PART I - GENERAL INFORMATION ABOUT THE KVK

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

KVK Address	Telephone		Email	Web Address
	Office	Fax		
Senior Scientist and Head **ICAR Krishi Vigyan Kendra** Kilnelli village, Chithathur post, Vembakkam Taluk, Thiruvannamalai-604410	04182-201525, 293484	-	kvktvmalai91@gmail.com	www.kvkthiruvannamalai.com

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

Host org. Name	Telephone		Email	Web Address
	Office	Fax		
The President, **Tamil Nadu Board of Rural Development,** No.24, Crescent park street, T.Nagar, Chennai-17	04424361319	04423461319	tnbrd1978@gmail.com	tnbrdngo.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Mr.N.Rameshraja	-	9943727419	rameshraja_horti@yahoo.co.in

1.4. Year of sanction : May **-** 1991 (No.5(108)/90-KVK Dt. 28.03.1991

1.5. Staff Position (as 31st March 2017)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale with present basic	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Senior Scientist and Head	Vacant	Sr. Scientist and Head	-	-	-	-	-	-	-
Pay scale : 15600 – 39100 + GP 5400/-										
2	Subject Matter Specialist	Mr.N.Rameshraja	SMS	M	Horticulture	M.Sc (Agri.) Hort.,	*24130/-*	04.07.2003	Permanent	OBC
3	Subject Matter Specialist	Mrs.T.Margaret	SMS	F	Home Science	M.Sc, M.phil	*24130/-*	04.07.2003	Permanent	OBC
4	Subject Matter Specialist	Mr.P.Narayanan	SMS	M	Plant Protection	M.Sc (Agri.)	*16230/-*	08.01.2014	Permanent	OBC
5	Subject Matter Specialist	Vacant	SMS	-	Animal Science	-	-	-	-	-
6	Subject Matter Specialist	Mr.V.Suresh	SMS	M	Agrl. Extension	M.Sc (Agri.	*16230/-*	20.01.2014	Permanent	OBC
7	Subject Matter Specialist	Mr.P.Rajesh	SMS	M	Agronomy	M.Sc (Agri.)	*16230/-*	20.01.2014	Permanent	OBC
Pay scale : 9300-34800 + GP 4200/-										
8	Programme Assistant – T4	Mr.O.Sekar	Comp. programmer	M	-	*B.Sc, PGDCA*	*19880/-*	01.09.1997	Permanent	OBC
9	Farm manager	Vacant	Farm manager	-	-	**-**	-	-	-	-
10	Programme Assistant – T4 (Lab Technician)	Vacant	Programme Assistant – T4 (Lab Technician)	-	-	**-**	-	-	-	-
11	Assistant	Mrs.M.Viji	Assistant/ Accountant	F	-	M.Com.,	*20790/-*	01.02.1993	Permanent	OBC

Pay scale : 5200-20200 + GP 2400/-										
12	Jr. Stenographer Grade - III	Mrs.A.K.Geetha	Stenographer	F	-	B.Com, DCA	*12810/-*	01.10.1997	Permanent	OBC
Pay scale : 5200-20200 + GP 2000/-										
13	Driver	Mr.S.Janarthanan	Driver cum Mechanic	M	-	8th Std.	*10590/-*	01.09.1993	Permanent	OBC
14	Driver	Mr.T.Selvaraj	Driver cum Mechanic	M	-	9th Std.	*10430/-*	01.01.1996	Permanent	OBC
Pay scale : 5200-20200 + GP 1800/-										
15	Supporting staff	Mr.T.Varadhan	Supporting staff	M	-	5th Std.	*9130/-*	01.02.1994	Permanent	OBC
16	Supporting staff	Mr.G.Selvam	Supporting staff	M	-	5th Std.	*9130/-*	01.07.1995	Permanent	OBC

1.6. Total land with KVK (in ha)

S.No	Item	Area (ha)
a.	Under building	2.0
b.	Orchard/Agro-forestry	1.6
c.	Under Crops	9.0
d.	Under Demonstration Units	3.2
e.	Others	4.2
Total		**20.0**

1.7 Infrastructural Development:

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	1997	696	25,34,244.00	Not applicable		
2.	Farmers Hostel	ICAR	1998	305	14,96,643.00			
3.	**Staff Quarters**							
	1. SMS quarters	ICAR	1997	390	13,42,350.00			
	2. Assistant Quarters	ICAR	1998	300	9,00,000.00			
4.	**Demonstration Units**							
	1.Animal shed	ICAR	1997	145.0	173384.05			
	2.Poultry shed	ICAR		29.2	88793.75			
	3.Goat shed	ICAR		22.1	88793.75			
	4. Mushroom shed	ICAR		24.7	96797.35			
	5. Workshop	ICAR		65.79	181236.25			
5	Fencing	ICAR		6407.3 Meter	5,58,765.00			
6	Threshing floor	ICAR		270.8	2,92,757.00			
7	Vehicle shed	ICAR	1996	80.4	192764.00			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms./hrs Run	Present status
Jeep : TN-09 AF – 0775	2004	4,82,356/-	233266.0	Need to be condemned
MF Tractor & Trailer : TN-25 AX 1058	2012	5,70,000/-	1155.4	Good
Hero Honda : TN–09 AP 4662	2006	36,890/-	74490.0	Need to be replaced
Hero Honda passion plus : TN–25 S 0563	2009	49,476/-	68016.0	Good

C) Equipments & AV aids

Sl. No.	Name of the equipment	Cost (Rs.)	Year of purchase	Present status
1	Table 3x2 sunmica KG-18 with godrej lock	15000	9/15/1993	Good
2	Steel Almirah 5.5 ft. Green colour	2750	9/15/1993	Good
3	Steel Almirah 6.5 ft. Green colour	15200	9/15/1993	Good
4	Wooden table with cup-board L shape	5500	11/20/1993	Good
5	Wooden table with cup-board L shape	6200	11/20/1993	Good
6	Wooden Teapoy 5x2 ft.	1750	11/20/1993	Good
7	Wooden cupboard	3300	11/20/1993	Good
8	Wooden podium	1100	11/20/1993	Good
9	Wooden Mica table 6x3 and 4x4 (2)	16400	3/24/1994	Good
10	Table 3x2 sunmica KG-18 with godrej lock	12000	6/22/1994	Good
11	Full arm chair KG-18	10500	6/22/1994	Not in use
12	White Board	4250	2/22/1995	Not in use
13	Glass Board	5090	2/22/1995	Not in use
14	Dining table 5x3 with 4 chairs	7000	3/7/1995	Good
15	Wooden cot with bed	5500	3/7/1995	Good
16	Polymer chairs-CH 23 type	285000	3/7/1995	Good
17	Screen 8 x 8	6500	10/14/1995	Good
18	Xerox Machine IR-1600 – Canon	74000	7/9/2004	Good
19	Steel cot super size 6 x 4 ft	33880	9/25/2004	Good
20	Steel dining table 5 x 2 x 2.5 ply wood top	16120	9/25/2004	Good
21	Iron rack	3500	3/1/2005	Good
22	LPG Double Burner stove (friendly)	1262	3/1/2005	Good
23	Revolving stool	565	3/8/2005	Good
24	Digital Conductivity meter	10444	3/10/2005	Good
25	Shaker	49994	3/10/2005	Good
26	Hot air oven - Guna Make	15033	3/10/2005	Good
27	Hot plate - Sunbim Make	24998	3/10/2005	Good
28	Refrigerator – Whirlpool	19998	3/10/2005	Good
29	Spectro photometer Model SL177	60300	3/17/2005	Good
30	Grinder - NACLE - 65mm x 25mm motor - 1/4 HP Stainless Steel	30009	3/23/2005	Good
31	Electronic balance - AUY 220, Capacity: 20 gms	100242.5	3/26/2005	Good
32	Servo Voltage Stabilizer with 5 KVA Electronic High/Low Voltage cut off	9008	3/30/2005	Good
33	Teak plywood table 6 x 2.5 x 2.5 ft-8 x 2.5 x 2.5 ft	86280	1/3/2006	Good
34	Jolapur Bed Spread	8700	1/28/2006	Good
35	Jolapur Bed Sheet	5600	1/28/2006	Good
36	LCD-Panasonic Projector	55000	3/22/2007	Good
37	Air Conditioner - Onida 1.5 t	0	9/19/2008	Good
38	Computer Tables	0	9/19/2008	Good
39	Printer Tables	0	9/19/2008	Good
40	Chairs	0	9/19/2008	Good
41	Desk Top Computers with 104 key board, Optical mouse-Monitor-17" TFT LCD-SVGA	0	2/17/2009	Not in use
42	Server with 104 key board, Optical mouse-Monitor-17" MPR II	0	2/17/2009	Not in use
43	UPS-3KVA-APC	0	2/17/2009	Good

44	Batteries	0	2/17/2009	Good
45	UPS-650 VA-APC	0	2/17/2009	Not in use
46	Dot Matrix Printer-TVS-245	0	2/17/2009	Not in use
47	Switch-DAX 24 port	0	2/17/2009	Not in use
48	Laser Printer-Hp LJ 1505	0	2/17/2009	Good
49	Scanner-Hp BJG3110	0	2/17/2009	Good
50	Fax Machine -Samsung - SCX 4521F	15000	9/3/2009	Good
51	V SAT Antenna-1.8 M Prodelin antenna	0	9/9/2009	Not in use
52	VIASAT Linkstar IDU-C-Band-5 watt-ODU with External PSU & cable	0	9/9/2009	Not in use
53	Pruning saw heavy duty	3474	2/18/2010	Good
54	Lopping shear	1283	2/18/2010	Good
55	Secature	1624	2/18/2010	Good
56	Hedge shear	770	2/18/2010	Good
57	Garden tools	386	2/18/2010	Good
58	Trowel	105	2/18/2010	Good
59	Garden hoe	565	2/18/2010	Good
60	Garden fork with steel handle	291	2/18/2010	Good
61	Leaf rabe with handle	291	2/18/2010	Good
62	Grass knife	410	2/18/2010	Good
23	Waterring cane-10 lit.-Rosecane	822	2/18/2010	Good
64	Warerring cane-5 lit.-Rosecane	326	2/18/2010	Good
65	Pattero shower-5	239	2/18/2010	Good
66	Fan shower	239	2/18/2010	Good
67	Hand saw	239	2/18/2010	Good
68	Secature-Geneo	445	2/18/2010	Good
69	Secature-Agri	326	2/18/2015	Good
70	Portable Generator --Birla Ecogen-EG 3000 AS Model	77520	3/9/2010	Good
71	Inverter-Usha Zentra digital-1400 VA with Tubular battery SR-2 Nos	27500	3/9/2010	Good
72	Rotavator-Model:36/30	60320	3/25/2010	Good
73	Tope-Round Vessel-10 G-6.700 kg	1045	6/8/2010	Good
74	Tope-Round Vessel-10 G-17.060 kg (52-60")	2750	6/8/2010	Good
75	Kaivadi Big Vegetable stainer-1.400 kg	532	6/8/2010	Good
76	Vegetable Kothu-SS 2.800 kg	700	6/8/2010	Good
77	Milk cane-SS-1.480 kg	385	6/8/2010	Good
78	Bucket- Satha-SS-1.580 kg	253	6/8/2010	Good
79	MS Jarnee-MS-2.060 kg	134	6/8/2010	Good
80	MS Stand-Fire wood Stove stand-16.080 kg	1045	6/8/2010	Good
81	Jug-water	540	6/8/2010	Good
82	Prestige Pressure cooker-20 lit.	3770	6/19/2010	Good
83	Wet Grinder-Jumbo Junior 6" Plate grinding machine with stand, 1.5 HP single phase motor	12540	7/5/2010	Good
84	72 x 48 x 4 " Inch Cushion Double Bed Mattress	76608	8/5/2010	Good
85	72 x 36 x 4 " Cushion Mattress	29352	8/5/2010	Good
86	Pillow	10000	8/5/2010	Good
87	Bed spread	20000	8/5/2010	Good
88	VST-Sakthi Power tiller-130DI with CT85 fitted diesel engine	148190	8/13/2010	Good
89	Prestige mixture Grinder 3 Jar	3465	2/17/2011	Good
90	Idly Pannai – Small	495	2/26/2011	Good

91	Tabara with lid	555	2/26/2011	Good
92	Iron Kadai	400	2/26/2011	Good
93	Hot pack	1300	2/26/2011	Good
94	Public Address system - Ahuja PS x 1200 Amplifier Speaker	10860	3/11/2011	Good
95	Public Address system - Ahuja AW 490 VHL Cordless dual mike	2513	3/11/2011	Good
96	Ahuja SRX 50 x T Speaker box	5587	3/11/2011	Good
97	LED monitor-Dell	6900	3/11/2011	Good
98	DVD Player-Sony-SR700H	4050	3/11/2011	Good
99	BPL-SMX- 1606 EPABX-16 ports with time delay voltage stabilizer, PVC cable	48099	3/19/2011	Good
100	BPL phone	1945	3/19/2011	Good
101	Deep Freezer-110 lit capacity (-200C)-ELANPRO	31500	3/31/2012	Good
102	Refrigerated Centrifuge (Centrifuge tube two types 1.Rotor 2. Ependof) 20000 RPM speed-RCF37570 - 8 to 400C-Remi with Rotor	198500	3/31/2012	Good
103	Vacuum desiccators-Made 3.3 low expansion Borosilicate Glass	5000	3/31/2012	Good
104	Hot air oven-Double walled chamber	30000	3/31/2012	Good
105	Water distillation units-Double still-Double stage lower boiler	90000	3/31/2012	Good
106	Laminar Air flow chamber- Clean air model	57250	3/31/2012	Good
107	BOD Incubator - Horizontal - Capacity : 6 Cubic feet.-Lark	74425	3/31/2012	Good
108	Vortex mixer - 200-2800 RPM variable speed	3738	3/31/2012	Good
109	D.O Meter - Range 0-20 ppm, 0-600C	8400	3/31/2012	Good
110	Digital pH Meter - Range -2.00 to 16.00pH	9450	3/31/2012	Good
111	Digital Colony counter - 5 digit, Size 110mm dia	5000	3/31/2012	Good
112	Thermo hygrometer - Range 0-100 %	1312	3/31/2012	Good
113	Digital moisture meter-VFD Display, Capacity 100gm,	86000	3/31/2012	Good
114	Microscope with stand - Lens dia 145 mm,	5250	3/31/2012	Good
115	UV rays chamber - UV lamp long wave length 365nm	6875	3/31/2012	Good
116	Magnetic stirrer-Fitted with Pilot lamps, Variable speed stirring.	4095	3/31/2012	Good
117	Brix meter-0-45 %	3500	3/31/2012	Good
118	Brix meter-45 to 85 %	3500	3/31/2012	Good
119	Phase contrast microscope-Antifungal and anti reflection	57000	3/31/2012	Good
120	Dissection microscope-ISI standard with movable condenser	1575	3/31/2012	Good
121	Water bath - Tank-Double walled chamber with thermo stat	4725	3/31/2012	Good
122	Autoclave - Vertical -2000 Watage	52300	3/31/2012	Good
123	Stereo zoom microscope - Digital imaging systems	103050	3/31/2012	Good
124	10 KVA Wide range single phase electronic servo voltage stabilizer	21755	3/31/2012	Good
125	Whirlpool Air Conditioner split 1.5 ton 5 Star with stabilizer	33000	3/31/2012	Good
126	IFB Microwave oven-20 lits. Capacity	4500	3/31/2012	Good
127	Mridaparikshak-Mini Soil Testing kit	180600	3/31/2017	Good

1.8. Details of SAC meeting conducted in 2016-17 : -

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1.	-	-	-	-	-

PART II - DETAILS OF DISTRICT

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

Farming Situation	Farming System
Irrigated	Paddy - Paddy (Irrigated)
Irrigated	Paddy-Groundnut - vegetables
Rainfed	Groundnut-Pulses
Irrigated	Vegetable-Vegetables

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

Agro ecological situation	Characteristics
Eastern ghats-(TN uplands) and Deccan plateau	Hot semi arid eco region with red loamy soils

Agro-climatic Zone	Characteristics
North Eastern Zone, Vellore	The Mean average temperature is 28.62^{o}C. Hot during summer (35 - 37^{o}C. Cool during winder periods (24 -26^{o}C. The temperature regime is hyper thermic

2.3 Soil types

Sl.No.	Soil type	Characteristics	Area(ha)
1	Red Loam	The texture varies from sand to clay and the majority being loam. Porous and friable structure, absence of lime free from carbonates	78256
2	Red sandy loam	Contain enough clay materials, dominated by sand particles, having visible particles and having very gritty structure	63160
3	Black Loamy	Consist of mixture of sand clay and decaying organic matter having high nutritive value	18793

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

Crop	Area (ha)	Production (Tonnes)	Productivity (kg/ha)
Paddy	138879	654953	4716
Cholam	373	783	2098
Cumbu	4836	15848	3277
Maize	1925	15800	8208
Ragi	2000	6634	3317
Samai	5650	12108	2143
Greengram	1076	774	719
Redgram	2253	1809	803
Blackgram	12840	8718	679
Groundnut	67035	162158	2419

Gingelly	971	653	673
Sugarcane	25403	210845	8300
Sunflower	6129	12258	2000
Cotton	330	156	474
Brinjal	284	3021	10637
Tomato	124	1496	12065
Bhendi	308	2679	8698
Chillies	658	1042	1584
Turmeric	313	6826	5478
Banana	2582	120528	46680
Mango	631	168	266

2.5. Weather data

Month	Rainfall (mm)	Temperature		Relative Humidity (%)
		Temp(Max)	Temp(Min)	
April	0.0	34	32	69
May	84.13	35	31	62
June	103.5	35	30	68
July	116.2	36	32	70
August	95.93	37	32	72
September	103.3	34	30	69
October	182.0	34	30	66
November	130.0	33	29	61
December	16.0	32	29	72
January	0.00	31	28	76
February	0.00	30	26	82
March	0.00	30	26	79

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

Category	Population	Population Unit	Production	Production Unit	Productivity	Productivity Unit
Cross breed-Exotic	480704	Nos.	3297000	Nos.	6.86	Lits/day
Indigenous	236632	Nos.	317000	Nos.	1.34	Lits/day
Buffaloes	22686	Nos.	104355	Nos.	4.3	Lits/day
Sheep	366752	Nos.	424140	Nos.	0	-
Goat	272823	Nos.	341440	Nos.	0	-
Pigs	5979	Nos.	17200	Nos.	0	-
Poultry	501552	Nos.	8834000	Nos.	0	-

2.7 District profile has been prepared and submitted Yes / No : Yes

2.8 Details of Operational area / Villages

Taluk Name	Hobli/Block Name	Village Name	How long the village is covered under operational area of the KVK	Major Crops	Major Problems	Identified Thrust Area
Arni	West Arni	Ammapalayam	2 Years	Paddy	Imbalanced fertilization, lack of awareness on IPDM, Blast, BLB, Brown leaf spot, stem borer, leaf folder and BPH	Integrated Crop Management, Integrated Pest and Disease Management
Polur	Polur	Jamunamarathur	2 Years	Pearl Millet	Cultivation of local variety, Long duration, Downy mildew incidence Ravage of Earhead , yield reduction.	Integrated Crop Management, Integrated Nutrient Management, Varietal Demonstration
				Little millet	Low market price, Lack of awareness in value addition, Less utilization of millets.	Integrated Crop Management
Polur	Polur	Padavedu	1 Year	Redgram	Cultivation of age old variety CO 6, Severe Incidence of root rot & SMD Very long duration (170-180 days), Pod borer damage.	Varietal Demonstration
Vembakkam	Vembakkam	Vembakkam	2 Years	Blackgram	Cultivation of T9 and VBN 3, Severe incidence of YMV-86%, Shattering during harvest-19%, Labour intensive , Yield loss-92%	Integrated Crop Management
				Greengram	Repeated cultivation of existing varieties KM 2 & VBN 2, Un uniform maturity leads to multi harvest, Incidence of YMV and Powdery mildew.	Integrated Crop Management, Varietal Demonstration

Thiruvannamalai	Kilpennathur	S.Nammiyandhal	1Years	Groundnut	Cultivation of local variety, poor yield pest and disease infestation , time consuming process, high wage, lake of awareness on women friendly equipments.	Farmers Field School, Drudgery reduction
				Sugarcane	Continuous cultivation of same variety CO 86032, Poor cane yield (80t/ha), Unaware of newly released varieties.	Integrated Crop Management, Varietal Demonstration
Thandarampattu	Thandarampattu	Sathanoor	3 Years	Tomato	Poor quality seedlings and field establishment, Imbalanced nutrition, Incidence of Fruit borer, Leaf curl, Lack of location specific hybrids,	Integrated Disease Management, Varietal Assessment
Vembakkam	Vembakkam	Vembakkam	2 Years	Brinjal	Cultivation of local variety, Incidence of shoot & fruit borer and little leaf, Blight, Imbalanced nutrition, Poor quality seedlings and field establishment, Low yield.	Integrated Crop Management, Integrated Pest and Disease Management
Vandavasi	Thellar	Kondaiyankuppam	3 Years	Bittergourd, Ribbedgourd, Snakegourd	Low fruit set, Maleness, Imbalanced nutrition, Incidence of Fruit fly, Sucking pests and Downy mildew, Lack of adoption of improved technologies	Integrated Crop Management, Varietal demonstration, Integrated Pest and Disease Management
Thiruvannamalai	Kilpennathur	S.Nammiyandhal	1Years	Chillies	Lack of knowledge on location specific hybrids, Imbalanced nutrition, Flower drop and incidence of Fruit rot, Leaf curl, high incidence of sucking pest.	Integrated Crop Management, Integrated Pest Management
Thandarampattu	Thandarampattu	Sathanoor	3 Years	Watermelon	Low yield, Imbalanced nutrition, Differential maturity of fruit, Bud necrosis, Fruit cracking, Lack of adoption of improved technologies	Integrated Crop Management.

Polur	Polur	Padavedu	1 Year	Banana	Low bunch grade and weight, Fusarium wilt and Sigatoka leaf spot, Imbalanced nutrition, Lack of knowledge on improved planting methods, Lack of knowledge on value addition.	Integrated Crop Management, Foliar nutrition, Value addition.
Thiruvannamalai	Kilpennathur	S.Nammiyandhal	1Years	Bhendi	Yellow vein Mosaic Virus, Imbalanced nutrition, Non adoption of improved technologies.	Integrated Crop Management, Varietal demonstration.
Thandarampattu	Thandarampattu	Sathanoor	3 Years	Jasmine	Yellowing of leaves, Bud worm, Imbalanced nutrition, Improper pruning.	Integrated Nutrient Management, Integrated Pest Management
Arni	West Arni	Korattur rantham	2 Years	Sapota	No value addition, Low market price	Value addition.
Vembakkam	Vembakkam	Vembakkam	2 Years	Milk	Distress sale of milk, Lack of awareness in processing	Value addition.
Vandavasi	Thellar	Kondaiyankuppam	2 Years	Fodder production	Lack of awareness on Green fodder, Poor milk and meat yield, Low economic return.	Fodder production

2.8.1 Priority thrust areas

- Integrated crop management practices.
- Varietal assessment in field & horticultural crops.
- Integrated Nutrient and weed Management
- Farm Mechanization
- Demonstration of high yielding varieties /hybrids
- Growth regulators application in Vegetable crops
- Scientific nursery management in vegetable crops
- Integrated Pest and disease management
- Organic farming
- Seed production in pulses & oilseeds
- Post harvest management
- Integrated Farming System
- Scientific livestock farming
- Value addition, Drudgery reduction

PART III - TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
6	5	32	25	9	9	72	72

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
124	83	2405	1584	359	441	6195	4927

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
83	5.79	13000	8007

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
-	327	11000	4440

3B.1. Abstract of interventions undertaken based on thrust areas identified for the district as given in Sl.No.2.7

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions										
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No.)	Supply of seeds (Qtl.)	Supply of planting materials (No.)	Supply of livestock (No.)	Supply of bio products	
													No.	Kg
1	ICM	Paddy	Severe water logging and algal growth. Poor tillering, Patchy growth, Leaf scorching , Stunted growth	-	-	1	-	2	3	-	-	-	-	-
		Millets	Less awareness of millets cultivation. Improper nutrient mgt. Poor yield.	-	Demo. on pearlmillet CO-10 under rainfed condition	2	-	-	2	CO 10 seed- 0.3	-	-	-	*Azosprillium-15. Phosphobacteria-15.*
		Sugarcane	Poor yield, Usage of old variety, Imbalanced nutrition	-	Demo on CO0212 sugarcane variety	1	-	-	2		Sugarcane sett-30000 (two buds)	-	-	*Azosprillium-4. Phosphobacteria-4.*
		Groundnut	Cultivation of age old variety, Improper weed, nutrient management. Poor yield.	-	-	3	-	-	-	-	-	-	-	-
2	Weed management	Paddy	Weed menace		-	-	-	1	2	-	-	-	-	-
		Pulses		-	-	2		-	1	-	-	-	-	-

3	Drought mitigation	Field crops	Low water availability, Less water use efficiency. Lack of awareness on drought management.	-	-	1	-	1	2	-	-	-	-	-
4	INM	Millets	Imbalanced nutrient management, Poor yield	-	-	1	-	-	2	-	-	-	-	-
		Oilseeds	Imbalanced Nutrient management. Poor yield.	-	-	1			1					
		Cucurbits Tomato, Brinjal, Chilli, Bhendi	Imbalanced nutrition	-	-	3	-	-	2	-	-	-	-	Vermicompost-825
5	Seed production	Pulses	Usage of age old variety, Inadequate seed supply	-	-	2	-	-	3	-	-	-	-	-

6	Varietal evaluation & ICM	Pulses	Cultivation of age old variety, Improper weed, nutrient management. Less awareness of foliar nutrition, Poor yield.	Assessment of redgram varieties under rainfed condition Assessment on performance of greengram varieties.	-	-	-	-	2	Red gram: LRG 52-0.25 CORG 7-0.25 Greengram : CO 8 – 0.20 BGS 9 – 0.20	-	-	-	-
7	Organic farming	Field crops	Indiscriminate usage of fertilizers, Cost of fertilizers, Reduction in soil microbes	-	-	3	-	-	2	-	-	-	-	-
		Vegetables	Indiscriminate use of pesticides and fertilizers	-	-	1	-	-	2	-	-	-	-	Vermicompost-500
8	Nursery management	Vegetables	Poor quality seedlings and field establishment	-	-	2	-	-	2	-	-	-	-	-
9	ICM	Brinjal, chillies, Tomato	Low yield, Flower drop, Lack of adoption of improved technologies, Reduction in soil fertility.	-	-	5	-	-	7					Vermi compost-250

		Bhendi	Yellow vein Mosaic Virus, Imbalanced nutrition, Non adoption of improved technologies.	-	▪ Demonstration of Bhendi hybrid CO4	1	-	-	6	Seeds-0.1	-	-		Vermi compost-100
		Bittergourd, Snakegourd, Watermelon Ribberd gourd	Low Fruit set, Fruit fly, Non adoption of improved technologies	-	▪ICM in Bittergourd. ▪ICM in Water melon	2	-	-	13	-	-	-	-	*Pongamia soap-60* *Neem soap-60* *Pseudomonas-10, Arka microbial consortium-30*
10	Precision farming	Vegetables	Lack of knowledge on improved production technologies	-	-	1	1	1	2	-	-	-	-	-
		Banana		-	-	-	-	1	1	-	-	-	-	-
11	INM & IPM	Jasmine	Yellowing of leaves, Bud worm, Imbalanced nutrition, Improper pruning.	-	-	-	-	-	2	-	-	-	-	-

12	IPDM	Paddy	Indiscriminate use of pesticide. Lack of awareness on IPDM. High incidence of blast, BLB, stem borer, BPH and leaf folder	-	IPM in paddy	6	1	1	10	-	-	-	20cc 20cc	*Trichogramma* japanicum. *T. chilonies*
		Pulses	Lack of knowledge on pests management, High incidence of YMV.	-	-	2	-	-	2	-	-	-	-	-
		Groundnut	Sever incidence of *Helicoverpa*, root rot, rust and tikka diseases	-	-	4	-	1	2	-	-	-	-	-
		Sugarcane	Yield loss due to sever incidence of borer and root grub.	-	-	1	-	1	2	-	-	-	-	-
		Brinjal	Incidence of shoot & fruit borer and little leaf, Root rot, Low yield	-	Demo. on IPDM in Brinjal	2	-	-	8	-	-	-	- 20cc	*Pseudomonas fluorescence* – 10 *T. chilonies*
		Chilli	High incidence of sucking pest and leafcurl virus.	Assessment of modules for the Management of sucking pests in Chillies	-	2	-	-	4	-	-	-	-	*Verticillium lecanii-5*

		Tomato	Incidence of Fruit borer, Leaf curl, Lack of resistant variety.	Assessment of Tomato Hybrids against leaf curl virus	-	1	-	-	3	Arka samrat-0.0015 COTH 3-0.0015	-	-	-	-
		Cucurbits	Fruit fly, Sucking pests, mosaic	-	-	2	-	-	3	-	-	-	-	-
13	Drudgery reduction	Groundnut	Time consuming process. High wage. Lack of awareness on women friendly equipments	-	Demonstration on Groundnut decorticator	2	-	-	1		-	-	-	
14	Value addition	Field crops	Low market price and Lack knowledge on value addition	-	-	5	-	-	3	-	-	-	-	-
		Fruits and vegetables	Low market price and high waste during On season.	Preservation techniques in sapota	-	4	-	1	4	-	-	-	-	-
		Milk	Low market price and Lack knowledge on value addition	-	-	1	-	-	3	-	-	-	-	-
		Mushroom	Lack of awareness on cultivational practices	-	-	1	3	-	6	-	-	-	-	-
		Bakery	Lack knowledge on baking techniques	-	-	1	-	-	2	-	-	-	-	-
15	Capacity building	Farmers club	Improper maintenance of registers by the farmers club	-	-	-	-	2	2	-	-	-	-	-

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/ enterprise	No. of programmes conducted			
				OFT	FLD	Training	Others – Extension Activities
1	2	3	4	5	6	7	8
1	Integrated Crop Management	TNAU	Paddy, Pearl millet	-	1	1	2
2	Integrated Crop Management	TNAU	Sugarcane	-	1	1	2
3	Integrated Weed Management	TNAU	Pulses	-	-	2	3
4	Integrated Nutrient Management	TNAU	Pearl millet	-	-	1	2
5	Integrated Crop Management	TNAU	Groundnut	-	-	2	2
6	Integrated Nutrient management	TNAU	Groundnut	-	-	1	1
7	Integrated Nutrient management	TNAU	Pulses	-	-	2	0
8	Seed production	TNAU	Paddy, Blackgram	-	-	2	3
9	Integrated Crop Management	TNAU	Pulses	-	-	2	0
10	Varietal evaluation	TNAU, UAS	Greengram	1	-	-	1
11	Varietal evaluation	TNAU, ANGRAU	Redgram	1	-	-	1
12	Organic farming	TNAU	Field crops, Vegetables	-	-	3	4
13	Nursery management	TNAU	Vegetables	-	-	2	2
14	Precision farming	TNAU	Vegetables	-	-	2	3
15	Integrated Crop Management, Varietal Demonstration (Bhendi)	TNAU, IIHR	Brinjal, chillies, Water melon, Bittergourd, Bhendi Vegetables.	-	3	9	26

16	Integrated Nutrient Management	TNAU, IIHR	Cucurbits, Bhendi, Tomato, Brinjal, Chilli	-	-	3	2
17	Integrated Pest and Disease Management	TNAU, NCIPM	Paddy	-	1	7	10
18	Integrated Pest and Disease Management	TNAU	Pulses	-	-	2	2
19	Integrated Pest and Disease Management	TNAU	Groundnut	-	-	4	2
20	Integrated Pest and Disease Management	TNAU	Sugarcane	-	-	1	2
21	Integrated Pest and Disease Management	TNAU, NBAII, IVRI	Chillies	1	-	2	4
22	Integrated Pest and Disease Management	TNAU & IIHR	Brinjal	-	1	2	8
23	Integrated Pest and Disease Management	TNAU	Gourds	-	-	2	3
24	Integrated Pest and Disease Management	TNAU, IIHR	Tomato	1	-	1	3
25	Feed and fodder management	TANUVAS	Fodder	-	1	-	1
26	Drudgery deduction	CAIE	Equipments	-	1	2	4
27	Drought mitigation	TNAU	Field crops	-	-	2	3
28	Value addition	TNAU	Field crops	-	-	5	3
29	Value addition	TNAU, UAS	Fruits and vegetables	1	-	4	4
30	Value addition	TANUVAS	Milk	-	-	1	3
31	Income Generation	TNAU & IIHR	Mushroom	-	-	4	6
32	Value addition	TNAU	Bakery	-	-	1	2
33	Capacity building	-	Farmers club & Extension personal	-	-	10	2
Total				**5**	**9**	**83**	**116**

3.B2 contd…

S. No	No. of farmers covered															
	OFT				FLD				Training				Others –Extension activities			
	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	0	0	0	0	0	0	10	5	0	0	11	5	0	0	45	12
2	0	0	0	0	5	0	0	0	0	18	2	0	25	8	0	0
3	0	0	0	0	0	0	0	0	16	12	6	8	35	17	4	5
4	0	0	0	0	0	0	0	0	0	9	0	5	0	0	30	15
5	0	0	0	0	0	0	0	0	29	9	0	3	40	18	15	0
6	0	0	0	0	0	0	0	0	13	0	7	0	35	20	7	6
7	0	0	0	0	0	0	0	0	29	9	14	7	41	32	10	0
8	0	0	0	0	0	0	0	0	15	18	3	3	27	17	6	4
9	0	0	0	0	0	0	0	0	37	17	0	0	35	16	12	8
10	4	1	0	0	0	0	0	0	0	0	0	0	40	20	0	0
11	4	0	0	1	0	0	0	0	0	0	0	0	45	0	0	7
12	0	0	0	0	0	0	0	0	49	8	4	23	72	11	0	0
13	0	0	0	0	0	0	0	0	16	0	0	0	15	0	0	0
14	0	0	0	0	0	0	0	0	28	10	0	0	42	80	0	0
15	0	0	0	0	28	2	0	0	117	6	0	0	222	21	5	0
16	0	0	0	0	0	0	0	0	27	4	0	0	74	10	2	0
17	0	0	0	0	7	3	0	0	116	6	7	0	64	9	0	0

18	0	0	0	0	0	0	0	0	37	0	0	1	18	6	4	1
19	0	0	0	0	0	0	0	0	69	1	2	0	8	7	3	0
20	0	0	0	0	0	0	0	0	17	0	0	0	10	2	0	0
21	5	0	0	0	0	0	0	0	30	6	0	0	30	4	0	0
22	0	0	0	0	10	0	0	0	25	3	5	0	59	6	0	0
23	0	0	0	0	0	0	0	0	28	2	1	0	22	1	1	0
24	2	0	3	0	0	0	0	0	6	0	6	2	4	2	10	0
25	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0
26	0	0	0	0	19	1	0	0	10	13	15	0	19	1	0	0
27	0	0	0	0	0	0	0	0	38	6	4	5	10	0	0	0
28	0	0	0	0	0	0	0	0	48	10	20	18	1	2	0	0
29	1	3	1	0	0	0	0	0	13	34	2	25	3	9	3	0
30	0	0	0	0	0	0	0	0	1	20	0	0	14	6	1	0
31	0	0	0	0	0	0	0	0	12	42	3	9	8	1	2	0
32	0	0	0	0	0	0	0	0	16	11	5	0	9	4	0	0
33	0	0	0	0	0	0	0	0	194	22	10	8	10	0	0	0
Total	**16**	**4**	**4**	**1**	**70**	**6**	**10**	**5**	**1036**	**296**	**127**	**122**	**1031**	**330**	**160**	**58**

PART IV - On Farm Trial

4.A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	-	-	2	-	-	-	-	-	-	**2**
Integrated Pest Management	-	-	-	-	1	-	-	-	-	**1**
Integrated Disease Management	-	-	-	-	1	-	-	-	-	**1**
Value addition	-	-	-	-	-	1	-	-	-	**1**
Total	**-**	**-**	**2**	**-**	**2**	**1**	**-**	**-**	**-**	**5**

4.A2. Abstract on the number of technologies refined in respect of crops **:** Nil

4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises **:** Nil

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises **:** Nil

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Varietal Evaluation	Redgram	Assessment on red gram varieties under rainfed condition	5	5	0.2
	Green gram	Assessment on performance of green gram varieties	5	5	0.2
Integrated Pest Management	Chilli	Assessment on modules for the Management of sucking pests in Chillies	5	5	0.2
Integrated Crop Management	-	-	-	-	-
Integrated Disease Management	Tomato	Assessment on Tomato Hybrids against leaf curl virus	5	5	0.2
Value addition	Sapota	Assessment of preservation techniques in sapota	5	5	-
Total	**-**	**-**	**25**	**25**	-

4.B.2. Technologies Refined under various Crops **:** Nil

4.B.3. Technologies assessed under Livestock and other enterprises **:** Nil

4.B.4. Technologies Refined under Livestock and other enterprises **:** Nil

4.C1. Results of Technologies Assessed

Results of On Farm Trial

1. Assessment on red gram varieties under rainfed condition

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Redgram	Kharif	Cultivation of local & long duration varieties, High incidence of pest and diseases, low productivity	Assessment on red gram varieties under rainfed condition	5	**TO1:** Cultivation of local varieties (SA1) **TO2:** Cultivation of Co(Gg) 7 Redgram variety **TO3:** Cultivation of LRG 52 Redgram variety	▪ Yield/Q/ha ▪ Branches-Nos./plant ▪ Pods-Nos./Plant ▪ No. of seeds/ pod	7.91 26 229 5 9.44 39 347 5 12.64 65 532 5	TO 3 resulted in 25.31 % increase in yield.	* TO 3 is economically viable. * TO 3 is better in net income compared to TO1 & TO2	-	-

Contd…

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1: Cultivation of local varieties (SA1)	TNAU	7.91	Q/ha	29046.00	1.69
TO2: Cultivation of CO(Gg) 7 Redgram variety	TNAU	9.44	Q/ha	48255.00	2.32
TO3: Cultivation of LRG 52 Redgram variety	TAU	12.64	Q/ha	76761.00	3.07

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1 Title of Technology Assessed : Assessment on red gram varieties under rainfed condition

2. Problem Definition : Cultivation of age old variety

3 Details of technologies selected for assessment

TO1 : Cultivation of local varieties (SA1)
TO2 : Cultivation of CORG 7 Redgram variety
TO3 : Cultivation of LRG 52 Redgram variety

4 Source of technology : **TO1 :** TNAU, **TO2 :** TNAU, **TO3:** UAS,Raichur

5 Production system and thematic area : Rainfed- Varietal Evaluation

6 Performance of the Technology with performance indicators :

Sl.No.	Performance Indicators	Technological options		
		TO1	TO2	TO3
1	Branches –Nos/plant	26	39	65
2	Pods-Nos./Plant	229	347	532
3	Seeds – Nos/Pod	5	5	5
4	Yield : Qtl/ha	7.91	9.44	12.64

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

Performance Indicators	Technological options		
	TO1	TO2	TO3
Pods-Nos./Plant	2	2	3
Yield	2	2	3
Net return	2	2	3
BCR	1	2	3

(High – 3, Moderate – 2, Low – 1, Very low – 0)

8 Final recommendation for micro level situation : LRG 52 found better in terms of yield and net returns and best suitable variety for rainfed condition in Thiruvannamalai district.

9 Constraints identified and feedback for research : The seed availability should be ensured

10 Process of farmer's participation and their reaction: Among the cultivars LRG 52 performed better followed by CORg7

2. Assessment on performance of green gram varieties

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Green gram	Rabi	Cultivation of local variety, Differential maturity, Incidence of YMV.	Assessment on performance of green gram varieties	5	**TO1 :** Cultivation of Green gram VRM1	▪ Yield/Q/ha ▪ No.of branches/plant ▪ No. of pods/plant. ▪ No. of seeds/pod. ▪ Percent Disease incidence	6.59 4 21 7 40.36	TO 3 resulted in 30.04 % increase in yield.	* TO 3 is economically viable. * TO 3 is better in net income compared to TO1 & TO2.	No	-
					TO2 : Cultivation of Green gram CO (Gg) 8.		8.14 6 32 8 5.10				
					TO3 : Cultivation of Green gram BGS 9		8.57 5 23 14 4.80				

Contd…

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1 : Cultivation of Green gram VRM1	TNAU	6.59	Q/ha	30329.00	1.72
TO2 : Cultivation of Green gram CO (Gg) 8.	TNAU	8.14	Q/ha	52705.00	2.43
TO3 : Cultivation of Green gram BGS 9	UAS,Raichur	8.57	Q/ha	57774.00	2.58

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1 Title of Technology Assessed : Assessment on performance of green gram varieties

2. Problem Definition : Cultivation with locally available variety VRM 1 and incidence of YMV

3 Details of technologies selected for assessment

TO1 : Cultivation of Green gram VRM1
TO2 : Cultivation of Green gram CO (Gg) 8.
TO3 : Cultivation of Green gram BGS 9

4 Source of technology : **TO1 :** TNAU, **TO2 :** TNAU, **TO3:** UAS,Raichur

5 Production system and thematic area : Irrigated- Varietal Evaluation

6 Performance of the Technology with performance indicators :

Sl.No.	Performance Indicators	Technological options		
		TO1	TO2	TO3
1	Yield/Q/ha	6.59	8.14	8.57
2	Branches-Nos./plant	4	6	5
3	No. of pods/plant	21	32	23
4	No. of seeds/pod	7	8	14
5	Percent Disease Incidence	40.36	5.10	4.80

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

Performance Indicators	Technological options		
	TO1	TO2	TO3
Branches-Nos./plant	1	2	3
No. of pods/plant	1	2	3
No. of seeds/pod	1	2	3

(High – 3, Moderate – 2, Low – 1, Very low – 0)

8 Final recommendation for micro level situation : BGS-9 performed better than other varieties both in terms of net return & yield.

9 Constraints identified and feedback for research : Short duration varieties with higher yield to be evolved in the future.

10 Process of farmers participation and their reaction : Found that the variety BGS-9 recorded higher yield compared to other two varieties and also very low disease incidence noticed.

3. Assessment of modules for the Management of sucking pests in Chillies

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Chillies	Irrigated	▪ Crinkling of leaves. ▪ Leaf curl stunted growth. ▪ Incidence of Thrips. ▪ Aphid and Mites	Assessment of modules for the Management of sucking pests in Chillies	5	**TO1 :** Application of pesticides **TO2 :** Growing Agathi as border crop. Seed treatment with imidacloprid 70% WS @ 12 g /kg of seed. Installation Yellow sticky traps@ 12/ha. Spraying insecticide Fipronil 5 % SC 1 ml /lit. **TO3 :** Cultivation of Maize as border crop. Soil application of Neem cake 250kg/ha. Spraying of Buprofezin 25 SC 150gm/ha. Application of neem soap @ 0.1% **TO4:** Application of neemcake 100 kg/ac. Spraying of neem seed powder @4%. Application of *Verticillium lecanii* 3g/lit.	▪ Yield (Q/ha) ▪ Percent pest and disease incidence	In progress.				

Contd…

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1 : Application of pesticides	-				
TO2 : Growing Agathi as border crop. Seed treatment with imidacloprid 70% WS @ 12 g /kg of seed. Installation Yellow sticky traps@ 12/ha. Spraying insecticide Fipronil 5 % SC 1 ml /lit.	TNAU	In Progress.			
TO3 : Cultivation of Maize as border crop. Soil application of Neem cake 250kg/ha. Spraying of Buprofezin 25 SC 150gm/ha. Application of neem soap @ 0.1%	IIVR				
TO4: Application of neemcake 100 kg/ac. Spraying of neem seed powder @4%. Application of *Verticillium lecanii* 3g/lit.	NBAII				

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1.	Title of Technology Assessed	:	Assessment of modules for the Management of sucking pests in Chillies
2.	Problem Definition	:	Crinkling of leaves, leaf curl, stunted growth, Incidence of Thrips, Aphid and Mites

3 Details of technologies selected for assessment

TO1 : Application of pesticides

TO2 : Growing Agathi as border crop. Seed treatment with imidacloprid 70% WS @ 12 g /kg of seed. Installation Yellow sticky traps@ 12/ha. Spraying insecticide Fipronil 5 % SC 1 ml /lit.

TO3 : Cultivation of Maize as border crop. Soil application of Neem cake 250kg/ha. Spraying of Buprofezin 25 SC 150gm/ha. Application of neem soap @ 0.1%

TO4 : Application of neemcake 100 kg/ac. Spraying of neem seed powder @4%. Application of *Verticillium lecanii* 3g/lit.

4	Source of technology	:	**TO1 :** TNAU, **TO2 :** TNAU, **TO3:** IIVR, **TO4:** NBAII
5	Production system and thematic area	:	Irrigated- Integrated Pest and Disease management
6	Performance of the Technology with performance indicators	:	In Progress
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques		
8	Final recommendation for micro level situation	:	-
9	Constraints identified and feedback for research	:	-
10	Process of farmers participation and their reaction	:	-

4. Assessment on Tomato Hybrids against leaf curl virus

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Tomato	Irrigated	▪ Crinkling of leaves. ▪ Stunted growth. ▪ Leaf Curl disease reduction in flowering	Assessment on Tomato Hybrids against leaf curl virus	5	**TO1 :** Cultivation of private hybrids **TO2 :** Tomato hybrid CoTH 3. Moderately resistant to leaf curl virus disease and root knot nematode. **TO3 :** Arka Samrat, Resistant to Leaf Curl Incidence. Bacterial wilt + Early blight. Fruit Deep red and round in shape.	▪ Yield (Q/ha) ▪ Percent disease incidence	In progress.				

Contd…

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1 : Cultivation of private hybrids	-	In progress.			
TO2 : Tomato hybrid CoTH 3. Moderately resistant to leaf curl virus disease and root knot nematode.	TNAU				
TO3 : Arka Samrat, Resistant to Leaf Curl Incidence. Bacterial wilt + Early blight. Fruit Deep red and round in shape.	IIHR				

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1. Title of Technology Assessed : Assessment on Tomato Hybrids against leaf curl virus pests in Chillies
2. Problem Definition : Crinkling of leaves, Stunted growth, Leaf Curl disease, reduction in flowering
3. Details of technologies selected for assessment
   - **TO1 :** Cultivation of private hybrids
   - **TO2 :** Tomato hybrid CoTH 3. Moderately resistant to leaf curl virus disease and root knot nematode.
   - **TO3 :** Arka Samrat, Resistant to Leaf Curl Incidence. Bacterial wilt + Early blight. Fruit Deep red and round in shape.
4. Source of technology : **TO1 :** TNAU, **TO2 :** TNAU, **TO3:** IIHR
5. Production system and thematic area : Irrigated- Integrated Pest Management.
6. Performance of the Technology with performance indicators : In Progess.
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
8. Final recommendation for micro level situation : -
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : -

5. Assessment of preservation techniques in Sapota

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Value addition-Sapota	-	▪ Low market price ▪ High wastage during on season	Assessment of preservation techniques in Sapota	5	**TO1 :** No value addition	▪ Shelf life (days) ▪ Consumer acceptability. (Organoleptic test)	3 -	TO 2 resulted in better consumer acceptability (3.4).	* TO2 is economically viable. * TO2 is better in net income compared to TO1 & TO3.	-	-
					TO2 : Preparation of sapota flakes with addition of sugar		90 3.4				
					TO3 : Preparation of sapota flakes without addition of sugar		90 2.8				

Contd…

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
TO1 : No value addition	-	195	Qtl/ha	273000.00	-
TO2 : Preparation of sapota flakes with addition of sugar	UAS-Bengaluru	38.53	Qtl/ha	1541000.00	2.78
TO3 : Preparation of sapota flakes without addition of sugar	TNAU	30.80	Qtl/ha	770000.00	2.69

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1. Title of Technology Assessed : Assessment of preservation techniques in Sapota
2. Problem Definition : Low market price, High wastage during on season
3. Details of technologies selected for assessment

TO1 : No value addition

TO2 : Preparation of sapota flakes with addition of sugar

TO3 : Preparation of sapota flakes without addition of sugar

4. Source of technology : **TO1 :** - , **TO2 :** UAS-Bengaluru, **TO3: TNAU**
5. Production system and thematic area : Value addition
6. Performance of the Technology with performance indicators :

Sl.No.	Performance Indicators	Technological options		
		TO1	TO2	TO3
1	Shelf life (days)	3	90	90
2	Consumer acceptability.	-	3.4	2.8

7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

Performance Indicators	Technological options		
	TO1	TO2	TO3
Colour	1	3.2	3.0
Appearance	1	3.0	2.6
Taste	1	3.4	2.8
Texture	1	2.8	1.8
Flavour	1	2.2	2.4

(Bipolar Verbal comparative scale – 5 point (1-Much less than standard, 2-Slighly less than standard, 3-The same as standard, 4-Slighly more than standard, 5-Much more than standard)

8. Final recommendation for micro level situation : TO2 received good consumer acceptability than others.
9. Constraints identified and feedback for research : -
10. Process of farmers participation and their reaction : Farmers felt that value addition technology (TO2) is good. But it consumes more labours. (130 female labour required for 154.05 Qtl/ha.)

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2016-17

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic Area	Technology Demonstrated
1	Oilseeds	-	-	-	-	-	-	Under Cluster FLD (NMOOP)
2	Pulses	-	-	-	-	-	-	Under Cluster FLD (NFSM)
3.	Cereals	Irrigated	Kharif	Paddy	ADT-45	-	Integrated Pest Management	**Integrated Pest Management in paddy** ▪ Installation of solar insect light trap @ 1/ac ▪ Release of *Trichogramma japanicum* @ 5cc/ha ▪ Release of *Trichogramma chilonies* @ 5cc/ha ▪ Installation of YSB Pheromone trap 50/ha ▪ Need based application of Neem oil @ 3 %
4	Millets	Rainfed	Kharif	Pearl millet	CO-10	-	Varietal demonstration	**Demonstration on Pearl Millet CO 10 Under Rainfed Condition** ▪ Demonstration of CO 10 pearl millet ▪ Soil application *Azosprillum a*nd *Phosphobacteria* @ 2.5 kg/ha each ▪ Seed treatment with *Trichoderma viride* 4 g/kg. ▪ Soil application of millet Mn mixture @ 12.5 kg/ha

5	Vegetables	Irrigated	Kharif	Bittergourd	-	Abhishek	Integrated Crop Management	**Integrated Crop Management In Bitter Gourd** ▪ NPK application based on soil test ▪ Soil application of Arka microbial consortium @12.5kg/ha, P.fluorescens @2.5kg/ha ▪ Vegetable special Spray @ 0.1 % ▪ Soil application of neem cake – 250 kg/ha. ▪ Spraying of Ethrel @ 250 ppm. ▪ Spraying of Neem, Pongamia soaps @ 1% ▪ Installation of Pheromone traps @ 12/ha. ▪ Installation of Yellow sticky traps @ 25/ha.
		Irrigated	Rabi	Bhendi	-	CO4	Varietal demonstration	**Varietal Demonstration on Bhendi hybrid CO 4** ▪ Resistant to Yellow Vein Mosaic Virus ▪ Plants tall 135-150cm ▪ Dark green, medium size fruits ▪ Duration:110 days, Yield:25.6t/ha
		Irrigated	Kharif	Brinajl	VRM-1	-	Integrated Pest and Disease Management	**Demonstration on IPDM in Brinjal** ▪ Soil application of *Pseudomonas* @ 2.5 kg/ ha ▪ Clipping of borer damaged shoots ▪ Installation of Yellow sticky trap @12/ha ▪ Installation of shoot and fruit borer pheromone trap @12/ha ▪ Release of *Trichogramma chilonies* @ 5 cc/ha ▪ Need based application of Azadiractin 1%

	Vegetables	Irrigated	Rabi	Watermelon	-	Maharaja	Integrated Crop Management	**ICM in Watermelon** ▪ NPK application based on soil test ▪ Vegetable special spray @ 0.1 % ▪ Soil application of neem cake@250kg/ha ▪ Spraying of Ethrel @ 250 ppm. ▪ Soil application of *P. fluorescens@2.5kg/ha.* ▪ Installation of Pheromone traps @ 12/ha. ▪ Spraying of neem, Pongamia soap @ 1% ▪ Installation of Blue sticky traps @ 25/ha.
6	Flowers	-	-	-	-	-	-	-
7	Ornamentals	-	-	-	-	-	-	-
8	Fruits	-	-	-	-	-	-	-
9	Spices and condiments	-	-	-	-	-	-	-
10	Commercial crops	Irrigated	Rabi	Sugarcane	CO0212	-	Varietal demonstration	**Demonstration on Sugar cane CO 0212** ▪ Demonstration of CO 0212 Sugarcane ▪ Sett treatment with *Azosprillium* @ 2000 gm/ha ▪ Application of MN mixture @ 50 kg/ha. ▪ Foliar application of TNAU Sugarcane booster @ 11.25 kg/ha at 45, 60 and 75 DAP
11	Medicinal and aromatic	-	-	-	-	-	-	-
12	Fodder crops	Irrigated	Rabi	Mixted fodder crops	-	-	Integrated Crop Management	**Demonstration on Mini Fodder Cafetaria** ▪ CN Grass (CO-5) – 40,000 slips/ha ▪ Fodder sorghum (COFS 31) –5kg/ha ▪ Fodder Cowpea (CO-9) – 25 kg/ha ▪ Desmanthus – 20 kg/ha ▪ Fodder trees –Agathi

13	Plantation	-	-	-	-	-	-	-
14	Fibre	-	-	-	-	-	-	-
15	Dairy	-	-	-	-	-	-	-
16	Poultry	-	-	-	-	-	-	-
17	Rabitry	-	-	-	-	-	-	-
18	Pigerry	-	-	-	-	-	-	-
19	Sheep and Goat	-	-	-	-	-	-	-
20	Duckery	-	-	-	-	-	-	-
21	Common crops	-	-	-	-	-	-	-
22	Mussels	-	-	-	-	-	-	-
23	Ornamental fishes	-	-	-	-	-	-	-
24	Oyster mushroom	-	-	-	-	-	-	-
25	Button mushroom	-	-	-	-	-	-	-
26	Vermicompost	-	-	-	-	-	-	-
27	Sericulture	-	-	-	-	-	-	-
28	Apiculture	-	-	-	-	-	-	-
29	Implements	Irrigated	Rabi	Groundnut Decorticator	-	-	Drudgery reduction	**Demonstration on Groundnut Decorticator** ▪ Demo on Decorticator ▪ Capacity – 30 kg /hour
30	Others – Kitchen Garden	-	-	-	-	-	-	-

Contd 5A

Sl. No.	Category	Crop	Area (ha)/ No. of Animal		No. of farmers/ demonstration			Reasons for shortfall in achievement
			Proposed	Actual	SC/ST	Others	Total	
1.	Oilseeds	-	-	-	-	-	-	-
2	Pulses	-	-	-	-	-	-	-
3	Cereals	Paddy : IPM-ADT-45	4	4	-	10	10	-
4	Millets	Pearl millet :Varietal Demonstration – CO-10	6	6	15	0	15	-
5	Vegetables	Bittergourd : ICM – Abhishek	2	2	-	10	10	-
		Bhendi : Varietal Demonstration – CO-4	2	2	-	10	10	-
		Brinjal : IPDM – VRM-1	2	2	-	10	10	-
		Watermelon : ICM – Maharaja	4	4	-	10	10	-
6	Flowers	-	-	-	-	-	-	-
7	Ornamentals	-	-	-	-	-	-	-
8	Fruits	-	-	-	-	-	-	-
9	Spices and condiments	-	-	-	-	-	-	-
10	Commercial	Sugarcane :Varietal Demonstration – CO-0212	0.4	0.4	-	5	5	-
11	Medicinal and aromatic	-	-	-	-	-	-	-
12	Fodder crops	▪ CN Grass (CO-5) – 40,000 slips/ha. ▪ Fodder sorghum (COFS 31) –5kg/ha. ▪ Fodder Cowpea (CO-9) – 25 kg/ha. ▪ Desmanthus – 20 kg/ha. ▪ Fodder trees –Agathi	0.4	0.4		1	1	

13	Plantation	-	-	-	-	-	-	-
14	Fibre	-	-	-	-	-	-	-
15	Dairy	-	-	-	-	-	-	-
16	Poultry	-	-	-	-	-	-	-
17	Rabitry	-	-	-	-	-	-	-
18	Pigerry	-	-	-	-	-	-	-
19	Sheep and Goat	-	-	-	-	-	-	-
20	Duckery	-	-	-	-	-	-	-
21	Common carps	-	-	-	-	-	-	-
22	Mussels	-	-	-	-	-	-	-
23	Ornamental fishes	-	-	-	-	-	-	-
24	Oyster mushroom	-	-	-	-	-	-	-
25	Button mushroom	-	-	-	-	-	-	-
26	Vermicompost	-	-	-	-	-	-	-
27	Sericulture	-	-	-	-	-	-	-
28	Apiculture	-	-	-	-	-	-	-
29	Implements	Groundnut Decorticator : Drudgery reduction	-	-	-	**20** (1Group)	**20** (1Group)	-
30	Others	-	-	-	-	-	-	-
Total			**20.8**	**20.8**	**15**	**56**	**71** (1Group)	-

5.A. 1. Soil fertility status of FLDs plots during 2016-17

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil			Previous crop grown
									N	P	K	
1	Oilseeds	Irrigated	-	-	-	-	-	Cluster FLD under NMOOP	-	-	-	-
2	Pulses	Rainfed	-	-	-	-	-	Cluster FLD under NFSM	-	-	-	-
3	Cereals	Irrigated	Kharif 2016	Paddy	ADT-45	-	IPM	Integrated Pest Management in paddy	H	M	M	Groundnut
4	Millets	Rainfed	Kharif 2016	Pearl millet	CO-10	-	Varietal Demonstration	Demonstration on Pearl Millet CO 10	H	L	L	Pearl millet
5	Vegetables	Irrigated	Kharif 2016	Bittergourd	-	Abhishek	ICM	Integrated Crop Management in Bittergourd	L	L	M	Ridge gourd
		Irrigated	Rabi 2016-17	Bhendi	-	CO-4	Varietal Demonstration	Demonstration on Bhendi Hybrid CO 4	H	M	H	Ground nut
		Irrigated	Kharif 2016	Brinjal	VRM-1	-	IPDM	Demonstration on IPDM in Brinjal	H	L	H	Blackgram, Paddy
		Irrigated	Rabi 2016-17	Watermelon	-	Maharaja	ICM	ICM in Watermelon	M	L	M	Groundnut
6	Flowers	-	-	-	-	-	-	-	-	-	-	-
7	Ornamental	-	-	-	-	-	-	-	-	-	-	-
8	Fruit	-	-	-	-	-	-	-	-	-	-	-
9	Spices and condiments	-	-	-	-	-	-	-	-	-	-	-
10	Commercial	Irrigated	Rabi 2016-17	Sugarcane	CO-0212	-	Varietal Demonstration	Demonstration on Sugarcane CO 0212	H	M	L	Groundnut
11	Medicinal and aromatic	-	-	-	-	-	-	-	-	-	-	-

12	Fodder	Irrigated	Rabi 2016-17	Fodder crops	Mixted fodder crops	-	ICM	Demonstration of mini fodder crops	H	H	L	Pulses
13	Plantation	-					-	-	-	-	-	-
14	Fibre	-					-	-	-	-	-	-
15	Implements	-	Rabi 2016-17	Groundnut Decorticator	-	-	Drudgery reduction	Demonstration on Groundnut decorticator	-	-	-	-

5.B. Results of Frontline Demonstrations

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase
							Demo			Check	
							H	L	A		
Oilseeds	-	Cluster FLD under NMOOP									
Pulses	-	Cluster FLD under NFSM									
Cereals											
Paddy	**IPM in Paddy** ▪ Installation of solar insect light trap @ 1/ac ▪ Release of *Trichogramma japanicum* @ 5cc/ha ▪ Release of *Trichogramma chilonies* @ 5cc/ha ▪ Installation of YSB Pheromone trap 50/ha ▪ Need based application of Neem oil @ 3 %	ADT-45	-	Irrigated	10	4	62.5	60.0	61.07	50.07	21.96

Millets											
Pearl millet	**Demonstration on Pearl Millet Co 10 Under Rainfed Condition** ▪ Demonstration of CO 10 pearl millet ▪ Soil application *Azosprillum a*nd *Phosphobacteria* @ 2.5 kg/ha each ▪ Seed treatment with *Trichoderma viride* 4 g/kg. ▪ Soil application of millet Mn mixture @ 12.5 kg/ha	CO10	-	Rainfed	15	6	29.25	27.26	28.04	20.54	36.51
Vegetables											
Bittergourd	**ICM in Bitter Gourd** ▪ NPK application based on soil test ▪ Soil application of Arka microbial consortium @12.5kg/ha, *P. fluorescens @2.5kg/ha.* ▪ Vegetable special Spray @ 0.1 % ▪ Soil application of neem cake – 250 kg/ha. ▪ Spraying of Ethrel @ 250 ppm. ▪ Spraying of Neem, Pongamia soaps @ 1% ▪ Installation of Pheromone traps @ 12/ha. ▪ Installation of Yellow sticky traps @ 25/ha.	-	Abhishek	Irrigated	10	2	457.75	402.25	423.48	326.75	29.60
Bhendi	**Varietal Demonstration on Bhendi hybrid CO 4** ▪ Resistant to Yellow Vein Mosaic Virus ▪ Dark green, medium size fruits	-	CO-4	Irrigated	10	2	In progress.				

Brinjal	**Demonstration on IPDM in Brinjal** ▪ Soil application of *Pseudomonas* @ 2.5 kg/ ha ▪ Clipping of borer damaged shoots ▪ Installation of Yellow sticky trap @12/ha ▪ Installation of shoot and fruit borer pheromone trap @12/ha ▪ Release of *Trichogramma chilonies* @ 5 cc/ha. ▪ Need based application of Azadiractin 1%	VRM-1	-	Irrigated	10	2	351.0	338.31	343.97	285.08	20.65
Watermelon	**ICM in Watermelon** ▪ NPK application based on soil test ▪ Vegetable special spray @ 0.1 % ▪ Soil application of neem cake@250kg/ha ▪ Spraying of Ethrel @ 250 ppm. ▪ Soil application of *P. fluorescens@2.5kg/ha.* ▪ Installation of Pheromone traps @ 12/ha. ▪ Spraying of neem, Pongamia soap @ 1% ▪ Installation of Blue sticky traps @ 25/ha.	-	Maharaja	Irrigated	10	4	309.75	296.5	302.09	237.91	26.98
Ornamentals	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-
Spices and condiments		**-**									
Commercial crops											

Sugarcane	**Demonstration on Sugar cane CO 0212** ▪ Demonstration of CO 0212 ▪ Sett treatment with *Azosprillium* @ 2000 gm/ha. ▪ Application of MN mixture @ 50 kg/ha. ▪ Foliar application of TNAU Sugarcane booster @ 11.25 kg/ha at 45, 60 and 75 DAP	CO-0212	-	Irrigated	5	0.4	In Progress.				
Medicinal and aromatic											
Fodder crops	**Demonstration on Mini Fodder Cafetaria** ▪ CN Grass (CO-5) – 40,000 slips/ha. ▪ Fodder sorghum (COFS 31) – 5kg/ha. ▪ Fodder Cowpea (CO-9) – 25 kg/ha. ▪ Desmanthus – 20 kg/ha. ▪ Fodder trees –Agathi	Mixed fodder crops	-	Irrigated	0.4	1	In Progress.				
Fibre											
Implements											
Groundnut decorticator	**Demonstration on Groundnut Decorticator** ▪ Demo on Decorticator ▪ Capacity – 30 kg /hour	-	-	-	1 Group (20)	-	-	-	-	-	-

(Contd…5BI)

Crop	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
	Gross Cost	**Gross Return**	**Net Return**	** **BCR**	**Gross Cost**	**Gross Return**	**Net Return**	** **BCR**
Oilseeds	Cluster FLD under NMOOP							
Pulses	Cluster FLD under NFSM							
Cereals								
IPM-Paddy-ADT-45	47131.00	103817.00	56686.00	2.20 : 1	51099.00	85126.00	34027.00	1.66 : 1
Millets								
Varietal Demonstration-Pearl millet CO-10	26726.00	75717.00	48991.00	2.83 : 1	31061.00	55456.00	24395.00	1.79 : 1
Vegetables								
ICM-Bittergourd- Abhishek	328195.00	906917.00	578722.00	2.76. : 1	339445.00	655582.00	316137.00	1.93 : 1
Varietal Demonstration-Bhendi CO-4	In Progress							
IPDM-Brinjal-VRM-1	145390.00	412771.00	267381.00	2.83 : 1	151467.00	342102.00	190634.00	2.25 : 1
ICM-Watermelon-Maharaja	79295.00	246943.00	167648.00	3.11 : 1	82218.00	191779.00	109561.00	2.33 : 1
Flowers	-							
Ornamentals	-							
Fruits	-	-	-	-	-	-	-	-
Spices and condiments	-	-	-	-	-	-	-	-
Commercial crops	-	-	-	-	-	-	-	-
Varietal Demonstration-Sugarcane CO-0212	In progress.							
Medicinal and aromatic	-	-	-	-	-	-	-	-
Medicinal and aromatic	-	-	-	-	-	-	-	-
Fodder- Mini fodder cafeteria	In progress.							
Implements-Groundnut decorticator	-	-	-	-	-	-	-	-

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

Crop	Data on other parameters in relation to technology demonstrated		
	Parameter with unit	**Demo**	**Check**
IPM-Paddy-ADT – 45	Percent infestation-Stem borer	4.26	13.66
	No. of sprays	2	6
ICM little millet – CO-10	Plant height (cm)	189	157
	Nos. of tillers /Plant	5	4
	No.Ear head/Tillers	3	2
	Length of Earhead (cm)	43	23
	Disease index (%)	5.64	27.59
ICM-Bittergourd- Abhishek	Days to 50% flowering	44.6	45.5
	Average fruit wt. (gm)	146.14	122.77
	Percent Fruit fly infestation	3.79	18.44
Varietal Demonstration-Bhendi CO-4	In Progress.		
IPDM-Brinjal-VRM-1	Percent Disease Incidence-Root rot	6.83	28.88
	Percent infestation-Fruit borer	9.39	31.33
ICM in watermelon-Maharaja	Days to 50% flowering	25.1	25.75
	Average fruit wt. (Kg)	5.62	4.52
	Percent Fruit fly infestation	6.59	20.29

5.B.2. Livestock and related enterprises : Nil

5.B.3. Fisheries : Nil

5.B.4. Other enterprises : Nil

5.B.5. Farm implements and machinery :

Crop	Data on other parameters in relation to technology demonstrated		
	Parameter with unit	**Demo**	**Check**
Groundnut decorticator	Brokened kernel wastage (kg/ha)	12.8	7.2
	Labour Required (Nos/ha)	2	8
	Capacity (Hours/ha)	3.20	8
	Decortications Cost (Rs.)/ha	200.00	800.00
	Germination (%)	83	78
	Cost saving on labour (%)	75	-
	Total cost saving (%)	36.5	-

5.B.6. Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	4	142	-
2	Farmers Training	9	129	-
3	Media coverage	1	Mass	-
4	Method demonstration	7	119	-
5	Farmers meet	6	180	

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	No. of Demo	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Vegetable crops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bhendi	Varietal Demonstration	CO-4	10	2	In Progress												
Total	-	-	**10**	**2**	-	-	-	-	-	-	-	-	-	-	-	-	-

PART VII. TRAINING

7.A. Training of Farmers and Farm Women 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
Crop Production										
Cropping Systems	1	0	18	18	2	0	2	2	18	20
Seed production	1	1	16	17	0	3	3	1	19	20
Integrated Crop Management	5	60	26	86	11	8	19	71	34	105
Soil and Water Conservation	1	9	6	15	3	5	8	12	11	23
Production of organic inputs	1	12	5	17	2	0	2	14	5	19
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	6	93	6	99	0	0	0	93	6	99
Nursery raising	1	12	0	12	0	0	0	12	0	12
Export potential vegetables	1	14	0	14	0	0	0	14	0	14
Protective cultivation	1	15	3	18	0	0	0	15	3	18
b) Fruits	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops	0	0	0	0	0	0	0	0	0	0
e) Tuber crops	0	0	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants	0	0	0	0	0	0	0	0	0	0
Soil Health and Fertility Management	0	0	0	0	0	0	0	0	0	0
Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment										
Value addition	7	46	38	84	17	19	36	63	57	120

Location specific drudgery reduction	1	4	0	4	15	0	15	19	0	19
Others (pl.specify)-Production and Value addition	3	27	15	42	9	24	33	36	39	75
Agril. Engineering	0	0	0	0	0	0	0	0	0	0
Plant Protection										
Integrated Pest Management	9	139	7	146	8	1	9	147	8	155
Integrated Disease Management	2	32	3	35	0	0	0	32	3	35
Fisheries	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site										
Vermi-compost production	2	18	0	18	2	23	25	20	23	43
Mushroom production	1	3	12	15	0	0	0	3	12	15
Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Agro-forestry	0	0	0	0	0	0	0	0	0	0
TOTAL	**43**	**485**	**155**	**640**	**69**	**83**	**152**	**554**	**238**	**792**

7.B Training of Farmers and Farm Women 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
Crop Production										
Weed Management	2	13	12	25	6	8	14	19	20	39
Seed production	1	14	2	16	3	0	3	17	2	19
Integrated Nutrient Management	2	13	9	22	7	5	12	20	14	34
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	2	23	2	25	0	0	0	23	2	25
Off-season vegetables	1	14	0	14	0	0	0	14	0	14
b) Fruits										
Cultivation of Fruit	1	10	0	10	0	0	0	10	0	10

c) Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops	0	0	0	0	0	0	0	0	0	0
e) Tuber crops	0	0	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0	0	0	0	0
Production and Management technology	2	33	2	35	0	0	0	33	2	35
g) Medicinal and Aromatic Plants	0	0	0	0	0	0	0	0	0	0
Soil Health and Fertility Management										
Integrated nutrient management	1	12	5	17	2	4	6	14	9	23
Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment										
Value addition	1	0	17	17	0	0	0	0	17	17
Location specific drudgery production	1	3	13	16	0	0	0	3	13	16
Agril. Engineering	0	0	0	0	0	0	0	0	0	0
Plant Protection										
Integrated Pest Management	8	108	3	111	6	2	8	114	5	119
Integrated Disease Management	1	20	0	20	0	0	0	20	0	20
Fisheries	0	0	0	0	0	0	0	0	0	0
	23	**263**	**65**	**328**	**24**	**19**	**43**	**287**	**84**	**371**

7.C. 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
Protected cultivation of vegetable crops	1	11	0	11	0	0	0	11	0	11
Integrated farming	1	15	0	15	7	0	7	22	0	22
Mushroom Production	3	9	30	39	3	9	12	12	39	51
TOTAL	**5**	**35**	**30**	**65**	**10**	**9**	**19**	**45**	**39**	**84**

7.D. Training for Rural Youths including sponsored training programmes (off campus) : Nil

7.E. 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	2	32	15	47	2	4	6	34	19	53
Integrated Pest Management	2	36	9	45	2	4	6	38	13	51
Protected cultivation technology	1	18	10	28	0	0	0	18	10	28
Production and use of organic inputs	1	18	1	19	0	0	0	18	1	19
Group Dynamics and farmers organization	2	38	2	40	0	0	0	38	2	40
Total	**8**	**142**	**37**	**179**	**4**	**8**	**12**	**146**	**45**	**191**

7.F. 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	2	53	12	65	18	3	21	71	15	86
Protected cultivation technology	1	29	0	29	1	0	1	30	0	30
Group Dynamics and farmers organization	1	29	0	29	1	0	1	30	0	30
Total	**4**	**111**	**12**	**123**	**20**	**3**	**23**	**131**	**15**	**146**

7.G. Sponsored training programmes conducted :

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	**Post harvest technology and value addition**	0	0	0	0	0	0	0	0	0	0
1.a.	Processing and value addition	3	27	15	42	9	24	33	36	39	75
	Total	**3**	**27**	**15**	**42**	**9**	**24**	**33**	**36**	**39**	**75**

Details of sponsoring agencies involved

1.a. : Ministry of Food Processing, NMFP, New Delhi.

7.H. Details of Vocational Training Programmes carried out by KVKs for rural youth : Nil

PART VIII – EXTENSION ACTIVITIES

1. Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	4	127	3	**130**	8	2	**10**	1	0	**1**
Film Show	5	141	14	**155**	0	0	**0**	5	0	**5**
Method Demonstrations	7	112	7	**119**	0	0	**0**	0	0	**0**
Group meetings	7	297	28	**325**	15	2	**17**	14	0	**14**
Lectures delivered as resource persons	8	281	55	**336**	24	4	**28**	16	2	**18**
Newspaper coverage	5	0	0	**0**	0	0	**0**	0	0	**0**
Popular articles	7	0	0	**0**	0	0	**0**	0	0	**0**
Extension Literature	5	0	0	**0**	0	0	**0**	0	0	**0**
Advisory Services-Help line	61	61	3	**64**	6	3	**9**	0	0	**0**
Scientific visit to farmers field (Field visit)	149	756	108	**864**	401	47	**448**	14	1	**15**
Farmers visit to KVK	94	243	0	**243**	0	0	**0**	5	2	**7**
Diagnostic visits	46	297	12	**309**	18	0	**18**	4	0	**4**
Exposure visits	1	17	0	**17**	0	0	**0**	0	0	**0**
Ex-trainees Sammelan	0	0	0	**0**	0	0	**0**	0	0	**0**
Soil health Camp	9	230	0	**230**	0	0	**0**	0	0	**0**
Animal Health Camp	0	0	0	**0**	0	0	**0**	0	0	**0**
Agri mobile clinic	0	0	0	**0**	0	0	**0**	0	0	**0**
Soil test campaigns	3	155	0	**155**	0	0	**0**	5	0	**5**
Farm Science Club Conveners meet	3	60	0	**60**	0	0	**0**	3	0	**3**
Celebration of important days-Nutrition week-World Food Day-World Women's Day	3	7	360	**367**	0	0	**0**	7	175	**182**
Farmers Field School	1	25	0	**25**	0	0	**0**	0	2	**2**
Farmers meet	16	381	37	**418**	22	4	**26**	3	1	**4**
Student visit to KVK	7	186	108	**294**	0	0	**0**	0	0	**0**
Total	**441**	**3376**	**735**	**4111**	**494**	**62**	**556**	**77**	**183**	**260**

b. Other Extension activities

Other Extn. Activity	Extension Number
Extension Literature	16
News paper	5
Popular Articles	9
Research Articles	6
News letter	1000 (Copies)
KMAS-Mobile advisory service	28

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)	Paddy –F1	CO 51	-	69.93	202740.00	52
Oilseeds			-	0.0	0.00	0
Pulses	Blackgram	VBN8	-	2.20	35200.00	9
	Blackgram	VBN6	-	3.59	57440.00	28
Fodder crop seeds	Lucerne	Local	-	0.0	0.00	0
Total	**-**	**-**	**-**	**5.79**	**295380.00**	**89**

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Fruits	Guava	L49	-	16	640.00	4
	Mango	Banganapalli	-	149	11400.00	8
	Lime	Local	-	66	1320.00	3
	Jack	PLR-1	-	4	60.00	2
	Pomegranate	Bhagwa	-	5	200.00	1
Plantation	Coconut	T x D	-	43	3225.00	2
Spices	Curryleaf	Pachai kambu	-	2	40.00	1
Forest Species	Timber	-	-	7722	115300.00	43
Total	**-**	**-**	**-**	**8007**	**132185.00**	**64**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Agents	*Trichoderma viride*	134	16750.00	105
	P. flurorescence	180	22500.00	131
Others (specify)	Earthworms	1	450.00	1
	Vermicompost	3876	19380.00	9
	Azolla	20	400.00	5
	Vegetable special	229	34980.00	25
Total	**-**	**4440**	**94460.00**	**276**

9.D. Production of livestock materials :

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Others – Goat	Salem black	7	19840.00	3
Poultry				
Duals (broiler and layer)	Asil	46	7800.00	15
Japanese Quail	Japanese	274	9590.00	10
Total	**-**	**327**	**37230.00**	**28**

9.E. Others

Products	Name of the product	Quantity Kg/Nos/Lits.	Value (Rs.)	Number of farmers to whom provided
Mushroom	Spawn	84 Pkts	3360.00	2
Machineries	Drum seeder	35 Nos	154700.00	35
Machineries	Cono weeder	14 Nos	17500.00	10
Total	**-**	**-**	**175560.00**	**47**

PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

10. A. Literature Developed/Published (with full title, author & reference)

1. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

News Latter Name	Start Date	Distributed Copies (Nos)	Volume Number	Issue Number	Copies Print /Circulated
Pasumaikathir	15.06.2003	1000	2	37, 38	1000
Total		**1000**	**2**	**-**	**1000**

(B) Literature developed/published

Item	Title	Authors name	Nos.
Research /Review article	1. Systemic elicitation of defence related enzymes suppressing *Fusarium* wilt.	**Narayanan Palani,** Parthasarathy Seethapathy, Rajalakshmi Jeyaraman, Arunkumar Kathaperumal and Vanitha Shanmugam	-
	2. Integrated Pest and Disease management in paddy.	**P.Narayanan,** R.Marimuthu, N.Rameshraja, V.Suresh, P.Rajesh, T.Margaret	-
	3. Botanicals in eco-friendly post harvest disease management	Parthasarathy Seethapathy, Rajalakshmi Jayaraman, **Narayanan Palani** and Prabakar Kuppusami	-
	4. Bio-control potential of microbial antagonists against post-harvest diseases of fruit crops: A Review	Parthasarathy S, Rajalakshmi J, **Narayanan P**, Arunkumar K and Prabakar K	-
	5. Survey of the Incidence and Severity of Bhendi (*Abelmoschus esculentus* (L.) Moench.) and Peas (*Pisum sativum* L.) Powdery Mildew Diseases in Tamil Nadu, India.	Rajalakshmi J, Parthasarathy S, **Narayanan P** And Prakasam V	-
	6. Bio efficacy of fungicide and bio control agencies for the management of bhendi powdery mildew	Rajalakshmi J, Parthasarathy S, **Narayanan P** And Prakasam V	-
Popular articles	1. Integrated disease management in potato	P.Narayanan	-
	2. Integrated pest management in mango.	P.Narayanan	-
	3. *Beauveria bassiana* as a Novel Entomopathogenic Fungi.	P.Narayanan, S.Parthasarathi, K.Arunkumar	-
	4. Insight in Antimicrobial Peptides (AMP) for Plant Disease Management.	P.Narayanan, S.Parthasarathi, K.Arunkumar	-
	5. Botanical extracts for the management of pest and disease.	P.Narayanan	-
	6. Integrated pest and disease management in chilli.	P.Narayanan	-
	7. Improved production technologies for brinjal	N.Rameshraja	
	8. Improved production technologies for bhendi	N.Rameshraja	
	9. Improved production technologies for watermelon	N.Rameshraja	

Extension literature			
Leaflets	-	-	-
Pamphlets	Integrated Crop Management in Millets (Cumbu)	P.Rajesh, SMS Agronomy	500
	Integrated Crop Management in Groundnut	P.Rajesh, SMS Agronomy	550
	Integrated Crop Management in Redgram	P.Rajesh, SMS Agronomy	500
	Integrated Crop Management in Blackgram	P.Rajesh, SMS Agronomy	1000
	Integrated Pest and Disease Management in Chillies	P.Narayanan, SMS Plant Protection	500
	Integrated Crop Management in Bhendi	N.Raneshraja, SMS Horticulture	500
	Integrated Crop Management in Chillies	N.Raneshraja, SMS Horticulture	500
	Integrated Crop Management in Brinjal	N.Raneshraja, SMS Horticulture	500
	Foliar nutrition in Vegetables	N.Raneshraja, SMS Horticulture	500
	SSI in Sugarcane	P.Rajesh, SMS Agronomy	500
	Value addition in Banana	T.Margaret, SMS Home Science	500
	Mushroom cultivation	T.Margaret, SMS Home Science	500
	Vermicompost production	P.Rajesh, SMS Agronomy	500
	KVK Mandate and its activities	V.Suresh, SMS Agriculture Extension	1000
Booklets	Integrated Pest and Disease management in Paddy	P.Narayanan, SMS Plant Protection	500
	IPM in Sugarcane	P.Narayanan, SMS Plant Protection	500
Other	-	-	9050

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	CD	Foot and Mouth Disease in cattle	21
2	DVD	KVK Roles and Activities	16
3	DVD	Direct sown paddy cultivation	4
Total			**41**

10.C. Success Stories

Title	URL address
New improved pearl millet variety CO 10 brought prosperity to tribal farmer	http://kvkthiruvannamalai.com/Success/SS-New%20improved%20pearl%20millet%20variety%20CO%2010%20brought%20prosperity%20to%20tribal%20farmer.pdf
Improved Brinjal Cultivation	http://kvkthiruvannamalai.com/Success/SS-Improved%20Brinjal%20Cultivation.pdf
Eco -friendly IPM practices for higher yield and income in paddy	http://kvkthiruvannamalai.com/Success/SS-Eco%20-friendly%20IPM%20practices%20for%20higher%20yield%20and%20income%20in%20paddy.pdf
Cream Separation in milk	http://kvkthiruvannamalai.com/Success/HS-Cream%20Separation%20in%20milk.pdf

10.1 New improved pearl millet variety CO 10 brought prosperity to tribal farmer

Name and address of the farmer :

Mr.K.Venkatesan
S/o. Kumar
Kizhshenbagathoppu village, Padavedu post,
Polur block, Thiruvannamalai Dist-606905
Mobile No. 919585032922

Mr.K.Venkatesan aged 38, is one of the contact farmers of KVK residing at Kizhshenbagathoppu tribal village of Thiruvannamalai. He has 5 acres of tribal land and cultivating millets, Groundnut, Blackgram, Greengram regularly. He used to cultivate pearlmillet variety which is available locally with conventional practices. Continuous use of local varieties leads to an enormous reduction in the yield and income.

In this condition, the KVK has selected him as one of the beneficiary farmers for the demonstration of pearlmillet CO 10 variety under the front line demonstration programme during 2016-17.

The KVK has introduced him the improved pearlmillet CO 10 variety and detailed package of practices. Consecutive field visits have been made to his field by the team of Scientist in order to train him on the recent technologies in pearlmillet. He also advised to attend the trainings programmes organized by department of agriculture to have a detailed knowledge of growing pearlmillet.

He has adopted the new technoloigies like seed treatment, bio fertilizer and bio agents applciation, soil application of millet Mn mixture, specific nutrient mangment, proper weed management and vize versa in his field.

As a result, he obtained an yield of 29.25 Q/ha compared to 19.24 Q/ha in the conventional practices. This was 34.22 percent higher than the previous year yield which he got from other local varieties. He obtained an average net income of Rs. 51740.00 per hectare during Kharif season by selling the seed at the rate of Rs. 27/kg. By seeing the economic benefit of this farmer, other farmers also have come forward to adopt the new technology and register themselves for seed production.

10.2. Improved Brinjal cultivation

Name and address of the farmer : **Mr. K.Rajendran**
S/o.Krishnan
Desur post, Vandavasi taluk,
Thiruvannamalai Dist – 604501
Mobile No.: 91 9941570284

Shri. Rajendran, aged 58, is a progressive farmer in Desur village of Vandavasi taluk. Currently, he has been cultivating 4 acres of land. While the three acres of land is planted with paddy, on a commercial scale, the remaining one acre is planted with spiny brinjal. He used to adopt conventional cultivation practices in brinjal. As a result, the yield and income he got from brinjal growing was not satisfactory to him. It was during that time, the KVK team visited his brinjal field and discussed about the problems as it has been the major source of income for his family.

Then, the KVK team selected him as a beneficiary farmer under KVKs demonstrations and training programmes. He was trained on various advanced nutrient and pest management technologies with major focus on foliar nutrition, IPM technologies including use of pheromone and sticky traps, pongamia and neem soaps etc.,. In addition, he went on an exposure visit to Tamil Nadu Agricultural University, Coimbatore with the support of KVK. He interacted with eminent scientists on brinjal cultivation technologies and participated in technological demonstrations.

He started adopting the technologies which he learnt from KVK. As a result, the cost on nutrient, pest and disease management was reduced to a considerable extent and better crop growth was achieved. He got an average yield of 141.84 Qtl/acre in the spiny brinjal cultivation from his one acre of land. He obtained an income of Rs. 149782.00 with a higher BC ratio of 2.97 : 1. His net income was Rs. 1,02,000.00 per acre. An additional gain of Rs.36650.00 per acre was accrued by him. The demonstrations and trainings imparted by KVK made him aware of technologies.

With a confidence regained, he opined "I was loosing interest in brinjal cultivation due to production problems, thanks to KVK team, now I realized the benefits of adopting improved technologies in brinjal cultivation and I am also spreading the technologies to other farmers in the locality".

10.3 Eco -friendly IPM practices for higher yield and income in paddy

Name and address of the farmer : **Mr.R.Arumugam**
S/o.Ramasamy
Athanoor post, Arni taluk,
Thiruvannamalai Dist – 604402.
Mobile No. +91 9788264810

Shri. Arumugam S/o. Ramasamy, aged 52 is a paddy farmer from Athanoor village of Arni taluk in Thiriuvannamalai district. He has been cultivating paddy for the past thirty years in all the seasons. His family is income primarily depends on paddy production alone. But, the productivity of paddy (4.5 ton/ha) was low and cost on plant protection chemicals (5-7 sprays) were increasing day by day.

It is due to severe incidence of Thrips, Stem borer, Leaf folder and BPH. Besides, he has been using enormous quantities of nitrogenous fertilizers. In this situation, he approached KVK for the management of pest and improves the productivity in paddy. The KVK included his village for the activities during the year 2016-17.

He was selected as one of the beneficiary farmers in the FLD programme with one acre of paddy and the IPM practices were demonstrated as one of the component of FLD. In this period, he has been trained for various integrated plant protection technologies and demonstrations were effectively conducted in his field by the KVK team.

As a result of adopting of various plant protection technologies, better resource use efficiency, he obtained an yield of 6.25 ton/ha. This was 21.96 percent higher as compared to average yield obtained by other farmers of his locality in the previous years.

After seeing the effectiveness of integrated plant protection practices, he planned to extend the area of paddy cultivation. Other paddy growing farmers of his locality have started cultivating paddy with integrated plant protection approach on a larger scale.

10.4 Cream Separation in milk

Name and address of the entrepreneur : **Mr.V.KamalaKannan**
S/o. Varadhan
Athi Village, Kaliyur post, Cheyyar Taluk,
Thiruvannamalai District.-604407.
Mobile No. 919176764885

Mr.KamalaKannan 42 aged is owned six acres of land involved in agriculture allied activities for the past 15 years and he has a milk collection centre also and being sent the milk to private dairy company. But he was not satisfied with the monthly income due to distress sale of milk during winter season. The other village people regularly earn high income by committing agriculture and skill oriented works at nearby areas. But he couldn't able to do like others because of his physical problems.

In this situation Mr.Kamalakannan approached with KVK team and got detailed explanation from the Scientist about value addition in milk – Cream separation. The KVK has provided technical support on cream separation in milk, marketing avenues for skimmed milk, curd, butter milk and machineries suppliers.

Our KVK Scientists continuously motivating him for the erection of cream separation unit. Moreover, he has been linkage with FSSAI license authority, packing, branding, fresh cream, butter, curd and butter milk sellers directly to him by continuous effort.

After receiving of all technical guidance and confidence he erected a cream separation unit at his house during August'16. Initially he started cream separation process 50 – 75 litres/day, now he is regularly purchasing 200 litres of milk/day for preparation of butter, curd and sold entire products to the whole sellers. He has been procuring milk from nearby villages regularly. Now he is preparing 9 kg of butter from 15 litres of cream per day out of 200 litres milk regularly. From the skimmed milk he is preparing 165 litres of curd regularly.

He standardised his products by maintaining consumer accessibility and hygenity of his production unit. His future plan is to sale of ghee. He is getting an income of Rs. 2,54,250.00/month by spending Rs.1,83,000.00 towards input, transportation and labour costs.

Mr.Kamalakannan regularly visiting the KVK to update his knowledge on newer technical aspects and machineries.

10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

Technology transfer through Whatsapp and Facebook

The KVK created whatsapp and facebook groups comprising farmers across Thiruvannamalai district and TamilNadu. In the group, the KVK technical team posting the advanced technologies in agriculture and allied fields regularly. Besides, the problems raised by farmers were addressed immediately by KVK team.

10.E. 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).

Crop/Enterprise	Source	ITK Practiced	Purpose
Wild boar	Farmer	Dusting of hairs around the bunds.	Controlling the wild Boar damage.
Paddy	Farmers	Tieing of Compact Disc (CD) around the paddy field.	Controlling of birds
Banana	Farmers	Bunch feeding of cow dung and cow urine.	Quality improvement of banana.

10.F. Indicate the specific training need analysis tools/methodology followed for identification of courses.

- **FARMERS AND FARM WOMEN**

  Survey, field visit, group discussion, information from panchayat presidents and progressive farmers. Discussion with line departments, NGO's and DRDA.

- **RURAL YOUTH**

  Survey, information from Nehru Yuva Kendra and line department. Discussion with Women Development Corporation and DRDA.

- **IN SERVICE PERSONNEL**

  Discussion with higher officials of the Line departments and NGO's, feedback information from the ex-trainees.

10.G. Field activities

i.	No. of villages adopted	:	33
ii	No of families selected	:	220
iii.	No. of survey/PRA conducted	:	3

10.H. Activities of Soil, Water Testing Laboratory & Plant Health Diagnostic Lab

1. Date of establishment : 06.05.2005
2. List of equipments purchased with amount

1. Soil, Water Testing Laboratory:

S.No	Name of the Equipment	Qty.	Cost (Rs.)
a. Non-Recurring			
1	Spectrometer	1	60301.00
2	Flame photometer	1	50250.00
3	pH meter	1	10010.00
4	Conductivity bridge	1	10444.00
5	Physical balance	1	9840.00
6	Chemical balance	1	100242.50
7	Water distillation still	1	99544.00
8	Kjeldahl digestion and distillation	2	60140.00
9	Shaker	2	49994.00
10	Refrigerator	1	19998.00
11	Oven	1	15034.00
12	Hotplate	1	24996.00
13	Grinder	1	30009.00
	Laboratory set up equipments :		0.00
14	Iron rack	2	2500.00
15	Gas stove	1	1262.00
16	Revolving chair	2	565.60
17	Stabilizer	1	9008.00
18	Setup -Cement concrete table with ceramic tile top, exhaust fan, working platform, plumbing work etc.,	-	270000.00
19	Syntax door for cupboard	-	37115.00
20	Mini Soil testing kit-MRIDHAPARIKSHAK	2	180600.00
Total Rs.			**1041853.10**

B) Plant Health Diagnostic Lab

S.No	Name of the Equipment	Qty.	Cost (Rs.)
Non-Recurring			
1	Deep freezer	1	31,500.00
2	Refrigerated Centrifuge with rotor	1	1,98,500.00
3	Vortex mixer	1	3,738.00
4	D.O Meter	1	8,400.00
5	Digital pH Meter	1	9,450.00
6	Digital Colony counter	1	5,000.00
7	Thermo hygrometer	1	1,312.00
8	Vaccum desiccators	1	5,000.00
9	Digital moisture meter	1	86,000.00
10	Magnoscope with stand	1	5,250.00

11	UV rays chamber	1	6,875.00
12	Magnetic stirrer	1	4,095.00
13	Brix meter – 0-45 %	1	3,500.00
14	Brix meter – 45 to 85 %	1	3,500.00
15	Phase contrast microscope	1	57,000.00
16	Dissection microscope	1	1,575.00
17	Hot air oven	1	30,000.00
18	Water distillation units-Double still	1	90,000.00
19	Water bath – Tank	1	4,725.00
20	Laminar Air flow chamber	1	57,250.00
21	BOD Incubator	1	74,425.00
22	Autoclave	1	52,300.00
23	Stereo zoom microscope	1	1,03,050.00
24	Split A/C	1	33,000.00
25	Micro oven	1	4,500.00
26	10 KV online UPS	1	21,755.00
Total Rs.			**9,01,700.00**

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	4363	3981	492	110780.00
Water Samples	301	282	220	29900.00
Plant samples	41	64	14	1800.00
Total	**4705**	**4327**	**726**	**142480.00**

Details of samples analyzed during the 2016-17

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	2105	2105	30	0.00
Water Samples	2	2	1	0.00
Plant samples	23	46	12	0.00
Total	**2130**	**2153**	**43**	**0.00**

10.I. Technology Week celebration during 2016-17 Yes/No : Yes.

10. J. Interventions on drought mitigation (if the KVK included in this special programme): NA

PART XI. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before Rs./ha.	After Rs/ha.
Foliar Nutrition in Cucurbits	845	84	The farmers were practicing only soil application of fertilizers to meet out the nutrient requirement of the crop. Income Rs 582956.00/ha	An income of 766990/ha was achieved after continuous application of nutrients through foliar
Protray Solanaceous Vegetable Seedlings Production	655	59	The Farmers have followed raised bed seedling production. The income was Rs. 166765.00/ha	An income of Rs 253850.00/ha was gained by the farmers after practicing the technology.
INM in solanaceous vegetables	468	68	The farmers did not follow the soil test based, crop specific nutrient management practices. The income was Rs 364863.00/ha	Soil test based crop recommendations of nutrient application was followed and a net income of Rs 419575.00/ha was gained by the farmers following the above practices.
Installation of Solar insect Light Trap in field and horticultural crops	225	56	Farmers are continuously using pesticides alone recommended by the retail pesticide dealers and they are not aware of the integrated control measures. A total income of Rs 86107.00/ha	A total income of Rs 106320.00/ha was gained by the farmers and the incidence of pests also minimized.
Direct Sown paddy using Drum Seeder	1525	65	High Seed rate, manpower and needs nursery preparation. An average net income of Rs 25650/ha gained by the farmers	Seed rate minimized by 45% and there is no need of nursery. An average net income of Rs.42350.00/ha was achieved by the farmers.
ICM in Groundnut	535	54	Cultivation of old varieties, no micronutrient foliar application. Average Net Income is Rs 27000.00/ha.	Introduction of new variety, foliar application of micro nutrients Average net income Rs. 40200.00/ha was achieved
ICM in Blackgram	650	72	Old varieties, YMV & Powdery mildew incidence Average net income Rs 38320.00/ha	Introduction of YMV resistant varieties, foliar application of Pulse Wonder Average net Income Rs 57600.00/ha
Mushroom production	120	42	Lack of knowledge on alternate income generation activities and mushroom cultivation. Average net income Rs 6300.00/month.	Introduction on advanced technologies and advisories. The average income Rs. 14500.00/month.

11.B. Cases of large scale adoption

Title	URL Name
Direct sown paddy cultivation.	http://kvkthiruvannamalai.com/Success/LSA-Direct%20sown%20in%20paddy.pdf

11.B.1. Direct sown paddy cultivation using Drum Seeder in Thiruvannamalai district

Paddy is the primary food crop in Thiruvannamalai district of Tamil Nadu State covering 1,39,013 hectares of area. Paddy is more suited to high rainfall regions because the crop requires abundant moisture level either through rainfall or irrigation to keep the soil under saturation throughout its life period. Water is the most critical input in order to assure the production of good quality and yield. However the recent practices of System of Rice Intensification (SRI), direct sowing and trials of drip irrigation system on paddy drastically reduced the amount of water required for its cultivation.

There is lot of awareness created on machineries used in paddy cultivation by the KVK as well as the State Department of Agriculture. Mechanization in Paddy cultivation can be possible at all the stages of the crop i.e from land leveling to harvesting. The various implements were used to cultivate the paddy are laser leveler, Puddlers, Paddy Drum Seeder, Cono weeder, paddy thresher cum harvester, etc. In Thiruvannamalai district the paddy growers are intensively using the above said implements with the subsidies from agriculture and allied departments for the past five years.

Among the implements, the Paddy Drum Seeder play a vital role in bringing the true mechanization in paddy cultivation. The performance of the drum seeder is mainly depends on the type of soil and field conditions, preparation of seed beds, speed of operation and power source.

1. Introduction of Paddy Drum seeder

A low cost and manually operated KSNM Direct Paddy Seeder was developed and certified by Tamilnadu Agriculture University, Coimbatore, India was introduced to paddy growers of Kaliyur village during Kharif 2012 & kharif 2013 by the KVK, Thiruvannamali as On Farm Testing (OFT) and Front line Demonstration (FLD). After that the KVK is supplying the Direct Paddy Seeder on demand requested by the farmer. The KVK has sold out a total quantity of 141 drum seeder so for based on the requirement.

The KSNM direct paddy seeder covers 8 rows of 20 cm row to row spacing at a time. This implement ensures uniform plant population throughout the field. This hyperboloid shaped drum with 200

mm diameter, 9 numbers of seed metering holes of 9 mm hole diameter. Baffles are provided inside the drum between seed holes resulting in uniformity of seed rate throughout the operation. These baffles also ensure hill dropping of seeds. Each seed drum has two rows of planting. Wheels are provided at both ends made up of plastic material to provide floating characteristics. The wheel diameter is 2 feet.

2. Materials & Methods

The study for evaluating the performance of paddy drum seeder was undertaken at Kaliyur, Kiliyathur, Palli, Parasur and Vazhkudai villages of Cheyyar taluk in Thiruvannamali district of Tamilnadu. About 125 acres have been taken to analyze the yield level and labour cost for cultivating an acre and it has been included in the different programmes of the KVK.

The selection of farmers has been made through different group meetings, discussions with farmers club and training programmes conducted at the village level. The effectiveness of paddy drum seeder was executed through On Farm testings and front Line Demonstrations for two years i.e Kharif 2012 & Kharfi 2013. Following basic information were considered to execute the experiment.

1. Paddy variety : ADT 43 & ADT 45
2. Soil type : Clay Loamy Soil
3. Treatments

   T1 : Traditional farmers Practice

   T2 : Ordinary Transplanting Method of Cultivation

   T3 : Mechanization in paddy Experiment with paddy Drum Seeder
4. Irrigation Source : Borewell

Paddy Drum Seeder Operational Procedure:

1. **Land Preparation**:
   - Direct Seeding avoids the nursery raising, pulling of seedlings and transplanting at the field. Levelling

     of the land and proper drainage facility are the most important things in the method of operation.
   - Lazer Levelling can be done with the help of lazer leveller
   - Puddling was carried out with the help of tractor drawn puddler or rotavator in 5-10 cm water level
2. **Paddy Seed Treatment**
   - The seeds were wetted with 0.1% carbendazim solution about 24 hours. A gunny bag in which the required quantity was soaked with water and the seeds were spreaded in the gunny bags and left for one day to improve the uniform sprouting has to be maintained. Then dry the seeds in open air to maintain the moisture level is important before filling the seeds in the drum seeder.

3. Sowing seeds with Drum Seeder

- A thin film of water over the main filed was maintained at the time of sowing is essential. The sprouted seeds were filled in all drums up to 2/3rd of its capacity. The Ground wheels make the impression to serve as a marker for next pass and helps for good movement of seeder. Continuous watch should be taken at the holes and cover the drum because of blockage of seeds due to high speed of operation which results in low germination.

4. INM & IPM Practices

- The NPK dose recommended for paddy is 120:60:60 and the nitrogen was applied in two splits. To reduce the pest and diseases cultural and biological practice along with chemical sprays were recommended to the farmers.

Conclusion

- Farmers stated that the sowing with Paddy Drum Seeder drastically reduced the man power in raising the nursery and transplanting. The labour required for direct seeding in one acre area is only 2 against 30 manpower required in normal transplanting method of cultivation.
- The method proved to be one of the most important costs saving technologies in Cheyyar block by reducing required quantity of seeds to the minimum. The average seed cost (12.5 kg) involved in drum seeder per acre is about Rs.500.00 against 30 kg of seed worth of Rs. 1200.00 in the traditional method of cultivation.
- The crop duration reduced by 6-7 days when compared to the traditional cultivation methods.
- The cost of cultivation was also reduced by 20% and the net income increased by 30%
- It is the effective method of cultivating paddy during drought periods as it required less quantity of water when compared to normal cultivation practices.
- At present, the direct sowing of paddy using drum seeder technology has spread over an area of 1400 hectares in Thiruvannamalai district due to effort taken by KVK in collobration with State Department of Agriculture.

PART XII-LINKAGES

12.A. Functional linkage with different organizations

Sl. No	Name of organization	Nature of linkage
1	State Department of Agriculture	Trainings and Demonstrations in various blocks under ATMA project. Conduction of field days under FLD, Farm Advisory Service.
2	State Department of Horticulture	
3	Department of Agri Business and Agri Marketing.	Trainings and Demonstrations in fruits and vegetable preservations.
4	State Department of Animal husbandry	The FMD audio CD developed by KVK were distributed to all the block officials.
5	NABARD	Formation of three Farmers Clubs at Kilsembedu, Maruthadu and Venmandhai villages.
		Implementation of Paddy Seed Production project.
6	Hand in Hand (NGO)	Orientation training to the farmers clubs, Technical convergence and other field activities.
	Centre for Indigenous Knowledge system. (CIKS)	
7	Integrated Child Development Scheme (ICDS)	Conduction of Nutritional week and World Food Day.

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Quality Seed production in paddy	2014-2017 (Completed)	NABARD-Thiruvannamalai	80000.00

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No : Yes

If yes, role of KVK in preparation of SREP of the district?

Scientist attended workshops on operationalization of ATMA and given technical guidance in preparation of SREP.

Coordination activities between KVK and ATMA during 2016-17 :

The scientist of the KVK participated in the various trainings organized under the ATMA programme in various blocks of the district.

12.D. Give details of programmes implemented under National Horticultural Mission

The National horticulture mission has not been implemented in Thiruvannamalai district

12.E. Nature of linkage with National Fisheries Development Board : Nil

12.F. Details of linkage with RKVY : Nil

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April'16	-	-	-
May'16	1	431	16
June'16	3	505	22
July'16	4	21431	32
August'16	3	505	11
September'16	3	739	12
October'16	3	25106	40
November'16	3	25106	28
December'16	2	506	9
January'17	2	506	12
February'1	2	582	9
March'17	2	582	6
Total	**26**	**75999**	**197**

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

13.A. Performance of demonstration units (other than instructional farm) :

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Food Processing unit	2015	0.01	Value added products	Coconut oil	15.25 lit	88389.00	3000.00	-
					Groundnut oil	274.75 lit		60799.00	-
					Sesame Oil	187.50 lit		46640.00	-
					Instant mix	59.7 kg		5900.00	-
					Bakery products	112.05 kg		10592.00	-
					Preserve products	61.50 kg		9225.00	-
2	Spawn Production unit	2003	0.001	Oyster	Spawn	84 pkts	840.00	3360.00	-

13.B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty. (Qtl)	Cost of inputs	Gross income	
Cereals									
Paddy	21.12.16	14.02.17	0.8	CO-51 –F1	Seed	69.93	204229.00	202740.00	In stock-400 kg- Rs.12000.00
Pulses									
Blackgram	15.06.16	20.08.16	0.4	VBN-8	Seed	2.20	121337.00	92640.00	In stock-486 kg- Rs.77760.00
Blackgram	16.06.16	22.08.16	0.6	VBN-6	Seed	3.59			
Oilseeds	-	-	-	-	-	-	--	-	-

Spices & Plantation crops									
Fodder	-	-	-	-	-	-	-	-	-
Fruits									
Mango	-	-	8.4	Banganapalli, Bangalora	Fruit	52.85	0.00	135977.00	-
Sapota			0.4	PKM-1	Fruit	1.49	0.00	4995.00	-
Amla			0.4	NA-7, Kanchan	Fruit	0.25	0.00	639.00	
Vegetables	-	-	-	-	-	-	-	-	-
Ashgourd	18.07.2016	08.10.2016	0.04	Mahyco1	Vegetables	11.50	440.00	6900.00	-
Others (specify)						**Nos**			
Nursery	-	-	0.2	Fruit Crops	Grafts and layers	240	67389.00	13620.00	-
	-	-		Plantation crops	Coconut seedlings	43		3225.00	-
	-	-		Forest trees	Seedlings	7724		115340.00	-

13.C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty (Qtl)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	*Trichoderma viride*	1.34	36729.00	39250.00	-
2.	*P. flurorescence*	1.80			-
3.	Vermicompost	38.76	16753.00	19380.00	
4.	Earthworms	0.01	0.00	450.00	-
5.	Azolla	0.20	0.00	400.00	-
6.	Vegetable special	2.29	16030.00	34980.00	

13.D. Performance of instructional farm (livestock and fisheries production) :

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Poultry	Asil	Chicks	46	7800.00	6950.00	-
2	Japanese Quail	Nandanam 1	Chicks	274	7410.00	9590.00	-
3	Goat	Salem block	Goat	7	0.00	17800.00	-

13.E. Others

Products	Name of the product	Quantity Kg/Nos/Lits.	Value (Rs.)	Number of farmers to whom provided
Mushroom	Mushroom	22.23 kg	4001.00	15
Machineries	Drum seeder	35 Nos	154700.00	35
Machineries	Conoweeder	14 Nos	17500.00	10
Total	**-**		**176201.00**	**60**

13.E. Utilization of hostel facilities –Accommodation available (No. of beds) : 16

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2016	-	-	-
May 2016	-	-	-
June 2016	-	-	-
July 2016	32	4	-
August 2016	30	3	-
September 2016	25	2	-
October 2016	72	8	-
November 2016	20	3	-
December 2016	0	0	-
January 2017	36	2	-
February 2017	52	4	-
March 2017	25	2	-
Total Rs.	**292**	**28**	-

13.F. Database management

S. No	Database target	Database created
1.	Database on library	Created and updated
2.	Database on Rainfall	Created and updated
3.	Website creation	Updated regularly
4.	Data enter in OLRS	Updated monthly

13.G. Details on Rain Water Harvesting Structure and micro-irrigation system : Nil

PART XIV – FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With KVK	Indian Bank	Vembakkam	812	Programme Coordinator-VKVK	556007560	604019012	IDIB 000V038
	Indian Bank	Vembakkam	812	TNBRD-VKVK-RF	556007571	604019012	IDIB 000V038

14.B. Utilization of KVK funds during the year 2016-17 (Rs. In lakh)

1. Budget Estimate

S. No	Particulars	Sanctioned in lakhs	Released in lakhs	Expenditure in Rs.
A. Recurring Contingencies				
1	**Pay & Allowances**	85.32	85.32	8532000.00
2	**Traveling allowances**	1.50	1.50	150014.00
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.25	2.25	225094.00
B	POL, repair of vehicles, tractor and equipments	1.50	1.50	151153.00
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.70	0.70	70135.00
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.30	0.30	30000.00
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1.37	1.37	137032.00
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.43	0.43	42780.00
G	Training of extension functionaries	0.25	0.25	25125.00
H	Maintenance of buildings	1.20	1.20	120089.00
I	Extension activities	0.35	0.35	35008.00
J	Integrated farming system	0.30	0.30	30000.00
	Farmers field school	0.30	0.30	30005.00
K	Display Boards	0.10	0.10	10000.00

L	Soil & Water Testing & Issue of Soil Health Cards	0.50	0.50	50000.00
M	Library	0.10	0.10	10095.00
TOTAL (A)		**96.47**	**96.47**	**9648530.00**
B. Non-Recurring Contingencies				
1	**Works**			
	a. Fencing	0.00	0.00	0.00
2	**Equipments including SWTL & Furniture**			
	a. Tractor with implements	0.00	0.00	0.00
	b. Plant Health Diagnostic Facility	0.00	0.00	0.00
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0.00	0.00	0.00
4	**Library** (Purchase of assets like books & journals)	0.00	0.00	0.00
TOTAL (B)		0.00	0.00	0.00
lC. Revolving fund :		0.00	0.00	0.00
GRAND TOTAL (A+B+C)		**96.47**	**96.47**	**9648530.00**

14.C. Status of revolving fund

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2014 to March 2015 ***	855352.05	1345291.00	1694346.00	506297.05
April 2015 to March 2016	506297.05	778855.00	617419.50	667732.55
April 2016 to March 2017	667732.55	1148812.00	817093.00	999451.55

***** Recurring expenses met out from RF Rs. 6.28 lakhs**

15. Details of HRD activities attended by KVK staff during 2016-17

Staff Name	Designation	Gender	Discipline	Training Title	Institute Address	Start Date	End Date	Amount (Rs)	Remarks
P.Narayanan	Subject Matter Specialist	Male	Plant Protection	Training on Biogas technology	TNAU, Coimbatore	12.07.16	15.07.16	0.00	-
T.Margaret	Subject Matter Specialist	Female	Home Science	Training on Capacity building on Food Processing	Home Science college and Research Institute, TNAU Madurai.	14.03.17	16.03.17	0.00	-
Total								**0.00**	**-**

16. Please include any other important and relevant information which has not been reflected above (write in detail).

1. Citizen Client Charter

Services Transaction	Success Indicators (Days)	Process	Services Standard (Days)	Service attended by KVK	Service pending with KVK
Paddy CO51 seed	5	Seeds procured from farmers producer company and supplier to other needy farmers.	2	1	0
Arrangement of Groundnut seeds TMV13	6	Through State Department of Agriculture, Cheyyar.	3	2	0
Blackgram VBN 6, 8 Seeds	5	Procured from the farmer and supplied to the other needy farmers.	2	30	0
Supply of Greengram seed CO 8 and BGS9	5	Collected from the farmers and distributed to the requested farmers	2	7	0
Supply of Redgram seed CO(Rg)7	4	Direct contact-Purchased by farmers.	1	3	0
Procurement of PPFM	5	Contact through phone	2	3	0
Vegetable Special Production and Supply	7	Direct contact by the farmers	2	15	0
Production and Supply of *Pseudomonas flourescense, Trichoderma viride*	5	Self production and supply on direct contact.	2	10	0
Solar Insect Light Trap	3	Arranged from Safs organic Enterprises, Pondicherry on request of the farmers	7	2	0
Supply of Direct paddy seeder	6	Direct contact-Purchased from private agencies and supplied to the farmers.	2	13	0
Supply of Cono Weeder	3	Direct contact-Purchased from private agencies and supplied to the farmers.	2	1	0

b. Details of various Projects implemented by the KVK

Lead Agency	Project Title	Role of KVK	Date of Initiation	Other Collaborative Agency	Duration (Years)	Project Outlay (Rs)	Amount Sanctioned (Rs)	Expenditure (Rs)	Progress Achieved
ATARI, ICAR, Bangaluru	Cluster FLD under NFSM – ICM Blackgram	Conducting demonstration on Blackgram in Clusters	22.12.2016	-	0.4	75000.00	75000.00	75000.00	25 demonstrations were conducted in three villages (One cluster)
	Cluster FLD under NMOOP – ICM	Conducting demonstration on Groundnut in Clusters	10.06.2016	-	0.6	405000.00	405000.00	405000.00	125 demonstrations were conducted at two clusters for both the seasons
NABARD Thiruvannamalai	Training on Quality Seed Production in Paddy	Conducting trainings on Paddy seed production and seed certification	10.06.2015	Department of Seed certification	2	80000.00	76000.00	76000.00	Completed the training to 80 farmers from Vandavasi Farmers Federation. Registration of paddy seeds in progress.
National Mission on Food Processing	Food processing Training Centre	Cundcution of trainings on food processing.	10/15/2013	Dept. of Agribusiness & marketing	10	1500000	0.00	15150.00	Total number 75 farmers were trained.
Total						**2060000.00**	**55600.00**	**571150.00**	**–**

16.1 Farmer Field School :

Thematic area	Crop	Technology demonstrated	Village	Period		Participants		
				From	To	Male	Female	Total
ICM	Groundnut	▪Soil sampling ▪ Introduction of VRI 8 Groundnut variety ▪ Spacing 30 x 10 cm ▪ Seed Treatment - *Trichoderma viride* @ 4 g/kg seeds ▪ Soil application of *Trichoderma viride* @ 1 kg/kg ▪ Application of Groundnut rich ▪ IPM and IDM practices	S.Nammiyanthal	Dec'16	Mar'16	25	0	25

16.2. Integrated Farming system :

Farmer wise data on IFS

Farmer 1	Farmer 2	Farmer 3	Farmer 4	Farmer 5
D. Manivannan	J. Sabarirajan	B.Mohan	R. Venkatesan	V. Sankar
saduperipalayam	Kilsembedu	Mettukudisai	Panaiyur	Vilankuppam
Area 4 acres	3 acres	4 acres	2acres	1.5 acre
Garden land	Garden land	Garden land	Partial irrigation	Garden land
Existing Components				
Vegetables, Sweet orange, Mango, Flowers, Goat, Poultry, Azolla, Vermicompost, CO FS 29	Vegetables, CO 4 fodder, Dairy, Poultry, Azolla, Vermicompost	Vegetables, Paddy, CO 4 fodder, Dairy, Poultry, Azolla, Vermicompost	Vegetables, CO 4 fodder, Dairy, Poultry, Azolla, Mushroom unit, Fish, Vermicompost	CO 4 fodder, dairy, Non-descriptive local goats, Poultry, Azolla, Vermicompost
New Components - 2016-2017				
Biogas, Kitchen garden, Fodder cafeteria, Vegetable Micro nutrients, Bio agents	Kitchen garden, Fodder cafeteria, Vegetable Micro nutrients, Bio agents	Biogas, Kitchen garden, Fodder cafeteria, Vegetable Micro nutrients, Bio agents	-	Goat, Kitchen garden, Fodder cafeteria, Vegetable Micro nutrients, Bio agents

Economic impact of IFS

SI. NO	Name of the farmer	Total area (acres)	Number of major/ subsidiary enterprises				Annual income (Rs.)			
			Before KVK intervention	After KVK intervention			Before KVK intervention	After KVK intervention		
				2013-14	2014-15	2015-16		2014-15	2015-16	2016-17
1.	D. Manivannan	4	5	-	12	15	2,53,217	3,16,568	3,78,235	5,28,235
2.	J. Sabarirajan	3	3	8	8	10	2,62,430	3,48,218	3,96,516	4,81,516
3.	B. Mohan	4	4	9	9	11	3,80,950	4,96,000	5,43,262	6,79,262
4.	R. Venkatesan	2	3	-	9	-	1,27,326	1,82,172	2,41,516	3,11,516
5.	V. Sankar	1.5	3	8	8	11	92,618	1,42,245	2,18,417	3,03,417