in Vegakollai village of Panruti taluk, Cuddalore district. He is a graduate and hails from traditional agriculture family. His place is known for jackfruit cultivation. The unique feature of his locality in respect of jack fruit is bearing in two seasons. In other jack fruit growing places, jack gives yield in only one season (summer), but in his place, jack fruits are available in summer as well as in rabi season (December to February). However, the income generated from jack orchard was meager, as the fruits are highly perishable and lack of proper storage facilities. Besides, there is loss to the farmer due to severe dropping- off of undersized, underdeveloped and half matured fruits, despite initial high fruit set. Keeping these things in mind, Th. Vijayakumar, thought differently to do something to jackfruit growers. This potential, educated youth approached the Krishi Vigyan Kendra (KVK), Virddhachalam for technical innovations and guidance. Subsequently he attended many trainings at Krishi Vigyan Kendra (KVK), Virddhachalam on value addition. He started value addition of jackfruit in his home in pilot scale and finetuned his technology in consultation with Krishi Vigyan Kendra (KVK), Virddhachalam and Indian Institute of Food Processing Technology (IICPT), Thanjavur, Tamil Nadu. Now he is preparing value added products from jack fruit such as jack fruit chips, murukku (Snack), seed flour, fruit candy and got FSSAI certificate. He is marketing the products in his own brand name of “Thembu Food Products”. He has emerged as a successful entrepreneur in jackfruit and is a role model for other educated rural youth of Cuddalore district.

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through the town and Thenpanni river is nearby. Panruti produces cashews, jackfruit, sugar cane and many vegetables. Panruti plays a major role in the cashew export business, exporting to Malaysia, Australia, Singapore, and the United States. It is known for its famous international jackfruit market, from where jackfruit is exported to many other countries. It is also a commercial center of Cuddalore district. The Rathinampillai market located in the center of the city attracts thousands of people every day from morning 5:00 a.m. itself. Nearby villages are Maligampattu, Anguchetty palayam, Chinnapettai, Thiruthuraiyur, Puthupettai or Pudupet, Bandrakottai, Mandhipalayam, Oraiyur, Kadampuliyar, Periyakattupalayam. Many nearby villages are famous for weaving Lungi, and Silk sarees.

Vegakollai is an interior village and is 4 km on eastern direction of Panruti to Kumbakonam high ways and 22 km away from Panruti.

V) SUCCESS STORY OF COTTON FARMER

Name and address of the farmer with Telephone / Mobile Number	R. Krishnamurthy S/o.Ramaamy Maruthathur Nallur block														
Situation analysis/Problem statement	<ul style="list-style-type: none"> ❖ Lack of awareness on etiology of parawilt in cotton ❖ Lack of knowledge on parawilt management methods 														
Plan, Implement and Support	<ul style="list-style-type: none"> ❖ KVK has intervened and analyzed the situation. ❖ Following the field visit, OFT on the “Assessment of methods for management of parawilt in cotton” was conducted in the Maruthathur village of Nallur block during 2018-19. ❖ Ten farmers (1.0 acre each) were selected in the same village for conducting the OFT. ❖ Critical inputs such as cobalt chloride, copper oxychloride, urea and DAP were distributed to the farmers. ❖ Demonstration was given under the field condition. ❖ Regular field visits were made by the KVK Scientist and advised the farmers on parawilt management. 														
Output	<ul style="list-style-type: none"> ❖ The farmer has got the highest yield of 27.0 quintals/ha of cotton kapas in his demonstration plot. ❖ The farmer recorded 95% recovery of parawilt affected plants following the imposition of treatment (Spraying of cobalt chloride @ 10 mg/l (10 ppm) on affected plants within 2 days of onset of symptoms and drenching with mixture of Copper oxychloride (25 g) and 200 g Urea in 10 L of water) whereas in the conventional practice (drenching with 0.3% carbendazim) only 40% of the plants have recovered. <table border="1" data-bbox="472 1308 1469 1529" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Yield (q/ha)</th> <th>Parawilt (%)</th> <th>Percent plant recovered (%)</th> <th>Gross cost (Rs./ha)</th> <th>Gross return (Rs./ha)</th> <th>Net return (Rs./ha)</th> <th>BC ratio</th> </tr> </thead> <tbody> <tr> <td>27</td> <td>18</td> <td>95</td> <td>93763</td> <td>148500</td> <td>54737</td> <td>1.58</td> </tr> </tbody> </table>	Yield (q/ha)	Parawilt (%)	Percent plant recovered (%)	Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	BC ratio	27	18	95	93763	148500	54737	1.58
Yield (q/ha)	Parawilt (%)	Percent plant recovered (%)	Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	BC ratio									
27	18	95	93763	148500	54737	1.58									
Outcome	<ul style="list-style-type: none"> ❖ Farmers have gained the knowledge on the etiology of parawilt in cotton and the measures to be taken to contain the problem. ❖ The farmers are frequently contacting the KVK to solve their field problems. 														
Impact	<ul style="list-style-type: none"> ❖ The cotton farmers in the village have got good yields and more profit during 2018-19 than the previous years. 														

15. B. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year: NIL

15. C. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development

Crop / Enterprise	ITK Practiced	Purpose of ITK
Paddy	Vasambu (<i>Acotus calamus</i>) powder and cow urine are mixed in the water that has been boiled and cooled over night and the seeds are soaked in the solution. The floating seeds are removed. The remaining seeds are used for sowing.	This serves the dual purpose of seed selection and treatment of seed borne disease
	The place with higher elevation in the field is selected for raising paddy nursery	Flooding is avoided
All crops	Ash is dusted on the germinated paddy nursery before the occurrence of heavy rain.	This practice prevents toppling of seedlings and also accumulation of seedlings on one side
	Farm waste and trash are burnt on the nursery beds. The heat that is generated by burning, sterilizes the soil and some nutrients like potash is added	For effective nutrient management
	A mixture of coconut water and buttermilk is used to increase the number of flowers in paddy. A mixture of 5 liters of coconut water and 5 liters of buttermilk is kept in a mud pot. This pot is buried in the soil for 5-7 days, after that one liter of solution is mixed with 10 liters water to spray on the crop,	For increasing number of flowers in the crop.
	Notchi (<i>Vitex negundo</i>) leaves along with stored paddy grain. News paper clippings and herbal leaf mixture.	To repel stored product pests
Pulses	Use of neem oil / red earth	To repel stored product pests in Pulses
	Coating the pulse seeds with arappu leaf powder	To protect the seeds from ants and birds
	Drying of blackgram seeds during new moon time	To protect from pulse beetle infestation
Vegetables	Neem extract/ Pungam Oil/ Panchaghavya	To control sucking pests and borers in vegetables
	Spraying of Lime water for Cucurbitaceous vegetables	To control downy mildew diseases.
Coconut Seedlings	Filling of sand in Coconut seedlings in between fronds	To control Rhinoceros beetle
Coconut Plantation	At the time of Planting of Coconut seedlings in the pit simultaneously planting of Aloe vera	To control root crub and termites.
Animal husbandry	Oral administration Aloe vera & Aanai nerunji leaves	To induce heat in cows
	Oral administration of Betelvines, omam	To solve indigestion problem in goats
	Equal quantity of Naphthalene balls and camphor were mixed with water made into paste and applied on the body of cattle for 2 hours	To control parasites
	Application of fat of pigs/henna leaf paste	To control foot and mouth disease in cattle

16. IMPACT

16. A. Impact of KVK activities (Not to be restricted for reporting period).

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Value addition in fruits & vegetables and millets – vocational training	36	12	Rs. 2000/month	Rs. 15000/month
Cluster FLD –oil seeds (Ground nut)	55	75	Rs.92,873/ha	Rs.1,95, 728 /ha
Cluster FLD-Pulses (Black gram)	30	75	Rs. 10,528/ha	Rs.14,798/ha
Training on Integrated Farming system-wet land	50	12	Rs.1,26,050/ha	Rs.3,61,312
Training on Integrated Farming system –dry land	35	10	Rs.10,000/ha	Rs.33,000/ha

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

16.B. Cases of large scale adoption

Case1: Demonstration of farmer's participatory seed production of paddy variety TKM 13

a. Background

In Cuddalore District, Paddy crop is cultivated in samba season in an area of 85000 acre. The crop is affected by various pest and diseases during Samba season. Existing varieties were highly susceptible and needs to be replaced with tolerant or resistant varieties. Hence, an FLD with TKM 13 variety was taken up and the susceptible variety BPT 5204 was used as a check. The trial was conducted at Azhichikudi and Manakudianiruppu villages of Bhivanagiri and Keerapalayam block. The crops performed well and provided good economic gain.

b. Output

The results revealed that the paddy varieties TKM 13 (75.05q/ha) recorded higher yield than check (57.56 q /ha). The net return was more in TKM 13, due to high market price (Rs 15.50/kg).

Pest and disease incidence in the varieties assessed*

Sl.No	Varieties	Leaf folder incidence (% leaf damage)	Stem borer incidence (% dead heart symptoms)	Blast incidence (Number of lesion/leaf)	BLB incidence (Number of infected leaves/ m ²)
1	Check	4.48	8.50	2.62	5.75
2	TKM 13	1.00	1.03	0.29	0.08

*Mean data of the trial conducted at the farmers' field

The pest and disease incidence in paddy variety TKM 13 was also less. The farmers did not take up any pesticide spray in TKM 13 variety. The crop yielded 7505 kg per hectare with less input on pest and disease management.

c. Out come

The net return received from the crop is Rs 57073 per hectare with the BC ratio of 2.02*

Varieties assessed	Production (kg/ha)	Net Return (Rs)	BC Ratio
BPT 5204	5756	25097	1.40
<i>TKM 13 paddy variety</i>	7505	57073	2.02

*Mean data of the trial conducted at the farmers' field.

d. Present status of the farmers in following the variety paddy TKM 13

- Based on the performance of the paddy variety TKM 13 and its tolerance level to pest and disease incidence during Samba season the farmers were very much satisfied. Hence the programme is being taken up as a convergence mode and seeds will be produced in farmers' participatory seed production programme.

e. Socio economic impact

- As the net return is more due to enhanced marketable price for the variety TKM 13, the farmers wish to go for cultivating the variety and the same is recommended for large scale adoption.
- The farmers visualised the performance of the paddy variety TKM 13 throughout the season with their active participation.
- The participation of the farmers in various domains shows positive impact on acceptance of the variety.
- This year the variety paddy TKM 13 cover an area 10000 ha.

Participation of the farmers in various domains

Domain	Seed treatment	Agronomic practices	Observation on pest and disease	Application of IPM for the pest and disease	Yield assessment
Level of participation	40%	60%	60%	40%	50%

Case 2: Demonstration of farmer's participatory seed production of Groundnut variety VRI 8

In Cuddalore District around 15000 ha is under Groundnut cultivation. Based on the interaction with the extension wing and farmers of the district it is realized that a bold seeded variety is needed for rabi season. Hence a variety released by the Tamil Nadu Agricultural University during the year 2016 named VRI 8 was taken up for demonstration during 2018-19. Ten demonstrations were conducted in an area of two hectares.

b. Output

The variety performed well with its special characteristics of

- Parentage : ALR 3/AK 303
- Duration : 105 – 110 days
- Season : Rainfed: April-May, June-July, October-November
- Irrigated: December-January, February-March, April-May
- Yield : Rainfed: 2130 kg/ha (22.0% over VRI 6)
- Irrigated: 2700 kg/ha (26.6% over VRI 6) Highest yield obtained : 5170 kg/ha
- Moderately resistant to late leaf spot and rust
- Shelling outturn 70.0%
- Oil content 49.0%
- Medium bold kernels

c. Outcome

The variety yielded as high as 4411 kg per hectare compared to the check variety VRI 2 (2860 kg per hectare). The net return from VRI 8 was Rs. 134488 per hectare with the BCR of 2.38 and the net return of VRI 2 was Rs. 45337 per hectare with the BCR of 1.41.

d. Present status of the farmers in adopting the variety VRI 8

- Based on the performance of the groundnut variety **VRI 8** and its performance the farmers are highly satisfied and requested for the seed material for the ensuing Rabi season. Hence training programme on seed production is proposed and seeds will be produced by adopting farmers' participatory seed production programme.
- This has led to vast spread of the variety in an area of 1000 hectare during 2018-19.

e. Socio economic impact

- ❖ The farmers have realized that the variety is suitable for rabi season especially during North east monsoon.
- ❖ Establishment of a network of small and medium seed growers in rainfed areas for the supply of quality seeds, and also to create awareness about new varieties among the farmers

- ❖ Farmer told that the number of pods per plant and yield was more in demonstration (i.e. 70 to 80 pods per plant) than the check due to management practices viz., seed treatment with bio control agents, gypsum application, balanced fertilizer application, herbicide application and management of pest and diseases guided by TNAU Scientists.
- ❖ Farmer felt that groundnut rich application was easier than DAP application and has the advantage of increasing the pod setting. Drought tolerance was good
- ❖ The successful performance of VRI 8 in terms of yield motivated other farmers in the village to adopt the variety
- ❖ This has led to vast spread of the variety in an area of 1000 hectare during 2018-19.

16.C. Details of impact analysis of KVK activities carried out during the reporting period

1. Analyzing the effectiveness of the on and off campus training programmes

The following methods were employed to assess the effectiveness of the on and off campus training programmes.

- a. Obtaining formal feed back at the end of each training programme in the prescribed format. This revealed the effectiveness of Subject Matter Specialist, delivery of subject and the content of the training. For each and every training, such analyses were carried out and based on the feedback necessary corrections were done in the training methodologies.
- b. Informal discussion at the end of the training period to assess the impact of the programme.
- c. For certain very important vocational trainings we assessed the pre and post training knowledge level of the trainees by employing participatory methods.
- d. Regular follow up /mobile contacts etc.,

2. Demonstrations and diagnostic field visits

- a. Participatory appraisal techniques
- b. Informal discussion
- c. Personal contacts (Farm and Home visits/telephone calls/SMS communications
- d. By assessing the percentage of adoption through casual discussion and questionnaire methods

3. Other extension activities (Exhibitions /KVK literature/Media activities/FFS/Field days etc.)

- a. Feed-back register
- b. Informal discussion
- c. Responses through our social media activities (Face book activities)

17. LINKAGES

17.A. Functional linkage with different organizations

This Kendra has developed a strong functional linkage with Govt. and Non-Govt. organizations for conducting training programmes, demonstrations, seminar, campaigns, farm advisory service, farmers study tour and other extension activities to achieve the Krishi Vigyan Kendra mandates. The details of the collaborative activities carried out are furnished below.

Name of Organization	Nature of linkage
Dept. of Agriculture	<ul style="list-style-type: none"> ◆ Assessing the training needs of farmers in areas of crop improvement, production, protection and mechanization ◆ Mid monthly and Monthly Zonal Workshop ◆ FLD – Field day ◆ Participated in the training programme ◆ Watershed & Waste land development programme ◆ Seedling supply ◆ District level farm improvement committee ◆ In service training to AOs /AAOs ◆ Off campus training programme ◆ Farm advisory services ◆ Seed farm- seed production meeting ◆ ATMA implementation
Dept. of Horticulture	<ul style="list-style-type: none"> ◆ Assessing the training needs of farmers in areas of Crop improvement, production, protection and mechanization ◆ Off campus training programme ◆ Collaborative training programme ◆ Seedlings supply ◆ Demonstration ◆ NHM training on cashew, mango, banana, chilies and loose flowers
Annamalai University, Chidambaram	<ul style="list-style-type: none"> ◆ Rural agricultural work experience programme ◆ U.G. and P.G. students visit to KVK ◆ Training to FSC clubs

TANUVAS, UTRC, Cuddalore	<ul style="list-style-type: none"> ◆ Resource persons for training
Agricultural Extension Wing, Department of agriculture (TANCOF)	<ul style="list-style-type: none"> ◆ Off campus training ◆ Seed supply & Watershed development ◆ Training on oil seed production technology
Department of Animal husbandry	<ul style="list-style-type: none"> ◆ Advisory service
Collectorate, Cuddalore	<ul style="list-style-type: none"> ◆ Grievance day meeting ◆ NLC expansion programme-alternate employment for displaced riots ◆ Agricultural production council meeting ◆ Periodical technical / consultative meeting
Mahalir Thittam / DRDA Cuddalore	<ul style="list-style-type: none"> ◆ Sponsored training ◆ SGSY – SHG training ◆ Skill up - gradation programme ◆ Vazhalnthukattuvom project
Higher Secondary Schools	<ul style="list-style-type: none"> ◆ Awareness campaign ◆ NSS campaign
NGOs	<ul style="list-style-type: none"> ◆ Awareness campaign ◆ Training programme ◆ Demonstration
NABARD, Cuddalore	<ul style="list-style-type: none"> ◆ Farmers group discussion ◆ TTC meetings ◆ Trainings to farmers
Agriculture Engineering Dept. Govt. of Tamil Nadu	<ul style="list-style-type: none"> ◆ Rain water harvesting programme ◆ Training on agricultural implements and river basin development ◆ Resource person for department training programmes
ZRC, Coimbatore	<ul style="list-style-type: none"> ◆ Training on power tiller operation, maintenance and its attachments ◆ Implements supply
Dept. of Millets, TNAU, Coimbatore	<ul style="list-style-type: none"> ◆ FLD in kodomillet and maize ◆ Seed supply
Dept. of Forage crops, TNAU, CBE	<ul style="list-style-type: none"> ◆ FLD and OFT on forage crops
NGO- KVKs	<ul style="list-style-type: none"> ◆ Training and exposure visit ◆ Seed materials supply & FLD / OFT discussion

WTC, Tamil Nadu Agricultural University, Coimbatore	<ul style="list-style-type: none"> ◆ Drip and sprinkler unit supply ◆ Technical support ◆ Training on micro irrigation
Indian Bank, Vriddhachalam	<ul style="list-style-type: none"> ◆ Training programmes
AIR, Puducherry	<ul style="list-style-type: none"> ◆ Helps to popularize the latest technology

17.B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies: NIL

Name of the scheme	Date/Month of initiation	Funding agency	Amount (Rs.)
Farmer Field School		ICAR	30000

Farmer's Field School on ecofriendly crop management in cotton

Name of the village: S. Naraiyur , Mangalur Block

Number of participants: 30

No of classes: 14

Objectives

- ❖ To educate the farmers about eco friendly crop management techniques in cotton
- ❖ To train the farmers on the use of eco friendly technical inputs and strategies
- ❖ To create awareness about production and marketing of cotton

Technology demonstrated

- Seed treatment with biofertilizers and bio control agents
- Seed treatment in cotton, seed hardening and acid delinting in cotton
- Fertilizer management for rainfed and irrigated cotton
- Weed management for irrigated and rainfed cotton
- Foliar application and management strategies for delayed sowing cotton
- Pest and disease management for irrigated and rainfed cotton
- Insecticide resistance and resurgence in cotton crop management
- Post harvest operation and management in cotton
- Credit facilities and bank loan scheme for starting cotton unit
- Preparation of panchagavya and spray
- Spray of neem oil and Neem seed kernal extract
- Setting of yellow sticky trap and pheromone trap
- Use of egg parasites for Pest management

Knowledge level in the FFS

- ❖ Pre entry: 64%
- ❖ Post Entry: 94 %

Knowledge spread in the FFS

Category	Pre entry	Post entry	Remarks
Seed treatment with biofertilizers and bio control agents	Partly known	Fully known	Now using
Weed management for irrigated and rainfed cotton	Partly known	Fully known	Now using
Use of vermicompost	Partly known	Fully known	Now using upon availability
Foliar spray of <i>Pseudomonas fluorescens</i> @ 0.2% at 20 and 40 DAP	Not awarded	Fully known	Now using upon availability
Preparation of panchagavya and spray	Awarded but not used	Fully known	Now using
Spray of neem oil and Neem seed kernal extract	Awarded but not used	Fully known	Now using upon availability
Setting of yellow sticky trap and pheromone trap	Not fully awarded	Fully known	Availability of the quality material is difficult
Use of egg parasites for pest management	Not fully awarded	Fully known	Availability of the quality material is difficult

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ON FARM TRIAL



OFT- Assessing the performance of paddy varieties in salt affected soil



OFT- Assessment of suitable rice fallow black gram variety for Cuddalore district



OFT- Assessment of suitable groundnut variety under rainfed condition



OFT- Assessment of Suitable decomposer for Composting Sugarcane Trash



OFT-Assessment Of Methods For Management Of Parawilt In Cotton



OFT-Assessment of Brown Rice Cookies Vs Millet Cookies on Glutone Allergy

FRONT LINE DEMONSTRATIONS



FLD - Demonstration of paddy variety CO 52 in SRI system in Cuddalore



FLD - Demonstration of paddy TKM 13 seed production by farmer participatory mode



FLD- Demonstration of seed production (foundation /certified) by farmer participatory mode in blackgram (MDU 1)



FLD- Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8



FLD- Demonstration of Pearl millet variety CO (CU) 10 variety and value addition.



FLD- Demonstration of ICM practices in Redgram variety CO8.



FLD -Demonstration Of Integrated Management Practices For Nematodes In Banana



FLD-Demonstration Of Management Strategies For Nematode Incidence In Tuberose



FLD- Demonstration on Grama Priya Chicks for Backyard Poultry



FLD – Demonstration on Composite Fish Culture in Farm Pond



FLD- Integrated Crop Mangament (ICM)Practices in Marigold



FLD - Demonstration of Arka Vegetable Special in Brinjal



FLD- Demonstration and seed production in farmer participatory mode in Gingelly var.VRI 3



FLD- Demonstration of integrated crop management in ragi variety CO 15 in salt affected soil

Cluster FLD - Blackgram



ON CAMPUS TRAINING



Explain the advantage of Panipipe



Importance of Roof Gardening



EDP Awareness Training



Delivering the Paddy Cultivation Techniques



Training on the bio-intensive pest and disease management in crops



Mush Room Cultivation Techniques

OFF CAMPUS TRAINING



Turmeric Training at Adari village



Improved Paddy Production Techniques and Seed Production at Ayyankurinjadi Village



Fodder Cultivation and Value Addition in Milk at Sathyavadi village



Paddy and Blackgram Cultivation Practices on Thoravallur Village



Delivered a lecture on integrated disease management in cotton at S.Naraiyur village



Delivering a lecture on pest and disease management in cotton at Perambalur village,

ACTIVITIES IN DFI VILLAGE



OFF Campus Training on AyyanKurinjpadi Village



NARI – Programme – Demo on Milk Value Addition and Nutritive Value of fruits and Vegetables at SathyaVadi Village



FLD Gingelly VRI 3 at Ayyan Kurinjipadi village



FLD- TKM 13 – Field Observation at DFI Village



DFI - Village Survey



FLD - Groundnut VRI 8 at Ayyankurinjpadi

VOCATIONAL TRAINING



**Value Addition in Fruits and Vegetables
06.02.2019 to 08.02.2019**



Demo of Value Addition of Vegetables



Demo of Value Addition of Fruits



Certified issued to the Trainees

SPECIAL PROGRAMMES



Mahila Kissan Diwas 15.10.2018



Swatchha Hi Sewa 15.10.2019 -31.10.2019



Parthenium Awareness Campaign 16-22.08.2019



Farmer Scientist forum meeting



PM- Kissan Niddhi - Samman Programme 24.02.2019



Vigilance Awareness week

SCIENTIFIC ADVISORY COMMITTEE MEETING & SPECIAL PROGRAMMES



World Honey Bee Day



Pre Kharif Awareness week



Scientific Advisory Committee meeting



Scientific Advisory Committee meeting



SPONSOR TRAINING PROGRAMMES



Improved Production Technologies in Cashew



District Level Cashew Seminar

Residential Training - Demo on Yoga



Friends of Coconut Tree – Coconut Development Board

DIAGNOSTIC VISITS



Fall army worm in Maize Field Visit - on 18.09.2018 at Kazhuthur



Diagnostic field visit in banana on 19.4.18 at Erumanur



Diagnostic field visit on paddy on 11.7.18 at Kammapuram and Siruvarapur



Diagnostic field visit on Paddy Field at V.Kumaramanagalam on 4.6.18



Diagnostic field visit on Brinjal Field on Chinvadavadi 26.09.2019



Diagnostic Field Visit On Maize Fall Army Worm At Keezhakalpoondi On 23.11.18

PAPER MESSAGES



PAPER MESSAGES

