

**PROFORMA FOR PREPARATION OF ANNUAL REPORT
(1st January 2021 to 31st December 2021)**

1. GENERAL INFORMATION ABOUT THE KVK

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

Name of the KVK as per official records (MoU): KVK, Villupuram

Address: Krishi Vigyan Kendra
Tamil Nadu Agricultural University
Tindivanam, Villupuram District – 604 002.

Phone : 04147 250001
Fax : 04147 250001
Email : kvktvm@tnau.ac.in

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

Name of the Host Organization as per Official Records: Tamil Nadu Agricultural University,
Coimbatore

Status of the Host Organization (As per the MoU): State Government University
(State Government University – [AU, HU, VU, FU] / State Government Department / ICAR Institute / Central University / Deemed University / Non-Governmental Organization)

Address : Tamil Nadu Agricultural University, Coimbatore – 641 003
Phone : 0422 6611233
Fax : 091-0422-6611433
Email : dee@tnau.ac.in , vctnau@tnau.ac.in
Name of the Chairperson: Dr.P.P.Murugan
Mobile No : 9443654740
Email : dee@tnau.ac.in

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

Name of the Programme Coordinator / SS&H : Dr. P.Sridhar
Residential Address : Staff quarters, KVK, Tindivanam
Phone No. : 9442151096
Mobile No. : sreedhacdm@gmail.com
Email:

1.4. Year of sanction of the KVK (as per Official Order): **2003-04 (No.16-12/2003-AE-I-dated 16.8.2003, AE-I-dated 22.3.04 of ICAR, New Delhi)**

1.5. Month and year of establishment : 25th March, 2004

1.6. Total land with KVK (in ha) (Consolidated figure) :

S. No.	Item	Area (ha)
1	Under Buildings	2.4
2.	Under Demonstration Units	0.4
3.	Under Crops	11.2
4.	Orchard/Agro-forestry	2.8
5.	Others (specify)	-
	Total	16.8

1.6. Infrastructural Development:

A) Buildings

S.No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction Completed/ in progress/ to be initiated)
1.	Administrative Building	ICAR	1.8.2007	550	39.85	-	-	-
2.	Farmers Hostel	ICAR	1.8.2007	305	25.75	-	-	-
3.	Staff Quarters (No.)	ICAR	1.8.2007	400	32.00	-	-	-
4.	Demonstration Units	ICAR	1.8.2007	40	4.00	1.7.06	160	Completed
		ICAR	1.8.2007	250m	2.00	1.7.06	-	Completed
		-	-	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	2004 (old structure renovated)	40	-	-	-	-
8	Farm godown	ICAR	1.8.2007	550	39.85	-	-	-
9	Shed (Farm equipment)	ICAR	1.8.2007	305	25.75	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms covered as on 31.12.2020	Present status
Tractor with accessories	2005	318150	9377 hrs	Good
Two wheeler (TVS Starcity)	2006	34028	44,750	Good
Two wheeler (TVS Scooty pep+)	2009	35371	42,340	Good
Bolero Jeep	2012	526477	1,89,500	Good

C) Equipment & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
OHP with accessories	2004	24,850	To be condemned. Action has been initiated to condemn the same.
Slide projector with accessories	2006	24,730	
Xerox machine	2006	74,630	
Computer with accessories	2006	74,950	
Digital camera with accessories	2007	20,000	
Digital camera with accessories	2011	25000	Good
Computer accessories including LCD	2007	1,00,000	Good
Plant Health diagnostic facility			
BOD Incubator + Stabilizer-Pricillab	2011	42432	Good
pH Meter-Elico	2011	5481	Good
Dessicator-Kasablanca	2011	2564	Good
Stereo Zoom microscope-Olympus	2011	85306	Good
Magnifier-Ajay	2011	5834	Good
Hot air oven-Pricillab	2011	19448	Good
Deep freezer-Voltas	2011	24752	Good
UPS –Microtek with backup exide	2011	26520	Good
Glass distillation apparatus+ RO system (Pricillab+Dolphin)	2011	38896	Good
Polarimeter-Erma	2011	2386.8	Good
Wall table-Pricillab	2011	62764	Good
Sink with table	2011	10608	Good
Wall cupboard	2011	22100	Good
Revolving stool	2011	8840	Good
Electrical installation	2011	10608	Good
Air conditioner 2.0 t-LG+stabilizer	2011	26520	Good
Vertical louver	2011	13260	Good
Separator	2011	15028	Good
Refrigerated centrifuge-Biolab	2011	139672	Good
Microwave oven-LG 8 lit	2011	7514	Good
Analytical balance 200g-Wensar	2011	29172	Good
Thermo hygrometer-Lutron	2011	751	Good
Colony counter-Hintron	2011	4950	Good
Autoclave-35lit-Obamax	2011	43316	Good
Laminar air flow-Pricillab	2011	30940	Good
Vortex mixer-Biolab	2011	4066	Good
Shaker-Pricillab	2011	15028	Good

Water bath-Pricillab	2011	5392	Good
Portable autoclave-Obramax	2011	5304	Good
Hot plate-induction-Prestige	2011	3094	Good
Magnetic stirrer-Pricillab	2011	3094	Good
UV chamber-Pricillab	2011	11404	Good
Digital moisture meter-Concord	2011	7514	Good
Display cabinet	2011	29172	Good
Cold water supplier-Voltas	2011	11315	Good
Slotted angle iron rack	2011	4508	Good
Steel almirah	2011	23134	Good
Revolving stool	2011	2121.6	Good
RO System-Dolphin	2011	7956	Good
Air conditioner + V. Stabilizer-LG+V guard	2011	25194	Good
Vertical Louver	2011	10608	Good
Vacuum cleaner-Eureka Forbes	2011	3536	Good
Sink unit	2011	19121	Good
Exhaust fan	2011	12730	Good
LPG Setup	2011	8398	Good
Wall storage cupboard-Pricillab	2011	5525	Good
Wall side storage-Pricillab	2011	5525	Good
Storage cabinet-Pricillab	2011	46630	Good
Cabinet for conditioned storage of samples-LG+Vguard	2011	10608	Good
GPS Garmin-E Trex	2011	17680	Good
Servo Stabilizer-2KVA	2011	6630	Good
Chaff cutter	2013	17400	Good
Air conditioner with stabilizer	2017	414900	Good
Furniture (Bureau, steel glass cabinet, library cabinet, wooden queen cots, sofa set)	2017	99577	Good
Camera	2017	28500	Good
Public address system	2017	9980	Good
LCD Projector	2017	69000	Good
Photo copier	2017	69825	Good
Brush cutter	2019	28000	Good
Manual and battery operated Sprayer	2019	4500	Good
Knapsack sprayer	2019	5500	Good
Autoclave	2019	37170	Good
LCD Projector	2021	36500	Good
LCD Screen Motorized	2021	8650	Good
Ahuja Receiver	2021	6000	Good

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

S.No.	Date	No of Participants	Salient Recommendations
1.	18.03.2022	32	
2.			

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

List of members and invited guests present in the 13th Scientific Advisory Committee meeting of Krishi Vigyan Kendra, Villupuram

Date of SAC meeting Conducted: 18.03.2022.

Proceedings of the 13th Scientific Advisory Committee meeting conducted at KVK, Tindivanam, Villupuram District on 18.03.2022

The 13th Scientific Advisory Committee meeting of Krishi Vigyan Kendra, Villupuram was held on 18.03.2021 at 11.00 A.M under the Chairmanship of Dr. M. Jawarharlal, Director of Extension Education, TNAU, Coimbatore. The meeting was attended by the members, invited guests, PC and SMSs of KVK, Villupuram.

S.No.	Name of the SAC Member	Position	Post
1.	Dr. M. Jawarharlal, Ph.D.,	Director of Extension Education, TNAU, Coimbatore	Chairman
2.	Dr. A. Bhaskaran, Ph.D.,	Principal Scientist, ATARI, Hyderabad	Member
3.	Dr. P. Sridhar, Ph.D.,	Programme Coordinator ICAR-KVK, Villupuram	Member
4.	Mr. Senthilkumar,	Programme Executive, All India Radio, Puducherry	Member
5.	Mr. Murugan, Director,	Programme Executive, Doordarshan, Pondicherry	Member
6.	Dr. T. Manoharan,	Joint Director, Department of Animal husbandry, Villupuram	Member
7.	Th. K. S. Mohan	Assistant Director of Sericulture Elchatiram Road, Vazhuhareddy Villupuram 605 602	Member
8.	Dr. H. Zaher Hussain,	Programme Coordinator, KVK, Puducherry	Member
9.	Th. R. Periyasamy	Assistant Director of Agriculture Villupuram	Member
10.	Th. R. Venkatesan,	Assistant Director of Agriculture Marakkanam	Member
11.	Mrs. A. Kumari,	Progressive farmer & SAC Member	Member
12.	Mrs. P. Sasikala,	Progressive farmer & SAC Member	Member
13.	Th. P. Sethuraman	NABARD Farmer	Member
14.	Th. R. Arunachalam,	Progressive farmer & SAC Member	Member
15.	Th. E. Shanmugam,	Progressive farmer & SAC Member	Member
Invitees			
16.	Dr. V. Paramasivam,	Professor (SST) ORS, Tindivanam	
17.	Dr. P. G. Lavanya,	Professor (SS&AC) ORS, Tindivanam	

18.	Dr.S.Thangeswari	Assistant Professor(PAT) Sugarcane Research Station, Cuddalore	
19.	Dr.R.Kancahana	Assistant Professor(PBG) ORS, Tindivanam	
20.	Dr.S.Thiruvarasan	Assistant Professor(Agronomy) ORS, Tindivanam	
21.	Dr.E.Jamuna	Assistant Professor(Agrl.Micro) ORS, Tindivanam	
Staff of KVK, Villupuram			
22.	Dr. K.Parameswari, Ph.D	Assistant Professor (SST)	
23.	Dr Noorjehan A.K.A.Hanif,Ph.D	Assistant Professor (Agrl. Ext.)	
24.	Dr. G.Gomathi, Ph.D	Assistant Professor (SS&AC)	
25.	Dr. R.Neelavathi,Ph.D	Assistant Professor (Horticulture)	
26.	Dr.S.Malathi	Assistant Professor (PAT)	
27.	Mrs.S.Kamaladevi	Farm Manager	
28.	Tmt.S.Deepika	Programme Assistant (Tech.)	
29.	Mr. R.Samundeeswaran	Programme Assistant (Computer)	

2. DETAILS OF DISTRICT (2021)

2.0. Operational jurisdiction of KVKs

District	New districts governed by the KVK after division of the district, if applicable	Taluks/Tehsils and/or Mandals under the KVKs jurisdiction
Villupuram	-	1. Kanai 2. Koliyanur 3. Kandamangalam 4. Vikravandi 5. Olakur 6. Mailam 7. Marakanam 8. Vanur 9. Gingee 10. Vallam 11. Melmalayanur 12. Mugaiyur 13. Thiruvannainallur

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

S. No	Farming system/enterprise
a.	Wet land Rice – Rice – Sesame/Pulses/Groundnut (June – July) (Aug – Sept) (March – April) Sugarcane (Dec – Jan)
b.	Garden land Groundnut/Milletts - Groundnut - Sesame (June – Sept) (Oct –Jan) (Feb – March)
c.	Dry land Groundnut/Milletts – Groundnut / Sesame / Pulses

	(June – Sept.)	(Oct.-Jan)
d.	Other crops Cotton, Tapioca, Brinjal, Gourds, Chillies, Watermelon, Cashew, Casuarina, Banana, Mango, Guava, Coconut, Tuberose, Button Rose, Crossandra, Jasmine	
e.	Other enterprises EDP-Home products, toy making, turmeric, flower crop and agro-forestry nursery, cashew processing, dairy farming, goat and sheep rearing.	

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

S. No.	Agro-climatic Zone	Characteristics
1.	North Eastern Zone	<p>Topography</p> <p>The District is situated between 8.5' and 13.2' of North latitude and 15' and 80.22' East longitude. The normal annual rainfall of 1029.4 mm is received in 63 rainy days. The North Eastern season provides maximum amount of 601 mm rainfall in 29 rainy days followed by South West monsoon contributing 294 mm in 24 rainy days. The major soil types are red loam and clay loam. Black soils are present in limited extent and coastal alluvial soils occur along the sea coast. In coastal taluks have saline and alkaline soils of about 12,000 ha. They are distributed in patches. The climate in the Zone is basically semi arid tropical. The hottest months are April-June and the cold climate prevails during December and January. The average minimum temperature varies from 19.5° C to 24.8 ° C. It has a wet period of 7 months and dry period of 5 months in a year. The relative humidity is highest during the months of October- November.</p> <p>Soil</p> <ol style="list-style-type: none"> 1. Red non calcareous – Low rainfall – Low Elevation 2. Red non calcareous – Low rainfall – Medium Elevation 3. Red non calcareous – Medium rainfall – Low Elevation 4. Red non calcareous – Medium rainfall –Medium Elevation 5. Red non calcareous – High rainfall – Low Elevation 6. Red calcareous – Low rainfall – Low Elevation 7. Red calcareous – Low rainfall – Medium Elevation 8. Red calcareous – Medium rainfall – Low Elevation 9. Red calcareous – Medium rainfall –Medium Elevation 10. Red calcareous – High rainfall – Low Elevation 11. Black non calcareous – Medium rainfall – Low Elevation 12. Black non calcareous – Medium rainfall – Medium Elevation 13. Black calcareous – Low rainfall – Medium Elevation 14. Black calcareous – Medium rainfall – Low Elevation 15. Black calcareous – Medium rainfall – Medium Elevation 16. Coastal saline alkaline and swamp – Medium rainfall – Low Elevation

2.3. Soil types

S. No	Soil type	Characteristics	Area in ha
1	Shallow, red gravelly loam soils	Hills and uplands	20823.38
2	Shallow, red gravelly clay soils		4747.85
3	Medium deep, red gravelly clay soils		3561.07
4	Deep to very deep, red clay soils		42195.97
5	Medium deep, clay soils	Plains	46469.22
6	Medium deep, red gravelly clay soils		89779.93
7	Deep to vey deep, red loamy soils		138699.01
8	Deep, calcareous clayey soils (low lands)		123436.87
9	Very deep, Sandy soils		7752.15
10	Very deep, lateritic clayey soils		7137.11
11	Very deep, calcareous black soil		183661.52
12	Deep to very deep, black soils		19828.90
13	Rocky lands		133314.36
14	Marshy lands		6101.09

2.4. Area, Production and Productivity of major crops cultivated in the district (or the jurisdiction as the case may be) for 2021

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Paddy	101933	409363	40.16
2	Maize	419	2116	50.50
3	Sorghum	8	10	12.10
4	Cumbu	13918	45929	33.00
5	Ragi	1786	5805	32.50
6	Other millets	1780	1798	10.10
7	Redgram	12	13	11.00
8	Blackgram	42565	34690	8.15
9	Greengram	1088	816	7.50
10	Cowpea	36	25	7.00
11	Other pulses	3879	2211	5.70
12	Groundnut	13576	314963	23.2
13	Sugarcane	14953	13457700	900
14	Cotton	7230	108450	15

Khariif

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)

Rabi

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)

Summer

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)

2.5. Weather data

Month	Rainfall (mm)	Temperature°C		Relative Humidity (%)
		Maximum	Minimum	
January 2020	0	32.0	27.1	67.0
February 2020	0	37.8	26.6	67.0
March 2020	0	37.0	27.1	69.9
April 2020	16.75	36.2	27.0	65.2
May 2020	17.43	37.6	28.2	71.4
June 2020	62.82	37.8	27.7	67.1
July 2020	105.91	36.4	25.6	68.6
August 2020	50.00	33.6	24.5	81.0
September 2020	101.76	33.3	25.7	77.5
October 2020	122.05	31.0	25.1	82.5
November 2020	277.15	28.8	24.2	81.3
December 2020	308.87	28.2	22.7	79.1

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2021)

Category of livestock	Population (Nos.)	Production (Nos.)	Productivity
Cattle – Cross bred	671581	3693695	5.5 litres/day
Cattle – Indigenous	113685	170527	1.5 litres/day
Buffaloes	17714	38970	2.2 litres/day
Sheep	244582	3424148	14 kg/animal
Goat	400110	6401760	16 kg/animal
Pig	15218	1065260	70 kg/animal
Rabbits	4288	6432	1.5 kg/animal
Backyard Poultry (Meat)	1230856	1846284	1.5 kg/bird
Backyard Poultry (Eggs)	651154	45580780	70 eggs
Farm Poultry	1578960	3473712	2.2 kg/bird
Fish – Marine	25714 Million	845990 Million	32. 9 MT
Fish – Inland	600	2400000	2.4 MT

2.7. Details of Adopted Villages (2021)

Sl.No	Taluk/ Mandal	Name of the block	Name of the village	Year of adopti on	Major crops & enterprises	Major problem identified	Identified Thrust Areas
KVK adopted villages							
1	Tindivanam	Olakkur	Pangulathur	2018	Paddy, Pulses, oilseeds, vegetables	Lack of knowledge on new variety Yield loss due to Pest and disease	Integrated pest and disease management Crop management Seed Production

2	Tindivanam	Marakanam	Nagar	2019	Paddy, Pulses, oilseeds, flowers, vegetables	Lack of knowledge on new variety Yield loss due to Pest and disease	Integrated pest and disease management Crop management Seed Production
DFI villages							
1	Tindivanam	Marakanam	Enthur	2018	Paddy, Pulses, oilseeds, flowers, vegetables	Lack of knowledge on new variety Yield loss due to Pest and disease Low income	Integrated pest and disease management Crop management Seed Production Entrepreneurial development

2.8. Priority/thrust areas

Crop/Enterprise	Thrust area
Paddy, Groundnut, Pulses	Crop improvement - Introducing new varieties
Paddy Groundnut ,Pulses	Recent crop production and protection technologies
Paddy, Groundnut	Farm mechanization
Groundnut , sugarcane , Paddy	INM and IWM and Integrated pest and disease management
Green fodder	Fodder technology demonstration
Turmeric	Integrated pest and disease management
Watermelon	Integrated pest and disease management
Use of biofertilizers	Utilization of bio-inoculants for sustainability
Integrated Nutrient Management	Rural awareness programmes on recent agrochemicals and micronutrients
Resource recycling	Bio-composting , NRM & bio-fertigation
Subsistence farming	Sustainable agriculture by IFS and resource conservation
Food processing	Value addition in food products
Seed production	Seed production & drought management
Poultry	Empowering rural backyard poultry
Cattle	Profitable dairy Farming
Buffalo	Nutritional management of young ones
Buffalo	Breeding management
Rural employment	Empowerment of rural youth and women

3. Salient Achievements

Achievements of Mandated activities (1st January 2021 to 31st December 2021)

S.No	Activity	Target	Achievement
1.	Technologies Assessed and refined (No.)		
2.	On-farm trials conducted (No.)	14	08
3.	Frontline demonstrations conducted (No.)	20	13
4.	Farmers trained (in Lakh)	2500	2923
5.	Extension Personnel trained (No.)	250	158
6.	Participants in extension activities (in Lakh)	500	725
7.	Production and distribution of Seed (in Quintal)	87.5	2453
8.	Planting material produced and distributed (in Lakh)	66,500	2923
9.	Live-stock strains and finger lings produced and distributed (in Lakh)	-	-
10.	Soil samples tested by Mini Soil Testing Kit (No)	150	67
11.	Soil samples tested by Traditional Laboratory (No)	200	133
12.	Water, plant, manure and other samples tested (No.)	50	29
13.	Mobile agro-advisory provided to farmers (No.)	2,450	1080
14.	No. of Soil Health Cards issued by Mini Soil Testing Kits (No.)	150	67
15.	No. of Soil Health Cards issued by Traditional Laboratory (No.)	200	133

Give Salient Achievements by KVK during the year in bullet points:

4. TECHNICAL ACHIEVEMENTS

Details of target and achievements of mandatory activities by KVK during 2021

OFT (Technology Assessment)

No. of OFTs		Number of technologies		Number of locations (Villages)		Total no. of Trials / Replications / Beneficiaries	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
14	08					67	40

FLD (crop/enterprise/CFLDs)

No of Demonstrations		Area in ha		Number of Farmers / Beneficiaries / Replications	
Targets	Achievement	Targets	Achievement	Targets	Achievement
20	14	13	13	178	140

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)

Clientele	Number of Courses		Number of Participants	
	Targets	Achievement	Targets	Achievement
Farmers and Farm Women	24	61	2500	2923
Rural youth		06		268
Extn. Functionaries				

Extension Activities

Number of activities		Number of participants	
Targets	Achievement	Targets	Achievement

Seed Production (q)

Target	Achievement	Distributed to no. of farmers
87.5	91.78	461

Planting material (Nos.)

Target	Achievement	Distributed to no. of farmers
16500	15125	408

Technology Assessments (OFTs) in Detail

Technology 1: Assessment of paper rolling(Seed tape)sowing methods with other planting methods in rice cultivation of Villupuram District

1.	Thematic area	:	Crop Management												
2.	Title	:	Assessment of paper rolling(Seed tape)sowing methods with other planting methods in rice cultivation of Villupuram District												
3.	Scientists involved	:	Dr. K. Parameswari SMS(SST)												
4.	Details of farming situation	:	Clay loam soil; Irrigated with annual rainfall of 1054 mm												
5.	Problem definition / description	:	Paddy is the predominant major cereal crop grown in Villupuram District with an area of 2.40 lakhs ha during 2019-20. Under aerobic situation, farmers are normally followed manual sowing or drum seeding method. These methods are involved high manpower for sowing and thinning operations and its also time consuming process. Hence, a new seed tape method of planting can also be included and to be assessed with existing method of drum seeding under aerobic situation. This seed tape method was developed by farmer at Thanjavur and his techniques were already disseminated through various social media and it needs thorough investigations with existing method of paddy cultivation <i>i.e</i> drum seeding which would helps to farming community to meet out the labour shortage, further, helps to skip nursery practices.												
6.	Technology Assessed	:													
	TO1	:	Seed Tape method of planting (Paper Roll method) (Innovation from Thanjavur Farmer, 2019) Papers are cut and stitched lengthwise in blocks with three layers of eight-inch length. The paddy seeds are then stuffed inside neem and sesame oil cakes with the support of a specially designed machine. After stuffing the roll with paddy seeds, they would then be attached to the wheels of a planting machine that resembles a cono weeder, which would support the paper rolls to be planted with a two-inch depth, thus reducing the planting cost.												
	TO2	:	Drum seeding (TNAU, 2015) Drum seeding technique involves direct seeding of pre-germinated paddy seeds in drums made up of fibre material to dispense seeds evenly in lines spaced at 20 cm apart in puddled and levelled fields												
7.	Critical inputs given per trial	:													
			<table border="1"> <thead> <tr> <th>Inputs</th> <th>Quantity</th> <th>Cost (Rs.)</th> </tr> </thead> <tbody> <tr> <td>Seeds</td> <td>5 kg</td> <td>400</td> </tr> <tr> <td>Biocontrol gents</td> <td>2 kg</td> <td>300</td> </tr> <tr> <td>Planting hiring charges</td> <td>2 hr</td> <td>2500</td> </tr> </tbody> </table>	Inputs	Quantity	Cost (Rs.)	Seeds	5 kg	400	Biocontrol gents	2 kg	300	Planting hiring charges	2 hr	2500
Inputs	Quantity	Cost (Rs.)													
Seeds	5 kg	400													
Biocontrol gents	2 kg	300													
Planting hiring charges	2 hr	2500													

8.	Results	:	
	Table : Performance of the technology		
	Technology Option	No. of trials	Yield (q/ha)
	<i>Farmers Practice(Transplanting)</i>		<i>Net (Rs./ha)</i>
	<i>Technology 1(Paper roll)</i>	5	51.23
	<i>Technology 2(Drum seeding)</i>		34,550
			48.77
			34,540
			50.98
			38,880
			1.52
			1.55
			1.59
9.	Constraints	:	While planting, paper seed tape is damaged and it caused gaps in the main filed
10.	Feedback of the farmers involved	:	Farmers opined that seed tape required thorough field preparation and poor plant population was observed
11.	Feed back to the scientist who developed the technology	:	Seed tape was damaged during planting and it needs further investigation. Seed tape may be useful when it will be manufactured by using easy degradable and undamaged material. But, it requires very low seed rate of 3-4 kg/ac and it also very economical than transplanting and drum seeding

Technology 2: Assessment of YMV resistant greengram variety suitable for Villupuram district

1.	Thematic area	:	Varietal Evaluation
2.	Title	:	Assessment of YMV resistant greengram variety suitable for Villupuram district
3.	Scientists involved	:	Dr. K. Parameswari SMS(SST)
4.	Details of farming situation	:	Sandy loam soil; Irrigated with annual rainfall of 999 mm
5.	Problem definition / description	:	Greengram is cultivated in about 8000 ha in Villupuram district during Kharif and Rabi season. The main problem is non availability of YMV resistant variety and unaware of suitable ICM technology
6.	Technology Assessed	:	
7.	TO1	:	VBN 4 (TNAU, 2019) ● Duration 65-75 days; ● Yield - 1251kg/ha ● Resistant to YMD
	TO2	:	MH 421 (CCHAU, Hissar, 2014) ● High-yielding (10-12q/ha) and resistant to the yellow mosaic virus & early maturing (60 days)
8.	Critical inputs given per trial	:	

		Inputs	Quantity	Cost (Rs.)		
		Seeds	8 kg	1600		
		Pulse wonder	2kg	430		
		Bio control gents	2 kg	300		
		<i>Rhizobium</i>	2 kg	300		
9.	Results	:				
Table : Performance of the technology						
Technology Option		No. of trials	Yield (q/ha)	Net Returns (Rs./ha)	B:C ratio	YMD incidence (%)
Farmers Practice (CO 8)		5	8.12	25,490	1.52	24.4
Technology 1 (VBN 4)			9.88	37,750	1.64	7.31
Technology 2 (MH 421)			8.28	28,230	1.57	14.46
10.	Constraints	:	-			
11.	Feedback of the farmers involved	:	Farmers preferred VBN 4. Since, it was given high yield with less YMD incidence.			
12.	Feed back to the scientist who developed the technology	:	VBN 4 is performed very well even under rainfed situations and it is high yielder with less incidence of YMD and wilt diseases			

Technology 3 - Assessment of coriander varieties for year round production under shade net

1. Thematic area : Varietal introduction
2. Title : **Assessment of coriander varieties for year round production under shade net**
3. Scientists involved : Dr.R.Neelavathi, SMS (Horticulture)
4. Details of farming situation : Shade net, loamy soil, irrigated
5. Problem definition / description:
 - Low leaf yield of local cultivars of coriander due to cultivation under open field condition.
6. Technology Assessed: (give full details of technology as well as farmers practice)

TO 1	ACr 2
Description	Resistant to stem gall. It suitable for greens.
TO2	CO 4
Description	Fast growing plant with short internodes, high yielder (590 kg /ha in irrigated and 540 kg/ha under rainfed) in a short duration of 65-70 days. It is suitable for cultivation throughout Tamil Nadu during June-July and Oct-Nov months.
Farmers practice	Cultivation of local varieties under open field condition.

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

Technology option	Inputs	Quantity	Amount (Rs.)
TO 1			

	Seeds	10 kg	3,100
	<i>Trichoderma viride</i>	5 kg	750
	<i>Bacillus subtilis</i>	5 kg	750
	Azospirillum	5 kg	400
	Neem oil	5 lit.	1,750
	Yellow sticky traps	15 nos.	500
		Total	7,250

Technology option	Inputs	Quantity	Amount (Rs.)
TO2			
	Seeds	5 kg	1,000
	<i>Trichoderma viride</i>	5 kg	750
	<i>Bacillus subtilis</i>	5 kg	750
	Azospirillum	5 kg	400
	Neem oil	5 lit.	1,750
	Yellow sticky traps	15 nos.	500
		Total	5,150

8. Results:

Table : Performance of the technology

Technology Option	No. of trials	Yield (q/ha)	Net Returns (Rs./ha)	B:C ratio	Data on Other performance indicators*
Farmers Practice	5	39.5	835	1.57	-
Technology 1 ACr 2 under shade net		79.4	3451	1.75	-
Technology 2 CO 4 under shade net		91.6	5678	2.08	-

9. Constraints		<ul style="list-style-type: none"> Timely initial investment for shade net erection.
10. Feedback of the farmers involved	:	<ul style="list-style-type: none"> Very good technology for growing coriander during summer. CO 4 is high yielding and suitable for growing under shade net. Higher income during summer.
11. Feed back to the scientist who developed the technology	:	<ul style="list-style-type: none"> CO 4 is suitable for growing under shade net. CO 4 recorded higher yield.

Technology 4: Assessing suitable herbicide for effective weed management for irrigated Blackgram

1. **Thematic area** : Crop Management
2. **Title** : Assessing suitable herbicide for effective weed management for irrigated Blackgram
3. **Scientists involved** : Dr.P.Sridhar, Programme Coordinator
4. **Details of farming situation** : Irrigated

5. Problem definition / description :

Pulse crops are being grown > 60,000 hectares in Villupuram district with high productivity. Weeds are greater menace and accounts for major cost for the manual weeding and also key yield reducer. Hence the ready mix herbicides would found more ideal for effective control of the weeds at vegetative stage and facilitates for yield enhancement and maximizing the profits.

6. Technology Assessed :

TO 1	Imazethapyr+ Quizalofop ethyl – tank mix
Description	To control the both grassy and broad leaved weeds at early stages of crop emergence by spraying on 15-20 DAS. Both are early post emergence herbicides. A tank mix application is advised before spraying. Recommended dose of 250 ml/acre each herbicide
TO2	Sodium Acifluorfen 16.5% + Clodinafop-Propargyl 8% EC
Description	To control the both grassy and broad leaved weeds at early stages of crop emergence by spraying on 15-20 DAS. Ready mix application is advised before spraying for effective control. Recommended dose of 400 ml/acre.
Farmers practice	Soil application of Pendimethalin @ 2.5 litres /ha on 3 DAS followed by one hand weeding.

7. Critical inputs given:

Inputs	Quantity	Cost (Rs.)
Imazethapyr	125 ml	150
Quizalofop ethyl	125 ml	150
Sodium Acifluorfen 16.5% + Clodinafop-Propargyl 8% EC	200 ml	370
Seed (Vamban 8)	4 kg	400

8. Results:

Table : Performance of the technology

<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (q/ha)</i>	<i>Net Returns (Rs./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
Farmers Practice	5	7.2	27200	1.7	70
Technology 1 (Imazethapyr+ Quizalofop ethyl – tank mix)		8.5	34200	2.01	76
Technology 2(Sodium Acifluorfen 16.5% + Clodinafop-Propargyl 8% EC)		9.8	41800	2.45	82

* Weed control efficiency

9. Constraints: Hand Weeding by the woman labour due to scarcity of woman labour in the peak season and availability of quality pre and post emergence herbicide in the local market.

10. Feedback of the farmers involved: Very good technology to address the labour scarcity issues in blackgram during 1st hand weeding.

11. Feed back to the scientist who developed the technology: Good technology and further studies may be conducted.

Technology 5: Assessment of seasonal foliage to ensure the feed availability during summer

- 1. Thematic area** : Crop Management
- 2. Title** : Assessment of seasonal foliage to ensure the feed availability during summer
- 3. Scientists involved** : Dr.P.Sridhar, Programme Coordinator
- 4. Details of farming situation** : Upland ecosystem
- 5. Problem definition / description:**

Small and marginal farmers constitute > 90 % in Villupuram district. Livestock is prime sector as subsidiary income generation. Seasonal availability of fodder and shrinkage of area under natural grassing coupled with Government initiative on Livestock promotion has created a huge demand for the fodder. Farmers are reluctant allocation of area exclusively for the fodder crops as well as water availability. To ensure the feed material for the livestock's during lean period is dire essential for sustainable farming system. Hence the silage making of the locally available seasonal green foliage would paves for the meeting the feed demand for increasing cattle population

6. Technology Assessed:

TO 1	Silage making of Sugarcane tops
Description	Chopping the foliage with partial shade drying for 30 minutes and mixing the Salt @ 1kg, Jaggery @ 2kg and water @ 3litres for every 100 kgs. Air tight packaging in silo bags helps for making the availability of the palatable dry fodder to livestock during lean season.
TO2	Silage making of CoBN 5
Description	Chopping the foliage with partial shade drying for 30 minutes and mixing the Salt @ 1kg, Jaggery @ 2kg and water @ 3litres for every

	100 kgs. Air tight packaging in silo bags helps for making the availability of the palatable dry fodder to livestock during lean season.
Farmers practice	Silage making of Paddy straw

7. Critical inputs given:

Inputs	Quantity	Cost (Rs.)
Silo bags	1 Nos.	400
Salt	1 kg	10
Jaggery	2 kg	100
Total		510

8. Results:

Table : Performance of the technology

<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (q/ha)</i>	<i>Net Returns (Rs./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
Farmers Practice	10	30	10000	1.0	-
Technology 1 (Silage making of Sugarcane tops)		50	23000	1.17	-
Technology 2(Silage making of CoBN 5)		70	32000	1.20	-

9. Constraints: Scarcity of green fodder during peak monsoon rainy days.

10. Feedback of the farmers involved: Very good technology for reducing the feed cost of milch animals.

11. Feed back to the scientist who developed the technology: Availability of CO (BN) 5 setts may be promoted. Since, excellent in leaf stem ratio than other green fodders. Highly suitable for silage making.

Technology 6: Assessment of productivity of grafted brinjal

- 1. Thematic area** : Crop management
- 2. Title** : Assessment of productivity of grafted brinjal
- 3. Scientists involved** : Dr.R.Neelavathi, SMS (Horticulture)
- 4. Details of farming situation** : Loamy soil, irrigated
- 5. Problem definition / description** : Reduction in profitability due to lesser fruiting period coupled with prone to biotic and abiotic stresses in Brinjal.
- 6. Technology Assessed** :

TO 1	Grafted brinjal using brinjal land race as rootstock
Description	Grafted brinjal - One year, pest resistance
TO2	Grafted brinjal (Hybrid) using <i>Solanum torvum</i> as rootstock
Description	Grafted brinjal - Two years, drought tolerance, pest and disease resistance, high per plant yield
Farmers practice	Seedlings

7. Critical inputs given : Brinjal grafts : 4000 Nos. Rs.32,000/-

8. Results : The brinjal grafts were transplanted in March-April,2021. The crop is in flowering stage.

Frontline Demonstrations in Detail

a. Follow-up of FLDs implemented during previous years

S. No	Crop/Enterprise	The matic Area	Technology demonstrated	Technology Demonstrated as a follow-up from OFT	Feed back sent to the Research System	Details on the performance of the technology sent to the Extension Department	Horizontal spread of the technology		
							No. of Villages	No. of farmers	Area (ha)
1.	Paddy	Crop production	Mitigation of drought through seed hardening in Direct Sown Rice	Field day was conducted in the FLD village and shown the positive performance.	Performed well during drought situation	Seed hardening mitigates drought and it maintained optimum plant population which gives uniform maturity.	16	455	59
2.	Bhendi	Crop production	Assessment of biopriming in Bhendi	Method demonstration was conducted among extension officials. Message was discriminated through AIR and farmers Whatsapp group	Slowly picked up by the farmers and processes are very difficult and biopriming process may be simplified	Biopriming improves the seed germination and seedling vigour which helps to maintain optimum plant population	3	45	9

b. Details of FLDs implemented during the reporting period

1. Technology-1

1.	Crop	;	Paddy
2.	Thematic area	;	Varietal evaluation
3.	Technology demonstrated	;	Popularization of paddy variety ADT 55 in Villupuram district
4.	Season and year	;	Rabi, 2021
5.	Farming situation	;	Irrigated, Clay loam , annual rainfall 1123 mm
6.	Source of fund	;	ICAR- Main
7.	No of locations (Villages)	;	1
8.	No. of demonstrations (replications/farmers/beneficiaries)	;	10
9.	No of SC/ST Farmers and women farmers	;	2
10.	Area proposed (ha)	;	4
11.	Actual area (ha)	;	4
12.	Justification for shortfall if any	;	-
13.	Feedback from farmers	;	High yielding and low pest and disease incidence
14.	Feedback of the Scientist	;	Alternated variety to BPT 5204, fine grain and resistant to blast and stem borer
15.	Extension activities on the FLD	;	Field days - 1No Training to farmer - 1 No Media coverage - Nil Training to extension functionaries - 1 No

Technology.2

1.	Crop	;	Ragi
2.	Thematic area	;	Varietal evaluation
3.	Technology demonstrated	;	Popularization of ATL 1 Ragi variety in Villupuram district
4.	Season and year	;	Rabi, 2021
5.	Farming situation	;	Irrigated, Clay loam , annual rainfall 889 mm
6.	Source of fund	;	ICAR- Main
7.	No of locations (Villages)	;	1
8.	No. of demonstrations (replications/farmers/beneficiaries)	;	10
9.	No of SC/ST Farmers and women farmers	;	3
10.	Area proposed (ha)	;	4
11.	Actual area (ha)	;	4
12.	Justification for shortfall if any	;	-
13.	Feedback from farmers	;	High yielding and low pest and disease incidence
14.	Feedback of the Scientist	;	Alternated variety to CO 15 and resistant to blast disease

15.	Extension activities on the FLD	;	Field days - Nil Training to farmer - 1 No Media coverage - Nil Training to extension functionaries - 1 No
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Technology-3

1.	Crop	;	Blackgram
2.	Thematic area	;	Crop management
3.	Technology demonstrated	;	Demonstration of VBN 11 Blackgram seed production (foundation /certified) by farmer participatory mode
4.	Season and year	;	Rabi, 2021
5.	Farming situation	;	Irrigated, Sandy loam , annual rainfall 1140 mm
6.	Source of fund	;	ICAR- Main
7.	No of locations (Villages)	;	4
8.	No. of demonstrations (replications/farmers/beneficiaries)	;	10
9.	No of SC/ST Farmers and women farmers	;	2
10.	Area proposed (ha)	;	4
11.	Actual area (ha)	;	4
12.	Justification for shortfall if any	;	-
13.	Feedback from farmers	;	High yielder and getting higher income due to production certified seeds
14.	Feedback of the Scientist	;	Seed production concept may included in DFI Concept which gave higher income than grain production
15.	Extension activities on the FLD	;	Field days - 1 No Training to farmer - 1 No Media coverage - 1 No Training to extension functionaries - Nil

Technology-4

1.	Crop	;	Vegetables
2.	Thematic area	;	Crop management
3.	Technology demonstrated	;	Demonstration on maximizing seed yield of major vegetables grown in Villupuram District under farmers
4.	Season and year	;	Rabi, 2021
5.	Farming situation	;	Irrigated, Sandy loam , annual rainfall 1066 mm
6.	Source of fund	;	ICAR- Main
7.	No of locations (Villages)	;	7
8.	No. of demonstrations (replications/farmers/beneficiaries)	;	10

9.	No of SC/ST Farmers and women farmers	;	2
10.	Area proposed (ha)	;	2
11.	Actual area (ha)	;	2
12.	Justification for shortfall if any	;	-
13.	Feedback from farmers	;	Farmers are interested in vegetable seed production in addition to production vegetables
14.	Feedback of the Scientist	;	Need based seed production is advisable otherwise
15.	Extension activities on the FLD	;	Field days - Nil Training to farmer - 1 No Media coverage - Nil Training to extension functionaries - Nil

Technology-5

Crop	:	Small onion
Thematic area	:	Crop protection
Technology demonstrated	:	Demonstration of IPDM strategies in Small Onion Bulb treatment with <i>P. fluorescens</i> 5g/kg + <i>T. asperellum</i> 5g/Kg + Soil application of <i>P. fluorescens</i> 1.25 kg/ha + <i>T. asperellum</i> 1.25 kg/ha + AM fungi (VAM) 12.5kg/ha + Azophos (4kg/ha)+ Neem cake 250 kg/ha before planting+Installation of Pheromone traps @ 12/ha+Yellow sticky traps @ 12/ha + Spraying of <i>P.fluorescens</i> 5g/lit. + <i>Beauveria bassiana</i> 10g/lit. on 30 DAP +Need based pesticides spray
Season and year	:	Rabi,2020
Farming situation	:	Soil type: Sandy loam soil Farming situation: Irrigated situation NPK Status:225:25:60 Previous crop: Vegetables Sowing date: April-May, 2021 Date of harvest: Seasonal Rainfall: 110 mm No. of rainy days: 6
Source of fund	:	ICAR Main
No of locations (Villages)	:	10
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	2
Area proposed (ha):	:	10.0 (1.0 acre per demo)
Actual area (ha)	:	4.0
Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
CO 6	Local			114	89	28	76750	236490	159740	3.08	80780	204680	123900	2.53

Feedback from farmers	:	<ul style="list-style-type: none"> Management with easily available biofertilizers and neem cake. Low cost technique. Increased yield.
Feedback of the Scientist	:	<ul style="list-style-type: none"> It is easily adopted by farmers. Recorded higher yield.
Extension activities on the FLD	:	Method demonstration, Farmers training & Extension Functionaries

Technology-6

Crop	:	Jasmine
Thematic area	:	Crop Management
Technology demonstrated	:	Micronutrient management and shelf life extension in jasmine
Season and year	:	Rabi,2021
Farming situation	:	Soil type: Loam soil Farming situation: Irrigated situation NPK Status:205:45:50 Previous crop: Jasmine Planting date: 2015-16 Date of harvest: Year round Seasonal Rainfall : 1381 mm No. of rainy days : 46
Source of fund	:	ICAR Main
No of locations (Villages)	:	1
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	2
Area proposed (ha):	:	10.0 (1.0 acre per demo)
Actual area (ha)	:	4.0
Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
Ramanathapuram local	Ramanathapuram local	101	92	98	84	17	966660	1945999	979339	2.01	1045600	1698000	652400	1.62

Feedback from farmers	:	<ul style="list-style-type: none"> Easy management of chlorosis and pink buds. More number of new flush and flower buds. Weight and length of flower buds and corolla tube increased. Higher yield.
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Feedback of the Scientist	: <ul style="list-style-type: none"> • The problem of chlorosis and pink buds was reduced drastically. • Shelf life of flowers was increased. • Higher yield. • Consumer preference for jasmine flowers from demonstration field is increased due to long corolla tube and big buds.
Extension activities on the FLD	Method demonstration, Farmers training & Extension Functionaries

Technology-7

Crop	:	Brinjal
Thematic area	:	Farm mechanization
Technology demonstrated	:	Demonstration on Vegetable Seedling Transplanter for Brinjal
Season and year	:	Rabi,2021
Farming situation	:	Soil type: Sandy loam soil Farming situation: Irrigated situation NPK Status:185:35:70 Previous crop: Vegetables Sowing date: November, 2021 Date of harvest: December-February Seasonal Rainfall: 286 mm No. of rainy days: 13
Source of fund	:	ICAR Main
No of locations (Villages)	:	2
No. of demonstrations	:	3
No of SC/ST Farmers and women farmers:	:	-
Area proposed (ha):	:	3.0 (1.0 acre per demo)
Actual area (ha)	:	4.0
Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
Transplanting using transplanter	Manual transplanting	42.5	38.4	40.2	38.7	3.88	279903	603500	323596	2.16	289450	595500	306050	2.06

Feedback from farmers	:	<ul style="list-style-type: none"> • Easy method of transplanting. • Manage to labour shortage. • Timely transplanting without waiting for labour.
Feedback of the Scientist	:	<ul style="list-style-type: none"> • Easy method of transplanting. • Very useful for farmers not only for planting of brinjal but also tomato, chilli, water melon and cucurbit seedlings. • Drudgery reduction.
Extension activities on the FLD	:	Method demonstration, Farmers training & Extension Functionaries

Technology-8

Crop	:	Mushroom
Thematic area	:	Value addition
Technology demonstrated	:	Demonstration on mushroom value added products such as dehydrated mushroom powder, instant mushroom soup mix and mushroom pickle
Season and year	:	Rabi,2021
Farming situation	:	-
Source of fund	:	ICAR Main
No of locations (Villages)	:	3
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	-
Area proposed (ha):	:	-
Actual area (ha)	:	-
Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield /bag				% Increase in yield	Economics of demonstration (Rs.)				Economics of check (Rs.)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
Value added products	Fresh mushroom	1.80	1.74	1.75	1.1	59.09	1682	3727	2045	2.72	114	156	42	1.37

Feedback from farmers	:	<ul style="list-style-type: none"> Shelf life of mushroom was increased. High income. High demand for mushroom pickle.
Feedback of the Scientist	:	<ul style="list-style-type: none"> Value addition of mushroom. Profitable. Entrepreneurship development.
Extension activities on the FLD	:	Method demonstration, Farmers training & Extension Functionaries

Technology-9

Crop	:	Rice
Thematic area	:	Crop management
Technology demonstrated	:	Popularisation of newly released variety Rice VGD 1 in Villupuram district
Season and year	:	Rabi,2020
Farming situation	:	Soil type: Clay loam soil Farming situation: Irrigated NPK Status: 265:11.5:355 kg/ha Previous crop: Rice Sowing date: First week of October Date of harvest: First week of February, 20212

Source of fund	:	ICAR Main
No of locations (Villages)	:	2
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	2
Area proposed (ha):	:	0.4 (1.0 ac per demo)
Actual area (ha)	:	0.4 (Total area: 10 acres)
Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
ADT 37	BPT	61.2	59	60	54	13.3	48500	100980	52480	2.08	52050	84300	32250	1.62

Feedback from farmers	:	<ul style="list-style-type: none"> • Very good variety • Grain type similar to land race Seeragasamba • Preferable by farmers and other people for cooking briyani • Adoptable for machine harvesting without lodging
Feedback of the Scientist	:	<ul style="list-style-type: none"> • All beneficiaries felt happy about this variety • This variety spread up to 20 ha to near by villages acres in the same village of in addition to demo area. • All farmers got higher yield
Extension activities on the FLD	:	Field day conducted on 08.02.2022. During field day more than 30 famers participated and impressed by this variety performance.

Technology-10

Crop	:	Coconut
Thematic area	:	Oilseeds
Technology demonstrated	:	Demonstration of application method and benefit on use of coconut tonic for coconut cultivation in coconut belt of Villupuram district
Season and year	:	Rabi, 2021
Farming situation	:	Saline soil under irrigated condition
Source of fund	:	ICAR Main
No of locations (Villages)	:	2
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	2
Area proposed (ha):	:	0.4 (1.0 ac per demo)
Actual area (ha)	:	0.4 (Total area: 10 acres)
Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield (nuts/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
Additionally Coconut tonic and MN mixture application	Urea, SSP & MOP alone	30182	27418	28750	21563	33.3	84000	316250	232250.0	2.76	88500	215625	127125	1.44

Feedback from farmers	:	<ul style="list-style-type: none"> • Button Shedding reduced • Nuts size, quality and no. of nuts per tree increased • These products may be made available in the local shops
Feedback of the Scientist	:	<ul style="list-style-type: none"> • More benefits realised by the farmers and felt happy. • More popularisation needed among the farmers of this district
Extension activities on the FLD	:	<ul style="list-style-type: none"> • Demonstrated coconut tonic and MN mixture application methods to farmers • Benefit of coconut tonic and MN mixture application dealt to other farmers of these villages and nearby villages

Technology-11

Crop	:	Sugarcane
Thematic area	:	Varietal Introduction
Technology demonstrated	:	Popularization of newly released Sugarcane variety CoC 13339 in Villupuram District
Season and year	:	Rabi, 2020
Farming situation	:	Soil type: Sandy loam soil Farming situation: Irrigated Previous crop: Pulses Sowing date: January 2021 Date of harvest: First week of December
Source of fund	:	ICAR Main
No of locations (Villages)	:	2
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	Nil
Area proposed (ha):	:	2.0 (0.5 acre per demo)
Actual area (ha)	:	2.0

Justification for shortfall if any:	:	-
Results	:	

Name of the Variety/ Hybrid		Yield (t/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Demo	Check	Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
		High	Low	Average										
Coconut tonic and MN mixture application	Urea, SSP & MOP alone	128.5	112.5	120.5	100.5	19.9	90000	338100	248100	2.76	100000	270000	170000	1.7

Feedback from farmers	:	<ul style="list-style-type: none"> No pest and disease incidence Cost of cultivation reduced Good sugar recovery and cane yield
Feedback of the Scientist	:	<ul style="list-style-type: none"> Performed well in both villages More Sets should be made available for farmers More popularisation needed among the farmers
Extension activities on the FLD	:	<ul style="list-style-type: none"> Demonstration of planting of protray seedling Success of this variety dealt to other farmers of these villages and nearby villages

Technology-12

Crop	:	Fodder Sorghum
Thematic area	:	Forage crops
Technology demonstrated	:	Promotion of COFS 31 by Farmers participatory seed production in Villupuram District
Season and year	:	Kharif 2021
Farming situation	:	Irrigated/ Rainfed
Source of fund	:	ICAR Main
No of locations (Villages)	:	02
No. of demonstrations	:	20
No of SC/ST Farmers and women farmers:	:	2 ha
Area proposed (ha):	:	2 ha
Actual area (ha)	:	4.0
Justification for shortfall if any:	:	-
Feedback from farmers		
Feedback of the Scientist		May be feed to the cattle as green as well as dry fodder and suitable for silage making.
Extension activities on the FLD		Training to the farmers
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
Demo	Check	Demo			Check		Gross Cost	Net Return	BCR (R/C)	Gross Cost	Net Return	BCR (R/C)
		High	Low	Average								
CO FS 31	Local	110	80	95	70	57	15000	35000	3.3	12000	13000	2.08

Technology-13

Crop	:	Cattle
Thematic area	:	Livestock
Technology demonstrated	:	Demonstration of anthelmintics for milch animals in Villupuram district
Season and year	:	Throughtot all season
Farming situation	:	Homestead
Source of fund	:	ICAR Main
No of locations (Villages)	:	02
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	2 ha
Area proposed (ha):	:	2 ha
Actual area (ha)	:	4.0
Justification for shortfall if any:	:	-
Feedback from farmers		Very good response in daily feed intake and improvement in growth and weight gain
Feedback of the Scientist		A very good technology especially for the heifers and further studies need to be conducted on time intervals, dosage along with location specific feed availability and breed specificity
Extension activities on the FLD		Training to the farmers in demo unit animals
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
Demo	Check	Demo			Check		Gross Cost	Net Return	BCR (R/C)	Gross Cost	Net Return	BCR (R/C)
		High	Low	Average								
Anthelmintics Wormolex HS Bolus	-	7.2	5.7	6.45	6.25	15	3250	2650	1.8	2800	1650	1.59

Technology-14

Crop	:	Broiler variety Nandanam B3
Thematic area	:	Poultry
Technology demonstrated	:	Demonstration of Nandanam Broiler-3 to the rural farmers in Villupuram district
Season and year	:	Throughout all season
Farming situation	:	Homestead
Source of fund	:	ICAR Main
No of locations (Villages)	:	02
No. of demonstrations	:	10
No of SC/ST Farmers and women farmers:	:	-
Area proposed (ha):	:	-
Actual area (ha)	:	4.0
Justification for shortfall if any:	:	-
Feedback from farmers		Nandanam-3 will be suitable for batch to batch rearing of chicken as a remunerative enterprise in rural areas.
Feedback of the Scientist		Nandanam-3 were performed well under backyard system
Extension activities on the FLD		Training to the farmers
Results	:	

Name of the Variety/ Hybrid		Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			Economics of check (Rs./ha)		
Demo	Check	Demo			Check		Gross Cost	Net Return	BCR (R/C)	Gross Cost	Net Return	BCR (R/C)
		High	Low	Average								
Nandhanam B3-TANU	Local	1.38	1.08	1.23	1.12	23	2280	4120	2.81	2180	2830	2.30

Extension Studies

Impact studies, survey and other extension studies

At the end of each impact study, provide few bullet points on salient findings of the study

(A separate chapter will be included in the Annual report for extension studies).

Technology Week Celebrations : Nil

Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Gosthies			
Lectures organised			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Distribution of Literature (No.)			
Distribution of Seed (q)			
Distribution of Planting materials (No.)			
Bio Product distribution (Kg)			
Bio Fertilizers (q)			
Distribution of fingerlings			
Distribution of Livestock specimen (No.)			
Total number of farmers visited the technology week			
Others			

Training/workshops/seminars etc. attended by KVK staff

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

Name of the staff	Title	Dates	Duration	Organized by
Dr.R.Neelavathi, Asst. Prof. (Hort.)	International Horticulture Conference 2021-NEXT GENERATION HORTICULTURE (NEXTGEN-HORT), at HC&RI, TNAU, Coimbatore	16-19 September,2021	4 days	TNAU, Coimbatore
Dr. R.Neelavathi, Asst. Prof. (Hort.)	9 th Indian Horticulture Congress -2021	18-21 November, 2021	4 days	Indian Academy of Horticultural sciences, New Delhi
Dr. R.Neelavathi,Asst. Prof. (Hort.)	Fifth International Agronomy Conference on "Agri Innovations to Combat and Food and Nutrition Challenges"	23-27, November, 2021	5 days	Indian Society of Agronomy, New Delhi

Details of sponsored projects/programmes implemented by KVK

S.No	Title of the programme / project	Sponsoring agency	Objectives	Duration	Amount (Rs)
1.	Empowering school students on Establishment of Nutritional garden in their backyard through virtual training by Krishi Vigyan Kendras in Villupuram, Cuddalore and Tiruppur districts of Tamil Nadu during COVID 19 pandemic	SPC, Chennai	<ul style="list-style-type: none"> • To provide training to the school children for establishing a nutritional garden in their home backyard for producing greens and vegetables. • To sensitize students and general public on the importance of nutritional garden in improving the nutritional intake in the diet of the family 	December, 2020 to March, 2022	15.51
2.	Solar drying of seasonal vegetables in Villupuram district	NABARD, Chennai		March, 2021 to March, 2023	13.05
3.	Swachhta Action Plan	ATARI, Hyderabad		April, 2021 to March, 2022	0.158
4.	Cluster FLD on oilseeds - Groundnut under NMOOP	ATARI, Hyderabad		June, 2021 to March, 2022	1.20
5.	National Initiative on Climate Resilient Agriculture (NICRA)			April, 2020 to March, 2021	8.40
6.	National Initiative on Climate Resilient Agriculture (NICRA)			April, 2021 to March, 2022	12.16
7.	SCSP			March, 2021 to March, 2022	8.75

SPC-SBGF Funded project

Title of the scheme : “Empowering School Students on Establishment of Nutritional garden in their backyard through Virtual training by Krishi Vigyan Kendras in Villupuram, Cuddalore and Tiruppur districts of Tamil Nadu during COVID-19 Pandemic”

Budget Sanctioned : Rs. 15,51,000/-

Period : 2021

Name and Designation of the project leaders

Principal Investigator

Dr. M. SenthilKumar, Ph.D.,

Assistant Professor (Agrl. Extension) & Nodal Officer- KVKs,
DoEE, TNAU, Coimbatore

Co - Principal Investigators

Dr.S.Anbumani, Programme Co-ordinator

Dr.R.Neelavathi, Asst. Professor (Horticulture)

Dr.N.Sriram, Programme Co-ordinator

Dr.K.Sundharaiya, Asst. Professor (Horticulture)

Dr.N.Anandaraja, Programme Co-ordinator

Dr.G.G.Kavitha Shree, Asst. Professor ((Food Science & Nutrition)

Objectives

- To provide training to the school children for establishing a nutritional garden in their home backyard for producing greens and vegetables.
- To sensitize students and general public on the importance of nutritional garden in improving the nutritional intake in the diet of the family

Progress made

Distribution of vegetable seeds, garden tools & weighing balance

- Vegetable seeds (Seed kit for kitchen garden) and garden tools (Rose can, hand hoe, garden raker, hand sprayer) have been purchased and distributed to 120 school students (Arpampalayam, Siruvanthadu, Rampakkam, Pakkam, Mittamandagapattu, Kumalam and Sithalampattu), Kandamangalam block, Villupuram district.
- Weighing balance was distributed to the schools

Established shade net at KVK, Tindivanam

Establishment of nutri-garden by school students

The students are actively involved in the establishment of Nutri-garden at their homes

Training programmes conducted

Virtual training was conducted on Establishment of Nutri-garden and rooftop garden and Importance of growing immunity boosting vegetables in Nutri-garden.



NABARD project

Title of the scheme : Solar drying of seasonal vegetables in Villupuram district

Budget Sanctioned : Rs.13.05 lakhs

Period : 2021

Name and Designation of the project leaders

Principal Investigator

Dr.R.Neelavathi, Asst. Professor (Horticulture)

Co - Principal Investigator

Programme Co-ordinator

Objectives

- To utilize the seasonal vegetables and fruits to avoid distress sale.
- To provide hands on training and demonstration on “Solar drying technology of vegetables and fruits” to increase the income of farmers, women and unemployed youth
- To popularize the cost effective solar drying technology of vegetables and fruits and transforming the small and marginal farmers to entrepreneurs

Progress made

- Erected of solar drier unit at KVK, Tindivanam
- Training and demonstration on “Solar drying technology of vegetables and fruits” will be given to 250 farmers of Olakkur block, Villupuram district.

Success stories

1. Seed Hub project is a boon for farmers of Villupuram District

1. Situation analysis/Problem statement

Availability of good quality seeds of improved varieties determines pulse productivity and limits farmers' income in India. The pulse seed replacement rate is extremely low i.e. only 2-7 percent compared to the recommended rate of 25-30 percent. Tackling this problem is the aim of a new ICAR scheme that strengthens the seed diffusion of high yielding pulses varieties, helping to boost farmer earnings and increase self-sufficiency through Pulse Seed Hub Centres. The Krishi Vigyan Kendra, Villupuram in Tamil Nadu is also one among the seed hub centre can facilitate to generate additional income of farmers through production of certified seeds of blackgram and greengram. Based on the local seed demand, the improved varieties viz., VBN 5, VBN 6, VBN 8, VBN 10 and VBN 11 in blackgram and CO 8 in greengram certified seeds had produced under farmer's field.

Problems identified

- Non adoption of newer and improved varieties
- High incidence of YMV in existing blackgram varieties
- Lower crop yield from existing varieties.
- Unavailability of good quality blackgram seed

2. Plan, Implement and Support

- ✓ Introduction of improved blackgram variety
- ✓ Seed treatment with biofertilizers
- ✓ Seed farmers were trained in seed farm sanitation, appropriate production technologies and post harvest handling
- ✓ Foliar application MN mixture
- ✓ Facilitated seed farm registration, roughing and seed farm inspection.

3. Output & Outcome

Particulars	Production (q/ha)	Gross income (Rs./ha)	Net income (Rs./ha)	Percent increase over production	Percent increase over income
Seed production in blackgram (FS/CS)	10.90	1,09,000	88,055	32.9	146.2
Grain production	8.20	55,760	35,760	-	-

The newly released TNAU blackgram varieties have been introduced into 57 farmers field in major pulse growing blocks of Villupuram districts under Seed Hub scheme. Through this project, farmers gained 32.9 percent increased yield due to adoption of improved production technologies suggested by KVK scientist. Similarly, doubling the farmers income has been achieved through production of certified /foundation seeds instead of grain production. Nowadays, State and Central government has implemented many farmers welfare programme the main aim of doubling the farmers income. In such situations, seed production may be included in the government programmes.



2. Success Story on new fine grain paddy variety VGD 1

1. Background

Paddy is one of the major crops of Villupuram district in Tamil Nadu. It occupies more than 12,000 ha during both Kharif and Rabi seasons of the year. Farmers of this district are cultivating bold grain varieties fetching low income. Farmers preferring finegrain variety but facing the problem of lodging and more pest and disease incidence. A farmer Mr.Kannan,S/o. Athimoolam is an innovative and hardworking farmer living in Sengamedu village, Vallam block, Villupuram district. He is a progressive farmer holding 10 acres of land and cultivating paddy and pulses under irrigated condition. Though he was engaged in regular farming work he got only a minimum profit. Due to labour constraints, paddy area is decreasing year by year in the village and nearby villages. In this situation, he approached KVK to solve the problems faced by him and other farmers of his village.

2. Plan, Implement and Support: Process

The KVK, Villupuram had conducted the frontline demonstration (FLD) programme on Popularization of newly released paddy variety VGD 1 at Sengamedu village, Vallam block of Villupuram district during rabi season. Over all this programme covered 10 acres of land. Periodical monitoring was done and given management guidelines such as irrigation, weed management in the initial period, pest and disease management. He followed all the technical advices and adopted the improved technologies in time.

3.Output:

The newly released paddy variety VGD 1 cultivation by adopting integrated nutrient management, weed management, pest and disease management has given more yield. So he obtained higher yield 56.6 q/ha when compare to his previous year yield of 49.7 q/ha. The yield increase was 13.9% higher over his previous year yield.

4.Outcome

The new variety reduced the gross cost due to minimum amount spent for pest and disease control with machine planting with a net profit of Rs. 76550/- with BCR of 2.08 than bold grain variety (Net profit: Rs. 55800 /- & BCR: 1.05). It is preferred many of the farmers because of it's very fine grain nature suitable for briyani making and fetching high market price. Many farmers of his village and nearby villages asking seeds to cultivate in their fields

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in net income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Popularization of newly released paddy variety VGD 1 (Alternate for Landrace Seeragasamba)	10	80	55800	76650

Impact

The new variety has a horizontal spread of 20 acres in and around the villages. The variety impressed many of the farmers due to its fine grain nature and high market value.



3.High income generation through Jasmine cultivation

1. Situation analysis/Problem statement

Villupuram is one of the predominant agricultural district in which about 60% of population is engaged in Agriculture and allied activities for their livelihood. Flower crops are one of most important crops in this district. Among the flowers, jasmine is a predominant flower crop in Villupuram district.

Problems identified

- Non adoption of micro nutrient management and post harvest treatment of flowers for shelf life extension.
- High incidence of chlorosis and pink buds in jasmine
- Non availability of good quality micro nutrient mixture for jasmine.

2. Plan, Implement and Support

- ✓ Introduction of micro nutrient mixture and boric acid
- ✓ Foliar application MN mixture
- ✓ Post harvest treatment of flowers with boric acid for shelf life extension.

- ✓ Farmers were trained in jasmine production technologies, micro nutrient management, post harvest handling, pest and disease management.

3. Output & Outcome

Particulars	Flower yield (t/ac)	Cost of cultivation (Rs./ac)	Gross income (Rs./ac)	Net income (Rs./ac)	BCR
Flower yield in Demonstration	3.88	365800	776000	410200	2.12
Farmers practice	3.36	418240	679200	260960	1.62

4. Impact

Micro nutrient mixture and boric acid were introduced in Villupuram district by covering ten farmers with an area of 10 acres through Front line demonstration. Among 10 farmers, Th.V.Kalaivanan, S/O Velusamy, residing at Veedur village recorded highest yield of 3.88 t/acre as compared to farmers practice and he realized gross income of Rs.4,10,200/acre and BC ratio is 2.12. Chlorosis and pink buds was reduced drastically. More number of new flush and flower buds were recorded. Weight and length of flower buds and corolla tube increased. Shelf life and freshness of flowers was maintained. Consumer preference for flowers obtained from demonstration field is increased due to long corolla tube and big flower buds. The demonstration was conducted at Veedur for further popularization of foliar application of micro nutrient mixture and shelf life extension. By seeing the impact of micro nutrient mixture, many farmers are interested to follow the same technologies to increase the flower yield and income.



Details of innovative methodology, innovative technology and transfer of Technology developed and used during the year by the KVK

- **Kisan Mobile Advisory Service (KMAS)** sending SMS to farmers mobile for disseminate the information and 8453 farmers were benefitted.
- **KVK Whatsapp group** – sharing of agricultural information among Villupuram district farmers through KVK whatsapp group
- **KVK Website** – Posting of training details and other agricultural information in KVK website
- **Multimedia** - Use of advanced audio visual aids and multimedia during capacity development programme

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.	Minor millets	Soil incorporation of navathanya (9 legumes)	To enrich the soil fertility
2.	Chilli	Foliar spray of butter milk	To reduce the leaf curl incidence
3.	Bhendi	Foliar spray of chilli extract 5%	To reduce the viral disease incidence

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)
Improved production technologies in Blackgram	52	70	35625	49819

Improving the livelihood of black gram farmers in Villupuram district through Cluster Front Line Demonstrations

The KVKs play an important role in transferring latest improved agricultural technologies to enhance the productivity of crops through trainings and FLDs. Keeping in view the beneficiaries of Blackgram (VBN 6) demonstrations from four villages of Villupuram district were selected purposively. To compare the production and profitability, the yield data of Cluster FLDs and control plots were collected from each farmers and averaged out at all locations. An average yield of 7.73 q/ha was recorded in demo plots and in check plots it was 6.72 q/ha. The yield difference of 1.02q/ha with the yield gap of 13.19 percent was observed in CFLD programme. The difference in yield gap might be due to the adoption of improved production technologies that were disseminated through KVK under Cluster FLD programme. Further, an attempt was made to assess the knowledge level of Cluster FLD farmers before and after the interventions of KVK. The knowledge level of the blackgram farmers in improved technologies was medium (40.00 %) to low (35.00 %) in before implementation of the Cluster

FLD programme. The knowledge level was increased from medium (50.00 %) to high (32.50 %) after implementation of the programme. More than 75 percent of the blackgram farmers were practicing improved varieties, optimum seed rate, seed treatment, foliar application of MN mixture, recommended fertilizer dosage and pest control. The appropriate reason for medium to higher level of knowledge on improved production technologies of blackgram might be due to KVK interventions such as awareness programme, demonstrations, trainings and field days.

Knowledge level of the blackgram farmers in improved production technologies

(n=40)

S.No.	Technologies	Before CFLD programme		After CFLD programme	
		Number	Percentage	Number	Percentage
1	Application of Farm Yard Manure @12t/ha	32	80	35	87.5
2	Improved blackgram varieties	11	27.5	31	77.5
3	Optimum seed rate @20kg/ha	35	87.5	38	95
4	Seed treatment (<i>Trichoderma viride</i> @ 4g and <i>Pseudomonas fluorescens</i> @ 10 g/kg of seeds)	18	45	29	72.5
5	Foliar application of MN mixture (TNAU Pulse wonder) @ 5 kg / ha	9	22.5	33	82.5
6	Application of recommended fertilizer	22	55	36	90
7	Weed management (Pre emergence application of Pendimethalin 3.3 litres/ha)	20	50	28	70
8	Pest control (Setting up of yellow sticky traps @ 36 nos / ha to control sucking pest, Pheromone trap @ 12 nos / ha, spray of Chlorantroniliprole @ 0.3 ml /lit) to control white flies and pod borer)	19	47.5	30	75
9	Disease control (Spot drenching with Carbendazim 1g / lit or application of <i>Pseudomonas luorescens</i> / <i>Trichoderma viride</i> 2.5 kg/ha with 50 kg FYM to control stem necrosis)	21	52.5	28	70

It could be observed from the above table 4, that before implementation of the CFLD programme only around twenty five percent of the respondents had knowledge on improved blackgram varieties and foliar application of MN mixture but after implementation of the programme it has been increased to 77.5 percent and 82.5 percent respectively. This might be due to the high yield and marker price of improved blackgram variety VBN 6 and reduced flower shedding by the foliar application MN mixture that is TNAU Pulses wonder.

More than 90 percent of the respondents had knowledge on usage of optimum seed rate and the recommended fertilizer dosage. The appropriate reason for this high level of knowledge might be due to the on and off campus training programmes offered by KVK. Further, soil test was taken by KVK in CFLD farmers field and insisted them for judicious usage of fertilizer which led to reduction in fertilizer cost.

According to the pest management, 47.5 percent of the responded had knowledge on the integrated pest management in before implementation of the CFLD programme. This has been increased to 75 percent. With respect to disease management, the knowledge of the respondents have been increased from 52.5 to 70 percent. The probable reason for this increased level of knowledge might be due to the result demonstration of the Integrated Pest and Disease Management practices conducted by KVK in CFLD demo plots and which resulted in more yield and profit. Similarly, Asiwal *et al.* (2005) also reported that increase in productivity and income gain under FLD's over traditional practices of Blackgram cultivation support the present results

Linkages

Functional linkage with different organizations

Name of organization	Nature of linkage
Department of Agriculture	<ul style="list-style-type: none"> • Execution of OFT and FLD programmes, Field day • Organization of Training programmes to farmers and extension functionaries • Soil health day programme • Field diagnostic visit • Guest lectures on season oriented topics
Department of Horticulture	<ul style="list-style-type: none"> • Execution of OFT and FLD programmes • Production and distribution of quality horticulture seeds and seedlings • Organizing training programmes to farmers and extension functionaries
Department of Agrl. Marketing	<ul style="list-style-type: none"> • Providing agro advisory on marketing of commodities • Training to extension functionaries
Agricultural Engineering Department	<ul style="list-style-type: none"> • Exposure visit • Demonstration of farm implements
Seed Certification Department	<ul style="list-style-type: none"> • Production of quality seeds • Promotion of Seed production
Sericulture	<ul style="list-style-type: none"> • Training to Extension functionaries
Animal Husbandry	<ul style="list-style-type: none"> • Implementation of IFS programme • Implementation of FLD programmes • Conducting animal health camps • Demonstration of animal components
Forestry	<ul style="list-style-type: none"> • Tree plantation programme
Department of Cooperation, TN Govt.	<ul style="list-style-type: none"> • Market linkage
Integrated Child Development Schemes	<ul style="list-style-type: none"> • Guest lectures on Food nutrition and security • Organizing training programmes and POSHAN MAAH to Anganwadi workers

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Virtual mode of IIHR Horticulture fair under Akadi Ka Amrit Mahotsav	21.02.2021	ICAR	
Poshan Vatika Maha Abhiyan under Food and Nutrition for farmers	26.08.2021	ICAR	
Mahila Kisan Diwas	15.10.2021	ICAR	
World Pulses Day	10.02.2021	ICAR	
World Food Day	16.10.2021	ICAR	
National Campaign on Agricultural Environment	23.11.2021	ICAR	
Awareness on Farmers Scientist interface in Climate resilient crop varieties technologies and production	19.08.2021	ICAR	
PM Live Programme in Natural Farming	28.09.2021	ICAR	
World Water Day	08.10.2021	ICAR	
Uttam Kheti - Unnat Kisan	23.12.2021 to 25.12.2021	ICAR	
Swachhta pakhwada	16.12.2021 to 31.12.2021	ICAR	
World Soil Day	05.12.2021	ICAR	
National Milk Day	07.12.2021	ICAR	

AWARDS and RECOGNITIONS

KVK, KVK Staff, KVK Contact Farmers etc. at district, state, national and international level supported by copies of certificates and photographs

(Please do not include Awards and certificates issued by ATARI)

Name of the Scientist	Name of the Award/ medal/ recognition	Sponsor/ host	Year of award
Dr. K.Parameswari, Assistant Professor (SS&T)	Eminent Scientist Award in the field of Seed Science and Technology	Agro Environmental Development Society, Majhra Ghat, Rampur, Uttar Pradesh	2021
Dr. K.Parameswari, Assistant Professor (SS&T)	Excellence in Extension Award	Global Nature Foundation, Trichy	2021
Dr. K.Parameswari, Assistant Professor (SS&T)	Best Social Scientist Award	GRABS Educational Charitable Trust, Chennai	2022
Dr. K.Parameswari, Assistant Professor (SS&T)	MS Swaminathan Best Scientist Award	Boss Science Society, Pudukkottai	2022



Important Visitors to KVKs during 2021 (with photographs)

S.No	Important visitors	Date of visit
1.	Mr.C.Ponnaiyan Hon'ble Vice Chairman State Development Policy council Chennai	03.02.2021
2.	Mrs.V.Gomathi ADSP, CBCID, Villupuram	16.02.2021
3.	Mr.T.K.Rajendiran D.G.P (Rt.)	10.03.2021
4.	The Director of Extension education TNAU, Coimbatore	19.03.2021
5.	The Director TRRI, Aduthurai	19.03.2021
6.	The Director Natural Resource Management, TNAU, Coimbatore	24.03.2021
7.	Mr.S.Selvaraj CGM, NABARD, Chennai	22.04.2021
8.	The Director Seed centre, TNAU, Coimbatore	05.07.2021
9.	The Director Water Technology centre, TNAU, Coimbatore	22.10.2021
10.	The Director Water Technology centre, TNAU, Coimbatore	23.12.2021

PHOTOS

Photos on performance of technologies in OFTs and FLDs, Trainings, Extension Programmes, Other Extension Activities, Important Visitors, Awards and Recognitions (KVK, Staff, Farmers) *etc.*

Jpeg/png format with good resolution for printing (300 dpi, RGB/CMYK)

Title must have the KVK Name, activity (OFT/Training/Visitor/award *etc.*) and short description

<p>Assessment of paper rolling(Seed tape)sowing methods with other planting methods in rice cultivation of Villupuram District</p>	<p>Assessment of YMV resistant greengram variety suitable for Villupuram district</p>		
<p>Popularization of paddy variety ADT 55 in Villupuram district</p>	<p>Popularization of ATL 1 Ragi variety in Villupuram district</p>		
<p>Demonstration of VBN 11 Blackgram seed production (foundation /certified) by farmer participatory mode</p>	<p>Demonstration on maximizing seed yield of major vegetables grown in Villupuram District under farmers</p>		