PROFORMA FOR PREPARATION OF ANNUAL REPORT (April 2019-March 2020)

1. GENERAL INFORMATION ABOUT THE KVK

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

Name of the KVK	Address	Telephone		E mail
		Office	FAX	
ICAR KVK, Theni	ICAR KRISHI VIGYAN KENDRA, THENI 89-A/B-3, West Street, Kamatchipuram (S.O),Theni District, Tamilnadu-625	04546247564	04546247564	cendectkvk@rediffmail.com cendect@gmail.com

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

Name of the Host Organization	Address	Telephone		E mail
		Office	FAX	
Centre for Development and Communication TRust	89-A/B-3, West Street,Kamatchipuram (S.O),Theni District, Tamilnadu-625 520.	04546247564	04546247564	cendectkvk@rediffmail.com cendect@gmail.com

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

Name	Residential Address	Telephone / Contact		
		Residence	Mobile	Email
Dr. S. Thirumurugan Ph.D.,	No,1 Vaigai Quarters, Kamatchipuram (S.O),Theni District, Tamilnadu-625 520.	9585142666	9585142666	haithirus@gmail.com

1.4. Year of sanction: 1994

1.5. Staff Position (as on 31th March, 2020)

Sl. No.	Sanctioned post	Name of the incumbent	Designation (eg.SMS)	Discipline (eg.Agronomy)	Edn. Qualification (eg. M.Sc.(Agri)-	Specialization (if applicable) eg. Agronomy	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent/ Temporary	Category (SC/ST /OBC/ Others)
1	Programme Coordinator	Dr.S.Thirumurugan	Senior Scientist and Head	Soil Science	M.Sc., (Agri.,)., Ph.D.,	Soil Science	37400-67000	9000	25.05.2018	Permanent	OBC
2	Subject Matter Specialist	Mr.P.Maheswaran	SMS	Agronomy	M.Sc., (Agri)	Agronomy	15600-39100	5400	27.01.2017	Permanent	OBC
3	Subject Matter Specialist	Mr. M.Arun Raj	SMS	Soil Science	M.Sc., (Agri)	Soil Science	15600-39100	5400	25.05.2018	Permanent	OBC
4	Subject Matter Specialist	Ms.V.Sumitha	SMS	Plant protection	M.Sc., (Agri)	Plant protection	15600-39100	5400	2.07.2018	Permanent	OBC
5	Subject Matter Specialist	Dr. G. Rajaraman	SMS	Horticulture	M.Sc.,(Horti)., Pd.D	Horticulture	15600-39100	5400	26.12.2019	Permanent	OBC
6	Subject Matter Speciali	Vacant	SMS	-	-	-	-	-		-	-

	st										
7	Subject Matter Specialist	Mrs.M.Ramya Siva Selvi	SMS	Home science	M.Sc.,(Home Science)., M.Phil.,	Home science	15600-39100	5400	25.01.2017	Permanent	OBC
8	Programme Assistant	Ms.S.Kalaivani	Lab technician	Agriculture	B.Sc., (Agri)	Agriculture	9300-34800	4200	31.05.2018	Permanent	OBC
9	Computer Programmer	Mrs.G.Winmathi	Computer Programmer	Computer	MCA.,MEd.,Mphil.,	Computer	9300-34800	4200	06.10.2018	Permanent	OBC
10	Farm Manager	Mr.N.Raja	Farm Manager	Horticulture	B.Sc., (Horti)	Horticulture	9300-34800	4200	14.09.2000	Permanent	OBC
11	Accountant / Superintendent	Mr.R.Pachaikannan	Accountant / Superintendent				9300-34800	4200	01.03.1995	Permanent	OBC
12	Stenographer	Mrs.M. Soundariya	Stenographer				5200-20200	2400	17.06.2019	Permanent	OBC
13	Driver	Mr.M.Patchaikannan	Driver				5200-20200	1900	01.01.2010	Permanent	OBC
14	Driver	Mr.A.ArockiyaJohnson	Driver				5200-20200	1900	01.01.2017	Permanent	OBC
15	Supporting staff	Mr.K. Shankar Nehru	Supporting staff				5200-20200	1800	01.06.2019	Permanent	OBC
16	Supporting staff	Mrs. K. Malarkodi	Supporting staff				4400-7440	1300	01.06.2019	Permanent	OBC

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

S. No.	Item	Area (ha)
1	Under Buildings	0.11 ha
2.	Under Demonstration Units	0.03 ha
3.	Under Crops	9.65 ha
4.	Orchard/Agro-forestry	1.00 ha
5.	Others (specify)	10.79 ha

\

1.7. Infrastructural Development:

A) Buildings

S.No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			CompletionDate	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	3/30/1996	483.5	2135800	-	-	-
2.	Farmers Hostel	ICAR	12/25/2002	312.0	1749596	-	-	-
3.	Staff Quarters (No.)	ICAR	2/11/1997	260.0	2930577	-	-	-
4.	Demonstration Units	ICAR	3/20/1999	0	300000	-	-	-
5.	Fencing	ICAR	3/21/1996	0	100000	-	-	-
6.	Sericulture Unit	ICAR	3/31/2012	160	400000	-	-	-
7.	Irrigation System	ICAR	3/31/2012	0	300000	-	-	-
8.	Demonstration Unit- Dairy	ICAR	3/30/1996	0	100000	-	-	-
9.	Rain Water harvesting system	-	-	-	-	-	-	-
10.	Threshing floor	-	-	-	-	-	-	-
11.	Farm godown	-	-	-	-	-	-	-
12.	Shed (Farm equipment)	-	-	-	-	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Scooter M80	1995	20,727	211000	Need replacement
Honda Activa	2009	50,800	23400	Need replacement
Bolero	2010	6,06,153	273800	Need replacement

C) Equipment & AV aids

Name of the equipment	Cost (Rs.)	Year of purchase	Present status
Over head projector	11160	1/6/1995	Good Condition
Electronic typewriter	21035	1/6/1995	Scrapped
Mixie	2175	1/14/1996	Scrapped
Onida color tv	18600	2/28/1996	Good Condition
English t/w machine	9852	2/29/1996	Scrapped
Tape recorder	3925	10/25/1995	Scrapped
Weighing scale	2643	3/29/1996	Scrapped
Amplifier & mike unit	4600	5/27/1996	Good Condition
Duplicating machine	17500	10/10/1995	Scrapped
Vcr	14990	2/28/1996	Scrapped
Slide projector	12855	2/28/1996	Scrapped
Lcd projector	69750	3/7/2007	Good Condition
Fax machine	15150	3/30/2009	Good Condition
Xerox machine	75400	3/1/2010	Good Condition
Digital camera	25000	6/30/2010	Good Condition
Generator	100000	11/24/2010	Good Condition
Epabx system	50220	3/30/2011	Good Condition
Steel table	1500	11/4/1994	Good Condition
Mica table	800	11/4/1994	Good Condition
Godrej table	13340	1/23/1995	Good Condition
Wooden table	2250	1/23/1995	Good Condition
Steel table	11785	12/15/1995	Good Condition

Mould chair	2896	1/13/1995	Good Condition
Plastic chair	5508	1/22/1995	Good Condition
S type chair	600	11/4/1994	Good Condition
S type chair	1500	3/10/1995	Good Condition
Pvc chair	23240	3/1/1998	Good Condition
File cabinet	7980	10/13/1995	Good Condition
White mark writing board	8875	12/12/1995	Good Condition
Water tanker	25000	2/26/1996	Scrapped
Disc plough	24853	2/26/1996	Good Condition
Tiller	13408	2/26/1996	Good Condition
Mould board plough	16379	2/26/1996	Good Condition
Cupboard	11140	2/28/1995	Good Condition
Executive chair	12290	3/22/1996	Good Condition
Cupboard	11500	3/7/2010	Good Condition
Nilkamal chair	20000	3/7/2010	Good Condition
Revoling chair	6500	3/7/2010	Good Condition
3 x 2 cash table	4400	3/7/2010	Good Condition
4 x 2 cash table	2600	3/7/2010	Good Condition
Computer table	2400	3/7/2010	Good Condition
Wall fan	3800	3/7/2010	Good Condition
Water punel	2000	3/7/2010	Scrapped
Water punel	4000	3/15/2010	Scrapped
Kusan	5000	3/7/2010	Good Condition
Reception chair	4500	3/7/2010	Good Condition
Steel cot	51000	3/8/2010	Good Condition
Speaker	2640	3/8/2010	Good Condition
Filling cabinet	14400	3/9/2010	Good Condition
Premium wall coffer	5300	3/9/2010	Good Condition
Digital camera	25000	6/30/2010	Good Condition
Power tiller	152250	3/30/2011	Good Condition
ICD recorder and DVD player	8280	3/15/2010	Good Condition
USB Modem	2008	3/15/2010	Good Condition
Camera	6990	3/20/2010	Good Condition
Display system	17085	3/24/2010	Good Condition
Hp printer	2400	3/5/2010	Good Condition
Round table	25837	3/31/2010	Good Condition

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

Sl.No.	Date	No of Participants	Salient Recommendations
1.	07.12.2019	38	Mango high density planting , animal health screening, fartmers producer organization, Weed management in Banana, Post harvest management, Organic input preparation , M-KISSAN, ITC tools, Millets cultivation, Animal husbandry activities, solar pumbs. Modern plant protection activities, Demo fields and crop cafeteria, youtube channel, Innovations in DFI villages

S.No.	**Name and Address**
1.	Dr.P.Patchaimal, ICAR KVK,CENDECT, Theni
2.	Dr.J.V.Prasad, Principal Scientist, ATARI, Zone X, Hyderabad
3.	Dr. S. Thirumurgan, Senior Scientist & Head, ICAR KVK,CENDECT, Theni
4.	Mr. P. Baskaran, AIR & DD News, Theni District.
5.	Mr. G. Pari ,Farmer, K. M Patty, Theni
6.	Mr. P. Bose , Family Counselor, Theni
7.	Mr. P. RameshPrabhu Farmer, Muliyampatti.
8.	Mrs. M. Backiyalakshmi, Women farmer, Mullaiyampatti.
9.	Mrs. M. Jenifer – District co- ordinator,Collectorate.
10.	Mr. Karthiraj , ADH, Chinnamanur.

11.	Mr. S. Arumugam, Asst.Dir Sericulture, Theni
12.	Mr.Pon Dhanapalan, Programme Executor, All India Radio, Madurai
13.	Mr. M. Viswanathan Junior Inspectorof Sericulture
14.	Dr. S. Sivaseelan,Prof & Head,VUTDC, Madurai
15.	Mrs. P. Bindu Women farmer,Bomminayakkanpatti
16.	Mrs. R. Selvarani Women farmer, Meenatchipuram
17.	Mr. R. Kannan, Vivegam, Odaipatti
18.	Mr. R. Rajesh Farmer, Odaipatti
19.	Dr. S. Sarashwathi, Prof & Head, GRS, Royappanpatti.
20.	Dr. S. Juliet Hepziba, Prof & Head, ARS, Vaigaidam
21.	Mr. R. Ravi kumar, Prof & Head, TNAU, Coimbatore
22.	Dr. K.N. Shiva, Principal Scientist,ICAR- NRCB,Trichy
23.	Mrs. L. Bhuvaneshwari, AGM, NABARD, Theni
24.	Dr. T. Arumugam, Dean,HC& RI, Periyakulam
25.	Mr. S. Manickam Programme Exicutive, AIR, Madurai
26.	Mr. Azhagu Murugan, F & H Section, AIR, Madurai.
27.	Mr. G. Vikram Siddartha, Programme Coordinator, Pay Agri. Ltd.,
28.	Dr. G. J. Janavi, Prof. & Head, HC&RI, Periyakulam.
29.	Mrs. K. Muthulakshmi,DDA(FTC), Theni
30.	Mr. M.Pandiyan, President, Theni District Farmers Association Leader
31.	Mr. P.Venkadesan, Progressive Farmer, Thenpalani
32.	Mr. V. Venkatesan, Forester, DFO, Theni
33.	Mr. K.V.M .Rajkumar, MD, Pay Agri. P. Ltd.,Theni
34.	Mr. T. Sadayandi, STEEL Trust, Theni
35.	Prof. L. Lakshmanan, President, Aundipatty.
36.	Mr. P.Sockar Selvam, Progressive Farmer, Kamatchipuram
37.	Mr.S. Saeed Muhamad , Farmer, Theni
38.	Mr. K. Narayanasamy President, TDBGA, Seepalakottai.

PROCEEDINGS OF XXI SCIENTIFIC ADVISORY COMMITTEE (SAC) MEETING HELD ON 07.12.2019.

The Inaugural address was given by Dr.K.V.Prasad Principal Scientist ,Atari, Hyderabad. In his inaugural address he explained the importance of SAC Meeting that the SAC Meeting is useful to fine tune the activities and to prepare the action plan of the KVK for the coming year. He also indicate that 35% of the programme fund allocated for the OFT, 15% for FLD and 25% for the training and extension activities.

During the special address given by Dr. T. Arumugam Dean, HC & RI, Periyakulam mentioned the Role of KVK that KVK should estimate new technologies to farmers and to take the needs of farmers to University

After the special address Dr.S. Thirumurugan, Senior Scientist and Hea d, ICAR KVK, CENDECT presented the action taken on the suggestions given by the SAC members during XX SAC held on 28.11.2018 this was followed by the presentation of OFT and FLD conducted during last year by Mr. P. Maheswaran SMS (Agronomy)., Mr. M. Arun Raj SMS (Soil Science)., Mrs. M. Ramya Siva Selvi SMS (Home Science) and Ms. V. Sumitha SMS (Plant Protection) . This is followed by the suggestions from SAC members.

Mr. Narayana Samy President, Theni(Dt), Banana growers Association suggested to develop technologies on organic control measures for Banana leaf spot, wilt and conduct trainings on Pre and Post Harvest technologies for Banana export.

Dr. K. N. Shiva, Principal Scientist ,ICAR- NRCB, Trichy suggested to conduct programmes on Banana value addition in the following years. He also suggested to conduct the training on value added products from waste Banana fruits and Perishable goods.

Dr. Ravikumar Theodore, Professor and Head, Training Division, Directorate of Extension and Evaluation, TNAU Coimbatore. He advised to focus on major serious problem in subject of Fall Army worm, rugose white fly and nematode problem in tamil nadu. To create awareness about this problem management among the farmers. Also to conduct Training about this problem management and suggested to conduct FLD on Mango ultra high during plantation and TNAU fruity fresh to enhance self life and to conduct Training programme on country Birds rearing, hydrophoenix and how to register in Electronic National Conference and to conduct awareness programme on Marketing and Parthenium awareness. He also suggested to oraganise Farmers for FPO Formation and to give consultancy service for the FPO. He also suggested to develop models on Bamboo based Agro Forestry, protected cultivation, Hydrophonix , Crop cafeteria. HE also suggested the post Training Schedules, contact persons, Farmers Database in the Website and to updating of District profile and Newsletter. Also suggested to conduct Field day programmes which is important and documentation of KVK activities. To make use the Media like DD, Air India, Internet, YouTube channel and WhatsApp group. He also suggested to develop linkage with Line departments. And to attend National Seminar by the KVK staff. Opportunity should be given to staff for Innovation.

Dr. J. V. Prasad, Principal Scientist,ATARI, Hyderabad suggested that each house holder should be covered by at least one innovation in the DFI village and to develop functional Demo units and KVK especially about skill oriented and every activities of the KVK should develop some money. HE also suggested to explain all government schemes in every Training programmes. The Veterinary and Horticulture programmes should included in the Action plan.

Mr. Pon Dhanapalan Farm Radio officer, Programme executive, Air India, Madurai suggested to conduct Training programme on use of Uzhavar Seyali and Poly House cultivation and suggested to Soil health card for small and marginal farmers.He also suggested to develop technologies for Brinjal, onion, Grapes and Pulses cultivation throughout the year.

Dr. S. Sivaseelan, Professor and Head VNTDC, Madurai suggested to include veterinary activities in the next year programmes and to encourage farmers for Dairy, Goat and Poultry farming through trainings. He also suggested that the KVK can make use of the mobile veterinary Lab services available with VUTDC and Health Screening animal facilities.

Dr. T. Arumugam, Dean, HC & RI, Periyakulam, suggested to update all the information in the website and to conduct training programmes on marketing especially to get premium price for the products. He also suggested to conduct trainings on Nursery technology, vegetable seed production and entrepreneur development. HE also advised to document the success stories.

Mrs. K. Muthulakshmi, Deputy Director of Agriculture(FTC) Suggested to make use of ATMA schemes available for the need of farmers.

After the discussion, vote of thanks was given by Dr. S. Thirumurugan, Senior Scientist and Head, ICAR KVK, CENDECT, and the meeting came to an end with National Anthem…

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

2. DETAILS OF DISTRICT (2019-20)

2.0.**Operational jurisdiction of KVKs**

District	New districts governed by the KVK after division of the district, if applicable	Tehsils and/or Mandals under the KVKs jurisdiction
Theni	-	8-Theni, Chinnamanur, uthamapalayam, Cumbum, Bodinayakkanur, Andipatty, periyakulam and kadamalaikundu

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

S. No	Farming system/enterprise
The total geographical area of the district is 288923Ha.Forest occupies 35.9%of total area. Net area cultivated occupies 40.7%.	Food crops occupy 38.9% of total gross area cultivated. About 8.4% of area comes under coconut, which is steadily increasing year by year. Horticultural crops occupy 25.1% of area due to favorable agro climatic condition and assured market. Oilseeds, Cotton and Sugarcane occupy 10.7%, 5.9% and 9.8% respectively.

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

S. No	Agro-climatic Zone	Characteristics
1.	Southern Zone. Based on the rainfall distribution, irrigation pattern, soil characteristics, cropping pattern and physical, ecological and social characteristics, 90% of Theni district fit into Southern Zone and the area adjoining to Western ghats fit into Western Zone accounting for 10% of area.	Average Annual rainfall 857 mm, Annual potential evapo transpiration -1825

2.3. Soil types

S. No.	Soil type	Characteristics	Area in ha
1.	Red calcareous	Yellowish red to dark red, Medium texture, Neutral to mild alkaline, well drained and moderate permeability	13259
2.	Red non calcareous	Moderate deep red to yellowish medium textured ,slightly acidic to neutral well drained with rapid permeability	23670
3.	Red lateritic calcareous	Dark reddish brown to brown heavy textured slightly acidic to neutral, well drained with moderate permeability	24644
4.	Red lateritic non calcareous	Yellowish red to very deep heavy textured neutral to mild alkaline moderate permeability, moderately drained	41667
5.	Black soil	Dark grey to very dark grey fine textured mild to moderate alkaline slow permeability poorly dried	2727
6	Mixed soil	Dark yellowish grey to dark grey fine textured to moderate, neutral to mild alkaline well drained good permeability	23526
7	Sand dunes	Yellowish red, single grain, loose, very friable, well drained with good permeability.	10900
8.	Hilly soils	Dark yellowish gray to very dark gray, heavy textured, acidic, well	147471

		drained with good permeability.	

2.4. Area, Production and Productivity of major crops cultivated in the district (or the jurisdiction as the case may be) for 2019-20

Crop	Area (ha)	Production	Production Unit	Productivity	Productivity Unit
Rice	12259	64970	Metric tons	5300	kg /ha
Sorghum	14200	2200000	Metric tons	1548	kg /ha
Cumbu	5300	800000	Metric tons	1501	kg /ha
Ragi	100	10000	Metric tons	1664	kg /ha
Maize	6200	1240000	Metric tons	2005	kg /ha
Redgram	3000	330000	Metric tons	1095	kg /ha
Blackgram	200	10000	Metric tons	367	kg /ha
Greengram	200	10000	Metric tons	399	kg /ha
Other pulses	5100	90000	Metric tons	173	kg /ha
Groundnut	2600	620000	Metric tons	2389	kg /ha
Sunflower	200	20000	Metric tons	947	kg /ha
Castor	100	183	Metric tons	183	kg /ha
Gingelly	400	10000	Metric tons	346	kg /ha
Coconut	15000	2314.88	lakh nuts	15533	Nuts
Sugarcane	5900	72300	Tons	117	q /ha
Banana	3328	2346240	Metric tons	700	q /ha
Grapes	1937	439700	Metric tons	227	kg /ha
Tomato	2394	229820	Metric tons	96	q/ha
Bhendi	137	11650	Metric tons	85	q /ha
Onion	478	46840	Metric tons	98	q /ha

2.5. Weather data

Month	Rainfall (mm)	Temp(Max)	Temp (Min)	Relative Humidity (%)
April 19	86	33.4	24.3	56.5
May 19	69	33.1	24.1	55.7
June 19	34	38.7	28.7	61.5
July 19	55	35.1	27.6	69.0
August 19	46	33.6	25.6	66.5
September 19	82	35.3	25.1	74.8
October 19	263	34.1	23.9	70.0
November 19	148	36.1	23.9	84.0
December 19	63	34.1	19.8	67.7
January 20	16	35.8	20.8	56.4
February 20	22	32.7	22.1	57.7
March 20	45	37.9	23.4	61.3

2.7. Details of Adopted Villages (2019-20)

Sl. no	Mandal/taluk	Name of the block	Name of the village	Year of adoption	Major crops & enterprise	Major problem identified	Identified thrust area
1	Theni	Theni	Vayelpatti	**2018**	Tuberose	Incidence of nematode in tuberose cultivation in Prajwal	OFT, Training, Extension Activities

						variety leading to yield loss of 15% (1.8 t/ha) with the net loss of Rs. 90000/ha. Average yield in the village 12 t/ha	
2	Theni	Theni	Srirengapuram	**2017**	Castor	Low yield (900 kg/ha) due to non availability of perennial high yielding variety in Castor and Non availability of high yielding and high branching Variety	FLD, Training, Extension activities
3	Theni	Theni	Vayelpatti	**2019**	Maize	High incidence of Fall Army Worm Attack 50 – 80 % yield loss in field and lack of awareness on IPM & BIPM	OFT, Training, Extension activities
4	Theni	Theni	Balakrishnapuram	**2017**	**Bhendi**	Non availability of improved hybrid and low yield (130 q/ha) in cultivation of Mahyco-10 hybrid	Training, Extension Activities
5	Uthamapalayam	Chinnamanur	Vembakottai	**2019**	Davana	Lack of awareness on new variety	FLD, Training, Extension Activities
6	Uthamapalayam	Chinnamanur	Thenpalani	**2017**	Grapes	Fruit cracking during rainy season and TSS content reduced due to triple harvests per year	FLD, Training, Extension Activities
7	Uthamapalayam	Chinnamanur	Chinnaovalapuram	**2017**	Ground nut	Yield loss upto 20 % due to infestation of white grub pest	Training, Extension Activities
8	Uthamapalayam	Chinnamanur	Thenpalani	**2018**	Grapes	Lack of awareness of wine variety	Training, Extension Activities
9	Uthamapalayam	Chinnamanur	Kuchanur	**2018**	Banana	Economic loss (20%) due to	Training, Extension

						post harvest losses and lack of knowledge about value addition in Banana	Activities
10	Uthamapalayam	Chinnamanur	Seepalakottai	**2015**	Organic farming	Lack of knowledge about organic farming and lack of knowledge about organic input	Training, Extension Activities
11	Uthamapalayam	Chinnamanur	T. Sindhalaichery	**2017**	Samai	Non availability of improved variety and low yield (4q /ha) in cultivation of local variety	Training, Extension Activities
12	Uthamapalayam	Uthamapalaym	Keelasindalaichery	**2017**	Guava	Reduction in yield by 20-30 % in an area of 100 ha among 250 farmers	Training, Extension activities
13	Uthamapalayam	Uthamapalayam	Hanumandhanpatti	**2017**	Banana	Considerable yield reduction (50 q/ha) due to panama wilt disease and lack of awareness on the use of bio-control agents in disease management	FLD, Training, Extension Activities
14	Uthamapalayam	Uthamapalayam	U ammapatti	**2019**	Tomato	Yield loss upto 20 % due to imbalanced use of fertilizer and poor fruit set and growth due to nutrient deficiency	FLD, Training, Extension Activities
15	Uthamapalayam	Uthamapalayam	Kokilapuram	**2019**	Paddy	Low yield recorded in conventional famers practice (5. t/ha) and non availability of High yielding, short duration variety for in Cumbum Valley in Theni district	FLD Training, Extension Activities
16	Uthamapalayam	Uthamapalayam	M Sindalaicheri	**2019**	Tomato	Yield loss due to severe	FLD Training, Extension

						incidence of spotted wilt disease	Activities
17	Uthamapalayam	Uthamapalayam	T Pomminayakampatti	**2019**	Guava	Post harvest Loss (30%) and Lack of knowledge about value added products from Guava	Training, Extension activities
18	Uthamapalayam	Uthamapalayam	Kombai	**2018**	Ground nut	Low yield (1800 kg/ha) Incidence of wilt and Tikka leaf spot diseases	OFT,Training, Extension Activities
19	Periyakulam	Periyakulam	Vadugapatti	**2018**	Sugarcane	Low yield (90 t/ha) and income (Rs.152750) due to non utilization of natural resource in Sugarcane cropping system.	OFT, Training, Extension Activities
20	Periyakulam	Periyakulam	Thamaraikulam	**2019**	Paddy	Higher cost of cultivation due to more labour cost, low no of productive tillers (18) due to lack of awareness of about improved planting methods	OFT, Training, Extension Activities
21	Periyakulam	Periyakulam	Jeyamangalam	**2019**	Sugarcane	Lack of awareness about recycling of sugarcane trash	Training, Extension Activities
22	Periyakulam	Periyakulam	Murugamalai	**2019**	Mango	Shedding of buds and flowers, Heavy yield loss due to poor fruit setting.	Training, Extension Activities
23	Periyakulam	Periyakulam	E Pudhupatti	**2018**	Mango	Yield reduction (20 %) due to improper nutrient management	FLD, Training, Extension Activities
24	Periyakulam	Periyakulam	Meenachipuram	**2019**	Tomato	Low Market Price (Rs.2/kg) during peak	Training, Extension Activity

						season and unaware of value addition in tomato	
25	Periyakulam	Periyakulam	Vadakarai	**2019**	Value addition - mango	Heavy fruit drop and wastage during the early stage of growth in Mango tree Unaware of Value addition in raw mango	FLD, Training
26	Bodinayakkanur	Bodinayakkanur	Anaikaraipatti	**2019**	Sugarcane	Low yield and flowering during winter December month and Incidence of internodes borer	FLD, Training, Extension Activities
27	Bodinayakkanur	Bodinayakkanur	Dharmathampatti	**2019**	Jasmine	Yield loss (20%) due to budworm damage and poor flower quality leads to less market preference	FLD, Training, Extension Activities
28	Bodinayakkanur	Bodinayakkanur	B. Ammapatti	**2019**	Chilli	Yield loss upto 20 % due to improper nutrient management practices and lack of awareness about balanced use of fertilizer (micro nutrient deficiency)	FLD, Training, Extension Activities
29	Bodinayakkanur	Bodinayakkanur	Silamalai,	**2017**	Groundnut	Cultivation of ICMV 221 with yield of 12 q/ha and incidence of drought and other calamities	Cluster FLD, Training, Extension Activities
30	Bodinayakkanur	Bodinayakkanur	Dombucherry, Batharakalipuram	**2018**	Sunflower	Low yield (1200 kg/ha) due to non availability of improved hybrid.	Cluster FLD, Training, Extension Activities
31	Uthamapalayam	Cumbum	Gudalore	**2019**	Black gram	Low yield (400 kg /ha) due to non availability of high yielding variety and Yellow	Cluster FLD, Training, Extension Activities

						Mosaic Incidence.	
32	Uthamapalayam	Cumbum	KM Patti	**2018**	Paddy	Farmers getting 30-50% yield loss due to improper fertilizer management	OFT, Training, Extension Activities
33	Uthamapalayam	Cumbum	Karunakkamuthampatti	**2019**	Pepper	Lack of knowledge about pepper seedling production	Training, Extension Activities
34	Uthamapalayam	Cumbum	Hanumandhampatti	**2017**	Banana	Yield loss (20 %) due to improper nutrient management and Micronutrient deficiency	Training, Extension Activities
35	Andipatty	Andipatty	Bodidhasampatti	**2018**	Tomato	Farmers getting low yield due to the transplanting of unhealthy seedlings	OFT, Training, Extension Activities
36	Andipatty	Andipatty	Mullayampatti	**2017**	Moringa	The pods are available in a very meager number during November to February owing to the season which coincides with heavy rainfall, low temperature which 37leads to the drop in flo38wers leading to poor 39pod set which is considered to be the off season period of the year.	FLD,Training, Extension Activities
37	Andipatty	Andipatty	Amchiyapuram	**2019**	Paddy	Farmers getting low yield (5.7 q/ha) due non availability of improved and non availability of highly suitable variety for Theni District.	FLD, Training, Extension Activities
38	Andipatty	Andipatty	Mullayampatti	**2017**	Cotton	Farmers getting low	FLD, Training,

						yield (5.7 q/ha) due to drought incidence	Extension Activities
39	Andipatty	Andipatty	Kanniyapillayampatti	**2017**	Onion	Yield loss upto 20 % due to severe incidence of purple blotch and aggravated by thrips incidence	FLD, Training, Extension Activities
40	Andipatty	Andipatty	Mullayampatti	**2017**	Pulses	More Labour required for grading and winnowing of pulses, Time Consuming process.	FLD, Training, Extension Activities Extension Activities
41	Andipatty	Andipatty	Mullayampatti	**2017**	Nutrition Garden	Non-availability of pesticide free vegetables at low cost. Lack of knowledge about the importance of Nutrition Garden	FLD, Training, Extension Activities
42	Andipatty	Andipatty	Balakombai, T.Alagapuri	**2018**	Ground nut	Non availability of improved varieties of groundnut and lack of knowledge about Integrated Crop Management.	Cluster FLD, Training, Extension Activities
43	Andipatty	Andipatty	Sitharpatti	**2019**	Sesame	Low yield (3.4q/ha) due to cultivation of low yield varieties and improper nutrient management	Cluster FLD, Training, Extension Activities
44	Andipatty	Andipatty	Mullayampatti	**2017**	Black gram	Low yield (3.6q/ha) due to yellow mosaic virus incidence and improper nutrient management practices	Cluster FLD, Training, Extension Activities
45	Andipatty	Andipatty	Pitchampatti	**2017**	Green gram	Low yield (350 kg /ha) due to non	Cluster FLD, Training, Extension

						availability of high yielding variety and incidence of yellow mosaic virus	Activities
46	Andipatty	Andipatty	Amchiyapuram	**2019**	Green gram	Low yield (340 kg /ha) due to non availability of high yielding variety and incidence of yellow mosaic virus	Cluster FLD, Training, Extension Activities
47	Andipatty	Andipatty	G Usilapatti	**2018**	Cashew	Cashew apples (90%) are thrown away after taking the nuts. Lack of Knowledge about the nutritional value and Health benefits of Cashew Apple	Training, Extension Activities
48	Andipatty	Andipatty	Bodidhasampatti	**2018**	Tomato	Non availability of improved hybrid and lack of knowledge about Integrated Crop Management in Tomato	Training, Extension Activities
49	Andipatty	Andipatty	Kathirnarasingapuram	**2018**	Jasmine	Root rot and nematode incidence (40-50 %) resulting in low yield, Poor micronutrient management	Training, Extension Activities
50	Andipatty	Andipatty	Kanniyapillayampatti	**2017**	Ragi	Low market price (Rs.25/kg) during peak harvest period in an area of 100 ha among 250 farmers and Unaware of health 51benefits of ragi	Training, Extension Activities
51	Andipatty	Andipatty	Seepalakottai	**2017**	Livestock	Mortality upto 10 % in adults and 30% in kids due to infectious	Training, Extension Activities

						diseases like neonatal viral enteritis, Entero toxemia, Anthrax, Blue tongue Pneumonia, foot rot and endo and ectoparasitism. vaccination and deworming : no vaccination and medication No dipping is practiced to control ecto parasites .Improper housing conditions during rainy and winter seasons leading to heavy motality in kids	
52	Andipatty	Andipatty	Sithayagoundenpatti	**2017**	Livestock	High somatic cell count, incidence of subclinical mastitis, Poor self life of milk	Training, Extension Activities
53	Andipatty	Andipatty	Sithayagoundenpatti	**2017**	IFS	Non availability of quality fodders and non cultivation of new variety under mixed fodder condition	IFS, Training, Extension activities
						Mineral deficiency, Low milk yield, infertility in dairy cows	
						Lack of knowledge on feeding practices for dairy cattle	

Crop/Enterprise	Thrust area
Paddy	Varietal evaluation and mechanization
Maize	Integrated pest management
Bhendi	Varietal evaluation
Onion	Integrated crop Management, Integrated pest management
Redgram	Integrated pest management, varietal evaluation
Black gram	Varietal evaluation and Pest management
Grapes	Integrated crop Management
Banana	Resource conservation technology
Banana	Crop geometry evaluation
Tomato	Integrated crop Management
Tamarind	Drudgery reduction
Green gram	Integrated crop Management
Organic farming	Resource utilization technologies
Paddy	Indigenous Technical; Knowledge
Brinjal	Integrated Pest Management
Guava	Integrated crop Management
Gingelly	Integrated crop Management
Samai	Integrated crop Management
Gingelly	Integrated crop Management
Sugarcane	Varietal evaluation
Mulberry	Varietal evaluation
Groundnut	Integrated crop Management
Sunflower	Integrated crop Management
Paddy	Integrated crop Management
Filed lab lab	Integrated pest management
Banana	Integrated crop Management
Black gram	Integrated crop Management
Ragi	Varietal evaluation
Cumbu	Integrated crop Management
Cotton	Integrated crop Management
Sorghum	Integrated crop Management
Black gram	Integrated crop Management
Green gram	Integrated crop Management
Jasmine	Integrated pest management
Marigold	Integrated crop Management
Cumbu	Integrated crop Management
Fodder crops	Integrated crop Management
Livestock	Disease management

2.9. Salient Achievements of (April 2019-March, 2020) (Mandated activities/ Projects)

S.No	Activity	Target	Achievement
1.	Technologies Assessed and refined(No.)	**10**	**8**
2.	On-farm trials conducted (No.)	**50**	**40**
3.	Frontline demonstrations conducted (No.)	**19**	**16**
4.	Farmers trained (in Lakh)	**1200**	**1464**
5.	Extension Personnel trained (No.)	**4**	**4**
6.	Participants in extension activities (in Lakh)	**100**	**97**
7.	Production of Seed (in Quintal)	**24.5**	**14.5**
8.	Planting material produced (in Lakh)	**29750**	**16000**
9.	Live-stock strains and finger lings produced (in Lakh)	**0**	**0**
10.	Soil, Water, plant, manures samples tested (in Lakh)	**800**	**669**
11.	Mobile agro-advisory provided to farmers (in Lakh)	**30000**	**20467**
12.	No.of Soil Health Cards issued by Mini Soil Testing Kits (No.)	**0**	**0**

13.	No.of Soil Health Cards issued by Traditional Laboratory (No.)	**0**	**669**

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

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2019-20

OFT (Technology Assessment)

Number of technologies		Total no. of Trials	
Targets	**Achievement**	**Targets**	**Achievement**
10	8	50	40

FLD (crop/enterprise/CFLDs)

No of Demonstrations		Area in ha		Number of Farmers	
Targets	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
19	16	87.5	62.5	185	155

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

Number of Courses			Number of Participants	
Clientele	**Targets**	**Achievement**	**Targets**	**Achievement**
Farmers	**60**	**64**	**1200**	**1464**
Rural youth	**8**	**8**	**200**	201
Extn.Functionaries	**4**	**4**	**100**	97

Extension Activities

Number of activities		Number of participants	
Targets	**Achievement**	**Targets**	**Achievement**
2365	1751	22160	12317

Seed Production (Qtl.)

Target	Achievement	Distributed to no. of farmers
24.5	14.5	141

Planting material (Nos.)

Target	Achievement	Distributed to no. of farmers
29750	16000	37

3.b. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs (Insert Rows wherever required)

Thematic areas	Crop	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers
Integrated Nutrient Management		Assessment of organic nutrient management in Rice cultivation (CO51)	TNAU 2014		
Varietal Evaluation	Groundnut	Assessment of suitable Groundnut variety for Theni District TO 1: VRI 8	 TNAU, 2016 TNAU, 2019	5	5

		TO 2: BSR 2			
	Bhendi	Assessment of new high yielding Bhendi hybrids in Theni District	TNAU , IIHR and 2017	5	5
Integrated Pest Management					
Integrated Crop Management	Maize	Assessment of Management modules against Fall Army Worm(Spodoptera frugiperda) in Maize	ICAR-IIMR, Ludhiana/DPPS & Q and 2019	5	5
	Coconut	Assessment of Management modules against Rugose Whitefly in Coconut	TNAU/NIPHM, 2019	5	5
	Tuberose	Assessment of Management modules against Nematode infestation in Tuberose	IIHR, 2019	5	5
Integrated Disease Management					
Small Scale Income Generation Enterprises					
Weed Management					
Resource Conservation Technology					
Farm Machineries					
Integrated Farming System					
Seed / Plant production					
Post Harvest Technology / Value addition		Alternative Natural Sweetener for Bakery Products	IIFPT&TNAU 2017	5	5
Drudgery Reduction					
Storage Technique					
Cropping system	Sugarcane	Assessment of Suitable intercrop for Sugarcane TO 1:Sugaracne + Bhendi TO 2: Sugaracne + Onion	TNAU, 2018	5	5
Total					

Summary of technologies assessed under livestock by KVKs

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

Summary of technologies assessed under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers

3.c. TECHNOLOGY ASSESSMENT IN DETAIL

OFT 1:

1. Thematic area: Cropping System

2. Title: Assement of Suitable intercrop for Sugarcane

3. Scientists involved: SMS (Agronomy)

4. Details of farming situation: Sugarcane is a major crop in varaganadhi river basin in Periyakulam block. The main planting season of the area is February – March. The crop cultivated in basin irrigation and open well irrigation. The major soil type of the area is Black colour clay loamy soil with high amount of nitrogen (284 kg/ha), low phosphorous (7.82 kg/ha) and high potassium (169 kg/ha). The major cropping system of the village is Sugarcane- Sugarcane- Paddy. Total area under Sugarcane crop in the cluster village is 2700 ha. Total amount of rainfall received during the crop period is 764 mm with 17 rainy days. The highest amount of rainfall received during north east monsoon (430mm), during south west monsoon received 284mm rainfall. Remaining 50 mm rainfall received during summer shower.

5. Problem definition / description: farmers conventional Sugarcane cultivation practice give Low yield (90 t/ha) and income (Rs.152750) due to non utilization of natural resource in Sugarcane initial growth period and non adoption of integrated crop management practices in Sugarcane. Lack in knowledge about intercropping with short duration vegetables crops in an area of 1400 ha among 200 farmers.

6. Technology Assessed:

TO1: Sugarcane + Bhendi intercropping system. Bhendi variety COBH 4 is short duration high yielding variety. Resistant yellow vein mosaic virus. Its give yield from 45 days after Sowing.

TO: 2 Sugarcane + Onion Intercropping system. Onion bulbs is a planting material. Its matured at 75 days after planting.

Farmers practice : Sugarcane + Green gram. Short duration Green gram is sown as intercrop between Sugarcane rows. Its mature at 7o days after sowing. After harvesting of pods the plant was incorporated in soil as a mulch material.

7. Critical inputs given

Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Onion Seed	250 g/0.25 ac	700
Bhendi seeds	250 g/0.25 ac	1000
Vegetable special	5kg /1 ac	800
Field board	1	400
Total cost		2900

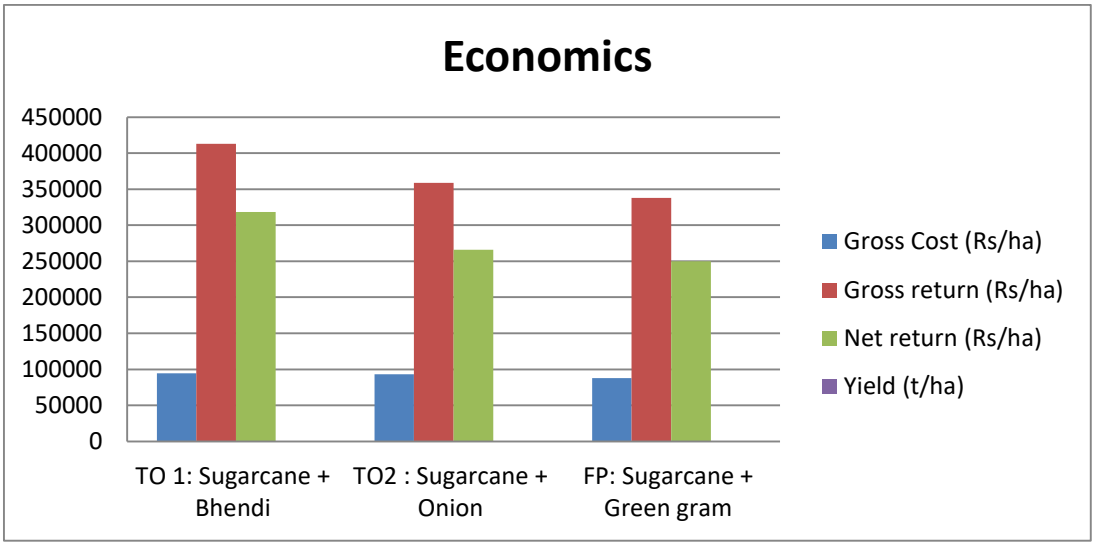
8. Results:

Table : Performance of the technology

Technology Option	*No.of trials*	*Yield (t/ha)*	*Net Returns (Rs. in lakh./ha)*	*B:C ratio*	*No. of Productive tillers per plant*
Farmers Practice: Sugarcane + Green gram	*5*	*123.12*	*249850*	*3.84*	*19.40*
Technology 1: Sugarcane + Bhendi intercropping system		*143*	*318500*	*4.37*	*18.00*
Technology2: Sugarcane + Onion Intercropping system		*128.2*	*265715*	*3.85*	*17.60*

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

Description of the results:



Sugarcane is the major crop cultivated in Vadugapatty cluster village. The main problem for Sugarcane growers in this region gaining of income takes long time as compared to others crops. Due to abnormal weather condition and failure of rainfall .leads to low yield and crop failure. Sugarcane is wider spaced crop. Since, initial stage of crop growth natural resources is not fully utilized. Keeping all the problems in above KVK introduce short duration and high market preference vegetable crops as intercrop in sugarcane cropping system. Technology option 1 is intercropping with Short duration and high yielding Bhendi (CO 4) hybrid. Technology option 2 is intercropping with small onion with duration of 75 days maturity. The highest crop equivalaent yield give by Technology option 1: Sugarcane + Bhendi intercropping system (143 t/ha) followed by Sugarcane + Onion Intercropping system (128.2t/ha). The farmers practice (TO 3: Sugarcane + Green gram intercropping system) recorded lower yield (123.12 t/ha). Regarding net income, TO 1 (Sugarcane + Bhendi) recorded highest net incomeof Rs.318500. TO 2 (Sugarcane + Onion) recorded net income of Rs. 265715. The farmers practice (Sugarcane + Onion) Recorded Rs.249850 as net income. The highest BCR (1: 4.37) recorded by the TO 1 (Sugarcane + Bhendi).

Constraints faced:

Intercropping in Sugarcane adopted only in wider planted crop. Farmers slightly feared about final yield of Sugarcane. During planting of Onion bulbs, it was struggling to emerge in clay loam soil. The bulb diameter also reduced as compared to sole onion bulb. Harvesting of Bhendi once in a two days if mentally difficult Sugarcane farmers. After getting good price only they are constantly harvesting.

9. Feed back of the farmers involved:

- Weed infestation during initial period is controlled
- Onion was affected by Bulb blight disease due to water logging in Sugarcane field.
- Bhendi Gives yield upto 120 Days after sowing. It was slightly affect the growth and tillering ability of Sugaracne.

/10. Feed back to the scientist who developed the technology:

- Quick growing Bhendi variety helpful to better economic return
- Formulation of recommended dose of fertilizer schedule for Sugarcane + Vegetables intercropping system will helpful to getting more yield in Sugarcne based cropping system.

OFT 2:

1**. Thematic area**: Varietal evaluation
2. Title: Assessment of Suitable Groundnut variety for Theni District
3. Scientists involved: SMS (Agronomy)

4. Details of farming situation: the on farm trial plot was located in Kombai village of Uthamapalayam Block. The area comes under the fotthills of western ghats. The soil type of the trail plot id red sandy loamy soil with high nitrogen content (274 kg/ha), medium in phosphorous (11.7 kg/ha) and high in Potassium (164 kg/ha). The major cropping system of the area is groundnut – pulses. The total amount of rainfall received during crop period is 425 mm with 17 rainy days.

5. Problem definition / description: the major problem in Groundnut cultivation area in Uthamapalayam block non availability of improved high yielding variety and non adoption of integrated crop management practices in groundnut. During last one decade farmers are cultivating same variety its lead to low yield (1800 kg/ha) and higher cost of cultivation. The main season in kharif. Heavy rainfall during vegetative stage leads to incidence of wilt and Tikka leaf spot diseases in an area of 1256 ha among 1800 farmers

6. Technology Assessed:

TO1: **VRI 8,**Yield : 2130 kg/ha(Rain fed)Duration 105- 110 days,Moderately resistant to LLS and Rust, 70% Shelling, 49 % oil content, Medium bold kernels
TO 2: **BSR 2,**Duration : 110days,Yield 2220 kg/ha (Rain fed), Oil content : 46.51 %

Farmers practice : JL 22 variety with average yield of 1800 kg/ha.

7. Critical inputs given

Critical input	Quantity per trial	Cost per trial
VRI 8 seeds	25 kg /0.5 ac	2500
BSR 2seeds	25 kg/0.5 ac	2500
Groundnut Rich	2kg /ac	1200
Field board	1	400
		6600

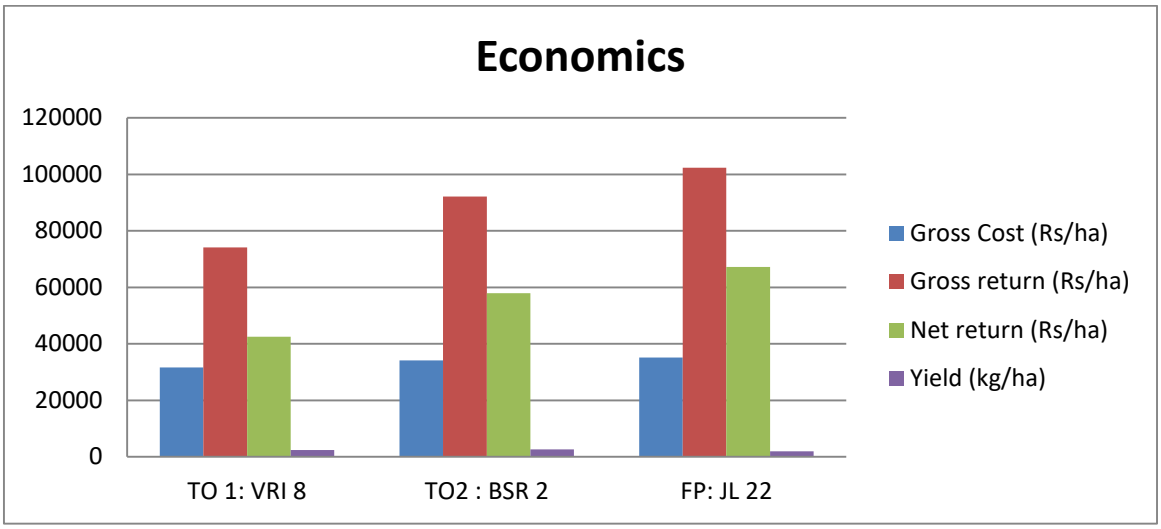
8. Results:

Table : Performance of the technology

Technology Option	***No.of trials***	***Yield (t/ha)***	***Net Returns (Rs. in lakh./ha)***	***B:C ratio***	***No.of Pods per plant****
Farmers Practice: Jl 22	*5*	*19.5*	*42516*	*2.21*	*31.00*
Technology 1: VRI 8		*23.62*	*57961*	*2.84*	*38.30*
Technology2: BSR 2		*26.62*	*67186*	*2.97*	*40.60*

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

Description of the results:



The result of Assesssment of suitable groundnut variety for theni district reveakd that, the highest yield was recorde in BSR 2 groundnut variety (26.24q/ha), followed by VRI 8 (23.62). the lowest yield was recorded by farmers practice JL 22 (19.5 q/ha). The highest net return (Rs.67186) was recorded by TO 2: BSR 2, followed by TO 1: VRI 8 (Rs. 57961). The lowest net return was recorded by famrers practice JL 22 (Rs. 42516). Regarding Benefit cost ratio BSR 2 recorded highest (2.97) followed by VRI 8 (2.84).

Constraints faced:

In Uthamapalayam block groundnut cultivated during kharif season, the high amount of rainfall during vegetative growth leads to wilt and leaf spot incidence. It will suffer the number plant survived in unit area and pod formation.

9. Feed back of the farmers involved:

BS2 groundnut varity give bold seed it will give higher market price

10. Feed back to the scientist who developed the technology: Seed hub and timely availability of seeds will helpful to large scale adoption of improved groundnut variety.

OFT 3:

1. Thematic area: INM

2. Title: Assessment of organic nutrient management in Rice cultivation (CO51)

3. Scientists involved: SMS (Soil Science &Agronomy)

4. Details of farming situation:

Paddy is a main food crop cultivated in Cumbum, Uthamapalayam, Chinnamnur and Andipatii block of Theni district in an area of 8200 ha during Kharif season of every year. More than 30 per cent of the area is occupied by rice cultivation in different season of Theni district. On Farm trial on assessment of organic nutrient management in Rice cultivation (CO51)at five farmers field of KK Patti village of Cumbum block respectively during Kharif season 2019-20. The trial area comes under the Cumbum valley within the Mullaiperiyar river irrigation basin. The soil type is Clay with medium nitrogen (370.6 kg/ha), low phosphorus (7.65 kg/ha) and high in potassium (127.6 kg/ha). Cropping scheme of the area is Paddy-Paddy-Pulses. The total area under Paddy cultivation is 1500 ha. During summer Green gram was growing as summer. It was used as a Green manure crop for Paddy cultivation. The average productivity of paddy is 65.4 q/ha during Kharif and 59.61 q/ha during Rabi. The village received 28 rainy days with annual rainfall of 950 mm.

5. Problem definition / description:

The farmers were getting 30-50% of yield loss due to improper usage of fertilizers. The farmers cannot cultivation of green manure crops due to unaware which results yield will be decreased. The farmers are didn't knowledge about organic manure sources which results poor grain and straw yield due to the improper nutrient management. The main objective of the study was to assess the suitable organic nutrient management in Rice cultivation (CO51) in Thenidistrict for higher grain yield and more net income.

6. Technology Assessed:

TO 1: Farmer Practice: Green manure + Chemical fertilizers

TO 2: Recommended Practice:INM - Green manure + Soil Test based NPK+ Biofertilizers

TO: 3Alternate Practice: Organic Nutrient: Incorporation of green manure, Seed treatment 3% Panchagavya, FYM @750 kg/ha + 100 kg rock phosphate + neem cake 200 kg/ha + top dressing vermicompost @ 1t/ha + 3% panchagavya spray twice at AT and PI (TNAU 2014).

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

Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Soil health card	1	160
Biofertilizers	20 kg/ha	340
Green manure	20kg/ha	128
Panchagavya	8 li/ha	300
EFYM	750 kg/ha	100
Rock phosphate	100 kg/ha	400
Field board	1	

8. Results:

The results of the on farm trail conducted assessment of organic nutrient management in Rice cultivation (CO51)are presented below (Table).

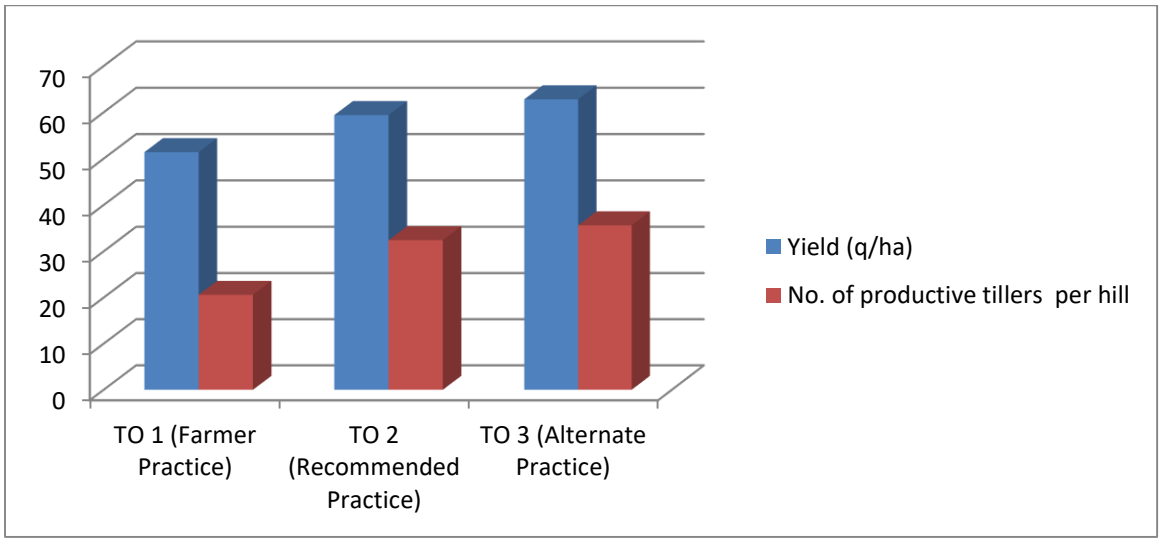
Table: Performance of the technology

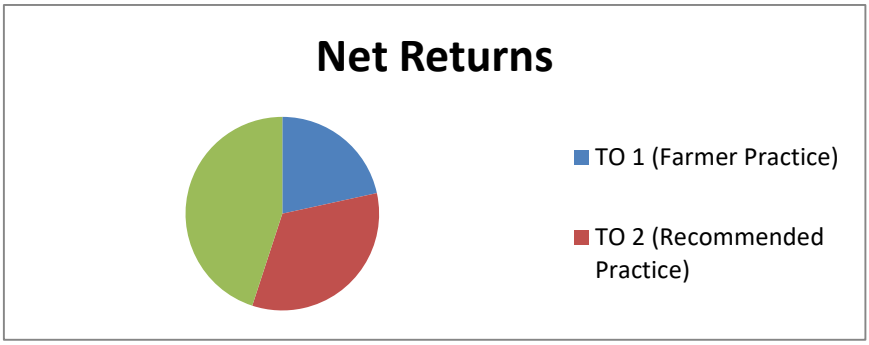
Technology Option	***No.of trials***	***Yield (q/ha)***	***Net Returns (Rs. in ha)***	***B:C ratio***	***No. of productive tillers per hill***
TO 1 (Farmer Practice)	*5*	51.4	32740	1.66	*20.6*
TO 2 (Recommended Practice)		59.4	50720	1.90	*32.4*
TO 3 (Alternate Practice)		62.8	68200	2.19	*35.6*

Description of the results:

On farm trial results revealed that cultivation of paddy by application of organic nutrient (Incorporation of green manure, Seed treatment 3% Panchagavya, FYM @750 kg/ha + 100 kg rock phosphate + neem cake 200 kg/ha + top dressing vermicompost @ 1t/ha + 3% panchagavya spray twice at AT and PI) was recorded highest grain yield (62.8 q/ha)followed by the practice of INM(Green manure + Soil Test based NPK+ Biofertilizers). The lowest grain yield of 51.4 q/ha was recorded in farmer Practice (Green manure + Chemical fertilizers).

Economics of the study revealed that, higher net returns (Rs.68200/ha) and benefit cost ratio (2.19) was recorded in application of organic nutrient (Incorporation of green manure, Seed treatment 3% Panchagavya, FYM @750 kg/ha + 100 kg rock phosphate + neem cake 200 kg/ha + top dressing vermicompost @ 1t/ha + 3% panchagavya spray twice at AT and PI) followed by INM (Green manure + Soil Test based NPK+ Biofertilizers) and farmers practice.





Constraints faced:

Non availability of panchagavya and other bio fertilizers during panicle initiation stage was observed.

9. Feed back of the farmers involved:

The application of organic nutrient (Incorporation of green manure, Seed treatment 3% Panchagavya, FYM @750 kg/ha + 100 kg rock phosphate + neem cake 200 kg/ha + top dressing vermicompost @ 1t/ha + 3% panchagavya spray twice at AT and PI) recorded higher productive tillers (32-39 tillers/hill) and grain yield compare to the INM and Green manure practices. Also, the soil health was increased by these practices.

10. Feed back to the scientist who developed the technology:

Organic inputs such as panchagavya, vermicompost and neemcake production technology trainingprogramme will engage the farmers to make available to the farmers.

OFT :4

1. Thematic area : Varietal evaluation

2. Title : Assessment of new high yielding Bhendi hybrids in Theni District.

3. Scientists involved: SMS (Horticulture) & Senior Scientist and Head

4. Details of farming situation:

Bhendicultivated in Balakrishnapuramvillage of Theni Block. The soil type is red loamy with medium nitrogen (304 kg/ha), low Phosphorous (7.8 kg/ha) and medium Potassium (276.8 kg/ha). The private hybrid of bhendi was recorded high pest and disease incidence, low yield among 200 famers in an area of 100 ha. Cropping scheme of this village cumbu – Bhendi - Chilli. The main crop cultivation season is kharif. Total area under bhendi is 250 ha with average production of 150 q/ha of fresh fruit. The village received 17 rainy days with annual rainfall of 820 mm.

5. Problem definition / description :

The private hybrid (Mahyco-10) gives low yield due to high pests such as mites,YVMV and fruit borer disease. Farmers are unaware of high yielding bhendihybrids that give better yield and also have moderate disease resistance. Farmers are getting low market price for fruits/pods. So, the farmers prefer to go for high yielding bhendi hybrids. The trail area also have low water potential this also results in higher mites incidence.

6. Technology Assessed:

TO1 : Recommended Practice

TO2: Alternate practice1

Bhendi Hybrid CO 4 TNAU 2016, Duration : 110 days ,Yield 25.60 t/ha

All the districts of Tamil Nadu except hilly regions. Medium size fruits; 25-29 fruits/plant; 22 harvests in 110 days. Resistant to bhendi YVMV disease

TO3: Alternate practice 2

IIHR-ArkaNikita, IIHR2017.Produces dark green, medium, smooth and tender fruits.

Excellent cooking quality, nutritionally rich in antioxidant activity, high mucilage content(1.08 % (FW) and high edible fiber content (8.85 % (DW). Rich in iodine content (33.31µ g/kg). Yields 21-24 t/ha in 125 -130 days duration.

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

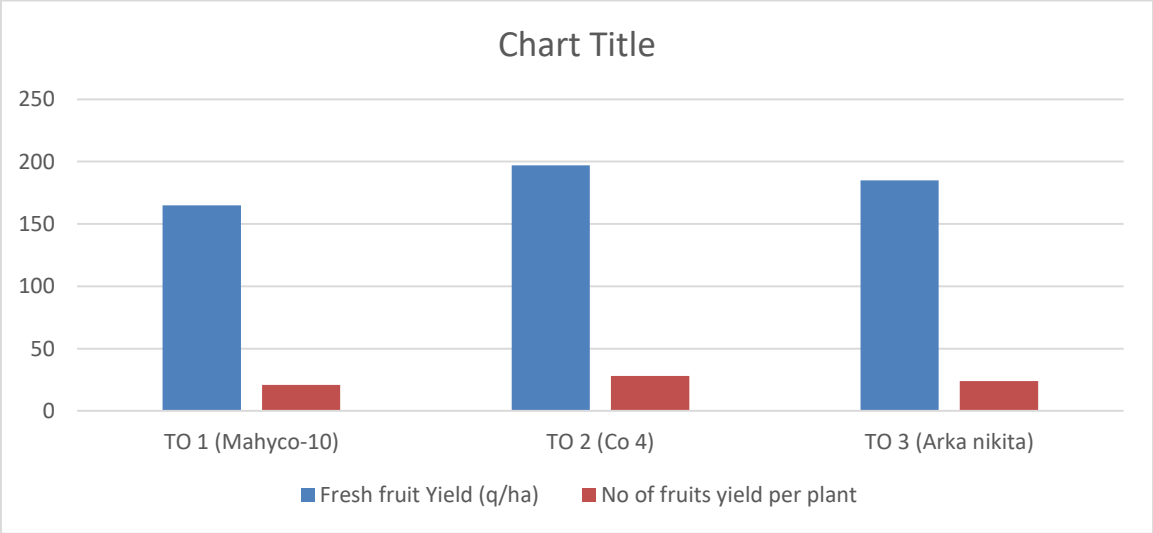
Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Seeds	1 Kg/ac	2000
Seeds	1 Kg/ac	2000
Azospirillum	10 g/ac	10
Phosphobacteria	400g/ac	40
IIHR Vegetable special	1 kg	160
Field board	1 nos	400

8. Results:

Table : Performance of the technology

Technology Option	***No.of trials***	***Fresh fruit Yield (q/ha)***	***Net Returns (Rs./ha)***	***B:C ratio***
TO 1 (Mahyco-10)	*5*	*165.0*	85500	2.08
TO 2 (Co 4)		*197.0*	143900	2.56
TO 3 (Arkanikita)		*185.0*	130600	2.43

Technology Option	***No of fruits yield per plant***	***Percentage of pest and disease incidence (%)***
TO 1 (Mahyco-10)	*21*	*11*
TO 2 (Co 4)	*28*	*12*
TO 3 (Arkanikita)	*24*	*11*



The results of the assessment of two new high yielding hybrids of Bhendiin Theni district indicated that out of the private hybrid viz., (mahyco-10).Co 4 recorded significantly higher fresh fruityield of 197q/ha followed by Arkanikita with185 q/ha and the lowest fresh fruityield of 165 q/ha was recorded in private hybrid (Mahyco-10). The highest number of fruits per plant of28 was recorded in CO-4 followed byArka Nikita (24). The lowest number of fresh fruits per plant of 21 was recorded in private hybrid. In the case of net returns, CO-4 was recorded significantly higher net return of Rs. 143900/ha followed by Arkanikita (Rs. 130600/ha) and the least net returns was recorded in private hybrid (Mahyco-10)(Rs. 85500/ha). During flowering stage of crops farmers faced termites incidence problem in private hybrids. The CO4Bhendi was recorded higher fresh fruit yield and farmers could get good quality of fruits.

Constraints faced:

Most of the farmers were cultivated private hybrid of bhendi. Due to high pest and disease incidence of private variety leads to low yield and low market price. Co-4 has moderately resistant to mites incidence. Cultivation of Co-4 were recorded higher yield than other private hybrids in Theni district area.

9. Feed back of the farmers involved:

Farmers informed that the new hybrids CO-4 and Arkanikita Hybrids had less incidence of pest and diseases. After the assessment farmers wanted to cultivate the same hybrid seeds for every season and requested the KVK to make arrangements to procure the same.

10. Feed back to the scientist who developed the technology:

Private Hybrid (Mahyco-10): Cylindrical sized fruits is fetching better price in the market but this variety recorded low yield.

TNAU HybridBhendi CO 4: Medium sized fruits is fetching better price in the market but this variety recorded high yield when comparing private hybrid.

IIHR-Arkanikita: Medium sized fruits is not fetching better price in the market but this variety recorded high yield when comparing private hybrid.

OFT:5

1. Thematic area : IPM

2. Title: Assessment of management modules against Fall Army Worm (*Spodoptera frugiperda*) in Maize

3. Scientists involved : SMS (Plant Protection)

4.Details of farming situation: Describe the farming situation including Season, Farming situation (RF/Irrigated), Soil type, fertility Status, Seasonal rainfall (mm) No. of rainy days etc (about 500 words). The trail were conducted during Kharif 2019-2020 at Kodangipatty village of Bodinayakanur block. Maize is cultivating as major crop in Theni District. The total area under Maize cultivation 6200 ha. The soil type is loamy with high nitrogen (241 kg/ha), low phosphorus (8.32kg/ha) and high in potassium (167kg/ha) with high nutrient capacity.

5. Problem definition / description: (one paragraph)

Farmers getting low yield (5.3 q/ha) due to Fall Army Worm *Spodoptera frugiperda* incidence in maize and lack of awareness of Integrated Pest Management (IPM). Cultivation of Maize without seed treatment, lack of raising trap crop, frequent monitoring, scouting leads to prevention of natural enemies and utilization of pheromone traps. Integrated pest management approach is required to be adopted.

6. Technology Assessed: (give full details of Technology as well as farmers practice)

Selection of Area: Kodangipatty Village, Theni District

TO 1: Farmer Practice: Application of Dichlorovos

TO 2: Recommended Practice: Seed treatment with Thiamethoxam @ 4ml/kg of seed growing of border crop with grain sorghum as trap crop sown in advance and legume intercrop as cowpea to promote natural enemies as few rows as intervals of maize. Collection and destruction of egg masses, installation of *Spodoptera frugiperda as* pheromone traps. First spraying of Azadirachtin 10000 ppm @ 10-15 Days After Sowing. Application of Entomo Pathogenic Nematode EPN 2g/lit @ 15-21Days After Sowing in leaf whorls. Spraying of *Metarhizium anisopliae* 2ml/lit @ 30-35 Days After Sowing.

TO 3: Alternate Practice: Emamectin Benzoate 5 SG @ 4g/lit or Spinosad 480 SC @ 5ml/lit as first spray of 21-28 DAS. Flubendiamide 480 SC or Chlorontriliniprole 18.5 SC or Spinetoram 11.7 SC @ 3 ml/lit as second spray of 36-42 DAS.

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

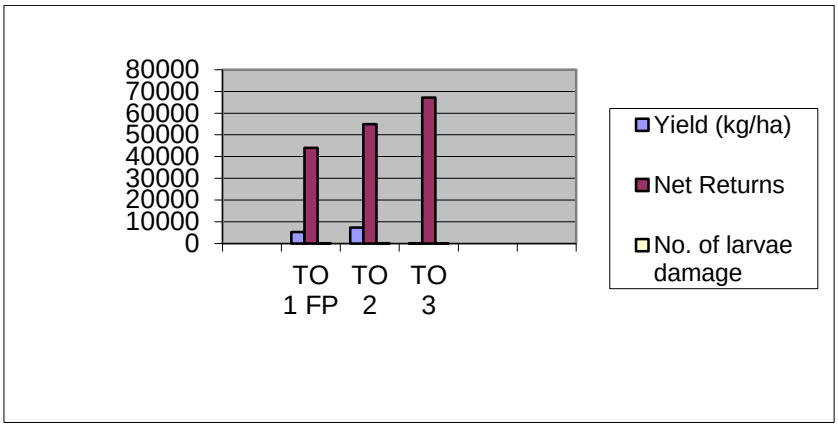
Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Fodder Sorghum-Trap crop	500 g	100
Cowpea- inter crop	500 g	100
Pheromone traps	12 traps + lures	600
Azadirachtin	1 lit	1000
EntomoPathogenic Nematode (EPN)	1 Kg	1000
Metarhizium anisopliae	1lit	600
Emamectin benzoate	1 lit	1000
Field board	1	400

8. Results:

Table: Performance of the Technology

Technology Option	No.of trials	Yield (t/ha)		BCR	No. of larvae damage	Pheromone catches/week
Technology 1: Farmers Practice:	5	5.31	67100	1.1	40	17
Technology 2:		7.35	55000	1.2	26	31
Technology 3:		**7.72**	43950	**1.4**	**15**	**46**

Description of the results: in addition you can use graphs also



9. Feed back of the farmers involved:

- Seed treatment with Thiamethoxam reduces the FAW incidence
- Fodder Sorghum and cowpea promotes natural enemies

10. Feed back to the scientist who developed the technology:

- Pheromone traps catches more number of Adults using *Spodolure*.
- Application of EPN kills the number of larvae /plant as in leaf whorl of Maize.
- *Metarhizium anisopliae* is very effective to manage FAW larvae.

OFT 6: Assessment of management modules against nematode infestation in Tuberose

1. Thematic area : IPM

2. Title : Assessment of management modules against nematode infestation in Tuberose

3. Scientists involved : SMS (Plant Protection)

4.Details of farming situation: Describe the farming situation including Season, Farming situation (RF/Irrigated), Soil type, fertility Status, Seasonal rainfall (mm) No. of rainy days etc (about 500 words) Tuberose is one of the highly profitable flower crop cultivated in and around Pallarpatti village of Bodinayakanur block.The trail were conducted during Kharif 2019-2020. The soil type is loamy with high nitrogen (271 kg/ha), low phosphorus (7.32kg/ha) and high in potassium (178 kg/ha) with high nutrient capacity.

5. Problem definition / description: (one paragraph)

Tuberose Farmers getting low flower yield (9.3 q/ha) due to nematode infestation and lack of awareness of cultivation of tuberose without bulb treatment, application of bio-pesticides. Due to nematode infestation the stunted growth of the plants and leaf size is reduced and the flowers appears sickly and at the end of infestation roots rotted. Leaves turn to pale yellow, reduction of no. of flowers and length of the flower stalk. Severe galling in the roots of Tuberose.

6. Technology Assessed: (give full details of Technology as well as farmers practice)

Selection of Area: Palarpatty Village, Theni District

TO 1: Farmer Practice: Application of Farm Yard Manure

TO 2: Recommended Practice: Bulb treatment with *Pseudomonas fluorescens* and *Trichoderma viride* each @ 10g/kg of bulb. *Trichoderma viride*, *Pseudomonas fluorescens*, *Paeciomyces lilacinus* each@ 2kg/tonne of Farm yard manure for enrichment and applied before planting. Once in three months biopesticides and enriched neem cake 100 kg/ac applied to the Standing crop.

TO 3: Alternate Practice : *Pochonia chlamydosporia* @ 2 kg/ac along with neem cake 100 kg/ac applied once in three months.

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

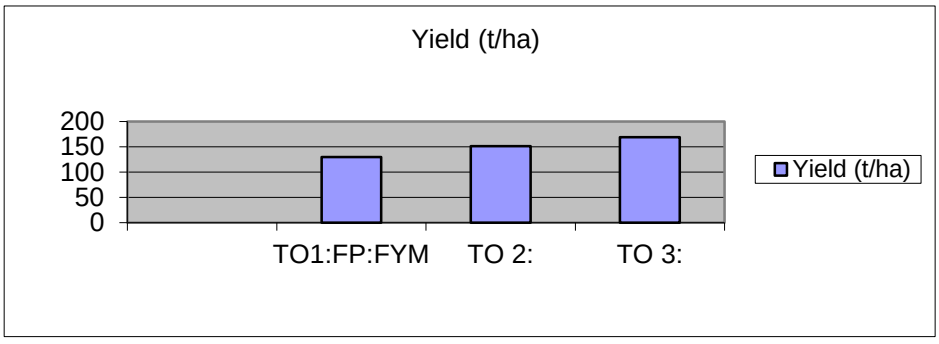
Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Pseudomonas fluorescens	10 kg	1200
Trichoderma viride	10 kg	1200
Paeciomyces lilacinus	6 kg	1200
Pochonia chlamydosporia	6 kg	1200
Field board	1	400

8. Results:

Table: Performance of the Technology

Technology Option	No.of trials	Yield (q/ha)			No. of root infested by nematode %
TO1:Farmers Practice: FYM	5	130	189500	1.1	26
TO 2		151	355900	1.2	14
TO 3		**169**	400091	**1.4**	**11**

Description of the results: in addition you can use graphs also



9. Feed back of the farmers involved:

Bulb treatment with biopesticides reduces the nematode infestation

10. Feed back to the scientist who developed the technology: Nematode infestation reduces raising of intercrop as marigold which is presence of allele chemical from the roots. Growth of the plants and leaf size increased after application of *Pseudomonas fluorescens* and *Trichoderma viride.*

OFT 7: Assessment of management modules against Rugose Whitefly in Coconut

1. Thematic area : IPM
2. Title : Assessment of management modules against Rugose Whitefly in Coconut
3. Scientists involved : SMS (Plant Protection)
4.Details of farming situation: Describe the farming situation including Season, Farming situation (RF/Irrigated), Soil type, fertility Status, Seasonal rainfall (mm) No. of rainy days etc (about 500 words). Coconut is one of the highly profitable plantation crop cultivated in and around Pudupatty village of Cumbum block. The trailwere conducted during Rabi 2019-2020. The soil type is Sandy loamy with high nitrogen (271 kg/ha), low phosphorus (7.12kg/ha) and high in potassium (168 kg/ha) with high nutrient capacity.
5. Problem definition / description: (one paragraph)

Coconut farmers getting low nut yield (8037 nuts/ha). Rugose whitefly nymphs and adults suck the sap from the under surface of leaves leads to Honey dew secretion, development of sooty mould fungus, yellowing of leaves and dropping of affected leaves. Extensive feeding of the insect leads to the excretion of honey dew which subsequently gets deposited on the upper surface of the leaves positioned down beneath or even on other under storey crops. Honey dew excrement, being sweet and watery, attracts ants and encourages growth of the fungus *Capnodium* sp. which causes disfigurement of leaves affecting the photosynthetic efficiency of the plant. Since the outer whorl of fronds of coconut palm, which already bear coconut bunches of different maturity, do not contribute to the nut yield considerably, the whitefly infestation with minimum tissue damage and sooty mould on the outer whorl of fronds.

6. Technology Assessed: (give full details of Technology as well as farmers practice)
Selection of Area: Pudupatti Village, Theni District
TO 1: Farmer Practice: Application of Farm Yard Manure
TO 2: Recommended Practice:

Installation of yellow sticky traps to monitor and catch the adult movement, releasing of *Chrysopa zastrowi* predator at 15 days interval, *Encarsia guadeloupae* parasitoid and foliar application of *Isaria fumosorosea*.
TO 3: Alternate Practice:

Spraying of neem based formulations Azadirachtin 1 %@ 2 ml/lit along with wetting agent@10g/lit at 20 days interval, spraying of 1 % starch solution for sooty mould.

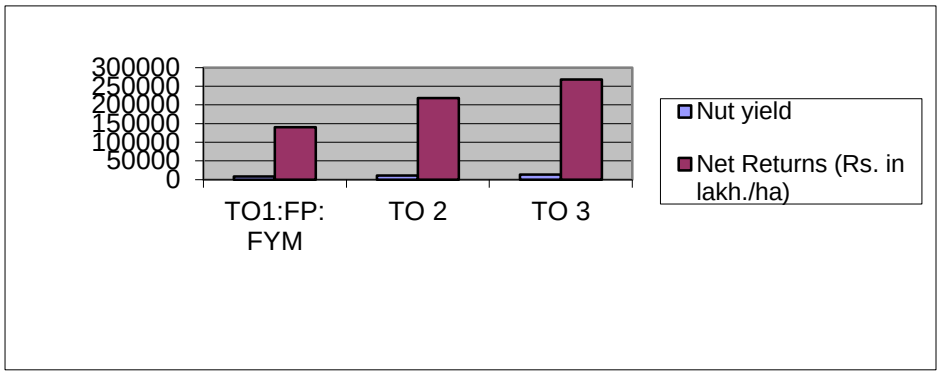
7. Critical inputs given: (along with quantity as well as value)

Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Yellow sticky traps	10 nos	1000
Chrysopa zastrowi	400 nos	500
Encarsia guadeloupae	2 pkts	50
Isaria fumosorosea	2 kg	400
Field board	1	400

8. Results: Table: Performance of the Technology

Technology Option	No.of trials	Nut yield			Reduction of RSW & sooty mould incidence %
TO1:Farmers Practice: FYM	5	8043	140000	1.2	36
TO 2		11062	218400	1.6	17
TO 3		**13710**	268500	**1.9**	**10**

Description of the results: in addition you can use graphs also



9. Feed back of the farmers involved: Yellow sticky traps attract more adults

10. Feed back to the scientist who developed the technology: Predator of *Chrysopa zastrowi* reduces nymph population whitefly.

OFT 8

1. **Thematic area** : Value Addition
2. **Title** : Alternative Natural Sweetner for Bakery Products
3. **Scientists involved** : Subject Matter Specialist (Home Science)
4. **Details of farming situation** : -
5. **Problem definition / Description***: High consumption of sugar leads to High incidence of non communicable diseases.*

Sugar is an essential and mostly commonly used ingredient in the Indian cuisines, mostly all the people in India consume sugar at least once in their daily meals. There are different varieties of sugar available in our country i.e.Palm Sugar, Jaggery, White Sugar etc.,

Technology Assessed

TO1 – Palm sugar (Centre for Post Harvest Technology, TNAU, 2017)

Palm sugar has been used as a traditional sweetener for thousands of years in Asia. It is now gaining popularity globally because of its natural, minimal processed and healthy. One of the major health claims is its glycemic index (GI). In view of the above point Centre for Post Harvest Technology, TNAU, 2017 has incorporated Palm sugar in bakery products for prevention of degernativer disorders.

TO2 – Jaggery (IIFPT, 2014)

Gur (Jaggery) is a natural, traditional sweetener made by the concentration of sugarcane juice and is known all over the world in different local names It is a traditional unrefined non-centrifugal sugar consumed in Asia, Africa, Latin America and the Caribbean. Containing all the minerals and vitamins present in sugarcane juice, it is known as healthiest sugar in the world. India is the largest producer and consumer of jaggery. Out of total world production, more than 70% is produced in India.

The special feature of the technology is

Rich in mineral salts, Easy to digest, Develops unique taste as sweetener,Treats throat and lung infections, Easily dissolved and balances the deficiency of sugar level, Sulphur less Organic Composition, a best to suite as preferred health alternative.

Being rich in vitamins and minerals, Jaggery was added in the bakery products i.e.Millet Cookies to improve the nutritional values of the products and also for a healthy life.

TO3: Farmers Practice (White Sugar)

Farmers are getting white sugar in the ration shop at low cost.

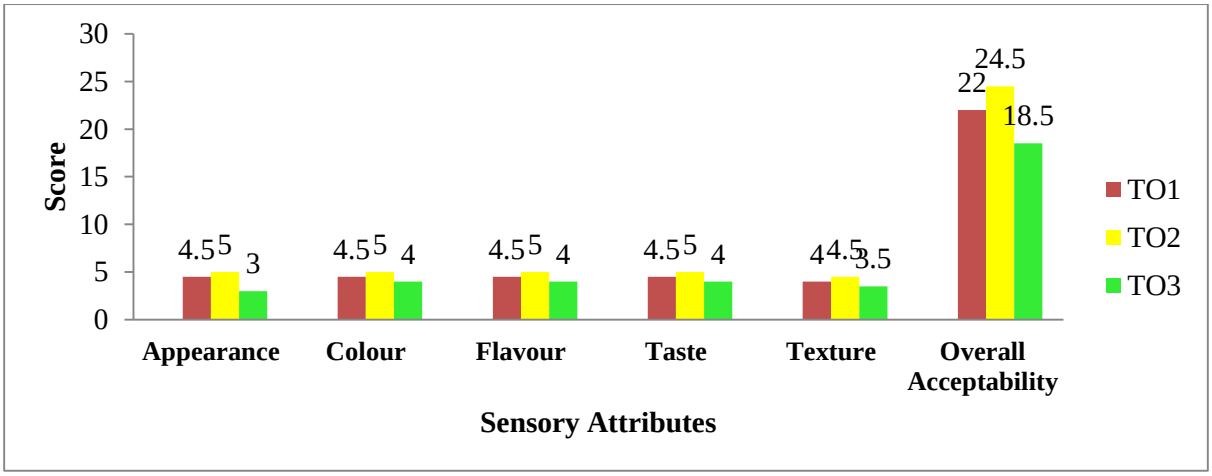
6. Critical inputs given: (along with quantity as well as value)

Details of inputs	***Total cost involved (Rs.)***
Raw materials (Jaggery, Palm sugar, White Sugar)	*1000*
Packaging materials	*500*
Total	***1500***

Organoleptic Evaluation

Particulars	Appearance (5)	Colour (5)	Flavour (5)	Taste (5)	Texture (5)	Overall Acceptability (25)
TO1	4.5	4.5	4.5	4.5	4	22.0
TO2	**5**	**5**	**5**	**5**	**4.5**	**24.5**
TO3	3	4	4	4	3.5	18.5

Excellent: 5, Very Good: 4, Good:4, Fair:1, Not Accepted:1



Organoleptic qualities play an important role in evaluating the quality of food products. A total of three types of natural sugars namely ground Palm, Jaggery and White sugar were used in the preparation of millet cookies. A numerical score card was used to measure the acceptability in terms of appearance, colour, flaovour, taste and texture with five scores for each criteria. Semi trained panel members in the age group of 20 -30 years evaluating the recipes. These scores given were excellent (5), very good (4), good (3), fair (2) and poor (1). The acceptability score was 25. For comparison purposes farmer practice i.e white sugar was used in preparation of millet cookies.

The acceptability trials of TO1, TO2 and TO3 obtained a mean score in the range of 3.0-5 out of 5. When compared to the farmers practice jaggery used millet cookies were highly acceptable in terms of appearance, colour, flavour, taste and texture and secured higher score.

The results indicated that the overall acceptability of different natural sweetner obtained a mean score in the range of 18.5 – 24.5 out of 25. The acceptability trials of different natural sweetner in comparison to the farmers practices, proved that TO2 ranked higher and was more acceptable by the semi trained panel members. The recipes would not only add taste and colour, but also provide important nutrient of iron to the human body. It can help to allivate malnutrition among children.

From the foregoing trails, it may be concluded that the TO2 possess high nutrient and also more acceptable. It is evident in terms of micronutrient especially rich in Iron.

9. Feed back of the farmers involved:

Farmwomen were very happy to adopt the technology and also they are using jaggery in their home. They are planning to develop the product in large scale level in the coming years.

Lack of machineries to develop value added products in large scale.

10. Feed back to the scientist who developed the technology:

Jaggery used products can be recommended to supplement in all the Anganwadi Centers to improve health and nutrition status of the children.

3.d. FRONTLINE DEMONSTRATION

a. Follow-up of FLDs implemented during previous years

S. No	Crop/Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Paddy	ICM	Demonstration of CO 51 Paddy variety	Training, FFS, Method demonstration, Scientist visit, Field day.	1	10	4
2	Maize	ICM	Demonstration of CO HM 6 Maize hybrid with ICM	Training, FFS, Method demonstration, Scientist visit, Field day.	1	10	4
3	Cumbu	Varietal introduction	Demonstration of CO 10 Cumby variety	Training, FFS, Method demonstration, Scientist visit, Field day.	1	10	4
4	Samai	Varietal introduction	Demonstration of CO 4 samai variety	Training, FFS, Method demonstration, Scientist visit, Field day.	1	10	4
5	Sorghum	Varietal introduction	Demonstration of K 12 Sorghum variety	Training, FFS, Method demonstration, Scientist visit, Field day and seed production	1	10	4

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

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

Sl.No.	Crop	Thematic area	Technology Demonstrated	Season and year	Source of funds	Area (ha)		No. of farmers/demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	Paddy	Varietal introducti	Demonstration of VGD	Kharif	ICAR	4	4	3	7	10	

		on	1 Paddy variety	2019							
2	Paddy	Varietal introduction	Demonstration of ADT 53 Paddy variety	Rabi 2019 - 2020	ICAR	4	4	4	6	10	
3	Castor	Varietal introduction	Demonstration of YTP 1 castor variety	Kharif 2019	ICAR	4	4	0	10	10	
4	Cowpea	Varietal introduction	Demonstration of VBN 3 Cowpea variety	Rabi 2019 - 2020	ICAR	4	4	0	10	10	
5	Tomato	INM	Demonstration on INM practices by foliar nutrition for enhancement of yield in Tomato	Kharif 2019	ICAR	4	4	2	8	10	
6	Chilli	INM	Demonstration foliar nutrition of IIHR Vegetable special for enhancement of yield in Chilli	Rabi 2019	ICAR	4	4	0	10	10	
7	Grapes	ICM	Demonstration on Double pruning and single harvest in seedless Grape.	Kharif 2019	ICAR	4	4	2	8	10	
8	Moringa	ICM	Demonstration on off season production of Moringa in Theni District.	Kharif 2019	ICAR	4	4	0	10	10	

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Paddy	Kharif 2019	Irrigated	Clay loam	291	11.74	169	Black gram	8.8.2019	30.12.2019	384	16
Paddy	Rabi 2019-2020	Irrigated	Clay loam	284	9.34	167	Paddy	25.11.2019	29.2.2020	294	13

Castor	Kharif 2019	Rainfed	Red loamy soil	164	13.45	169	Cotton	9.8.2019	7.2.2020	684	23
Cowpea	Rabi 2019-202.0	Rainfed	Black clay loam	274	9.54	169	Cotton	24.10.2020	6.1.2020	345	15
Tomato	Kharif	Irrigated	Red loamy soil	235	12.5	159	Tomato	06.06.2019	16.10.2019	290	6
Chilli	Rabi	Irrigated	Red loamy soil	242	13.5	165	Onion	17.12.2019	22.04.2019	185	4
Grapes	Kharif	Irrigated	Clay loam	275	6.25	147	Grapes	20.06.2019	23.10.2019	275	8
Moringa	Kharif	Irrigated	Red loamy soil	264	10.25	165	moringa	12.06.2019	07.10.2019	190	4

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1. Paddy	Cultivation of VGD 1 Paddy variety gives high net return due to higher market preference of the variety. This characteristics are Similar to seeragasamba , highly suitable for Briyani making. Demonstration of seed treatment with pseudomonas decreases the disease incidence.
2. Paddy	Short duration in nature helped to avoid water shortage in second paddy crop in the cluster village. Lodging was reduced as compared to other variety. Incidence of Yellow stem borer and lakshmi diseases was reduced. High market reference due to medium slender in nature.
3. Castor	Higher yield 1460 kg/ha. Higher branching variety. Bold seeded as compare to farmers practice. Highly preferred for bund cropping for cotton and pulses. Also give good income in intercropping with short duration pulses.
4. Cowpea	VBN 3 gives higher yield as compared to previous varieties cultivated by farmers. Incidence of yellow mosaic virus is low. Application of pulses wonder reduces the flower shedding and increase the number of pods per plant. Incidence of wilt disease was noticed in heavy textured soil during north monsoon period.
5. Tomato	The application of pseudomonas fluorescence reduced the disease incidence (fusarial wilt diseases). Foliar application of 19:19:19 and micronutrient mixture @1g / lit (0.1%) during 40th and 80th days after planting were induces the flowering and increased the fruit yield.
6. Chilli	The foliar application of 0.3 % IIHR vegetable special during 60 and 100 days after planting was increased the fruit yield and reduces the flower drop. Also, it enhanced the fruit quality such as fruit appearance, fruit keeping quality and odor.
7. Grapes	The major problem of seedless grape cultivation is Fruit cracking during rainy season and TSS content reduced due to triple harvests per year in an area of 250 ha among 120 farmers. Finally, we suggest that the Foundation pruning done by the month of February and followed Fruit pruning done by July month of every year in the Theni district of TamilNadu.
8. Moringa	The pods are available in a very meager number during November to February owing to the season which coincides with heavy rainfall, low temperature which leads to the drop in flowers leading to poor pod set which is considered to be the off season period of the year. FYM 10 kg /tree along with 100 g urea, 100 g super phosphate and 50 g of muriate of potash is given per tree and irrigated, July month pruned trees along with application of potassium nitrate 0.5%.

Farmers' reactions on specific technologies

S. No	Feed Back
1 Paddy	Higher yield and higher market preference
2 Paddy	High yield and short duration and non lodging
3. Castor	Perform well under the bund cropping system
4. Cowpea	Higher yield and incidence of yellow mosaic virus reduced.

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	15	30.12.2019, 29.2.2020, 7.2.2020, 6.1.2020, 23.10.2019, 07.10.2019, 06.06.2019	371	
2	Farmers Training	18	30.12.2019, 29.2.2020, 7.2.2020, 6.1.2020, 23.10.2019, 07.10.2019, 06.06.2019	281	
3	Media coverage			-	
4	Training for extension functionaries				

Performance of Frontline demonstrations

Frontline demonstrations on crops

Crop	Thematic Area	technology demonstrated	Name of the Variety/ Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
Pulses	Varietal introduction	Demonstration of VBn 3 Cowpea	VBN 3	Local	10	4	10.45	7.95	9.40	7.17	31	17600	46060	28460	2.62	16860	34416	17556	2.04
Oilseeds	Castor	Demonstration of YTP 1 Castor variety	YTP 1	Local	10	4	16.75	11.61	14.53	11.53	28	27650	89731	62081	3.25	24510	62262	37752	2.54
Cereals	Paddy	Demonstration of VGD 1 Paddy variety	VGD 1	Sowbagya	10	4	66.81	59.60	63.8	56.4	13	54610	138823	84213	2.54	46510	96020	49510	2.06
	Paddy	Demonstration of ADT 53 Paddy variety	ADT 53	Goraknath 509	10	4	71.54	58.60	66.21	57.23	16	51460	125799	74339	2.44	48250	97291	49041	2.02
Commercial crops																			
Millets																			
Vegetables																			

Crop	Thematic Area	technology demonstrated	Name of the Variety/ Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
Moringa	ICM	Demonstration on off season production of Moringa in Theni District.	PKM-1	PKM-1	10	4	364	325	341.5	275	24.2	175000	580550	405550	3.32	155000	357500	202500	2.31
Tomato	INM	Demonstration on INM practices by foliar nutrition for enhancement of yield in Tomato	10	1	10	4	34.1	26.5	29.9	24.6	21.4	142500	418040	275540	2.93	132600	295200	162600	2.23
Chilli	INM	Demonstration foliar nutrition of IIHR Vegetable special for enhancement of yield in Chilli	10	1	10	4	24.2	20.5	22.5	17.5	28.6	167400	382670	215270	2.29	146500	262500	116000	1.79
Onion	IPM	Demonstration of IPDM strategies in Onion	10	1	10	4	400	350	375	350	30	142000	675000	533000	4.75	153000	364000	211000	2.35
Tomato	IDM	Demonstration on IPDM Package for managing Spotted wilt disease	10	1	10	4	223	330	276	330	37	51650	118845	61195	2.46	48250	100710	52430	2.08
Fruits																			

Crop	Thematic Area	technology demonstrated	Name of the Variety/ Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										
Grapes	ICM	Demonstration on Double pruning and single harvest in seedless Grape.	Seedless grapes	Muscat	10	4	252	225	241	205	17.50	475000	1445400	970400	3.04	425000	1107000	682000	2.60
Banana	IDM	Demonstration of IDM practices for management of Panama wilt disease	10	1	10	4	1070	920	995	820	35	223500	1125100	901600	5.03	223500	973000	749500	4.35
Plantation crops																			
Spices and condiments																			
Flowers																			
Jasmine	IPM	Demonstration of budworm management in Jasmine	10	1	10	4	8010	7020	7515	6217	25	200000	700376	536421	2.5	150000	2500000	100000	1.66

Crop	Thematic Area	technology demonstrated	Name of the Variety/ Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							High	Low	Average										

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

** BCR= GROSS RETURN/GROSS COST

FLD on Livestock

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

Goat																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

Category	**Thematic area**	**Name of the technology demonstrated**	**No. of Farmer**	**No.of units**	**Major parameters**		**% change in major parameter**	**Other parameter**		**Economics of demonstration (Rs.)**				**Economics of check (Rs.)**			
					Demonstration	**Check**		**Demonstration**	**Check**	**Gross Cost**	**Gross Return**	**Net Return**	**BCR (R/C)**	**Gross Cost**	**Gross Return**	**Net Return**	**BCR (R/C)**

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Price per kg of mango		% change in major parameter	Self life		Economics of demonstration (Rs.) or Rs./1000 kg mango				Economics of check (Rs.) or Rs./Mango			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Value addition	Development of Value Added Product AMCHUR (Mango Powder) from unripe Mango for income generation (1000 kg)	10	1	49	15	166.67	6 months	5 days	23700	49000	25300	2.06	15000	20000	5000	1.33
Vermi Compost																

FLD on Women Empowerment

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

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing /Planting	Harvesting	Total	Land preparation	Sowing /planting	Harvesting/harvesting	Total
Bhendi ring cutter	Bhendi	Demonstration of Bhendi ring cutter	10	1	Manday/ha BCR	0.125 1:2.41	0.08 1:1.84	56			4	4			800	800
Vegetable seedling transplanter	Farm mechanization	Demonstration of vegetable seedling transplanter	10	1	Manday/ha BCR	0.1	0.0625	60		6		6		1800		1800

Bhendi Feed Back from farmers: Easy to operate, no scratches, less time required to harvest

Vegetable Seedling Transplanter Feed Back from farmers: Reduces labour cost, Time saving, easy to implement espeically for tomato, brijal saplings

FLD on Other Enterprise: nutritional garden

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg) / 5 cent		% change in yield	yield		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Vegetables	Nutri Garden	Nutrition Garden in Anganwadi Workers	5	5	56	10	460.00			800	3360	2560	4.2	250	600	350	2.4

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

FLD on Demonstration details on crop hybrids *(Details of Hybrid FLDs implemented during 2019-20)*

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

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

Crop	Source of fund	Thematic Area	technology demonstrated	Name of the Variety/ Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
				Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
								High	Low	Average										
Kharif																				
Green gram	ICAR	ICM	CO 8 with ICM	VBN 2	CO 8	25	10	8.4	7.0	7.7	6.2	24	17410	51783	34373	2.97	13547	29674	16127	2.19
Black gram	ICAR	ICM	VBN 8 with ICM	T 9	VBN 8	25	10	8.6	6.8	7.7	7.5	2.6	15989	48360	32371	2.02	16297	670800	50783	3.11
Redgram	ICAR	ICM	CO 7 with ICM	Local variety (Vella thuvarai)	Co 7	50	20	9.2	7.9	8.6	6.7	28	25640	59340	33700	2031	26100	46230	20130	1.77
Groundnut	ICAR	ICM	CO 6 with ICM	JL 22	CO 6	25	10	26.61	19.21	22.34	16.5	35	28654	91776	63121	3.2	27626	62904	35642	2.3
Sesame	ICAR	ICM	TMV 7 ICM	TMV 3	TMV 7	25	10	7.8	6.25	7.02	6.27	12	26122	61774	35652	2.36	24330	46594	22264	1.91
Rabi																				
Green gram	ICAR	ICM	CO 8 with ICM	Local varietyt	CO 8	25	10	7.7	8.6	8.3	6.2	34	19400	45650	26250	2.35	21300	42250	20950	1.98
Blackgram	ICAR	ICM	VBN 4 ICM	Local variety	VBN 4	25	10	9.2	8.4	8.8	6.2	42	23500	57720	34220	2.46	21300	42250	20950	1.90
Groundnut	ICAR	ICM	Kidiri 9 with ICM	JL 22	Kidiri 9	25	10	26.61	19.17	22.04	16.57	33	28067	80867	52800	2.88	27500	62996	35496	2.29
Sesame	ICAR	ICM	TMV 7 with ICM	TMV 3	TMV 7	25	10	7.9	6.0	6.95	5.2	34	18841	45904	27363	2.4	19845	42660	22815	2.1

FLD on Livestock

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

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

FLD on Other enterprises

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

FLD on Women Empowerment

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

FLD on Farm Implements and Machinery

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

4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	1	15	0	15	4	0	4	19	0	19
Resource Conservation Technologies	1	31	0	31	0	0	0	31	0	31
Cropping Systems	1	9	2	11	0	3	3	9	5	14
Crop Diversification										0
Integrated Farming	1	5	11	16	4	2	6	9	13	22
Micro Irrigation/irrigation	2	13	4	17	5	2	7	18	6	24
Seed production	1	15	0	15	0	0	0	15	0	15
Nursery management										0
Integrated Crop Management	1	18	17	35	0	0	0	18	17	35
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)	1	15	0	15	0	0	0	15	0	15
Total	**9**	**121**	**34**	**155**	**13**	**7**	**20**	**134**	**41**	**175**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	1	16	6	22	0	0	0	16	6	22
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	14	9	23	0	0	0	14	9	23
Others (pl specify)										
Total (a)	2	30	15	45	0	0	0	30	15	45
b) Fruits										
Training and Pruning	1	13	6	19	2	0	2	15	6	21
Layout and										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Management of Orchards										
Cultivation of Fruit	1	16	5	21	0	0	0	16	5	21
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	2	29	11	40	2	0	2	31	11	42
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology	1	16	4	21	3	1	4	20	5	24
Processing and value addition										
Others (pl specify)										
Total (d)	1	16	4	21	3	1	4	20	5	24
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	5	75	30	106	5	1	6	81	31	111
III Soil Health and Fertility Management										
Soil fertility management	1	19	3	22	0	0	0	19	3	22
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	15	4	19	2	0	2	17	4	21
Production and use of organic inputs	1	17	4	21	0	0	0	17	4	21
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	1	12	4	16		0	0	12	4	16
Balance use of fertilizers	1	35	7	42		0	0	35	7	42
Soil and Water Testing	1	15	5	20	8	0	8	23	5	28
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	6	113	27	140	10	0	10	123	27	150
IV Livestock Production and Management										
Dairy Management										
Poultry										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	18	18	0	9	9	0	27	27
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	4	5	9	0	13	13	4	18	22
Women empowerment										
Location specific drudgery reduction technologies										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Rural Crafts	2	9	10	19	0	1	1	9	11	20
Women and child care										
Others (pl specify)										
Total	**4**	**13**	**33**	**46**	**0**	**23**	**23**	**13**	**56**	**69**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	2	30	4	34	5	2	7	35	6	41
Integrated Disease Management	1	19	2	21	3	4	7	22	6	28
Bio-control of pests and diseases	2	17	7	24	0	1	1	17	8	25
Production of bio control agents and bio pesticides	1	14	0	14	1	3	4	15	3	18
Others (pl specify)										
Total	**6**	**80**	**13**	**93**	**9**	**10**	**19**	**89**	**23**	**112**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**30**	**402**	**137**	**540**	**37**	**41**	**78**	**440**	**178**	**617**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	1	12	14	**26**	0	0	**0**	12	14	26
Resource Conservation Technologies										
Cropping Systems										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Diversification	1	17	5	**22**	4	2	**6**	21	7	28
Integrated Farming				**0**			**0**	0	0	0
Micro Irrigation/irrigation	1	25	0	**25**	0	0	**0**	25	0	25
Seed production										0
Nursery management										0
Integrated Crop Management										0
Soil & water conservatioin										0
Integrated nutrient management										0
Production of organic inputs										
Others (pl specify)	2	51	0	**51**	10	0	**10**	61	0	61
Total	5	105	19	**124**	14	2	**16**	119	21	140
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	2	37	12	49	5	0	5	42	12	54
Exotic vegetables				0			0	0	0	0
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	15	8	23	0	0	0	15	8	23
Others (pl specify)										
Total (a)	**3**	**52**	**20**	**72**	**5**	**0**	**5**	**57**	**20**	**77**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit	3	48	14	62	7	0	7	55	14	69
Management of young plants/orchards										
Rejuvenation of old orchards										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Export potential fruits										
Micro irrigation systems of orchards	1	25	4	29	5	0	5	30	4	34
Plant propagation techniques										
Others (pl specify)										
Total (b)	**4**	**73**	**18**	**91**	**12**	**0**	**12**	**85**	**18**	**103**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology	1	27	8	35	6	0	6	33	8	41
Processing and value addition	1	24	7	31	0	0	0	24	7	31
Others (pl specify)										
Total (d)	**2**	**51**	**15**	**66**	**6**	**0**	**6**	**57**	**15**	**72**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	**9**	**176**	**53**	**229**	**23**	**0**	**23**	**199**	**53**	**252**
III Soil Health and Fertility Management										
Soil fertility management	1	15	3	29	0	0	0	25	4	29
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	12	5	26	0	0	0	22	4	26
Production and use of organic inputs	1	18	4	18	0	0	0	15	3	18
Management of Problematic soils	1	11	7	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	1	15	4	17	0	0	0	12	5	17
Nutrient Use Efficiency	1	15	3	22	0	0	0	18	4	22
Balance use of fertilizers				18	0	0	0	11	7	18
Soil and Water Testing	1	12	5	19	12	0	12	27	4	31
Others (pl specify)										
Total	**7**	**118**	**31**	**149**	**12**	**0**	**12**	**130**	**31**	**161**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	1	14	15	1	14	15
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	1	38	14	52	12	2	14	50	16	66
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	5	14	23	37	4	50	54	18	73	91
Women empowerment										
Location specific drudgery reduction technologies	1	5	13	18	0	0	0	5	13	18
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	**8**	**57**	**50**	**107**	**17**	**66**	**83**	**74**	**116**	**190**
VI Agril. Engineering										
Farm Machinary										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	2	23	7	30	2	1	3	25	8	33
Integrated Disease Management	1	19	6	25	1	3	4	20	9	29
Bio-control of pests and diseases	1	17	3	20	3	2	5	20	5	25
Production of bio control agents and bio pesticides	1	14	2	16	1	0	1	15	2	17
Others (pl specify)										
Total	**5**	**73**	**18**	**91**	**7**	**6**	**13**	**80**	**24**	**104**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**34**	**529**	**171**	**700**	**73**	**74**	**147**	**602**	**245**	**847**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	2	27	14	41	4	0	4	31	14	45
Resource Conservation Technologies	1	31	0	31	0	0	0	31	0	31
Cropping Systems	1	9	2	11	0	3	3	9	5	14
Crop Diversification	1	17	5	22	4	2	6	21	7	28
Integrated Farming	1	5	11	16	4	2	6	9	13	22
Micro Irrigation/irrigation	3	38	4	42	5	2	7	43	6	49
Seed production	1	15	0	15	0	0	0	15	0	15
Nursery management	0	0	0	0	0	0	0	0	0	0

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated Crop Management	1	18	17	35	0	0	0	18	17	35
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	3	66	0	66	10	0	10	76	0	76
Total	**14**	**226**	**53**	**279**	**27**	**9**	**36**	**253**	**62**	**315**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	3	53	18	71	5	0	5	58	18	76
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	2	29	17	46	0	0	0	29	17	46
Others (pl specify)										
Total (a)	**5**	**82**	**35**	**117**	**5**	**0**	**5**	**87**	**35**	**122**
b) Fruits										
Training and Pruning	1	13	6	19	2	0	2	15	6	21
Layout and Management of Orchards										
Cultivation of Fruit	4	64	19	83	7	0	7	71	19	90
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards	1	25	4	29	5	0	5	30	4	34
Plant propagation techniques										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl specify)										
Total (b)	**6**	**102**	**29**	**131**	**14**	**0**	**14**	**116**	**29**	**145**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**13**	**231**	**58**	**289**	**22**	**0**	**22**	**253**	**58**	**311**
d) Plantation crops										
Production and Management technology	1	16	4	21	3	1	4	20	5	24
Processing and value addition	1	24	7	31	0	0	0	24	7	31
Others (pl specify)										
Total (d)	**3**	**67**	**19**	**87**	**9**	**1**	**10**	**77**	**20**	**96**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	**14**	**251**	**83**	**335**	**28**	**1**	**29**	**280**	**84**	**363**
III Soil Health and Fertility Management										
Soil fertility management	2	34	6	51	0	0	0	44	7	51
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	2	27	9	45	2	0	2	39	8	47
Production and use of organic inputs	2	35	8	39	0	0	0	32	7	39
Management of Problematic soils	1	11	7	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	1	15	4	17	0	0	0	12	5	17
Nutrient Use Efficiency	2	27	7	38	0	0	0	30	8	38
Balance use of fertilizers	1	35	7	60	0	0	0	46	14	60
Soil and Water Testing	2	27	10	39	20	0	20	50	9	59
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**13**	**211**	**58**	**289**	**22**	**0**	**22**	**253**	**58**	**311**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Total										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	0	18	18	1	23	24	1	41	42
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	1	38	14	52	12	2	14	50.	16	66
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	6	18	28	46	4	63	67	22	91	113
Women empowerment										
Location specific drudgery reduction technologies	1	5	13	18	0	0	0	5	13	18
Rural Crafts										
Women and child care	2	9	10	19	0	1	1	9	11	20
Others (pl specify)										
Total	**12**	**70**	**83**	**153**	**17**	**89**	**106**	**87**	**172**	**259**
VI Agril. Engineering										
Farm Machinary and its maintenance										
Installation and maintenance of micro irrigation systems										
Use of Plastics in										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology										
Others (pl specify)										
Total										
VII Plant Protection										
Integrated Pest Management	4	53	11	64	7	3	10	60	14	74
Integrated Disease Management	2	38	8	46	4	7	11	42	15	57
Bio-control of pests and diseases	3	34	10	44	3	3	6	37	13	50
Production of bio control agents and bio pesticides	2	28	2	30	2	3	5	30	5	35
Others (pl specify)										
Total	**11**	**153**	**31**	**184**	**16**	**16**	**32**	**169**	**47**	**216**
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	**64**	**931**	**308**	**1240**	**110**	**115**	**225**	**1042**	**423**	**1464**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production	1	12	5	17	3	0	3	15	5	20
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	1	17	6	23	1	1	2	18	7	25
Bee-keeping	2	27	9	36	3	1	4	30	10	40
Sericulture	1	14	3	17	1	2	3	15	5	20
Repair and maintenance of farm										

machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**5**	**70**	**23**	**93**	**8**	**4**	**12**	**78**	**27**	**105**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production	1	11	14	25	1	0	1	14	14	28
Bee-keeping	1	20	13	33	3	1	4	23	14	37

Sericulture	1	16	10	26	2	3	5	18	13	31
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**3**	**47**	**37**	**84**	**6**	**4**	**10**	**55**	**41**	**96**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production	1	12	5	17	3	0	3	15	5	20
Production of organic inputs										

Planting material production										
Vermi-culture										
Mushroom Production	2	28	20	48	2	1	3	32	21	53
Bee-keeping	3	47	22	69	6	2	8	53	24	77
Sericulture	2	30	19	49	3	5	8	33	18	51
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**8**	**117**	**66**	**183**	**14**	**8**	**22**	**133**	**68**	**201**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Productivity enhancement in field crops	1	20	5	**25**	**0**	**0**	**0**	**20**	**5**	**25**
Integrated Pest Management	1	17	5	**22**	**5**	**1**	**6**	**22**	**6**	**28**
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										

Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Agri Nutri Garden, Nutri Thali and Biofortied Varieties for Anganwadi workers	1	5	55	60	0	12	12	5	67	72
TOTAL	**3**	**42**	**65**	**107**	**5**	**13**	**18**	**47**	**78**	**125**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops										
Integrated Pest Management	1	14	3	17	1	2	3	15	5	20
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL	1	14	3	17	1	2	3	15	5	20

Training programmes for Extension Personnel including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	20	5	**25**	**0**	**0**	**0**	**20**	**5**	**25**
Integrated Pest Management	**2**	**31**	**8**	**39**	**6**	**3**	**9**	**37**	**11**	
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Agri Nutri Garden, Nutri Thali and Biofortied Varieties for Anganwadi workers	1	5	55	60	0	12	12	5	67	72
TOTAL	4	56	68	124	6	15	21	62	83	97

Table. Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops										
Commercial production of vegetables										
Production and value addition										
Fruit Plants										

Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Bee Keeping	1	8	2	10	14	4	18	22	6	28
Total	1	8	2	10	14	4	18	22	6	28
Post harvest technology and value addition										
Processing and value addition	1	21	1	22	3	4	7	24	5	29
Spirulina value addition	2	0	37	37	0	13	13	0	50	50
Others (pl. specify)										
Total	**3**	**21**	**38**	**59**	**3**	**17**	**20**	**24**	**55**	**79**
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management										
Animal Nutrition Management										
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total										
Home Science										
Household nutritional security										
Economic empowerment of women										
Drudgery Reduction of Women	2	20	12	32	2	6	8	22	18	40
Others (pl. specify)										
Total	2	20	12	32	2	6	8	22	18	40
Agricultural Extension										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
Total										
GRAND TOTAL	**6**	**49**	**52**	**101**	**19**	**27**	**46**	**68**	**79**	**147**

Name of sponsoring agencies involved: NABARD, Chennai

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology and value addition										
Value addition	1	13	14	27	0	3	3	13	17	30
Others (pl. specify)										
Total	1	13	14	27	0	3	3	13	17	30
Livestock and fisheries										
Dairy farming										
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Others (pl. specify)										
Total										
Income generation activities										
Vermicomposting										
Production of bio-agents, bio-pesticides,										
bio-fertilizers etc.										
Repair and maintenance of farm machinery										
and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching, embroidery, dying etc.										
Agril. para-workers, para-vet training										
Others (pl. specify)										
Total										
Agricultural Extension										

Capacity building and group dynamics										
Others (pl. specify)										
Total										
Grand Total	1	13	14	27	0	3	3	13	17	30

5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	37	49	7	93
Diagnostic visits	63	241	97	401
Field Day	21	450	67	538
Group discussions	15	774	42	831
KisanGhosthi	4	147	10	161
Film Show	3	625	46	674
Self -help groups	2	25	0	27
KisanMela	2	1200	67	1269
Exhibition	11	790	120	921
Scientists' visit to farmers field	41	194	17	252
Plant/animal health camps	3	217	15	235
Farm Science Club	7	140	0	147
Ex-trainees Sammelan				0
Farmers' seminar/workshop	2	141	17	160
Method Demonstrations	5	352	13	370
Celebration of important days	4	280	18	302
Special day celebration	1	300	5	306
Exposure visits	6	208	0	214
Field visit	245	536	0	781
Telephone enquiry	1205	1205	0	2410
Home visit	33	99	0	132
Lecture delivered	41	1985	67	2093
Total	**1751**	**9958**	**608**	**12317**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	8
Extension Literature	16
News paper coverage	37
Popular articles	7
Radio Talks	12
TV Talks	52
Animal health amps (Number of animals treated)	117
Research articles	4
Success stories recorded	7
Farmers visit to KVK	1520
Total	**1780**

Messages sent

MOBILE ADVISORY SERVICES THROUGH MKISAN PORTAL

(While filling mobile advisory data, only fill numbers under 'Type of messages'. Please don't add any text)
No of registered farmers: 2300

Types of	Type of messages													
Messages	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only	48	20410	0	0	3	57	0	0	0	0	0	0	51	20467
Voice only														
Voice & Text both														
Total Messages	48	20410	0	0	3	57	0	0	0	0	0	0	51	20467
Total farmers Benefitted	48	20410	0	0	3	57	0	0	0	0	0	0	51	20467

MOBILE ADVISORY SERVICES THROUGH OTHERS

(While filling mobile advisory data, only fill numbers under 'Type of messages'. Please don't add any text)
No of registered farmers: 2300

Types of	Type of messages													
Messages	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only	46	5400	0	0	0	0	0	0	56	9200	36	6700	138	21300
Voice only	0	0	0	0	0	0	0		0	0	15	750	15	750
Voice & Text both														
Total Messages	46	5400	0	0	0	0	0	0	56	9200	51	7450	153	220520
Total farmers Benefitted	46	5400	0	0	0	0	0	0	56	9200	51	7450	153	220520

6. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

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

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

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

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

Enterprise	Name of crop	Variety	Seed produced		Seed supplied to farmers						Seed supplied to other agencies	
					Free seed			Priced seed				
			Quantity (q)	Value (Rs)	Quantity (q)	No of farmers	Value (Rs)	Quantity (q)	No of farmers	Value (Rs)	Quantity (q)	Value (Rs)
CEREALS	Wheat											
	Paddy											
	Maize											
	Sorghum (Jowar/Cholam/Jonna)											
	Pearl Millet (Bajra/Cumbu/Sajja)	CO 10	4	16400	1.2	27	4920	2.2	38	9020	1.6	6560
	Finger millet (Ragi)											
	Foxtail Millet (Korra/Thenai)											
	Barnyard Millet (Kuthiraivali/Udalu, Kodisama)											
	Kodo Millet (Varagu/Arikelu)											
	Little Millet (Samai/Samalu)											
	Proso Millet (PaniVaragu/varriga)											
	Barley											
	Brown top millet											
	Total Cereals											
OIL SEEDS	Groundnut	CO 6	4.8	31200	4.8	12	31200	0	0	0	0	0
	Sunflower											

	Safflower											
	Sesame											
	Castor											
	Niger											
	Rapeseed & Mustard											
	Linseed											
	Soybean											
	Total Oil Seds	CO6	4.8	31200	4.8	12	31200	0	0	0	0	0
PULSES	Pigeon pea (Red Gram)											
	Chick pea (Bengal gram)											
	Green gram	CO8	2.5	20000	0	0	0	2.5	26	20000	0	0
	Black gram	VBN6	2.8	23240	0	0	0	2.8	38	23240	0	0
	Cowpea											
	Horse gram											
	Lentil											
	Rajma											
	Field pea											
	Total Pulses		**5.3**	**43240**	**0**	**0**	**0**	**5.3**	**64**	**43240**	**0**	**0**
VEGATABLES	Bhendi (Okra/Ladies finger)											
seeds	French bean											
	Radish											
	Onion											
	Chilli (Seeds)											
	Tomato (Seeds)											
	Brinjal (Seeds)											
	Gourds (snake, bottle, bitter, ribbed etc)											
	Pumpkin											
	Vegetable Pea											
	Total Vegetables											
FRUITS												
seeds												

	Total Fruits											
FLOWERS												
seeds												
	Total Flowers											
SPICES	Turmeric rhizome											
seeds	Coriander											
	Garlic											
	Fenugreek											
	Total Spices											
FODDER	Fodder Sorghum											
seeds	Fodder Cowpea											
	Desmanthus/Hedge lucerne											
	Lucerne											
	Stylo											
	Alfalfa											
	Berseem											
	Total Fodder											
Special Planting	Potato											
Materials	Small onion bulb											
(Quintals)	Sugarcane setts (if sold by weight)											
	Total special planting materials											
GREEN	Dhaincha											
MANURE	Sesbania											
seeds	Sunnhemp											

	Other Green manure seeds											
	Total Green Menure seeds											
COMMERCIAL	Cotton											
CROPS	Other Commercial Crop seeds											
seeds	Other Commercial Crop seeds											
	Total Commercial Crops											
	Grand Total of Seeds											

Production of planting materials by the KVKs (seedlings, cuttings. Slips in numbers)

Enterprise	**Name of crop**	**Variety**	**Planting material produced**		**Planting material supplied to farmers**						**Planting material supplied to other agencies**	
					Free supply			**Priced**				
			Quantity (Nos)	**Value (Rs)**	**Quantity (Nos)**	**No of farmers**	**Value (Rs)**	**Quantity (Nos)**	**No of farmers**	**Value (Rs)**	**Quantity (Nos)**	**Value (Rs)**
VEGATABLES	Brinjal seedlings											
	Chilli seedlings	K2	5000	5000	0	0	0	5000	2	5000	0	0
	Tomato seedlings	COTH3	10000	5000	0	0	0	10000	2	5000	0	0
	Cabbage seedlings											
	Cauliflower seedlings											
	Broccoli seedlings											
	Capsicum seedlings											
	Onion seedlings											
	Onion bulb (aggregatum)											
	Cucumber seedlings											
	Bottle gourd seedlings											
	Bitter gourd seedlings											

	Sponge gourd seedlings											
	Pumpkin seedlings											
	Knolkhole seedlings											
	Summer Squash seedlings											
	Marrow seedlings											
	Coccinia	Local	1000	10000	0	0	0	1000	4	10000	0	0
	Total Vegetable planting materials		**16000**	**20000**	**0**	**0**	**0**	**16000**	**8**	**20000**	**0**	**0**
FRUITS	Aonla											
grafts	Litchi											
seedlings and	Mango											
cuttings	Papaya seedlings											
	Guava											
	Jack fruit											
	Beal											
	Citrus											
	Lemon											
	Mausammi											
	Karonda											
	Pomegranate											
	Custard apple											
	Apple											
	Ber											
	Jamun											
	Pear											
	Peach											
	Kiwi											
	Apricot											
	Walnut											
	Banana succers											
	Banana seedlings											
	Total Fruit planting materials											
FLOWERS AND	Marigold											
ORNAMENTAL	Tube Rose (Rajnigandha)											
PLAN	Chrysanthmum											

TS												
seedlings and cuttings	Rose											
	Hibiscus (Gudhal)											
	Crotan plant											
	Calandula (Pot marigold)											
	Vervina											
	Pendula											
	Baugainvillia											
	Durenta Golden											
	Gladiolus											
	Harshingar											
	Glardia											
	Ficusbenajamina											
	Red erration											
	Poppy											
	Sweet William											
	Chirayata											
	Ashok											
	Total Flowers and Ornamental planting materials											
MEDICINAL	Lemon Grass											
AND	Aswagandha											
AROMATIC	Satawar											
PLANTS	Mahogani											
seedlings and cuttings	Turmeric											
	Total medicinal and aromatic											
FORESTRY	Poplar											
AND	Arjun											
PLANTATION	Siris											
CROPS	Catechu											

seedlings and cuttings	Chironji											
	Mahua											
	Karanj											
	Neem											
	Teak											
	Eucalyptus											
	Saguan											
	Samel											
	Casuarina											
	Coconut seedlings											
	Arecanut seedlings											
	Total forest and plantation crops											
FODDER slips	Napier grass											
	Para grass											
	Super Napier grass											
	Sudax Chery											
	Cumbu Napier grass (Co 3, Co 4, Co 5 etc)											
	Other fodder plants (Specify)											
	Total Fodder crops											
SPICES	Turmeric											
	Coriander											
	Garlic											
	Fenugreek											
	Other Fibre Crops (Specify - seed only)											
	Total Spices											
	Fodder Sorghum											
	Fodder Cowpea											
	Desmanthus/Hedge lucerne											
	Lucerne											
	Stylo											
	Alfalfa											
	Berseem											
	Other Fodder Seeds											
	Total Fodder											
GRE	Dhaincha											

EN												
MANURE	Sesbania											
	Sunnhemp											
	Other Green manure seeds											
	Total Green Menure seeds											
Special Planting	Mushroom spawn											
Materials	Sugarcane setts (If sold by Numbers)											
sold by numbers	Other seed materials (sold by numbers)											
	Total special planting materials											
Any other planting material sold by numbers	Paddy seedlings											
	Any other (specify)											
	Total Commercial Crops											
	Grand Total of Seeds		**16000**	**20000**	**0**	**0**	**0**	**16000**	**8**	**20000**	**0**	**0**

Production of Bio-Products

Category	**Name of the product**	**Commercial name (if any)**	**Bio-products produced**		**Bio-products supplied to farmers**						**bio-products supplied to other agencies**	
					Free distribution			**Priced**				
			Quantity (kg)	**Value (Rs)**	**Quantity (kgs)**	**No of farmers**	**Value (Rs)**	**Quantity (kgs)**	**No of farmers**	**Value (Rs)**	**Quantity (kgs)**	**Value (Rs)**
Bio-fertilizers	Rhyzobium											
	Azotobacter											
	Acetobacter											
	Azospirillum											

	BGA											
	Azolla											
	VAM											
	Phosphate solubilizers											
	Potassium Solubilizers											
	Sulphur Solubilizers											
	Waste decomposer											
	Bio composting culture											
	Other Effective Micro Organisms (Specify)											
	Total bio-fertilizers											
Bio-inputs	Panchagavya		60	18000	0	0	0	60	53	18000	0	0
	Vermicompost		**15000**	**75000**	**5000**	**2**	**25000**	**10000**	**8**	**50000**	**0**	**0**
	Earthworms for vermicompost											
	Compost											
	Other bio-inputs (specify)											
	Total bio-inputs		15060	93000	5000	2	25000	10060	61	68000	0	0
Bio-Pesticides for insect pests	*Beauveriabassiana*											
	Trichoderma viridi											
Fungal diseases	*Metarrhiziumanisoplae*											
Nematodes	*Psuedomonas*											
	EPN											
	Trichogramma (Unit)											
	Insect Parasitoids (Specify)											
	Insect Parasitoids (Specify)											

	Insect Parasitoids (Specify)											
	Insect Parasitoids (Specify)											
	Insect Parasitoids (Specify)											
	Neem Soap											
	Pongamia Soap											
	Botanicals (Specify)											
	Total bio-pesticides											
	Total bio-products											

Production of livestock materials

Category	**Name of the livestock/fish /feed**	**Variety/improved species name/ Commercial name (if any)**	**Production**		**Supplied to farmers**						**Supplied to other agencies**	
					Free distribution			**Priced**				
			Quantity (No)	**Value (Rs)**	**Quantity (No)**	**No of farmers**	**Value (Rs)**	**Quantity (No)**	**No of farmers**	**Value (Rs)**	**Quantity (No)**	**Value (Rs)**
Dairy cattle	Cow											
	Cow											
	Cow Calf											
	Cow Calf											
	Bufallo											
	Bufallo											
	Bufallo calf											
	Bufallo calf											
	Other diary cattle (Specify)											
	Total Dairy Cattle											
Goat and Sheep	Goat											
	Goat											
	Goat											
	Sheep											
	Sheep											
	Sheep											

	Lamb											
	Lamb											
	Other goat/sheep (Specify)											
	Total goat and sheep											
Poultry	Desi bird											
	Desi bird											
	Desi bird chicks											
	Desi bird chicks											
	Broiler											
	Layer											
	Dual purpose birds											
	Japanese Quail											
	Turkey											
	Emu											
	Ducks											
	Desi bird egg											
	Broiler hybrid egg											
	Layer egg (breeding)											
	Egg (Commercial)											
	Quail egg (breeding)											
	Quail egg (commercial)											
	Others under poultry (specify)											
	Total poultry											
PIGGERY	*Pigs adults*											
	Piglets											
	Pork											
	Others related to piggery)											
	Total Piggery											
FISHERY	Fingerlings of Fish type (specify)											
	Fish meat											

	(kg)											
	Total Fishery											
	Grand Total Livestock and fishery											

8. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples/ SHC	**No. of Samples**		**No. of Farmers**	**No. of Villages**	**Amount realized (Rs.)**
	Using Mini Soil Testing Lab	**Through Traditional Lab**			
Soil samples		**669**	**669**	**81**	37500
Soil Health Cards (SHC)		**669**	**669**	**81**	**37500**

Samples	**No.of Samples**	**No.of Farmers**	**No.of Villages**	**Amount realized (Rs.)**
Water	**230**	**230**	**46**	**2300**
Plant				
Manure				
Others (pl.specify)				
Total	**230**	**230**	**46**	**2300**

9. SCIENTIFIC ADVISORY COMMITTEE

Date of SAC meeting	**Number of members attended**
7.11.2019	38

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

10. PUBLICATIONS

Publications in journals

S. No	Authors	Year	Title	Journal
1	Maheshwaran, P., M. Arun Raj and K. Ragu	2019	Assessment of suitable Redgram (Cajanus cajan) variety for yield and yield characteristics in rainfed region of Theni district	Journal of Pharmacognosy and Phytochemistry
2	Maheshwaran, P., M. Arun Raj, K. Ragu	2020	Assessment of suitable Sugarcane variety for black cotton soils of Varaganadhi river basin area in Theni district	Journal of Pharmacognosy and Phytochemistry
3	Maheshwaran, P.,M Arun Raj, K Ragu	2019	Assessment of suitable castor hybrid for higher yield and yield characteristics in rainfed region of theni district	Journal of Pharmacognosy and Phytochemistry

4	Arun Raj, M., P Maheshwaran, M Vetrivel and S Vignesh	2019	Assessment of suitable salt resistant rice variety for saline soils of theni district	
5	Maheshwaran, P and M. Arun Raj	2019	Nilayana varumanathirkum velan kadugal varappu	Krishi Jagran
6	Maheshwaran, P and M. Arun Raj	2019	Varumanam tharum velan kaadugal	Pachai bhoomi
7	Arun Raj, M and P Maheshwaran	2019	Mundhiriyil orpathithiranai athikarikka nerukku nadavu murai	Agridoctor
8	Arun Raj, M and P Maheshwaran	2019	Thennaiku ootasathu tonic	Agridoctor
9	Arun Raj, M and P Maheshwaran	2019	Thakkaliyil nunuttasathu patrakurai arikurikalum athai sari seiyyum valimuraikalum	Agridoctor
10	Arun Raj, M and P Maheshwaran	2019	Karumbu thogaiyai payanpaduthi makkiya oram thayarithal	Agridoctor
11	Arun Raj, M and P Maheshwaran	2019	Nerpayiril orungkinandha ura melanmai	

Other publications

S.No	Item	Year	Authors	Title	Publisher
1	Books				
		2019	Dr.P.Patchaimal, K.Ragu, P.Maheswaran, and M.Ramya Siva selvi	Innovative farmers	KVK, Theni
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Sugarcane production technologies	KVK, Theni
		2019	Dr.P.Patchaimal, K.Ragu, P.Maheswaran,	Grapes Production technologies	KVK, Theni
2	Book chapters / manuals				
3	Training manuals	2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Production technologies of various crop and processing and value addition	KVK, Theni

4	Conference, proceeding papers, popular articles, Bulletins, Short communications	2019	Dr.S.Thirumuruga n and K Ragu and P.Maheswaran	Double pruning and single harvest in Seedless grapes	KVK, Theni
		2019	Dr.S.Thirumuruga n, and P.Maheswarna	Assessment of Suitable Sugarcane varieties for Theni District	KRISAT Tamil Conference, Madurai
5	Technical bulletin/ Folders				
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Water harvesting methods	KVK, Theni
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Cumbu production technologies	KVK, Theni
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Fall army worm management in Maize	KVK
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Soil samplae collection	KVK
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Value Added products from Millets	KVK
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga	Grapes production technologies	KVK

			n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi		
		2019	Dr.P.Patchaimal, Dr.S.Thirumuruga n K.Ragu, P.Maheswaran, M.Arunraj, V.Sumitha and M.Ramya Siva selvi	Sugarcane production technologies	KVK
6	Reports				
7	others				

Newsletter/Magazine

Name of News letter/Magazine	**Frequency**	**No. of Copies printed for distribution**
Velan ariviyal malar	Quarterly	800

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

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

Staff Name	Training Title	Duration	Institute Address	Major areas of knowledge gained	Programmes planned based on knowledge gained
Dr.S.Thirumurugan, Senior Scientist and Head	Management of Fall Army Worm (FAW) in Maize	1 Day (08.08.2019)	TNAU, Coimbatore	Fall Army Worm Management	Conducting FLD and Scientific Visits.
	Management of Nematodes in Horticultural crops	1 Day (09.08.2019)	TNAU, Coimbatore	Nematode management	Conducting FLD
	Sustainable Agro forestry	1 Day (06.06.2019)	FC & RI, Mettupalayam	Agroforestry	Training for Agro Forestry conducted
M.Ramya Siva Selvi SMS (Home Science)	7 th Expert committee Meeting for Curriculum Development	2 Days (13.12.2019 to 14.12.2019)	NIEPMD, Chennai,	Curriculum Development (CD)	-
	Women Empowerment and Child Marriage	1 day 28.11.2019	UNICEF & CRY	Ending Child Marriage	-
P.Maheswaran, SMS (Agronomy)	6 Post Harvest Processing & Crop production in Millets	5 days (06.01.2019 to 11.012019)	NIPHM	Crop production post harvest processing	Conducting FLD on Cumbu and Samai
Mr. M. Arun Raj	Pesticide Application Techniques and Safety measures	**5 days** (01.04.2019 to 05.04.2019)	National Institute of Plant Health Management (NIPHM), Rajendra Nagar, Hyderabad – 500 030.	Major Pesticide Application Techniques	Created awareness about pesticide application techniques and safety measures through various training programme

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

Activities conducted				
No. of Training programmes	**No. of Demonstration s**	**No. of plant materials produced**	**Visit by farmers (No.)**	**Visit by officials (No.)**
87	**13**		**12500**	**127**

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

Introduction of alternate crops/varieties

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

Major area coverage under alternate crops/varieties

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

Farmers-scientists interaction on livestock management

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

Animal health camps organised

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

Seed distribution in drought hit states

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

Large scale adoption of resource conservation technologies

Crops/cultivars and gist of resource conservation technologies	**Area**	**Number of**

introduced	**(ha)**	**farmers**
Total		

Awareness campaign

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

14. Awards/rewards by KVK and staff

Recognitions &Awards/Special attainments and Achievements of Practical Importance				
Recognitions & Awards (Team Award/individual				
Item of Recognition	Year		Awarding Organization National / International / Professional; Society	Individual/ collaborative
Special Attainments & Achievements of Practical Importance(patents, technologies, varieties, products, concepts, methodologies etc.)				
Category	Title	Year	Individual/ Collaborative	Additional Details/Information

14. Details of sponsored projects/programmes implemented by KVK

S.No	**Title of the programme / project**	**Sponsoring agency**	**Objectives**	**Duration**	**Amount (Rs)**

Please attach detailed report of each project/programme separately

15. Success stories

1. Profitable Rice production in Theni district

Water scarcity was a major problem, its availability being dictated by the monsoon in Karunkkamuthampatti cluster village Theni district. Lack of adoption of good agricultural practices reduces the productivity of Paddy. There was an urgent need to cultivate short duration Paddy variety for water scarcity season and implement the good agricultural practices for rice cultivation while enhancing productivity. CO 51 Paddy variety was shorter duration with 110 days duration with white medium slender grains. High milling capacity (69%) and Head rice recovery (63%) with intermediate amylase content (22%). CO 51 paddy has Average yield of 6623 kg/ha it is 11 % increase over ADT 43 with yield potential of 11377 in Tamil Nadu. This variety suitable for cultivation as Transplanted rice throughout Tamil Nadu except Nilgris District.

Plan, Implement and Support

KVK planned to implement FLD on CO 51 Paddy cultivation. As a part of FLD the following practices and methods are implemented

Integrated Crop Management Practices for higher Productivity

Split application of Urea

Application of excessive Nitrogenous fertilizers Particularly Urea leads to Plants are dark green in colour, Abundant foliage, Restricted root system, Flowering and seed setting may be retarded and attract the sucking pests. Application of Urea and other Nitrogenous fertilizers at three split doses. Application of 50 % of N at the time of Transplanting.Remaining first 25 % at time of active tillering stage and second 25 % at the time of Panicle emergence stage. This method helps increased the Nitrogen use efficiency and reduces the cost of fertilizers.

In other hands, Productivity of Paddy is reduced when leaf Nitrogen content < 2% at the time of tillering stage. Foliar application of Urea at 1 % at active tillering stage increase the No. of tillers per hills resulted from high tillering ability.

Pheromone traps for controlling Yellow Stem Borer.

Rice yellow stem borer is the major problem identified in paddy growers in Tamil Nadu. Appearance of Symptoms mostly at panicle emergence stage. In this stage unable to implement the control measures with 16 % yield losses. Pheromone traps installation at the rate of 5 No.s / Acre for monitoring the Yellow stem borer incidence in paddy from transplanting onwards. This method helps to farmers for manage the Yellow Stem borer from early Stages onwards.

Integrated Disease Management: In Tamil Nadu paddy growing areas yield loss due to incidence of Blast and Sheath Blight are the main diseases during Kharif and Rabi Season. Rice crops grown under irrigated conditions were inoculated with*Pyricularia oryzae* during early growth stages to study the effect of leaf blast on yield formation. The inoculations led to severe epidemics of leaf blast around maximum tillering, characterized by the presence of typical blast lesions and an accelerated senescence of heavily infested leaf tissue. Leaf blast led to a prolonged tillering and a delay in flowering and maturity. Crop growth rate and leaf area formation declined sharply during establishment of the disease and continued to be reduced till maturity. This resulted in a marked reduction of total dry matter production and grain yield. (Source: L. Bastiaans)IDM Practices which comprising seed treatment with Trichiderma at 10g/kg of seeds and Foliar application of Pseudomonas 5g/ litre of water at 15 Days After Transplanting and 15 days after first spray. It is control the Blast and Sheath blight in Paddy and reduces the indiscriminate application of fungicide.

PPFM (Methylobacteria) for Drought Mitigation

Theni district farmers are mainly depends on Mullai periyar River. After transplanting of paddy sometimes water deficit during 7-15 days. When water deficit occurs tillering stage leads to poor yield due low tillering capacity. For overcome this water demand ICAR KVK, Theni foliar application of PPFM at the ratio of 1000 mL/acre to reduce the evapotranspiration rate. It is not permanent measure against drought. It works 7-15 days water deficit only. It is also works as a plant growth regulator to increase the growth of Paddy.

Group approach for horizontal spread of the variety

The CO 51 variety was first introduced at Veerapandi village of Theni district. After successful yield gain from co 51, district scientific advisory committee recommended the CO 51 variety for kharif and Rabi season. In collaboration with ATMA, KVK conducted the farm school in paddy with Co 51. Seed material also produce at seed farm in Theni district. Totally 800 ha among 1200 farmers were growing CO 51 with integrated crop management practices

Results and outcome

Yield obtained from CO-51 Paddy field is 78q/ha over he got net return of 87710 with 2.96 BC ratio. This is more profit than farmers practice. The paddy variety CO 51 with Integrated Crop Management Practices helps higher production when water deficit during maturity stage. Practice of Split application of urea reduces the nitrogen losses and increases the Nitrogen use efficiency lead to high tillering capacity. Growing Azolla in paddy field fix the atmospheric Nitrogen. Pest management strategies with Pheromone traps reduces the pesticides cost. Foliar application of PPFM reduces the rate of evapotranspiration and increase the Shoot growth. This will be a step forward in doubling the Paddy growers' income as target for our country.

Success story : 2

Nutri Garden for Enhancing Nutrition Security in Anganwadi Center-A success story

KVK, Theni conducted FLD training on "Nutri Garden" to enhance food and nutritional security in Anganwadi centers with an aim of eradicating malnutrition among Children. Anganwadi workers were thought about the importance of nutri garden, biofortified varieties, health benefits of basic five food groups (Cereals, Pulses, Vegetables, Greens, Fruits, Milk and Milk Products and Fats and Oil), Recommended Dietary Allowances (RDA), POSHAN Abhiyan etc.,

The Anganwadi workers were encouraged to go for cultivation of diverse vegetables and fruits primarily for children consumption to improve the food and nutrition security. They were provided critical inputs under FLD Programme i.e.pack of assorted seeds having a combination of leguminous i.e cow pea, vegetables i.e brinjal, tomato, bhendi, chilli, tomato, leafy vegetables like drumstick, Agathi, palak, paruppukerai, manathakkali, Amaranths and other vegetables i.e Bitter gourd, Ridge gourd, Cowpea, Cluster bean, Pumpkin, Bottle gouard, Snake gourd, Tomato etc., fruit seedlings like Papaya, Banana, Guava, Mango etc., to the anganwadi centers.

Vishwanathapuram Anganwadi Center is a successful Nutri Garden Center among all centers which is located at Chinnamanur Block, Theni District. Anganwadi workers did not have prior knowledge on Nutri Garden eventhough the workers were shown keen interest in cultivation of organic vegetables and got good yield.

Field day was organized to create awareness among parents of anganwadi children about the importance and health benefits of Nutri Garden to enrich the dietary habits of family and society with better nutrients. Totally 56 kg *of* vegetable produce out of which 50 kg was used for Anganwadi center and 6kg was given to poor families and remaining 10 kg was sold in the local areas. Programme Officer, ICDS, CDPO, Supervisor and Anganwadi workers, Parents were visited the Anganwadi Center and appreciated their efforts for the cause of Children. ICDS PO instructed all the anganwadi workers to implement the Nutri Garden in 8 blocks of Theni

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

15. C. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

16. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Application of MN mixture to Coconut	500	38	225/tree	350/tree

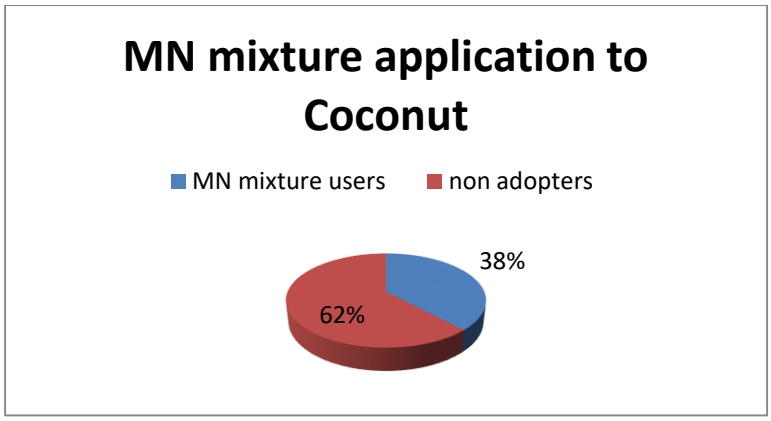
NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

16.B. Cases of large scale adoption

(Please furnish detailed information for each case)

Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
CO 51 Paddy variety	350	980
IIHR Banana Special	800	1250
Total	1150	2230

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



17. LINKAGES

17.A. Functional linkage with different organizations

Name of organization	Nature of linkage
Dept. of Agriculture	Conducting Training programmes and Demonstration. Received assistance for getting seeds/critical inputs for FLD Programme. Participation in department training programme as resource person.
Dept. of Horticulture	Received Guidance and Assistance for Conducting Training Programmes. Received and supply of Quality Seedlings to Farmers
Dept. of Animal Husbandry	Creating awareness about mixed fodder cultivation
Horticultural College and Research Institute, Periyakulam	Received Guidance and Assistance for Conducting Training Programmes. Guidance to students for their Rural Agricultural Work Experience programme
Agricultural College and Research Institute, Madurai	Guidance to students for their Rural Agricultural Work Experience programme
Nehru Yuva Kendra, Theni	Creating awareness among farmers about scientific farming through field level NYK volunteers
NGO Network	Creating awareness about Drought Mitigation and Sustainable Agriculture
All India Radio, Madurai	Broadcasting of Feedback/Interviews of KVK beneficiary Farmers for Adopting New Technologies
News Papers	Coverage of KVK activities
Tamil Nadu Agricultural University	Received Latest Technologies for Conducting Training Programmes. Getting Seeds/Critical Inputs for Conducting FLD/OFT Programmes
NRCB	Received Latest Technologies for Popularization of farmers.

	Getting Quality Improved Critical Inputs for Conducting OFT Programme
Cotton Corporation of India	Jointly Organised Trainings and Demonstration
NABARD	Conducting Capacity Building training to Grapes Growers
FTC, TANUVAS, Theni	Received Critical Inputs for conducting FLD Programme
Joint Action for Sustainable Livelihood (JASuL)	Training extension workers on Climate Change Mitigation Strategies
Vazhnthu Kattuvom Thittam,Theni	Organizing Training Programmes
ATMA	Conducting Farmers Field School Programmes, Capacity Building Training for ATMA Functionaries
Coconut Development Board, Chennai	Conducted Friends of Coconut Tree Trainings and Demonstration
Coffee Board	Conducting training to SHG members

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

17.B. List 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.)

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