ANNUAL REPORT 2015-16

(FOR THE PERIOD APRIL 2015 TO MARCH 2016)

KRISHI VIGYAN KENDRA, DHARMAPURI

PART I –GENERALINFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
Krishi Vigyan KendraPapparapatty– 636809Dharmapuri DistrictTamil Nadu	04342-245860	04342-245860	kvkdpri@tnau.ac.in	www.kvkdharmapuri.org

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Tamil Nadu Agricultural University Coimbatore– 641003 Tamil Nadu	0422-6611233	0422-6611521	dee@tnau.ac.in	www.tnau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr.P.S.Shanmugam	-	94430 26501	psshanmugamk@yahoo.co.in

1.4. Year of sanction: December 2006

1.5. Staff Position (as 31st March 2016)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Gender	Discipline	Highest Qualification	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category
1	Programme Coordinator	Dr.P.S.Shanmugam	Programme Coordinator	Male	Ag. Entomology	Ph.D	15600-39100+7000	31660	15.02.2010	Permanent	OBC
2	SMS	Dr.K.Indhumathi	Subject Matter Specialist	Female	Horticulture	Ph.D	15600-39100+7000	31660	30.12.2009	Permanent	OBC
3	SMS	Vaccant	Subject Matter Specialist								
4	SMS	Dr.M.Sangeetha	Subject Matter Specialist	Female	Soil Science	Ph.D	15600-39100+7000	31660	09.07.2010	Permanent	OBC
5	SMS	Dr.M.A.Vennila	Subject Matter Specialist	Female	Ag. Extension	Ph.D	15600-39100+7000	31660	07.12.2012	Permanent	SC
6	SMS	Dr.K.Jothilakshmi	Subject Matter Specialist	Female	Home Science	Ph.D	15600-39100+6000	25600	19.07.2014	Permanent	OBC
7	SMS	Dr.R.Thangadurai	Subject Matter Specialist	Male	Animal Husbandry	Ph.D	15600-39100+6000	25600	01.08.2014	Permanent	OBC
8	Programme Assistant (LabTech.)/T-4	Th.R.Panneerselvam	Farm Manager	Male	Plant Breeding	M.Sc	9300-34800+4400	19120	04.06.2007	Permanent	OBC
9	Programme Assistant (Computer)/ T-4	Tmt. M.Swapna	Programme Assistant (Lab Technician)	Female	Agriculture	B.Sc	9300-34800+4400	19120	04.06.2007	Permanent	OBC

10	Programme Assistant/ Farm Manager	Tmt. A.Pabitha	Programme Assistant (Computer)	Female	Computer Science	M.Sc (Hort), PGDCA	9300-34800+4400	18020	10.12.2008	Permanent	OBC
11	Assistant	Th.P.Ganesan	Superindent	Male	NIL	B.Sc (Zoology)	9300-34800+4800	17410	08.03.2016	Permanent	OBC
12	Jr. Stenographer	Tmt.V.Subalakshmi	AAO	Female	NIL	Dip in Agri	5200-20200+2800	12620	15.04.2015	Permanent	OBC
13	Driver	Th.P.Thirumoorthy	Driver	Male	NIL	Nil	5200-20200+2000	13470	18.01.2007	Permanent	OBC
14	Driver	Th.C.Gopi	Supervisor	Male	NIL	-	9300-34800+4200	15340	09.11.2012	Permanent	SC
15	Supporting staff	Th.P.Chinnadurai	Supporting Staff	Male	NIL	5th	4800-10000+1300	10370	08.05.2013	Permanent	OBC
16	Supporting staff	Th.C.Murugesan	Supporting Staff	Male	NIL	5th	4800-10000+1300	9400	08.05.2013	Permanent	OBC

1.6. Total land with KVK :16.16hectares

S.No.	Item	Area (ha.)
1	Area under buildings, godowns, farm roads and open wells	1.8
	Under Demonstration	
2	Mango model nursery unit	2.0
3	Rain water harvesting unit	1.0
4	Slatted goat rearing	0.10
5	Vermicompost yard	0.04
6	Sustainable sugarcane initiative	0.60
7	Newly released crop varieties	0.30
8	Nutrition garden	0.04
9	Millets bank (Little Millet, Finger millet, Kodo millet, Proso millet	0.40
10	Fodder bank (CO (CN) 4, Hedge Leucerne)	0.25
11	Crop cafetaria	0.16
	Under Seed Production	
12	Moringa high density planting	0.16
13	Paddy – ADT 49	0.30
14	Sorghum	0.35
15	Finger millet	0.30
16	Green gram	0.40
17	Horsegram	1.20
18	Vegetables	0.60
19	Tapioca	0.50
20	Turmeric seed production (Allepey Supreme, BSR 1 & 2, CO 2, PTS 10, Roma)	0.20
21	Cumbu napier grass CO(CN) 4 & CO(BN) 5	0.30
22	Fodder sorghum – CO (FS) 31	0.35
	Agro Forestry	
23	Tamarind	2.0
24	Pungam, neem and kumil	2.4
25	Eucalyptas, Acacia sp.	0.4
	Total	16.16

1.7. Infrastructural Development:

A) Buildings

S. No	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (m^2)	Expenditure (Rs in Lakhs)	Starting Date	Plinth area (m^2)	Status of construction
1	Administrative Building	ICAR	31.03.2009	548.24	54.26	19.05.08	-	Completed
2	Farmers Hostel	ICAR	31.03.2009	300	32.06	19.05.08	-	Completed
3	Staff Quarters (6 Nos)	ICAR	31.03.2009	400	39.57	19.05.08	-	Completed
4	Demonstration Units						-	
	Slatted Floor Goat Rearing Unit	ICAR	15.03.2009	57.8	3.10	19.05.08	-	Goats are being reared
	Polyhouse (2 units)	NHM	-	1000	4.00	-	-	Rootstocks are being maintained
	Shadenet house (4 units)	NHM	-	2000	2.00	-	-	Rootstocks and softwood graftings are being maintained
5	Fencing	ICAR	20.03.2009	1250 m	10.00	19.05.08	-	-
6	Rain Water harvesting system	ICAR		1225	10.00			
7	Land leveling	ICAR	-	20000	2.00	-	-	-
8	Bore well	ICAR	-	-	3.00s	-	-	-
9	Threshing floor	-	-	-	-	-	-	-
10	Farm godown	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (TN 29 AB 4127)	2007	4,82,329	219252	Frequent repairs are done. Need to be replaced
Two wheeler (TN 29 AB 3695)	2007	42804	65508	Good condition
Two wheeler (TN 29 AB 3696)	2007	42804	71000	Good condition
Tractor with trailer (TN 29 AB 5582)	2007	5,00,347	2450 hours	Good condition
Power tiller	2009	1,50,000	350	Good condition

C) Equipment and AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computer accessories including LCD	2007	1,42,224	Need to be replaced
OHP	2007	11,050	Good condition
Camera	2007	20,213	Need to be replaced
Photocopier	2007	68,340	Good condition
Fax machine	2008	14,000	Good condition
Computer with accessories	2009	75,000	Good condition
Generator	2011	98,950	Good condition
PA system	2011	45,000	Good condition
EPABX System	2011	62,500	Good condition
Laser guided land leveler	2011	3,40,000	Good condition

1.8. Details SAC meeting conducted in 2015-16

Date : 19.11.2014

No. of Participants : 35

Sl.No	Salient Recommendations	Action taken
1.	Salt deposition in drip system affects the sustainability of using the technology. Hence necessary technical advice may be given	✓ Training has been conducted for the farmers of Morappur block on 'Drip system maintenance' on 17.02.2015 under IAMWARM operated by KVK. In this training programme demonstration of acid treatment was done. ✓ Training has been conducted on 'Micro irrigation and Precision Farming' on 24.02.2015 & 25.02.2015 for 60 farmers in coordination with Precision Farming Development centre, TNAU, Coimbatore. In this training programme maintenance of drip system is given importance. ✓ Importance of Drip system maintenance and the technologies were emphasised during the SSI training programmes conducted during October, November and December in 17 batches for 340 farmers under NADP – SSI programme.
2.	Weed management technologies in pulses may be demonstrated and popularized	In the ICM in pulses training programmes integrated weed management session also included and demonstration of the use of pre and post emergence herbicides in pulse eco system also done to the farmers
3.	Soil testing laboratory may be established at KVK	Proposal has been submitted.
4.	Training on value addition of millets may	An Entrepreneurship development programme was conducted with the financial support of State Mission of Food Processing, Agricultural Marketing and Agri Business at ICAR- TNAU, KVK,

	be strengthened	Dharmapuri on the month during February 2015. The training programme was conducted through the planned programme schedule covering skills required for entrepreneurship development, activities of bank financing, operational mechanism of pre and post harvest processing machineries, innovative technologies of value addition of millets, packaging and labelling, marketing potentiality, food laws, book keeping and accounts maintaining. Discussion with successful entrepreneurs was also facilitated during the programme for motivation. After attending this training programme, the following women entrepreneurs were started their home scale business . 1. Mangaa millet based products, Kathirnayakkanahalli, Morappur block. 2. Chandra millet snacks, Vellisandai, Palacode block. 3. Natura millet products, Pennagaram. 4. Amutham food products, Mookanahalli, Nallampalli block
5.	Demonstration of small machineries for small holdings may be done	The use of small machineries such as pulse row marker, garden land weeder, power weeder were explained to the farmers in Integrated crop management training programmes.
6.	Technologies for prevention of discolouration of fruits in Moringa during rainy season is needed	Training Programme has been proposed in the Action Plan 2016 – 17.
7.	Possibilities of cultivation of Pepper in Dharmapuri district may be studied	In vathalmalai region of Dharmapuri bock along with horticultural department pepper cultivation is initiated in some farmers fields. The results are encouraging. The places where elevation is more than 1000 m in Dharmapuri district may be suitable for Pepper cultivation.
8.	Trainings on honey bee rearing may be conducted	Special project on “Empowering tribal through Bee Keeping” has been proposed to State Balanced Growth Fund (SBGF) for Rs. 12.48 lakhs and the same has been approved for operation. The scheme work will be initiated in the ensuing financial year.
9.	Drought, pest and disease tolerant sorghum variety may be demonstrated	The drought and smut tolerant variety K 12 demonstration was conducted during kharif and rabi 2015 – 16. It showed only 5-10% smut incidence compare to local varieties where it was more than 40%.
10.	Training on PHT to the extension officials and farmers may be strengthened	Two days training programme on “Value addition in millets” has been organized under part II millet project for 100 farmers during Jan-Feb 2016.
11.	Training on Organic cultivation practices for vegetables may be given	The organic farming practices were entrusted in all the ICM trainings. The preparation of panchkavya and amutha karasial were also demonstrated to the farmers.
12.	Hi-tech cultivation technology for Capsicum under polyhouse is needed	The advance practices in polyhouse capsicum cultivation was given to the farmers in the ATMA training programme. FLD on ‘Biorational pest management strategies in Polyhouse Capsicum’ has been conducetd in ten farmers to field to demonstrate the efficacy of bioproducts in protected condition.
13.	Demonstration of use of fodder trees such as Agathi, Subabul,	Fodder trees such as Agathi and Gliricidia has been included in the Fodder bank demonstration of KVK farm. During the training programmes farmers are sensitized on the inclusion of fodder trees in the fodder bank.

	Gliricidia may be conducted	
14.	Demonstration on quail rearing may be done	Training Programme has been proposed in the Action Plan 2016 – 17.
15.	Demonstration of CO (CN) 4 & CO (BN) 5 may be done to meet fodder crop requirement	Setts of CO (CN) 4 & CO (BN) 5 are available for sale at KVK. About 1,02,000 nos. has been supplied to the farmers during 2015-16. Farmers are sensitized on the availability of planting materials of CO (CN) 4 & CO (BN) 5 during the training programmes.
16.	Demonstration of white grub management in Ratoon sugarcane may be done	Importance of Drip system maintenance and the technologies were emphasized during the SSI training programmes during October, November and December in 17 batches for 340 farmers under NADP – SSI programme.
17.	Papaya mealy bug parasitoid may be produced and supplied in large scale to the sericulture farmers	Mass production of the PMB parasitoid *Acerophagus papaya*e is done with the financial support of ATMA. About 1,00,000 parasitoids has been distributed to the farmers in all the blocks of Dharmapuri District.
18.	Training on production of value added products from milk may be given	Training has been given on value addition in milk products on 09.10.2014 for 40 farmers.
19.	Precision farming demonstration unit should be maintained at KVK farm	Demonstration units of Precision farming in Turmeric, Tapioca, tomato, bittergourd and moringa has been maintained at KVK farm
20.	Farmers database (crop wise and block wise) should be maintained at KVK	The crop wise and block wise datat base of 13,500 no. of farmers has been maintained at KVK till date. The data base has been regularly updated and submitted to the DEE.
21.	Trainings for extension functionaries may be conducted based on their requirement	Recent advances in Production and plant protection technologies for both agricultural and horticultural crops is being given regularly during the monthly zonal workshops.
22.	Demonstrations and trainings on NRM activities may be included in the future programmes.	Training on Rainwater harvesting and Insitu soil moisture conservation methods has been organized for 40 farmers. During the training programme, construction of farm pond, agronomic measures for soil moisture conservation, plastic and plant debris mulching, efficient water saving irrigation methods *viz*., drip, subsurface drip, sprinkler, etc. has been emphasized.

PART II - DETAILS OF DHARMAPURI DISTRICT

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

S. No	Farming system/enterprise
A.	**Wetland**
1.	Paddy-Sugarcane
2.	Paddy-Paddy-Ragi
3.	Banana
B.	**Garden land**
1.	Paddy- Pulses – Vegetables
2.	Paddy – Millets – Pulses
3.	Paddy – Turmeric
4.	Paddy – Cotton
5.	Cotton-Maize
6.	Cotton+Redgram-Littlemillet/Horsegram
7.	Groundnut-Sorghum+Lablab
8.	Brinjal-Tomato
9.	Gourds in pandal system
10.	Tuberose
11.	Chrysanthemum-Sorghum
12.	Watermelon-Muskmelon-Tomato in mulching
13.	Coconut+Turmeric/Fodder sorghum/Cumbunapier grass/Sunhemp/Daincha
14.	Arecanut+Banana
C.	**Dry land**
1.	Tapioca –Horsegram
2.	Groundnut - Horse gram
3.	Ragi - Greengram /Blackgram/Bengalgram
4.	Little millet - Horsegram
5.	Cotton – Gingelly
6.	Cotton –Horsegram-Fodder Sorghum
7.	Ragi-Horsegram
8.	Sorghum /Cumbu - Horsegram
9.	Mango
10.	Dairy farming, Goat rearing & Agro forestry

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

S. No	Agro-climatic Zone	Characteristics
1.	North Western zone	This zone comprises of Dharmapuri, Krishnagiri, Namakkal and Salem districts. The altitude of this district ranges between 200 and 600 metersaboveMSL with anAnnual rainfall of 853 mm and annual PET of 1727 mm.

S. No	Agro ecological situation	Characteristics
1.	More than 80 % of the area is under dry land agriculture	Crops were raised during the South West Monsoon and North East Monsoon periods in dry land areas

2.3. Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Red loamy soil	The red or brown colour of the soil is attributed to the diffusion of iron content	3, 62,069
2.	Black loamy soil	The black clayey alluvium rich soil (black soil)	19,983

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

S. No.	Crops	Area (ha)	Production (tonnes)	Productivity (t/ha)
A.	**Cereals**			
1.	Paddy	27900	67518.00	2.42
2.	Cholam	6655	4259.20	0.64
3.	Cumbu	1230	1414.50	1.15
4.	Ragi	20141	26988.94	1.34
5.	Maize	7280		
6.	Samai	15134	8475.04	0.56
7.	Fodder cholam	21972	-	-
B.	**Pulses**			
1.	Redgram	5137	1849.32	0.36
2.	Green gram	1526	640.92	0.42
3.	Black gram	8476	3390.40	0.40
4.	Horse gram	28713	7465.38	0.26
5.	Bengal gram	5269	684.97	0.13
6.	Cowpea	10864	2172.80	0.20
7.	Lablab	3757	1502.80	0.40
C.	**Oilseeds**			
1.	Groundnut	20994	28131.96	1.34
2.	Sunflower	2959	1952.94	0.66
D.	**Cash crops**			
1.	Sugarcane	20594	113884.80	5.53
2.	Cotton	12999	2599.80	0.20
E.	**Fruits**			
1.	Mango	16067	117128.00	7.29
2.	Banana	623	22036.00	35.36
F.	**Vegetables**			
1.	Tomato	3950	138250.00	35.00

2.	Brinjal	1825	63875.00	35.00
3.	Bhendi	1690	33800.00	20.00
4.	Radish	560	16800.00	30.00
5.	Onion	550	11000.00	20.00
6.	Ribbed gourd	230	5060.00	22.00
7.	Bitter gourd	250	5000.00	20.00
8.	Greens	140	1680.00	12.00
9.	Tapioca	15670	470100.00	30.00
10.	Other vegetables	745	14900.00	20.00
G.	**Spices**			
1.	Tamarind	1362	476.00	3.45
2.	Turmeric	8212	3284.00	4.00
3.	Chillies	550	8250.00	15.00
H.	**Flowers**			
1.	Rose	137	99.00	7.26
2.	Jasmine	197	1540.00	7.82
3.	Chrysanthemum	517	5170.00	10.00
4.	Nerium	139	973.00	7.00
5.	Tuberose	372	6700.00	18.00

Source – Joint Director of Agriculture, Dharmapuri&Deputy Director of Horticulture, Dharmapuri

2.5. Weather data

Month	Rainfall (mm)	Temp(Max)	Temp (Min)	Relative Humidity (%)
April 2015	90.5	37.5	24.5	57.2
May	109.1	37	24.7	55
June	83.3	32.6	24.5	60.1
July	12	34.4	24.1	55.2
August	135.9	40.2	24.3	62.3
September	132.7	31.1	22.4	72.5
October	126.8	30.7	21.5	73.5
November	310	28.6	20.5	81.2
December	79.4	28.2	16.3	74.5
January 2016	0	28.2	15.6	74.2
February	0	32.6	16.8	58.4
March	0	35.2	18.2	52.1

Source: http://tawn.tnau.ac.in

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

Category	Population	Production	Productivity
Cattle			
Crossbred	303570		
Indigenous			
Buffalo	48836		
Crossbred			
Indigenous			
Goats	185750		
Sheep	132944		
Pigs	1607		
Rabbits			
Poultry			
Hens			
Desi			

Category	Area	Production	Productivity
Marine		-	-
Inland		1738.53	-
Prawn		-	-
Scampi		-	-
Shrimp		-	-

Source: VUTRC, Dharmapuri

2.7 District profile has been Updated for 2015-16 :Yes

2.7.Details of Operational area / Villages

Sl.No	Taluk	Name of the Block	Name of the Village	No. of years covered	Major Crops & Enterprises	Major Problems	Identified Thrust Area
1	Palacode	Palacode	Pulikarai	2 Years	Groundnut	Lack of drought resistant varieties, Yield reduction due to drought, Poor filling of pods due to micronutrient deficiency Incidence of leaf miner and leaf feeder damage	Integrated Crop Management
					Finger millet	Lack of drought resistant varieties Crop loss due to occurrence of drought	Varietal Demonstration
					Bhendi	Yield loss due to Yellow Vein Mosaic Virus	Integrated Crop Management
					Amaranthus	Yield & quality loss due to white rust	Varietal Evaluation
					Chillies	Lack of high yielding hybrid Available hybrids are susceptible to powdery mildew Yield reduction up to 10%	Integrated Crop Management
2	Dharmapuri	Nallampalli	Sompatti	2 Years	Bengalgram	Low yield of existing variety Crop loss due to wilt incidence	Varietal Assessment
					Sorghum	Lack of high yielding dual purpose variety suitable for irrigated condition	Varietal demonstration with Integrated Crop Management
					Cotton	Yield loss due to reddening of leaves, Shedding of squares, buds and bolls Damage due to incidence of mealy bug	Integrated Crop Management
					Livestock	Swelling and hardening of udder, Reduction of quality and quantity milk yield, expensive veterinary medicine, Premature culling of animal due to mastitis	Demonstration of herbal treatment for mastitis

3	Pappireddipatty	Pappireddipatty	Molayanur	2 Years	Ribbed gourd	Lack of suitable variety for farmers preferring varieties	Varietal assessment
					Paddy	Stem borer, Leaf folder, Blast & Bacterial leaf blight reduces the yield. The usage of insecticides for the management increases the cost of cultivation	Varietal assessment
					Bittergourd	Leaf miner, fruit fly and mosaic causes yield losses. Farmers tend to use multiple sprays for the management	Integrated Crop Management
4	Pennagaram	Pennagaram	Periyur	2 Years	Redgram	Lack of high yielding variety suitable for late planting and delayed monsoon condition	Varietal assessment
					Little millet	Lack of dehulling process Low price for grains	Demonstration of processing methods
					Dairy cattle	Low Breeding management, Low conception, Infertility, more intercalving duration, more number of service per conception	Demonstration of scientific cattle rearing technology
5	Harur	Morappur	Annamalaipatti	2 Years	Greengram	Lack of Synchronized maturing variety	Demonstration of Integrated Crop Management with new variety
					Field bean	Lack of high yielding and Photo insensitive varieties	Demonstration of Integrated Crop Management with new variety
					Bittergourd	Leaf miner, fruit fly and mosaic causes yield losses. Farmers tend to use multiple sprays for the management	Demonstration of Integrated Pest and Disease Management practices
					Sericulture	Uzifly incidence reduces the yield	Demonstration of

							Integrated Management Practices
6	Palacode	Karimanagalam	Keragodahalli	2 Years	Brinjal	Yield loss due to soil borne diseases and Nematode	Demonstration of Integrated Nematode Management practices
					Radish	Lesser market price due to pithiness	Demonstration of Integrated Crop Management with new variety
					Capsicum	Leafminer, mites, anthracnose and dieback causes yield losses	Demonstration of Integrated Pest and Disease Management
7	Harur	Harur	Gopinathampatti	2 Years	Paddy	Stem borer, Leaf folder, Blast and Bacterial leaf blight reduces the yield. The usage of insecticides for the management increases the cost of cultivation	Assessment of IPDM practices
					Tomato	Fruit borer, Sucking pests, leaf curl, TSWV causes yield loss	Integrated Crop Management

2.9 Priority thrust areas

S. No.	Thrust area
1.	Assessment and demonstration of drought mitigation techniques to overcome terminal and intermittent drought conditions
2.	Assessment and demonstration of Pandal Vegetable Cultivations because it requires less water and fetches more income.
3.	Demonstrating Hi-tech horticulture activities for suitable crops
4.	Demonstration of improved production technologies, pre-processing and value addition in Nutrition rich small millets to increase farm revenue of marginal and small farmers
5.	Demonstration of Bio intensive pest management modules for the major pest and disease
6.	Demonstrating Integrated crop management techniques for the food crops and market led agricultural and horticultural crops
7.	Integrated farming systems for the year round income of the farmer
8.	Nutrition garden to ensure the nutritional security
9.	Market driven farming for the higher income

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	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
6	6	30	30	19	18	162	160

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		No. of Programmes		Number of participants	
Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
120	101	10000	7996	4000	2933	10000	9748

Seed Production (Qtl.)		Planting materials (Nos.)		
5		6		
Target	Achievement	Crop	Target	Achievement
30	21	Turmeric	30q	28q
		CN grass	40000 Nos	35000 Nos
		Sugarcane	60q	57q

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
Nil		3000	2257

3.B1. 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	Title of FLD	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
1	Introduction of new variety	Paddy	Low yield of existing variety and lack of short duration variety	-	Demonstration of ICM in newly released short duration TNAU Paddy variety MDU 6 in Dharmapuri district	-	-	-	-	0.3	-	-	*Azospirillum*-10kg *Phosphobacteria*-10 kg *Pseudomonas* – 10 kg
2	Varietal assessment	Paddy	Stem borer, Leaf folder, Blast & Bacterial leaf blight reduces the yield. The usage of insecticides for the management increases the cost of cultivation	Assessment of Ecological Engineering in ADT 49 Paddy	-	-	-	-	-	0.01	-	-	-
3	Varietal demonstration with Integrated Crop Management	Sorghum	Lack of dual purpose variety suitable for rainfed condition	-	Demonstration of newly released TNAU Sorghum Variety K12	-	-	-	-	0.3	-	-	*Azospirillum*-10kg *Phosphobacteria*-10 kg

4	Varietal Demonstration	Finger millet	Lack of drought resistant varieties Crop loss due to occurrence of drought	-	Demonstration and seed production in drought resistant Finger millet variety ML 365 under rainfed condition	-	-	-	-	0.08	-	-	*Azospirillum*-20kg *Phosphobacteria*-20 kg
5	Varietal demonstration with Integrated Crop Management	Sorghum	Lack of high yielding dual purpose variety suitable for irrigated condition	-	Demonstration of ICM in Sorghum CO 30 under irrigated condition	-	-	-	-	0.04	-	-	*Pseudomonas* – 10 kg
6	Varietal assessment	Redgram	Lack of high yielding variety suitable for late planting and delayed monsoon condition	Assessing the suitability of newly released high yielding Red gram Varieties for late planting and delayed monsoon condition in Dharmapuri	-	-	-	-	-	0.45	-	-	-

7	Varietal Assessment	Bengalgram	Low yield of existing variety Crop loss due to wilt incidence	Assessment of the performance of high yielding Bengal gram varieties in Dharmapuri district	-	-	-	-	-	0.15	-	-	-
8	Introduction of new variety	Greengram	Lack of high yielding and synchronized maturing varieties	-	Demonstration of ICM in newly released TNAU Green gram variety Co(Gg) 8	-	-	-	-	0.4	-	-	*Phosphobacteria*-10 kg *Pseudomonas* – 10 kg
9	Introduction of new variety	Field bean	Low yield of existing varieties and lack of photoinsensitive varieties	-	Demonstration of Field bean variety HA4	-	-	-	-	1.0	-	-	-
10	Integrated Crop Management	Groundnut	Lack of drought resistant varieties, Yield reduction due to drought, Poor filling of pods due to micronutrient deficiency Incidence of leaf miner and leaf feeder damage	-	Demonstration of ICM in Groundnut CO 7	-	-	-	-	1.5	-	-	*Trichoderma*– 5 kg

11	Integrated Crop Management	Cotton	Yield loss due to reddening of leaves, Shedding of squares, buds and bolls Damage due to incidence of mealy bug	-	Demonstration of ICM in Bt Cotton	1	-	-	-	-	-	-	*L.lacca ni*-1lit
12	Integrated Crop Management	Bhendi	Yield loss due to Yellow Vein Mosaic Virus	Assessment of performance of Bhendi hybrids tolerant to Yellow Vein Mosaic Virus disease in Dharmapuri district	-	-	-	-	-	0.08	-	-	*Pseudo monas* – 20 kg Neem soap-10kg
13	Varietal assessment	Ribbed gourd	Lack of suitable variety for farmers preferring varieties	Assessment of performance of Ribbed gourd variety Pusa Nutan in Dharmapuri district	-	-	-	-	-	0.03	-	-	*Pseudo monas* – 20 kg Neem soap-10kg
14	Varietal Evaluation	Amaranthus	Yield & quality loss due to white rust	Assessment of performance of Amaranthus varieties	-	-	-	-	-	0.001	-	-	-

15	Integrated Crop Management	Chillies	Lack of high yielding hybrid Available hybrids are susceptible to powdery mildew Yield reduction up to 10%	-	Demonstration of TNAU Hybrid COCH 1 in Dharmapuri district	1	-	-	-	0.02	-	-	*Azospirillum*-10kg *Phosphobacteria*-10 kg *Pseudomonas* – 10 kg
16	Integrated Crop Management	Dry chillies	Lack of adaptation of varieties suitable for dry chillies	-	Demonstration of ICM in Chillies LCA 625	-	-	-	-	0.01	-	-	*Pseudomonas* – 20 kg
17	Integrated Crop Management	Tomato	Fruit borer, Sucking pests, leaf curl, TSWV causes yield loss	-	Demonstration of multiple disease resistant tomato hybrid Arka Rakshak with Bio-intensive pest management strategies in Tomato	-	-	-	-	0.005	-	-	-
18	Integrated Crop Management	Radish	Lesser market price due to pithiness	-	Demonstration of Integrated Crop Management with new variety	-	-	-	-	0.035	-	-	*Pseudomonas* – 20 kg
19	IPDM practices	Capsicum	Leafminer, mites, anthracnose and dieback causes yield losses	-	Demonstration of Integrated Pest and Disease Management	-	-	-	-	-	-	-	*Paecilomyces* – 20 kg Neem soap-80kg

20	Integrated Crop Management	Bittergourd	Leaf miner, fruit fly and mosaic causes yield losses. Farmers tend to use multiple sprays for the management	-	Demonstration of Integrated Pest and Disease Management practices	-	-	-	-	-	-	-	*Pseudomonas* – 40 kg
21	Demonstration of herbal treatment for mastitis	Livestock	Swelling and hardening of udder, Reduction of quality and quantity milk yield, expensive veterinary medicine, Premature culling of animal due to mastitis	-	Demonstration of herbal treatment for mastitis in lactating dairy cattle	1	-	-	-	-	-	-	-
22	Demonstration of scientific cattle rearing technology	Livestock	Low Breeding management, Low conception, Infertility, more intercalving duration, more number of service per conception	-	Demonstration of oestrous synchronization in Pluriparous dairy cattle in Dharmapuri district	1	-	-	-	-	-	-	-
23	Demonstration of Integrated Pest Management Practices	Sericulture	Uzifly incidence reduces the yield	-	Demonstration of Phytojuvenoid and Uzifly trap use in sericulture	-	-	-	-	-	-	-	-

24	Demonstration of processing methods	Little millet	Lack of dehulling process Low price for grains	-	Demonstration of millet dehuller CIAE Bhopal model for little millet rice preparation in Dharmapuri district	1	-	-	-	-	-	-	-

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
1	2	3	4	5	6	7	8
1	Demonstration of ICM in newly released short duration TNAU Paddy variety MDU 6 in Dharmapuri district	TNAU	Paddy	-	10	-	-
2	Assessment of Ecological Engineering in ADT 49 Paddy	TNAU & NIPHM	Paddy	-	5	1	-
3	Demonstration of newly released TNAU Sorghum Variety K12	TNAU	Sorghum	-	10	-	-
4	Demonstration and seed production in drought resistant Finger millet variety ML 365 under rainfed condition	UAS (B)	Fingermillet	-	20	-	-
5	Demonstration of ICM in Sorghum CO 30 under irrigated condition	TNAU	Sorghum	-	10	-	-
6	Assessing the suitability of newly released high yielding Red gram Varieties for late planting and delayed monsoon condition in Dharmapuri	TNAU & UAS (B)	Redgram	5	-	-	-
7	Assessment of the performance of high yielding Bengal gram varieties in Dharmapuri district	UAS(R) & PDKV	Bengalgram	5	-	-	-

8	Demonstration of ICM in newly released TNAU Green gram variety Co(Gg) 8	TNAU	Greengram	-	10	-	-
9	Demonstration of Field bean variety HA4	UAS (B)	Field bean	-	10	1	-
10	Demonstration of ICM in Groundnut CO 7	TNAU	Groundnut	-	4	-	-
11	Demonstration of ICM in Bt Cotton	TNAU & CICR	Cotton	-	10	1	-
12	Assessment of performance of Bhendi hybrids tolerant to Yellow Vein Mosaic Virus disease in Dharmapuri district	TNAU & IIVR	Bhendi	5	-	-	-
13	Assessment of performance of Ribbed gourd variety Pusa Nutan in Dharmapuri district	TNAU & IARI	Ribbed gourd	5	-	-	-
14	Assessment of performance of Amaranthus varieties	TNAU & IIHR	Amaranthus	5	-	-	-
15	Demonstration of TNAU Hybrid COCH 1 in Dharmapuri district	TNAU	Chillies	-	10	1	-
16	Demonstration of ICM in Chillies LCA 625	APHU	Chillies	5	-	-	-
17	Demonstration of multiple disease resistant tomato hybrid Arka Rakshak with Bio-intensive pest management strategies in Tomato	IIHR	Tomato	-	10	-	-
18	Demonstration of Integrated Crop Management with new variety	IIHR	Radish	5	-	-	-
19	Demonstration of Integrated Pest and Disease Management	TNAU & IIHR	Capsicum	-	10	-	-
20	Demonstration of Integrated Pest and Disease Management practices	TNAU	Bittergourd	-	10	-	-
21	Demonstration of herbal treatment for mastitis in lactating dairy cattle	TANUVAS	Dairy animal	-	50	1	-
22	Demonstration of oestrous synchronization in Pluriparous dairy cattle in Dharmapuri district	TANUVAS	Dairy animal	-	10	1	-
23	Demonstration of Phytojuvenoid and Uzifly trap use in sericulture	TNAU	Silkworm	-	5	-	-
24	Demonstration of millet dehuller CIAE Bhopal model for little millet rice preparation in Dharmapuri district		Littlemillet	-	10	2	-

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
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
				7	2	-	1								
5	-	-	-												
				7	2	1	-								
				14	3	3	-								
				7	3	-	-								
3	-	2	-												
4	-	1	-												
				8	2	-	-								
				7	2	1	-								
				4	-	-	-								
				7	2	1	-								
5	-	-	-												
5															
5															
				8	2	-	-								
				5	-	-	-								
				10	-	-	-								
				4	1	-	-								
				10	-	-	-								
				9	-	1	-								
				50	-	-	-								
				10	-	-	-								
				4	-	1	-								
				-	10	-	-								

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
Integrated Nutrient Management										
Varietal Evaluation			2		3					5
Integrated Pest Management	1									1
Integrated Crop Management										
Integrated Disease Management										
Small Scale Income Generation Enterprises										
Weed Management										
Resource Conservation Technology										
Farm Machineries										
Integrated Farming System										
Seed / Plant production										
Value addition										
Drudgery Reduction										
Storage Technique										
Mushroom cultivation										
Total	1		2		3					6

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.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)
Integrated Nutrient Management	-	-	-	-	-
Varietal Evaluation	Red gram	Assessing the suitability of newly released high yielding Red gram Varieties for late planting and delayed monsoon condition in Dharmapuri district	5	5	0.4 ha
	Bengal gram	Assessment of the performance of high yielding Bengal gram varieties in Dharmapuri district	5	5	0.4 ha
	Bhendi	Assessment of performance of Bhendi hybrids tolerant to Yellow Vein Mosaic Virus disease in	5	5	0.4 ha
	Ribbed gourd	Assessment of performance of Ribbed gourd variety Pusa Nutan in Dharmapuri district	5	5	0.4 ha
	Amaranthus	Assessment of performance of Amaranthus varieties	5	5	0.4 ha
Integrated Pest Management	Paddy	Assessment of Ecological Engineering in ADT 49 Paddy	5	5	0.4 ha
Resource Conservation Technology	-	-	-	-	-

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

OFT 1.Assessing the suitability of newly released high yielding Red gram Varieties for late planting and delayed monsoon condition in Dharmapuri district

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
Redgram	Rainfed	Lack of high yielding variety suitable for late planting and delayed monsoon condition	Assessing the suitability of newly released high yielding Red gram Varieties for late planting and delayed monsoon condition in Dharmapuri district	5	TO1 Local var.	Yield (q./ha)	6.2	The varieties BRG 4, and CO(Rg) 7 performed better than the local check and recorded 55.2, and 21.94 percent higher grain yield than the local check respectively.	Farmers are interested in cultivating variety BRG 4 under rainfed conditions as it withstands drought and suitable for delayed monsoon condition	Nil	Nil
						No. of Pods/ plant	131				
						Pod borer Incidence (%)	14				
					TO2 BRG 4	Yield (q./ha)	9.62				
						No. of Pods/ plant	302				
						Pod borer Incidence (%)	4				
					TO3 Co (Rg) 7	Yield (q./ha)	7.56				
						No. of Pods/ plant	181				
						Pod borer Incidence (%)	6				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
Technology option 1 -Farmer's practice	FP	6.2	(q/ha)	18,000	1.68
Technology option 2- BRG 4	UAS (B)	9.62	(q/ha)	38,940	2.37
Technology option 3- Co (Rg) 7	TNAU	7.56	(q/ha)	27,280	2.05

4.C2.1 Details of On Farm Trial

1	Title of Technology Assessed	Assessing the suitability of newly released high yielding Red gram Varieties for late planting and delayed monsoon condition in Dharmapuri district		
2	Problem Definition	Lack of high yielding variety suitable for late planting and delayed monsoon condition		
3	Details of technologies selected for assessment	**Technology Option 1**- Local variety **Technology Option 2-** BRG 4 **Technology Option 3**- CO(Rg) 7		
4	Source of technology	BRG 4 (UAS 2014) and Co (Rg) 7 (TNAU, 2004)		
5	Production system and thematic area	Rainfed with ICM		
6	Performance of the Technology with performance indicators			
	Parameter	Local	BRG 4	CO (Rg) 7
	Number of pods/ plant (Nos)	131	302	181
	Incidence of pod borer (%)	14	4	6
	Grain yield (q/ha)	6.2	9.62	7.56
	Percent yield increase than FP (local)	-	55.2	21.94
	Gross income (Rs/ha)	43,460	67,340	52,920
	Net income (Rs/ha)	18,000	38,940	27,280
	BCR	1.68	2.37	2.05
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	The varieties BRG 4 and Co (Rg) 7 performed better than the local check and recorded 55.2, and 21.94 percent higher grain yield than the local check respectively. Also, BC ratio was higher in BRG 4 (2.37) followed by CO(Rg)7 (2.05) and lower in local variety (1.68).		
8	Final recommendation for micro level situation	Redgram variety BRG 4 can be recommended for take up sowing in rainfed conditions in the delayed monsoon situation in Dharmapuri district. For further spread of the variety FLD will be conducted during the forthcoming year.		
9	Constraints identified and feedback for research	-		
10	Process of farmers participation and their reaction	Farmers are interested in cultivating the BRG 4 under rainfed conditions.		

OFT 2.Assessment of the performance of high yielding Bengal gram varieties in Dharmapuri district

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
Bengal gram	Rainfed	Low yield of existing variety Crop loss due to wilt incidence	Assessment of the performance of high yielding Bengal gram varieties in Dharmapuri district	5	**TO1**-Local variety CO 4	No. of branches per hill	2.67	▪ Under Rainfed condition, JAKI 9218 and GBM 2 were found promising and recorded the grain yield of 10.08 and 9.33 q/ha as compared to 8.08 q/ha in CO 4. ▪ JAKI 9218 proved to be superior with a yield increase of 24.7 percent over CO 4. ▪ Incidence of wilt disease also less in JAKI 9218 and GBM 2 compared to CO 4. ▪ JAKI 9218 also realised the highest net come of Rs 22158/- with B:C ratio of 2.16.	Farmers are interested in growing of JAKI 9218 under rainfed condition for realizing higher return.	-	-
						No. of pods per plant	18.4				
						Wilt incidence (%)	21.4				
						Grain Yield (q/ha.)	8.08				
					TO2- JAKI 9218	No. of branches per hill	4.17				
						No. of pods per plant	28.1				
						Wilt incidence (%)	6.30				
						Grain Yield (q/ha.)	10.08				
					TO3- GBM 2	No. of branches per hill	3.59				
						No. of pods per plant	22.9				
						Wilt incidence (%)	15.7				
						Grain Yield (q/ha.)	9.33				

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / ha	BC Ratio
TO 1 - CO 4	TNAU, 1991	8.08	q/ha	13958	1.77
TO 2 – JAKI 9218	PDKV, 2008	10.08	q/ha	22158	2.16
TO 3 – GBM 2	UAS (R), 2014	9.33	q/ha	19083	2.00

4C2.2.Details of On Farm Trial for assessment

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td colspan="4">Assessment of the performance of high yielding Bengal gram varieties in Dharmapuri district</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td colspan="4">Low yield of existing local variety
About 25-30 per cent yield loss due to wilt incidence</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td colspan="4">Technology option 1 - CO 4
Technology option 2 - JAKI 9218
Technology option 3- GBM 2</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td colspan="4">CO 4-TNAU,1991; JAKI 9218- PDKV, 2008;
GBM 2- UAS(R), 2014</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td>:</td><td colspan="4">Cultivation of Bengalgram under rainfed condition</td></tr>
<tr><td>6</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>Parameter</td><td>Farmers Practice – CO 4</td><td>JAKI 9218</td><td>GBM 2</td></tr>
<tr><td></td><td></td><td></td><td>Plant height (cm)</td><td>25.5</td><td>28.6</td><td>32.0</td></tr>
<tr><td></td><td></td><td></td><td>Number of branches (No./plant)</td><td>2.67</td><td>4.17</td><td>3.59</td></tr>
<tr><td></td><td></td><td></td><td>Number of Pods (No./plant</td><td>18.4</td><td>28.1</td><td>22.9</td></tr>
<tr><td></td><td></td><td></td><td>Days to 50% flowering</td><td>46</td><td>48</td><td>48</td></tr>
<tr><td></td><td></td><td></td><td>Wilt incidence (%)</td><td>21.4</td><td>6.30</td><td>15.7</td></tr>
<tr><td></td><td></td><td></td><td>Pod borer incidence (%)</td><td>11.3</td><td>4.0</td><td>4.6</td></tr>
<tr><td></td><td></td><td></td><td>Grain yield (q/ha)</td><td>8.08</td><td>10.1</td><td>9.33</td></tr>
<tr><td></td><td></td><td></td><td>% Yield increase than FP</td><td>-</td><td>24.7</td><td>8.04</td></tr>
<tr><td></td><td></td><td></td><td>Gross income (Rs/ha)</td><td>33108</td><td>41308</td><td>38233</td></tr>
<tr><td></td><td></td><td></td><td>Net income (Rs/ha)</td><td>13958</td><td>22158</td><td>19083</td></tr>
<tr><td></td><td></td><td></td><td>BCR</td><td>1.77</td><td>2.16</td><td>2.00</td></tr>
<tr><td></td><td></td><td></td><td colspan="4">Assessment of different high yielding bengalgram varieties revealed that JAKI 9218 and GBM 2 were found promising under rainfed condition and recorded the grain yield of 10.08 and 9.33 q/ha as compared to 8.08 q/ha in CO 4. JAKI 9218 proved to be superior with a yield increase of 24.7 percent over CO 4. JAKI 9218 also realised the highest net come of Rs 22158/- with B: C ratio of 2.16.</td></tr>
</table>

<table>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques</td><td>:</td><td>
<table>
<tr><th>Parameter</th><th>Farmers Practice – CO 4</th><th>JAKI 9218</th><th>GBM 2</th></tr>
<tr><td>Size of the pods and seeds</td><td>Small</td><td>Bold</td><td>Medium</td></tr>
<tr><td>Yield potential</td><td>Low</td><td>High</td><td>Medium</td></tr>
</table>
Bengal gram variety JAKI 9218 was found to be best in respect of pod characteristics and yield potential compared to other assessed varieties.
</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td>Bengal gram variety JAKI 9218 proved to be the best in giving higher grain yield and showing wilt tolerance compared to other varieties viz., GBM 2 and CO 4. Hence JAKI 9218 can be cultivated under rainfed condition.</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td>High yielding, short duration varieties with the characteristics of tolerance to wilt incidence may be evolved for the benefit of the farmers.</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Farmers are interested in growing of JAKI 9218 under rainfed condition for realizing higher return.</td></tr>
</table>

OFT 3.Assessment of performance of Bhendi hybrids tolerant to Yellow Vein Mosaic Virus disease in Dharmapuri district

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
Bhendi	Irrigated	Yield loss due to yellow vein mosaic virus	Assessment of performance of Bhendi hybrids tolerant to Yellow Vein Mosaic Virus disease in Dharmapuri district	5	TO1- Private hybrid	Yield (q/ha)	146.4	• Co Bh H 1 recorded a higher yield of 15 tonnes per hectare which is 15 percent higher than Kasi Kranti • Incidence of YMV is also lesser in CO Bh H 1 compared to Kasi Kranti	Tenderness in CO BhH1 is good compared to Kasi Kranti and Private hybrid.	-	-
						Incidence of YMV (%)	19.3				
						Fruit weight (g)	21.0				
					TO2- CO Bh H 1	Yield (q/ha)	157.0				
						Incidence of YMV (%)	17.3				
						Fruit weight (g)	15.0				
					TO3- Kasi Kranti	Yield (q/ha)	134.4				
						Incidence of YMV (%)	27.3				
						Fruit weight (g)	11.8				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
Technology option 1 (Farmer's practice) –Private hybrid	-	146.4	q/ha	122020	3.3
Technology option 2 – CO BhH 1	TNAU (2008)	157	q/ha	136660	3.7
Technology option 3 – Kasi Kranti	IIVR (2013)	134.4	q/ha	109540	3.2

4.C2.3. Details of On Farm Trial

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of performance of Bhendi hybrids tolerant to Yellow Vein Mosaic Virus disease in Dharmapuri district</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Yield loss due to yellow vein mosaic virus</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>Technology option 1 - Private hybrid
Technology option 2 - CO Bh H 1
Technology option 3- Kasi Kranti</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>Technology option 1 - Private hybrid
Technology option 2 - CO Bh H 1 (TNAU, 2008)
Technology option 3- Kasi Kranti (IIVR, 2013)</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td>:</td><td>Irrigated
Introduction of improved varieties</td></tr>
<tr><td>6</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Parameter</th><th>Private hybrid</th><th>CO Bh H 1</th><th>Kasi Kranti</th></tr>
<tr><td>Yield (q/ha)</td><td>146.4</td><td>157</td><td>134.4</td></tr>
<tr><td>YMV (%)</td><td>19.33</td><td>17.328</td><td>27.332</td></tr>
<tr><td>Fruit weight (g)</td><td>21</td><td>15.04</td><td>11.84</td></tr>
<tr><td>Gross cost (Rs.)</td><td>53660</td><td>51740</td><td>51740</td></tr>
<tr><td>Gross returns (Rs.)</td><td>175680</td><td>188400</td><td>161280</td></tr>
<tr><td>Net returns (Rs.)</td><td>122020</td><td>136660</td><td>109540</td></tr>
<tr><td>BCR</td><td>3.304735</td><td>3.6791</td><td>3.151893</td></tr>
</table>
</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>• Co Bh H 1 recorded a higher yield of 15 tonnes per hectare which is 15 percent higher than Kasi Kranti
• Incidence of YMV is also lesser in CO Bh H 1 compared to Kasi Kranti</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td>CO Bh H 1 is recommended for the Bhedi growers of Dharmapuri district</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td>-</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Tenderness in CO BhH1 is good compared to Kasi Kranti and Private hybrid and hence preferred by the farmers</td></tr>
</table>

OFT 4. Assessment of performance of Ribbed gourd varieties in Dharmapuri district

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
Ribbed gourd	Irrigated	Lack of suitable variety for farmers prefering varieities	Assessment of performance of Ribbed gourd varieties in Dharmapuri district	5	TO1- Local variety	Yield (q/ha)	143.0	• MDU 1 recorded a higher yield of 16 tonnes per hectare which is 7.0 percent higher than Local variety • Colour and firmness of the fruits of MDU 1 is better than the other varieities compared.	Firmness of fruits of MDU 1 is better. Hence moves better in Uzhavar sandhai	-	-
						Incidence of fruit fly (%)	8.7				
						Fruit length (cm)	78.2				
					TO2- MDU 1	Yield (q/ha)	159.2				
						Incidence of fruit fly (%)	10.3				
						Fruit length (cm)	74.7				
					TO3- Pusa Nutan	Yield (q/ha)	131.0				
						Incidence of fruit fly (%)	17.7				
						Fruit length (cm)	64.6				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
Technology option 1 (Farmer's practice) – Local variey	-	143	q/ha	54075.00	2.2
Technology option 2 – MDU 1	TNAU	159.2	q/ha	65415.00	2.4
Technology option 3 – Pusa Nutan	IARI (2013)	131	q/ha	45675.00	2.0

4C2. 4.Details of On Farm Trial

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of performance of Ribbed gourd varieties in Dharmapuri district</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Lack of suitable variety for farmers prefering varieities</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>Technology option 1 - Local variety
Technology option 2 - MDU 1
Technology option 3- Pusa Nutan</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>Technology option 1 - Local variety
Technology option 2 - MDU 1 (TNAU)
Technology option 3- Pusa Nutan (IARI, 2013)</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td>:</td><td>Irrigated
Introduction of improved varieties</td></tr>
<tr><td>6</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Parameter</th><th>Local variety</th><th>MDU 1</th><th>Pusa Nutan</th></tr>
<tr><td>Yield (q/ha)</td><td>143.0</td><td>159.2</td><td>131</td></tr>
<tr><td>Single fruit weight (g)</td><td>357.8</td><td>382</td><td>254.4</td></tr>
<tr><td>Fruit length (cm)</td><td>78.16</td><td>74.672</td><td>64.584</td></tr>
<tr><td>Gross cost (Rs.)</td><td>46025</td><td>46025</td><td>46025</td></tr>
<tr><td>Gross returns (Rs.)</td><td>100100</td><td>111440</td><td>91700</td></tr>
<tr><td>Net returns (Rs.)</td><td>54075</td><td>65415</td><td>45675</td></tr>
<tr><td>BCR</td><td>2.2</td><td>2.4</td><td>1.9</td></tr>
<tr><td>Incidence of YMV (%)</td><td>23.996</td><td>23.552</td><td>30.264</td></tr>
<tr><td>Incidence of fruit fly (%)</td><td>8.662</td><td>10.33</td><td>17.662</td></tr>
</table>
</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td>➢ MDU 1 recorded a higher yield of 16 tonnes per hectare which is 7.0 percent higher than Local variety
• Colour and firmness of the fruits of MDU 1 is better than the other varieities compared.</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td>MDU 1 is recommended for adaption in Dharmapuri district</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td>Fruit fly management need to be addressed
Viral disease incidence is higher. Needs IDPM measures</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Firmness of fruits of MDU 1 is better . Hence moves better in Uzhavar sandhai</td></tr>
</table>

OFT 5.Assessment of the performance of Amaranthus 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
Amaranthus	Irrigated	Low yield of local variety Loss due to incidence of white rust disease	Assessment of the performance of Amaranthus varieties	5	**TO1**-Local variety	Yield (q/ha)	87	Palur 1 is suitable for dharmapuri district because when it was compared with the other two varieties. Palur 1 has high yield and less white rust incidence and not affected with leaf spot disease.	The variety Palur 1 is accepted by farmers.	-	-
						Incidence rust and leaf spot (%)	27.9				
						Keeping quality	1				
						BCR	2.04				
					TO2- Palur 1	Yield (q/ha)	105				
						Incidence rust and leaf spot (%)	4.94				
						Keeping quality	1				
						BCR	2.49				
					TO3- Arka Samraksha	Yield (q/ha)	88.5				
						Incidence rust and leaf spot (%)	5.1				
						Keeping quality	1				
						BCR	2.14				

Contd..

Technology Assessed	Source of Technology	Production	Unit	Net Return (Profit) in Rs. / ha	BC Ratio
TO 1 - Local variety	-	87	q/ha	87550	2.04
TO 2 – Palur 1	TNAU, 2013	105	q/ha	125550	2.49
TO 3 – Arka Samraksha	IIHR, 2013	88.5	q/ha	96550	2.14

4C2.5. Details of On Farm Trial for assessment

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td colspan="4">Assessment of the performance of Amaranthus varieties</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td colspan="4">Low yield of existing local variety
Loss due to incidence of white rust disease</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td colspan="4">Technology option 1 - Local variety
Technology option 2 - Palur 1
Technology option 3- Arka Samraksha</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td colspan="4">Palur 1 – TNAU 2013;
Arka Samraksha – IIHR, 2013</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td>:</td><td colspan="4">Cultivation of Bengalgram under rainfed condition</td></tr>
<tr><td>6</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>Parameters</td><td>TO 1- Local variety</td><td>TO2- Palur 1</td><td>TO3- Arka Samraksha</td></tr>
<tr><td></td><td></td><td></td><td>Yield (q/ha)</td><td>87</td><td>105</td><td>88.5</td></tr>
<tr><td></td><td></td><td></td><td>Incidence rust and leaf spot (%)</td><td>27.9</td><td>4.94</td><td>5.1</td></tr>
<tr><td></td><td></td><td></td><td>Keeping quality</td><td>1</td><td>1</td><td>1</td></tr>
<tr><td></td><td></td><td></td><td>BCR</td><td>2.04</td><td>2.49</td><td>2.14</td></tr>
<tr><td></td><td></td><td></td><td colspan="4">Palur 1 is the most suitable variety and it was performed better then arka samraksha and local farmer’s practice.because of the white rust incidence was noted only 4.95 per cent compared to local farmer’s practice (27.9 %)</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques</td><td>:</td><td colspan="4">Palur 1 is suitable variety for Dharmapuri district</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td colspan="4">The variety Palur 1 can be recommended for cultivation.</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td colspan="4">Nil</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td colspan="4">The process of farmer’s participation was good and they were satisfied by this assessment.</td></tr>
</table>

OFT 6.Assessment of Ecological Engineering in ADT 49 Paddy

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
Paddy	Irrigated	Indiscriminate use of pesticides	Assessment of Ecological Engineering in ADT 49 Paddy	5	TO1- Farmers practice	Yield (q/ha)	37.8	• Growing pulses, oilseeds and flowering plants along the border increases the natural enemies population and hence reduces the pest incidence • BCR is high in ecological engineering is high compared to the other technological options	Ecological engineering enabled the farmers to take up the crop without pesticide spray	-	-
						No. of hopper per hill	6.7				
						Incidence of Dead heart (%)	10.7				
					TO2- IPM modules	Yield (q/ha)	39.6				
						No. of hopper per hill	10.1				
						Incidence of Dead heart (%)	8.4				
					TO3- Ecological Engineering	Yield (q/ha)	45.2				
						No. of hopper per hill	10.6				
						Incidence of Dead heart (%)	7.1				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
Technology option 1 (Farmer's practice)	-	37.8	q/ha	19020	1.3
Technology option 2 – IPM modules	TNAU	39.6	q/ha	29120	1.5
Technology option 3 – Ecological Engieering	NIPHM	45.2	q/ha	44240	1.8

4.C2.6. Details of On Farm Trial

<table>
<tr><td>1</td><td>Title of Technology Assessed</td><td>:</td><td>Assessment of Ecological Engineering in ADT 49 Paddy</td></tr>
<tr><td>2</td><td>Problem Definition</td><td>:</td><td>Indiscriminate use of pesticides</td></tr>
<tr><td>3</td><td>Details of technologies selected for assessment</td><td>:</td><td>Technology option 1 - Farmers' practice
Technology option 2 - IPM Modules
Technology option 3- Ecological engineering</td></tr>
<tr><td>4</td><td>Source of technology</td><td>:</td><td>Technology option 1 - Farmers' practice
Technology option 2 - IPM Modules (TNAU)
Technology option 3- Ecological engineering (NIPHM)</td></tr>
<tr><td>5</td><td>Production system and thematic area</td><td>:</td><td>Irrigated
Introduction of improved varieties</td></tr>
<tr><td>6</td><td>Performance of the Technology with performance indicators</td><td>:</td><td>
<table>
<tr><th>Parameter</th><th>Farmers practice</th><th>IPM modules</th><th>Ecological Engineering</th></tr>
<tr><td>Number of hopper per hill</td><td>6.7</td><td>10.2</td><td>10.7</td></tr>
<tr><td>% incidence of stem borer (Dead heart)</td><td>10.7</td><td>8.4</td><td>7.1</td></tr>
<tr><td>% incidence of stem borer (White ears)</td><td>12.8</td><td>11.6</td><td>9.7</td></tr>
<tr><td>No of coccinelids per hill</td><td>0.4</td><td>1.4</td><td>2.0</td></tr>
<tr><td>No of spiders per hill</td><td>0.9</td><td>2.4</td><td>3.2</td></tr>
<tr><td>No of productive tillers</td><td>34.2</td><td>38.8</td><td>40.8</td></tr>
<tr><td>Yield(q/ha)</td><td>37.8</td><td>39.6</td><td>45.2</td></tr>
<tr><td>Gross cost</td><td>64140.0</td><td>58000.0</td><td>55200.0</td></tr>
<tr><td>Gross return</td><td>83160.0</td><td>87120.0</td><td>99440.0</td></tr>
<tr><td>BCR</td><td>1.3</td><td>1.5</td><td>1.8</td></tr>
</table>
</td></tr>
<tr><td>7</td><td>Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques</td><td>:</td><td>• Growing pulses, oilseeds and flowering plants along the border increases the natural enemies population and hence reduces the pest incidence
• BCR is high in ecological engineering is high compared to the other technological options</td></tr>
<tr><td>8</td><td>Final recommendation for micro level situation</td><td>:</td><td>Ecological engineering by growing pulses, oilseeds and flowering plants along the border</td></tr>
<tr><td>9</td><td>Constraints identified and feedback for research</td><td>:</td><td>-</td></tr>
<tr><td>10</td><td>Process of farmers participation and their reaction</td><td>:</td><td>Ecological engineering enabled the farmers to take up the crop without pesticide spray</td></tr>
</table>

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2015-16

S. No	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Title	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
										Proposed	Actual	SC/ ST	Others	Total	
1	Cereals	Irrigated	Rabi 2015	Paddy	MDU 6	-	Introduction of short duration variety	SRI Seed treatment Conoweeder use INM & IPDM	Demonstration of ICM in newly released short duration TNAU Paddy Variety MDU 6 in Dharmapuri district	4	4	1	9	10	-
2	Millets	Rainfed	Kharif 2015	Sorghum	K 12	-	Introduction of new variety	Seed treatment INM & IPDM	Demonstration of newly released TNAU Sorghum Variety K12 in Dharmapuri district	4	4	1	9	10	-
		Rainfed	Kharif 2015	Finger millet	ML 365	-	Introduction of new drought tolerant variety	Line sowing, Seed treatment with biofertilizers, Soil application of millet MN mixture @ 3 kg/acre	Demonstration and seed production in drought resistant Finger millet variety ML 365 under rainfed condition	8	8	3	17	20	-
		Irrigated	Rabi 2015	Sorghum	CO 30	-	Introduction of new variety	Seed treatment with Thiomethoxim @ 5 g /kg seed Seed treatment with *P.fluorescens @*	Demonstration of ICM in Sorghum CO 30 under irrigated condition	4	4	-	10	10	-

								10 g/kg seed Soil application of Millet MN mixture @ 5 kg/acre							
3	Pulses	Rainfed	Kharif 2015	Green gram	CO 8	-	Introduction of new variety	Seed treatment Soil application of Micronutrient mixture Pulse wonder spray	Demonstration of ICM in Newly released TNAU Green gram variety Co (Gg) 8	4	4	2	8	10	-
		Irrigated	Rabi 2015	Field bean	HA 4	-	Introduction of new variety	Line sowing Soil application of MN mixture @ 5 kg/acre Pulse wonder spray during flowering Stage IPDM practices	Demonstration of Field bean variety HA4 in Dharmapuri district	4	4	2	8	10	-
4	Oilseeds	Rainfed	Kharif 2015	Groundnut	CO 7	-	Introduction of new variety	Line sowing Seed treatment with *Trichoderma viride* @ 4g/kg seed Soil application of MN mixture @ 3 kg/acre IPDM practices	Demonstration of ICM in Groundnut CO 7	0.4	0.4	-	4	4	-
5	Fibre	Irrigated	Rabi 2015	Cotton	-	Bt hybrid	ICM practices	Foliar spraying of 1% MgSO4 Urea(1.0%) and ZnSO4 (0.10%) as on 50th, 80th and 110th day Foliar application of	Demonstration of ICM in Bt Cotton	4	4	-	10	10	-

								1.5 % D.A.P. + 0.5% KCl at fortnightly intervals from 110 DAS Foliar spraying of Planofix @ 0.25 ml/lit at 60 and 90 DAS IPDM practices							
6	Vegetables	Irrigated	Rabi 2015	Chilli	-	COCH 1	Introduction of new hybrid	Seed treatment Fertilizer application Fertigation RDF : 120:20:80 NPK K/ha	Demonstration of TNAU Chilli Hybrid COCH 1 in Dharmapuri district	4	4	-	10	10	-
		Irrigated	Rabi 2015	Chilli	LCA 625	-	Introduction of new variety	ICM in Chillies LCA 625	Demonstration of ICM in Chillies LCA 625	2	2	-	5	5	-
		Irrigated	Rabi 2015	Radish	Arka Nishanth	-	Introduction of new variety	ICM in Radish Arka Nishanth	Demonstration of ICM in Radish Arka Nishanth	2	2	-	5	5	-
		Irrigated	Rabi 2015	Tomato	Arka Rakshak	-	Introduction of new variety with BIPM practices	Bio-intensive pest management strategies	Demonstration of multiple disease resistant tomato hybrid Arka Rakshak with Bio-intensive pest management strategies in Tomato	2	2	-	10	10	-
		Irrigated	Rabi 2015	Capsicum	-	-	ICM practices	Integrated Pest management strategies	Demonstration of ICM strategies in Polyhouse capsicum	1	1	-	10	10	-
		Irrigated	Rabi 2015	Bitter gourd	-	-	ICM practices	Integrated Pest management	Demonstration of ICM in Bittergourd	4	4	-	10	10	-

								strategies							
7	Dairy	-	-	Dairy animal	-	-	Oestrous synchronization	Technology for Oestrous synchronization	Demonstration of oestrous synchronization in Pluriparous dairy cattle in Dharmapuri district	10	10	-	10	10	--
		-	-	Dairy animal	-	-	Herbal treatment for mastitis	Herbal treatment for mastitis	Demonstration of herbal treatment for mastitis in lactating dairy cattle	50	50	-	50	50	-
8	Sericulture	-	-	Silkworm	-	-	Phytojuvenoid and Uzifly trap usage	Demonstration of Phytojuvenoid and Uzifly trap usage	Demonstration of Phytojuvenoid and Uzifly trap use in sericulture	-	-	-	5	5	-
9	Others	-	-	Little millet	-	-	Value addition	Introduction of millet dehuller	Demonstration of millet dehuller CIAE Bhopal model for little millet rice preparation in Dharmapuri district	10	10	-	10	10	-

5.A. 1. Soil fertility status of FLDs plots during 2015-16

S. No	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Title	Status of soil			Previous crop grown
										N	P	K	
1	Cereals	Irrigated	Rabi 2015	Paddy	MDU 6	-	Introduction of short duration variety	SRI Seed treatment Conoweeder use INM & IPDM	Demonstration of ICM in newly released short duration TNAU Paddy Variety MDU 6	L	M	H	Pulses
2	Millets	Rainfed	Kharif 2015	Sorghum	K 12	-	Introduction of new variety	Seed treatment INM & IPDM	Demonstration of newly released TNAU Sorghum Variety K12	L	M	H	Pulses
		Rainfed	Kharif 2015	Finger millet	ML 365	-	Introduction of new drought tolerant variety	Line sowing, Seed treatment with biofertilizers, Soil application of millet MN mixture @ 3 kg/acre	Demonstration and seed production in drought resistant Finger millet variety ML 365 under rainfed condition	L	M	M	Horsegram
		Irrigated	Rabi 2015	Sorghum	CO 30	-	Introduction of new variety	Seed treatment with Thiomethoxim @ 5 g /kg seed Seed treatment with *P.fluorescens* @ 10 g/kg seed Soil application of Millet MN	Demonstration of ICM in Sorghum CO 30 under irrigated condition	L	M	M	Pulses

								mixture @ 5 kg/acre					
3	Pulses	Rainfed	Kharif 2015	Greengram	CO 8	-	Introduction of new variety	Seed treatment Soil application of Micronutrient mixture Pulse wonder spray	Demonstration of ICM in TNAU Green gram variety Co (Gg) 8	L	M	H	Pulses
		Irrigated	Rabi 2015	Field bean	HA 4	-	Introduction of new variety	Line sowing Soil application of MN mixture @ 5 kg/acre Pulse wonder spray during flowering Stage IPDM practices	Demonstration of Field bean variety HA4	L	M	M	Pulses
4	Oilseeds	Rainfed	Kharif 2015	Groundnut	CO 7	-	Introduction of new variety	Line sowing Seed treatment with *Trichoderma viride* @ 4g/kg seed Soil application of MN mixture @ 3 kg/acre IPDM practices	Demonstration of ICM in Groundnut CO 7	L	L	M	Horsegram
5	Fibre	Irrigated	Rabi 2015	Cotton	-	Bt hybrid	ICM practices	Foliar spraying of 1% MgSO4 Urea(1.0%) and ZnSO4 (0.10%) as on 50th, 80th and 110th day Foliar application of	Demonstration of ICM in Bt Cotton	L	M	M	Daincha

								1.5 % D.A.P. + 0.5% KCl at fortnightly intervals from 110 DAS Foliar spraying of Planofix @ 0.25 ml/lit at 60 and 90 DAS IPDM practices					
6	Vegetables	Irrigated	Rabi 2015	Chilli	-	COCH 1	Introduction of new hybrid	Seed treatment Fertilizer application Fertigation RDF : 120:20:80 NPK K/ha	Demonstration of TNAU Chilli Hybrid COCH 1	L	M	H	Millets
		Irrigated	Rabi 2015	Chilli	LCA 625	-	Introduction of new variety	ICM in Chillies LCA 625	Demonstration of ICM in Chillies LCA 625	L	M	H	Tomato
		Irrigated	Rabi 2015	Radish	Arka Nishanth	-	Introduction of new variety	ICM in Radish Arka Nishanth	Demonstration of ICM in Radish Arka Nishanth	L	M	H	Tomato
		Irrigated	Rabi 2015	Tomato	Arka Rakshak	-	Introduction of new variety with BIPM practices	Bio-intensive pest management strategies	Demonstration of multiple disease resistant tomato hybrid Arka Rakshak with Bio-intensive pest management strategies in Tomato	L	M	H	Tomato
		Irrigated	Rabi 2015	Capsicum	-	-	ICM practices	Integrated Pest management	Demonstration of ICM	L	M	H	Capsicum

								strategies	strategies in Polyhouse capsicum				
		Irrigated	Rabi 2015	Bittergourd	-	-	ICM practices	Integrated Pest management strategies	Demonstration of ICM in Bittergourd	L	M	H	Tomato
7	Dairy	-	-	Dairy animal	-	-	Oestrous synchronizatio n	Technology for Oestrous synchronization	Demonstration of oestrous synchronization in Pluriparous dairy cattle				
		-	-	Dairy animal	-	-	Herbal treatment for mastitis	Herbal treatment for mastitis	Demonstration of herbal treatment for mastitis in lactating dairy cattle				
8	Sericulture	-	-	Silkworm	-	-	Phytojuvenoid and Uzifly trap usage	Demonstration of Phytojuvenoid and Uzifly trap usage	Demonstration of Phytojuvenoid and Uzifly trap use in sericulture				
9	Others	-	-	Little millet	-	-	Value addition	Introduction of millet dehuller	Demonstration of millet dehuller CIAE Bhopal model for little millet rice preparation				

5.B. Results of Frontline Demonstrations

5.B.1. Crops

FLD 1 :Demonstration of ICM in newly released short duration TNAU Paddy Variety MDU 6 in Dharmapuri district

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Paddy	Demonstration of ICM in newly released short duration TNAU Paddy Variety MDU 6 in Dharmapuri district	MDU 6	-	Irrigated	10	4 ha	50.32	39.3	44.1	33.4	32.01	33616	66150	32534	2.0	31025	50930	19905	1.64

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

Parameter with unit	Demo	Check
No of tillers/ hill	27	22
No. of productive tillers/ hill	20	14
Stem borer incidence (%)	5	12

FLD 2 :Demonstration of newly released TNAU Sorghum Variety K12 in Dharmapuri district

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Sorghum	Demonstration of newly released TNAU Sorghum Variety K12 in Dharmapuri district	TNAU Sorghum K 12	-	Rainfed	10	0.4 ha/ unit	25.5	17.0	19.78	16.24	21.79	28071	49892	21821	1.78	25900	41135	15235	1.58

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

Parameter with unit	Demo	Check
Straw yield (q/ha)	58.51	49.78
Plant height (Cm)	160.5	140
Incidence of downy mildew (%)	Nil	5
Incidence of stem borer (%)	Nil	8%

FLD 3 :Demonstration and seed production in drought resistant Finger millet variety ML 365 under rainfed condition

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Fingermillet	Line sowing, Seed treatment with biofertilizers, Soil application of millet MN mixture @ 3 kg/acre	ML 365	-	Rainfed	20	8	23.1	19.2	21.0	17.3	21.7	24405	38649	14244	1.58	21723	31740	10018	1.46

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

Parameter with unit	Demo	Check-GPU 28
Plant population (No./m^2)	35.3	26.1
Number of tillers per plant	4.56	2.61
Plant height (cm)	76.4	65.8
Days to 50% flowering	64	70
Blast incidence (%)	-	8

FLD 4 :Demonstration of ICM in Sorghum CO 30 under irrigated condition

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Sorghum	Seed treatment with Thiomethoxim @ 5 g /kg seed Seed treatment with *P.fluorescens* @ 10 g/kg seed Soil application of Millet MN mixture @ 5 kg/acre	CO 30	-	Irrigated	10	4	26.1	21.3	23.8	19.5	22.6	22575	37320	14745	1.65	20181	30409	10228	1.51

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

Parameter with unit	Demo	Check– Thalaivirichan cholam
Plant height (cm)	195	168
Days to 50% flowering	65	78
Stover yield (q/ha)	52.1	41.3
Shoot fly incidence (%)	2	16
Panicle length (cm)	24.2	21.6
Earhead	Semi compact	Loose

FLD 5 :Demonstration of ICM in Newly released TNAU Green gram variety Co (Gg) 8

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Greengram	Demonstration of ICM in Newly released TNAU Green gram variety Co (Gg) 8	TNAU Greengram Co (Gg) 8	-	Rainfed	10	0.4 ha/ unit	8.60	5.20	5.85	4.41	32.65	13683	32833	19150	2.41	12000	26450	14450	2.21

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

Parameter with unit	Demo	Check
No of Pods/ plant	2	15
No. of seeds per pod	10	8
Synchronization (%)	80	40
Aphids incidence	5%	10%

FLD 6 :Demonstration of Field bean variety HA4 in Dharmapuri district

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Field bean	Line sowing Soil application of MN mixture @ 5 kg/acre Pulse wonder spray during flowering Stage IPDM practices	HA 4	-	Irrigated	10	4	25.3	20.8	28.3	22.8	24.1	31950	65628	33678	2.04	29195	52848	23653	1.80

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

Parameter with unit	Demo	Check-Local
Days to 50% flowering	48	-
Number of racemes/ plant	10.7	6.4
Number of pods per plant	91.1	67.8
Number of seeds per pod	4-5	3-4
Pod borer damage (%)	11.5	32.5
Type	Photo-insensitive	Photosensitive

FLD 7 :Demonstration of ICM in Groundnut CO 7

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Groundnut	Line sowing Seed treatment with *Trichoderma viride* @ 4g/kg seed Soil application of MN mixture @ 3 kg/acre IPDM practices	CO 7	-	Rainfed	4	0.4	15.4	13.7	14.5	12.9	12.6	32038	58100	26063	1.81	29700	51600	21900	1.74

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

Parameter with unit	Demo	Check
Plant population (No./m^2)	29.3	25.5
Number of pods per plant	19.8	12.2
Leaf miner damage (%)	9	31
S.litura damage (%)	14	36
Early leaf spot incidence (%)	4.5	13.0

FLD 8 :Demonstration of ICM in Bt Cotton

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Cotton	Nipping of terminal bud INM - FS of $MgSO_4$ (1%), Urea (1.0%) and $ZnSO_4$ (0.10%) on 50, 80 & 110th day; FS of DAP (1%)+ KCl (0.5%) at 15 days interval FS of Planofix @ 0.25 ml/lit at 60 DAS; IPDM practices	-	Bt hybrid-Bunny	Irrigated	10	4	18.2	16.1	17.0	14.3	18.3	32294	69456	37162	2.16	29044	58736	29693	2.02

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

Parameter with unit	Demo	Check
Number of branches per plant	13.9	9.36
Number of bolls per plant	65.2	47.6
Leaf reddening incidence (%)	-	23.5
Reduction in shedding of squares, immature bolls (%)	64.5	-
Mealy bug incidence (%)	4.3	12.6

FLD 9 :Demonstration of TNAU Chilli Hybrid COCH 1 in Dharmapuri district

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Chillies	Demonstration of TNAU Chilli Hybrid COCH 1 in Dharmapuri district	-	TNAU Chilli hybrid COCH 1	Irrigated	10	0.4 ha/ unit	342.0	302.0	320.7	267.3	19.98	187081	801666.	614585	4.30	168650	669583	500933	3.98

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

Parameter with unit	Demo	Check
No.of fruits/ plant (Nos)	50	38
Yield / plant (Kg. Plant)	1.80	1.53
Length of fruit (Cm)	8.5	7
Powdery mildew incidence (%)	-	5

FLD 10 : Demonstration of ICM in Chillies LCA 625

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Chillies	Variety LCA 625 INM including Arka vegetable special spray IDPM	LCA 625	-	Irrigated	5	2 ha	147	115	138.6	107.0	29.5	70600.0	266698.8	197998.8	3.9	70600.0	144747.2	74147.2	2.1

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

Parameter with unit	Demo	Check
Dry chilli yield (q/ha)	22.2	36.4
Dry recovery (%)	20.8	23.2

FLD 11 Demonstration of ICM in Radish Arka Nishanth

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Radish	Variety Arka Nishanth INM including Arka vegetable special spray IPM for flea beetle	Arka Nishanth	-	Irrigated	5	2 ha	305.0	220.0	258.4	231.8	11.5	40500	77520	39795	2.05	36125	69562.5	33437.5	1.93

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

Parameter with unit	Demo	Check
Tuber weight (g)	93.9	84.2
Pithiness (%)	1.2	21.5
White rust (%)	9.3	18.3
Flea beetle (%)	16.0	15.8

FLD 12 :Demonstration of multiple disease resistant tomato hybrid Arka Rakshak with Bio-intensive pest management strategies in Tomato

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area/ unit (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										
Tomato	Arka Rakshak Spraying of neem soap @ 10gm/lt *Paecilomyces lilacinus* Pheromone trap @ 5/ac	-	Arka Rakshak	Irrigated	10	2	600	550	582	488	19.3	132500	349560	217060	2.64	165500	341600	176100	2.06

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

Parameter	Demo	Check
Sucking pest incidence (%)	18.10	45.5
Fruit borer incidence (%)	8.75	20.5
Pinworm incidence (%)	8.50	21.60
Blight incidence (%)	0.00	19.40
Leaf curl incidence (%)	0.00	13.80
Market preference	Oval shaped fruits fetches less price	Preferred

FLD 13 :Demonstration of ICM strategies in Polyhouse capsicum

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Capsicum	Yellow sticky traps for sucking pest management Seedling drenching with *Pseudomonas fluorescens* @ 10g/lt. Spraying of neem soap @ 10gm/lt Arka vegetable special spray @ 5g/lt.	-	Private	Irrigated	10	4	880	820	845	785	7.64	872500	3802500	2930000	4.60	937500	3532500	2595000	3.80

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

Parameter with unit	Demo	Check
Whitefly incidence (Nos/plant)	3.58	3.26
Thrips incidence (Nos/plant)	1.03	1.05
Mite incidence (Nos/plant)	2.36	2.76
Wilt incidence (%)	12.50	14.50

FLD 14 :Demonstration of ICM in Bittergourd

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Bittergourd	Yellow sticky traps for sucking pest management Neem cake application along with *Paecilomyces lilacinus* Spraying of neem soap @ 10gm/lt *Paecilomyces lilacinus* Fruit fly trap @ 5/ac	-	Private hybrid	Irrigated	10	4	345	310	326	258	26.4	115000	391200	276200	3.37	134400	281760	147360	2.28

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

Parameter with unit	Demo	Check
Leafhopper incidence (%)	13.50	29.43
Fruitfly incidence(%)	8.90	23.35
Leaf spot incidence (%)	15.95	24.78
Yellow mosaic incidence (%)	3.33	8.78

5.B.2. Livestock and related enterprises

FLD 15 : Demonstration of oestrous synchronization in Pluriparous dairy cattle in Dharmapuri district

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Livestock	Oestrous synchronization in dairy cattle	TRIU-B with Hormones	Cross bred dairy cattle	Infertile pluriparous dairy cattle	10	-	-	-	-	-	90 % conception	27362.5	74891.3	47628.8	2.74	26412.5	26101.1	-312	0.98

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

Parameter with unit	Demo	Check
Exhibit of estrus (in percentage)	100	-
Conception rate(in percentage)	90	-
Number of service per conception(in nos)	2	-

FLD 16 :Demonstration of herbal treatment for mastitis in lactating dairy cattle

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	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										
Livestock	Herbal treatment for mastitis in lactating cattle	-	-	-	50	-	-	-	-	-	100 % success	18120	47551.2	29461.2	2.749	19920	43071.2	23151.2	2.177

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

Parameter with unit	Demo	Check
Normal secretion of milk (In days)	5	3
Reduction of size of affected udder (In days)	3	2

5.B.4. Other enterprises

FLD 17 :Demonstration of Phytojuvenoid and Uzifly trap use in sericulture

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (kg/1000dfl)				% 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										
Sericulture	Use of Phytojuvanoid ilamthi during last larval instar @ 5ml/100dfl Uzifly management Management strategies	-	-	-	5	-	760	712	740	593	24.8	61400	88896	27496	1.45	61300	71232	9932	1.16

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

Parameter with unit	Demo	Check
Weight of single cocoon	1.85	1.48
Uniformity (%)	85	92
Increase in larval period	18 hrs	-

FLD 18 :Demonstration of millet dehuller CIAE Bhopal model for little millet rice preparation in Dharmapuri district

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Income (Rs/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
CIAE Bhopal dehuller	Demonstration of millet dehuller CIAE Bhopal model for little millet rice preparation in Dharmapuri district	-	-	-	10	-	6370	3900	63.3	2333	6261	3927	2.66	2333	3833	1500	1.63

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

Parameter with unit	Demo	Check
Recovery percentage of rice	70%	-
Power consumption	5 unit/100kg	-
Acceptance of packaging materials	Metalized poly propylene stand pouches	-
Market preferences	Highly accepted	-
Waste management	Husk used animal feed	-

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

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	1	52	-
2	Farmers Training	6	246	-
3	Media coverage	5	-	-
4	Training for extension functionaries	-	-	-
5	Others	-	-	-

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type	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										
Cotton	Foliar spraying of 1% MgSO4 Urea(1.0%) and ZnSO4 (0.10%) as on 50th, 80th and 110th day Foliar application of 1.5 % D.A.P. + 0.5% KCl at fortnightly intervals from 110 DAS Foliar spraying of Planofix @ 0.25 ml/lit at 60 and 90 DAS IPDM practices	Bt hybrid -Bunny	10	4	18.2	16.1	17.0	14.3	18.3	32294	69456	37162	2.16	29044	58736	29693	2.02
Chillies	Demonstration of TNAU Chilli Hybrid COCH 1 in Dharmapuri district	TNAU Chilli hybrid COCH 1	10	0.4 ha/ unit	342.0	302.0	320.7	267.3	19.98	187081	801666.	614585	4.30	168650	669583	500933	3.98

Bittergourd	Yellow sticky traps for sucking pest management Neem cake application along with *Paecilomyces lilacinus* Spraying of neem soap @ 10gm/lt *Paecilomyces lilacinus* Fruit fly trap @ 5/ac	Private hybrid	10	4	345	310	326	258	26.4	115000	391200	276200	3.37	134400	281760	147360	2.28
Capsicum	Yellow sticky traps for sucking pest management Seedling drenching with *Pseudomonas fluorescens* @ 10g/lt. Spraying of neem soap @ 10gm/lt Arka vegetable special spray @ 5g/lt.	Private	10	4	880	820	845	785	7.64	872500	3802500	2930000	4.60	937500	3532500	2595000	3.80

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										
Weed Management	1	39	6	45	1	3	4	40	9	49
Integrated Crop Management	11	621	313	934	42	48	90	663	361	1024
Integrated Nutrient Management	1	44	0	44	1	0	1	45	0	45
Others –SSI Production technology	2	226	45	271	8	1	9	234	46	280
Horticulture										
a) Vegetable Crops										
Roof top gardening	1	57	23	80	-	-	-	57	23	80
Nutrition garden	7	140	220	360	3	-	3	143	220	363
Plastic mulching in flowers	1	50	-	50	-	-	-	50	-	50
b) Fruits										
Micro irrigation systems of orchards	2	102	18	120	7	8	15	109	26	135
Value addition in fruits and vegetables	5	200	73	273	15	17	32	215	90	305
Livestock Production and Management										
Dairy management	16	141	1057	1198	43	161	204	184	1218	1402
Poultry management	2	58	13	71	1	1	2	59	14	73
Piggery management	1	22	12	34	1	4	5	23	16	39
Animal Nutrition management	1	15	23	38	-	-	-	15	23	38
Feed and Fodder technology	1	20	15	35	-	-	-	20	15	35
Goat rearing	4	40	200	240	5	57	32	45	227	272
Home Science/Women empowerment										
Value addition	14	79	79	158	31	53	84	110	132	242
Processing & cooking	1	37	0	37	2	0	2	39	0	39
Plant Protection										
Integrated Pest Management	3	150	90	240	5	5	10	135	95	250
Integrated Disease Management	2	98	60	158	2	3	5	100	63	163
Production of Inputs at site										
Seed production	1	35	38	73	4	2	6	39	40	49
Vermi-compost production	2	50	43	93	0	5	5	50	48	98
Azolla Production	1	0	20	20	0	0	0	0	20	20
Total	**80**	**2224**	**2348**	**4572**	**171**	**368**	**509**	**2375**	**2686**	**5051**

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										
Resource Conservation Technologies	1	80	20	100	10	10	20	90	80	120
Integrated Crop Management	6	312	158	556	18	18	36	410	176	586
Millet Production	1	45	25	70	5	0	5	50	25	75
Horticulture										
a) Vegetable Crops										
Nutrition garden	8	390	210	600	-	-	-	390	210	600
b) Ornamental plants										
Nursery management	1	15	10	25	5	2	7	20	12	92
Livestock Production and Management										
Dairy Management	2	72	38	110	24	7	31	96	45	141
Goat rearing	2	15	85	100	-	-	-	15	85	100
Production of Inputs at site										
Seed production	2	19	16	35	2	2	4	21	18	39
Total	**40**	**1790**	**985**	**2947**	**102**	**69**	**171**	**2052**	**1154**	**3226**

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
Nursery management of Horticultural crops	1	35	10	45	2	2	4	37	12	49
Value addition	1	-	-	-	81	117	198	81	117	198
Sheep and goat rearing	1	39	6	45	5	-	5	44	6	50
Quail rearing	2	70	32	102	-	-	-	70	32	102
Total	**5**	**144**	**48**	**192**	**88**	**119**	**207**	**232**	**167**	**399**

7.D. Training for Rural Youths 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
Protected cultivation of vegetable crops	1	45	5	50	-	-	-	45	5	50
TOTAL	**1**	**45**	**5**	**50**	**-**	**-**	**-**	**45**	**5**	**50**

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					
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	25	10	35	3	2	5	28	12	40
Total	**1**	**25**	**10**	**35**	**3**	**2**	**5**	**28**	**12**	**40**

7.F. Training programmes for Extension Personnel including sponsored training programmes (Off campus) : Nil

7.G. Sponsored training programmes conducted

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	11	276	45	321	8	1	9	284	26	330
Commercial production of vegetables	12	527	383	910	3	0	3	530	383	913
Post harvest technology and value addition										
Processing and value addition	12	121	99	220	49	56	105	170	155	325
Livestock Production and management										
Animal Nutrition Management	16	141	1057	1198	43	161	204	184	1218	1402
Total	**51**	**1065**	**1584**	**2649**	**103**	**218**	**321**	**1168**	**1782**	**2970**

Details of sponsoring agencies involved :

1. NADP – Precision Farming Training
2. NADP – SSI training
3. NABARD – SSI training
4. NADP – seed production
5. NRTT
6. PPV FR training

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

PART VIII – EXTENSION ACTIVITIES

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	1	20	10	30	10	12	22	30	22	52
KisanKhosti	1	34	28	62	21	14	35	4	4	8
Exhibition	15	850	500	1350	50	70	120	40	30	70
Method Demonstrations	32	440	461	901	12	58	70	16	-	16
Farmers Seminar	2	375	140	515	32	26	58	17	12	29
Lectures delivered as resource persons	46	-	-	1380	-	-	-	-	-	-
Newspaper coverage	45	Mass								
Radio talks	30	Mass								
Popular articles	21	Mass								
Extension Literature	31	Mass								
Advisory Services	1247	1198	49		-	-	-	-	-	-
Scientific visit to farmers field	24	38	-	38	-	-	-	8	1	9
Farmers visit to KVK	7201	-	-	7201	-	-	-	-	-	-
Diagnostic visits	263	321	15	337	-	-	-	41	8	49
Exposure visits from other state and districts										
Celebration of important days World Soil day Jai Kisan Jai Vigyan Diwas	2	190	33	223	3	2	5	4	5	9
Total	**8961**	**3466**	**1236**	**12037**	**128**	**182**	**310**	**160**	**82**	**242**

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	CO (R)51	-	960	24960	60
	Finger millet	ML365	-	223	7805	55
	Finger millet	GPU 67	-	73	2555	18
	Foxtail millet	KMR 204	-	56	1960	11
	Jowar	CO 30	-	85	2550	120
	Jowar	K12	-	253	7590	95
Oilseeds	Groundnut	Kadhiri 9	-	30	2100	1
	Groundnut	CO 7	-	50	3500	3
Pulses	Greengram	CO 8	-	143	12870	22
Fodder crop seeds	Fodder Sorghum	CO (FS)29	-	125	47500	0
	Fodder Sorghum	CO (FS) 31	-	85	32300	0
Total				**2083**	**145690**	**385**

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
Commercial	Sugarcane	Co 0403	-	22.8	5700	2
	Sugarcane	Co 0627	-	34.2	8550	2
Spices	Turmeric	BSR 1	-	130	1560	4
	Turmeric	BSR 2	-	293	3516	5
	Turmeric	Co 2	-	1820	21840	25
	Turmeric	PTS 10	-	80	960	1
	Turmeric	Allepey Supreme	-	295	3540	6
	Turmeric	Roma	-	202	2424	4
Fodder crop saplings	Napier	CO (CN) 4	-	8000	4000	52
	Napier	CO (BN) 5	-	27000	13500	156
Total				**37877**	**65590**	**257**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity (Kg)	Value (Rs.)	Number of farmers to whom provided
Bio-fungicide	*Pseudomonas fluorescence*	1812	213600	205
	Trichoderma viride	785	92100	118
Others (specify)	Vermicompost	6652	66520	16
	Earthworm	6.5	1625	6
Total		**9255.5**	**373845**	**345**

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 (Pl. specify)	Kanni & Boer cross	5	24640	5
Poultry	-	-	-	-
Piggery	-	-	-	-
Fisheries	-	-	-	-
Total		**5**	**24640**	**5**

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

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

(A) KVK News Letter :

Name of the News letter	Volume Number	Issue Number	Copies Print/Circulated
Seithi Madal	7	2	250
Seithi Madal	7	3	250
Total			500

(B) Literature developed/published :

Item	Title	Author Name	Number	Additional Information
Research papers	Management of sett rot (*Ceratocystisparadoxa* (de Seynes) Moreau) in Sustainable Sugarcane Initiative (SSI) Nurseries	Shanmugam, P.S., Sangeetha, M., Sarvanan, N.A., and N. Tamilselvan		*The Bioscan* (Accepted).
	First record of South American tomato moth, *Tuta*	Shanmugam, P.S., K. Ramaraju and K.		*Entomon*. (Accepted)

	absoluta(Meyrick) (Lepidoptera: Gelechiidae) in Tamil Nadu, India.	Indhumathi		
	Cardiopulmonary changes during Isoflurance anaesthesia with intermittent positive pressure ventilation (IPPV) for thoracotomy in cattle.	Thangadurai, R., Rajendran, N., Dharmaceelan, S., Nanjappan, K., Kathirvel, S and S.Senthilkumar		*Indian Vet.J.*93:33.35.
	Management of Uterine Prolapse in a Non-descript doe under field condition	Thangadurai, R and M.Selvaraj		*Indian Vet.J.*93: 54-56.
	Rare congenital bifurcated tail and imperforate anus in a female calf	Thangadurai, R., Kathirvel, S and S.Pannerselvam		*Indian Vet.J.*93:75.
	Management of mealybug menace in tuberose using sprinkler irrigation system in Dharmapuri district - a case study	Shanmugam, P.S., K. Indhumathi, M. Sangeetha and N. Tamilselvan		Innovative Insect Management Approaches for Sustainable Agro-Ecosystem at Madurai held during 27- 30 January 2015.
	Surgical management of Ventral abdominal hernia in a lamb	Thangadurai, R., Pannerselvam,S and S.Kathirvel		*Indian Vet.J.*93:73-74.
	Evaluation of different pest management modules against major insect pests and diseases of turmeric	Shanmugam, P.S., K. Indhumathi, M. Sangeetha and N. Tamilselvan		*CurrentBiotica*. 9(1). 17-24.
	Anaesthetic qualities and complications of different anaesthetic combination during thoracotomy in cattle	Thangadurai, R., Kathirvel, S., Senthilkumar, S., Dharmaceelan and N.Rajendran		*Indian Vet.J.*92: 58-59.
	Dystocia due to double head monster fetesa in Murrah Buffalo under field condition.	Thangadurai, R and Selvaraj		*Indian Vet.J.*92: 61-62
	Electrocardiographic studies during thoracotomy in cattle	Thangadurai, R., Rajendran, N., Kathirvel, S., Senthilkumar, S., Dharmaceelan, S., Nanjappan, K., and. S.Murugesan		*Indian Vet.J.*92:26-28.
	Stree evaluation during thoracotomy in cattle	Thangadurai, R., Rajendran, N., Kathirvel, S.,		*Indian Vet.J.*92: 66-67.

		Senthilkumar, S., Dharmaceelan, S., Nanjappan, K. and S.Murugesan		
Booklet	Cultivation techniques for Maize under Rainfed condition	Sangeetha, M., M.A.Vennila, R.Panneerselvam and P.S.Shanmugham	100	-
	Crop residue management	Sangeetha, M. and P.S.Shanmugham	100	-
	Integrated crop management in cotton	Sangeetha, M., P.S.Shanmugham, M.A.Vennila and N.Vadivel	100	-
	Plant varieties protection and farmers rights	Vennila.M.A. and N. Tamilselvan	100	-
	Integrated Farming System	Vennila.M.A., N. Vadivel and R. Thangadurai	100	-
	Roof gardening	Indhumathi.K, P.S. Shanmugam, and N. Vadivel	100	-
	Value addition in amla	Jothilakshmi.K and N.Vadivel	50	-
	Processing and value addition in millets	Jothilakshmi.K, Shanmugam, P.S, Sangeetha, M, M.A.V.Vennila	50	-
Popular articles in Journals	Siruthaniyangalil mathippu kottuthalil tholil munaivor	Vennila, M.A, Jothilakshmi.K. and P.S. Shanmugam.		Valarum velanmai, November 2015.pg.no :56-57.
	Entreprenuer in Millet Value Addition	Vennila .M.A. and K.Jothilakshmi		November. 2015. pp.56- 57
	Papalin payangalum payanpadugalum	Jothilakshmi,K., Vadivel, N. and R.Thangadurai		Naveena velanmai. October pg no: 42-44
	Meat purpose rabbit rearing	Thangadurai, R., Tamilselvan, N and N.Vadivel		Naveena velanmai, September 53-24.
	Siruthaniya thithippana inippuunavugal	Jothilakshmi, K., Vadivel, N and R.Thangadurai		August 2015.pg no 19-20
	Situthaniya adumanai porutgal	Jothilakshmi, K., Vadivel, N and R.Thangadurai		August 2015 Malar14 : kani 09
	White pig rearing	Thangadurai, R and		Kalnadai Kathir,

		N.Tamilselvan		Auguest 43-44.
	Maruthuva niraintha sirunyhaniya unavugal.	Jothilakshmi, K., Vadivel, N and R.Thangadurai		July 2015. Malar14 : kani 08 pg no 49-51
	Green manures for improving soil health	Sangeetha, M., P.S.Shanmugham and N.Tamilselvan		NaveenaVelanmai, June 2015.Pp 41-43.
	Kodainkodai Nellikkai • .	Jothilakshmi, K., Vadivel, N and R.Thangadurai		Naveena velanmai. June 2015.
	Arokiyamananothitha siruthaniya unavugal	Jothilakshmi, K., Vadivel, N and R.Thangadurai		Naveena velanmai. June 2015.
	Meat rabbit rearing	Thangadurai, R ., Tamilselvan, N and N.Vadivel		Kalnadai kathir, June 20-22.
	Green fodder for pregnant goats	Thangadurai, R and N.Tamilselvan		Tamilaga Viavasayee, May, 30-32.
	Medicinal tree plants for veterinary medicine	Thangadurai, R and N.Tamilselvan		May,48-49.
	Rabbit rearing.	Thangadurai, R and N.Tamilselvan		Malarum Velanmai May,41-43.
	Posture land management for goats	Thangadurai, R and N.Tamilselvan		Malarum Velanmai, May: 37-40.
	Profitable method of dairy cow rearing	Thangadurai, R and N.Tamilselvan		Malarum Velanmai, May: 29-31.
	Matruunavugal from ragi	Jothilakshmi,K., Tamilselven.N and R.Thangadurai		MalarumVelanmai, May 2015, malar 14 :kani 06. Pg no 72-76.
	Value addition of tomato	Jothilakshmi,K., Tamilselven.N and R.Thangadurai		NaveenaVelanmai. April 2015 pg no 24-26
Popular articles in Newspaper	Turmeric Rhizome rot Management	Shanmugam, P.S. and K.Indhumathi		Salem edition.03.12.2015 (Tamil)
	Banana leaf roller in Dharmapuri district	Shanmugam, P.S. K.Indhumathi and M.A.Vennila		Dinathanthi, Salem edition. 16.07.2015 (Tamil)
	Banana leaf roller in Dharmapuri district	Shanmugam, P.S. K.Indhumathi and M.A.Vennila		Dinathanthi, Salem edition. 16.07.2015 (Tamil)
	Management of Ashweevil in Brinjal	Shanmugam, P.S. K.Indhumathi and		Dinathanthi, Salem edition.

		M.Sangeetha		18.06.2015. (Tamil)
	Tomato pin worm infestation	Shanmugam, P.S., Ramaraju.K., and K.Indhumathi		Dinathanthi, Salem edition. 11.06.2015. (Tamil)
	Feeding management for calves	Thangadurai, R		Dinamalar, dt 22.07.2015
	Tree fodder management of cows during sunner	Thangadurai, R and N.Vadivel		Dinamalar, dt 24.06.2015.
	Banana Bunch Cover	Indhumathi.K, P.S. Shanmugam, and N. Vadivel		Dhinathanthi, Dt. 10.09.2015
	Mulching in Tuberose for Weed management	Indhumathi, K and P.S. Shanmugam		The Hindu, Dt.28.05.2015
	Housing management for livestock	Thangadurai, R. and N.Tamilselvan		Dinamani dt 09.04.2015
Pamphlet	Soil testing for knowing the soil health	Sangeetha, M. and P.S.Shanmugham	500	-
	Integrated Farming system	Vennila,M.A., N. Vadivel and R. Thangadurai	100	-
	Integrated Farming System	Vennila.M.A., N. Vadivel and R. Thangadurai	100	-
	Value addition of ragi and nutrition importance	Jothilakshmi,K and N.Vadivel	100	-
	Desibird rearing and health management	Thangadurai, R and N.Vadivel	100	-
	New technologies in dairy cow rearing	Thangadurai, R and N.Vadivel	500	-
	Profitable method for goat rearing	Thangadurai, R and N.Vadivel	500	-
	White pig rearing	Thangadurai, R and N.Vadivel	500	-
Total			9000	

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the Programme	Number
1.	DVD	Millet value addition	5
2.	DVD	INSIMP success story	5
3.	DVD	Pre Rabi Awareness Programme	5

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

1. Precision Farming in Chillies

Th. P. Kavery, S/o. Ponnankatti,
Puligarai (village &Post), Palacode (Tk), Dharmapuri district
Mobile: 9789505500

Technologies

- ✓ Introduction of high yielding COCH1
- ✓ Adoption of Precision farming technologies
- ✓ Basel application of FYM , *Azospirillum*, *Phosphobacteria* and super phosphate
- ✓ Fertigation of 120: 20: 80 kg NPK/ ac
- ✓ Application of NAA @ 10 ppm
- ✓ Application of Zinc sulphate @ 5 gm/ lit

Yield and Economics

Details	Amount (Rs/ ha)
Land preparation	2000
Sowing	400
FYM	1500
Fertilizers	3000
Weed management	800
Harvest	800
Total	9100
Yield (Kg/ac)	**420**
Gross returns	**31500**
Net returns	**22400**

2. ICM in tapioca

Th. A. Thangavelu, S/o. Aattukkaran,
Somanahalli village, Palacode (Tk), Dharmapuri district
Mobile: 94433 30392

Technologies

- ✓ Sett treatment with Carbendazim @ 2 gm/ lit of water
- ✓ Basel application of FYM and Super phosphate
- ✓ Fertigation of 36:36:96 kg NPK/ ac
- ✓ Application of fluchlorolin @ 800 ml/ lit
- ✓ Foliar spray of 0.5% Zinc sulphate
- ✓ IPM for mealy bug

Yield and Economics

Details	Amount (Rs.)
Land preparation	5000
Basel application of fertilizers	5000
Setts	1500
Planting	1500
Fertilizers	12000
Weed management	6000
Micronutrients	600
Crop protection	600
Harvest	10000
Total	42200

3. ICM in Greengram

Th. R. Jayam, S/o. Ramasamy,
Ganapatty village, Dharmapuri Taluk & District
Mobile: 9578509327

Technologies

- ✓ Variety – Green gram CO 8
- ✓ Seed treatment with biofertilizer
- ✓ Line sowing with pulse marker
- ✓ Soil Application of Micronutrient mixture @ 3 Kg/ ac
- ✓ Pulse wonder spray @ 2 Kg/ac
- ✓ Synchorinized flowering and hence one or two harvests

Yield and Economics

Details	Amount (Rs.)
Land preparation	2000
Sowing	400
FYM	1500
Fertilizers	3000
Weed management	800
Harvest	800
Total	9100
Yield (Kg/ac)	420
Gross returns	31500
Net returns	22400

4. Sericulture – White cocoon production

Th. G. Pandian S/o. P. Govindan
Moongilpatty village, Palacode (Tk), Dharmapuri district
Mobile: 9788938757

Technologies

- ✓ Basal application of FYM for mulberry cultivation

- ✓ Fertigation of NPK @ 140: 56: 56/ ac
- ✓ Application of 2% bleaching powder solution
- ✓ Management of Uzifly by using uzifly trap

Yield and Economics

Details	Amount (Rs.)
Mulberry cultivation	
Seedlings	5200
Planting	14000
FYM (8 tonnes @ Rs.1000/ - per tonne)	8000
Fertilizers	18000
Weed management	2400
Electricity & Miscellaneous	500
Total	48100
Silk worm rearing	
Silk worm egg	7150
Disinfectants and other Inputs	15000
Total	22150
Yield Silk cases	1000 Kg
Gross returns	350000
Net returns	279750

5. Intensive method of Dairy Farming

Th. V. Sampath, S/o. Vedi,
Ethhappankottai village, Dharmapuri Taluk & District
Mobile: 7708742270

Technologies

- ✓ Jersey and H. F cows
- ✓ Feed and fodder management @ 30- 35 kg of green fodder, 6 kg of dry fodder and 5 kg of concentrate / cattle/ day
- ✓ Mineral mixture @ 40 gm/ cattle / day
- ✓ Regular vaccination at periodical intervals

Yield and Economics

Details	Amount (Rs.)
Shed	30000
Feed and Fodder management	360000
Mineral mixture	49500
Artificial insemination	1350
Total	413850
Income from Milk	776250
Income from Cow dung	9000
Gross returns	785250
Net returns	371400

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

Innovative Methodology adopted	Technology transferred
Participatory approach Appointed technical input provider	Polythene mulching in Vegetables and melons Mechanization in Tapioca, melons and gourds IPDM practices in vegetables
Commodity approach	Promotion of value addition in minor millets *viz*., Finger millet, Proso millet, Foxtail millet and Kodo millet
Cluster approach	Seed production training, protray nursery raising
FFS mode	ICM in Tapioca and its value addition and marketing
Providing implements to the farmers on free of cost from KVK	Popularization of farm implements *viz*., laser guided land leveler, seed drill, mulch spreader, turmeric harvester, power sprayer, Chisel plough and Sugarcane trash shredder
Natural resource management technologies	Composting sugarcane trash using microbial consortia was popularized among farmers for long term sustainability of soil health
Information Communication Technologies Initiatives (TNAU's Agri tech portal, expert system, video conferencing and Mobile based agro advisory services)	Need based agro advisory services related to crop management, nutrient deficiency, pest and disease management has been given

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)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Millets grains	Grains were mixed with neem leaves	For avoiding pest damages
2.	Ash Gourd seeds	Seeds mixed with cow dung	For preservation of longevity of seeds
3.	Snake Gourd seeds	Seeds were mixed with ashes	For preserving germination till next season
4.	Ridged gourd seeds	Seeds were mixed with ashes	For preserving germination till next season
5.	Brinjal	Spraying of fish oil	For avoiding pest damages (fruit borer)
6.	Vegetables	Spraying of butter milk	To control aphids
7.	Vegetables	Spraying of Amrith solution (Five types of leaves- Erukku, Notchi, Neem and Pungan)	For avoiding pest damages
8.	Vegetables	Planting of seeds during no	For better germination of seeds

		moon day	
9.	Vegetables	Spraying of cow urine	For avoiding pest damages and better growth of the plants
10.	All the crops	Thirsty toys	For birds scare

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

Type of participants	Tool / Methodology
Identification of courses for farmers visits	Farmer to farmer approach
Identification of courses for Farm women	Group discussion
Rural Youth	e-media
In-service personnel	Interactive workshop

10.G. Field activities

i. Number of villages adopted = 20
ii. No. of farm families selected = 130
iii. No. of survey / PRA conducted = 2

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :No SWTL

1. Year of establishment :
2. List of equipments purchased with amount:

Details of samples analyzed so far since establishment of SWTL: No SWTL

Details of samples analyzed during the 2015-16: No SWTL

10.I. Technology Week celebration during 2015-16 Yes/No : No

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

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./Unit)	After (Rs./Unit)
SSI	300	10	211640	265980
ICM in Small Onion	40	10	300105	351000
Integrated nematode management in Tomato	50	20	114000	144000
Mulching in Tuberose	10	5	252500	308440
Mulching in Watermelon	100	30	273750	362250
Transplanting technique in Redgram	120	10	18585	32725

IDPM in Turmeric	120	25	247000	318500
Fodder sorghum CO(FS) 29	500	10	-	-
Cumbu Napier grass CO(CN) 4	500	20	-	-
Turmeric boiler	165	20		
Pulse wonder	80	40	28000	36000
Arka vegetable special in vegetables	600	40	430000	300000

11.B. Cases of large scale adoption

Mulching in Vegetables and Flowers

Introduction

- Dharmapuri district owns major area under vegetables and flowers *viz.* tomato, brinjal, chillies, tuberose, tapioca, turmeric, watermelon and muskmelon
- Major constraints faced are weed management and soil borne diseases in vegetables especially in case of melons**.**
- KVK, Dharmapuri demonstrated plastic mulching technology to overcome these problems during 2013-14.

Advantages of plastic mulching

- Saves irrigation water by reducing water loss by evaporation.
- Prevents infection of soil borne pathogens
- Prevents weed growth and cost towards weed management is reduced.
- Quality of produce maintained which fetches higher price.

Specifications of plastic mulch

- Low density polyethylene (LDPE)
- Thickness of sheet should be more than 40 micron
- Colour of the mulch – Top silver and bottom black

Results of the demonstrations

Economic advantage of the technology adopted in Watermelon

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
517.50	450.0	15.0	60,000	3,62,250	3,02,250	6.0	61,750	2,73,750	2,12,000	4.4

Economic advantage of the technology adopted in Tuberose

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
130.0	118.5	9.70	253074	657340	404257	5.8	242418	538115	274385	4.0

Methods adopted for horizontal spread of the technology

- ✓ Frontline demonstration was conducted in 15 farmers fields during 2013-14.
- ✓ Popularized through training programmes
- ✓ Through IAMWARM scheme this technology was demonstrated to 200 farmers
- ✓ Through NHM this technology has been demonstrated in Morappur, Harur and Pappireddipatti blocks.

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

11.C.1.. Impact of EDP Training on Promotion of Processing and Value Addition of Millets based Entrepreneurship Development Programme in Dharmapuri district

In Dharmapuri district various types of millets were cultivated in about 60,289 ha. Sorghum, ragi, cumbu, samai, thenai and panivaragu are the major millet crops cultivated in Dharmapuri district. The farmers are mainly cultivating the millets under rainfed condition with little management practices and the productivity is very low when compared to state average. Only 50 per cent of the state average is being realised in Dharmapuri district due to non adoption of high yielding varieties and hybrids and improved cultivation practices. After harvesting the produce, the some of the farmers used to sell in the local market and some of them keep it for own consumption. The farmers never practicing pre processing and value addition practices.

In this context a EDP project was obtained from the Mission Director, State Mission on Food Processing, Director of Agricultural Marketing and Agri – Business, Guindy, Chennai under NMFI during 2014 – 15 and training on Millet Value Addition technologies was conducted. About thirty participants were selected based on personal interview and they were given with the training for the period of one month during February 2015. In this training programme Skill set development required for entrepreneurship in Processing and Value addition of millets, entrepreneurship qualities, role of financial institutions, role of development departments, production and value addition technologies of millets, accounts maintenance and record keeping were dealt in detail. In addition to that the demonstration of preparation of value added products like ready mix, health mix, murukku mix, adai mix, paniyaram mix, sancks, cookies, bread, cake and rusk from millets was conducted.

After a period of one year the follow up of the training was done and it was found that among the thirty participants three of them taken up self employment venture on millet value addition and four of them joined with others. The impact of the training as follows.

Tmt. Sangeetha, Mookanahalli, Pennagaram block

Tmt. Sangeetha belongs to farm family and she had attended the EDP training on Millet Value Addition technologies and she got motivated to start self employment on millet value added products and she joined with three of other participants with other neighbours and formed group called Siruthaniya Mathippu Koottuthal Thozhil kulu and started their business.

They prepared products like health mix, cumbu adai mix, thenai, samai and varagu cookeies, ragi murukku mix, samai cheval etc. Initially they distributed the products as sample packets to friends, neighbours and after seeing the preference of the products they started to sell their products to the government offices, departmental stores and pudhuvazhlvu projects in the brand name of Amudhamfoodsand now the individual member is able to earn Rs. 500/- per month. They hope that the profit may increase up to Rs. 2000/- as the business proceeds. Tmt. Sangeetha has been awarded with **Young Achiever Award** during the state level Farmers day held at Tamil Nadu Agricultural University, Coimbatore during 8th January 2016.

Selvi. C. Ramakandam and C. Lakshmikandam, Kathirnaickanahalli, Morappur block

Both of them after attending the EDP training on Value addition technologies in millets they started a group called Manga Mahalir Kulu and started adopting the value addition technologies and preparing the value added products like cumbu adai mix, ragi paniyaram mix, thenai ravadosa mix, samai, thenai and varagudosa mix,cookies, bread and rusks from millets. They preparing and selling their products in the brand name of Mangafoods. They are earning around Rs. 800/ - per month and they expect that it may increase upto Rs. 2000/- as the business proceeds.

Tmt. Shanthi, Vanampatty, Palacode block

Tmt. Shanthi W/o. Palanivelu is a farm women cultivating groundnut, tapioca, tomato, bhendi and greens. Due to scarcity of water and labour problem she wanted to take self employment. She had attended EDP training and got motivated to start millet value addition as a business. She is preparing health mix and millet dosa mix from various millets like sorghum, samai, varagu and thenai. Without spending much on raw materials purchase she used her own agricultural produces. The total cost of the production was very less, in turn the total income realized was comparatively high. She is earning Rs. 2400/- month. The training imparted, increased her ability to utilize own farm produces, search better marketing opportunities and collectively selling her produces online and cash transactions through online banking. This situation develops her self confidence and now she is in a position to provide employment opportunities to other neighbouring farm women.

11.C.2. Assessment of Impact of On Campus training

The following on campus trainings were conducted at KVK, Papparapatty and the impact assessment was done by evaluation of training programmes.

Methodology

A set of questions related to the topic of training was prepared with the help of concerned SMS and it was administered to the participants before starting of the training programme and same questions was again administered at the end of the training programmes. Two sets of scores was obtained ie. Pre evaluation score and post evaluation score and from the two scores percentage of Knowledge gain was calculated by using the formula

$$\% \text{ of Knowledge gain} = \frac{\text{Post evaluation score} - \text{Pre evaluation score}}{\text{Total score}} \times 100$$

Percent of knowledge gain was obtained for the individual training and presented in the following table

Results and Discussion

Table.List of training with evaluation scores

Sl. No.	Date of Training	Name of the Training	Pre Evaluation	Post Evaluation	Knowledge gain (%)
1.	1.10.15	Value addition in Ragi	6	10	40
2.	9.10.15	ICM in Cotton	3	6	30
3.	15.10.15	Roof Gardening and Nutrition	4	7	30
4.	20.10.15	IFS and livestock management	4	8	40
5.	4.11.15	Advances in White pig rearing	3	7	30
6.	13.11.15	Improved Production Technologies in Sugarcane	5	8	30
7.	26.11.15	Use of Mulching Sheet in vegetables and flowers	6	9	30
8.	3.12.15	Value addition in Tomato	6	8	20
9.	11.12.15	SRI	6	8	20
10.	13.1.16	ICM in Chillies	3	7	30

From the above Table it could be seen that about fourty percent of knowledge was gained in the trainings viz., Value addition in Ragi and IFS and livestock management. About thirty percent of increase in knowledge was observed in the trainings on, ICM in Cotton, Roof Gardening and Nutrition, Advances in White pig rearing, Use of Mulching Sheet in vegetables and flowers and ICM in Chillies and only twenty percent increase in knowledge was observed in the training on Value addition in Tomato and SRI. Regarding item wise knowledge the following aspects were observed.

In ragi value addition trainings the participants were not known about the improved value addition technologies like preparation of noodles making, cookies and nutritional importance of ragi. After attending the training they gained knowledge on the above. In the IFS training knowledge on different components of IFS suitable for different types of lands was gained. In ICM in cotton the participants gained knowledge on FYM requirement and major nutritional deficiencies occurred in cotton. Benefits of using mulching sheets, types of mulching sheets to be used were known to the participants after attending the training. In sugarcane production technologies the participants were gained knowledge on sett treatment, spacing to be adopted and name of fertilizers required for sugarcane. In chillies cultivation knowledge on seedling root dipping and fertigation techniques were gained by the participants.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
ATMA	Participation in training programmes and farm school
National Horticulture Mission	Established mango model nursery and supplying grafting
State Agricultural and allied Departments(Agrl Engineering, Marketing,)	Joint diagnostic survey, joint implementation, participation in meeting, conducting training programmes FLD, OFT and other demonstrations and Uzhavar Peruvizha.
NABARD, PallavanGrama Bank, Indian Bank, State Bank of India	Conducting training programmes and demonstrations., Crop insurance , farm advisory service, SSI
NBAII, Bangalore	Evaluation of stress tolerant superior strains of bioagents
IIHR, Bangalore	Technical advice on vegetable special
TNAUVAS ,Chennai	Technical advice on Mineral mixture for repeat breeder cows and grand supplement
VUTRC, Dharmapuri	Technical advice on Mineral mixture for repeat breeder cows and grand supplement
Puduvalzhuthitam	Conducting trainings to rural youth on entrepreneurship development programmes
Integrated watershed management programme (IWMP)	Conducting trainings to rural youth on entrepreneurship development programmes
NGO – PNMP, MYRADA Thenkoodu	Participating in demonstrations and trainings to SHGs

12.B. List Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
Ensuring Nutritional Security to the Rural Poor through Nutritional Gardens in Villages of Dharmapuri District under the reviving the Green Revolution (RGR) Initiative	Establishment of nutrition garden demonstration and training	06.01.2013	Navajbai Rathan Tata Trust	1259000
Enhancing the Livelihood of Tribal Farmers in Dharmapuri District through Capacity Building on Improved Production Technologies and Value Addition in Millets	Awareness on the project was created among the tribal farmers through various meetings. About 10 Farmers Interest Groups (FIGs) were formed with 200 farmers @ 20 farmers per FIG. The FIG farmers were provided with training on Improved technologies of production and value addition in Millet. Demonstration of value added products were conducted for the benefit of participants.	16.07.2015	State Planning Commission	2377000
Promotion of quality seed production in Green manures	Demonstration and quality seed production in green manure crops in the farmers holdings	10.11.2014	NADP-RKVY	372000
Part II plan scheme Millet processing and demonstrate the dehusking machine in village level	Conducted the training programme through lectures about Integrated crop management in millets and demonstration about processing machineries of millets and preparation methods of value added products from millets	11.01.2016	Dept of Agri and FPE, AEC&RI, TNAU	260000

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

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

- Preparation in researchable issues
- Preparation in Farm school
- Preparation in R-E-F linkages
- Formulation of trainings and demonstration

Coordination activities between KVK and ATMA during 2015-16

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other Remarks (if any)
01	Meetings				
	SSEPRS Pre annual action plan	Pre annual action plan meeting at JDA office, Dharmapuri	1	-	-
	SSEPRS Annual action plan	Annual Action plan meeting at Ooty	1	-	-
02	Research projects				
	Nil		-	-	-
03	Training programmes				
	Paddy	SRI	1	-	-
	Millets	ICM in millets	8	-	-
		Advanced techniques of maize cultivation under rainfed condition	3	-	-
	Pulses	ICM in pulses	8	-	-
		Redgram transplanting	3	-	-
	Oilseeds	ICM in Gingelly and Groundnut	5	-	-
	Commercial crops	Value addition in fruits and vegetables	2	-	-
	Soil fertility	Crop residue management	8	-	-
	Plant protection	IPM in cotton	1	-	-
		IPM in paddy	2	-	-
		IPM in vegetables	3	-	-
	Livestock	New technologies in goat rearing	1	-	-
		Dairy cow rearing	1	-	-
04	Demonstrations				
	Crop residue management	Method demonstration of composting	8	-	-
	Foliar nutrition	Method demonstration of foliar spraying in blackgram	3	-	-
	Vermicomposting	Method demonstration of vermicomposting	2	-	-
05	Extension Programmes				
	KisanMela	Jai kisan jai vigyan diwas	-	1	-
	Technology Week	-	-	-	-
	Exposure visit	Farmers day exhibition	-	1	-

	Exhibition	Pre rabi awareness programme	-	1	-
	Soil health camps	World soil day	-	1	-
	Animal Health Campaigns	-	-	-	-
	Others : Farm school	Redgram transplanting	3	-	Technical support by KVK scientists
		ICM in Paddy	1	-	
		ICM in Groundnut	1	-	
		ICM in pulses	3	-	
	Seed village programme	Seed village programme in pulses	6	-	-
	Farm women development programme	Efficient Farm women development programme	8	-	-
06	Publications				
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	IPM in Paddy	1	-	Technical support by KVK scientists
		ICM in Millets	1	-	
		ICM and value addition in millets	1	-	
		Crop residue management	1	-	
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	Other Activities (Pl. specify)				
	Watershed approach	-	-	-	-
	Integrated Farm Development	-	-	-	-
	Agri-preneurs development	-	-	-	-
08	Field visits				
	Joint field visit	Paddy	1	-	-
		Tomato	1	-	-
		Onion	1	-	-
		Capsicum	1	-	-

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

S. No.	Programme	Nature of linkage	Funds received (Rs.)	Expenditure during the reporting period (Rs.)	Constraints if any

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

S. No.	Programme	Nature of linkage	Funds received (Rs.)	Expenditure during the reporting period (Rs.)	Remarks

12.F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received (Rs.)	Expenditure during the reporting period (Rs.)	Remarks
1.	NADP – RKVY	SSI training	212800	212800	-
2.	NADP – RKVY	Green manure seed production	372000	372000	-

12. G. Kisan Mobile Advisory Services

Month	Message Type	No. of farmers covered	Crop	Livestock	Weather	Marketing	Awareness	Other Enterprise	Total
April 2015	Text Message	1052	6	5	4	6	2	3	26
May 2015	Text Message	1500	2	2	1	0	0	0	5
June 2015	Text Message	15263	25	5	2	2	2	0	36
August 2015	Text Message	1500	6	0	0	2	0	0	8
Total		**19315**	**39**	**12**	**7**	**10**	**4**	**3**	**75**

Through SMS portal for farmers

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.	Slooted floor goat rearing	2009	0.4	Kanni x boar	kids	3			
				Tellicherry x boar	kids	3			

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. (kg)	Cost of inputs	Gross income	
Rice	30.11.2014	06.02.2014	0.16	CO 51	Seed	960		24960	
Finger millet	13.01.2015	18.05.2015	0.16	GPU 67	Seed	73		2555	
	13.01.2015	18.05.2015		ML 365	Seed	223		7805	
	13.01.2015	18.05.2015		KMR 204	Seed	56		1960	
Jowar	28.12.2014	24.03.2015	0.16	CO 30	Seed	85		2550	
Jowar	18.02.2015	05.06.2015	0.26	K 12	Seed	253		7590	
Green gram	17.04.2015	19.06.2015	0.40	CO 8	Seed	143		12870	
Groundnut	22.12.2014	23.04.2015	0.08	Kadiri 9	Seed	30		2100	
	17.04.2015	20.07.2015	0.08	CO 7	Seed	50		3500	
Sugarcane	29.12.2014	01.07.2015	0.12	Co 0403	Setts	2280		5700	
				CO 06027	setts	3420		8550	
Turmeric	31.07.2014	03.06.2015	0.16	BSR 1	Rhizome	130		1560	
	31.07.2014			BSR 2	Rhizome	293		3516	
	31.07.2014			CO 2	Rhizome	1820		21840	
	31.07.2014			Roma	Rhizome	80		960	
	31.07.2014			PTS 10	Rhizome	80		960	
	31.07.2014			Allepey supreme	Rhizome	295		3540	
Cumbu Napier grass			0.08	CO (CN) 4	Setts	8000 Nos		4000	
			0.16	CO(BN) 5	setts	27000 Nos		13500	
Fodder sorghum	12.06.2015	10.11.2015	0.16	CO (FS) 29	Seeds	85		32300	
			0.24	CO(FS) 31	Seed	125		47500	

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

Sl. No.	Name of the Product	Qty (kg)	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	*Pseudomonas fluorescence*	1812	Rs. 75/kg	213600	-
2	*Trichoderma viride*	785	Rs. 75/kg	92100	-
3	Vermicompost	6652	Rs. 10/kg	66520	-
4	Earthworm	6.5	Rs.250/kg	1625	

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	Goat	Kanni & Boer cross	Animal	5	-	24640	-

13.E. Utilization of hostel facilities

Accommodation available (No. of beds) : 30

Month	No. of trainees stayed	Trainee days (Days stayed)	Reason for shortfall
April 2015	43	1	-
May 2015	26	6	-
June 2015	85	2	-
July 2015	308	24	-
August 2015	32	7	-
September 2015	142	7	-
November 2015	90	3	-
December 2015	19	10	-
January 2016	43	4	-
February 2016	218	12	-
Total	1006	76	--

13.F. Database management

S.No	Database target	Database created
1.	Nine fold classification of land	Nine fold classification of land
2.	Number and size of operational holdings	Number and size of operational holdings
3.	Weather parameters of the district. (for a minimum period of 10 years)	Weather parameters of the district(for a minimum period of 10 years)
4.	Details of soil profile	Details of soil profile
5.	Detailed cropping pattern (for a minimum period of ten years)	Detailed cropping pattern (for a minimum period of ten years)
6.	Area, production and productivity of major crops	Area, production and productivity of major crops
7.	Details of livestock wealth in the district	Details of livestock wealth in the district
8.	Production and productivity of livestock produces	Production and productivity of livestock produces
9.	Area under irrigation from different sources	Area under irrigation from different sources
10.	Seasonal availability of labour	Seasonal availability of labour

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
Construction of structure completed. The structure is being utilized for demonstration of IWMP training programme.									

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 Host Institute	State bank of India	TNAU Branch, Coimbatore	-	-	-	-	-
With KVK	State Bank of India	Papparapatty	15038	Main account	30117740134	63600212	SBIN 15038
	State Bank of India	Papparapatty	15038	Revolving fund	30258635490	636002121	SBIN 15038

14.B. Utilization of KVK funds during the year 2015-16(in Rupees)

S.No	Particulars	RE 2015-16 (Rs.)	Funds released from ZPD (Rs.)	Total Expenditure (Rs.)
A.	Recurring Contingencies:			
1	Pay and Allowances	9517000	10259802	10084774
2	Traveling allowances	100000		100000
3	Contingencies			
a	Stationery, telephone, postage and others	100000		99992
b	POL, repair of vehicles, tractor and equipments	100000		99833
c	Meals/refreshment for trainees	50000		49957
d	Training material	50000		49982
e	Frontline demonstration	223000		222839
f	On farm testing	68000		67399
g	Maintenance of building	25000		24996
h	Extension Activities	50000		49990
i	Library	4000		3924
j	Total Recurring	670000		668912
k	Total Non Recurring	0		0
l	Grand Total	1,02,87,000		1,07,53,686

14.C.Status of revolving fund (in Rupees) for the three years

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 2012 to March 2013	5,32,709	10,00,023	4,21,333	11,11,399
April 2013 to March 2014	11,11,399	9,50,486	5,71,253	14,90,632
April 2014 to March 2015	14,90,632	8,61,658	5,93,375.00	16,36,430
April 2015 to March 2016	16,36,430	8,21,492	10,78,229.00	15,02,178

15. Details of HRD activities attended by KVK staff during 2015-16

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.K.Indhumathi	Subject Matter Specialist (Horticulture)	Social media training	TNAU, Coimbatore	8.6.2015
Dr.R.Thangadurai	Subject Matter Specialist (Animal Husbandry)	Social media training	TNAU, Coimbatore	8.6.2015
Dr.N.Vadivel	Subject Matter Specialist (Agronomy)	9th National conference of KVK	ICAR, Patna	24.7.2015 to 26.7.2015
Dr.N.Vadivel	Subject Matter Specialist (Agronomy)	Self management training	Manage, Hyderabad	7.9.2015
Dr.N.Vadivel	Subject Matter Specialist (Agronomy)	Orientation training	TNAU, Coimbatore	14.9.2015 to 17.9.2015
Dr.K.Indhumathi	Subject Matter Specialist (Horticulture)	One day workshop about FPO	KVK, Namakkal	11.9.2015
Dr.P.S.Shanmugam	Programme Coordinator	One day workshop about FPO	KVK, Namakkal	11.9.2015
Dr.K.Jothilakshmi	Subject Matter Specialist (Home Science)	One day workshop about FPO	KVK, Namakkal	11.9.2015
Dr.K.Jothilakshmi	Subject Matter Specialist (Home Science)	Capacity Building Programme on Effective Office Administration	TNAU, Coimbatore	28.10.2015 to 30.10.2015
Dr.R.Thangadurai	Subject Matter Specialist (Animal Husbandry)	Capacity Building Programme on Effective Office Administration	TNAU, Coimbatore	28.10.2015 to 30.10.2015
Dr.R.Thangadurai	Subject Matter	Capacity Building	TNAU,	28.10.2015 to

	Specialist (Animal Husbandry)	Programme on Effective Office Administration	Coimbatore	30.10.2015
Dr.M.Sangeetha	Subject Matter Specialist (Soil Science)	Agroforestry Models Establishment and Management	IFGTB, Coimbatore	18.11.2015 to 20.11.2015
Dr.M.A.Vennila	Subject Matter Specialist (Ag. Extension)	Agroforestry Models " Establishment and Management	IFGTB, Coimbatore	18.11.2015 to 20.11.2015
Dr.M.A.Vennila	Subject Matter Specialist (Ag. Extension)	Training programme on Biogas technology	Department of Bioenergy, TNAU, Coimbatore	7.12.2015 to 10.12.2015
Dr.M.Sangeetha	Subject Matter Specialist (Soil Science)	Seed Quality Regulation	TNAU, Coimbatore	17.7.2015 to 21.7.2015
Tmt.A.Pabitha	Programme Assistant (Computer)	OLRs workshop	KVK, Mysore	19.1.2016 to 20.1.2016
Dr.M.A.Vennila	Subject Matter Specialist (Ag. Extension)	First KVK Symposium on Technology Delivery Mechanisms of KVKs for Higher Productivity and Profitability in Agriculture	University of Agricultural Sciences, Dharwad	21.1.2016 to 22.1.2016
Tmt.A.Pabitha	Programme Assistant (Computer)	Refresher training course	TNAU, Coimbatore	9.3.2016 to 10.3.2016
Tmt. M.Swapna	Programme Assistant (Lab Technician)	Refresher training course	TNAU, Coimbatore	9.3.2016 to 10.3.2016
Th.R.Panneerselvam	Farm Manager	Farm Mangers training	TNAU, Coimbatore	23.3.2016 to 25.3.2016