#### PROFORMA FOR PREPARATION OF ANNUAL REPORT (1<sup>st</sup>January 2022 to 31<sup>st</sup>December 2022)

#### **1. GENERAL INFORMATION ABOUT THE KVK**

1.1. Name and address of KVK with phone, fax and e-mail
Name of the KVK as per official records (MoU): ICAR KRISHI VIGYAN KENDRA,
CENDECT, THENI
Address: 89- A/B-3, West Street, Kamatchipuram (S.O) Theni District, Tamil Nadu -
625520
<b>Phone</b> : 04546-247564
<b>Fax</b> : 04546-247564
Email:cendectkvk@rediffmail.com
1.2. Name and address of host organization with phone, fax and e-mail
Name of the Host Organization as per Official Records: CENTRE FOR
DEVELOPMENT AND COMMUNICATION TRUST (CENDECT)
Status of the Host Organization (As per the MoU): Non- Governmental Organization
Address: 89- A/B-3, West Street, Kamatchipuram (S.O) Theni District, Tamil Nadu -
625520
<b>Phone</b> : 04546-247245
<b>Fax</b> : 04546-247245
Email:cendect@gmail.com
Name of the Chairperson: Dr. P. Patchaimal
Mobile No: 9443047245
Email:cendect@gmail.com
1.3. Name of the Programme Coordinator with phone & mobile No.
Name of the Programme Coordinator / SS&H: Mr. P. Maheswaran

Residential Address: CENDECT KVK, Quarters, Kamatchipuram, Theni District Phone No.: 04546247564 Mobile No.:9677661410

Email:danushmahes@gmail.com

# 1.4. Year of sanction of the KVK (as per Official Order): 1994

1.5. Month and year of establishment: March, 1994

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

S.	Item	Area (ha)
No.		
1	Under Buildings	0.11ha
2.	Under Demonstration	0.03ha
	Units	
3.	Under Crops	9.65ha
4.	Orchard/Agro-forestry	1.00ha
5.	Others (specify)	10.79ha
	Total	21.58ha

# 1.6. Infrastructural Development:

# A) Buildings

S.No. Name of building Source of Stage								
		funding	ng Complete		Inc		omplete	
			Completion	Plinth	Expenditure	Starting	Plinth	Status of construction
			Date	area	( <b>Rs.</b> )	Date	area(Sq.m)	Completed/ in progress/ to
				( <b>Sq.m</b> )				be initiated)
1.	Administrative	ICAR	03.30.1996	483.5	2135800	-	-	Completed
	Building							
2.	Farmers Hostel	ICAR	12.25.2002	312.0	1749596	-	-	Completed
3.	Staff Quarters	ICAR	02.11.1997	260.0	2930577	-	-	Completed
	(No.)							
4.	Demonstration							
	Units							
		ICAR	03.31.2012	160	417000	-	-	Completed
		ICAR	03.30.1996	120	102000	-	-	Completed
5	Fencing	ICAR	03.21.1996	2 km	100000	-	-	Completed
6	Rain Water							
	harvesting system							
7	Threshing floor							
8	Farm godown							
9	Shed (Farm							
	equipment)							

# **B)** Vehicles

vehicle purchase (Rs.) 31.12.2022	
	status
Tractor         2022         754425         1120 hrs	Good

# C) Equipment & AV aids

Name of the equipment	Cost (Rs.)	Year of purchase	Present status
Over head projector	11160	01.06.1995	Under repair
Electronic typewriter	21035	01.06.1995	Scrapped
Mixie	2175	01.14.1996	Scrapped
Onida Colour TV	18600	2.28.1996	Scrapped
English t/w machine	9852	2.29.1996	Scrapped
Weighing Scale	2643	3.29.1996	Scrapped
Amplifier &mike unit	4600	5.27.1996	Good condition
Duplicating machine	17500	1.10.1995	Scrapped
VER	14990	2.28.1996	Scrapped
Slide projector	12855	2.28.1996	Scrapped
LED projector	69750	3.7.2007	Under repair
Fax machine	15150	3.30.2009	Under repair
Xerox machine	75400	3.1.2010	Under repair
Digital Camera	25000	6.30.2010	Under repair
Generator	100000	11.24.2010	Under repair
Epabax system	50220	3.30.2011	Under repair
Steel table	1500	11.04.1994	Under repair
Mica table	800	11.04.1994	Under repair
Godrej table	13340	1.23.1995	Scrapped
Wooden table	2250	1.23.1995	Scrapped
Steel table	11785	12.5.1995	Scrapped
Mould chair	2896	1.13.1995	Scrapped
Plastic chair	5508	1.22.1995	Scrapped
S type chair	600	11.4.1994	Scrapped
S type chair	1500	3.10.1995	Scrapped
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	24953	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	Damaged
Cupboard	11500	3.7.2010	Good condition

Nilkamal chair	20000	3.7.2010	Good condition
Revolving chair	6500	3.7.2010	Damaged
3x2 cash table	4400	3.7.2010	Damaged
4x2 cash table	2600	3.7.2010	Damaged
Computer table	2400	3.7.2010	Damaged
Wall fan	3800	3.7.2010	Damaged
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	Damaged
Filling cabinet	14400	3.9.2010	Good condition
Premium wall coffer	5300	3.9.2010	Good condition
Digital camera	25000	6.30.2010	Under repair
ICD recorder and DVD player	8280	3.15.2010	Under repair
USB modem	2008	3.15.2010	Under repair
Camera	6990	3.20.2010	Under repair
Display system	17085	3.24.2010	Under repair
Hp printer	2400	3.15.2010	Scrapped
Round table	25837	3.31.2010	Good condition

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

S.No.	Date	No of Participants	Salient Recommendations
1.	-	-	-
2.			

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

# 2. DETAILS OF DISTRICT (2022)

# 2.0. Operational jurisdiction of KVKs

District	New districts governed by the KVK	Taluks/Tehsils and/or
	after division of the district, if	Mandals under the KVKs
	applicable	jurisdiction
Theni	-	5 Taluks and 8 Blocks

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

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

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

S.	Agro-climatic Zone	Characteristics
No		
1.	Southern Zone - Based on the rainfall distribution,	Average Annual rainfall 857 mm,
	irrigation pattern, soil characteristics, cropping	Annual potential evapo
	pattern and physical, ecological and social	transpiration -1825
	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.	

# 2.3. Soil types

S.	Soil type	Characteristics	Area in ha
No.			
1.	Red calcareous	Yellowish red to dark red,	13259
		Medium texture, Neutral to mild	
		alkaline, well drained and	
		moderate permeability	
2.	Red non calcareous	Moderate deep red to yellowish	23670

			0
		medium textured ,slightly acidic	
		to neutral well drained with rapid	
		permeability	
3.	Red lateritic calcareous	Dark reddish brown to brown	24644
		heavy textured slightly acidic to	
		neutral, well drained with	
		moderate permeability	
4.	Red lateritic non calcareous	Yellowish red to very deep heavy	41667
		textured neutral to mild alkaline	
		moderate permeability,	
		moderately drained	
5.	Black soil	Dark grey to very dark grey fine	2727
		textured mild to moderate alkaline	
		slow permeability poorly dried	
6	Mixed soil	Dark yellowish grey to dark grey	23526
		fine textured to moderate, neutral	
		to mild alkaline well drained good	
		permeability	
7	Sand dunes	Yellowish red, single grain, loose,	10900
		very friable, well drained with	
		good permeability.	
8.	Hilly soils	Dark yellowish gray to very dark	147471
		gray, heavy textured, acidic, well	
		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 2022

# Kharif

S. No	Сгор	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)	Productivity Unit
Redgram	3000	330000	Metric tons	1095	kg /ha
Castor	100	183	Metric tons	183	kg /ha
Coconut	15000	2314.88	lakh nuts	15533	Nuts
Sugarcane	5900	72300	Tons	117	q /ha
Mango	8582	600740	Metric tons	70	q /ha
Banana	3328	2346240	Metric tons	700	q /ha
Grapes	1937	439700	Metric tons	227	kg /ha
Cashew	5520	27600	Metric tons	5	kg /tree

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

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Summer

S. No	Crop	Area (ha)	Production	Productivity	Productivity
			(Qtl)	(Qtl /ha)	Unit
Rice	12259	64970	Metric tons	5300	kg /ha
Maize	6200	1240000	Metric tons	2005	kg /ha
Tomato	2394	229820	Metric tons	96	q/ha
Sunflower	200	20000	Metric tons	947	kg /ha

# 2.5. Weather data

Month	Rainfall	Temperatu	Temperature <sup>0</sup> C	
	( <b>mm</b> )			(%)
		Maximum	Minimum	
January 2022	11	30	19	56.2
February 2022	30	33	16	54.71
March 2022	2	38.3	18	61.03
April 2022	27	37.5	21.7	54.71
May 2022	110	36.3	22	61.5
June 2022	127	35.1	22	68.1
July 2022	40	35.3	21.8	66.5
August 2022	30	35.1	23	64.3
September 2022	161	32.1	20.2	64.3
October 2022	228	33.2	20.2	70.0
November 2022	130	30.2	19.9	63.1
December 2022	141	30.3	18	56.2

# **2.6.** Production and productivity of livestock, Poultry, Fisheries etc. in the district (2022)

Category	Population	Production	Productivity					
	Cattl	e						
Crossbred	94695	182500000	1927 ltr					
Indigenous	15580	10220000	655.96 ltr					
Buffalo	1423	1788500	1256.85 ltr					
	Sheep							
Crossbred	40644	900000	18.4 kg					
Indigenous	7055	120000	15.08 kg					
Goats	95388	1800000	18.87 kg					
	Pigs							
Crossbred	819	40140	60 kg					
Indigenous	-							
Rabbits	135	-	-					
	Poult	ry						
Hens	290535	87160500	300 eggs					
Desi	113002	226004	1.6 kg					
Improved	210050	420100	1.8 kg					
Ducks	4222	844	2.2 kg					
Turkey and others	1087	5435	3.8 kg					

Category	Area	Production	Productivity
Fish			
Marine	-	-	-
Inland	20	10795	540
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

# 2.7. Details of Adopted Villages (2022)

S.	Taluk/	Name	Name of the	Year	Major	Major problem identified	Identified
No.	manda	of the	village	of	crops &		Thrust
	l	block		adop	enterpris		Areas
				tion	es		
1	Periya	Periyak	Vadugapatty	2018	Sugarcan	Low yield (100 t/ha) due to	Varietal
	kulam	ulam			e	non-availability of drought	evaluation
						tolerant and shorter duration	Value
						variety	chain
							manageme
							nt
2	Andipa	Andipa	G.Usilampatt	2017	Cumbu	Cultivation of ICMV 221	ICM,
	tty	tty	i			with yield of 12 q/ha and	Value
						incidence of drought and	addition
						other calamities	
DFI	Villages						
1	Andipa	Andipa	Mullayampat	2017	Maize,	Low yield (55q/ha) in	ICM,

							9
	tty	ty	ti		Cotton	maize, Pest incidence in	Value
						Cotton, non-availability of	chain
						High yielding sorghum	manageme
						hybrid sorghum	nt,
							Entreprene
							ur
							developme
							nt
2	Bodina	Bodina	Palaraptti	2019	Banana,	Low yield, lack of	Varietal
	yakkan	yakkan			Onion,	knowledge in new varieties	introducti
	ur	ur			Pulses,	and technologies, improper	on, ICM,
					Paddy	pest and disease	IPDM,
					and	management	Value
					millets,		addition,
					Sugarcan		FPO
					e		

# 2.8. Priority/thrust areas

<b>Crop/Enterprise</b>	Thrust area
Paddy	Varietal evaluation and mechanization
Maize	Integrated pest management
Bhendi	Varietal evaluation
Onion	Integrated crop Management, Integrated pest management
Red gram	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

# 3. Salient Achievements

# Achievements of Mandated activities (1st January 2022 to 31st December 2022)

S.No	Activity	Target	Achievement
1.	Technologies Assessed and refined(No.)	20	20
2.	On-farm trials conducted (No.)	10	10
3.	Frontline demonstrations conducted (No.)	12	12
4.	Farmers trained (in Lakh)	0.01750	0.02590
5.	Extension Personnel trained (No.)	200	240
6.	Participants in extension activities (in Lakh)	15000	21429
7.	Production and distribution of Seed (in Quintal)	22	16.2
8.	Planting material produced and distributed (in Lakh)	40000	36000
9.	Live-stock strains and finger lings produced and distributed	0	0
	(in Lakh)		
10.	Soil samples tested by Mini Soil Testing Kit (No)	0	0
11.	Soil samples tested by Traditional Laboratory (No)	500	502
12.	Water, plant, manure and other samples tested (No.)	250	293
13.	Mobile agro-advisory provided to farmers (No.)	10000	12240
14.	No.of Soil Health Cards issued by Mini Soil Testing Kits	0	0
	(No.)		
15.	No.of Soil Health Cards issued by Traditional Laboratory	500	502
	(No.)		

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

- We have achieved the dissemination of Azolla Cultivation. Totally 165 farmers are adopting this technology in Theni District.
- We have achieved the Soil test based crop nutrition for sustainable crop yield. Totally 502 farmers adopted this technolgy through KVK activities.
- We have developed 63 Agri based entreprenuers through EDP Programme in The District.
- We have formed Five Farmers Producer Company viz., Sugarcane FPO, Grapes FPO, Malar FPO, Honey FPO, and Banana FPO with involving more than 5000 farmers.
- We have achieved the Y angle method of grapes cultivation in an area of 87 ha among 141 farmers.

# **4. TECHNICAL ACHIEVEMENTS**

## Details of target and achievements of mandatory activities by KVK during 2022

# **OFT (Technology Assessment)**

No. of OFTs			Number of technologies		Number of locations (Villages)		Total no. of Trials / Replications / Beneficiaries	
Target	Achieveme	Target	Achieveme	Target	Achieveme	Target	Achieveme	
S	nt	S	nt	S	nt	S	nt	
10	10	20	20	12	12	50	50	
FLD (crop/enterprise/CFLDs)								

No of De	emonstrations	Area in ha		Number of Farmers / Beneficiaries / Replications	
Targets	Achievement	Targets	Achievement	Targets	Achievement
16	16	64	64	160	160

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

Nu	Numbe	r of Participants		
Clientele	Targets	Achievement	Targets	Achievement
Farmers and Farm	60	64	1500	2185
Women				
Rural youth	8	9	250	305
Extn.Functionaries	8	8	200	240

#### **Extension Activities**

Num	ber of activities	Number of participants		
Targets	Achievement	Targets	Achievement	
812	1002	19610	28000	

#### Seed Production (q)

Target	Achievement	Distributed to no. of farmers
22	16.2	187

# Planting material (Nos.)

Target	Achievement	Distributed to no. of farmers
40000	36000	151

# Technology Assessments (OFTs) in Detail OFT 1

Thematic area: Varietal Evaluation

Ttitle: Assessment of Groundnut variety for Rainfed Region of Theni District

**Details of the Farming Situation:** The trails were conducted at Ethakovil village of Andipatty block, Theni District. The average annual rainfall of the area is 830 mm. The soil is red clay loamy soil. The soil have Medium nitrogen content (291 kg/ha), Low phosphorus (9.2 kg/ha) and medium potassium (414 kg/ha) content. The major cropping pattern of the area is Groundnut-Pulses.

**Problem identified:** Farmers got low yield (11 q/ha) due to cultivation of local variety and non-adoption of improved cultivation practices.

#### Technology assessed **TO: 1 – VRI 9** Duration: 115 days Average yield: 25 q/ha **TO: 2- KadiriLepakshi 1812** Duration: 112 days Average yield: 32 q/ha **TO: 3 – Farmers Practice (Local Variety – Nattukadalai)** Duration: 125 days Average yield: 11 q/ha **Results: Yield parameters and yield of the trails**

Technology Option	No. of Trails	Duration	No of Pod/plant	No of Filled Pod/ Plant	Pod yield (q/ha)	Haulm yield (q/ha)
TO 1- VRI 9		120	44.76	41.06	19.88	49.06
TO 2- KadiriLepakshi 1812	5	117	47.24	29.73	17.18	41.32
TO 3- Farmers Practice (Naatukadalai)		125	25.36	20.36	12.628	37.79

# **Economics of the trail**

Technology Option	Cost of	Gross	Net	BCR
	Cultivation	return	return	
TO 1- VRI 9	36840	91448	54608	2.48
TO 2- KadiriLepakshi 1812	37250	79028	41778	2.12
TO 3- Farmers Practice				
(Naatukadalai)	36400	58052	21652	1.59

# **Description of results**

The on-farm trail were revealed that the highest yield was recorded in VRI 9 (19.88 q/ha), followed by Kadirilepakshi 1812 (17.18 q/ha). This was due to highest number of filled pods in VRI 9 (41.06) followed by kadirilepakshi (29.73). The lowest number of

pods recorded in farmers practice. Regarding economic aspects VRI 9 recorded the highest Gross return (Rs.91448) and BCR 2.48 due to their bold appearance and seed colour and market preference. The highest haulm yield was recorded by VRI 9 (4906 kg /ha) followed by kadirilepakshi (4132 kg/ha). The haulm of VRI 9 highly preferred by Milch animal and Goat.

9. **Constrains:** The trail comes under the rainfed situation. During Germination perio we did not get enough rainfall for germination and growth.

10. **Feedback of the Farmer Involved:** The VRI 9 variety recorded the highest yield and income. The variety look bold grains recorded higher market preference. The haulm of the VRI 9 was highly prefered by Cow and Goat.

11. Feed back to the scientis who developed the technology: The VRI 9 Groundnut variety recorded low Germination percentage. Regarding Kadiri lepakshi 1812 recorded more number of unfilled pods.

# OFT 2

Thematic area: Varietal Evaluation

Ttitle: Assessment of Bio fortified Cumbu variety for Theni District

**Details of the Farming Situation:** The trail was conducted at Sukkangalpatti village of Chinnamanur Block, Theni District. The average annual ranifall of the area is 890 mm. The soil type is red loamy. The soil has Medium nitrogen content (249 kg/ha) Low Phosphorus (10.25 kg/ha) and medium potassium (227 kg/ha). The major cropping pattern of the area Cumbu/Sorghum- pulses.

**Problem identified:** farmers got low yield (11.5 q/ha) due to cultivation of local varietry and non adoption of improved cultivation practices.

# **Technology** assessed

**TO: 1 – ABV 04** Duration: 86 days Average yield: 28.6 q/ha

**TO : 2- CO 10** Duration: 85- 90 days Average Yield: 29.23 q/ha

**TO : 3 – Farmers Practice (ICMV 221)** Duration: 110 days Yield: 11. 6q/ha

**Results :** 

#### Yield parameters and yield of the trails

Technology Option	No. of Trails	Duration (days)	Plant height (cm)	No.of productive tillers /plant	Panicle length (cm)	Yield (q/ha)
TO 1- ABV 04	5	85.6	171.2	5.6	30.8	20.01
TO 2- CO 10		92.2	176	5.56	42.2	23.71
TO 3- Farmers		100.8	167.4	3.62	29.3	17.11
Practice						
(ICMV 221)						

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#### Economics of the trail

Technology Option	Cost of Cultivation	Gross return	Net return	BCR
	( <b>Rs.</b> )	( <b>Rs.</b> )	( <b>Rs.</b> )	
TO 1- ABV 04	18437	44022	25585	2.38
TO 2- CO 10	18437	52162	33725	2.82
TO 3- Farmers Practice (ICMV 221)	19150	37642	18492	1.96

# **Description of results**

The on-farm trail were revealed that the highest Grain yield was recorded in CO 10 variety (23.71 q/ha) followed by ABV 04 (20.01 q/ga). The lowest yield was obtained in Farmers practice (17.11 q/ha). The highest yield in Co 10 variety was due to the combination effect of highest number of Productive tillers (5.56) and Panicle length (42.2 cm). ABV 04 recorded the panicle length of 30.8 cm and 5.6 number of productive tiller per plant. Regarding economic aspect CO 10 recorded the highest net return (Rs. 33725) and BCR (2.82) followed by ABV 04 (Net return Rs.25585 and BCR – 2.38). The farmers practice variety ICMV 221 recorded the net return of Rs. 18492 with 1.92 BCR. The highest market preference for bio fortified varieties due to their greyish yellow colour and shape.

9. **Constrains:** during vegetative growth nutrient defeciency occured. Wild boar incidecne suffered the trail plot.

10. Feedback of the Farmer Involved: The CO 10 Cumbu recorded hugher yield. The straw yield of the both varieties are good. More number of productive tillers and long p earhead.

11. Feed back to the scientis who developed the technology: The number of unfilled grains are noticed in both varieties.

# OFT 3

- 1. Thematic area: INM
- 2. Title: Assessment of Novel organic liquid in Groundnut for higher yield
- 3. Scientists involved: SMS (Soil Science & Agronomy)

#### 4. Details of farming situation:

Groundnut is a major oilseed crop cultivated under Rainfed condition in Andipatty block of Theni district in an area of 750 ha during Kharif and Rabi season of every year. On Farm trial on assessment of novel organic liquid in Groundnut for higher yield under rainfed condition at five farmer's field of Ethakovil village of Andipatty block respectively during Kharif season 2022-23. The soil type is basically red sandy loam. In this soil contains medium nitrogen (285.2 kg/ha), low phosphorus (7.52 kg/ha) and medium in potassium (137.5 kg/ha). The average productivity of Groundnut is 14.6 t/ha. The village received 16 rainy days with annual rainfall of 746 mm.

# 5. Problem definition / description:

The farmers were getting low yield (12.6 q/ha) due to improper nutrient management practices; micronutrient deficiency. The main objective of the study was to assess the performance of novel organic liquid in Groundnut for higher yield under rainfed condition for higher pod yield and more net income.

# 6. Technology Assessed:

# TO 1: Farmer Practice: No foliar nutrition

**TO 2: Recommended Practice:** Foliar nutrition of NOVEL Organic Liquid - 2ml/L for 2 times **TO 3: Alternate Practice:** Foliar nutrition of Groundnut rich - 2 sprays of TNAU groundnut rich @ 5.0 kg/ha (for each spray) at 35 DAS (50 per cent flowering) and 45 DAS (Pod developing stage) in 500 litres of water is recommended.

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

Name of critical input	Qty per trial	Cost per trial (Rs.)
NOVEL Organic Liquid	1 lit	200
Groundnut Rich	4 kg	800
Field board	1	400

#### 8. Results:

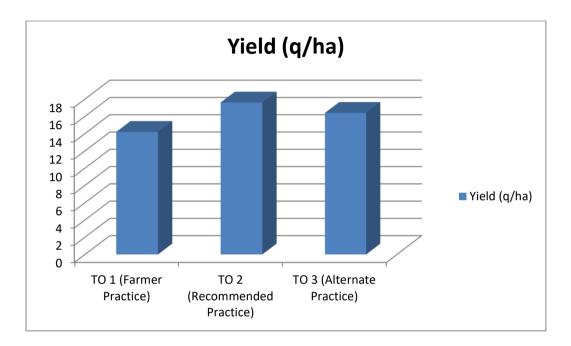
The results of the on farm trail conducted assessment of novel organic liquid in Groundnut for higher yield under rainfed conditionare presented below (Table).

Table: Performance of the technology

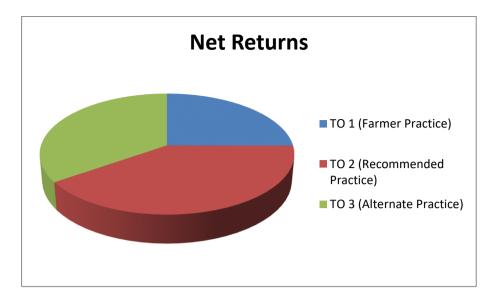
Technology Option	No.of trials	Yield (q/ha)	Net Returns (Rs. in ha)	B:C ratio	No. of pods per plant
TO 1 (Farmer Practice)		14.2	27820	1.74	26
TO 2 (Recommended Practice)	5	17.6	44740	2.08	38
TO 3 (Alternate Practice)		16.4	38520	1.96	32

#### **Description of the results:**

On farm trial results revealed that, the higher pod yield of 17.6 q/ha was recorded in foliar application of novel organic liquid @ 2ml/L for 2 times followed by foliar spraying of Groundnut rich - 2 sprays of TNAU groundnut rich @ 5.0 kg/ha (for each spray) at 35 DAS (50 per cent flowering) and 45 DAS (Pod developing stage) in 500 litres of water is recommended. The lowest pod yield of 14.2 q/ha was recorded in farmer's practices (Without any foliar nutrition).



Economics of the study revealed that, higher net returns (Rs. 44740 /ha) and benefit cost ratio (2.08) was recorded in foliar application of novel organic liquid @ 2ml/L for 2 times followed by foliar spraying of Groundnut rich - 2 sprays of TNAU groundnut rich @ 5.0 kg/ha (for each spray) at 35 DAS (50 per cent flowering) and 45 DAS (Pod developing stage) in 500 litres of water is recommended.



#### **Constraints faced:**

Farmers are getting improper rainy days during this season. Due this issue germination percentage are slightly affected.

#### 9. Feedback of the farmers involved:

The foliar application of Novel organic liquid is increases number of pods and pod yield. Oil content of the grain is more in application of novel organic liquid.

#### 10. Feedback to the scientist who developed the technology:

The foliar application of Novel organic liquid is increases pod yield significantly with reduction in use of chemical fertilizers. Also, it acts as a best source of nutrient and plant growth hormones in organic farming.

#### <u>OFT :4</u>

#### 1. Thematic area :Varietal evaluation

- 2. Title : Assessment of suitable high yielding varieties of Tomato in Theni District.
- 3. Scientists involved: SMS (Horticulture) and (Plant Protection)

#### 4. Details of farming situation:

The trails were conducted at Pulikuthi village of Chinnamanur Block, Theni District. The soil type is red loamy with high nitrogen (482.4 kg/ha), low Phosphorous (8.9 kg/ha) and high Potassium (290.5 kg/ha). The local variety of tomato was recorded low yield, low market price and fruit borer incidence among 120 famers in an area of 50 ha. Cropping scheme of this village Tomato – Brinjal – Chilli, the main crop cultivation season is Kharif. Total area under tomato is 250 ha with average production of 78 t/ha. The village received 18 rainy days with annual rainfall of 890 mm.

**5. Problem definition** / **description:** Low yield, low market price and Poor quality of fruits, Incidence of Pest and Diseases (Leaf Curl, Blossom End Rot, Bacterial wilt, early blight) in an area of 800 ha among 1400 Nos. of farmers.

# 6. Technology Assessed:

# TO 1: Farmer Practice: Private variety (Sivam)

# **TO 2: Recommended Practice:**

COTH-4 (CO4): Fruits are flat round with thick pericarp (5.84 mm) with extended shelf life (10 days at room temperature). Fruits have green shoulder at breaker stage which turns to red colour at ripening. Fruits are borne in clusters of 5-6, with an average fruit weight of 75.3 g. Hybrid has long harvesting period with 20-22 harvests in 150 days with a yield of 2.94 kg per plant. Yield: 92.3 t/ha (27.31 % increase over TNAU tomato hybrid CO3 and 40.91% over Lakshmi). Ascorbic acid content: 26.13 mg/100 g, TSS: 6.70 brix and Titratable acidity: 0.70 %. Source: TNAU, Coimbatore, 2020

# **TO: 3: Alternate Practice**

**ArkaApeksha:** It is a high yielding hybrid developed by crossing ITHR 2834 and ITHR 2918. It has triple disease resistance to Tomato Leaf Curl Disease (Ty1+Ty2), Bacterial wilt and Early blight. Plants are semi-determinate with dark green foliage. Fruits are firm, deep red, oblong, medium large (90-100g) with iointless (j2) pedicel. Fruits are suitable for processing as they have TSS (4.7° Brix), acidity (0.36%), lycopene (14.15mg/100g fresh weight). Recommended for summer, kharif&rabi cultivation. It has a yield potential of 43 to 90 t/ha in 140- 150 days. Source: IIHR, 2018

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

Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Seed (COTH 4)	60 g/ 0.25 ac	2500
Seed (ArkaApeksha)	60 g/ 0.25 ac	2500
Pseudomonas fluorescence	1 lit	450
Field board	1	400

# 8. Results:

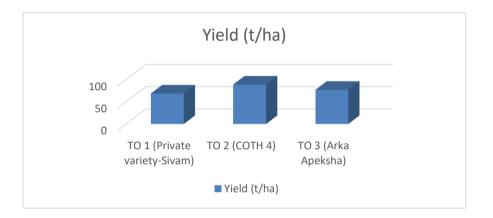
Table: Performance of the technology

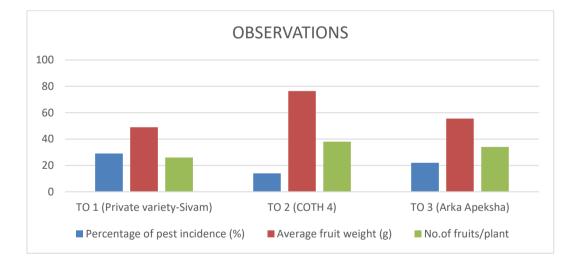
Technology Option	No.of trials	Yield (t/ha)	Net Returns (Rs. In)	B:C ratio
TO 1 (Private variety-Sivam)	5	68.4	279000	2.76
TO 2 (COTH 4)		88.5	364500	3.25
TO 3 (ArkaApeksha)		76.7	353500	3.19

Technology Option	Percentage of pest incidence (%)	Average fruit weight (g)	No.of fruits/plant
TO 1 (Private variety-Sivam)	29	49.0	26
<i>TO 2 (COTH 4)</i>	14	76.4	38
TO 3 (ArkaApeksha)	22	55.5	34

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

Description of the results: (one page) in addition you can use graphs also





The results of the assessment of two new high yielding variety of Tomato in Theni district indicated that out of the local varieties viz., (COTH 4) recorded significantly higher fruit yield of 88.5 t/ha followed by ArkaAbeksha with 76.7 t/ha and the lowest fruit yield of 49.0 t/ha was recorded in local variety(Sivam). The highest number of fruits per plant (38) was recorded in COTH 4 followed by ArkaAbeksha (34). In the case of net returns, COTH 4 was recorded significantly higher net return of Rs. 364500/ha followed by ArkaAbeksha

(Rs. 353500/ha) and the least net returns was recorded in local variety (Rs. 279000/ha). During flowering and fruiting stages of crop growth farmers faced the viral incidence problem and fruit Borer incidence. COTH 4 tomato hybrid was recorded high fruit yield and farmers could get good quality of fruits in Pulikuthi village of Chinnamanur Block, Theni District.

#### **Constraints faced:**

Due to pest and Disease incidence of same variety leads to low yield and low market price. COTH-4 has moderately resistant to viral and pest incidence. Cultivation of COTH 4 were recorded high yield than other IIHR and local varieties in Theni district area.

#### 9. Feed back of the farmers involved:

1. Moderately resistant to pest and disease incidence

2. The yield was high in COTH 4 variety when compare to the other private and IIHR varieties.

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

Yield loss upto 20 % due to imbalanced use of fertilizer, poor fruit set, incidence of pest & disease and minimum growth due to nutrient deficiency. Low price and price fluctuation due to less demand in the market.

# **OFT: 5**

1. Thematic area	: Post Harvest Technology (PHT)
2. Title	: Assessment of Dehydration Efficiency using Different Energy Sources in Banana Fig

3. Scientists involved : Home Science

# 4. Details of farming situation: -

**5. Problem definition / description**: India is the largest producer of banana in the world, contributing 25 per cent to the global production. During the market glut, the excess production of banana can be converted into value added product to get more profit. Banana fig is a dehydrated fruit, prepared by ripening the immature or mature marketable and unmarketable fruits of banana.

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

**TO1:** Solar Dryer- Banana fig is a dehydrated fruit, prepared by artificially ripening the immature or matured unmarketable fruits of banana. Figs are prepared by peeling, disinfection and dehydration in solar dryer.

Source and year: NRCB, Trichy & 2016

**TO2:** Hot Air oven- Fully ripe banana, Peeling, treated with 1%KMS, Drying (sun/oven at 50 degree C) for 24 hours, Cooling, Packing in polyethylene bags, Storage **Source and year:** TNAU, Coimbatore & 2015

Farmers Practice: No Value Addition

7. Critical inputs given: (along with quantity as well as value)	7.	Critical	inputs	given:	(along	with	quantity	as well	as value)
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Critical inputs	Quantity	Cost (Rs.)			
Raw materials (Banana)	100 kg	3000			
Preservatives	1 kg	500			
Hot Air Oven	1	20000			
Packaging materials	1	1000			
Field board	1	500			
	Total Cost				

#### 8. Results:

	Organoleptic Evaluation								
			Resul	ts					
Technology	Appearance (5)	Colour (5)	Flavour (5)	Taste (5)	Texture (5)	Overall Acceptability (25)	Shelf life of the product		
Solar Dryer	4	4.5	4.5	4.5	4.5	22	3		
Hot Air Oven	4	4	4	4	4	20.5	Months		

#### **Results - Economics**

Technology	Time Taken	Gross Cost	Gross return (Rs)	Net return (Rs)
Solar Dryer (100 kg)	102 hours	5300	19500	14200
Hot Air Oven (100 kg)	75 hours	6800	20400	13600
Farmers Practice	-			

9. Constraints: -Very difficult to dry during rainy seasons.

**10. Feedback of the farmers involved:**Lack of awareness on Banana Fig availability among the population. Hence, the Marketing the products is very difficult. Dehydration of Banana Fig using solar dryer is very cheap and reasonable.

#### 11. Feed back to the scientist who developed the technology:

#### **Frontline Demonstration in Detail**

a. Follow up of FLDs Implemented during previous years

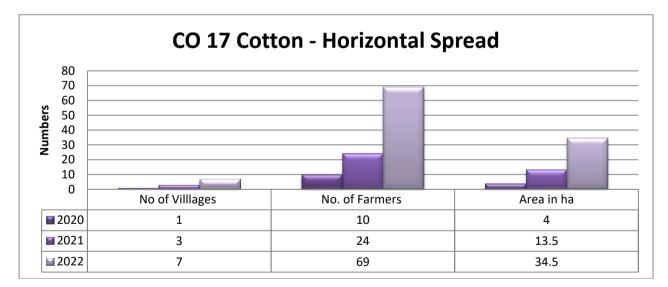
Technology-1 Crop/Enterprise: Cotton Thematic area: Varietal Introduction Technology Demonstrated as a follow-up from OFT Feedback sent to the Research System:

- Magnesium deficiency occurred during rainy days.
- Flower shedding during rainy days.
- Boll size was going to smaller than other cultivars

Details on the p	erformance of	the technolog	gy sent to the	Extensio	n Departm	ent

Particulars	Technol ogy	No.of Bolls/pl ant	Incide nce of Mealy bug (%)	Yiel d (q/h a)	Gros s Cost (Rs/h a)	Net Inco me (Rs/h a)	BC R
Farmer	Private	49.65	21	14.2	2772	4087	2.4
Practice	hybrid			9	0	2	7
Demonstra	CO 17	61.14	17	19.4	2476	7059	3.8
tion	Cotton			6	0	4	5
	variety						

Horizontal spread of the technology (No. of Villages, farmers and area in ha)



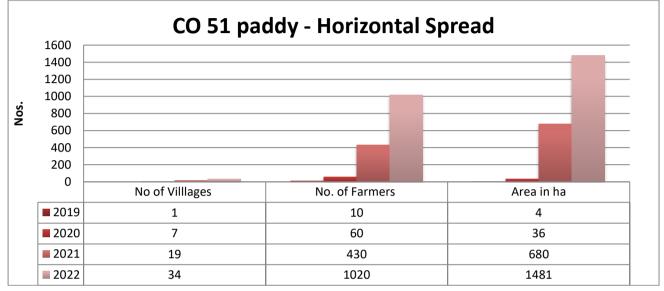
Technology-2

Crop/Enterprise: paddy Thematic area: Varietal Introduction Technology Demonstrated as a follow-up from OFT: CO 51 Paddy variety with Integrated Pest management Practices Feedback sent to the Research System: Crop lodging was occur during second crop Incidence of Yellow Stem Borer was high in Thaladi season Details on the performance of the technology cont to the Extension Department

Details on the performance of the technology sent to the Extension Department

						23
Particulars	Technolog y	No.of Productiv e tillers	Yield (q/ha)	Gross Cost (Rs/ha)	Net Income (Rs/ha)	BCR
Farmer	Goraknath	29	61.25	48250	57793	2.20
Practice	509					
Demonstrati	CO 51	38	69.00	52684	87715	2.60
on						

Horizontal spread of the technology (No. of Villages, farmers and area in ha)



#### **Frontline Demonstrations in Detail**

**FLD:** 1

Crop – Sorghum

Thematic area: Varietal Introduction with ICM

**Technology demonstrated:** CO 32 Sorghum variety with application of 12.5 kg MN mixture.

#### **Technology description:**

CO 32 Sorghum variety- dual purpose sorghum variety Duration: 90 days Average gran yield: 24.00 q/ha Fodder yield 65.00 q/ha Soil Application of Micronutrient mixture at 12.5 kg /ha along with 37.5 kg sand.

#### Season and year: Kharif 2022

**Farming situation**: the demonstration plot located at Pichampatti village of Andippati block. The total area under sorghum cultivation in the cluster is 860 ha. Farmers are cultivating year old varieties and other private hybrids which was register low yield. The soil type of the demonstration plot is red loamy soil with medium Nitrogen content (260 kg/ha), low phosphorus content (8.95 kg/ha) and Medium potassium content (194 kg/ha). The average annual rainfall of the area is 832 mm.

Source of Fund: KVK main

**No.of Location: 2** 

Number of Demonstration : 10

No. of SCST Farmers: 2

Area Proposed : 4 ha

Actual area : 4 ha

#### Justification for shortfall if any: Nil

# Feedback from the farmers:

- CO 32 recorded higher grain yield under rainfed situation
- CO 32 recorded higher market price (Rs.23/kg) due to their yellowish white colour grain
- Incidence of shoot fly was very low (16.2 %) as compare to farmers Practice (34.7 %)

Feedback of the scientist: Extension activities on the FLD : Field days- 1 Farmrs training – 2 Media Coverage – 1

FLD: 2Crop – PaddyThematic area: Varietal Introduction with ICM

#### Technology description: VGD 1 paddy variety

Duration: 130 days

Average yield - 58.50 q/ha

The variety similar to seeraga samba, mild scented and suitable for making biryani, moderately resistant to leaf folder, blast and brown spot.

#### Season and year: Kharif 2022

**Farming situation:** The demonstration plot located at B.Meenakshipuram village of Bodinayakkanur Block. The total area under Paddy cultivation in the cluster is 1210 ha. Farmers are cultivating year old varieties and other varieties which were register low yield. The soil type of the demonstration plot is red loamy soil with medium Nitrogen content (272 kg/ha), low phosphorus content (9.40 kg/ha) and medium potassium content (210 kg/ha). The average annual rainfall of the area is 860 mm.

Source of Fund: KVK main No.of Location: 1 Number of Demonstration: 10 No. of SCST Farmers: 0 Area Proposed: 4 ha Actual area: 4 ha Justification for shortfall if any: Feedback from the farmers Feedback of the scientist: Extension activities on the FLD: Field days- 1 Farmrs training – 2

# Media Coverage – 1

# Feedback from farmers:

- Leaf folder incidence was very low
- Traders are not interested to purchase in field level due to very small grain
- Incidence of stem borer was more than other variety
- More percentage of broken rice during milling (need Specific boiling time)

#### **FLD: 3**

Crop: Tenai Title :Demonstration of ATL 1 Tenai variety Thematic area: Varietal introduction with ICM Technology demonstrated: VGD 1 Paddy variety

#### **Technology description:**

ATL 1 tenai variety with soil Application of 12.5 kg MN mixture. **Season and year**: Kharif 2022

**Farming situation:** The demonstration plot located at B.Meenakshipuram village of Bodinayakkanur Block. The total area under Paddy cultivation in the cluster is 1210 ha. Farmers are cultivating year old varieties and other varieties which were register low yield. The soil type of the demonstration plot is red loamy soil with medium Nitrogen content (272 kg/ha), low phosphorus content (9.40 kg/ha) and medium potassium content (210 kg/ha). The average annual rainfall of the area is 860 mm.

Source of Fund: KVK main No.of Location: 1 Number of Demonstration : 10 No. of SCST Farmers: 0 Area Proposed : 4 ha Actual area : 4 ha Justification for shortfall if any: Feedback from the farmers Feedback of the scientist: Extension activities on the FLD : Field days- 1 Farmrs training – 2 Media Coverage – 1

# **Feedback from farmers:**

- More number of productive tillers with lengthy ear head
- Non lodging and highly drought tolerant.
- High market price.
- No pest and disease incidence.

# **FLD:4**

Crop:Bottle gourd

Thematic area: Crop Production & Management

**Technology demonstrated:** Boric acid at 25 ppm concentration applied as foliar spray thrice prior to early fruiting.

# **Farming situation:**

Bottle gourd is a major cucurbits crop cultivated in Chinnamnur, Uthamapalayam and Cumbum blocks of Theni district in an area of 750 ha of every year under irrigated condition. Demonstration of foliar application of boric acid to boost yield of Cucurbitaceous crops cost effectively in Red soils at different farmer's field of Veppampatti village of Chinnamanur Block. The soil type is sandy loam with medium nitrogen (315.2 kg/ha), low phosphorus (6.85 kg/ha) and medium in potassium (134 kg/ha).

Source of fund: KVK Main No of locations (Villages): 1 No. of demonstrations (replications/farmers/beneficiaries): 10 No of SC/ST Farmers and women farmers:

Area proposed (ha): 4

Actual area (ha): 4

Justification for shortfall if any: Nil

Feedback from farmers:

- Flower drop was reduced by foliar application of Boric acid at 25 ppm concentration applied as thrice prior to early fruiting.
- Fruit setting was increased by foliar nutrition of boric acid.

# Feedback of the Scientist:

• Foliar application boric acid during flowering stage increases flower setting and fruit setting percentage.

**Extension activities on the FLD:** Field day - 1, Farmers training – 2, Media coverage: 0, Training to Extension Functionaries: 0

# **FLD : 5**

Crop:Castor

Thematic area: Crop Production & Management

**Technology demonstrated:** Soil application of RDF (45:15:15 NPK kg/ha) and 12.5 kg ZnSO4 ha-1, TNAU MN mixture 7.5 kg/ha. Foliar application of plant growth regulator consortia (CASTOR GOLD) @ 0.05 % (0.5 ml/litre of water) on 25 and 60 DAS.

# **Farming situation:**

Castor is a major oilseeds crop cultivated in Theni and Bodi blocks of Theni district in an area of 850 ha of every year under irrigated and rainfed condition. Demonstration of INM in Castor for higher productivity at different farmer's field of Sriregapuram village of Theni Block. The soil type is clay loam with low nitrogen (280.3 kg/ha), low phosphorus (6.25 kg/ha) and medium in potassium (125 kg/ha).

Source of fund: KVK Main

No of locations (Villages): 1

No. of demonstrations (replications/farmers/beneficiaries): 10

# No of SC/ST Farmers and women farmers:

Area proposed (ha): 4

Actual area (ha): 4

Justification for shortfall if any: Nil

# Feedback from farmers:

• Foliar application of Castor gold increases flower setting percentage and seed yield increase more than 15 per cent when compare to the untreated plot.

# Feedback of the Scientist:

• Foliar application of plant growth regulator consortia (CASTOR GOLD) reduces flower shedding.

**Extension activities on the FLD:** Field day - 1, Farmers training -1, Media coverage: 0, Training to Extension Functionaries: 1

# FLD : 6

Crop:Paddy

Thematic area: Crop Production & Management

**Technology demonstrated:** Incorporation of green manure – Daincha 20 kg/ha at pre flowering stage, Seed treatment 3% Panchagavya and application of biofertilizerAzospirillum and Phosphobacteria 2 kg/ha, EFYM @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.

# **Farming situation:**

Paddy is a major cereals crop cultivated in Theni district in an area of 2500 ha of every year. Demonstration of Organic Nutrient Management in Rice cultivation (Vaigai Dam 1) at different farmer's field of Melmangalam village of Periyakulam Block. The soil type is sandy loam with medium nitrogen (329 kg/ha), low phosphorus (6.21 kg/ha) and medium in potassium (141kg/ha).

Source of fund: KVK Main No of locations (Villages): 1 No. of demonstrations (replications/farmers/beneficiaries): 10 No of SC/ST Farmers and women farmers: Area proposed (ha): 4 Actual area (ha): 4 Justification for shortfall if any: Nil Feedback from farmers:

- Green manuring practices improves soil structure and water holding capacity of the soil.
- Application of bio fertilizers, vermicompost and panchagavya reduced cost of inorganic fertilizer and increases grain yield; demo plot are recorded less pest and disease incidence.

# Feedback of the Scientist:

• Organic manuring practices improve the soil health and reduce the cost of cultivation in paddy cultivation.

**Extension activities on the FLD:** Field day - 1, Farmers training – 2, Media coverage: 0, Training to Extension Functionaries

# **FLD:7**

Crop: Banana

**Thematic area:** Information Communication Technologies (ICTs)

Technology demonstrated: Demonstration of TNAU Banana Expert System

Season and year: Kharif and 2021

Farming situation: Irrigated, Soil type is Sandy loam

Source of fund: KVK Main

No of locations (Villages): 2

No. of demonstrations (replications/farmers/beneficiaries):20

No of SC/ST Farmers and women farmers:6

Area proposed (ha): 4 ha

Actual area (ha): 4 ha

Justification for shortfall if any: Nil

- **Feedback from farmers:** The TNAU banana expert system mobile-based application was useful and comfortable. The farmers stated that the assistance of agricultural experts and Scientist are not available at all time, in that condition this mobile based-application would be very useful to make timely decisions.
- **Feedback of the Scientist:** In future years, more awareness should be created among banana growers about this TNAU banana expert system.

Extension activities on the FLD:

(Field days-0 Farmer's training-2 Media coverage- 2 Training to Extension Functionaries- 1)

#### FLD : 8

Crop/ Enterprise: Cattles

**Thematic area:** Information Communication Technologies (ICTs)

Technology demonstrated: Demonstration of TNAU Cattle Expert System

Season and year: Kharif and 2022

Farming situation: Irrigated, Soil type is Clay loam

Source of fund: KVK Main

No of locations (Villages): 1

No. of demonstrations (replications/farmers/beneficiaries):20

No of SC/ST Farmers and women farmers: 4

Area proposed (ha): -

Actual area (ha): -

Justification for shortfall if any: Nil

**Feedback from farmers:** The TNAU Cattle expert system mobile-based application was useful and comfortable. The farmers stated that the assistance of agricultural experts and Scientist are not available at all time, in that condition this mobile based-application would be very useful to make timely decisions.

**Feedback of the Scientist**: In future years, more awareness should be created among Cattle rearers about this TNAU Cattle expert system.

Extension activities on the FLD:

(Field days-0 Farmer's training-1 Media coverage- 1 Training to Extension Functionaries- 1)

#### FLD : 9

Crop: Paddy

**Thematic area:** Information Communication Technologies (ICTs)

Technology demonstrated: Demonstration of TNAU Paddy Expert System

Season and year: Kharif and 2022

Farming situation: Irrigated, Soil type is Sandy loam

Source of fund: KVKMain

No of locations (Villages): 1

No. of demonstrations (replications/farmers/beneficiaries):20

No of SC/ST Farmers and women farmers: 5

Area proposed (ha): 4 ha

Actual area (ha): 4 ha

Justification for shortfall if any: Nil

Feedback from farmers: The TNAU Paddy expert system mobile-based application was useful and comfortable. The farmers stated that the assistance of agricultural experts and

Scientist are not available at all time, in that condition this mobile based-application would be very useful to make timely decisions.

**Feedback of the Scientist:** In future years, more awareness should be created among Paddy growers about this TNAU Paddy expert system.

Extension activities on the FLD:

(Field days-1

Farmer's training-2

Media coverage- 3

Training to Extension Functionaries-1

# FLD 10

**Title:** Demonstration of different value-added products from Manjari Medika grape juice variety

Crop : Grapes

Thematic area : Value Addition

**Technology demonstrated:** Manjari Medika is suitable for value added products. TSS content in juice is recorded 19 to 22°Brix with acidity of 0.5-0.6 per cent. Due to its teinturier nature, juice of this variety is very dark in colour and contains anthocyanins. This Zero Waste concept based technologies have been developed for juicing, utilization of pomace in making high quality bakery products (cookies and breads) and remaining seeds for extraction of high quality grape seed oil.

Season and year : Rabi 2021-22

Farming situation :-

**Source of fund** : ICAR

No of locations (Villages): 2

**No. of demonstrations (replications/farmers/beneficiaries):** 10

No of SC/ST Farmers and women farmers: -

Area proposed (ha) : -

Actual area (ha) : -

Justification for shortfall if any: -

Feedback from the beneficiaries: Highly adopted during peak season and rainy times.

**Scientist Feedback:** The shelf of the Products is 25-28 days only. The pre-treatments dosage can be modified.

# Extension activities on the FLD:

- 1. Training 1
- 2. Method Demonstration-1
- 3. Distribution of Training Manual 10

# FLD 11

Demonstration of Different types of Coconut Chips

Crop : Coconut

Thematic area : Value Addition

Technology demonstrated: Osmotic dehydration + Solar drying + Electrical Drying Sweet coconut chips with different flavours, Medicated sweet chips, Salted spicy coconut chips, Nutraceutical coconut chips

Season and year : Kharif2021 Farming situation : -Source of fund : ICAR No of locations (Villages): 2 No. of demonstrations (replications/farmers/beneficiaries): 10 No of SC/ST Farmers and women farmers: -Area proposed (ha) : -Actual area (ha) : -

Justification for shortfall if any: -

Scientist Feedback: It is a very innovative and healthy products.

# **Faremers Feedback:**

# Extension activities on the FLD:

- 1. Training 1
- 2. Method Demonstration 3
- 3. Lecture Delivered 5
- 4. Media Coverage-1
- 5. Field Day -1

# FLD 12

Demonstration of TNAU Sweet Flag 6EC for the Management of Pulse Beetle in Seeds.

Crop : Post Harvest Technology

Thematic area : Storage Loss Minimization

Technology demonstrated: TNAU SWEET FLAG 6EC @ 10ml/kg of pulse seeds (Green gram, Black gram, Bengal gram and Cowpea) caused cent per cent mortality of pulse beetle on third to fifth day after six months of treatment. Germination of treated seeds was not affected after six months of storage (TNAU, Coimbatore & 2020)

Season and year : Rabi 2021-22

Farming situation : -

Source of fund : ICAR

No of locations (Villages): 2

No. of demonstrations (replications/farmers/beneficiaries): 10

No of SC/ST Farmers and women farmers: -

Area proposed (ha) : -

Actual area (ha) : -

Justification for shortfall if any: -

Feedback from the beneficiaries: Storage losses can be minimized using this technology. Scientist Feedback: It can be recommended to the State Agriculture Department to provide in Subsidy mode for the welfare of small and marginal farmers.

Extension activities on the FLD:

- 1. Training -1
- 2. Method Demonstration -5
- 3. Field Day -1
- 4. Lecture Delivered -6
- 5. Article Published -1
- 6. Group Meetings -2

#### **Extension Studies**

#### Impact studies, survey and other extension studies

# **Impact Study of Cluster Frontline Demonstration of Pulses Technologies Preamble:**

Krishi Vigyan Kendra, Theni conducted Cluster Front Line Demonstration on pulse crops such as Blackgram at farmer field in the villages of Theni district from 2018 to 2022. Totally 300 front line demonstrations were conducted in 120 hectare area with involvement of farmers and scientific staff of KVK The main focus of the study was to assess the impact of Cluster Frontline Demonstration of Pulses Technologies.

#### Methodology

A complete list of 120 respondents was randomly prepared who have under gone through training and demonstration on CFLD Pulses such as Black gram from Krishi Vigyan Kendra, Theni districts from 2018 to 2022.. A questionnaire was framed covering background information. In order to assess the adoption level, Productivity, extension gap, technology gap of Black gram and Green gram cultivation under CFLD's and knowledge on existing package of practices, improved varieties, seed treatment, weed management, plant protection and storage techniques adopted by demonstrated farmers. The statistical tool like percentage used in this study for analyzed data. The extension gap, technology gap and the technology index were work out with the help of formulas given by Samui et al., (2000) as mentioned below:

1. Extension gap = Demonstration yield - farmers' yield (control)

2. Technology gap = Potential yield - demonstration yield

Table 1: Technology demonstrated under CFLD's and farmers' practices

Particulars	Demonstration	<b>Farmers Practice</b>
Farming Situation	Rainfed	Rainfed
Variety	VBN-6 and 8	Local variety
Method of sowing	Line Sowing	Line Sowing
Seed treatment	Treat with bio-fertilizers	No seed treatment
Seed rate	15kg/ha	20kg/ha
Fertilizer dose	N:P (20:50)	Not Followed
Plant Protection	Spraying Chlorpyriphos for pod borer	Not-Specific
	and Imadichlorid for sucking pests	
Weed Management	Herbicide	Hand Weeding
	Farming Situation Variety Method of sowing Seed treatment Seed rate Fertilizer dose Plant Protection	Farming SituationRainfedVarietyVBN-6 and 8Method of sowingLine SowingSeed treatmentTreat with bio-fertilizersSeed rate15kg/haFertilizer doseN:P (20:50)Plant ProtectionSpraying Chlorpyriphos for pod borer and Imadichlorid for sucking pests

Table 2: Productivity, extension gap, technology gap in black gram

Year	Yield (q/ha)		Increases	Extension	Technology	B:0	C Ratio
			in yield	gap (q/ha)	Gap (q/ha)	_	
	Demonstration	Farmers	(%)			Demo	Farmers
		Practice					Practice
2017	7.6	6.3	20.63	1.3	4.4	1.36	1.0
2018	7.8	6.4	21.87	1.4	4.2	1.90	1.40
2019	7.9	6.2	27.41	1.7	4.1	1.33	1.10
2020	8.3	6.5	27.69	1.8	3.7	3.60	3.10

2021	8.8	6.8	29.41	2.0	3.2	3.45	2.90
2022	9.1	6.9	31.88	2.2	2.9	2.60	2.05
Aver	8.25	6.51	26.48	1.73	3.75	2.37	1.92
age							

33

#### **Results and Discussion**

Table 2 shows that the seed yield of CFLD's plots was higher as compared to local check because of improved variety, seed treatment, weed management and plant protection measures followed in CFLD's plots (Table 1). The table 2 depicted that the average seed yield was 8.25q/ha which was higher as compared to local plots (6.51 q/ha). The increased % yield was 26.48 in CFLD's over farmers practice.

**Extension gap** An average extension gap between demonstrated practices and farmers practices was recorded 1.73 q/ha (Table 2). This Extension gap should be assigned to adoption of improved transfer technology in demonstrations practices which outcome in higher grain yield than the traditional farmer practices. The similarly observations were also obtained in Black gram crop by by Hiremath and Nagaraju, (2010).

#### **Technology Gap**

Yield of the demonstration plots and potential yield of the crop was compared to estimate the yield gaps, which were further categorized in to technology and extension gaps. The average technology gap in the black gram was 3.75 q/ha (Table 2). The observed technology gap may be attributed dissimilarity in soil fertility status, rainfall distribution, disease and pest attacks as well as the change in the locations of demonstration plots every year.

The data revealed that Average Benefit cost ratio was also recorded under front line demonstrations (2.37) as compared to farmer practices (1.92) during the period of study. The similarly findings was also obtained by Bairwa et al., (2013). The above results showed that the integration of improved technology along with active participation of farmer has a positive effect on increase the Grain yield and Economic return of black gram.

#### Conclusion

There is a need of suitable technology for enhancing the productivity of black gram crop and it is also a need to conduct such demonstrations which may lead to the improvement and empowerment of farmers. High benefit: cost ratio also advocated the economic viability of the demonstration and motivated the farmers towards adoption of interventions demonstrated. Hence, by conducting front line demonstrations of proven technologies, yield potential of black gram crop can be increased to great extent. This will subsequently increase the income as well as the livelihood of the farming community.

# Technology Week Celebrations

Types of Activities	No. ofNumber ofActivitiesParticipants		Related crop/livestock technology		
		1 ur ticipunto	Vegetable Production		
Gosthies	1	61	technologies		
			Millet cultivation, water		
			conservation, Poultry Rearing		
			Techniques and post-harvest		
			Processing and Value		
Lectures organized	3	97	Addition		
Exhibition	1	54	New Agricultural technologies		
Film show	1	61	Mechanization in cotton		
Fair	0	0	-		
			Coconut. Maize and Black		
Farm Visit	4	17	gram		
Diagnostic Practical	0	0			
Distribution of Literature			Minor Miller cultivation		
(No.)	2	200	practices		
Distribution of Seed (q)	1	61	Nutri garden seeds		
Distribution of Planting					
materials (No.)	0	0	-		
Bio Product distribution					
(Kg)	0	0	-		
Bio Fertilizers (q)	0	00	-		
Distribution of fingerlings	0	0	-		
Distribution of Livestock					
specimen (No.)	0	0	-		
Total number of farmers					
visited the technology					
week	6	527	-		
Others					

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

Name of the staff	Title	Dates	Duration	Organized by
P.Maheswaran SMS (Agronomy) & Programme	Organic Farming	10.12.2022	One day	MANAGE Hyderabad and SAMETI, Kudumiyanmalai
Coordinator (i/c) P.Maheswaran SMS (Agronomy) & Programme Coordinator (i/c)	XII Biennial National KVK Conference - 2022	01.06.2022 & 02.06.2022	Two days	Dr.Y.S.Parmer University of Horticulture and Forestry, Solan
P.Maheswaran SMS (Agronomy) & Programme Coordinator (i/c)	Recent Technologies in Agriculture with special focus on Natural Farming	08.11.2022 & 10.11.2022	Three days	TNAU, Coimbatore
Mr. M. Arunraj	Study Tour on Bamboo- Wonder Grass"	23.08.2022 to 25.08.2022	3 Days	Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore
Dr. G. Rajaraman	State Level Refresher Training	14.11.2022 to 16.11.2022	3 days	DEE, TNAU, Coimbatore
M.Ramya Siva Selvi,SMS (HomeScience)	National Facilitators Development Program for Agricultural Extension Management	21.02.2022 to 26.02.2022	6 Days	MANAGE, Hyderabad, Telangana State
M.Ramya Siva Selvi,SMS (HomeScience)	Agripreneurshi p through Banana Based Technologies – An Avenue for Atmanirbhar Bharat"	15.06.2022 to 17.06.2022	3 Days	MANAGE, Hyderabad, Telangana State & ICAR-NRCB, Trichy
M.Ramya Siva Selvi,SMS (HomeScience)	Promotion of Biofortificatio n for ensuring Nutritional	27.07.2022 to 29.07.2022	3 Days	MANAGE, Hyderabad in collaboration with Harvest Plus, India and PAMETI, Ludhiana.

Name of the	Title	Dates	Duration	36 Organized by
staff	<u> </u>			
MD C'	Security	14.10.2022	1.D	
M.Ramya Siva	International	14.10.2022	1 Day	Indian Dairy
Selvi,SMS	Conference on			Association, Tamil
(HomeScience)	Indian			Nadu Chapter, Chennai,
	Dairying-			Department of Food
	Sustainability and Nutrition			Science and Nutrition,
				Nutrition Society of India, Coimbatore
	Security			
				Chapter, Avinashilingam
				Institute for Home
				Science and Higher
				Education for Women,
				Coimbatore
M.Ramya Siva	National	19.10.2022	1 Day	K.S.R College of Arts
Selvi,SMS	Conference on	19.10.2022	1 Duy	and Science for
(HomeScience)	Trends for			Women, Namakkal
	Futuristic			
	Development			
	in Home			
	Science			
	Research and			
	Innovations			
M.Ramya Siva	Management	01.10.2022	1 Day	Punjab Agricultural
Selvi,SMS	Development			Management and
(HomeScience)	Programme			Extension Training
	for Women			Institute (PAMETI),
	Extension			Ludhiana.
	Officials		1.5	
Mr.C.Sabarinatha	International	27.01.2022	1 Day	Faculty of Agriculture,
n,	workshop on			Annamalai University,
SMS	Contribution			Chidambaram, Tamil
(Agricultural	of FPOs in			Nadu
Extension)	Complementin			
	g Farmers Income			
Mr.C.Sabarinatha	Social Medias	(16.05.2022-	5 days	University of
n,	for	20-5-2022)	Judys	Agricultural Sciences,
SMS	Agricultural	20-3-2022)		Bangalore, Karnataka
(Agricultural	Extension			& MANAGE,
Extension)				Hyderabad
Mr.C.Sabarinatha	Recent	21.11.2022	3 days	Tamil Nadu Agricultural
n,	Technologies	to		University, Coimbatore
SMS	in Agricultural	23.11.2022		&
(Agricultural	with Special			ICAR-Agricultural
Extension)	Focus on			Technology
	Natural			Application Research
	Farming			Institute, Hyderabad
Mr.C.Sabarinatha	Extension	12.12.2022 to	5 days	MANAGE, Hyderabad

Name of the staff	Title	Dates	Duration	Organized by
n,	Next:	16		&
SMS	Changing	.1		Tamil Nadu
(Agricultural	Roles and	2.		Agricultural University
Extension)	Innovations in	20		(TNAU), Coimbatore
	Agricultural	22		
	Extension	)		

# Details of sponsored projects/programmes implemented by KVK

S.	Title of the	Sponsoring	Objectives	Duration	Amount
No	programme /	agency	U		( <b>R</b> s)
	project				
1	GRAPE FPO	NABARD	Economic	3 years	11,44,000.00
			empowerment		
			of grape		
			farmers		
2	District Level				
	Awareness		To create	1 Day	
	Camp on Prime	KVIC,	awareness on	(25.02.2022)	15,500.00
	Minister's	Madurai	PMEGP		
	Employment		Schemes		
	Generation				
	Programme		To Provide		
3	STRY Drogramma on	MANAGE-			
	Programme on Value Addition	Hyderabad	skill training on Value	6 Days	42,000.00
	and Processing of	through	Addition and	(19.09.22-	42,000.00
	Fruits and	SAMETI &	Processing of	24.09.22	
	Vegetables	ATMA	fruits and	24.09.22)	
	vegetables		vegetables		
4			To provide	5 Days	
_	Basic		Basic	10.10.2022-	Provided
	Beekeeping	KVIC,	Beekeeping	14.10.2022	Bee boxes
	Training	Madurai	Training for		and other
			STs		tools
5	Scientific		To Provide		
	Poultry Rearing	ICAR-IIHR,	the latest	One Day	
	Techniques and	Bengaluru	technologies	(27.12.2022)	50,000.00
	IIHR		of IIHR and		
	Technologies		Poultry		
	for Sustainable		rearing		
	Income		techniques		
	Generation		To form EDO	2 V	11 44 000 00
6	FPO-Sugarcane and Betalvine	NABARD, Theni	To form FPO	3 Years	11,44,000.00
		THEIII	and Implement the Sugarcane		
			and Betel vine		
			Products		
			Troducts		

Please attach detailed report of each project/programme separately

#### Success Story -1

### Groundnut Seed Production: A way for getting double the income

**1. Situation analysis/Problem statement:** the Major Problem of the Groundnut growers in the area is low yield (13.2 q/ha). This was due to cultivation of low yielding varieties and non-adoption of Good Agricultural Practices. The farmers getting Rs. 27000 per as net income per ha. Insufficient rainfall and drought during vegetative stage reduces the yield and income of the farmers

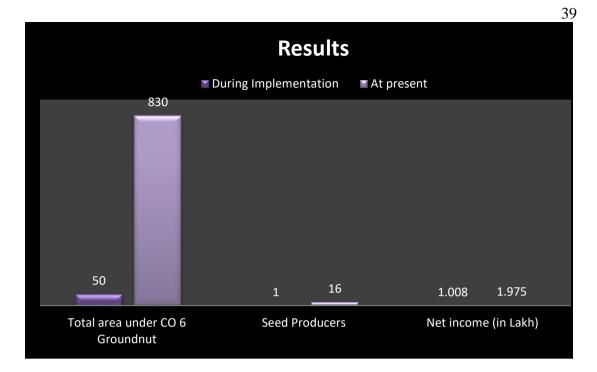
**2. Plan, Implement and Support**: PRA session conducted at Ethakovil village for identification of thrust and opportunities to overcome the thrust. We have implemented the CFLD Oilseed Groundnut Programme with newly Released CO 6 Groundnut variety with ICM practices in the village in an area of 50 ha. We have also conducted Capacity building training on Seed Production technologies in Groundnut and Farmers Made exposure visit to State seed Production farm at Theni.

#### 3. Output:

Before intervention of KVK					
<b>Component Description</b>					
Components	Yield	′ ha	Gross inc	ome	Net
Names			( <b>Rs.</b> )		Income (Rs.)
Groundnut	28 Q		59800		27000
After intervention of KVK	·				
Components	Yield / ha	Gross	Net	P	roduction %
		income	income	Ι	ncrease over
		( <b>Rs.</b> )	( <b>Rs.</b> )		
Groundnut Seed Production	32 Q	100800	67500		12.5

Adoption of CO 6 Groundnut as grain and seed production increases the yield as well as income of the farmers. The seed production programme helped the farmers to adopt the good practices with quality seeds. The affordability of the technology is 57 % among the 125 farmers who adopted the technology.

4. Outcome and Impact:



Success story-2 Recycling of Farm wastes – A small lane for Organic farming

Name of farmer:Vijaya Raja Address: S/ O Krishnan, Jeyamangalam, Peiyakulam,Theni Mobile Number: 6379868533 Age: 35 Education: B.Com. Size of land holding (in acre): 3.5 acre



- 1. Situation analysis/Problem statement: Soil health is very important to produce healthy crops that in turn fulfil nutritional requirement of human beings and animals. Soils supply essential nutrients, water, oxygen and root support to plants to make them grow healthy and flourish (FAO, 2015). To maintain soil health, it is very important to manage the agricultural waste, which mainly consists of crop residues that contain lots of organic carbon and other plant nutrients. Field retention of crop residue after harvest not only reduces soil erosion but also helps to enhance soil microbial growth. Crop residue management is a challenging task in Theni district due to the predominance of sugarcane-sugarcane cropping system. This situation demands an effective waste disposal technology that can convert crop waste into some other valuable forms. Moreover, crop residue management at farm level is a time taking process that requires timely attention of the farmer. To solve this problem, National Centre of Organic Farming (NCOF) has developed a waste decomposer culture in the year 2015 that can be used for quick composting of organic waste. It is a consortium of microorganisms developed from local cow's dung that can also works as a biofertilizer and biocontrol agent along with improving soil health. Multiplication and application of waste decomposer is simple and doesn't require much expertise. This makes the product farmers friendly
- 2. **Plan, Implement and Support**: KVK, Theni implementing four training programme on Composting technologies at KVK, Theni. He was one of the participants. He learned the different types of composting technologies and use of various types of

microbial inoculum. We also made two scientist visits to his farm and given advisories on making composting pit and development of sugarcane trash compost by using NFCO waste decomposer. After guidance he was making compost in sugarcane trash and recycled the sugar trash waste. He also applied that compost as manure to the next cropping system.

- 3. **Output**: Use of waste decomposer in sugarcane trash composting helped farmers to get relatively higher yields. This technology has also reduced the input cost and use of chemical fertilizers that improved the profitability of rice cultivation. The visible difference observed between the experimental field and the neighbouring sugarcane fields has helped other farmers to get informed about the technology as well as motivated to adopt it in their fields too.
- 4. **Outcome:** Major advantage with this waste decomposer is that it is helped to convert all types of biodegradable wastes into compost within 30-45 days. Further, it helped to reduce biotic stress in plants when use as foliar spray controlled various insect pests and diseases. It is also recommended for set treatment for uniform germination. The judicious use of decomposer helped farmers to reduce the cost of cultivation especially in the purchase of organic fertilizers and pesticides.



5. **Impact:** The average yield of cane from the demonstration fields was 438.0 Quintal/acre which was about 15% more than that of previous year. The average input cost saved by farmers was approximately Rs. 6000/acre by adopting this eco-friendly technology.

#### Success Story 3 Integrated Farming System (IFS)- A Livelihood Security

Name of farmer: Dhayalan Address: S/ O Pandiyarajan, Markeyankottai, Theni Mobile Number: 9842384982 Age: 26 Education: Degree Size of land holding (in acre): 8 acre



**1. Situation analysis/Problem statement:** The Aspiring young farmer in Markeyankottai village of Chinnmannur block, Theni District. The major crops

grown are coconut and banana but he frequently faced yield loss and inconsistent income.

2. Plan, Implement and Support: KVK, Theni organizing several training programmes on Integrated Farming System and Improved banana cultivation training and he got encouraged and aware about various technologies available to meet her needs and frequently he had participated in various trainings of KVK. After that training programme he taken up Banana cultivation with IFS models including various components Livestock rearing, Fodder cultivation, Hydrophonics, Silage Production, Azolla and Vermicompost Production.

## 3. Output:

- → Initiating Roof top rearing of goats with having various breeds like Jamunapari, Thalacherry, Boyer with total of 15 goats and earning an income of Rs 2 lakhs/ year and goat manure can be used for composting purpose.
- Extablishing Dairy unit with rearing of 15 cattles (Including 9 Female cow, 3 Kangayam breed and 2 heifers with Milk production of 150 Litres/ day, Which is exported to nearby states.
- Cultivating high yielding Fodder Varieties such as CO5, Super napier, COFS29 and other cultivation including mulberry production, Tree fooders like Agathi, Subabool, Glyricidia to be produced for Livestock animals.
- Establishing Vermicomposting unit and producing a 5 tonnes of vermicompost per month which will be utilized for his own coconut farm and also give supply to neighbouring farmers
- Produced and sold Azolla (800kg) to 200 farmers in each year and Initiating Silage Production unit, Hydrophonics structure for the purpose of fodder production to livestock animals.

Component Names	Area (Acre)/No.	Production (Q/Liter/No.)	Gross income (Rs.)	Net Income (Rs.)
Coconut	2 Acre	14500 No.	217500	125440
		Total	217500	125440

### 4. Before Intervention

Components Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross income (Rs.)	Net income (Rs.)
Coconut	3Acre	26400 No.	528000	369600
Banana	1Acre	220 Q	350000	220000
Cow	10 No.	18000 L	540000	297000
Goat	15No.	150	98000	78300
Azolla	1Acre	8 Q	40000	36000
		Total	1556000	1000900

### After Intervention

#### **Output:**

The yield of coconut will be increased by adopting various crop improvement technologies and introduction of G9 banana cultivation and various IFS units includes Dairy, Poultry, Goat rearing, Azolla production. From these practices he reduces the cost of cultivation by effective utilization of farm wastes and he get a annual income of 10 Lakhs/ annum.

#### Success Story 4 Value Added Products from fruits and vegetables for sustainable livelihood

#### **Domain of the study / Rationale:**

Smt. Regina Palpadiyan (55) living in Aranmanaiputhur Village, Theni District. Her educational qualification is 12standard. She always thought about to do something new and useful to the community. After coming in contact of KVK Theni, she got an innovative idea to make value added products from seasonal fruits and vegetables. Her hard work and dedication helped her to develop innovative products using locally available resources. She is also rearing backyard poultry and backyard kitchen garden.

<u>Activities implemented by KVK</u>: She has attended the skill training on Value Addition and Processing of Fruits and Vegetables. she started making products like Banana Malt (ODOP Concept), Beetroot malt, carrot malt, amla jam, honey amla, amla candy, Gulkhand, etc., Initially she has used their product in her family and relatives. After getting the good response and health benefits in the family, she started selling to other people.

**Support:** Received Rs.6,00,000/- grant from DIC. She has purchased pulping machine, roasting machine, malt making machine, packaging machine, sealing machine for reducing the drudgery and also to reduce the labour. Marketing linkages also created with line departments, FPOs, SHGs, NABARD Rural Mart, Super Markets. Providing Continuous handholding support from purchase to marketing.

**Output**: She has trained and adopted the technical knowledge and skills which was learned from KVK training programmes. She has developed more than 20 products i.e Different Types of Malts- Millets Malt, Beetroot Malt, Carrot Malt, Aloe Vera Malt, Red Banana Malt in the brand name of VAHIN HOME MADE FOOD PRODUCTS. She has received FSSAI (No. 22420231000348) and MSME (Udyam No.: TN-23-0005493) registration Certificates.

### **Recognition:**

- Appreciated by Hon.Minister of Social welfare and women empowerment for her innovative products on 03.08.2022 at KVK premises.
- Received Best Entrepreneur Award during International Women Day programme at CENDECT KVK.
- Scientific Advisory Committee Member under Entrepreneur category.
- Participated in Doordharsan Program and shared her success journey for wider coverage.
- Participated in the District Level Exhibitions in different block of Theni District
- Selected as Best Entrepreneur in Mahalir Thittam and ATMA.
- She is a role model and motivation speaker for other women and rural youth in the district.
- Currently, she is marketing her products at collectorate premises, Theni.

### **Outcome and Impact:**

- i.<u>Technological benefits:</u> She has been disseminating the technologies to the 5 Mahalir Thittam SHGs, 150 RAWE students, 12 Entrepreneurs, 50 farm women through trainings, method demonstration, lecture delivered.
- ii. <u>Economic benefits:</u> She is earning around Rs.15,000/ month.
- **iii.**<u>Social benefits:</u> She is providing Highly energetic and nutritious to the community and providing employment opportunities to the unemployed women.

- iv. Environmental Benefits: Eco friendly, healthy and nutritious products
- v. <u>Institutional Development:</u> She is also the nearest She is also using the Incubation facilities at KVK premises.
   Glimpses of her Journey

<image>

Minister Visit during the Inauguration of Women Entrepreneur Center opening ceremony on 03.08.2022 at KVK Premises



**Success Story 5** 

## Beekeeping – A Sustainable Income for Rural Youth

#### **Domain of the study / Rationale:**

Bee-keeping is an income generating activity that suits the rural and village population. It can be adopted in any rural, agriculture and forest development for sustainable employment and entrepreneurship development. Hence KVK Theni conducted many programmes to create employment generations to the rural community especially for Rural Youth.



C.AMBETHRAJA (31) living in 7th Lane area, Cumbum, Theni District. He has completed 12<sup>th</sup>. Due to his family situation, he was not able to go for higher studies. After higher secondary immediately he joined as a Saleman in Cumbum mobile shop. Basically, he is an innovative thinker and implementer in his work. Now, he is the Best Youth Beekeeper and providing beekeeping techniques to the budding beekeepers, neighbours, rural youths exclusively for socio economically weaker sections. His interest, hard work helped him to achieve success in the field of beekeeping.

Activities implemented by KVK: Based on the above view, KVK Theni conducted three days training programmes in all blocks of Theni District. He has attended three days skill training and exposure visit was arranged for getting practical knowledge about beekeeping.

**Support:** After completing the KVK Training programmes. He participated in five-day training which was organized by KVK & KVIC at KVK Campus. Next, he was provided 10 Bee boxes along with tool-kits (honey extractor, smokers, bee weevils etc.,), beekeeper identity card under Honey Mission. Honey Mission was implemented in collaboration with KVIC, DO, Madurai., He resigned his job and fully involved in Beekeeping after the KVK trainings

**Output**: Currently he is having the following products. 1. Beeboxes (Different quality), 2. Colonies 3. Raw Honey 4. Bee wax& cream 5. Honey Soap 6. Bee Pollen. Now he earning Monthly Rs.40000/- in beekeeping sector alone. He is also doing some forest work during his free time.

He is implementing technical knowledge and skills which was learned from KVK training programmes. He is selling from beeboxes to honey value added products in all parts of Tamil Nadu. His brand name of AMSA Honey and registered in FSSAI No. 2242247000031.

#### **Recognition:**

- Appreciated by Hon.Minister of Social welfare and women empowerment for his innovative products on 03.08.2022 at KVK premises.
- Received Best Entrepreneur Award
- Participated in All India Radio and shared his success journey for wider coverage.
- Participated in the District Level Exhibitions in different block of Theni District

- vi. <u>Technological benefits</u>: He has been disseminating the technologies to the 8 Beekeeping FIGs, Entrepreneurs through trainings, method demonstration. He has also developed Technical Pamphlets for wider disseminations.
- vii. <u>Economic benefits:</u> With the adoption of innovative practices, he generated a net income of Rs 40,000/- per month
- **viii.** <u>Social benefits:</u> He is serving the health products to the community without any adulteration. He is a rural youth role model and motivation speaker for other women and rural youth in the district.
- ix. Environmental Benefits: Eco friendly, healthy and nutritious, medicinal products
- **x.** <u>Institutional Development:</u> He is also motivating the neighbour who are not aware of KVK activities and also advised them to attend the trainings in KVK.



#### **Glimpses of his Journey**



Year	Title of the	Concept in brief	Objectives	Usefulness/ used for	Models operated	Outcome results
	Innovative extension methodology spread					
2022-23	Soil Test Crop Response (STCR) based fertilizer application	STCR approach is aiming at obtaining a basis for precise quantitative adjustment of fertilizer doses under varying soil test values and response for targeted levels of crop production. STCR provides the relationship between a soil test value and crop yield. Used for similar soils of particular agro-eco region.	doses for a given crop based on soil test values to achieve the "Targeted yields" in a specific soil agro-climatic region under irrigation or protective irrigation conditions by using mathematical equations	profitable site specific fertilizer recommendation for increased crop production and for maintenance of soil fertility. Aims to provide balanced, efficient	methodology takes in to account the three factors; a) Nutrient requirement (NR) in kg/ quintal of the produce	based fertilizer application methods which results they are getting higher

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

Year	Title of the Innovative extension methodology	Concept in brief	Objectives	Usefulness/ used for	Models operated	Outcome results
	spread					
2021- 2022	Agri-Nutri (A2N) Nutri Smart Village	Nutri Farming System, Agri-Nutri Capacity Building Programme, Agri-Nutri Education and Institutional Covergence	To establish Agri-Nutri (A2N) Nutri Smart Village	Provided the entire Nutri Farming System	Farm women	Establishment of Nutri Garden and Micro Green Cultivation for Nutrition Security
2017- 18	Master Trainers approach for technology spread	Our KVK is aimed at making the trainees in to trainers especially youth members been converted as master trainers	To develop the trainees in to trainers for the horizontal spread of the technologies	The master trainers are been utilized for the various training conducted in ON and OFF campus training	The youth members are with good educational background and good operating skills in the machines are been trained	Among 15 master trainers were been operating with the KVK for coconut climbing machine, bee keeping ,modern dairying
2018- 19	The Group Approach - A mechanism to safeguard the farmers	Aggregating farmers in a group is a difficult task but it is the need of the day. By lack of co- operation among farmers they were exploited at different levels (input shops, commission mandies, local money lenders, middlemen, Govt. subsidies, etc.,) and they are still in distress. To overcome those issues our KVK believe strongly the	under one umbrella for collective actions.	<ul> <li>a. farm inputs</li> <li>especially seeds,</li> <li>pesticides, plant</li> <li>protection chemicals,</li> <li>feed, etc.,</li> <li>b. To add the</li> <li>Value to their produces</li> <li>and sell the products at</li> <li>remunerative prices to</li> <li>make agriculture as a</li> <li>profitable venture.</li> </ul>	As the Farmers are clubbed into a group the mobilization of financial resources to establish input shops, value addition centers, etc., became easy. b. Being a group it is easy to avail Government schemes for their	FPO are formed on Grapes and sugarcane farmers are now benefited by this group formation approach

Year	Title of the Innovative extension methodology spread	Concept in brief	Objectives	Usefulness/ used for	Models operated	Outcome results
		group approach and formed FPOs with the NABARD funding			betterment.	

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)

#### Introduction

Mr. Jeyaraj is an organic farmer who took up natural farming during 2015 after undergoing training in Organic farming from the KVK, Theni. The farmers were hailing at Kathirnarasingapuram village of Andipatty block, Theni District. He have 5 acre of land with minimum of water resources. Due to high price of inorganic fertilizer he is following organic cultivation of Jasmine in his farm (2 acre). The farmer uses cow dung manure and bio gas slurry.

#### **ITK practiced**

The farmer is practiced foliar spraying bio- gas slurry mixed with water 1:10 ratio in jasmine prevents flower drop and corrects nutrient (Fe) deficiency.



#### Rationale

Nutrients are supplied to correct iron deficiency and prevents flower drop.



### Benefit

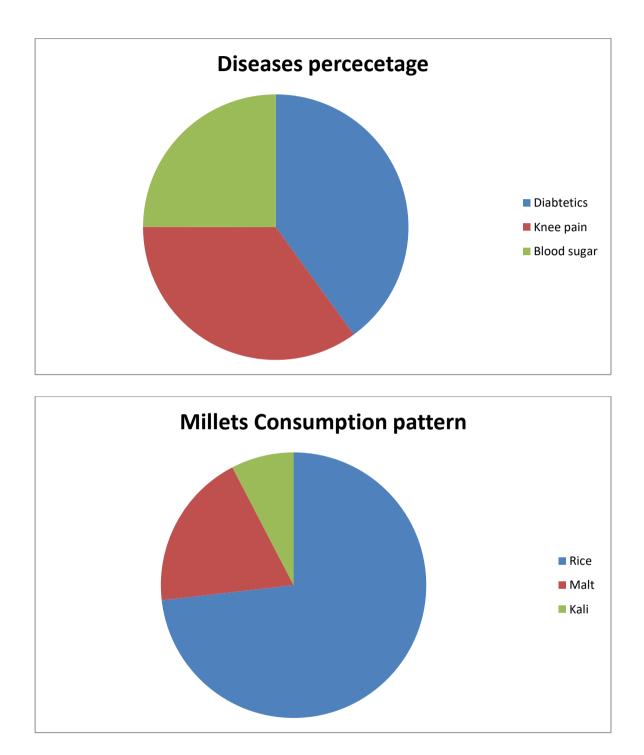
Easy to adopt and low cost.

			50
<b>Operational Area</b>	<b>Crop/Enterprises</b>	ITK Practiced	Purpose of ITK
Chinnamanur and	Red	<b>Coating with Red Mud Soil</b>	To prevent the pest
Andipatti Blocks	Gram/Sorghum	1 kg of Red soil is required	and infestation during
	(var-Irumbu	for 4 kg of Red Gram for	the storing period and
	Solam),	coating	also for good
			germinations.
Theni and	Paddy	Storing with Pungam	To manage the pest
Periyakulam		Leaves	and infestation during
Blocks		Farmers are practicing gunny	the storing period and
		bags to store paddy seeds for	also for good
		managing rice moth during	germinations.
		storage period.	
		Top of the gunny spreading	
		Pungam for preventing	
		storage pest in Paddy	
Vellaiyammalpuram	Onion	Thalippu Vadagam is a sun	To minimize the post-
, Chinnamanur		dried condiment prepared	harvest losses during
Block		using small onions and other	Peak harvest time and
		spices during peak harvest	low market situations
		time.	

#### Survey report

#### Impact of Barnyard Millet Consumption on Health benefits in rural areas of Theni District

Barnyard Millet, Echinichloa frumentaceace, grown as compliment to existing millet crops, contribute to superior nutritional properties with increased dietary fiber, low glycemic index and high micronutrient composition. This study was conducted with the aim of impact analysis on barnyard millet consumption in rural populations of kathirnarasingapuram, G.Usilampatti and Kamatchipuram in Theni District. The Questionnaire is prepared with the following parameters like age, gender, consumption pattern, consumption rate per week, health issues from the selected samples. A total of 60 respondents were surveyed categorizing as barnyard consumers and non-consumers. Based on the results, most of the individuals i.e., 30% of individuals are identified from the age group of 50-60 and 26.6% of individuals are of 40-50. Among the individuals of above-mentioned age group, 26.6% of individuals are reported to be diabetic, 23.3% are reported to be suffering from knee pain and 16.6% of individuals reported to be increased blood pressure subjects. Based on the consumption pattern of barnyard millet, 63.3% of individuals are consuming barnyard food products twice a week in the form of rice and 16.6% of individuals are consuming four times a week in the form of malt and snack item (laddoo) and 6.6% of individuals are consuming on a daily basis in the form of kali. Among 26.67% of diabetic patients identified, after consumption of barnyard millet in any form, 50% of individuals are reported to maintain stable blood sugar levels. 6.6% revealed the significant maintenance of normal B.P levels after consumption of barnyard millet among 16.66% of blood pressure patients. The results suggest that barnyard millet been high in nutritional value with hypoglycemic and blood pressure properties make it a nutritive substitute to cereal crops.



Name of specific technology/skill	No. of participants	% of adoption	Change in income (Rs.)		
transferred	participants	adoption	Before (Rs./Unit)	After (Rs./Unit)	
IIHR Banana Special	450	42	375/Bunch	420/Bunch	
NCOF Waste Composer	150	40	2500/ unit	3200/unit	
TNAU Fruity fresh	80	30	1500/q	1850/q	
Azolla cultivation	100	87	289/day/Animal	340/day/animal	
CO 6 Groundnut	150	64.5	24700/ha	49600/ha	

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

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

Impact of five select technologies assessed/demonstrated/popularized by the KVK in the
district (in QRT format)

Year	Title	Success story in brief
2015	Foliar	Name: M. Jeyaraj
2016	Application of	Background:
	Banana Special	The farmer is hailing from Palarpatti village in Bodi Taluk
	for Quality	of Theni District. He developed 10 acres of Land holding with
	Bunches	adequate supply of irrigation water. This farmer has cultivated
		Banana, Rice and Coconut. But now he gives more importance to
		Banana Cultivation.
		In initial Banana Cultivation, he used heavy dose of
		chemical fertilizers and other inorganic inputs to increase the
		production and the productivity. On continuous banana
		cultivation in his field, he couldn't take up the lead in Banana
		Cultivation because of lowest production and more cost of
		cultivation. Hence he could not realize the profit margin in
		Banana Cultivation. In subsequent years of Banana Cultivation
		pulled him down economically.
		At particular point of time, interventions of KVK made
		him too aware and adopt the technologies of Banana Special
		application for Banana Cultivation. He interacted with our KVK
		and purchased of IIHR Banana Special for the past 3 years.
		Banana Special was sprayed by him during all vegetative stage at
		monthly interval and at the time of bunch formation and
		development stage. He has given more thrust for foliar spray of
		banana special to the banana to take more advantages like less

		53
		micronutrient consumption, crop improvement and increase in fruit size and color and fast correction of deficiency. As the banana special was applied in entire banana field, the yield increase was substantial and ultimately made profit margin increased economical. In initial banana cultivation he could realize only 28 - 30 Kg per bunch. Now after the banana special spray, he got and additional yield of 5 Kg/bunch and he was able to take more yield and increase production and productivity. After the foliar application of banana special, he now applied Banana Special through Drip Irrigation. Now days, he couldn't practice basal soil application of micronutrients. Instead he prefers to go for foliar spray and drip fertigation. Banana Special mixture gave more yields and quality of bunches in banana cultivation. This helped him to increase profit of Rs. 40,000/acre.
2017-	Cashew Apple	Intervention Process:
2017-2018	Squash Preparation	She is a farm women. The acute shortage of irrigation water has lead to decrease in yield and farm income. The home scientist of CENDECT KVK imparted training programme on Home Care Products, Various Pickle Preparation, and Fruits Processing Technologies for the SHG members at Thangammalpuram. She had attended many of our training programmes. With the skills learnt, she has started preparing Cashew Squash with locally wasted Cashew apple. KVK Home Scientist has given the technical guidance to become a entrepreneur. She purchased other raw materials from whole sale shop and started preparing the Cashew Squash. She is now selling the Cashew Squash in the local markets in Theni District. Impact: Now one group of SHG members have started preparation of Cashew Squash for the home consumption. Economic Gains: In initial stage, she produced 3 Lt of Cashew Squash per day. After that she increased the amount of production to 15 Lt
		Cashew Squash per day. The production cost is Rs. 10/ lt. The cost of selling of 1 Lt Cashew Squash is Rs. 30 and for 15 Lt of Cashew Squash. She earns Rs. 300/day. She earns Rs. 9000/- per
		month.
2016-	Onion Storage	Background:
2017	Structure	The farmer is hailing from Ambasamudram in Theni Block in Theni District. He developed 4 Onion storage structure for storing Onion cultivated from his 20 acre land holding. But now he gives more importance to Onion storage.
		In his initial farming, he cultivated Rice and Vegetables in

		54
		<ul> <li>irrigated condition and Cumbu at rainfed situation. He was not able to earn more profit from these crops. He wanted to become a business turned farmer. So he started Onion cultivation in small areas of land holding. After that, he cultivated 10 acres of Onion. At harvesting time, low market price for Onion reduced the profit. So he wanted to store and sell during the high market price time. At particular point time, interventions of KVK made him aware and adopt the technologies on pre harvest spray for long term storage and low cost Onion storage structure. He interacted with KVK for the past 3 years. He established Onion storage structures with the interaction of our KVK. He has given more thrust for utilizing locally available bamboo, sorghum Stover and wild grasses for construction of structure for storaging of Onion to take more advantages to get better market price. Onion storage structure is 80ft length, 3 ft width with the height of 6ft. In this storage structure, he stores 7,500kg of Onion. At the time of harvesting, price for Onion is Rs.15/kg due to low demand. After two months cost of Onion is Rs.20-25/kg. Average price increment is Rs. 2-7/kg/month.</li> </ul>
2016 2017	CO-4 Bhendi Hybrid Cultivation	Background: The farmer is hailing from Balakrishnapuram village in Theni Taluk of Theni District. He developed 8 acres of Land holding with adequate supply of irrigation water. This farmer has cultivated Bhendi, Banana and Maize. But now he gives more importance to Bhendi Cultivation. In initial Bhendi Cultivation he used cultivation of private varieties, heavy dose of chemicals and fertilizers to increase the production and the productivity. On continuous Bhendi cultivation because of lowest market price, production and more cost of cultivation. Hence he could not realize the profit margin in Bhendi cultivation in subsequent years of Bhendi cultivation pulled him down economically. At particular point of time, intervention of KVK made him to aware and adopt Co-4 Bhendi features tall plants 135-150 cm, dark green, bender medium size fruit, 25-29 fruits/plant, 22 harvest in 110 days starbing from 39 days after sowing resistant to bhendi YVMV disease. CO-4 bhendi hybrid cultivation through according to survey conducted by ICAR KVK, CENDECT. Bhendi cultivation area decreased. So KVK scientist approaches the farmer to cultivate bhendi in Rabi season for getting higher price. He interacted with out KVK and he got CO-4 bhendi seeds during the last year. CO-4 bhendi hybrid was cultivated by him in 1 acre. IIHR vegetable special application, increased the quality of bhendi fruits and reduced curved bhendies. During harvest itching problems was not observed

		55		
		followed by labours compared to other bhendi varieties. As the		
		CO-4 bhendi was cultivated the yield increase was substaintial		
		and ultimately made profit margin increased economically in		
		initial bhendi cultivation he could realize only 22 plucking per		
		season. Now, after the CO-4 bhendi hybrid cultivation he got 32		
		plucking with yield of 115q per dare and he was able to take more		
		yield, price, resistant to YMV and increased production and		
		productivity. This helped him to get profit of 3,00.000/acre in a		
		Rabi season.		
2017	CO 51 Paddy	Water scarcity was a major problem, its availability being		
2018	variety:	dictated by the monsoon in Theni district. Lack of adoption of		
	Profitable Rice	good agricultural practices reduces the productivity of paddy.		
	Production in	There was an urgent need to reduce water consumption and		
	Theni	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		
		Integrated Crop Management Practices for higher		
		Productivity		
		Productivity Split application of Urea		
		Productivity Split application of Urea Application of excessive Nitrogenous fertilizers		
		Productivity Split application of Urea Application of excessive Nitrogenous fertilizers Particularly Urea leads to Plants are dark green in colour,		
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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 produces 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.

### Cases of large scale adoption/impactof specific technologies

### Scaling up of CO 51 Paddy variety for Rabi season in Theni district

**Introduction:** Paddy is the major crop inTheni District. The total area under cultivation is 14000 ha. Among the entire paddy growing area the cropping pattern is Paddy-paddy-Pulses. The second paddy crop was short duration due to lack of availability of water. Famers are cultivating low yielding and medium duration varieties. The variety recorded low yield due to water shortage during milk dough stage. At the point KVK introduce CO 51 Paddy variety for Second Paddy crop.

## Programmes Conducted on CO 51 Paddy variety

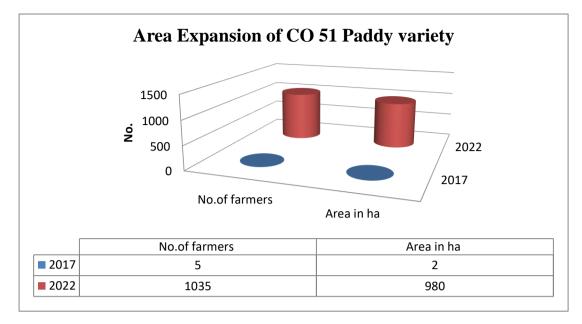
- OFT programme in 2 ha among 5 farmers
- FLD programmes in 8 ha among 20 farmers
- Training programmes 8 for farmers 1 for rural youth with participation of 174 farmers and rural youth
- 3 field days and 2 farm school in CO 51 paddy variety conducted

## **Economics of the Variety**

	Yield	Yield increase (%)	Cost of Cultivation (Rs)	Gross income (Rs)	Net income (Rs)	BCR
CO 51	60.16	15.22	43257	102272	59015	2.37
Farmers practice	51.00	-	45650	76500	30850	1.68

## Action taken for Scaling up:

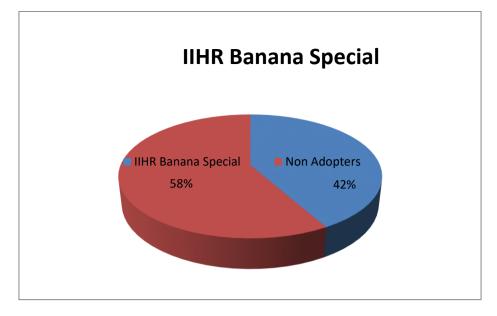
After introducing the variety KVK were conducted 3 field days in collaboration with State department. In collaboration with Joint Director of Agriculture and Seed Certification department we have developed 7 Certified Seed producers in the District. We also recommend to the department to supply CO51 Paddy seeds as part of National Agricultural Development Programme on Subsidy Basis. This help to adopt the CO 51 Paddy variety in large scale in the District.



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

Area spread in district through convergence under IIHR Banana Special till 2022 is 850 ha

Particulars	Yield (q/ha)	Yield increase (%)	Cost of Cultivation (Rs)	Gross income (Rs)	Net income (Rs)	BCR
IIHR Banana Special	1120	17.89	285000	1344000	1059000	4.71
Farmers practice	950	-	246000	1140000	894000	4.63



# <u>Linkages</u>

## Functional linkage with different organizations

Name of Organization	Nature of Linkage
ICAR Institutes	
ICAR NRCB, Trichy, Tamil Nadu.	Received Latest Technologies for Popularization of farmers. Getting Quality Improved Critical Inputs for conducting OFT, FLD Programme
ICAR NRCG, Pune	Received Latest Technologies for Popularization of farmers. Getting Quality Improved Critical Inputs for conducting OFT, FLD Programme
ICAR IIHR, Bengaluru	Received Latest Technologies for Popularization of farmers. Getting Quality Improved Critical Inputs for conducting OFT, FLD Programme
MANAGE, Hyderabad & SAMETI	STRY Training
DST Institute	
National Innovation Foundation-India	Innovators Meet, Research Study, Dissemination of Grassroots Innovation Projects
Line Departments	
Department of Agriculture, Theni, Tamil Nadu.	Conducting Training programmes and Demonstration. Received assistance for getting seeds/critical inputs for FLD Programme. Participation in department training programme as resource person.
Department of Horticulture, Theni, Tamil Nadu.	Received Guidance and Assistance for Conducting Training Programmes. Received and supply of Quality Seedlings to Farmers
Department of Animal Husbandry, Theni, Tami lNadu.	Creating awareness about mixed fodder cultivation
Department of Sericulture, Theni, Tamil	Conducting Skill Trainings

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Name of Organization	Nature of Linkage	
Nadu.		
VazhnthuKattuvomThittam,Theni,Tamil Nadu.	Organizing Training Programmes	
Mahalir Thittam, Theni	Conducting Trainings to the SHGs Leaders/Members	
ATMA, Theni, Tamil Nadu.	Conducting Farmers Field School Programmes, Scientist Visits, Field Visits, Capacity Building Trainings for ATMA Functionaries	
FTC, TANUVAS, Theni, Tamil Nadu.	Conducting Training, Extension Activities, Important Days Receiving Critical Inputs for conducting FLD Programme	
Joint Action for Sustainable Livelihood (JASuL)	Training extension workers on Climate Change Mitigation Strategies	
ICDS, Theni, TamilNadu.	Establishment of Nutri Garden in Anganwadi, Conducting Training, Distribution of Nutri Garden Seeds, Seedlings, Saplings. Conducting Training to the Anganwadi Workers	
Nehru Yuva Kendra (NYK), Theni, TamilNadu.	Creating awareness among farmers about scientific farming through field level to NYK volunteers. Linking SHGs to get NYKs schemes.	
Cotton Corporation of India	Jointly Organized Trainings and Demonstration	
Board		
Coffee Board, Bodinayakkanur, TamilNadu.	Conducting training to SHG members	
Spices Board, Bodinayakkanur, ,TamilNadu.	Conducting Training and Awareness Programmes to Farmers, Rural Youth, SHGs	
Council		
Tamil Nadu State Council of Science and Technology (TNSCST), Chennai, TamilNadu.	Publication of	
Commission		
KVIC, Madurai, TamilNadu.	Organizing Basic Bee keeping Training and Distribution of Bee Boxes.	
Financial Sectors	1	
NABARD, Theni, TamilNadu.	Getting financial assistances for 2 FPOs, Book Publications -Seminars.	
District Industries Center, TamilNadu.	Organizing various Awareness programmes to Startups	
Lead Bank, Theni, TamilNadu.	Financial Literacy Programmes	
<b>Education Institutions – Universities and Col</b>		
Tamil Nadu Agricultural University, Coimbatore, TamilNadu.	Receiving Latest Technologies for Conducting Training Programmes. Getting Seeds/Critical Inputs for conducting FLD/OFT Programmes	
TNAU, Horticultural College and Research Institute, Periyakulam	Receiving Guidance and Assistance for Conducting Training Programmes. Guidance	

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Name of Organization	Nature of Linkage	
	to students during Rural Agricultural Work	
	Experience programme	
Agricultural College and Research Institute,	Guidance to students for their Rural	
Madurai, TamilNadu.	Agricultural Work Experience programme	
Sri AdiChunchanagiri Women's College,	Signed MOUs with College to transfer of	
Cumbum, Theni, TamilNadu.	technologies, joint implementation purposes	
Sri Arul Anandar College, Madurai,	Signed MOUs with College to transfer of	
TamilNadu.	technologies, joint implementation purposes	
Avinashilingam Institute for Home Science	Conducting Training to the Faculty,	
and Higher Education for Women,	Scholars, Students, Joint Implementation	
Coimbatore, TamilNadu.	Activities	
Fatima College, Madurai, TamilNadu.	Guidance to students for their Rural	
	Agricultural Work Experience programme	
Karunya Agriculture College, Coimbatore	Guidance to students for their Rural	
	Agricultural Work Experience programme	
Ramakrishna Agriculture College,	Guidance to students for their Rural	
Coimbatore, TamilNadu.	Agricultural Work Experience programme	
College of Agricultural Technology (CAT),	Guidance to students for their Rural	
Theni, TamilNadu.	Agricultural Work Experience programme	
Krishna College of Agriculture and	Guidance to students for their Rural	
Technology (KRISAT), Usilampatti,	Agricultural Work Experience programme	
TamilNadu.		
HajeeKaruthaRowtherHowdia College,	Guidance to students for their Rural	
Uththamapalayam, Theni, TamilNadu.	Agricultural Work Experience programme	
Tamil Nadu Teachers Education University,	Conducting 12 hours Assist World Record	
Chennai, TamilNadu.	Programme	
Mass Media		
All India Radio, Madurai, TamilNadu.	Broadcasting of Feedback/Interviews of	
	KVK beneficiary Farmers for Adopting New	
	Technologies	
Kodai FM, Dindugal	Broadcasting of Feedback/Interviews of	
	KVK beneficiary Farmers for Adopting New	
	Technologies	
Leading News Papers-Daily Thanthi,	Coverage of KVK activities	
Dinamalar, Thinakaran, Thinaboomi,		
MalaiMurasu, Agri-Doctor, TamilNadu.		
Farmers Producer Group/ Organizations (Fl		
Suruliaru Grapes Farmer Producer Company	Conducting Training Programmes, Joint	
Ltd., Surulipatty, TamilNadu.	Implementation, Participation in Meeting,	
	Scientist Visit	
Vallalar Farmer Producer Company Ltd.,	Conducting Training Programmes, Joint	
Periyakulam, TamilNadu.	Implementation, Participation in Meeting	
Malar Farmer Producer Company Ltd.,	Conducting Training Programmes, Joint	
Andipatty, TamilNadu.	Implementation, Participation in Meeting	
Aghamalai Spices FPC Ltd.,	Conducting Training Programmes, Joint	
Periyakulam, TamilNadu.	Implementation, Participation in Meeting	
Kamathenu FPC Ltd., Chinnamanur	Conducting Training Programmes, Participation in Meeting	
Malligai Horticulture Farmer Producer Group,	Conducting Training Programmes, Joint	
Seepalakottai, TamilNadu.	Implementation, Participation in Meeting	
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Name of Organization	Nature of Linkage		
Salamalai Horticulture Development Farmer	Conducting Training Programmes, Joint		
Producer Company Ltd., TamilNadu.	Implementation, Participation in Meeting		
NGO Network and other Institutes			
Assist World Record, Tamil -America	Organizing 12 hours World Record Event		
World Vision, Theni	Conducting Training Programmes for GAP		
	to the farmers and farms women's		
Dhan foundation, Madurai	Conducting Training Programmes GAP to		
	the farmers and farms women's		
NGOs	Creating awareness about Drought		
	Mitigation and Sustainable Agriculture,		
	Value Addition, Skill Training		

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)

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

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

Name of the Award	Category (International/ National/State/ Regional/ District/ Intuitional/ Society etc.,)	Recipient (KVK/KVK - STAFF/Contact Farmer/Trainee etc.,	Description about the award/Remarks if any
Best Poster Award-1st Prize	Institutional	M.Ramyasivaselvi SMS (Home Science)	International Conference on "Indian Dairying-Sustainability and Nutritional Security held on 14.10.2022 at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu.
<b>Recognition</b> Facilitator	National Level - MANAGE-	M.Ramyasivaselvi SMS (Home Science)	MANAGE, Hyderabad
<b>Contact Farme</b>			
Best Farmer Award	District Level	K.Pounthai	Sericulture
KVK Trainees			
Best Entrepreneur Award- I Prize	District Level	Amutha Kalasam FIG, Bodinayakkanur	Received the award during International women's day celebration 2022
Best Entrepreneur Award- II Prize for RTU Millets Flour Items	District Level	Bodinayakkanur	Received the award during International womens day celebration 2022
Best Entrepreneur Award- III Prize- Handicrafts from Coconut Shell	District Level	ARUDUCES Handicrafts SHGs	Received the award during International womens day celebration 2022
Consolation Award for Millet by- products	District Level	P.Chitra,, Entrepreneur	Received the consolation award during International women's day celebration 2022

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Name of the Award	Category (International/ National/State/ Regional/ District/ Intuitional/ Society etc.,)	Recipient (KVK/KVK - STAFF/Contact Farmer/Trainee etc.,	Description about the award/Remarks if any	
Consolation Award	District Level	K.Preethi, Entrepreneur	Received the consolation award during International women's day celebration 2022	
Consolation Award for Millets Chocolate	District Level	Nithya, Entrepreneur	Received the consolation award during International women's day celebration 2022	
Consolation Award for Organic based value added products	District Level	Rajeshwarai, Entrepreneur	Received the consolation award during International women's day celebration 2022	
Consolation Award	District Level	Sandhiya Ambedhraj- Beekeeper	Received the consolation award during International women's day celebration 2022	
Consolation Award	District Level	Kanchana Entrepreneur	Received the consolation award during International women's day celebration 2022	
Consolation Award	District Level	R.Saranaya Entrepreneur	Received the consolation award during International women's day celebration 2022	
Consolation Award	District Level	Sindhuja Best Mushroom Cultivator	Received the consolation award during International women's day celebration 2022	

Name of the Visitors	Designation	Purpose of Visit
Mrs.P.Geetha Jeevan	Hon'ble Minister of Social	Participated in the Inauguration of
	Welfare & Women	Women Entrepreneur Training cum
	Empowerment,	Production Center on 03.08.2022 at
	Government of Tamil	KVK Theni
	Nadu	
Thiru.K.V.Muralidharan,	District Collector, Theni	Participated in the Inauguration of
IAS		Women Entrepreneur Training cum
		Production Center on 03.08.2022 at
		KVK Theni
		Participated in Kisan Mela
Thiru.N.Ramakrishnana,	MLA, Cumbum	Participated in the Inauguration of
	Constituency, Theni	Women Entrepreneur Training cum
		Production Center on 03.08.2022 at
		KVK Theni
		Participated in Distribution of
		Critical Inputs
Thiru.A.M.G.Ashokan	MLA, Sivakasi	Participated in the Inauguration of
	Constituency, Theni	Women Entrepreneur Training cum
		Production Center on 03.08.2022 at
		KVK Theni
Thiru.P.Sankaralingam	Director, SAMETI,	Participated in STRY Programme
	Kudumiyanamalai, Tamil	
	Nadu	

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# Important Visitors to KVKs during 2022 (with photographs)



KVK Theni-Chief Guest Address by Mrs.P.Geetha Jeevan, Hon'ble Minister of Social Welfare & Women Empowerment, Government of Tamil Nadu on occasion of Grand opening of KVK Women Entrepreneur Center



Mrs.P.Geetha Jeevan, Hon'ble Minister of Social Welfare & Women Empowerment, Government of Tamil Nadu Inaugurated the Women Entrepreneur Training Center on 03.08.2022 at KVK



Thiru.P.Sankaralingam, Director, SAMETI, Kudumiyanamalai, Tamil Nadu visited KVK Millet Cafeteria during STRY Programme



Distribution of Critical Inputs by Thiru.N.Ramakrishnana, MLA, Cumbum Constituency, Theni

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