ANNUAL REPORT (April-2017-March-2018)

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	111	3586	1247	4833
Rural youths	14	387	230	617
Extension functionaries	11	263	153	416
Sponsored Training	7	320	57	377
Vocational Training	2	-	-	-
Total	**145**	**4556**	**1687**	**6243**

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	60	30	
Pulses	-	-	-
Cereals	30	4	
Vegetables	20	6	
Other crops	53	21.2	
Total	163	61.2	-
Livestock & Fisheries	5		5
Other enterprises- Value addition	2		2
Total	7	0	7
Grand Total	**170**	**61.3**	**7**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	5	33	33
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	5	33	33

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	536	3045
Other extension activities		
Total	536	3045

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
	Text only	267	0	0	0	0	0	267
	Voice only	0	0	0	0	0	0	0
	Voice & Text both	0	0	0	0	0	0	0
	Total Messages	**267**	0	0	0	0	0	267
	Total farmers Benefitted	**4343**	0	0	0	0	0	**4343**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	11.42 q	100923
Planting material (No.)	43564	364264
Bio-Products (kg)	136 kg	13600
Livestock Production (No.)	2 nos.	10000
Fishery production (No.)		

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	314	30500
Water	187	9350
Plant		
Total	**501**	**39850**

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	16
2	Conferences	10
3	Meetings	26
4	Trainings for KVK officials	9
5	Visits of KVK officials	13
6	Book published	7
7	Training Manual	8
8	Book chapters	-
9	Research papers	-
10	Lead papers	-
11	Seminar papers	5
12	Extension folder	9
13	Proceedings	-
14	Award & recognition	-
15	On going research projects	-

DETAIL REPORT OF APR-2017-18

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**

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, 2018)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temp-orary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr.S.Kannan	Associate Professor	Food Science and Nutrition	37400-67000 9000(GP)	47800	06.08.2009	Permanent	SC
2	Subject Matter Specialist	Vacant							
3	Subject Matter Specialist	Dr.K.Natarajan	Assistant Professor	Seed Science & Technology	15600-39100-7000(GP)	33590	16.04.2015	Permanent	OBC
4	Subject Matter Specialist	Dr.P.T.Sharavanan	Assistant Professor	Pl. Pathology	15600-39100-7000(GP)	33590	18.03.2013	Permanent	OBC
5	Subject Matter Specialist	Dr. K. Venkatalakshmi	Assistant Professor	Agronomy	15600-39100-7000(GP)	33590	16.04.2013	Permanent	OBC
6	Subject Matter Specialist	Dr. A. Ramesh kumar	Assistant Professor	Horticulture	15600-39100-7000(GP)	33590	22.04.2015	Permanent	OBC
7	Subject Matter Specialist	Tmt. G. Porkodi	Assistant Professor	Soil Science & Agrl.Chemistry	15600-39100-6000 (GP)	29610	08.04.2015	Permanent	SC
8	Programme Assistant	Mrs.G.Meenalakshmi	Programme Assistant (Lab Tech.)	Horticulture	35900-1135000	49600	28.02.2011	Permanent	SC
9	Computer Programmer	Mr.R.Samundeeswaran	Programme Assistant (Computer)	Computer Science	35900-1135000	44100	14.11.2012	Permanent	SC
10	Farm Manager	Mr. D.Kumar	Farm Manager	Agronomy	35900-1135000	57500	19.05.2015	Permanent	OBC
11	Accountant / Superintendent	Selvi.A.Naveenatham	Superintendent	Higher Secondary	36900-116600	49500	17.04.2015	Permanent	SC
12	Stenographer	Mrs. T. Chandirakala	Assistant	SSLC	19500-62000	23693	24.01.2018	Permanent	OBC
13	Driver	Th. C. Jayabal	Driver	XI	35900-1135000	55800	28.11.1986	Permanent	OBC
14	Driver cum mechanic	Th.S.Arul	Driver cum Mechanic	X	19500-62000	32200	21.02.2007	Permanent	OBC
15	Supporting staff-1	Th. A. Deivasigamani	Office Assistant	XII	15700-50000	19300	27.01.2011	Approvied Probationer	OBC
16	Supporting staff-2	Th. P. Narayanasami	PUSM	-	15700-50000	27600	08.08.1988	Permanent	OBC

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

S. No.	Item	Area (ha)
1	Under Buildings	872.62 m^2
2.	Under Demonstration Units	208.66 m^2
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	-	-	-	-	-	-	-
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	15939	Running
Motor cycle-Hero Honda (TN 31V 4421)	2009	48,255	41723	Running
Tractor (TN-31 AS 2462)	2011	4,87,500	1551 hrs	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.	23.02.2018	22	18

**** Attach a copy of SAC proceedings along with list of participants***

Proceedings of 21st Scientific Advisory Committee Meeting conducted at KVK, Vriddhachalam , Cuddalore District

The 21st Scientific Advisory Committee Meeting was held at KVK, Vridhachalam, Cuddalore district on 23.02.18 under the Chairmanship of Dr. H.Philip, the Director of Extension Education, Tamil Nadu Agricultural University, Coimbatore in the presence of Dr. R.Usha Kumari, Professor and Head, Regional Research Station, Vridhachalam, Dr. K. Nageswari, Professor & Head, Vegetable Research Station, Palur and Dr. M. Jayachandran, Professor & Head, Sugarcane Research Station, Cuddalore.

Chairman: Dr.H.Philip Director of Extension Education Tamil Nadu Agricultural University Coimbatore-3	**Member Secretary :** Programme Coordianator Krishi Vigyan Kendra Vridhachalam - 606 001 Cuddalore District
Members	
Dr.R.Usha Kumari Professor and Head Regional Research Station Vridhachalam	Dr.K.J.Jeyabaskaran ICAR- National Research Centre for Banana Thogamalai Road, Thayanur Post, Trichy – 620 017
S.Poongothai Deputy Director of Horticulture (PTL) Cuddalore-1	Dr.M.Senthil Kumar Assistant Professor (AEX) & Nodal Officer of KVKs, DOEE, TNAU, Coimbatore-3.
Dr.K. Parameswari Programme Coordinator KVK Tindivanam	Mr. G. Chandrasekaran 26/33A, Nethaji Nagar Panruti Cuddalore district.
Dr. R. Alex Horticulture Officer Vriddhachalam – 606 001.	Dr.P.Silambarasan Assistant Professor & Head Veterinary University Training & Research Centre Semmandalam, Cuddalore-1
Dr. M. Pauline Felicita Suganthi Veterinary Assistant Surgeon Veterinary Dispensary Mangalampettai	Th. D. Chandran Regional Manager TAFCORN, Vridhachalam
Ms. D. Kalaivani Junior Inspector of Sericulture Ezhuchatram road Vazhudhareddy, Villupuram-605 602	Mrs. A. Lakshmi Assistant Director District Industrial Centre Cuddalore
Farmer members:	
Thiru. C. Natarajan S/o. Chidambaram, 2/46, South street, Sathiyavadi (Po) Vridhachalam Taluk Cuddalore district	Mr. S.Ram Magesh Vallam Thatchakadu Chidambaram Taluk Cuddalore district

Mr. P. Manimozhi Mathakalirmanikkam Srimushnam Taluk Cuddalore district	Mr. V.K. Kumaraguru Karuppanchavadi Kurinjipadi Taluk Cuddalore district
Mr. M.Mujefur Rehman B/123,Millath Nagar Mangalampettai Cuddalore District	Mr. K. Kannathasan Senthamil Natural Farming Centre Murugankudi Thittakudi taluk Cuddalore district
Special Invitees	
Dr. K. Nageswari Professor and Head Vegetables Research Station Palur, Cuddalore District	Dr. M.Jayachandran, Professor and Head Sugarcane Research Station Cuddalore -1

The meeting was commenced with lighting of Kuthuvillakku by the dignitaries. The Programme Coordinator of KVK, Vriddhachalam, Dr. S. Kannan welcomed the August gathering. He presented the action taken report on the recommendations and suggestions made during the 20th SAC meeting. The salient achievements of OFT's, FLD's, trainings and other extension activities conducted during the year 2016-17 were presented by the SMS of the KVK.

During the meeting the following recommendations were given by the chairman and members for action plan of forth coming year.

The Director of Extension Education, TNAU, Coimbatore & Chairman, SAC

- Effectiveness of the training programmes should be done by all SMS (pre and post evaluation)
- Mass production of bio-inoculants such as *Trichoderma viride*,*Pseudomonas fluorescens* shall be undertaken.
- A meeting involving of Directorate of Agri Business Development, TNAU, Coimbatore shall be organized in order to sensitize the agri business opportunities to the entrepreneurs of Cuddalore district.
- The Progressive farmers/ entrepreneurs shall be encouraged to apply for various awards under different institutions.
- More number of farmer participants shall be included in WhatsApp group.
- Farmer Scientist Forum shall be established.
- Soil nutrient analysis should be done and soil health cards should be issued to the farmers.
- Technology dissemination through radio talks is to be done effectively through All India Radio, Pondicherry.

- Farmer database should be strengthened by enrolling a minimum of 200 farmers per month.

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

- Minor millets for saline soils of Parangipettai block shall be identified and provided to the farmers so as to promote minor millet cultivation.
- New hybrids/varieties in casuarina shall be demonstrated in Cuddalore district.

Dr. R.Usha Kumari, Professor and Head, Regional Research Station, Vridhachalam

- Farmer participatory seed production in crops *viz*., paddy, groundnut and gingely shall be done.

Dr. R. Alex, Horticulture Officer, Vriddhachalam

- A programme on various management strategies in marigold shall be undertaken so as to enhance the yield and quality as it is an emerging crop in the district.
- New high yielding varieties/ hybrids in bhendi with Yellow Vein Mosaic virus tolerance/resistance shall be assessed / demonstrated.

Th. D. Chandran, Regional Manager, TAFCORN, Vriddhachalam

- Training programme may be organized on latest state of art technologies in cashew, particularly on high density planting system, pruning and foliar spray etc.

Th. C. Natarajan, Progressive farmer, Sathyavadi village

- Awareness on usage of green fodder through trainings and demonstrations should be created.
- Training on management of milk yielding cows and value addition in milk has to be conducted.

Th. S.Ram Magesh, Progressive farmer, Vallam Thatchakadu, Parangipettai block

- Paddy varieties suitable for saline soils may be provided for commercial cultivation in salt affected soils of Parangipettai block.

2. DETAILS OF DISTRICT (2017-18)

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

S. No	Farming system/enterprise
1	Command areas
2	Irrigated agricultural system
3	Rainfed agricultural system
4	Livestock production
5	Sericulture
6	Inland aquaculture
7	Cashew Processing unit, Cashew nurseries
8	Value addition

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 Nitrogen ,medium in P and K	91679
2.	Sandy	Neutral to Saline pH, poor in water holding capacity, low in Nitrogen 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 Nitrogen, 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 ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 2017	0.0	37.0	25.9	74.9
May 2017	18.6	37.7	26.7	76.2
June 2017	37.8	37.7	27.6	67.7
July 2017	29.8	37.1	26.7	70.3
August 2017	93.29	35.3	25.8	59.2
September 2017	121	35.2	25.8	79.3
October 2017	100.4	33.9	24.6	73.2
November 2017	208	39.7	24.4	76.2
December 2017	163	30.0	22.6	83.3
January 2018	26.2	32.8	20.20	84.15
February 2018	0.0	33.9	20.8	79
March 2018	-	-	-	-

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

Category	Population (Nos)	Production
Cattle	337451	174 lakh litres
Crossbred	150.976	5412
Indigenous	23.562	777
Buffalo	19784	15.106
Sheep	59255	6968
Crossbred	-	--
Indigenous	-	--
Goats	305366	--
Pigs	**17827**	--
Crossbred	-	--
Indigenous	-	--
Rabbits	-	--
Poultry	3805549	165.121 lakh nos.
Hens	-	--
Desi	-	--

Improved	-	--
Ducks	11614	-
Turkey and others	-	-
Fish	-	-
Marine	57.5 km	426735
Inland	45 km	184753.44
Prawn	--	--
Scampi	--	--
Shrimp	--	--

2.7 Details of Adopted Villages (2017-18)
Year of adoption: 2017-18

Sl. No.	Taluk/ mandal	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Kurinjipadi	Kurinjipadi	Ayyan kurinjipadi	Paddy, Groundnut, Sesamum, Blackgram , Cumbu	Lack of awareness of newly released varieties Non availability of seeds in right time Lack of knowledgee on ICM and IPDM	Demonstraio n of ICM in paddy, groundnut, sesame, blackgram Fishculture and fodder cultivation

2.8 Priority/thrust areas

S. No	Thrust area
1	Evaluation and demonstration of new high yielding varieties and hybrids
2	Introduction of alternate cropping system and crop management practices
3	Integrated nutrient management for improving crop productivity and soil health
4	Improving the productivity of horticultural crops
5	Integrated pest and disease management
6	Farm mechanization for major oil seeds, cereals and horticultural crops
7	Self employment and entrepreneur development programmes
8	Problem soil management
9	Production and supply of quality seed / seedling materials
10	Water stress mitigation and water resource conservation
11	Integrated Farming System
12	Promotion of balanced Nutrition diet

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2017-18

OFT (Technology Assessment)				FLD (crop/enterprise/CFLDs)			
1				2			
Number of technologies		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
05	05	33	33	64.2	64.2	170	170

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	-	111	-	4833	-	536	-	2860
Rural youth	-	14	-	617	-	-	-	-
Extn. Functionaries	-	11	-	416	-	-	-	-

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
-	11.42	44	-	43564	571

3.b. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management				
Varietal Evaluation	Paddy	Assessing the performance of paddy varieties in salt affected soil	5	5
	Black gram	Assessment of black gram variety suitable for summer irrigated with special emphasis on YMV	10	10
	Turmeric	Assessment of Turmeric varieties at Cuddalore district	5	5
Integrated Pest Management	Groundnut	Assessment on pre and post harvest management technologies for aflotoxin contamination in groundnut	10	10
Integrated Crop Management	-	-	-	-
Integrated Disease Management	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-
Weed Management	-	-	-	-
Resource Conservation Technology	-	-	-	-
Farm Machineries	-	-	-	-
Integrated Farming System	-	-	-	-

Seed / Plant production	-	-	-	-
Post Harvest Technology / Value addition	-	-	-	-
Drudgery Reduction	-	-	-	-
Storage Technique	-	-	-	-
Others (Pl. specify)	Paddy	Assessment of glycemic responses of Traditional Paddy varieties	3	3
Total			**33**	**33**

Summary of technologies assessed under livestock by KVKs: NIL

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management	-	-	-	-
Evaluation of Breeds	-	-	-	-
Feed and Fodder management	-	-	-	-
Nutrition Management	-	-	-	-
Production and Management	-	-	-	-
Others (Pl. specify)	-	-	-	-
Total				

Summary of technologies assessed under various enterprises by KVKs : NIL

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
-	-	-	-	-

3.C. TECHNOLOGY ASSESSMENT IN DETAIL

(From technology please give full details under the broad thematic areas such as varietal evaluation, Nutrient management , pest and disease management, weed management, Integrated Crop Management, cropping systems, improve tools and implements, livestock enterprises,gender specific technologies etc)

(The format for preparing the same is furnished below)

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

1.	Thematic area	:	Varietal Evaluation
2.	Title of Technology Assessed	:	Assessing the performance ofpaddy varieties in salt affected soil
3.	Scientists involved	:	SMS (SS&AC) & SMS (PAT)
4.	Details of farming situation	:	Season : Rabi, 2017 Farming situation : Irrigated Soil type : Clay Fertility status : N- Low : P – Medium & K – High Seasonal rainfall : 480 Number of rainy days :9
5.	Problem definition / description	:	❖ Unaware of paddy variety suitable for salt affected ❖ Poor soil properties leads to lower productivity

6. Technology Assessed :

TO 1	TO2	TO3
Farmer practice	TRY 3	Gangavathi Sona (GGV-05-01)

7 Critical inputs given: (along with quantity as well as value)

Critical inputs	Quantity	Value
Paddy TRY 3	20 kg/ac	3000
Paddy Gangavathi Sona (GGV-05-01)	20 kg/ac	3000

8. Results: :

Table : Performance of the technology

Technology Option	*No.of trials*	*Yield (t/ha)*	*Net Returns (Rs. in)lakh.*	*B:C ratio*	*Data on Other performance indicators**
Farmers Practice (BPT 5204)	*5*	*5.38*	*29229*	*2.19*	*No. of productive tillers/hill- 17.2 No. of grains /panicle – 118.5*
Paddy TRY 3		*6.37*	*38702*	*2.61*	*No. of productive tillers/hill- 25.7 No. of grains /panicle – 139.9*
Paddy Gangavathi Sona (GGV-05-01)		*5.57*	*31284*	*2.28*	*No. of productive tillers/hill- 16.2 No. of grains /panicle – 125.8*

9 Description of the results

The results of trial showed that, among the three rice varieties viz., BPT, TRY 3 and Gangavathi Sona, the rice variety TRY 3 performed well in salinity affected soil when compared to other two rice varieties in terms of crop establishment and yield. The grain type of TRY 3 was medium and medium slender for Gangavathi Sona. The TRY 3 variety recorded higher yield when compared to others. Pest and disease incidence are more in gangavathi sona variety when compared to TRY 3 and check.

10. Feed back of the farmers involved:

The farmers were satisfied with the performance of TRY 3 rice variety in terms of yield as well economic returns. They showed interest to take-up TRY 3 for ensuing season in larger scale without any reluctance. The peer farmers showed keen interest on TRY 3 as their best alternate variety for salinity soil condition

11. Feed back to the scientist who developed the technology

The rice variety TRY 3 performed well under in soil saline soil. The crop establishment was satisfactory to given set of situation resulting in higher economic returns to the farmers due to its yield potential nature.

Require medium slunder paddy grain variety for salt affected soil

2. Assessment of black gram variety suitable for summer irrigated with special emphasis on YMV

1.	Thematic area	:	Varietal evaluation
2.	Title of Technology Assessed	:	Assessment of black gram variety suitable for summer irrigated with special emphasis on YMV
3.	Scientists involved	:	SMS (Agron.) and SMS (Pl.Patho.)
4.	Details of farming situation	:	Season : Summer, 2018 Farming situation : Irrigated Soil type : clay, clay loam Fertility status : N- Low ; P – Medium and K – High Seasonal rainfall : 320 Number of rainy days :2
5.	Problem definition / description	:	❖ Lack of awareness about suitable varieties of black gram in summer season ❖ In summer season YMV incidence were higher. Hence farmers were realized low yield in summer season when compared to other season. ❖ Lack of awareness on YMV resistant black gram varieties
6.	Technology Assessed	:	**TO 1**: Farmers practice (Black gram Var.T9) **TO2**: Black gram Var.ADT 5 **TO3**: Black gram Var.IPU 2-43
7	Critical inputs given: (along with quantity as well as value)		**Critical inputs*** / **Quantity** / **Value** Black gram Var.ADT 5 — 20 kgs — 2460 Black gram Var. IPU 2-43 — 20 kgs — 3000 Pulse wonder — 20 kgs — 3600 TNAU MN mixture — 10 kgs — 800 Yellow sticky trap — 30 nos. — 1500 *Freight charges extra, Trial is under progress

8.	Results:	:	

Table : Performance of the technology

Technology Option	*No.of trials*	*Yield (t/ha)*	*Net Returns (Rs. in) lakh./ha)*	*B:C ratio*	*Data on Other performance indicators* (YMV incidence %)*
Farmers Practice	**10**	1.09	0.23	1.84	4.15
Technology 1		1.21	0.26	1.88	2.25
Technology 2		1.32	0.31	2.04	0.6

9	Description of the results		17.3 per cent and 9.7 per cent higher yield was recorded higher in black gram variety IPU 2-43 than the farmers practice and ADT 5 respectively in summer season.YMV incidence was recorded lower in black gram variety IPU 2-43 (0.6%) when compared to farmer's practice (4.15 %) and ADT 5 (2.25 %).
10.	Feed back of the farmers involved:		In black gram variety IPU 2-43 is resistant to YMV incidence and recorded higher yield in summer season.
11.	Feed back to the scientist who developed the technology		Seed has to be supplied to the Department of Agriculture to the farming community for further area expansion.

3. Assessment of varieties of turmeric for Cuddalore district

1.	Thematic area	:	Varietal evaluation
2.	Title of Technology Assessed	:	Assessment of varieties of turmeric for Cuddalore district
3.	Scientists involved	:	SMS (Pl.Patho.), SMS(Agron.),
4.	Details of farming situation	:	Season : Kharif, 2018 Farming situation : Irrigated Soil type : Clay Fertility status : N- Low ; P – Medium and K – High Seasonal rainfall : 840 Number of rainy days : 21
5.	Problem definition / description	:	In Cuddalore district, turmeric is being cultivated in an area of 220 ha in Mangalore and Nallur block. The farmers from this region using local popular varieties viz., Attur local and Nariyappanur local varieties for cultivation purpose. The local varieties are susceptible for pest and disease incidence and rhizome rot disease is being observed regularly in the crop. Hence, the farmers were frequently encountered with yield reduction in the crop. A variety with high yielding, pest and disease tolerance is needed for this region of the farmers. Hence, due to needs, the KVK, Cuddalore intervened and proposed on farm trial on "Assessment of varieties of turmeric for cuddalore district" in the turmeric growing regions.
6.	Technology Assessed	:	

TO 1	TO2	TO3
Farmers practice (Attur local)	CO 2	IISR Pragati

7	Critical inputs given: (along with quantity as well as value)		

Critical inputs*	Quantity	Value
CO2	600 kg	7200
IISR Pragati	200 kg	10000

*Freight charges extra

8.	Results:	:	

Table : Performance of the technology

Technology Option	*No.of trials*	*Yield of rhizome (t/ha)*	*Net return*	*B:C*	*Total no. of days for maturity (days)*	*Rhizome rot incidence (%)*
TO 1: Farmers Practice- Attur local	*5*	*17.56*	*211890*	*3.05*	*206*	*7.81*
TO 2- CO 2		*19.25*	*223484*	*3.14*	*224*	*2.12*
TO3 2-IISR Pragati		*15.79*	*142081*	*2.40*	*168*	*4.51*

9	Description of the results	:	Two varieties of turmeric viz., CO 2 and IISR Pragati are taken in the OFT for assessment at Reddakurichi, Adari village area. The seed rhizome were bought from the MYRADA KVK, Erode and given to the farmers for cultivation. Initially, rhizome treatment with 0.3% copper oxychloride for 30 min was

			demonstrated to the farmers in order to minimize the disease incidence in growing stage. The crop growth was assessed in every stage. The farmers were taught with integrated crop management practices and regular weeding andffertilizer application was done to the crop by the farmers. The results of the trial indicated that CO 2 variety given higher yield and it recorded 8.56 tonne/ha of dried rhizome and where as another technology option IISR Pragati recorded lowest yield (6.79 tonne/ha) when compared to farmers practice in the trial. The higher net return was recorded from the variety CO2 and lowest return was recorded in IISR Pragati. The higher benefit cost ratio was observed from the CO 2 variety. Whereas, IISR Pragati matured very earlier and 168 days taken for maturity. The CO 2 variety taken longer period (224 days) for maturity when compared to farmers practice (Attur local: 206 days). Rhizome rot incidence was recorded as low in CO 2 variety (2.12 %) when compared to farmers practice (7.81%).
10.	Feed back of the farmers involved:	:	The CO 2 variety performed better and it possess less market value (Rs 70/kg of cured rhizome) when compared to local variety (Rs 87/kg of cured rhizome). Whereas, IISR Pragati is early matured and not performed well and it had very low market value (Rs 58/kg). The farmers feels that rhizome of IISR pragati had very poor quality.
11.	Feed back to the scientist who developed the technology	:	CO 2 variety performed better and it needs further demonstration for large scale adoption.

4. Assessment on pre and post harvest management technologies for aflotoxin contamination in groundnut

1.	Thematic area	:	Plant Protection
2.	Title of Technology Assessed	:	Assessment on pre and post harvest management technologies for aflotoxin contamination in groundnut
3.	Scientists involved	:	SMS (SST) & SMS(PAT)
4.	Details of farming situation	:	Season : Rabi, 2017 Farming situation : Irrigated Soil type : Sandy loam Fertility status : N- Low :, P – Medium & K – High Seasonal rainfall : 643 Number of rainy days :12
5.	Problem definition / description	:	❖ Single major crop in rainfed tracts ❖ Reduced kernal quality & Hampered export business ❖ Moisture and heat stress during pod development ❖ Improper storage of pods and storage room ❖ Health hazards - Carcinogenic, Estrogenic

- ❖ Improper management practices and adverse climatic conditions at harvest and after harvest are predisposing factors for post-harvest aflatoxin contamination.
- ❖ Significant grain deterioration caused by moulds also occurs during storage because of prevailing ambient conditions

6. Technology Assessed :

TO 1	TO2	TO3
Farmer practice	Soil application of neem cake or castor cake @ 500 kg/ha + Furrow application of *T. viride* or *T. harzianum* @ 2.5 kg/ha	Basal application of gypsum@200 kg/ha + Compost @ 2 tonnes/ha + Seed treatment with polymer @ 3 ml/kg of seed

7 Critical inputs given: (along with quantity as well as value)

Critical inputs	Quantity	Value
Neem Cake	980 kg	23044
Trichoderma viride	40 kg	4000
Polymer	2 litres	1800

8. Results: :

Table : Performance of the technology

Technology Option	***No.of trials***	***Yield (t/ha)***	***Net Returns (Rs. in ha)***	***B:C ratio***	***Data on Other performance indicators****
Farmers Practice	*10*	2.62	20416	1.16	Root rot – 30% Number of pods/plant - 20
*Technology 1(*Soil application of neem cake or castor cake @ 500 kg/ha + Furrow application of *T. Viride* @ 2.5 kg/ha*)*		3.98	89677	1.69	Root rot – 10% Number of pods/plant - 33
*Technology 2 (*Basal application of gypsum@200 kg/ha + Compost @ 2 tonnes/ha + Seed treatment with polymer @ 3 ml/kg of seed*)*		3.90	83947	1.64	Root rot – 16% Number of pods/plant - 31

9 Description of the results

The growth and yield attributes were on par with both the technology. Among them, soil application of neem cake recorded highest yield of 39.48 q/ha (34 % increased yield over control). The yield attributing characters viz., No. of pods /plant and root rot incidence were on par with both technologies.

10. Feed back of the farmers involved:

- ❖ The farmers have realized the soil application of neem cake along with furrow application of *Trichoderma viride* will effectively control the root rot as well as aflotoxin contamination especially during kharif and rabi season.
- ❖ Integrated strategies such as resistant genotypes, soil amendments and quite recently Aflasafe should be demonstrated to the small-holder growers. Low-cost strategies such as improved seed, clean farm operations, quick drying, sorting and used of improved storage methods, which are within the remit of the smallholder growers 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 locally available quality seed, and also to create the awareness about new technology among

			the farmers
11.	Feed back to the scientist who developed the technology		❖ Require short duration with bold kernals and drought tolerance variety. Most rainfed lowlands areas have drought problems and varieties having tolerance to both stresses could be a way to enhance and stabilize production.

5. Assessment of glycemic responses of Traditional Paddy varieties

1.	Thematic area	:	Rice
2.	Title of Technology Assessed	:	Assessment of glycemic responses of Traditional Paddy varieties
3.	Scientists involved	:	Dr. S. Kannan, (Programme Coordinator)
4.	Details of farming situation	:	-
5.	Problem definition / description	:	Paddy is an important crop in that area. Most of the peoples affected by diabetic condition. Lack of knowledge on health benefits of traditional paddy variety.
6.	Technology Assessed	:	

TO 1	TO2	TO3
(Farmer practice) Milled Rice	Mappilai samba rice flakes	Red kavuni rice flakes

7	Critical inputs given: (along with quantity as well as value)		

Critical inputs	Quantity	Value
Rice flakes	15kg	2100
Estimation of available carbohydrates in rice	3	1000
Glucometer and strips	3 Nos and 3box	4200

8. Results:

9. Performance of the technology

Table:

Technology Option	No.of trials	Carbohydrate content (gm/100 gm)	Crude Protein (gm/100 gm)	Glycemic index (%)
TO 1- Milled Rice –BPT 5220(Existing practice)	3	90.10	7.25	68.50
TO2- Mapillai Samba Rice flakes		85.50	11.20	55.65
TO3-Red Kavuni rice flakles		82.40	12.40	53.10

T 0- *Farmers Practice -Milled Rice Flakes*

No.of interventions	Carbohydrate content (gm/100 gm)	Pre prandial blood glucose level (mg/dl	Post prandial blood glucose level (mg/dl)			
			30 (min)	60 (min)	90 (min)	120 (min)
1	90.10	110	154	160	156	118
2	90.10	98	140	145	144	105
3	90.10	105	152	158	142	108
4	90.10	118	158	162	154	120
5	90.10	106	153	155	142	116

T1: *Recommended Practice- Mapillai Samba Rice flakes*

No.of interventions	Carbohydrate content (gm/100 gm)	Pre prandial blood glucose level (mg/dl	Post prandial blood glucose level (mg/dl)			
			30 (min)	60 (min)	90 (min)	120 (min)
1	85.50	115	128	139	135	112
2	85.50	108	124	136	131	105
3	85.50	106	121	140	139	102
4	85.50	116	134	152	147	111
5	85.50	108	123	145	141	101

T2: *Recommended Practice- Red Kavuni Rice flakes*

No.of interventions	Carbohydrate (gm)	Pre prandial blood glucose level (mg/dl	Post prandial blood glucose level (mg/dl)			
			30 (min)	60 (min)	90 (min)	120 (min)
1	82.40	112	124	140	138	110
2	82.40	110	123	153	148	106
3	82.40	102	114	149	144	101
4	82.40	104	127	151	147	102
5	82.40	111	125	149	145	110

9	Description of the results		• In the study, the people with good health condition were selected for the assessment of glucose level. • The result of the existing practices shows that there is no deviation in the glucose level even after consumption of food at prescribed time. • The result of the studies shows that the lower glucose level were observed from the person who consumed Red kavuni rice flakes and followed by Mappilai samba rice flakes. • The reduction of glucose was observed from the technology option when compared to the existing practices
10.	Feed back of the farmers involved:		❖ Red kavuni rice flakes is good when compared to milled rice flakes ❖ Technology option gives much better result when compared to existing practices ❖ The flavor and taste of rice flakes are good ❖ Colour of rice flakes is appealing ❖ lower blood glucose level is observed among the beneficiary
11.	Feed back to the scientist who developed the technology		❖ The performance of traditional paddy varieties is excellent when compared with ordinary milled rice flakes. ❖ Slow release of glucose level in blood- Because the fibre content is more in traditional rice flakes.

**** Other performance indicators: such as pest intensity, weed population, test weight, duration etc***

3.d. FRONTLINE DEMONSTRATION

a. Follow-up of FLDs implemented during previous years : NIL

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
-	-	-	-	-	-	-	-

**** Thematic areas as given in Table 3.1 (A1 and A2)***

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, 2017	ICAR	4	4	2	8	10	-
		Crop Improvement	Demonstration of paddy ADT(R) 50 in SRI system in Cuddalore district	Samba, 2017	ICAR	4	4	2	8	10	-
		Crop Protection	Demonstration of ecological engineering practices for samba paddy	Samba, 2017	ICAR	4	4	1	9	10	-
2.	Millets	Varietal demonstration	Demonstration of COH(M)6 maize hybrid at Cuddalore District	Jan-Feb,2018	ICAR	4	4	3	7	10	-
			Demonstration of Integrated crop management in kodo millet CO3	Kharif, 2017	ICAR	4	4	2	8	10	-

3.	Oil seeds	Crop Protection	Demonstration of management of stem rot in groundnut	Irrigated	ICAR	8	8	3	17	20	
		Crop Improvement	Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	Rabi 2017	ICAR	2	2	2	8	10	-
		Crop Improvement	Demonstration and seed production in farmer participatory mode in Gingelly var.VRI 3	Rabi 2017	ICAR	12	12	7	23	30	-
4.	Cotton	Varietal demonstration	Demonstration of K 12 cotton variety with Integrated crop management	Rabi, 2017	ICAR	4	4	1	9	10	➢ Nonavailability of cotton seed ➢ Seeds received after season
5.	Vegetables	Crop Protection	Demonstration of IPDM practices in chilli	Rabi, 2017	ICAR	4	4	2	8	10	-
6	Banana	Crop management	Demonstration of NRCB Shakti in banana	Annual crop, 2017-18	ICAR	4	4	2	8	10	-
7	Watermelon	Crop management	Demonstration of ICM in watermelon	Rabi, 2017-18	ICAR	3.2	3.2	1	7	8	-
8	Sirukeerai	Crop Improvement	Demonstration of PLR 1 Sirukeerai	Rabi 2017-18	ICAR	2	2	2	8	10	-
9	Cashew	Crop management	Demonstration of Intercropping and ICM in cashew	Annual 2017-18	ICAR	2	2	-	5	5	-
10	Moringa	Value addition	Demonstration and production of dehydrated moringa leaves powder	Annual 2017-18	ICAR	1	2	-	2	2	-

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	Rabi 2017	Irrigated	Clay loam	L	M	H	Pulses	20.09.17	10.01.18	504	8
Paddy	Samba, 2017	Irrigated	Clay	L	M	H	Green manure	04.09.17	19.01.18	875.0	13
Paddy	Samba, 2017	Irrigated	Clay soil	L	M	H	Green manure	29.08.17	01.02.18	478.9	8
Groundnut	Rabi 2017	Irrigated	Sandy loam	L	M	H	Groundnut	22.11.17	10.04.18	643.4	12
Groundnut	Rabi 2017	Irrigated	Sandy loam soil	L	M	H	Cumbu	23.11.17	24.03.18	504	8
Sesame	Rabi 2017	Irrigated	Sandy loam soil	L	M	H	Groundnut	20.03.18	Demonstration is under progress	504	8
Maize	Jan-Feb	Irrigated	Red loam-clay loam	L	M	H	Black gram/Paddy	Second of Jan	April last week	12	1
Kodomillet	Rabi 2017	Rainfed	Sandy loam	L	M	H	Maize	15.10.17	21.02.18	407	4
Chilli	Rabi 2017	Irrigated	Sandy loam	L	M	H	Sugarcane	07.12.17	23.03.18	504	8
Banana	Annual crop, 2017-18	Irrigated	Red sandy laom	L	M	M	Sugarcane			1112	22
Watermelon	Rabi, 2017-18	Irrigated	Sandy loam	L	M	M	Paddy	29.12.17	01.03.18	504	8
Sirukeerai	Rabi 2017-18	Irrigated	Sandy loam	L	M	M	Brinjal	01.12.17	25.12.17	504	8
Cashew	Annual 2017-18	Irrigated	Red loam	L	M	M	-	-	Demonstration is under progress	942	22
Moringa	Annual 2017-18	Value added product prepration									

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	❖ 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 has suited to the climatic condition and soil of the region," says Mr. Velmurugan from Agaram Alampadi 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 100 percent more than the BPT variety. More and more farmers would adopt CO 52 paddy variety in the next year
Demonstration of paddy ADT(R) 50 in SRI system in Cuddalore district	❖ Farmers felt that even if there was a delay in transplantation owing to delay in release of water or late arrival monsoon, the crop could not be harvested and such delays would have adverse effects on yield parameters and flowering of crop. Since the variety is photosensitive and the sowing will be taken during first week of August. ❖ Farmers felt that pest and disease occurrence was more during November – December and it will reflect in flowering.
Demonstration of ecological engineering practices for pest and disease management in samba paddy	❖ Pest and disease problem is major constrain in samba paddy. The ecological engineering practices in paddy is altered and reduced the incidence of major pest in paddy crop. The raising of border crop viz., marigold, blackgram and sunflower is taken in the trial. ❖ The farmers have realized impact of border crop on incidence of leaf folder and stem borer.
Demonstration of maize hybrid COH(M)6 at Cuddalore District	❖ TNAU Maize hybrid COH (M)6 performed well in terms of yield and foliar spray of TNAU maize maxim at silking and tasseling stage has played effective role on getting higher yield
Demonstration of Integrated crop management in kodo millet CO3	❖ The farmers have realized that the variety is suitable for rainfed especially during October- November. ❖ The number of productive tillers per hill was more compare to local varieties ❖ Application of MN-Mixture increase the grain yield when compared to check
Demonstration of management of stem rot in groundnut	❖ The seed treatment and soil treatment with *Trichoderma viride* is effective for the stem rot management. The famers realized the benefits of use of *T. viride* on stem rot disease in groundnut.
Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	❖ 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.
Demonstration and seed production in farmer participatory mode in Gingelly var.VRI 3	❖ 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
Demonstration of IPDM practices in	❖ The incidence of thrips and mite in chilli is reduced in IPM demonstrated plot. The incidence of larval pest is also contained and

chilli	the farmers felt that IPM practices useful for the chilli especially during the summer season.
Demonstration of NRCB Shakti in banana	❖ There was 25 % increase in yield over the farmers practice. ❖ The BCR realized was 3.17
Demonstration of ICM in watermelon	❖ There was 24.5 % increase in yield over the farmers practice. ❖ The BCR realized was 3.27 ❖ The number of fruits per vine and fruit weight were increased over the Non ICM practice.
Demonstration of PLR 1 Sirukeerai	❖ There was 23.9 % increase in yield over the farmers practice. ❖ The BCR realized was 2.24
Demonstration of Intercropping and ICM in cashew	❖ ICM with intercropping recoreded higher 100 nut weight, shelling percentage of cashew nut and 22.21 percent increase in yield of cashew over check ❖ The farmers realized additional net income of Rs.51667/- per hectare through ICM + intercropping with blackgram.
Demonstration of K 12 cotton variety with Integrated crop management	❖ The FLD is in progress.
Demonstration and production of dehydrated moringa leaves powder	❖ The powder prepared under FLD is good for human health due to rice in Fe content. This may be suitable for girls and child. Since, the raw material is low cost and cheap, unemployed woman can easily engage as entrepreneur in this area.

Farmers' reactions on specific technologies

S. No	Feed Back
Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	❖ 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 seeds
Demonstration of paddy ADT(R) 50 in SRI system in Cuddalore district	❖ Farmer need suitable variety for drought tolerance as well as delayed transplanting condition for longer duration.
Demonstration of maize hybrid COH(M) 6 at Cuddalore District	Farmers were satisfied with TNAU Maize hybrid COH (M)6 and Farmers were well aware of INM practices (Balanced use of major and micro nutrients)
Demonstration of Integrated crop management in kodo millet CO3	Farmers need CO 3 variety due to higher yield record when compare to other local variety
Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	❖ 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 small holder farmers ❖ After the new varieties have been disseminated in the wider farming 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 ❖ Farmers need fully farm mechanization in groundnut particularly pulling of plants and stripping operation
Demonstration of NRCB Shakti in banana	❖ The fruit weight was high and were shining ❖ The fruits fetched more price in the market than Non ICM practice

Demonstration of ICM in watermelon	❖ Uniform sized, shinning fruits
Demonstration of PLR 1 Sirukeerai	❖ Higher yield of greens and were dark green and fresh

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days				
	Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	1	18.01.18	23	-
	Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	1	20.03.18	28	-
	Demonstration and seed production in farmer participatory mode in Gingelly var.VRI 3	1	21.03.15	55	-
	Demonstration of ecological engineering practices for samba paddy	1	23.02.18	28	-
	Demonstration of Integrated crop management in kodo millet CO3	1	21.02.18	25	-
	Demonstration of ICM in watermelon	1	28.02.18	30	-
	Demonstration of NRCB Shakti in banana	1	14.02.18	35	-
2	Farmers Training	10	-	473	
3	Media coverage	20	-	-	-
4	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																			
Oilseeds																			
Groundnut	Crop Protection	Demonstration of management of stem rot in groundnut	VRI 2	VRI 2	20	8	42.01	34.52	36.99	28.57	22.76	125034	203489	78455	1.62	121632	157140	35507	1.29

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										
Groundnut	Crop Improvement	Demonstration of HYV, seed production in participatory mode in groundnut var.VRI 8	VRI 8	VRI 2	10	2	44.42	39.62	42.02	29.54	29.7	98767	233134	134367	2.36	109736	161403	51666	1.47
Sesame	Crop Improvement	Demonstration and seed production in farmer participatory mode in Gingelly var.VRI 3	VRI 3	Local	30	12			14.16	6.6	53.38	35912	123958	88047	3.44	27867	61250	33383	2.19
Cereals																			
Paddy	Crop Protection	Demonstration of ecological engineering practices for samba paddy	CR 1009	CR 1009	10	4	72.42	64.25	67.21	62.72	6.60	44451	107544	63092	1.41	45948	103489	57541	1.25
	Crop Improvement	Demonstration of paddy variety CO 52 in SRI system in Cuddalore district	CO 52	BPT5204	10	4	80.62	71.25	75.93	55.12	29.20	52952	116550	63599	2.20	61740	96469	34729	1.56
	Crop Improvement	Demonstration of paddy ADT(R) 50 in SRI system in Cuddalore district	ADT 50	CR 1009	10	4	69.37	54.37	61.87	57.56	6.96	57606	99900	42294	1.73	62398	87495	25097	1.40
Commercial 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										
Cotton	Varietal demonstration	Demonstration of K 12 cotton variety with Integrated crop management	K12	Bt cotton	10	4	Trial is in progress												
Millets																			
Maize	Varietal demonstration	Improved variety COH (M) 6 Spacing TNAU MN Mixture TNAU maize maxim	COH(M)6	NK 6240	10	4	94.25	79.55	87.51	70.29	19.7	65487	131265	65778	2.00	60987	105434	44447	1.73
Kodomillet	Varietal demonstration	Demonstration of Integrated crop management in kodo millet CO3	CO 3	Local variety	10	4	17.95	16.12	17.38	13.04	24.97	10960.14	27300.10	16339.96	2.49	9202.80	18460.60	9257.80	2.01
Vegetables	Crop Protection	Demonstration of IPDM practices in chilli	Private hybrid-Parool		10	4	197.1	172.4	181.6	160.8	11.56	45409	145264	99854	3.19	43555	128144	84859	2.94
Sirukeerai (Amaranthus)	Demo of variety	Demonstration of PLR 1 Sirukeerai	PLR-1	Local	10	2	83.46	70.28	78.35	63.25	23.90	22750	50928	28178	2.24	20750	38583	17833	1.86
Fruits																			
Banana	INM	Demonstration of NRCB Shakti (Micronutrient formulation) in banana	Poovan	Poovan	10	4	720	622.5	673.0	538.5	24.98	128238	406959	278721	3.17	121391	312721	191330	2.57
Watermelon	ICM	Demonstration of ICM in watermelon	Pakeeza	Pakeeza	8	3.2	345.00	322.5	334.38	268.44	24.56	80048	261356	181309	3.27	74344	207248	132904	2.79
Plantation crops																			
Cashew (Demo is in progress)	ICM	Demonstartion of intercropping and ICM	VRI-3	VRI-3	5	2	5.16*	4.37*	14.25	11.66	22.21	104450	276159	161709	2.65	92445	202487	110042	2.19
Spices and condiments																			
Flowers																			

* 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: 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

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters (kg/ha)		% change in major parameter	Other parameter		Economics of demonstration (Rs/ha)				Economics of check (Rsha)			
					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	21.7	Average weight individual fish 900 g	Average weight 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

<table>
<tr><th>Category</th><th>Name of technology</th><th>No. of demonstrations</th><th>Name of observations</th><th>Demonstration</th><th>Check</th></tr>
<tr><td>Moringa leaves</td><td>Demonstration of dried moringa leaves, powder and moringa leaves value added products like Idli powder and soup mix.</td><td>2</td><td>Time for dehydration, recovery percentage, organoleptic properties and BCR</td><td>

The dehydration time noted 48-60 hours in 50- 55° c.
Recovery percentage 150 g dried leaves obtained from 1000 g fresh leaves and from 150 g powder obtained.
Based on the organoleptic score 3- 5 per cent of dried moringa leaf powder for accepted for all. Because more than five per cent mixing of moringa powder gives bitter taste of the products.

<table>
<tr><th>List of the moringa products</th><th>Cost (Rs. /Kg)</th></tr>
<tr><td>Fresh moringa leaves (250g/ bundle Rs 10/-)</td><td>40</td></tr>
<tr><td>Dried moringa leaves</td><td>600</td></tr>
<tr><td>Dried moringa leaf powder</td><td>800</td></tr>
<tr><td>Dried Moringa idli mix</td><td>300</td></tr>
<tr><td>Dried Moringa soup mix</td><td>180</td></tr>
</table>
Organoleptic evaluation:
<table>
<tr><th>Particulars</th><th>Colour</th><th>Flavour</th><th>Taste</th><th>Appearance</th><th>Overall Acceptability</th></tr>
<tr><td>Dried Moringa leaves</td><td>4</td><td>4</td><td>4</td><td>4</td><td>Good</td></tr>
<tr><td>Dried Moringa leaf Powder</td><td>3</td><td>4</td><td>4</td><td>3</td><td>Good</td></tr>
<tr><td>Dried Moringa idli powder</td><td>5</td><td>5</td><td>5</td><td>5</td><td>Good</td></tr>
<tr><td>Dried Moringa soup mix</td><td>4</td><td>5</td><td>4</td><td>4</td><td>Good</td></tr>
</table>
Performance index:

5:Excellent 4: very Good 3: Good 2: Fair 1: Not acceptable

</td><td>Using moringa leaves</td></tr>
</table>

FLD on Farm Implements and Machinery: NIL

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total

FLD on Other Enterprise: Kitchen Gardening: NIL

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)

FLD on Demonstration details on crop hybrids ***(Details of Hybrid FLDs implemented during 2016-17):*** **NIL**

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Oilseed crop													
Pulse crop													
Cereal crop													
Vegetable crop													
Fruit crop													
Other (specify)													

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)			
				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										
Groundnut																				
Cluster 1	ICAR - ATARI	Integrated crop management	Improved variety Seed treatment with Rhizobium, Phosphobacteria, *Trichoderma viride*, Seed drill sowing Post emergence application of herbicide Spraying of Micro nutrient supplement – Groundnut rich & Groundnut tonic Application of Gypsum & $ZnSo_4$ Mechanization of harvesting	VRI 8	VRI 2	15	6	44.42	39.62	42.02	29.54	29.70	99542	230525	130983	2.31	109736	161403	51667	1.47
Cluster 2	ICAR - ATARI	Integrated crop management	Improved variety Seed treatment with Rhizobium, Phosphobacteria, *Trichoderma viride*, Seed drill sowing Post emergence application of herbicide Spraying of Micro nutrient supplement – Groundnut rich & Groundnut tonic Application of Gypsum & $ZnSo_4$ Mechanization of harvesting	VRI 8	VRI 2	30	12	48.65	42.37	45.51	28.56	37.24	98630	240738	142108	2.44	108586	149940	41354	1.38

Cluster 3	ICAR - ATARI	Integrated crop management	Improved variety Seed treatment with Rhizobium, Phosphobacteria, *Trichoderma viride*, Seed drill sowing Post emergence application of herbicide Spraying of Micro nutrient supplement – Groundnut rich & Groundnut tonic Application of Gypsum & $ZnSo_4$ Mechanization of harvesting	GJG22	VRI 2	30	12	68.75	44.56	56.65	29.03	48.76	100297	254923	154626	2.53	100108	152407	52299	1.52
Pulses																			
Cluster 1	ICAR - ATARI	Integrated crop management	Seed treatment with Rhizobium, Phosphobacteria, *Pseudomonas fluorescens* Spraying of pulse wonder Application of ZnSo4 IPM practices	CO6	VBN 3	50	20	7.76	5.95	6.96	5.80	20.0	26150	40600	14450	1.552581	29520	48720	19200	1.65
Cluster 1	ICAR - ATARI	Integrated crop management	Seed treatment with Rhizobium, Phosphobacteria, *Pseudomonas fluorescens* Spraying of pulse wonder Application of ZnSo4 IPM practices	VBN 3	Local variety	50	20	7.24	5.24	6.52	5.71	14.18	27560	34260	6700	1.24	30450	42380	11930	1.39

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

FLD on Fisheries : NIL

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)

* 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)

FLD on Women Empowerment: NIL

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

FLD on Farm Implements and Machinery: NIL

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total

4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	1	34	3	37	12	4	16	46	7	53
Resource Conservation Technologies	-	-	-	-	-	-	-	-	-	-
Cropping Systems	1	29	11	40	17	13	30	46	24	70
Crop Diversification	1	36	7	43	7	15	22	43	22	65
Integrated Farming	2	62	21	83	6	1	7	68	22	90
Micro Irrigation/irrigation	1	41	11	52	-	-	-	41	11	52
Seed production	3	128	6	134	48	13	61	176	19	195
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Soil & water conservatioin	-	-	-	-	-	-	-	-	-	-
Integrated nutrient management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**9**	**330**	**59**	**389**	**90**	**46**	**136**	**420**	**105**	**525**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	1	48	3	51	3	2	5	51	5	56
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	1	2	15	17	1	4	5	3	19	22
Exotic vegetables	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	1	30	2	32	3	-	3	33	2	35
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (a)	**3**	**80**	**20**	**100**	**7**	**6**	**13**	**87**	**26**	**113**
b) Fruits										
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	1	21	2	23	5	2	7	26	4	30
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (b)	**1**	**21**	**2**	**23**	**5**	**2**	**7**	**26**	**4**	**30**
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (c)	-	-	-	-	-	-	-	-	-	-
d) Plantation crops										
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	2	10	65	75	3	12	15	13	77	90
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (d)	**2**	**10**	**65**	**75**	**3**	**12**	**15**	**13**	**77**	**90**
e) Tuber crops										
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (f)	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants										
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	1	20	3	23	5	3	8	25	6	31
Post harvest technology and value addition	1	16	2	18	4	0	4	20	2	22

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (g)	2	36	5	41	9	3	12	45	8	53
GT (a-g)	**8**	**147**	**92**	**239**	**24**	**23**	**47**	**171**	**115**	**286**
III Soil Health and Fertility Management										
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	1	101	26	127	-	-	-	101	26	127
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Balance use of fertilizers	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	1	36	4	40	-	-	-	36	4	40
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**2**	**137**	**30**	**167**	-	-	-	**137**	**30**	**167**
IV Livestock Production and Management										
Dairy Management	-	-	-	-	-	-	-	-	-	-
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed & fodder technology	-	-	-	-	-	-	-	-	-	-
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing and cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	4	40	78	118	10	28	38	50	106	156
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**4**	**40**	**78**	**118**	**10**	**28**	**38**	**50**	**106**	**156**
VI Agril. Engineering										
Farm Machinary and its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
VII Plant Protection										
Integrated Pest Management	3	75	12	87	12	3	15	87	15	102
Integrated Disease Management	4	88	12	100	6	2	8	94	14	108

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Bio-control of pests and diseases	4	92	24	116	21	15	36	113	39	152
Production of bio control agents and bio pesticides	3	63	23	86	15	11	26	78	34	112
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**14**	**318**	**71**	**389**	**54**	**31**	**85**	**372**	**102**	**474**
VIII Fisheries										
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	1	22	3	25	10	5	15	32	8	40
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**22**	**3**	**25**	**10**	**5**	**15**	**32**	**8**	**40**
IX Production of Inputs at site										
Seed Production	1	47	1	48	18	4	22	65	5	70
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	2	61	8	69	7	3	10	68	11	79
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	2	51	21	72	4	2	6	55	23	78
Organic manures production	1	27	5	32	2	1	3	29	6	35
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-colonies and wax sheets	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom Production	2	35	7	42	3	2	5	38	9	47
Apiculture	1	94	18	112	12	7	19	106	25	131
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**9**	**315**	**60**	**375**	**46**	**19**	**65**	**361**	**79**	**440**
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	67	10	77	31	17	48	98	27	125
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**67**	**10**	**77**	**31**	**17**	**48**	**98**	**27**	**125**
XI Agro-forestry										
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	**48**	**1376**	**403**	**1779**	**265**	**169**	**434**	**1641**	**572**	**2213**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	3	96	6	102	33	12	45	129	18	147
Resource Conservation Technologies	1	18	6	24	4	2	6	22	8	30
Cropping Systems	1	35	2	37	13	5	18	48	7	55
Crop Diversification	2	48	1	49	31	6	37	79	7	86
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Micro Irrigation/irrigation	1	34	6	40	8	2	10	42	8	50

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Seed production	3	84	6	90	21	17	38	105	23	128
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	7	157	24	181	39	6	45	196	30	226
Soil & water conservatioin	-	-	-	-	-	-	-	-	-	-
Integrated nutrient management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**18**	**472**	**51**	**523**	**149**	**50**	**199**	**621**	**101**	**722**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	1	31	6	37	2	2	4	33	8	41
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	-	-	-	-	-	-	-	-	-	-
Exotic vegetables	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (a)	**1**	**31**	**6**	**37**	**2**	**2**	**4**	**33**	**8**	**41**
b) Fruits										
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	1	27	2	29	2	2	4	29	4	33
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (b)	**1**	**27**	**2**	**29**	**2**	**2**	**4**	**29**	**4**	**33**
c) Ornamental Plants										
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (c)	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
d) Plantation crops										
Production and Management technology	2	162	14	176	10	8	18	172	22	194
Processing and value addition	4	140	65	205	27	15	42	167	80	247
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (d)	**6**	**302**	**79**	**381**	**37**	**23**	**60**	**339**	**102**	**441**
e) Tuber crops										
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices										
Production and Management technology	1	26	7	33	7	2	9	33	9	42
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (f)	**1**	**26**	**7**	**33**	**7**	**2**	**9**	**33**	**9**	**42**
g) Medicinal and Aromatic Plants										
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (g)	-	-	-	-	-	-	-	-	-	-
GT (a-g)	**9**	**386**	**94**	**480**	**48**	**29**	**77**	**434**	**123**	**557**
III Soil Health and Fertility Management										
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	-	-	-	-	-	-	-	-	-	-
Management of Problematic soils	-	-	-	-	-	-	-	-	-	-
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Balance use of fertilizers	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**-**	**41**	**41**	**-**	**18**	**18**	**-**	**59**	**59**
IV Livestock Production and Management										
Dairy Management	-	-	-	-	-	-	-	-	-	-
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed & fodder technology	1	6	10	16	3	2	5	9	12	21
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**6**	**10**	**16**	**3**	**2**	**5**	**9**	**12**	**21**
V Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing and cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	5	65	120	185	15	40	55	80	160	240
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**5**	**65**	**120**	**185**	**15**	**40**	**55**	**80**	**160**	**240**
VI Agril. Engineering										
Farm Machinary and its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
irrigation systems										
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	1	15	8	23	6	9	15	21	17	38
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**15**	**8**	**23**	**6**	**9**	**15**	**21**	**17**	**38**
VII Plant Protection										
Integrated Pest Management	7	214	24	238	26	5	31	240	29	269
Integrated Disease Management	11	301	46	347	24	12	36	325	58	383
Bio-control of pests and diseases	6	124	35	159	18	6	24	142	41	183
Production of bio control agents and bio pesticides	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**24**	**639**	**105**	**744**	**68**	**23**	**91**	**707**	**128**	**835**
VIII Fisheries										
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	1	25	4	29	1	-	1	26	4	30
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**25**	**4**	**29**	**1**	**-**	**1**	**26**	**4**	**30**
IX Production of Inputs at site										
Seed Production	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	2	41	11	52	6	1	7	47	12	59

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	1	-	41	41	-	18	18	-	59	59
Organic manures production	-	-	-	-	-	-	-	-	-	-
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-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	**3**	**41**	**52**	**93**	**6**	**19**	**25**	**47**	**71**	**118**
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	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	**63**	**1649**	**485**	**2134**	**296**	**190**	**486**	**1945**	**675**	**2620**

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	4	130	9	139	45	16	61	175	25	200
Resource Conservation Technologies	1	18	6	24	4	2	6	22	8	30
Cropping Systems	2	64	13	77	30	18	48	94	31	125
Crop Diversification	3	84	8	92	38	21	59	122	29	151
Integrated Farming	2	62	21	83	6	1	7	68	22	90
Micro Irrigation/irrigation	2	75	17	92	8	2	10	83	19	102
Seed production	6	212	12	224	69	30	99	281	42	323
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	7	157	24	181	39	6	45	196	30	226
Soil & water conservatioin	-	-	-	-	-	-	-	-	-	-
Integrated nutrient management	-	-	-	-	-	-	-	-	-	-
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**27**	**802**	**110**	**912**	**239**	**96**	**335**	**1041**	**206**	**1247**
II Horticulture	-	-	-	-	-	-	-	-	-	-
a) Vegetable Crops	-	-	-	-	-	-	-	-	-	-
Production of low value and high valume crops	2	79	9	88	5	4	9	84	13	97
Off-season vegetables	-	-	-	-	-	-	-	-	-	-
Nursery raising	1	2	15	17	1	4	5	3	19	22
Exotic vegetables	-	-	-	-	-	-	-	-	-	-
Export potential vegetables	-	-	-	-	-	-	-	-	-	-
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation	1	30	2	32	3	-	3	33	2	35
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (a)	**4**	**111**	**26**	**137**	**9**	**8**	**17**	**120**	**34**	**154**
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	2	48	4	52	7	4	11	55	8	63
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (b)	**2**	**48**	**4**	**52**	**7**	**4**	**11**	**55**	**8**	**63**
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (c)	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	2	162	14	176	10	8	18	172	22	194
Processing and value addition	6	150	130	280	30	27	57	180	157	337
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (d)	**8**	**312**	**144**	**456**	**40**	**35**	**75**	**352**	**179**	**531**
e) Tuber crops										
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	1	26	7	33	7	2	9	33	9	42
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (f)	**1**	**26**	**7**	**33**	**7**	**2**	**9**	**33**	**9**	**42**
g) Medicinal and Aromatic Plants										
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	1	20	3	23	5	3	8	25	6	31

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Post harvest technology and value addition	1	16	2	18	4	-	4	20	2	22
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total (g)	**2**	**36**	**5**	**41**	**9**	**3**	**12**	**45**	**8**	**53**
GT (a-g)	**17**	**533**	**186**	**719**	**72**	**52**	**124**	**605**	**238**	**843**
III Soil Health and Fertility Management										
Soil fertility management	-	-	-	-	-	-	-	-	-	-
Integrated water management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Production and use of organic inputs	1	-	41	41	-	18	18	-	59	59
Management of Problematic soils	1	101	26	127	-	-	-	101	26	127
Micro nutrient deficiency in crops	-	-	-	-	-	-	-	-	-	-
Nutrient Use Efficiency	-	-	-	-	-	-	-	-	-	-
Balance use of fertilizers	-	-	-	-	-	-	-	-	-	-
Soil and Water Testing	1	36	4	40	-	-	-	36	4	40
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**3**	**137**	**71**	**208**	**0**	**18**	**18**	**137**	**89**	226
IV Livestock Production and Management										
Dairy Management	-	-	-	-	-	-	-	-	-	-
Poultry Management	-	-	-	-	-	-	-	-	-	-
Piggery Management	-	-	-	-	-	-	-	-	-	-
Rabbit Management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Disease Management	-	-	-	-	-	-	-	-	-	-
Feed & fodder technology	1	6	10	16	3	2	5	9	12	21
Production of quality animal products	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**6**	**10**	**16**	**3**	**2**	**5**	**9**	**12**	**21**
V Home Science/Women empowerment	-	-	-	-	-	-	-	-	-	-
Household food security by kitchen gardening and	-	-	-	-	-	-	-	-	-	-

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
nutrition gardening										
Design and development of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing	-	-	-	-	-	-	-	-	-	-
Processing and cooking	-	-	-	-	-	-	-	-	-	-
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition	9	105	198	303	25	68	93	130	266	396
Women empowerment	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**9**	**105**	**198**	**303**	**25**	**68**	**93**	**130**	**266**	396
VI Agril. Engineering										
Farm Machinary and its maintenance	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	1	15	8	23	6	9	15	21	17	38
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**15**	**8**	**23**	**6**	**9**	**15**	**21**	**17**	38

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
VII Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	10	289	36	325	38	8	46	327	44	371
Integrated Disease Management	15	389	58	447	30	14	44	419	72	491
Bio-control of pests and diseases	10	216	59	275	39	21	60	255	80	335
Production of bio control agents and bio pesticides	3	63	23	86	15	11	26	78	34	112
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**38**	**957**	**176**	**1133**	**122**	**54**	**176**	**1079**	**230**	**1309**
VIII Fisheries										
Integrated fish farming	-	-	-	-	-	-	-	-	-	-
Carp breeding and hatchery management	-	-	-	-	-	-	-	-	-	-
Carp fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Composite fish culture	2	47	7	54	11	5	16	58	12	70
Hatchery management and culture of freshwater prawn	-	-	-	-	-	-	-	-	-	-
Breeding and culture of ornamental fishes	-	-	-	-	-	-	-	-	-	-
Portable plastic carp hatchery	-	-	-	-	-	-	-	-	-	-
Pen culture of fish and prawn	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Edible oyster farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Fish processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**2**	**47**	**7**	**54**	**11**	**5**	**16**	**58**	**12**	**70**
IX Production of Inputs at site										
Seed Production	1	47	1	48	18	4	22	65	5	70
Planting material production	-	-	-	-	-	-	-	-	-	-
Bio-agents production	4	102	19	121	13	4	17	115	23	138
Bio-pesticides production	-	-	-	-	-	-	-	-	-	-
Bio-fertilizer production	-	-	-	-	-	-	-	-	-	-
Vermi-compost production	3	51	62	113	4	20	24	55	82	137
Organic manures	1	27	5	32	2	1	3	29	6	35

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
production										
Production of fry and fingerlings	-	-	-	-	-	-	-	-	-	-
Production of Bee-colonies and wax sheets	-	-	-	-	-	-	-	-	-	-
Small tools and implements	-	-	-	-	-	-	-	-	-	-
Production of livestock feed and fodder	-	-	-	-	-	-	-	-	-	-
Production of Fish feed	-	-	-	-	-	-	-	-	-	-
Mushroom Production	2	35	7	42	3	2	5	38	9	47
Apiculture	1	94	18	112	12	7	19	106	25	131
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**12**	**356**	**112**	**468**	**52**	**38**	**90**	**408**	**150**	558
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	67	10	77	31	17	48	98	27	125
WTO and IPR issues	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	**1**	**67**	**10**	**77**	**31**	**17**	**48**	**98**	**27**	**125**
XI Agro-forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
Others (pl specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	**111**	**3025**	**888**	**3913**	**561**	**359**	**920**	**3586**	**1247**	**4833**

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	2	62	21	83	6	1	7	68	22	90
Seed production	1	27		27	13		13	40	0	40
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	1	18	2	20	4	2	6	22	4	26
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	2	2	76	78	3	18	21	5	94	99
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	**6**	**109**	**99**	**208**	**26**	**21**	**47**	**135**	**120**	**255**

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	3	67	13	80	26	13	39	93	26	119
Production of organic inputs	1	-	41	41	0	18	18	-	59	59
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	3	110	13	123	23	8	31	133	21	154
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	1	25	4	29	1	-	1	26	4	30
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	**8**	**202**	**71**	**273**	**50**	**39**	**89**	**252**	**110**	**362**

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	2	62	21	83	6	1	7	68	22	90
Seed production	4	94	13	107	39	13	52	133	26	159
Production of organic inputs	1	-	41	41	-	18	18	-	59	59
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Mushroom Production	1	18	2	20	4	2	6	22	4	26
Bee-keeping	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Value addition	5	112	89	201	26	26	52	138	115	253
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	1	25	4	29	1	-	1	26	4	30
Freshwater prawn culture	-	-	-	-	-	-	-	-	-	-
Shrimp farming	-	-	-	-	-	-	-	-	-	-
Pearl culture	-	-	-	-	-	-	-	-	-	-
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Any other (pl.specify)	-	-	-	-	-	-	-	-	-	-
TOTAL	**14**	**311**	**170**	**481**	**76**	**60**	**136**	**387**	**230**	**617**

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	156	107	263	36	21	57	192	128	320
Integrated Pest Management	5	35	8	43	6	4	10	41	12	53
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	1	25	10	35	5	3	8	30	13	43
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	**11**	**216**	**125**	**341**	**47**	**28**	**75**	**263**	**153**	**416**

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	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-

Training programmes for Extension Personnel 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
Productivity enhancement in field crops	5	156	107	263	36	21	57	192	128	320
Integrated Pest Management	5	35	8	43	6	4	10	41	12	53
Integrated Nutrient management	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	1	25	10	35	5	3	8	30	13	43
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	**11**	**216**	**125**	**341**	**47**	**28**	**75**	**263**	**153**	**416**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	2	175	15	190	8	7	15	183	22	205
Commercial production of vegetables	1	26	5	31	6	3	9	32	8	40
Total	3	201	20	221	14	10	24	215	30	245
Production and value addition										
Fruit Plants	-	-	-	-	-	-	-	-	-	-
Ornamental plants	-	-	-	-	-	-	-	-	-	-
Spices crops	-	-	-	-	-	-	-	-	-	-
Soil health and fertility management	-	-	-	-	-	-	-	-	-	-
Production of Inputs at site	-	-	-	-	-	-	-	-	-	-
Methods of protective cultivation	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Farm machinery	-	-	-	-	-	-	-	-	-	-
Farm machinery, tools and implements	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
Livestock production and management	-	-	-	-	-	-	-	-	-	-
Animal Nutrition Management	-	-	-	-	-	-	-	-	-	-
Animal Disease Management	-	-	-	-	-	-	-	-	-	-
Fisheries Nutrition	-	-	-	-	-	-	-	-	-	-
Fisheries Management	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Home Science	-	-	-	-	-	-	-	-	-	-
Household nutritional security	-	-	-	-	-	-	-	-	-	-
Economic empowerment of women	-	-	-	-	-	-	-	-	-	-
Drudgery reduction of women	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Agricultural Extension										
Capacity Building and Group Dynamics	4	90	20	110	15	7	22	105	27	132
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	7	291	40	331	29	17	46	320	57	377

Name of sponsoring agencies involved

Details of vocational training programmes carried out by KVKs for rural youth: NIL

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management	-	-	-	-	-	-	-	-	-	-
Commercial floriculture	-	-	-	-	-	-	-	-	-	-
Commercial fruit production	-	-	-	-	-	-	-	-	-	-
Commercial vegetable production	-	-	-	-	-	-	-	-	-	-
Integrated crop management	-	-	-	-	-	-	-	-	-	-
Organic farming	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
Dairy farming	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Sheep and goat rearing	-	-	-	-	-	-	-	-	-	-
Piggery	-	-	-	-	-	-	-	-	-	-
Poultry farming	-	-	-	-	-	-	-	-	-	-
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, dying etc.	-	-	-	-	-	-	-	-	-	-
Agril. para-workers, para-vet training	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Agricultural Extension	-	-	-	-	-	-	-	-	-	-
Capacity building and group dynamics	-	-	-	-	-	-	-	-	-	-
Others (pl. specify)	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	-	-	-	-	-	-	-	-	-	-

5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	389	444	7	451
Diagnostic visits	70	215	32	247
Field Day	7	219	18	237
Group discussions	5	212	51	263
Kisan Ghosthi	-	-	-	-
Film Show	4	185	-	-
Self -help groups	-	-	-	-
Kisan Mela	4	400	26	426
Exhibition	4	Mass	-	0
Scientists' visit to farmers field	19	25	-	25
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	1	150	-	150
Method Demonstrations	25	310	15	325
Celebration of important days	10	605	14	619
Special day celebration (World Honey Bee Day)	1	63	4	67
Parthenium Awareness week	1	72	2	74
World Soil Health Day	1	172	5	177
Exposure visits	2	112	5	117
Others (pl. specify)	-	-	-	-
Total	**540**	**2877**	**168**	**3045**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	
Extension Literature	18
News paper coverage	25
Popular articles	8
Radio Talks	4
TV Talks	4
Animal health amps (Number of animals treated)	-
Others (pl. specify)	-
Total	**59**

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	55	4268	-	-	-	-	-	-	-	-	-	-	-	-
Voice only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voice & Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Messages	55	4268	-	-	-	-	-	-	-	-	-	-	-	-
Total farmers Benefitted	55	4268	-	-	-	-	-	-	-	-	-	-	-	-

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	207	75	-	-	-	-	-	-	-	-	-	-	-	-
Voice only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voice & Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Messages	207	75	-	-	-	-	-	-	-	-	-	-	-	-
Total farmers Benefitted	207	75	-	-	-	-	-	-	-	-	-	-	-	-

6. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS: NIL

Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Gosthies	-	-	-
Lectures organised	-	-	-
Exhibition	-	-	-
Film show	-	-	-
Fair	-	-	-
Farm Visit	-	-	-

Diagnostic Practicals	-	-	-
Distribution of Literature (No.)	-	-	-
Distribution of Seed (q)	-	-	-
Distribution of Planting materials (No.)	-	-	-
Bio Product distribution (Kg)	-	-	-
Bio Fertilizers (q)	-	-	-
Distribution of fingerlings	-	-	-
Distribution of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week	-	-	-

7. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs (give quantity of seed in quintals only)

Crop	Name of the crop	Name of the variety /hybrid	Quantity of seed produced (q)	Value (Rs)	Seed supplied to farmers		Supplied to other agencies (q)
					Quantity (q)	No of farmers	
Cereals	Bajra	Pioneer	3.0	9333	-	-	3.0
Oilseeds	Groundnut	VRI 8	5.70	51300	5.70	10	4.0
	Groundnut	GJG9	2.0	18000	2.0	-	2.0
	Sesame	VRI 2	1.05	13650	1.0	34	.05
Pulses	Blackgram	VBN 6	0.72	8640	--	-	0.72
Commercial crops	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-
Total	-	-	**11.42**	**100923**	**8.70**	**44**	**9.77**

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety / hybrid	Number	Value (Rs.)	Planting material supplied to farmers		Supplied to other agencies (No)
					No	No of farmers	
Commercial	Cashew graft	VRI 3	13286	318864	5911	148	7375
	Jack Root stock	PLR 1	800	8000	-	-	800
	Jack grafts	PLR 1	31	4650	31	20	-

Vegetable seedlings	Brinjal	PLR 2 & Parul	11190	11190	11190	287	-
	Chillies	Pryianka	3210	3210	3210	30	-
Fruits							
Ornamental plants	Rose	-	16	320	16	10	-
Medicinal and Aromatic	Herbal	-	20	400	20	10	-
Plantation	Coconut	Local	13	650	13	6	-
Spices							
Tuber							
Fodder crop saplings	Cumbu Napier	COCN(4)	14000	7000	14000	25	-
Forest Species	Teak	Local	998	9980	998	35	-
Others	-	-	-	-	-	-	-
Total			**43564**	**364264**	**35389**	**571**	**8175**

Production of Bio-Products

Bio Products	**Name of the bio-product**	**Quantity Kg**	**Value (Rs.)**	**Supplied to farmers**		**Supplied to other agencies**
				kg	**No of farmers**	**kg**
Bio Fertilisers	-	-	-	-	-	-
Bio-pesticide	-	-	-	-	-	-
Bio-fungicide	-	-	-	-	-	-
Bio Agents	*Trichoderma viride*	123	12300	123	100	-
	Pseudomonas flourescens	13	1300	13	15	-
Others	-	-	-	-	-	-
Total		**136**	**13600**	**136**	**115**	

Production of livestock materials: NIL

Particulars of Live stock	**Name of the breed**	**Number**	**Value (Rs.)**	**Supplied to farmers**		**Supplied to other agencies (No)**
				No	**No of farmers**	
Dairy animals	-	-	-	-	-	-
Cows	-	-	-	-	-	-
Buffaloes	-	-	-	-	-	-
Calves	-	-	-	-	-	-
Others (Pl. specify) Goat	Tellocherry	2	10000	-	2	KVK, Vridhahcalam
	-	-	-	-	-	-
Poultry	-	-	-	-	-	-
Broilers	-	-	-	-	-	-
Layers	-	-	-	-	-	-
Duals (broiler and layer)	-	-	-	-	-	-
Japanese Quail	-	-	-	-	-	-
Turkey	-	-	-	-	-	-
Emu	-	-	-	-	-	-

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Supplied to farmers		Supplied to other agencies (No)
				No	No of farmers	
Ducks	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-
	-	-	-	-	-	-
Piggery	-	-	-	-	-	-
Piglet	-	-	-	-	-	-
Others (Pl.specify)	-	-	-	-	-	-
Fisheries	-	-	-	-	-	-
Indian carp	-	-	-	-	-	-
Exotic carp	-	-	-	-	-	-
Others (Pl. specify)	-	-	-	-	-	-
	-	-	-	-	-	-
Total	-	2	10000	-	2	-

8. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	**305**	**314**	**42**	**30500**
Water	**187**	**187**	**36**	**9350**
Plant	-	**-**	-	**-**
Manure	-	**-**	-	**-**
Others (pl.specify)	-	**-**	-	**-**
	-	**-**	-	**-**
Total	**492**	**501**	**78**	**39850**

9. SCIENTIFIC ADVISORY COMMITTEE

Date of SAC meeting	Number of members attended
23.02.2018	22

Proceedings of 21st Scientific Advisory Committee Meeting conducted at KVK, Vriddhachalam , Cuddalore District

The 21st Scientific Advisory Committee Meeting was held at KVK, Vridhachalam, Cuddalore district on 23.02.18 under the Chairmanship of Dr. H.Philip, the Director of Extension Education, Tamil Nadu Agricultural University, Coimbatore in the presence of Dr. R.Usha Kumari, Professor and Head, Regional Research Station, Vridhachalam, Dr. K. Nageswari, Professor & Head, Vegetable Research Station, Palur and Dr. M. Jayachandran, Professor & Head, Sugarcane Research Station, Cuddalore.

The meeting was commenced with lighting of Kuthuvillakku by the dignitaries. The Programme Coordinator of KVK, Vriddhachalam, Dr. S. Kannan welcomed the August

gathering. He presented the action taken report on the recommendations and suggestions made during the 20th SAC meeting. The salient achievements of OFTs, FLDs, trainings and other extension activities conducted during the year 2016-17 were presented by the SMS of the KVK.

During the meeting the following recommendations were given by the chairman and members for action plan during forth coming year.

The Director of Extension Education, TNAU, Coimbatore & Chairman, SAC

- Effectiveness of the training programmes should be done by all SMS (pre and post evaluation)
- Mass production of bio-inoculants such as *Trichoderma viride*, *Pseudomonas fluorescens* shall be undertaken.
- A meeting involving of Directorate of Agri Business Development, TNAU, Coimbatore shall be organized in order to sensitize the agri business opportunities to the entrepreneurs of Cuddalore district.
- The Progressive farmers/ entrepreneurs shall be encouraged to apply for various awards under different institutions.
- More number of farmer participants shall be included in WhatsApp group.
- Farmer Scientist Forum shall be established.
- Soil nutrient analysis should be done and soil health cards should be issued to the farmers.
- Technology dissemination through Radio talks is to be done effectively through All India Radio, Pondycherry.
- Farmer database should be strengthened by enrolling a minimum of 200 farmers per month.

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

- Minor millets for saline soils of Parangipettai block shall be identified and provided to the farmers so as to promote minor millet cultivation.
- New hybrids/varieties in casuarina shall be demonstrated in Cuddalore district.

Dr. R.Usha Kumari, Professor and Head, Regional Research Station, Vridhachalam

- Farmer participatory seed production in crops *viz*., paddy, groundnut and gingely shall be done.

Dr. R. Alex, Horticulture Officer, Vriddhachalam

- A programme on various management strategies in marigold shall be undertaken so as to enhance the yield and quality as it is an emerging crop in the district.
- New high yielding varieties/ hybrids in bhendi with Yellow Vein Mosaic virus tolerance/resistance shall be assessed / demonstrated.

Th. D. Chandran, Regional Manager, TAFCORN, Vriddhachalam

- Training programme may be organized on latest state of art technologies in cashew, particularly on high density planting system, pruning and foliar spray etc.

Th. C. Natarajan, Progressive farmer, Sathyavadi village

- Awareness on usage of green fodder through trainings and demonstrations should be created.
- Training on management of milk yielding cows and value addition in milk has to be conducted.

Th. S.Ram Magesh, Progressive farmer, Vallam Thatchakadu, Parangipettai block

- Paddy varieties suitable for saline soils may be provided for commercial cultivation in salt affected soils of Parangipettai block.

10. PUBLICATIONS

Publications in journals: NIL

S. No	Authors	Year	Title	Journal
-	-	-	-	-

Other publications

S.No	Item	Year	Authors	Title	Publisher
1	Books	2017	K. Natarajan P.T. Sharavanan A.Rameshkumar K. Venkatalakshmi G. Porkodi K. Meenalakshmi D. Kumar R. Samundeeswaran S. Kannan	Production technology of groundnut	KVK, Vridhachalam
		2018	K. Natarajan P.T. Sharavanan A.Rameshkumar K. Venkatalakshmi G. Porkodi K. Meenalakshmi D. Kumar R. Samundeeswaran S. Kannan	Protection of Plant Varieties & Farmers Right Act 2001	KVK, Vridhachalam
2	Book chapters /				

	manuals				
3	Training manuals	2017	Porkodi, G., P.T. Sharavanan , M. Nirmaladevi, K. Natarajan, A. RameshKumar, K. Venkatalakshmi, D. Kumar G. Meenalakshmi, R. Samundeeswaran, S. Kannan,and M.S. Aneesa Rani.	Management of nutrients deficiency in crop (Tamil), published by KVK, Vriddhachalam	KVK, Vridhachalam
		2017	Porkodi, G., P.T. Sharavanan, M. Nirmaladevi, K. Natarajan, A. RameshKumar, K. Venkatalakshmi, D. Kumar G. Meenalakshmi, R. Samundeeswaran and S. Kannan.	Soil Health management through organic farming (Tamil), published by KVK, Vriddhachalam	KVK, Vridhachalam
		2017	Sharavanan, P.T G. Porkodi, K. Venkatalakshmi, A. RameshKumar, K. Natarajan, G. Meenalakshmi, R. Samundeeswaran, D. Kumar and S. Kannan.	Management of paddy cultivation by organic method (Tamil), published by KVK, Vriddhachalam	KVK, Vridhachalam
4	Conference, proceeding papers, popular articles, Bulletins, Short communications	2018	K. Natarajan	Demonstration of submergence tolerant paddy variety cr 1009 sub 1 for cuddalore district	INTFES & Extension Education Society
		2018	K. Natarajan	Enhancement of productivity, profitability and income from farmers through seed production of groundnut through cluster approach	INTFES & Extension Education Society
		2018	Sharavanan, P.T., M. Nirmaladevi, G. Porkodi and S. Kannan.	Improvement of Knowledge level of paddy growers on ecofriendly cultivation practices by farmers' field school approach.	INTFES & Extension Education Society
		2018	Porkodi, G., P.T. Sharavanan, A. Rameshkumar and S. Kannan.	Assessment of nutripellet pack technology in chilli.	INTFES & Extension Education Society
		2018	Porkodi, G., M. Nirmaladevi, P.T. Sharavanan, and S. Kannan.	Increasing productivity of blackgram by front line demonstrations in cluster approach.	INTFES & Extension Education Society

		2018	Rameshkumar, A., P.T. Sharavanan, G.Porkodi and S. Kannan.	Demonstration of crop management practices to increase yield in cashew.	INTFES & Extension Education Society
		2018	Rameshkumar, A., P.T. Sharavanan, and S. Kannan.	Integrated crop management in sankegourd	INTFES & Extension Education Society
		2018.	K.Venkatalakshmi and S.Kannan.	Demonstration of Pani pipe –indicator tool of Alternate Wetting and Drying in low land transplanted paddy.	INTFES & Extension Education Society
		2018	K.Venkatalakshmi and S.Kannan	Demonstration of improved variety and production technology of pulses through cluster village approach.	INTFES & Extension Education Society
		2018	Nirmaladevi, M., G. Porkodi, P.T. Sharavanan and S. Kannan	Popularization of carp farming in farm ponds through FLDs for additional income.	INTFES & Extension Education Society
5	Technical bulletin/ Folders	2017	RameshKumar, A., Porkodi, G., P. T. Saravanan , K. Natarajan, M. Nirmaladevi, K. Venkatalakshmi, S. Kannan,and M.S. Aneesa Rani.	2017. Improved pulse production technology in delta area (Tamil)	KVK, Vriddhachalam
		2017	Porkodi, G., P.T. Saravanan, M. Nirmaladevi, K. Natarajan, A. RameshKumar, K. Venkatalakshmi, D. Kumar G. Meenalakshmi, R. Samundeeswaran, S. Kannan,and M.S. Aneesa Rani.	Management of nutrients deficiency in crop (Tamil)	KVK, Vriddhachalam
		2017	Nirmaladevi, M., G. Porkodi, T. Saravanan, K. Natarajan, A. RameshKumar, K. Venkatalakshmi, D. Kumar G. Meenalakshmi, R. Samundeeswaran, S. Kannan and M.S. Aneesa Rani.	Fodder production (Tamil),	KVK, Vriddhachalam
		2017	Saravanan, T., M. Nirmaladevi, G. Porkodi,	Mushroom cultivation techniques (Tamil)	KVK, Vriddhachalam

			K. Venkatalakshmi, A. RameshKumar, K. Natarajan, G. Meenalakshmi, R. Samundeeswaran, T. Kumar S. Kannan,and M.S. Aneesa Rani. 2017.		
		2017	Saravanan, T., M. Nirmaladevi, G. Porkodi, K. Venkatalakshmi, A. RameshKumar, K. Natarajan, G. Meenalakshmi, R. Samundeeswaran, T. Kumar S. Kannan,and M.S. Aneesa Rani	Management of paddy cultivation by organic method (Tamil)	KVK, Vriddhachalam
		2018	Porkodi, G., P.T. Sharavanan, M. Natarajan, A. RameshKumar, K. Venkatalakshmi, T. Kumar G. Meenalakshmi, R. Samundeeswaran and S. Kannan	Soil health management through organic farming	KVK, Vriddhachalam
		2018	Sharavanan, P.T., G. Porkodi, A. Ramesh Kumar, K. Venkatalakshmi, K. Natarajan, T. Kumar, G.Meenalakshmi, R. Samundeeswaran and S. Kannan	Agri based entrepreneurship for cuddalore district (Tamil) by	KVK, Vriddhachalam.
	Folder	2017	G. Porkodi, Sharavanan, P.T, K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan, S. Kannan	Micro nutrient for crop productivity	KVK, Vriddhachalam
		2017	G. Porkodi, Sharavanan, P.T, K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan, S. Kannan	Technologies for dryland for maintaining soil health	KVK, Vriddhachalam
		2017	K. Venkatalakshmi, G. Porkodi, Sharavanan, P.T, A. Ramesh Kumar, K. Natarajan, S. Kannan	Pani Pipe technologies for paddy	KVK, Vriddhachalam
		2017	K. Venkatalakshmi, G. Porkodi,	Weed management in dry sown paddy	KVK, Vriddhachalam

			Sharavanan, P.T, A. Ramesh Kumar, K. Natarajan, S. Kannan		
		2017	K. Venkatalakshmi, G. Porkodi, Sharavanan, P.T, A. Ramesh Kumar, K. Natarajan, S. Kannan	Fodder crop cultivation	KVK, Vriddhachalam
		2017	K. Venkatalakshmi, G. Porkodi, Sharavanan, P.T, A. Ramesh Kumar, K. Natarajan, S. Kannan	Major nutrients in crop and its impact	KVK, Vriddhachalam
		2017	G. Porkodi, Sharavanan, P.T, K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan, S. Kannan	Micro nutrients deficieny and its reclamation	KVK, Vriddhachalam
		2017	G. Porkodi, Sharavanan, P.T, K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan, S. Kannan	Soil and water testing for soil health management	KVK, Vriddhachalam
		2018	G. Porkodi, Sharavanan, P.T, K. Venkatalakshmi, A. Ramesh Kumar, K. Natarajan, S. Kannan	Pani pipe for water saving in paddy crop	KVK, Vriddhachalam
6	Reports	-	-	-	-
7	others				
8	Popular article	2018	Kannan. S., G. Porkodi, Sharavanan, P.T., and A. Rameshkumar	Value addition in kodo millet	Farm fest – 2018. XXXII flower, vegetable and fruit show Souvenir, Puducherry on 02nd - 04th February, 2018
		2018	Sharavanan, P.T., G. Porkodi, A. Rameshkumar and S. Kannan	Pesticide free vegetable production	
		2018	Rameshkumar, A., G. Porkodi, T. Sharavanan, S. Kannan	Nursery management in vegetable crops	
		2018	Porkodi, G., Sharavanan, T., A. Rameshkumar and S. Kannan	Uses of bio fertilizers	
		2018	K.Venkatalakshmi.	Irrigation by Field water tube method in Paddy	Krishi Jagran Tamil 2(1) .36-38

		2018	K.Venkatalakshmi	Weed management in direct seeded paddy	Krishi Jagran Tamil 2(1) .20-24

Newsletter/Magazine

Name of News letter/Magazine	Frequency	No. of Copies printed for distribution
Erkalam	Quarterly	400

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	Duration	Organized by
Dr. K. Natarajan SMS (SST)	"Advanced Strategic Processing Techniques for Oilseeds to Combat Protein-Energy Malnutrition and Augment Farmers' Income"	21 days (Aug 1-21, 2017)	ICAR-Central Institute of Post-harvest Engineering & Technology (ICAR-CIPHET), Ludhiana, Punjab
Dr. K. Venkatalakshmi	Biogas technology	2 days (Aug 21-24, 2017)	Department of bio energy, TNAU, Coimbatore
Dr. K. Venkatalakshmi	International symposium on "Sugarcane since CO 205:100 years and beyond (Sucrosym 2017)"	2 days, (Sep 18-20, 2017)	SBI, Coimbatore
Dr. K. Natarajan SMS (SST)	Workshop on Seed Enhancements techniques	One day (Jan 25, 2018)	Seed Centre, TNAU, Coimbatore
Dr. A. Ramesh Kumar SMS (Hort.)	Refresher course on "Protected cultivation with special reference to soilless cultivation, hydroponics and aeroponics"	21 days (Jan 9-28, 2018)	UAS, Dharwad
Dr. K. Natarajan SMS (SST)	Agroforestry models – Establishment and Management	3 days (Jan 29-31, 2018)	IFGTB, Coimbatore
Dr. P. T. Sharavanan SMS (PAT)	Bio pesticides for crop protection and improvements: Emerging technology to benefits farmers.	Feb 2-22, 2018	College of agriculture, GBUAT, Pant nagar
Dr. K. Natarajan SMS (SST)	"Invigorating Transformation of farm Extension Towards Sustainable Development: Futuristic Challenges and prospects"	2 days (March 9-10, 2018)	TNAU, Coimbatore
Dr. K. Natarajan SMS (SST)	Annual Seed Workshop	One day (March 22, 2018)	Seed Centre, TNAU, Coimbatore
Dr. S. Kannan Dr. P. T. Sharavanan Dr.K. Natarajan Dr. A. Rameshkumar Dr.K.Venkatalakshmi Mrs. G. Porkodi	"International Conference on Invigorating Transformation of Farm Extension towards sustainable development: Futuristic Challenges and Prospects. "	8.3.2018 to 10.3.2018	TNAU, Coimbatore
Dr. P. T. Sharavanan SMS (PAT)	Bio safety awareness workshop	23.03.2018	TNAU, Coimbatore

11. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM: NIL

Activities conducted				
No. of Training programmes	**No. of Demonstration s**	**No. of plant materials produced**	**Visit by farmers (No.)**	**Visit by officials (No.)**
-	-	-	-	-

12. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/COLD WAVES ETC

Introduction of alternate crops/ varieties: NIL

Crops/cultivars	**Area (ha)**	**Extent of damage**	**Recovery of damage through KVK initiatives if any**
-	-	-	-
Total			

Major area coverage under alternate crops/varieties: NIL

Crops	**Area (ha)**	**Number of beneficiaries**
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

Farmers-scientists interaction on livestock management: NIL

Livestock components	**Number of interactions**	**No.of participants**
Total		

Animal health camps organised : NIL

Number of camps	**No.of animals**	**No.of farmers**
Total		

Seed distribution in drought hit states:L NIL

Crops	**Quantity (qtl)**	**Coverage of area (ha)**	**Number of farmers**
Total			

Large scale adoption of resource conservation technologies: NIL

Crops/cultivars and gist of resource conservation technologies introduced	**Area (ha)**	**Number of farmers**

Total		

Awareness campaign: NIL

	Meetings		**Gosthies**		**Field days**		**Farmers fair**		**Exhibition**		**Film show**	
	No.	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**	**No.**	**No.of farmers**
Total												

13. Awards/rewards by KVK and staff

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
-	-	-	-
Special Attainments & Achievements of Practical Importance (patents, technologies, varieties, products, concepts, methodologies etc.)			
Category	Title	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.	District Level Seminar on Cashew	GOI -DCCD	To improve the Cashew production	1	50000
2.	District Level Seminar on Cashew	GOI -DCCD	To improve the Cashew production	1	90000
3.	TN-IAMP	World Bank	To conserve water resource and Improve the crop productivity	5 years	1200000

Please attach detailed report of each project/programme separately

15. Success stories

i. SUCCESS STORY ON GROUNDNUT

Name and address of the farmer with Telephone / Mobile Number	P. Aravazhi S/o Palani Vandurasan kuppam Naduveerapattu Post Cuddalore Block and District Mob : 9443327534 
Situation analysis/Problem statement	❖ Lack of awareness on new varieties of groundnut ❖ The continuous use of local groundnut variety reduced the yield ❖ Non adoption of ICM technology reduced the yield
Plan, Implement and Support	❖ KVK has intervened and adopt the village for conducting FLD on groundnut (VRI 8) during 2017-18

<table>
<tr><td></td><td>
❖ 10 farmers were selected in Vandurasankuppam village of Cuddalore block
❖ Critical inputs such as groundnut pods (VRI8), Trichoderma Viride, TNAU Groundnut rich and pheromone traps were distributed to the farmers
❖ He has attended training on groundnut production technology was conducted to the farmers
❖ He also participated demonstration 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 The farmer has got highest yield of 44.42 q/ha of processed groundnut pods in his demonstration plot (VRI 8)
❖ Because of using right technologies and farm mechanization he has got higher yield in groundnut i.e. 44.42 q/ha
❖ The other farmers also got an average yield of 42.38 q/ha with an BC ratio of 2.36 than other variety
❖ Farmer felt that groundnut rich application was easier than DAP application and has the advantage of increasing the pod setting. Drought tolerance was good
</td></tr>
<tr><td>Output</td><td>
<table>
<tr><th>Yield (q/ha)</th><th>No. of pods/plant</th><th>100 seed wt</th><th>Gross cost (Rs./ha)</th><th>Gross return (Rs./ha)</th><th>Net return (Rs./ha)</th><th>BC ratio</th></tr>
<tr><td colspan="7">Individual farmer</td></tr>
<tr><td>44.42</td><td>48</td><td>45</td><td>99465</td><td>244310</td><td>144845</td><td>2.45</td></tr>
<tr><td colspan="7">10 farmer demos</td></tr>
<tr><td>42.388</td><td>44</td><td>44.636</td><td>98767.1</td><td>233134</td><td>134366.9</td><td>2.36</td></tr>
</table>
</td></tr>
<tr><td>Outcome</td><td>
❖ 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 groundnut and gingelly to more than 500 farmers of Naduveerapattu and nearby villages
❖ With the help of NABARD Fund, Major Crop Development Scheme (MCDS) was adopted and implemented in the following villages viz., Vandurasankuppam, Naduveerapattu, Palur 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
</td></tr>
<tr><td>Impact</td><td>
❖ In “Grievences day” meeting the district Collector appreciated the farmer for highest yield in groundnut 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
</td></tr>
</table>

	the groundnut pod (2000 kg) for upscaling the groundnut variety VRI 8 in convergence mode ❖ Due to the well functioning and impact created by the farmers, Minister of Agriculture, Agriculture 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

Name and address of the farmer with Telephone / Mobile Number	S/o Kaliyaperumal 30/2, West Street Karuppanchavadi Village 607301 Kurinjipadi Taluk, Cuddalore Dist Mob : 9942187135, 9443081666 
Situation analysis/Problem statement	❖ 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
Plan, Implement and Support	❖ KVK has intervened and adopt the village for conducting Cluster FLD on groundnut (GJG20) during 2017-18 ❖ 30 farmers were selected in Karuppanchavadi village of Kurinjipadi block ❖ Critical inputs such as groundnut pods (GJG20), *Trichoderma Viride*, TNAU Groundnut rich and pheromone traps were distributed to the farmers ❖ He has attended training on groundnut production technology was conducted to the farmers ❖ He has participated demonstration 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
Output	**Adopted Technology by the farmer** **Groundnut** ❖ Use of newly released groundnut varieties like, G7, G9, G20 and VRI 8 ❖ Drip and sprinkler irrigation for groundnut crop whenever water is demand ❖ Post emergence herbicide application on 15th to 16th day - Imazethapyr @ 300 ml/acre ❖ Top dressing of fertilizer on 20th, 60th and 80th day - 10:26:26 combination - 20 kg /acre ❖ Foliar spray of water soluble fertilizer on 30th, 45th, 60th & 80th days of sowing All 19:19:19 - 30th day – 1kg/acre DAP Combination - 45th day 1 kg/acre Urea + Potash WSF - 60th day – 1 kg/acre 0:0:50 WSF - 80th day – 1 kg/acre ❖ Biological method of pest control

	• 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 by use of machineries because groundnut crop need more labourers than other crop from sowing to harvest. ❖ Because of using right technologies and farm mechanization he has got higher yield in groundnut .i.e. 75 q/ha **Paddy** ❖ Production of different classes of seeds in paddy to meet the seed requirement of the farming community in Cuddalore district ❖ Adoption of the SRI method of cultivation in paddy and procedures in it for seed production ❖ Adoption of proper cropping sequence to maintain soil fertility status ❖ Raising of green manures and *insitu* incorporation before paddy cultivation ❖ Adoption of the right package of technologies ❖ Following the seed production and certification procedures without deviation **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 **Sugarcane** ❖ Raising nursery using single budded chips ❖ Transplanting young seedlings (25-35 days old) ❖ Maintaining wide spacing (5 x 2 feet) in the main field ❖ Providing sufficient moisture through water saving efficient irrigation technologies viz., subsurface drip fertigation ❖ Encouraging organic method of nutrient and plant protection measures. ❖ Practicing intercropping with effective utilization of land Field crops (Per acre)

Crop	Yield	Cost of cultivation (Rs.)	Gross income (Rs.)	Net income (Rs.)	BCR
Groundnut	30 q	38000	154000	116000	4.05
Paddy	3.4 t	30000	74750	44750	2.49
Sesame	900 kg	10000	67500	57500	6.75
Sugarcane	55 t	73000	143000	70000	1.95
Cumbu	1500 kg	9500	19500	10000	2.05

Horticulture crops (Per acre)

Crop	Yield	Cost of cultivation (Rs.)	Gross income (Rs.)	Net income (Rs)	BCR
Amla	6 t	20000	180000	160000	9.0

Hiring charges

Machinery Hiring	Cost of cultivation (Rs.)	Gross income (Rs.)	Net income (Rs)	BCR
Hiring charges of all machineries	1200000 including diesel, driver bata and fuel charges	2500000	1300000	2.08

New package of practices/ management strategies

Groundnut

- Because of labour shortage and drought there is need for practicing new technology
- The use of machinaries for groundnut harvesting and stripping is needed nowadays because of labour shortage
- Use of pungam oil, neem oil and camphor will control the pest and disease by low cost as well as organic method and without use of pesticides since groundnut is consumable product
- The use of water soluble fertilizer will reduce the leaf dropping from leaf formation to harvest stage and makes the plant green upto maturity and makes uniform maturity of the pod.
- The water soluble fertilizer directly goes to the individual plant and the nutrient are perfectly utilized by the individual plant.

Sesame

- Formation of ridges and furrows will make uniform maturity and avoid lodging and thereby maintain the population and thereby increase the yield
- While irrigation during broadcasting method there will be water stagnation and there by affect the plant. But in ridges and furrows the water absorption of plants will take slowly and uniformly and thereby growth of the plant in a continuous manner and thereby increase the yield of the plant .
- Foliar spray of DAP and Planofix during flowering and pod formation stage will increase the seed set and thereby increases the yield
- Basal application of manganese sulphate before sowing will help in the formation of bold pods and increases the oil content

Outcome	❖ 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 groundnut to more than 1000 farmers of Karuppanchavadi and nearby villages **Saving of resources** **Groundnut** ❖ Use of seed drill reduce the labour cost to a tune of Rs. 2000 than use of manual method. ❖ Use of post emergence herbicide will reduce the manual labour cost and makes the difference in cost of cultivation ❖ Usually groundnut stripping is done by manual method .But the use of groundnut stripper makes the profit of Rs. 15,000 than manual method **Sesame** ❖ The cost of cultivation by new practice will increase of Rs. 2000 compare to broadcast method, but the yield is more in line sowing method compare to broadcast method ❖ Formation of ridges and furrows and line sowing will make extra Rs. 2000 compare to broadcast method. Extra labour is needed for line sowing and thinning operation that will make the difference for cost of cultivation ❖ With the help of NABARD Fund, Major Crop Development Scheme was adopted and implemented in the following villages viz., Karuppanchavadi, T. Palayam, Kullanchavadi and Kattinkuppam. With the help of scheme, critical inputs, funds, newer technologies, trainings and marketing were provided to the farmers with his guidance. ❖ Practicing seed production in groundnut and other millets and formed the commodity group comprised of 100 farmers and marketed the produce to different district of Tamil Nadu ❖ As a group leader for NABARD Farmers Club and got agricultural inputs through subsidy for more than 200 farmers of karuppanchavadi and nearby villages ❖ NABARD club functioning very well by getting different agricultural implements with 100% subsidy. Agricultural engineering department also gave power tiller and tractor to the club with 100 % subsidy ❖ Facilitate the mass tree planting and fish pond for the farmers through line departments ❖ New technologies will be disseminated regularly to the village by the KVK and RRS Scientists through his motivation ❖ Regularly attended the technology empowerment programmes of KVK,he has adopted it and integrated it ❖ Due to the well functioning and impact created by the farmers, Minister of Agriculture, Agriculture Production Commissioner, Commissioner of Agriculture, district Collector, line department officials were visited the village frequently
Impact	**Media coverages like success stories** ❖ His success is documented and telecasted by Makkal TV on April 2017 and pothigai TV ❖ His achievements are published in popular dailies like Daily Thanthi,

	Dinamalar, Dinamani and Dinakaran ❖ The farmer has been appreciated for his contribution in groundnut and he was recognized by State sponsored programme entitled 'Increasing the productivity in groundnut ' on 2009 -10 ❖ The farmer has been appreciated for his contribution in cumbu and he was recognized by State Level sponsored programme entitled 'Increasing the productivity in cumbu ' on 2011-2012 ❖ Adoption of technologies of TNAU, Mr. V.K. Kumaraguru received 16.5 t/ha (wet pod) of Asha groundnut during 2015 and has been appreciated at National level for higher productivity. ❖ During 2015, he was awarded for usage of machinaries for groundnut by the higher number of farmers by Tamil Nadu Agricultural University, Coimbatore ❖ The farmer has been appreciated for his contribution to agriculture in different platforms and he was recognized by State & District Level sponsored programme entitled 'Increasing the productivity in groundnut' on 2015 and 2016

iii. SUCCESS STORY ON SEED PRODUCER (RAJA SEEDS)

Name and address of the farmer with Telephone / Mobile Number	T. Subramanian S/o Thirugnanasambantham North street, Rajendrapattinam-608703 Vridhachalam Taluk Cuddalore District Mob : 9787581169 
Situation analysis/Problem statement	❖ Non availability of quality seed to the farmers ❖ Non adoption of ICM technology reduced the yield ❖ Linking of new variety in seed production chain
Plan, Implement and Support	❖ The farmer purchased the seeds from private seed companies, government outlets and also used his own farm saved seeds. ❖ Then the Krishi Vigyan Kendra intervened and trained the farmer as well as the farmers of Rajendrapatinam village about the seed production technologies such as land selection, sources of seed, isolation distance, rouging, foliar nutrition, harvesting and post harvest handling of seeds in three stages under seed village training programme. ❖ Training on seed production technology of paddy and pulses was conducted to the farmers of Rajendrapattinam village

<table>
<tr><td></td><td>❖ Demonstration of seed drill sowing, Machine planting, Roguing operation and 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</td></tr>
<tr><td>Output</td><td>He is producing 12 ha of paddy seeds and 5 ha of blackgram seeds and supplying the same to the farmers and to the department of agriculture.
<table>
<tr><th>Particulars</th><th>Yield (t)</th><th>Income (Rupees)</th><th>Net income (Rupees)</th></tr>
<tr><td>Processed seed for one acre of paddy</td><td>2.25 tonnes</td><td>56250</td><td>31,250</td></tr>
<tr><td>Processed seed for 30 acres of paddy</td><td>67.5 tonnes</td><td>16,87,500</td><td>9,37,500</td></tr>
<tr><td>Processed seed for one acre of blackgram</td><td>400 kg</td><td>52000</td><td>42,000</td></tr>
<tr><td>Processed seed for 5 acre of blackgram</td><td>2 tonnes</td><td>2,60,000</td><td>2,10,000</td></tr>
</table></td></tr>
<tr><td>Outcome</td><td>❖ Seed production in paddy is economically viable
❖ SRI method of cultivation favoured all the underlying operations in seed production
❖ SRI method of planting addressed the farm level issue of labour shortage
❖ A cropping sequence of green manures-paddy-pulses caused a total reduction in the use of nitrogenous fertilizer
❖ Adoption of the right package of technologies in nursery including seed treatment with Pseudomonas reduced the disease incidence and increased the quality seedlings
❖ Proper main field management in seed production resulted in higher profit than grain production
❖ Among the trained farmers, Mr. T. Subramaniyam emerged as an entreprenuer and started a business establishment - Raja Seeds and started producing certified and Truthful labeled seeds in paddy and black gram.
❖ The profit achieved of this entrepreneur showed that the seed production is a profitable agribusiness venture and the scope is enlarging day by day as there is growing demand for quality seed material in the agricultural industry.</td></tr>
<tr><td>Impact</td><td>❖ He is earning approximately Rs. 8 lakhs /annum and generating</td></tr>
</table>

	employment of 145 man days per year. ❖ He is selling his produce in Cuddalore, Thanjavur and Ariyalur districts. ❖ This Kendra was involved in promotion of marketing their produce by allowing them to display and sell their produces in Agri-horti fairs, TNAU sponsored exhibitions, CODISSIA Agri-Expo, Pondicherry Agri Fair etc., through stall exhibition cum selling. ❖ Direct marketing and indirect marketing through shops ❖ Due to the well functioning and impact created by the farmers, Minister of Agriculture, Agriculture Production Commissioner, Commissioner of Agriculture, district Collector, line department officials were visited the village frequently. ❖ Th. T. Subramaniyam has spread the combination of SRI technology and seed production among 30 farmers of Rajendra pattinum village. The empowered farmers have taken up seed production and the village is popularly called as Seed Village, as the whole village is doing seed production under his guidance. ❖ Many farmers have visited his field and he is one among the resource farmers of KVK Cuddalore ❖ Serving as a role model for other farmers to become an entrepreneur. ❖ Participating in the Uzhavar Peruvizha, farmers day and sharing his experience. ❖ His achievements are published in popular dailies ❖ His success is documented and telecasted by Makkal TV and pothigai TV.

iv. SUCCESSFUL FARMER - MUSHROOM CULTIVATION

S.No	**Particulars**		
1.	Name & Address	Mrs. M.F. Fousiya Begam **Sister Rajiya Memorial Self Help Group** Aliyar Nagar Mangalampettai Vridhachalam- 606001 Cuddalore District Mobile: 94432 85405	
2.	Age	29	
3.	Educational qualification	10^{th} standard	
4.	Enterprise	Mushroom cultivation	

5.	Activities	• Mrs. M.F. Fousiya Begam W/o Mohammad Faruk Jinna from Managalampettai is studied 10th standard and came to KVK, Vridhachalam in order to earn for her family. • The KVK, Vridhachalam given a vocational training programme on mushroom cultivation during the month of Oct, 2014. She attended in the training and got training experience in mushroom cultivation and value addition. • After the training, she started a self help group on Sister Rajiya Memorial Self Help Group by organizing 15 women for establishing mushroom cultivation unit. • They started mushroom cultivation unit at 25 x 15 feet size at mangalampettai and scientists of the KVK visited the unit and given suggestions for improvement of the unit in a business mode.
6.	Profit	• They produced 20 kg oyster mushroom and 18 kg of milky mushroom daily from the unit. • They earned Rs. 14000 /month as net income.
7.	Achievement	• Received the "**Best Young Entreprenuer award**" for the year 2016 from Tamil Nadu Agricultural University, Coimbatore
8.	Publicity and Marketing	• Mushroom produced from the unit are being sold in the market of Ulundurpettai, Mangalampettai and Vridhachalam. • This Kendra was involved in promotion of marketing their produce by allowing them to display and sell their produces in Agri-horti fairs, TNAU sponsored exhibitions, CODISSIA Agri-Expo, Pondicherry Agri Fair etc., through stall exhibition cum selling. • Direct marketing and indirect marketing through shops.
9.	Present working condition of the enterprise	• The KVK, Vriddhachalam is also involved in giving technical backstop improvement by exposing them to higher end learning training IICPT at Thanjavur for value addition in mushroom products. • Now she started new milky mushroom production unit of 30 x18 feet size.
10.	Horizontal spread of enterprise	• They are giving training and guidance to the woman's in that area for starting a new unit.
11.	Other activities	• Providing training on mushroom to other women groups and self help groups and motivating them to become entrepreneurs. • Serving as a role model for other farmers and farm women to become an entrepreneur • Participating in the Uzhavar peruvizha, farmers day and sharing her successful entrepreneur • Her achievements are published in popular dailies. • Her success is documented and telecasted by pothigai TV.

v. DEMONSTRATION OF ALTERNATE WETTING AND DRYING THROUGH PANI PIPE IN PADDY

Name of the Farmer Address for the communication with pin code Contact Phone number	:	Mr. G. Sakthivel Sathukudal village Vridhachalam Block Cuddalore Dt . 9788272673	
Age	:	49 years	
Experience in farming	:	25 years	
Land holding Major cropping pattern followed Irrigation source Season for paddy Variety **Problem identified**	: : : : : :	8 acre Paddy-Black gram Bore well Samba (Rabi) BPT 5204 • Lack of awareness on judicious application of irrigation water to transplanted paddy • Lack of awareness on suitable tool for alternate wetting and drying method of irrigation to transplanted paddy	
Plan, implement and support Practices followed before interventions:	:	• Indiscriminate use of irrigation water by flood irrigation to the paddy crop • More number of irrigations were given to the paddy crop • He has not followed the practices like seed treatment with bio fertilizer and bio control agents. • He has not applied TNAU MN mixture to the paddy crop. • Cost of cultivation is higher due to increase in fuel consumption and labour charges for irrigation • KVK,Vridhachalam has conducted OFT – Assessment of suitable water saving technology in Paddy during 2015-16 in 10 locations of Cuddalore district. • Based on the performance of AWD- irrigation through pani pipe this technology has been up scaled to FLD.	
Technologies adopted (KVK interventions)	:	• KVK, Vridhachalam has conducted FLD during 2016-17 in his field. • The following technologies were demonstrated for the paddy crop. • Seed treatment with *P. fluorescens* at 10 g/kg of seeds • Seed treatment with bio fertilizer *Azospirillium* and *Phosphobacteria*	

Methodology followed **Out put and Out come**	:	• Application of TNAU MN mixture to the paddy crop @10 kg/acre as enriched FYM • Irrigation applied through Alternate wetting and drying method through pani pipe to the paddy crop • The Pani Pipe is a 30 cm long plastic or bamboo pipe of 15 cm diameter with drilled holes, which is sunk into the rice field to a 15 cm depth (Rest of the pipe protrudes above the ground). • When the water level inside the pani pipe drops to 15cm below ground level, the field is ready to be re flooded. The physical appearance and field operation of the Pani pipe can be seen from Fig.1. • This threshold of 15 cm is called 'safe AWD' as it does not have any impact on yield. • The farmer has followed the above said improved technologies .He installed pani pipe in his field 20 days after sowing. • He installed near to the field bund for easy inspection. He installed one of pani pipe to 50 cents of land. • He has given irrigation to the crop (to the level of 2.5 cm to 5 cm based on the crop height) after the water in the pani pipe has fully disappeared. • A week after and before flowering he allowed to stand the water up to 5 cm. After that again he irrigated after the water in the pani pipe has fully disappeared. • He has stopped the irrigation 20 days prior to the harvest of crop. • Leaflet were distributed to the farmers • Popular articles were published abut the pani pipe • Through trainings and water campaigns method to install, advantage of panipipe were explained by the KVK,Vridhachalam • With the support and schemes (TANII) of Department of Agriculture Pani pipes were installed in larger area (61,140 acres) in non delta areas of Cuddalore district.
Results of the KVK interventions	:	• Irrigation by AWD through Pani pipe (6050 kg/ha) is higher than the farmers practice of flood irrigation (5420 kg/ha).because AWD improves the aeration in the root zone, their by more number of tillers/m^2 has been produced. • This is 10.4 per cent over farmers practice. No. of irrigations by AWD through Pani pipe (17 nos.) were lower than the farmer's practice of flood irrigation (25 nos.).From one hectare of land

<table>
<tr><td>Impact of success story on other farmers in locality</td><td>:</td><td>nearly 36 lakh litres of water is saved. Marked wooden sticks are used to measure the irrigation water level in the field which are placed at different locations in the field.
• The net profit realized is higher in the AWD through Pani pipe (Rs. 70,375/ha) than the farmers practice of flood irrigation (Rs. 52,480/ha).
• Considerable number of farmers in his locality started adopting because of the very sincere training efforts of Th.G.Sakthivel and field day conducted by KVK, Vridhachalam.
• During 2017-18 In cuddalore district 61,140 acres of paddy field installed with pani pipe through TANII scheme by the Department of Agriculture.</td></tr>
<tr><td>Farmers feed back</td><td>:</td><td>• Less number of irrigations has given so water is saved.
• Cost of cultivation is reduced by less diesel consumption.
• More number of tillers were produced there by higher yield
• Less pest and disease incidence were occurred due to AWD practice.
• Pani pipe will be easily manufactured by farmers themselves, simple method to follow.</td></tr>
<tr><td>Details of Economics:</td><td>:</td><td>
<table>
<tr><th></th><th>Particulars</th><th>Demo</th><th>Check</th></tr>
<tr><td>1</td><td>Yield (kg/ha)</td><td>6050</td><td>5420</td></tr>
<tr><td>2</td><td>Cost of cultivation (Rs./ha)</td><td>59,700</td><td>64,050</td></tr>
<tr><td>3</td><td>Gross return (Rs./ha)</td><td>1,30,075</td><td>1,16,530</td></tr>
<tr><td>4</td><td>Net return(Rs./ha)</td><td>70,375</td><td>52,480</td></tr>
<tr><td>5</td><td>B:C ratio</td><td>2.2</td><td>1.8</td></tr>
</table>
</td></tr>
</table>

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 (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Paddy	*Vasambu* (*Acotus calamus*) 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	This serves the dual purpose of seed selection and treatment of seed borne disease

		sowing.	
2		The place with higher elevation in the field is selected for raising paddy nursery	Water flooding is avoided
3	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
4		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
5		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 increase number of flowers in the crop.
6		Nochi leafs along with stored paddy grain. News paper clippings and herbal leaf mixture.	To repel stored product pests
7	Pulses	Use of neem oil / red earth	To repel stored product pests in Pulses
8		Coating the pulse seeds with arappu leaf powder	To protect the seeds from ants and birds
9		Drying of blackgram seeds during new moon time	To protect from pulse beetle infestation
10	Vegetables	Neem extract/ Pungam Oil/ Panchaghavya	To control sucking pests and borers in vegetables
11	Animal husbandry	Oral administration Aloe vera & Aanai nerunji leaves	To induce heat in cows
12		Oral administration of Betelvines, omam	To solve indigestion problem in goats
13		Equal quantity of Napthalene balls and camphor were mixed with water into paste and apply on the body of cattle for 2 hours	To control parasites
14		Application of fat of pigs/henna leaf paste	To control foot and mouth disease in cattle

16. IMPACT

16.A. Impact of KVK activities.

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Value addition in millets – vocational training	20	5	Rs. 5000/month	Rs. 7000/month
Value addition in fruits and vegetables –vocational training	22	12	Rs. 7000/month	Rs. 30000/month
Quality seedling production –	40	25	Rs.	Rs.

Vocational training			10000/month	35000/month
Integrated Farming system-wet land –FLD & Training	100	30	Rs.1,26,050/ha	Rs.3,61,312
Integrated Farming system –dry land – FLD & Training	100	25	Rs.10,000/ha	Rs.33,000/ha
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. **12,528/ha**	Rs.19798/ha
IPDM practices in paddy	22	65	Rs 45756/ha	Rs 52463/ha

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

16.B. Cases of large scale adoption (Please furnish detailed information for each case)

CASE 1: Ground nut production technologies through cluster FLD approach

Ground nut is cultivated around 15,000 ha in Cuddalore district during 2012-13.After that the area under groundnut cultivation is drastically reduced (9926 ha) from existing variety due to not known about improved technologies.

Interventions of KVK, Vridhachalam

During 2017-18, 75 nos.of cluster FLD for ground nut has been conducted in 30 ha of land during rabi season at Vandurasankuppam Village of Cuddalore block, Ayyan Kurinjipadi & Karuppanchavadi Village of Kurinjipadi Block of Cuddalore district. In cluster FLD approach KVK, Vridhachalam has demonstrated the improved variety of groundnut, VRI 8 and GJG 22, seed treatment with rhizobium and phosphor bacteria, demonstration of crop Management practices, Post emergence herbicide application, application of groundnut rich @ 5 kg/acre, demonstration of IPDM practices, setting of pheromone traps and yellow sticky traps and stripping operation by machine were conducted to the farmers .

Impact of intervention

The average yield obtained by cultivating VRI 8 is 43.77 q/ha when compared to check (29.05 q / ha) in the two cluster villages. They have also recorded higher net income of Rs.1,42,108/ha by cultivating VRI 8 when compared to check (Rs.51,667/ha).

The average yield obtained by cultivating GJG 22 is 56.65 q/ha when compared to check (29.03 q/ ha) in the third cluster village. They have also recorded higher net income of Rs.1,54,626/ha by cultivating GJG 22 when compared to check (Rs.52,299/ha).The other

farmers about (60 per cent) also been cultivating the VRI 8 and GJG 22 and other improved package of practices in groundnut .The socio economic status of groundnut farmers were improved in the cluster villages. They are also willing to produce the seeds of VRI 8 & GJG 22 by seed village concept.

Feedback from the farmers:

The seeds of the VRI 8 & GJG 22 is bolder seeds and also it is drought tolerant variety than the check. Market price fetches lower value i.e. Rs. 2000/40 kg bag during 2018 which is very lower value and farmers needs fix minimum Procurement price to the groundnut crop.

Horizontal spread

Within a short period of 2017-18, now through interactive efforts in collaborative with local extension functionaries now about 1000 ha of area is under cultivating the VRI 8 & GJG 22 especially in Vandurasankuppam Village of Cuddalore block, Ayyan Kurinjipadi & Karuppanchavadi Village of Kurinjipadi Block of Cuddalore district.

CASE 2: Blackgram and greengram production technologies through cluster village approach

i. Situation analysis

Blackgram and greengram are major crops in Nallur block of Cuddalore district of Tamil Nadu. The farmers using local varieties which are low yielding characters. Sometimes, low yield attributes with poor soil nutrient status and pest and disease problems. An average of 4.25 q/ha of yield was recorded from the blackgram crop. The farmers generally not aware of latest released varieties and recent technologies for higher production.

Implement of Intervention of KVK, Vridhachalam and support

KVK,Vridhachalam has conducted 50 trials for blackgram and 50 trials for greengram during the year of 2017-18 at Edaichittur, Ilangiyanur Village, Nallur block in 40 ha of land. The black gram and greengram yield was low in that block due to lack of awareness about improved variety and technologies.

ii. Output

Before intervention

Before the intervention the yield obtained in black gram is 4.25 q/ha and in greengram is 4.9 q/ha. The net income obtained by the farmers were very low (Rs.14450/ha in blackgram and Rs 6700/ha). By cluster FLD approach the following technologies and improved varieties were demonstrated like Co 6 in black gram and VBN 3 in greengram, Seed treatment with Rhizobium, Phosphobacteria, *Pseudomonas fluorescens*, spraying of pulse wonder, application of $ZnSo_4$ and IPM practices. The farmers were also supplied with

the critical inputs like seeds, bio fertilizers, pulse wonder, $ZNSO_4$, pheromone trap and yellow sticky trap.

After intervention

After the intervention, in blackgram the yield obtained by cultivating Co 6 is 6.96 q/ha when compared to check 4.25 q/ha .The net income obtained is also improved drastically (Rs.19200/ha) when compared to check.

Performance of CO 6 blackgram in Cluster FLD programme

Farmer's Existing plot				Demonstration plot			
Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C Ratio	Gross Cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
26150	40600	14450	1.55	29520	48720	19200	1.65

In greengram, 6.52 q/ha was recorded from greengram as against local variety of 4.9q/ha in the cluster FLD programme. The net income was observed as more in VBN3 greengram (Rs11930) when compared to check (Rs 6700/ha).

Performance of VBN 3 blackgram in Cluster FLD programme

Farmer's Existing plot				Demonstration plot			
Gross cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C Ratio	Gross Cost (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
27560	34260	6700	1.24	30450	42380	11930	1.39

Feedback from the farmers

CO 6 is performing better than check variety VBN 3. The no. of pods/plant obtained is higher in CO 6 than the check. Similarly, VBN 3 in greengram performed better with increased yield and net income.

iii. Impact

In Edaichittur, Ilangiyanur Village, Nallur block, based on the intervention, 6825 kg of blackgram and 4850 kg of green gram seeds were sold to the other farmers for seed purpose. The farmers in the neighbouring village are also willing to adopt the improved blackgram var. CO 6 and greengram VBN 3 and improved package of practices. They realized a better yield and net income by adopting blackgram and greengram varieties and improved package practices.

CASE 3: Case study-Integrated farming system under wetland situation

Integrated farming system is a holistic approach which is nothing but integration of agriculturally allied enterprises along with the cropping with the objectives of increasing income and recycling of farm wastes and by products to sustain the soil productivity .The allied enterprises were selected based on the resource availability and agro ecological situation. The efficiency of the component linkages was evaluated predominately on the basis and employment generation with the possibility of recycling the organic wastes.

Earlier the small farmers followed cropping system alone (Rice-rice fallow pulses) in their farm. They earned low yield and income from the crop due to aberrant weather situations like drought, flood and cyclone etc. and also they faced unemployment combined with no income during the off season.

KVK, Vridhachalam intervention:

The integrated farming system experiments were conducted at wet land since 2012 onwards by this Kendra. Integration of crop along with fish, poultry and vermi compost unit in the wet land system under 1 ha of land .The crop (Rice-Maize/cotton-) is cultivated in 0.9 ha of land. The density of fingerlings stockings 1000 is nos for 0.1 ha The poultry shed is erected over the fish pond with 50 nos. poultry breed of Vanaraja and Giriraja. The product from the crop like broken rice, maize grains and oil cakes were fed to poultry .The poultry droppings and rice bran, oil cakes were supplied as a feed to the fish. The by - products were efficiently recycled in IFS through this the cost of production is greatly reduced simultaneously net income generated (Rs.3,61,312 / ha) is increased and more employment opportunity is created (1200 man days /year) is increased. During 2012-13 three nos. of wet land FLDs were conducted in Alichikudi, Gopurapuram and Puliyur villages .Subsequently IFS based intensive trainings were arranged for the local farmers and extension functionaries.

After intervention:

After the technological backstopping provided by the KVK, Vridhachalam many farmers realized the benefits of IFS (wet land).They have shifted their cropping pattern and farming system from conventional to integrated farming system in order to attain the sustainable livelihood. The farmers have obtained higher production and income throughout the year. The economic and society status of the farmer is certainly by this intervention. In one hectare of wet land systems a farmer could get a net additional income of Rs.1,08,350/- from the allied enterprises and his crop component.

Feedback from the farmers:

Integration of crop cultivation along with fish and poultry rearing is the profitable, sustainable and employment generating technology. The financial status of the farmer is improved by this intervention.The farmers were satisfied with this intervention.

Horizontal spread

Within a short period of 2012-14, now through interactive efforts in collaborative with local extension functionaries now about 25 Nos. farmers have established their own wetland IFS system in their farms, especially in Vridhachalam ,Karveppilankurchi and Chinnakandyankuppam areas.

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 modifications were made 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

2. 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	♦ 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 ♦ Precision farming project
Dept. of Horticulture	♦ 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,chillies and loose flowers ♦ Precision farming project
Annamalai University, Chidambaram	♦ Rural agricultural work experience programme ♦ U.G. and P.G. students visit to KVK ♦ Training to FSC clubs
TANUVAS, UTRC, Cuddalore	♦ Resource persons for training
Agricultural Extension Wing, Department of agriculture (TANCOF)	♦ Off campus training ♦ Seed supply & Watershed development ♦ Training on oil seed production technology
Department of Animal husbandry	♦ Advisory service

Collectorate, Cuddalore	♦ Grievance day meeting ♦ NLC expansion programme-alternate employment for displaced riots ♦ Agricultural production council meeting ♦ Periodical technical / consultative meeting
Mahalir Thittam / DRDA Cuddalore	♦ Sponsored training ♦ SGSY – SHG training ♦ Skill up - gradation programme ♦ Vazhalnthukattuvom project
Higher Secondary Schools	♦ Awareness campaign ♦ NSS campaign
NGOs	♦ Awareness campaign ♦ Training programme ♦ Demonstration
NABARD, Cuddalore	♦ Farmers group discussion ♦ TTC meetings ♦ Trainings to farmers
Agriculture Engineering Dept. Govt. of Tamil Nadu	♦ Rain water harvesting programme ♦ Training on agricultural implements and river basin development ♦ Resource person for department training programmes
ZRC, Coimbatore	♦ Training on power tiller operation, maintenance and its attachments ♦ Implements supply
Dept. of Millets, TNAU, Coimbatore	♦ FLD in kodomillet and maize ♦ Seed supply
Dept. of Forage crops, TNAU, CBE	♦ FLD and OFT on forage crops
NGO- KVKs	♦ Training and exposure visit ♦ Seed materials supply & FLD / OFT discussion
WTC, Tamil Nadu Agricultural University, Coimbatore	♦ Drip and sprinkler unit supply ♦ Technical support ♦ Training on micro irrigation
Indian Bank, Vriddhachalam	♦ Training programmes
AIR,Puducherry	♦ 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.)

----------XXXXXXX----------

OFT – Photos

Assessment of rice varieties in salt affected soil

Assessment of turmeric varieties

Assessment of technologies for aflatoxin in ground nut

Assessment of black gram variety suitable for summer irrigated with special emphasis on YMV

Assessment of glycemic response of traditional paddy varieties

FLD – Photos

Demonstration of paddy variety Co 52

Demonstration of ICM in Kodo millet

Demonstration on CO(H) 6 Maize Hybrid

Demonstration on Seed production in Ground nut VRI 8

Demonstration on Sesame VRI 3

Ecological engineering method of pest management in paddy

FLD – Photos

Demonstration of PLR 1 Sirukeerai (Amaranthus)

Demonstration on Banana Shakti

Demonstration on ICM in watermelon

Dehydration of moringa powder - value addition

Intercropping and ICM in cashew

Demo of Composite fish culture in farm ponds

ON CAMPUS TRAININGS

Improved production techniques in paddy

Seed production techniques in pulses and oilseeds

Cultivation and value addition in mushroom

Cultivation techniques of vetiver

Rearing of poultry, milch animal and value addition in milk

Training for entrepreneurship development

OFF CAMPUS TRAININGS

ICM in paddy

Blackgram cultivation techniques

Hitech practices in maize and cotton

Water and nutrient management in paddy

Watermelon cultivation techniques

Guava cultivation techniques

Cluster FLD

Demo on seed drill sowing

Post emergence herbicide in ground nut

Field visit at Ayyankurinjiapdi village

Field day

Demonstration of pulse wonder spray in the CFLD trial

Assessing the performance of Blackgram at ediachittur village

Special Programmes

World Honey Bee Day

Sankalp See Siddhi- release of publication

Value Addition in Cashew

SWACHCH HI SEVACampus cleaning at PUM school, Pudhukuraipettai

Training on Safe use of Pesticides

Agriculture Education day

Soil Health Day & Other Programmes

Distribution of Soil Health Card

Exhibition- world soil health day

Demonstration of Soil sampling

SAC meeting- News Letter release

Conduct of Quiz programme to PUM school, Pudhukuraipettai

Distribution of prizes to winners of drawing competition

FARMERS FIELD SCHOOL AND DEMO UNITS

FFS- Ground nut Field Visit

Farmers Field School

Protray nursery demo unit

IFS model unit

Cashew Nursery Unit

HI-Tech Nursery Unit