

**PROFORMA FOR PREPARATION OF ANNUAL REPORT**  
(1<sup>st</sup> January 2023 to 31<sup>st</sup> December 2023)

**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. )) Theni District, TamilNadu - 625520

**Phone:** 04546247564

**Fax:** 04546247564

**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. )) Theni District, TamilNadu - 625520

**Phone:** 04546247245

**Fax:** 04546247245

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

1.6. **Infrastructural Development:**  
**A) Buildings**

S.No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction Completed/ in progress/ to be initiated)
1.	Administrative Building	ICAR	3.30.1996	483.5	2135800	-	-	Completed
2.	Farmers Hostel	ICAR	12.25.2002	312.0	1749596	-	-	Completed
3.	Staff Quarters (No.)	ICAR	2.11.1997	260.0	2930577	-	-	Completed
4.	Demonstration Units							
		ICAR	3.31.2012	160	417000	-	-	Completed
		ICAR	3.30.1996	120	102000	-	-	Completed
5	Fencing	ICAR	3.21.1996	2 km	100000	-	-	Completed
6	Rain Water harvesting system							
7	Threshing floor							
8	Farm godown							
9	Shed (Farm equipment)							

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms covered as on 31.12.2023	Present status
BOLERO	2023	944294	28670	Good
TRACTOR	2022	754425	2110 hrs	Good

**C) Equipment & AV aids**

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Overhead projector	01.06.1995	11160	Under repair
Electronic typewriter	01.06.1995	21035	Scrapped
Mixie	01.14.1996	2175	Scrapped
Onida Colour TV	2.28.1996	18600	Scrapped
English t/w machine	2.29.1996	9852	Scrapped
Weighing Scale	3.29.1996	2643	Scrapped
Amplifier & mike unit	5.27.1996	4600	Good condition
Duplicating machine	1.10.1995	17500	Scrapped
VER	2.28.1996	14990	Scrapped
Slide projector	2.28.1996	12855	Scrapped
LED projector	3.7.2007	69750	Under repair
Fax machine	3.30.2009	15150	Under repair
Xerox machine	3.1.2010	75400	Under repair
Digital Camera	6.30.2010	25000	Under repair
Generator	11.24.2010	100000	Under repair
Epabax system	3.30.2011	50220	Under repair
Steel table	11.04.1994	1500	Under repair
Mica table	11.04.1994	800	Under repair
Godrej table	1.23.1995	13340	Scrapped
Wooden table	1.23.1995	2250	Scrapped
Steel table	12.5.1995	11785	Scrapped
Mould chair	1.13.1995	2896	Scrapped
Plastic chair	1.22.1995	5508	Scrapped
S type chair	11.4.1994	600	Scrapped
S type chair	3.10.1995	1500	Scrapped
PVC chair	3.1.1998	23240	Good condition
File cabinet	10.13.1995	7980	Good condition
White mark writing board	12.12.1995	8875	Good condition
Water tanker	2.26.1996	25000	Scrapped
Disc plough	2.26.1996	24953	Good condition
Tiller	2.26.1996	13408	Good condition
Mould Board plough	2.26.1996	16379	Good condition
Cupboard	2.28.1995	11140	Good condition

Executive chair	3.22.1996	12290	Damaged
Cupboard	3.7.2010	11500	Good condition
Nilkamal chair	3.7.2010	20000	Good condition
Revolving chair	3.7.2010	6500	Damaged
3x2 cash table	3.7.2010	4400	Damaged
4x2 cash table	3.7.2010	2600	Damaged
Computer table	3.7.2010	2400	Damaged
Wall fan	3.7.2010	3800	Damaged
Water punel	3.7.2010	2000	Scrapped
Water Punel	3.15.2010	4000	Scrapped
Kusan	3.7.2010	5000	Good condition
Reception chair	3.7.2010	4500	Good condition
Steel cot	3.8.2010	51000	Good condition
Speaker	3.8.2010	2640	Damaged
Filling cabinet	3.9.2010	14400	Good condition
Premium wall coffer	3.9.2010	5300	Good condition
Digital camera	6.30.2010	25000	Under repair
ICD recorder and DVD player	3.15.2010	8280	Under repair
USB modem	3.15.2010	2008	Under repair
Camera	3.20.2010	6990	Under repair
Display system	3.24.2010	17085	Under repair
Hp printer	3.15.2010	2400	Scrapped
Round table	3.31.2010	25837	Good condition

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

S.No.	Date	No of Participants	Salient Recommendations
1.	22.02.2023	30	Enclosed

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

## **2. DETAILS OF DISTRICT (2023)**

### **2.0.Operational jurisdiction of KVKs**

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

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

	Farming system/enterprise
The total geographical area of the district is 288923Ha.Forest occupies 35.9%of total area. Net area cultivated occupies 40.7%.	Food crops occupy 38.9% of total gross area cultivated. About 8.4% of area comes under coconut, which is steadily increasing year by year. Horticultural crops occupy 25.1% of area due to favorable agro climatic condition and assured market. Oilseeds, Cotton and Sugarcane occupy 10.7%, 5.9% and 9.8% respectively.

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

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

### **2.3. Soil types**

S. No.	Soil type	Characteristics	Area in ha
1.	Red calcareous	Yellowish red to dark red, Medium texture, Neutral to mild alkaline, well drained and moderate permeability	13259
2.	Red non calcareous	Moderate deep red to yellowish medium textured ,slightly acidic to neutral well drained with rapid permeability	23670
3.	Red lateritic calcareous	Dark reddish brown to brown heavy textured slightly acidic to neutral, well drained with	24644

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

**2.4. Area, Production and Productivity of major crops cultivated in the district (or the jurisdiction as the case may be) for 2023**

S. No.	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
1	Paddy	12600	70200	5570
2	Millets	24200	101800	4210
3	Pulses	21100	14000	660
4	Cotton	1900	7700	4.05Bales
5	Sugarcane	5500	600000	109.09
6	Oilseeds	4780	8730	1830
7	Banana	5972	433567.2	72.6
8	Mango	9946	104433	10.5
9	Guava	271	2515.65	9.3
10	Sapota	556	13054.25	23.5
11	Acid Lime	291	232.4	0.8
12	Mandarin Orange	47	18.6	0.4
13	Grape	1951	63602.6	32.6
14	Papaya	35	6790	194.0
15	Pomegranate	9	195.5	23.0
16	Jack	39	631.8	16.2
17	Aonla	434	5381.6	12.4
18	Lemon	43	47.3	1.1
19	Santra (Sathukudi)	20	331.5	17.0
20	Navel	44	0	0.0
21	Tomato	2525	34838.1	13.8
22	Brinjal	312	3931.2	12.6

S. No.	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
23	Chillies	448	7168	16.0
24	Bhendi	210	1613.15	7.7
25	Small onion	539	5600.4	10.4
26	Cucumber	66	406.1	6.2
27	Water melon	4	108.15	30.9
28	Bottlegourd	5	52	10.4
29	Snackgourd	31	474.3	15.3
30	Ribbedgourd	12	170.2	14.8
31	Bittergourd	32	396.9	12.6
32	Ashgourd	4	63.7	18.2
33	Pumpkin	22	485.9	22.6
34	Chow-Chow	5	0	12.9
35	Clusterbeans	8	0	20.7
36	Dollichos bean	422	5437.35	62.5
37	Radish	7	134.55	21.8
38	Cabbage	124	7750	25.2
39	Cauliflower	142	3084.7	40.7
40	Beetroot	171	4309.2	53.0
41	Tapioca	975	39682.5	16.3
42	DrumStrick	1801	95453	53.0
43	Curryleaf	10	163	10.0
44	Green	31	0	0
45	Green	11	220.5	12.6
46	Kovakai	244	34838.1	10.0
47	Beans	274	3931.2	14.2
48	Knolkhol	11	7168	21.0
<b>Total</b>		<b>98702</b>	<b>1697037</b>	<b>13357.94</b>
<b>Flower crops</b>				
1.	Rose	16	88	5.5
2.	Jasmine	107	642	6.0
3.	Crossandra	83	8.25	0.1
4.	Mullai	5	33.5	6.7
5.	Kozhikondai	47	611	13.0
6.	Jathimalli	13	92.5	7.4
7.	Tube rose	10	100	10.0
8.	Marigold	29	406	14.0
9.	Chevanthi	95	712.5	7.5
10.	Arali	4	0	0 0
11.	Marikozhnthu	7	75.4	11.6
<b>Total</b>		<b>416</b>	<b>2769.15</b>	<b>81.8</b>
<b>Spices and Condiments</b>				
12.	Turmetic	14	2.5	35
13.	Cardamom	1444	1.0	-1444
14.	Papper	73	1.7	-124.1
15.	Coriander	78	6.6	511.5

S. No.	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)
16.	Vanilla	3	2.5	7.5
17.	Tamarind	2219	1.0	2219
18.	Mint Leaf	3	4.2	10.5
<b>Total</b>		<b>3831</b>	<b>19.5</b>	<b>1215.4</b>
<b>Plantation crops</b>				
19.	Tea	1548	7.2	11145.6
20.	Coffee	2818	1.2	-3381
21.	Cashew (Nut)	6352	1.5	-9527.25
22.	Arecanut	49	1.2	-58.8
23.	Cocoa	60	8.0	476
24.	Betelvine	141	12.7	1784.35
25.	Lemon Grass	28	18.0	495
<b>Total</b>		<b>10996</b>	<b>49.8</b>	<b>933.9</b>

## 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
January 2023	10	40.2	21.0	56.2
February 2023	30	32.8	22.93	54.71
March 2023	00	38.42	23.04	61.03
April 2023	20	32.8	22.93	54.71
May 2023	90	40.0	29.3	61.5
June 2023	130	35.3	27.1	68.1
July 2023	30	33.6	26.6	66.5
August 2023	30	35.3	25.6	64.3
September 2023	150	36.4	25.5	64.3
October 2023	220	37.9	23.9	70.0
November 2023	130	34.7	20.8	63.1
December 2023	130	36.3	21.0	56.2



## 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2023)

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

Category	Area	Production	Productivity
<b>Fish</b>			
<i>Marine</i>	-	-	-
<i>Inland</i>	<b>20</b>	<b>10795</b>	<b>540</b>
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

## 2.7. Details of Adopted Villages (2023)

Sl. No.	Taluk/mandal	Name of the block	Name of the village	Year of adoption	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Andipatty	Andipatty	G.Usilampatti	2017	Cumbu	Cultivation of ICMV 221 with yield of 12 q/ha and incidence of drought and other calamities	ICM, Value addition
2	Periya	Periyak	Kullapuram	2022	Banana,	Integrated crop management	Vaue

	kulam	ulam			Coconut	in Banana and value addition in Banana wastes. Value added products from Coconut	addition and EDP development
3	Andipatty	Andipatty	Theppampatti	2023	Redgram, Groundnut	Low yield in Groundnut (14 q/ha) Low yield in Redgram (9 q/ha)	Varietal introduction
DFI villages							
1	Andipatty	Andipatty	Mullayampatti	2017	Maize, Cotton	Low yield (55q/ha) in maize, Pest incidence in Cotton, non-availability of High yielding sorghum hybrid sorghum	ICM , Value chain management, Entrepreneur development
2	Bodinyakkanur	Bodinyakkanur	Palarapatti	2019	Banana, Onion, Pulses, Paddy and millets , Sugarcane	Low yield, lack of knowledge in new varieties and technologies, improper pest and disease management	Varietal introduction, ICM, IPDM, Value addition , FPO

## 2.8. Priority/thrust areas

Crop/Enterprise	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 (1<sup>st</sup> January 2023 to 31<sup>st</sup> December 2023)

S. No	Activity	Target	Achievement
1.	Technologies Assessed and refined(No.)	32	30
2.	On-farm trials conducted (No.)	16	15
3.	Frontline demonstrations conducted (No.)	26	23
4.	Farmers trained (in Lakh)	0.2353	0.2704
5.	Extension Personnel trained (No.)	375	437
6.	Participants in extension activities (in Lakh)	0.30265	0.55356
7.	Production and distribution of Seed (in Quintal)	22	16.2
8.	Planting material produced and distributed (in Lakh)	230000	81400
9.	Live-stock strains and finger lings produced and distributed (in Lakh)	-	-
10.	Soil samples tested by Mini Soil Testing Kit (No)	200	0
11.	Soil samples tested by Traditional Laboratory (No)	250	260
12.	Water, plant, manure, and other samples tested (No.)	50	158
13.	Mobile agro-advisory provided to farmers (No.)	13600	
14.	No.of Soil Health Cards issued by Mini Soil Testing Kits (No.)	250	0
15.	No.of Soil Health Cards issued by Traditional Laboratory (No.)	250	260

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

- We have established the 163 IFS units in small and marginal farmers field with convergence of line departments
- We have achieved the Soil test based crop nutrition for sustainable crop yield. Totally 502 farmers adopted this technology through KVK activities.
- We have developed 95 Agri based entrepreneurs through EDP Programme in The District.

### 4. TECHNICAL ACHIEVEMENTS

#### Details of target and achievements of mandatory activities by KVK during 2023

##### OFT (Technology Assessment)

No. of OFTs		Number of technologies		Number of locations (Villages)		Total no. of Trials / Replications / Beneficiaries	
Target s	Achievement	Target s	Achievement	Target s	Achievement	Target s	Achievement
16	15	32	30	16	15	80	75

##### FLD (crop/enterprise/CFLDs)

No of Demonstrations		Area in ha		Number of Farmers / Beneficiaries / Replications	
Targets	Achievement	Targets	Achievement	Targets	Achievement
26	23	10.4	9.2	260	230

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

Number of Courses			Number of Participants	
Clientele	Targets	Achievement	Targets	Achievement
Farmers and Farm Women	117	101	2353	2704
Rural youth	28	6	660	784
Extn. Functionaries	16	27	375	503

**Extension Activities**

Number of activities		Number of participants	
Targets	Achievement	Targets	Achievement
1028	2253	30265	55356

**Seed Production (q)**

Target	Achievement	Distributed to no. of farmers
22	16.2	184

**Planting material (Nos.)**

Target	Achievement	Distributed to no. of farmers
230000	81400	850

## Technology Assessments (OFTs) in Detail

1.

**1. Thematic area:** INM

**2. Title:** Performance evaluation of TNAU Vigour plus in Pulses under rainfed condition

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

**4. Details of farming situation:**

Black gram is a major pulse crop cultivated under Rainfed condition in Andipatty block of Theni district in an area of 420 ha during Kharif an Rabi season of every year. On Farm trial on performance evaluation of TNAU Vigour plus in pulses under rainfed condition at five farmer's field of Okkarapatti village of Andipatty block respectively during kharif season 2023. The soil type is basically red sandy loam. In this soil contains medium nitrogen (282.7 kg/ha), low phosphorus (7.69 kg/ha) and medium in potassium (138.3 kg/ha). The average productivity of Black gram is 6.5 t/ha. The village received 17 rainy days with annual rainfall of 720 mm.

**5. Problem definition / description:**

The farmers were getting low yield (4.2 q/ha) due to lack of awareness about plant growth regulators; non-application of growth regulators; improper nutrient management practices; yellow mosaic virus incidence. The main objective of the study was to performance evaluation of TNAU Vigour plus in pulses under rainfed condition for higher grain yield and more net income

**6. Technology Assessed:**

**TO 1: Farmer Practice:** Non application of growth promoters

**TO 2: Recommended Practice:** TNAU Vigourplus - Seeds are coated uniformly with formulation @ 20–25 ml per kg and shade dried for 30 min prior to sowing

**TO 3: Alternate Practice:** Bio-Pulse - Application of Bio-Pulse as seed bio priming with recommended dose of fertilizer

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

Name of critical input	Qty per trial	Cost per trial (Rs.)
TNAU Vigour plus	1 lit	600
Bio-Pulse	1 lit	600
Field board	1 nos	400

**8. Results:**

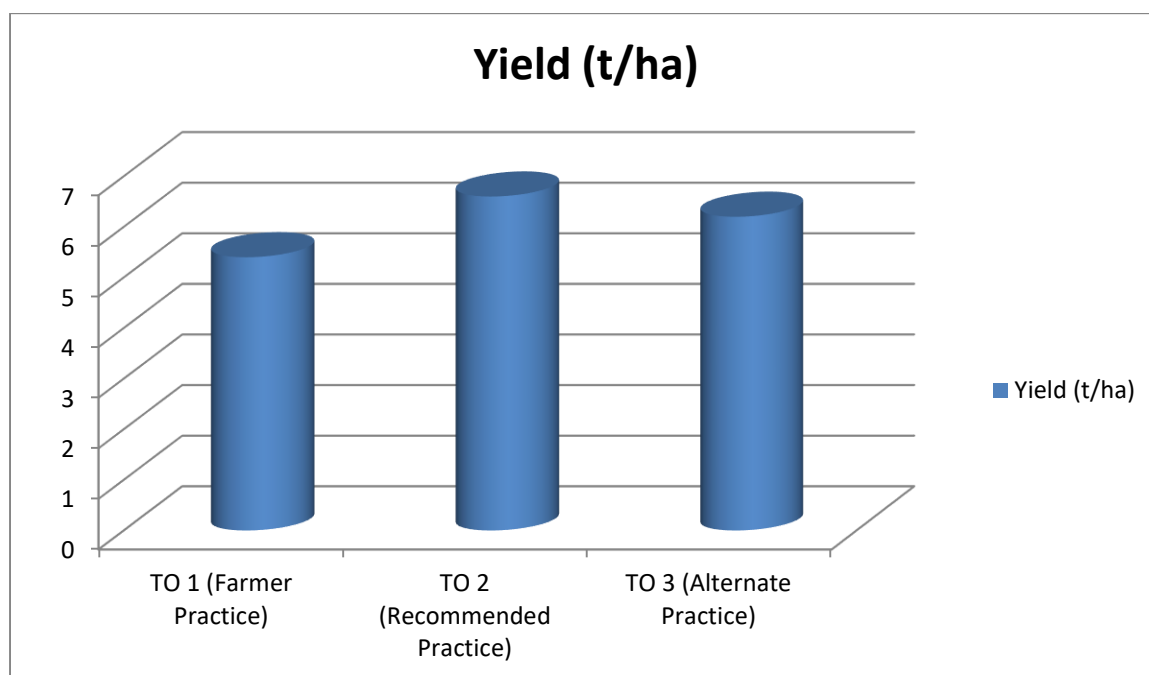
The results of the on farm trail conducted performance evaluation of TNAU Vigour plus in pulses under rainfed condition are presented below (Table).

**Table:** Performance of the technology

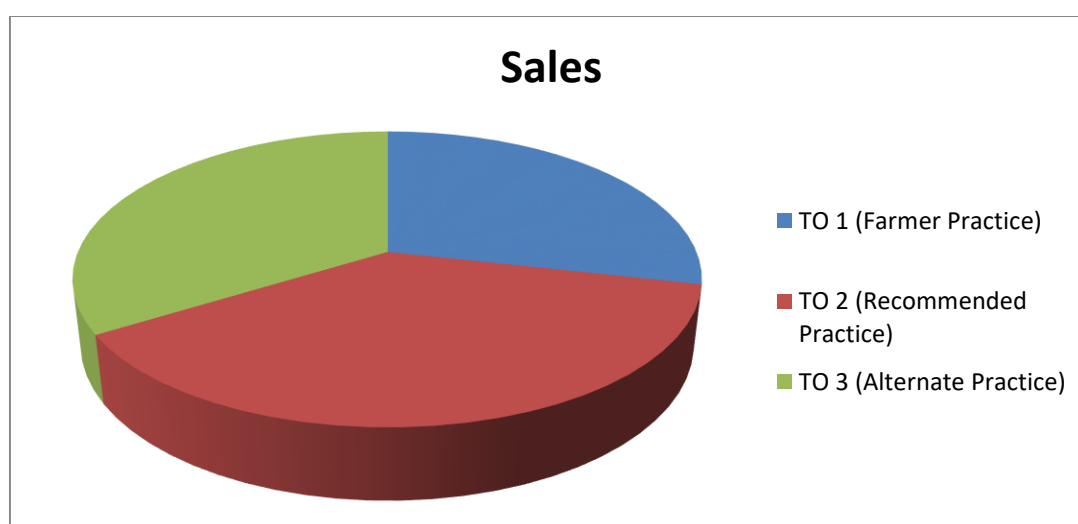
Technology Option	No.of trials	Yield (t/ha)	Net Returns (Rs. in ha)	B:C ratio	No. of pods per plant
TO 1 (Farmer Practice)	5	5.4	20400	2.17	10
TO 2 (Recommended Practice)		6.6	27000	2.41	16
TO 3 (Alternate Practice)		6.2	24200	2.26	14

**Description of the results:**

On farm trial results revealed that, the grain yield of 6.6 t/ha was recorded in application of TNAU Vigour plus followed by the application of Bio-Pulse (6.2 t/ha). The lowest grain yield of 5.4 q/ha was recorded in farmer's practices (Non application of growth promoters).



Economics of the study revealed that, higher net returns (Rs. 27000/ha) and benefit cost ratio (2.41) was recorded in application of TNAU Vigour plus followed by the application of Bio-Pulse followed by the application of Bio-Pulse (Rs. 24200/ha). The lowest net returns of Rs. 20400/ha was recorded in farmer's practices (Non application of growth promoters).



**Constraints faced:**

Farmers faced yellow mosaic virus incidence problem during flowering and pod stage.

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

Normally, Black gram sowing under rainfed condition the germination percentage was very low. But, the application of TNAU Vigor plus as seed coating in Black gram which results germination percentage was increased under rainfed condition.

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

The application of a pre-sowing seed coating nano-formulation (TNAU Vigor plus) in Black gram are increases drought tolerance and pod setting percentage under rainfed condition. Also, it has increased pod yield upto 15 percentage under rainfed condition.

**2.**

1. **Thematic area:** Varietal Evaluation

2. **Title:** Assessment of Bio fortified Cumbu variety for Theni District

3. **Scientists involved:** SMS (Agronomy)

4. **Details of farming situation:** The trail was conducted at Kullapuram village of Periyakulam Block, Theni District. The average annual rainfall 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.

5. **Problem definition / description:** (one paragraph): farmers got low yield (11.5 q/ha) due to cultivation of local variety and non adoption of improved cultivation practices

**6. 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

**7. Critical inputs given:**

Name of the critical input	Qty per trail	Cost per trail (Rs.)
ABV 04 Cumbu variety	1 kg	40
CO 10 Cumbu variety	1 kg	40
MN mixture	5 kg	800
Azospirillum	1 kg	200



## 8. 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	<b>5</b>	86.1	176.51	5.41	28.52	19.01
TO 2- CO 10		93.00	180.00	5.56	42.2	23.50
TO 3- Farmers Practice (ICMV 221)		100.15	167.4	3.62	2.3	16.11

**Economics of the trail**

Technology Option	Cost of Cultivation (Rs.)	Gross return (Rs.)	Net return (Rs.)	BCR
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 was revealed that the highest Grain yield was recorded in CO 10 variety (23.50 q/ha) followed by ABV 04 (19.01 q/ga). The lowest yield was obtained in Farmers practice (16.11 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. **Constraints:** under rainfed condition N deficiency occurred during vegetative stage. Wild boar damages also noticed.

10. **Feedback of the farmers involved:** both the cumbu varieties recorded the highest growth and yield as compare to previous variety in terms of number of productive tillers, panicle length. Grain was bold and appeared prefer the highest market price.

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

Under rainfed condition vagaries in panicle emergence in ABV 04 this will delay the harvest of the crop. in CO 10 cumbu variety grain filling ratio was slightly low .

3.

1. **Thematic area:** Varietal Evaluation2. **Title:** Assessment of Paddy variety for Kuruvai season in Theni District3. **Scientists involved:** SMS (Agronomy)

4. **Details of farming situation:** The trail was conducted at Karunakkamuthampatti village of Cumbum block in Theni District. The average annual rainfall of the cluster area is 911 mm. The soil type clay loam soil with average Nitrogen content, low Phosphorus and higher potassium. The cropping pattern of the area is Paddy-Paddy-Pulses

5. **Problem definition / description:** (one paragraph): Farmers getting low yield 44.67 q/ha and income due to non availability of high yielding and market preference variety.

6. **Technology Assessed:****TO: 1 – CO 55**

-short duration superfine variety with 115 days. The average yield of the culture is 60.50 q/ha.

**TO : 2- RNR 150 48**

Short duration (125 days), Yield – 60.0 q/ha

**TO : 3 – Farmers Practice ( Gorak nath )**

7. Critical inputs given:

Name of the critical input	Qty per trail	Cost per trail (Rs.)
CO 55 seed	4 kg	400
RNR 15048 seeds	4 kg	400
Azospirillum	0.5 lit	150
Trichoderma	1 kg	100

**8. Results:****Yield parameters and yield of the trails**

Technology Option	No. of Trails	No. of productive tillers /plant	Yield (q/ha)	Net return (Rs.)	BCR
TO 1- CO 55	<b>5</b>	32.74	61.12	63862	2.29
TO 2- RNR 15048		28.23	54.89	44103	1.89
TO 3- Farmers Practice		18.47	49.27	26972	1.52

**Description of results**

The highest yield (61.12 q/ha) was recorded in CO 55 followed by RNR 15048 (54.89 q/ha). This was due to highest number of productive tillers in CO 55 followed by RNR 15048. The lowest yield was recorded in farmers practice due to lowest number of productive tillers and incidence of pest and diseases. The highest net return (Rs.63862) recorded in CO 55

followed by RNR 15048 (Rs.44103). This was due to highest marker preference among traders in RNR 15048 and market price.

9. **Constraints:** incidence of leaf folder noticed in both the varieties.

10. **Feedback of the farmers involved:** CO 55 recorded the highest yield parameters and income. In the aspect of RNR 15048 the duration delayed up to 135 days.

11. **Feed back to the scientist who developed the technology:** in RNR 15048 flowering started at 45 DAP but matured at harvest maturity at 135 DAP.

#### 4.

1. **Thematic area:** Plant Protection

2. **Title:** Assessment of integrated management of powdery mildew in grapes

3. **Scientists involved:** SMS (Plant Protection) & SMS (Horticulture)

4. **Details of farming situation:** Irrigated, Red soil

5. **Problem definition / description: (one paragraph)**

1. Whitish or greenish-white powdery patches on the undersides of basal leaves.

2. Affected powdery mildew diseases incidence is high (45%). So yield loss (499 q/ha). Due to lack of knowledge in IDM practice.

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

TO -1	1. Spray wettable sulphur @ 0.3% or dust sulphur @ 6 -12 kg/ha in the morning or azoxystrobin @ 150 a.i./ha (600 ml/ha) at 30 days after pruning five times at 10 days interval ( 3 spray)
TO -2	Azoxystrobin+ Difenconazole 0.5 ml/l or Myclobutanil 1.0g/l or Puprimet 25 EC 1 ml/l ( 3 spray) Regular application of <i>Ampelomyces quisqualis</i> should be done @5-6g/L at regular intervals for control of powdery mildew.
Farmer practice	Wettable sulphur 0.3 % & Myclobutanil 1.5 g/lit

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

Name of critical input	Qty per trial	Cost per trial (Rs.)
Ampilomyces Quisqualis	2 litres	718/-
Cosavet	1 kg	555/-
Field board	1 No.	200/-

#### 8. Results:

The results of the in vivo assay revealed that *Ampilomyces quisqualis* was sprayed at 40, 50 and 65 DAP @ 5ml/ lit Sulphur were sprayed at that time of 70, 75, 80 DAP sprayed at 2g /litre is highly effective in conidial germination of grapevine powdery mildew pathogen.

**Table:Performance of the technology**

Technology Option	No. of trials	Per cent Diseases incidence	Disease reduction (%)	Yield (t/ha)	Net Returns (Rs. in ha)	B:C ratio
TO 1 (Farmer Practice)	5	55	26.66	20.0	6,87,500	1.30
TO 2 (Recommended Practice)		20	73.33	22.5	8,15,000	1.23
TO 3 (Alternate Practice)		75	-	17.5	5,67,500	1.40

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

### **Constraints faced:**

Farmers faced powdery mildew disease incidence due to at that time of rain.

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

Due to lack of awareness in foliar spray to control disease

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

Powdery mildew disease incidence was recorded 55 DAP. So, Propalytic measure was given at that time 40, 50 and 65 DAP of *Ampilomyces quisqualis* and sulphur 70, 75 and 80 DAP to control powdery mildew disease incidence. Due to control the disease and bunch quality and yield also increase.

## **5**

### **1. Thematic area : Varietal evaluation**

**2. Title :**Assessment of suitable high yielding varieties of Lab lab in Theni District.

**3. Scientists involved:** SMS (Horticulture) and (Plant Protection)

### **4. Details of farming situation:**

The trails were conducted at Erasainaickanur 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 lab lab 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 Lab lab– Brinjal – Chilli, the main crop cultivation season is Kharif. Total area under lab lab is 150 ha with average production of 15 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 pods, Incidence of Pest and Diseases (Anthracnose, Powdery mildew and Pod borer) in an area of 150 ha among 600 Nos. of farmers.

### **6. Technology Assessed:**

**TO 1: Farmer Practice:** Private variety

**TO 2: Recommended Practice:**

**Lab lab CO 16:** Lp (b) 03 x Lp (b) 36. June – July and October – November. Yield:16.5 t/ha. Kozhikkaal avarai type. Photo-insensitive and suitable for year round cultivation. Early bearing with 50-55 days for first harvest. 12-15 pickings can be made in four months duration. Less infestation by Maruca pod borer (5.5%). Source:TNAU-2023

### **TO: 3: Alternate Practice**

**Arka jay:** Developed through back cross and pedigree selection involving the Parents Hebbal Avare x IIHR 93. Plants dwarf, bushy, erect and photo insensitive. Flowers purple. Pods long, light green slightly curved, Without parchment. Vegetable type with excellent cooking qualities. Tolerant to low moisture stress. Duration 75 days. Source:IIHR,2017

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

Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Seed (CO 16)	2.5 kg/ 0.25 ac	1000

Name of critical input	Qty per trial/ha	Cost per trial (Rs.)
Seed (Arka jay)	2.5 kg/ 0.25 ac	1000
IIHR vegetable special	1kg	400
Field board	1	400

## 8. Results:

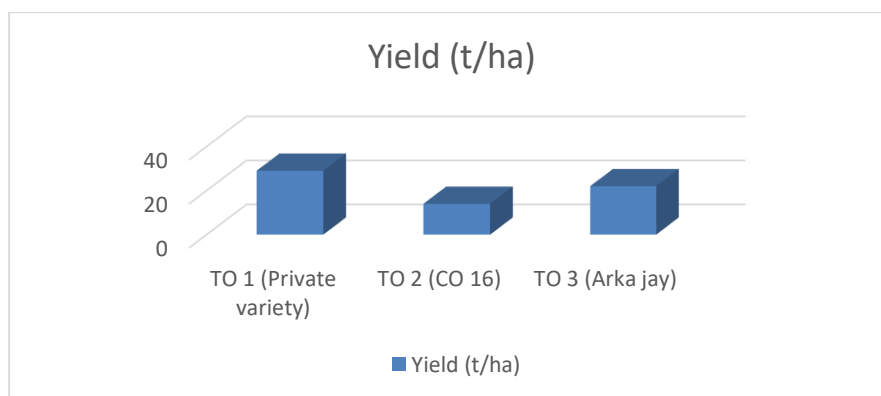
Table: Performance of the technology

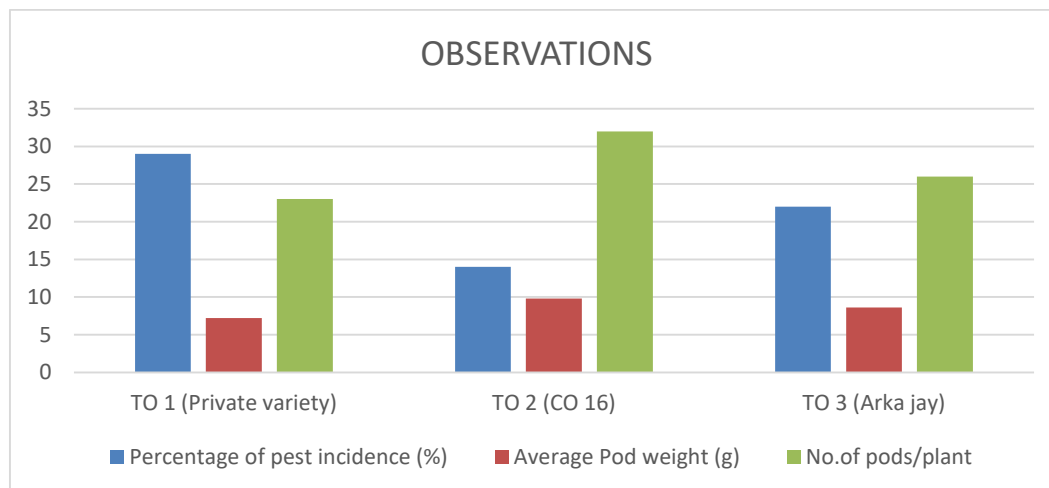
<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (t/ha)</i>	<i>Net Returns (Rs. In)</i>	<i>B:C ratio</i>
<i>TO 1 (Private variety)</i>	5	13.5	565000	3.31
<i>TO 2 (CO 16)</i>		15.5	671000	3.59
<i>TO 3 (Arka jay)</i>		14.8	629000	3.43

<i>Technology Option</i>	<i>Percentage of pest incidence (%)</i>	<i>Average Pod weight (g)</i>	<i>No. of pods/plant</i>
<i>TO 1 (Private variety)</i>	29	7.20	23
<i>TO 2 (CO 16)</i>	14	9.80	32
<i>TO 3 (Arka jay)</i>	22	8.60	26

*\* 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 lab lab in Theni district indicated that out of the local varieties viz., (CO 16) recorded significantly higher pod yield of 15.5 t/ha followed by Arka jay with 14.8 t/ha and the lowest pod yield of 13.5 t/ha was recorded in local variety. The highest number of pods per plant (32) was recorded in CO 16 followed by Arka jay (26). In the case of net returns, CO 16 was recorded significantly higher net return of Rs. 671000/ha followed by Arka jay (Rs. 629000/ha) and the least net returns was recorded in local variety (Rs. 565000/ha). During flowering and fruiting stages of crop growth farmers faced the viral incidence problem and pod Borer incidence. CO 16 lab lab was recorded high pod yield and farmers could get good quality of pods in Erasainaickanur 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. CO 16 has moderately resistant to viral and pest incidence. Cultivation of CO 16 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 CO 16 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 pod set, incidence of pest & disease and minimum growth due to nutrient deficiency. Low price and price fluctuation due to less demand in the market.

**6**

**1. Thematic area** : Post Harvest Technology (PHT)

**2. Title:** Assessment of Different Coating Formulations to improve the Shelf life of Fruits and Vegetable

**3. Scientists involved:** Home Science

**4. Details of farming situation:** -

**5. Problem definition / description:** Poor Shelf life of fruits and vegetables because of its perishable in nature. Lack of Post-harvest facilities i.e. Non availability of refrigerated to transport and high quality cold storage facilities for food manufactures and sellers.

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

**TO1:** ICAR-IINRG: Dipping in 2% of coating formulation for 5 minutes, surface drying & packing

**TO2:** TNAU: Fruity Fresh-Enhanced Freshness Formulations (EFF)-Dipping in 2% TNAU Fruity Fresh coat for 5 Minutes, surface drying & packing

**Farmer Practice:** Direct Selling: No Value Addition

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

Name of the Critical Inputs	Quantity (L)
IINRG Coating formulations – Tomato (5 L) & Brinjal (5 L)	10 L
Fruity Fresh Coat	5 L

## 8. Results: Performance of the technology

### Evaluation of Shelf Life of the Produce

Technology Options	No. of trials	Shelf life of the Produce (Days)	
		Brinjal	Tomato
Farmers Practice	5	4	8
Technology 1 (ICAR-IINRG)		21	20
Technology 2 (TNAU)		14	15

**Evaluation of shelf-life of the Produce:** The shelf-life quality of the control as well as treated fruits was evaluated through appearance changes.

Brinjal and tomatoes were dipped in 2% coating formulations for 5 minutes; the excess coating was drained and the coated brinjal and tomato were dried. After coating, brinjal and tomato were kept at room temperature for 21 days and also analysed daily for any visible change and after every 1, 5, 10, 15, 20 days. The shelf life of Brinjal was 21 days using TO1 and 14 days using TO 2. The shelf life of Tomato was 20 days using TO1 and 15 days using TO 2.

## 9. Constraints:-

**10. Feedback of the farmers involved:** It can be applicable/suitable only during peak harvest period.

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

- Cost of the Coating formulations is very high.
- Difficult to get on time

**1. Thematic area** : Value Addition

**2. Title** :Assessment of different types of herbal powder incorporated instant Nutri-drink

**3. Scientists involved:** Home Science

**4. Details of farming situation:** -

**5. Problem definition / description:**

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

**TO1:**Hibiscus incorporated herbal powder instant Nutri-drink

- Shade dried Hibiscus incorporated herbal drink
- Solar dried Hibiscus incorporated herbal drink
- Colorant agent from Hibiscus

**TO2:**Hibiscus incorporated herbal powder instant Nutri-drink

- Shade dried Clitoriateratea incorporated herbal drink
- Solar dried Clitoriateratea incorporated herbal drink

Colorant agent from Clitoriateratea

**Farmer Practice:**No processing in Clitoriateratea and underutilized edible flower

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

Fresh Hibiscus Flower, Lemon, Ginger, Lemon Grass, Basil Leaves, Honey, All Spices, Cinnamon, tea tip bag, packaging materials.

## 8. Results: Performance of the technology

### Organoleptic Evaluation

Results							
Technology	Appearance (5)	Colour (5)	Flavour (5)	Taste (5)	Texture (5)	Overall Acceptability (25)	Shelf life of the product
Hibiscus incorporated herbal powder instant Nutri-drink	5	5	4.5	5	4.5	24	2 Months (Powder )
Clitoriaternatea incorporated herbal drink	5	5	4	4.5	4	22.5	
Farmers Practice	No processing in Clitoriaternatea and underutilized edible flower						

**9. Constraints:** Availability of Clitoriateratea

**10. Feedback of the farmers involved:**

Innovative products using locally available herbals.



**11. Feed back to the scientist who developed the technology:** Anti nutritional properties should be studied

8

**1. Thematic area :** Dehydration

**2. Title:** Assessment of Suitable Dehydration Techniques for Guava Powder Preparation

**3. Scientists involved:** Home Science

**4. Details of farming situation: -**

**5. Problem definition / description: -**

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

**TO1:** Solar Dryer - Selection of fruits at hard ripe stage, followed by peeling and scooping out the seeds. Slices made, dipped in sugar syrup (Brix value - 50 to 70° brix) + citric acid + preservative- dried in solar dryer till moisture level attains 15%, pulverizing. For making 1 kg of dehydrated slices, we require about 7-8 kg of ripe fruits and 2 kg of sugar.

**TO2:** Cabinet Dryer - Selection- washing- cutting- scooping out the seeds- Cabinet drying (60°C) - till moisture level attains 15% and pulverizing.

**Farmer Practice:** Sun drying

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

Name of the Critical Inputs	Quantity (No.)
Hand refractometer	1
Weighing balance	1
Sealing machine	1
Packaging materials	1 kg

**8. Results:**

Technology	Drying Time
TO 1 – Solar Dryer	32 hours
TO2-Cabinet Dryer	12 hours

### Organoleptic Evaluation

Results							
Technology	Appearance (5)	Colour (5)	Flavour (5)	Taste (5)	Texture (5)	Overall Acceptability (25)	Shelf life of the product
TO 1 – Solar Dryer	4.5	4	4.5	4.5	4	22.5	3 Months
TO2- Cabinet Dryer	4	4.5	4	4.5	4	21	
Farmers Practice	Direct Selling						

**9. Constraints: -**

**10. Feedback of the farmers involved:**

Guava powder is new very new concept. Difficult to use solar dryer during the rainy season. But it is effective methods to develop dehydrated products. Drying time is higher when compared with cabinet dryer.

Dehydration can be done in 12 hours using cabinet dryer.

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

Solar dryer concept is very help to develop value added products.

### **Frontline Demonstrations in Detail**

#### **a. Follow-up of FLDs implemented during previous years.**

##### **1. Technology-1**

**Crop/Enterprise:** Black gram

**Thematic area:** varietal introduction

**Technology Demonstrated as a follow-up from OFT.- VBN 8**  
assessment

**Feedback sent to the Research System-** grain size was medium as compare to other variety

Details on the performance of the technology sent to the Extension Department- Short duration nature, higher yield and disease resistant variety.

Horizontal spread of the technology-

**No of villages** 28

**No of farmers** – 1180

**Total area in ha** – 860 ha

#### **b. Details of FLDs implemented during the reporting period**

##### **Technology-1**

**Crop:**Ground nut

**Thematic area:** Crop Production & Management

**Technology demonstrated:** A formulation of consortium of PGPR (Nut Magic) can be applied after dilution through irrigation water or through FYM after multiplication in FYM or through drip or as seed treatment

##### **Farming situation:**

Groundnut is a major Oilseeds crop cultivated in all blocks of Theni district in an area of 800 ha of every year. More than 15 per cent of the area is occupied by Oilseeds cultivation in Theni district. The Demonstration of Nut Magic in Groundnut for higher productivity at different farmer's field of Ethakovil village of Andipatti Block. The soil type is sandy loam with medium nitrogen (306.5 kg/ha), low phosphorus (7.25 kg/ha) and medium in potassium (114.6 kg/ha). The village received 22 rainy days with annual rainfall of 820 mm.

**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:** 2

**Area proposed (ha): 4**

**Actual area (ha): 4**

**Justification for shortfall if any: Nil**

**Feedback from farmers:**

- The soil application of Nut Magic along with FYM as basal was reduced micro nutrient deficiency symptoms like Fe and Zn deficiency in demo plot.
- The Nut Magic was increases pod setting percentage in rainfed cultivation Ground nut which results pod yield was increased upto 12 % when compared to the check.

**Feedback of the Scientist:**

- The soil application of Nut Magic along with FYM as basal was reduced micro nutrient deficiency symptoms like Fe and Zn deficiency

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

## **Technology-2**

**Crop:** Paddy

**Thematic area:** Crop Production & Management

**Technology demonstrated:** Foliar spraying with IFFCO Nano Urea (5 ml of Nano urea/Litre). N, P & K fertilizer – Basal application based on soil test, Top dressing of K fertilizers. N fertilizers as nano urea foliar sprays – 1st spray at active tillering stage or 20-25 days after Transplanting; 2nd spray 20-25 days after 1st spray or before flowering in the crop.

**Farming situation:**

Paddy is a major cereals crop cultivated in mullai periyar river basin of Theni district in an area of 4500 ha of every year. The Demonstration of IFFCO Nano Urea in Paddy cultivation at different farmer's field of Karungattankulam village of Chinnamanur Block. The soil type is clay loam with medium nitrogen (290.3 kg/ha), low phosphorus (6.15 kg/ha) and medium in potassium (134.9 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: 0**

**Area proposed (ha): 4**

**Actual area (ha): 4**

**Justification for shortfall if any: Nil**

**Feedback from farmers:**

- The IFFCO Nano Urea was easy handling and transport to the fields. Foliar spray of IFFCO Nano Urea was highly efficiency when compare to the soil supplication of granular urea.

**Feedback of the Scientist:**

- The foliar application of IFFCO Nano Urea at active tillering stage and Panicle initiation stage was increased number of productive tillers and panicles respectively. Overall, the grain yield was increased upto 10.7 % when compare to the conventional application of Urea.

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

### Technology-3

**Crop:** sorghum

**Thematic area:** varietal introduction

**Technology demonstrated.-** Co 32 variety with ICM practices

**Season and year:** kharif 2023

**Farming situation:**rainfed

**Source of fund:** ICAR

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 10

**Area proposed (ha):** 4

**Actual area (ha)-**4

**Justification for shortfall if any: -**

**Feedback from farmers:** fodder yield was good as compare to other sorghum variety

**Feedback of the Scientist:** incidence of shoot fly

**Extension activities on the FLD:**

Field days-1

Farmers training- 1

media coverage- 1

training to Extension Functionaries- 1

### Technology-4

**Crop:** Tenai

**Thematic area:** varietal introduction

**Technology demonstrated.-** ATL 1 with ICM practices

**Season and year:** kharif 2023

**Farming situation:**rainfed

**Source of fund:** ICAR

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 0

**Area proposed (ha):** 4

**Actual area (ha)-**4

**Justification for shortfall if any: -**

**Feedback from farmers:** Grain yield was higher than local varieties

**Feedback of the Scientist: -**

**Extension activities on the FLD:**

Field days- 1

Farmers training- 1

media coverage- 0

training to Extension Functionaries- 1

### Technology-5

**Crop:** Groudnut

**Thematic area:** varietal introduction

**Technology demonstrated.-** TMV 14 with ICM practices

**Season and year:** kharif 2023

**Farming situation:**rainfed

**Source of fund:** ICAR

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 0

**Area proposed (ha):** 4

**Actual area (ha):**4

**Justification for shortfall if any: -**

**Feedback from farmers:** Bold size kernal and haulm yield was good

**Feedback of the Scientist:** uniformity of pods are less

**Extension activities on the FLD:**

Field days- 1

Farmers training- 1

media coverage- 1

training to Extension Functionaries- 1

### Technology-6

**Crop:** Banana

**Thematic area:** Plant Protection

**Technology demonstrated.**

**Season and year:** Kharif 2023

**Farming situation:** Banana is a major crops cultivated in theni districts.

**Demonstration of Bio-Consortia for sigatoka leaf spot Management in banana** at different farmer's field of palarpatti village. Banana affected many fungal, bacterial disease, Major crops affected sigatoka leaf spot, air borne disease its spread all banana fields.. So, farmers due to lack of awareness in the management

**Source of fund:** ICAR

**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):**

**Justification for shortfall if any: -**

**Feedback from farmers:** The foliar application of NRCB Bio consortia(at @50g per litre from 4th month after planting at 20 days interval (5sprays) ) to reduced sigatoka leaf spot disease

**Feedback of the Scientist:**

**Extension activities on the FLD:** Training (On and off campus)

**Technology-7**

Crop: Maize

Thematic area: Plant Protection

Technology demonstrated.

Season and year: Kharif 2023

Farming situation: Maize is a major crops cultivated in theni districts. Demonstration of maize fall army worm Management in maize at different farmer's field at sadayalpatti village. So, farmers due to lack of awareness in the management.

Source of fund:

No of locations (Villages): 1

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

No of SC/ST Farmers and women farmers: -

Area proposed (ha): 5

Actual area (ha):

Justification for shortfall if any: -

Feedback from farmers: Application of neem cake @ 250 kg/ha at the time of last ploughing to increase the plant and soil health Seed treatment with cyantraniliprole 19.8% +thiamethoxam 19.8% FS @ 4 ml/kg seed. FAW adults using pheromone traps @ 12/ha. Emaxectin benzoate 5 SG @ 0.4 g/lit to control the maize fall army worm.

Feedback of the Scientist:

Extension activities on the FLD: Training (On and off campus)

(Field days, Farmers training, media coverage, training to Extension Functionaries)

**Technology-8**

**Crop:** Tomato

**Thematic area:** Crop Production & Management

**Technology demonstrated:** BIOGROW has been developed using consortium of different bacterial species "viz., Bacillus sp. BC39, Bacillus sp. RC25, Pseudomonas sp. K30 and Pseudomonas sp. K31," endowed with phosphorus solubilization, IAA and siderophore production attributes. Application of BIOGROW increased the yield of tomato by 25- 30%. Moreover, there was a significant improvement in nutritional quality of the produce as evident from enhanced content of lycopene and  $\beta$ -carotene.

**Farming situation:**

Tomato is a major vegetable crop cultivated in all blocks of Theni district in an area of 1800 ha of every year. More than 30 per cent of the area is occupied by tomato crop cultivation in Theni district. Non availability of improved variety and low yield, yield reduction due to improper nutrient management, high Pest and disease incidence at different farmer's field of Palarpatti, Bodinaickanur Block. The soil type is sandy loam with medium nitrogen (319.4 kg/ha), low phosphorus (8.40 kg/ha) and medium in potassium (123 kg/ha). The village received 31 rainy days with annual rainfall of 840 mm.

**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:** 2

**Area proposed (ha):** 4

**Actual area (ha):** 4

**Justification for shortfall if any:** Nil

**Feedback from farmers:**

- Application of BIOGROW applied field was increased the yield of tomato upto 13.81% when compared to the check and low in pest and disease incidence.
- BIOGROW applied field tomato fruits are light green in colour and good in taste and suited for culinary purpose. (Enhanced content of lycopene and  $\beta$ -carotene)

**Feedback of the Scientist:**

- BIOGROW applied field was increased the yield of tomato upto 20.00% when compared to the check and low in pest and disease incidence.

**Extension activities on the FLD:** Field day - 1, Farmers training – 3, Media coverage: 0, Training to Extension Functionaries: 0

## **Technology-9**

**Crop:**Jasmine

**Thematic area:** Crop Production & Management

**Technology demonstrated:** Pruning during second week of August and application of Mepiquat chloride (500 ppm) 15 days after pruning induced off season flowering with a per plant yield of 273.28 g/ plant during October – January (1.57 t / ha). This helped in realizing high profit for the farmers.

**Farming situation:**

Jasmine is cultivated in about 150 ha of land in the district under irrigated condition during kharif and rabi season. Lack of knowledge about off-season jasmine production, low yield and more pest and disease.

**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:** 0

**Area proposed (ha):** 4

**Actual area (ha):** 4

**Justification for shortfall if any:** Nil

**Feedback from farmers:**

- The farmers were applied Mepiquat chloride (500 ppm) 15 days after pruning to induced off season flowering, the flower initiation was induced.
- Flower setting percentage was increased and pest and disease incidence was low and farmers get more income through off season selling of jasmine flowers.

**Feedback of the Scientist:**

Mepiquat chloride (500 ppm) 15 days after pruning to induced off season flowering, the flower initiation was induced. So, they farmers are get more yield and income, very much helpful for the betterment of life.

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

### Technology – 10

**Crop** : Green Leafy Vegetables  
**Thematic area** : Household food security by kitchen gardening and nutrition gardening  
**Technology demonstrated:** Demonstration on Nutri Garden and Micro green cultivation  
**Season and year** : Kharif 2022  
**Farming situation** : -  
**Source of fund** : FLD  
**No of locations (Villages):**  
**No. of demonstrations (replications/farmers/beneficiaries):**  
**No of SC/ST Farmers and women farmers:**  
**Area proposed (ha)** : -  
**Actual area (ha)** : -  
**Justification for shortfall if any: -**

#### Parameter Assessed

Technologies	No.of days	Yield (5 cent)	Nutrition Knowledge (Score 10)		Consumption Pattern of GLVs	
			Before	After	Before	After
Nutri Garden and Micro green cultivation	32	102 kg	4	8.5	Once in a week	Thrice in a week

#### Feedback from the beneficiaries:

- Used to have Moringa leaves once in a week.
- After microgreens cultivation the consumption pattern of GLVs have increased from one to three times.

#### Scientist Feedback

- Micro greens are rich in nutrients, they contain larger amounts of vitamins, minerals and antioxidants than other vegetables. Hence, it can be recommended to include in Anganwadi centers to include in mid-day meal for eradication micronutrient malnutrition.

#### Extension activities on the FLD:

- Conducted Group Meeting – 2
- Field Day -1
- Awareness on micro green cultivation and its importance-3
- Follow up visit – 2

### Technology – 11

**FLD:** Milk Value Added Products and Enhance the Income Level of Dairy Farmer

**Crop** : Milk



**Thematic area:** Value Addition

**Technology demonstrated:** Milk Value Added Products and Enhance the Income Level of Dairy Farmer

**Season and year** : Kharif 2022

**Farming situation** :

**Source of fund** : FLD

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 10

**Area proposed (ha) :** -

**Actual area (ha) :** -

**Justification for shortfall if any:** -

**Parameter Assessed**

Raw Materials	Output	Gross cost	Gross return	Net Return	BCR
Milk (100 L)	14.25 kg	4250	5700	1450	1.3
Farmers Practice (Direct selling)	100 L Milk	4000	5000	1000	1.25

**Feedback from the beneficiaries**

Simple device, easy to use clean, portable, useful to small dairy farmer, innovative product

**Scientist Feedback**

The size of the paneer pressing device can be bigger size.

**Extension activities on the FLD:**

Method Demonstration of Paneer – 4

Celebration of world milk day - 1

Published popular article on Income generation through value added products for wider dissemination of technologies.

**Technology – 12**

**FLD:** Demonstration of different value-added products from Grapes

**Crop** : Grapes

**Thematic area :** Value Addition

**Technology demonstrated:** Demonstration of different value-added products from Grapes

**Season and year** : Rabi 2022-23

**Farming situation** : -

**Source of fund** : FLD

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 10

**Area proposed (ha) :** -

**Actual area (ha) :** -

**Justification for shortfall if any:** -

**Parameter Assessed**

Raw Materials	Output	Gross cost	Gross return	Net Return	BCR
Dry Grapes (100 g)	21 kg	5650	10500	4850	1.85

### **Feedback from the beneficiaries**

- Difficult to process during the rainy season

### **Scientist Feedback**

- Organic dehydration can be recommended instead of Potassium Carbonate and Ethyl Oleate.

### **Extension activities on the FLD:**

Method Demonstrations - 5

**Entrepreneurship Development:** Mrs.V.Ranjani, women entrepreneur has installed 92 sq.ft. solar dryer and started dry grapes production at PC Patti. Marketing her products in the brand name of Amutha Surabi.

### **Technology - 13**

**FLD:** Demonstration of ARKA High Humidity Storage Box for Shelf-Life Extension of Green Leafy Vegetables

**Crop** : Green Leafy Vegetable

**Thematic area** : Post Harvest Management

**Technology demonstrated:** Demonstration of ARKA High Humidity Storage Box for Shelf-Life Extension of Green Leafy Vegetables

**Season and year** : Rabi 2022-23

**Farming situation** : -

**Source of fund** : FLD

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 10

**Area proposed (ha)** : -

**Actual area (ha)** : -

**Justification for shortfall if any:** -

### **Parameter Assessed**

Technologies	Shelf life	
	Green Leafy Vegetables	Curry Leaves/Ladies Finger/Brinjal
ARKA High Humidity Storage Box for Shelf-Life Extension of Green Leafy Vegetables	3 Days	5 Days
Farmers Practice	1 Day	2 Days

### **Feedback from the beneficiaries**

Portable, easy to handle, no refrigeration or electricity needed, highly suitable for vegetable retail shops, supermarkets & vegetable vendors suitable for small vegetable vendors, street vendors

### **Scientist Feedback**

- Hygienic way of storage of fresh green leafy vegetables

- Size of the box can be maximized
- Partition can be inserted for keeping different types of vegetables

#### **Extension activities on the FLD:**

- Conducted Method Demonstrations to the green leafy and vegetables growers.
- Follow up visit
- Entrepreneurship Development – 1 No.
- Handholding support was provided to Mrs.R.Sugumar, progressive farmer, Cumbum for getting license from ICAR IIHR, Bengaluru for IIHR Arka High Humidity storage boxes for improving the shelf life of Green leafy vegetables on 7.06.2023. He has started his start up in the name of M/S Bharat Techno at KK Patti, Cumbum. He has distributed the storage boxes to Dindigul, Perambalur, Coimbatore, Thoothukudi Krishi Vigyan Kendras of Tamil Nadu.

#### **Technology – 14**

**FLD:** Demonstration of Low-cost ripening Chamber for Fruits

**Crop** : Fruits

**Thematic area** : Post Harvest Management

**Technology demonstrated:** Demonstration of Low-cost ripening Chamber for Fruits

**Season and year** : Rabi 2022-23

**Farming situation** :

**Source of fund** : FLD

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 5

**Area proposed (ha) :** -

**Actual area (ha) :** -

**Justification for shortfall if any:** -

#### **Parameter Assessed**

<b>Technologies</b>	<b>Fruits</b>	<b>Capacity</b>	<b>Ripening Time</b>
Low-cost ripening Chamber for Fruits	Banana, Mango	0.5 tonne	3 Days

Low-cost ripening technology, fruits are taken outside the chamber after 24 hours, and within 5 days they attain uniform colour.

#### **Feedback from the beneficiaries**

Suitable for small banana farmers, required minimum space, easy to carry

#### **Scientist Feedback**

Low-cost safe ripening technologies as a small-scale business to earn income

#### **Extension activities on the FLD**

Method Demonstrations – 3

Lecture Delivered - 2

#### **Technology – 15**

**FLD: Demonstration of Multi-Purpose Food Processing Machine****Crop** : Medicinal Plants**Thematic area** : PHM and Value Addition**Technology demonstrated:** Demonstration of Multi-Purpose Food Processing Machine**Season and year** : Rabi 2023**Farming situation** : -**Source of fund** : FLD**No of locations (Villages):** Chinnamanur**No. of demonstrations (replications/farmers/beneficiaries):** 10**No of SC/ST Farmers and women farmers:** 1**Area proposed (ha)** : -**Actual area (ha)** : -**Justification for shortfall if any:** -**Parameter Assessed**

<b>Technology</b>	<b>Name of the product</b>	<b>Time Taken</b>	<b>Overall Acceptability (Score – 5)</b>	<b>Shelf life of the products</b>
Multipurpose Processing Machine	Herbal Extracts	3 hours	5	3 Months

**Economics**

<b>Technology</b>	<b>Gross Income</b>	<b>Gross Return</b>	<b>Net Income</b>	<b>BCR</b>
Betelvine Juice (100 lit)	3550	7500	3950	2.11

**Feedback from the beneficiaries**

- Very useful for extracts from betelvine, rose, aloe vera, neem, banana leaf
- Easy to remove seeds from amla and jamun
- Easy to prepare mango leather
- Easy to peel onion, garlic and ginger

**Scientist Feedback :**

- Mixing, boiling and extraction are various processes involved in making juices, pulp, essential oils, essence etc from edible and non - edible fruits having medicinal properties. This is also a first step of process for Pharma/ Food Processing Industry. Different machines are available for different process (pulverizing, mixing, steaming, pressure-cooking, and juice/oil/gel-extracting), however there was no single machine available which alone can perform all the above functions.
- Since this Multipurpose machine was very useful for pulverizing, mixing, steaming, extracting juice, gel, peeling of onion, garlic, ginger.

**Extension activities on the FLD:**

- Conducted training on Development of Value-Added Products from locally available agricultural and horticultural resources using MPP
- Published popular article on use of Multipurpose processing machine in value addition in Nila Valam Magazine and Nam Vali Velanmai
- Conducted 14 Method Demonstrations of MPP machine
- Exposure visit was arranged to MPP Machine to various district of farmers.
- Entrepreneurship Development: Mrs.P.Gayathri has started herbal products homemade products in the brand name of M/S Pure AA Herbal Homemade Products, Cumbum, Theni District and purchased Multipurpose Machine with the financial support of Rs.1,51,512/- under PMFME scheme. The herbal products are aloe vera skin glow gel, rose water, floral face pack and herbal shampoo.
- Mrs.S.Rengu, women entrepreneur, Sri Sai Sakthi Foods, samiyar madam, chinnamanur has been using KVK Incubation unit for betelvine extractions.
- Mrs.R.Umamaheswari, women entrepreneur, RR Food products, Bodinaykkanur has been using KVK Incubation unit for banana instant mix, deseeding of amla.

### Technology – 16

**FLD:** Demonstration of Herbal powder incorporated Millet Cookies

**Crop** : Millets, Herbal

**Thematic area** : Value Addition

**Technology demonstrated:** Demonstration of Herbal powder incorporated Millet Cookies

**Season and year** : Rabi 2022-23

**Farming situation** : -

**Source of fund** : FLD

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 10

**Area proposed (ha)** : -

**Actual area (ha)** : -

**Justification for shortfall if any:** -

### Organoleptic Evaluation

Results							
Technology	Appearance (5)	Colour (5)	Flavour (5)	Taste (5)	Texture (5)	Overall Acceptability (25)	Shelf life of the product
Herbal powder incorporated Millet Cookies	4	4	4.5	4.5	4.5	21.5	2 Months
Maida Cookies	4	4.5	4	3	4	19.5	

### Results - Economics

Technology	Gross Cost	Gross return (Rs.)	Net return (Rs.)	BCR
Herbal powder incorporated Millet Cookies (100 kg)	24150	50000	25850	2.07
Farmers Practice- Maida Cookies (100 kg)	14050	25000	10950	1.77

#### **Feedback from the beneficiaries**

- Innovative cookies, healthy bakery items

#### **Scientist Feedback**

- Children like to have herbal powder incorporated millet cookies instead of Maida cookies.

#### **Extension activities on the FLD:**

- Demonstration of herbal powder incorporated millet cookies
- Entrepreneurship Development - 1

#### **Technology – 17**

#### **FLD: Demonstration of Nutrient Dense Ready to Use Multigrain Mixes**

**Crop** : Multigrain

**Thematic area** : Value Addition

**Technology demonstrated:** Demonstration of Nutrient Dense Ready to Use Multigrain Mixes

**Season and year** : Kharif 2023

**Farming situation** : -

**Source of fund** : FLD

**No of locations (Villages):** 1

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

**No of SC/ST Farmers and women farmers:** 10

**Area proposed (ha)** : -

**Actual area (ha)** : -

**Justification for shortfall if any:** -

#### **Organoleptic Evaluation**

Results							
Technology	Appearance (5)	Colour (5)	Flavour (5)	Taste (5)	Texture (5)	Overall Acceptability (25)	Shelf life of the product
Demonstration of Nutrient Dense Ready to Use Multigrain	4.5	5	4.5	5	5	24	3 Months

Mixes							
Banana Health Mix	5	4.5	5	4.5	5	24	

### Results - Economics

Technology	Gross Cost	Gross Income (Rs)	Net return (Rs)	BCR
Demonstration of Nutrient Dense Ready to Use Multigrain Mixes (100 kg)	15630	32000	16370	2.04
Banana Health Mix (100 kg)	35060	60000	24940	1.71

### Feedback from the beneficiaries

Highly nutritious, overall acceptability of products were good.

### Scientist Feedback

- Highly suitable to all the age groups especially Anemia

### Extension activities on the FLD:

- Method Demonstrations – 5
- Lecture Delivered – 7
- Scientist Visit – 2
- Field Day – 1
- Entrepreneurship Development – 3 women entrepreneurs and 1 SHG

### Technology – 18

**FLD:** Demonstration of Domestic Solar Dryer for drying agricultural/horticultural products

**Crop :** Agriculture and Horticulture Produces

**Thematic area:** Value Addition

**Technology demonstrated:** Demonstration of Domestic Solar Dryer for drying agricultural/horticultural products

**Season and year :** Kharif 2023

**Farming situation :** -

**Source of fund :** FLD

**No of locations (Villages):** 2

**No. of demonstrations (replications/farmers/beneficiaries):** 2 SHGs

**No of SC/ST Farmers and women farmers:** 20

**Area proposed (ha) :** -

**Actual area (ha) :** -

**Justification for shortfall if any:**

### Results - Economics

Dehydrated Products using solar dryer	Gross Cost (Rs.)	Gross Income (Rs.)	Net Return (Rs.)	BCR
Banana Stem Powder (100 kg)	1050	2500	1450	2.3
Banana Powder (100 kg)	5250	7500	2250	1.4
Cluster bean vathal (100 kg)	2570	9000	6430	3.5
Lycopene vadagam (100 kg)	2750	8000	5250	2.9
Amla mouth freshener (100 kg)	7500	28000	20500	3.7

- Method Demonstrations – 4
- Lecture Delivered – 4
- Scientist Visit – 2
- Field Day – 1
- Dissemination of Technology – Handholding support to Installed 4 solar dryers in Cumbum, Uthamapalayam, 2 in PC patti, Theni

### Impact Study of Cluster Frontline Demonstration of Oilseeds Technologies

#### Preamble:

Krishi Vigyan Kendra, Theni conducted Cluster Front Line Demonstration on oilseeds crops such as groundnut at farmer field in the villages of Theni district from 2019 to 2023. Totally 350 front line demonstrations were conducted in 150 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 Oilseeds Technologies.

#### Methodology

A complete list of 120 respondents was randomly prepared who have undergone through training and demonstration on CFLD Oilseeds such as groundnut 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 groundnut 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 worked 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

S.No	Particulars	Demonstration	Farmers Practice
1	Farming Situation	Rainfed	Rainfed
2	Variety	VRI 8,9 and Kathiri	Local variety



		Lepakshi	
3	Method of sowing	Line Sowing	Line Sowing
4	Seed treatment	Treat with bio-fertilizers	No seed treatment
5	Seed rate	150kg/ha	125kg/ha
6	Fertilizer dose	Fertilizer dose of 20, 40 and 40 kg N, P2 O5 and K2 O per ha, respectively along with Sulphur @ 20 kg/ha.	Not Followed
7	Plant Protection	Spraying Chlorpyrphos for pod borer and Imadichlorid for sucking pests	Not-Specific
8	Weed Management	Herbicide	Hand Weeding
9	Flower and pod development	Use of Groundnut Rich @ 2kg/acre for induces flowering and pod setting.	Not Specific

Table 2: Productivity, extension gap, technology gap in Groundnut

Year	Yield (q/ha)		Increases in yield (%)	Extension gap (q/ha)	Technology Gap (q/ha)	B:C Ratio	
	Demonstration	Farmers Practice				Demo	Farmers Practice
2019	24	15.5	43	1.9	3.9	1.56	1.20
2020	25.5	16	44.50	2.7	4.5	1.86	1.31
2021	25	15	45.00	1.3	4.7	1.33	1.14
2022	27	17.5	46.50	1.5	3.7	3.60	3.41
2023	28.5	18	47.00	1.4	4.2	2.45	2.50
<b>Average</b>	26	19.8	54.9	2.10	5.1	2.16	1.91

## 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 26 q/ha which was higher as compared to local plots (19.8 q/ha). The increased % yield was 54.90 in CFLD's over farmers practice.

**Extension gap** An average extension gap between demonstrated practices and farmers practices was recorded 2.10 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 similar observations were also obtained in Black gram crop 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 5.1 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 cluster front line demonstrations (2.16) as compared to farmer practices (1.91) during the period of study. The similar 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 Groundnut.

### **Conclusion**

There is a need of suitable technology for enhancing the productivity of groundnut 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 groundnut 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**

<b>Types of Activities</b>	<b>No. of Activities</b>	<b>Number of Participants</b>	<b>Related crop/livestock technology</b>
Gosthies	1	67	Field crop production technologies
Lectures organized	4	261	Millets production and value addition
Exhibition	1	450	Agricultural entrepreneurship
Film show	2	80	Millet Production and value addition
Fair	-		
Farm Visit	4	17	Field crop production
Diagnostic Practical	-		
Distribution of Literature (No.)	2	800	Field crop production and mango cultivation
Distribution of Seed (q)	-		
Distribution of Planting materials (No.)	-		
Bio Product distribution (Kg)	-		

Bio Fertilizers (q)	-		
Distribution of fingerlings			
Distribution of Livestock specimen (No.)	-		
Total number of farmers visited the technology week	6		
Others		1875	Field crop production and EDP development

**Training/workshops/seminars etc. attended by KVK staff.**

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

<b>Name of the staff</b>	<b>Title</b>	<b>Dates</b>	<b>Duration</b>	<b>Organized by</b>
P.Maheswaran	Bamboo – wonder grass	9.11.2023 – 11.12.2023	3 days	IFGTB, C TNAU,
	Annual Zonal Workshop	17-19.08.2023	3 Days	TNAU, Coimbatore
C.Sabarinathan, (Agricultural Extension)	Agriculture Science congress	10-12.10.2023	3 days	CMFRI

**Details of collaborative / externally funded / sponsored projects/programmes implemented by KVK.(2023)**

<b>S.No</b>	<b>Title of the programme / project</b>	<b>Sponsoring agency</b>	<b>Objectives</b>	<b>Duration</b>	<b>Amount (Rs)</b>
<b>1</b>	GRAPE FPO	NABARD	Economic empowerment of grape farmers	3 years	11,44,000.00
<b>3</b>	STRY Programme on Millets production and value addition	MANAGE-Hyderabad through SAMETI & ATMA	To Provide skill training on Production and value addition in millets	6 Days	42,000.00
<b>6</b>	FPO-Sugarcane and Betalvine	NABARD, Theni	To form FPO and Implement the Sugarcane and Betel vine Products	3 Years	11,44,000.00

## Success stories

### Template for preparing success stories/case studies

Name of farmer: Mr. S. Pragatheswaran

Address: S/o Siva prakasam, Karungattankulam, Chinnamanur, Theni

Mobile Number: 8056625553

Age: 47

Education: 12<sup>th</sup>

Size of land holding (in acre): 2.5 ac



1. **Situation analysis/Problem statement:** The farmers were hailing at Karugattankulam village of Chinnamanur Block, Theni District. He have 2.5 acre of land Mullai periyar river basin. He is cultivated Paddy crop throughout the year. In Theni district huge area of farmers are cultivated Paddy crop in Mullai periyar river basin. Farmers often use excessive dose of nitrogenous fertilizer, this leads to high cost of fertilizer low fertilizer use efficiency and other environmental problems.
2. **Plan, Implement and Support:** KVK, Theni implementing FLD programme on Demonstration of IFFCO Nano Urea in Paddy cultivation (SAC Recommendation) at Karungattankulam village. KVK are distributed IFFCO Nano Urea to the farmers as a critical input for demonstration purpose. We have given lecture on IFFCO Nano Urea usage methods and its benefits to the farmers. After that he was foliar sprayed IFFCO Nano Urea @ 5 ml of Nano urea/litre. N, P & K fertilizer – Basal application based on soil test, Top dressing of K fertilizers. N fertilizers applied as Nano urea foliar sprays – 1<sup>st</sup> spray at active tillering stage or 20-25 days after Transplanting; 2<sup>nd</sup> spray 20-25 days after 1st spray or before flowering in the crop.
3. **Output:** The application of Nano Urea is produced by an energy efficient environment friendly production process with less carbon footprints. IFFCO Nano Urea increased availability of nitrogen to crop which results farmers are getting higher grain yield and productive tillers by more than 80% resulting in higher nutrient use efficiency. Overall he was getting more grain yield from the Paddy when compare to the conventional method of Urea application.

#### 4. Before Intervention

Particulars	Yield (q/ha)	No. of tillers/ plant	Cost of cultivation Rs/ha	Gross income	Net income	BCR
Paddy	49.5	12	52800	148500	95700	2.81

#### After Intervention

Particulars	Yield (q/ha)	No. of tillers/ plant	Cost of cultivation Rs/ha	Gross income	Net income	BCR
Paddy	54.8	16	55400	164400	109000	2.97

- 1. Outcome:** The foliar application of IFFCO Nano Urea was recorded higher grain yield (54.8 q/ha) with 16 productive tillers. IFFCO Nano Urea increased availability of nitrogen to crop by more than 80% resulting in higher nutrient use efficiency. Its application to crops as foliar fertilization enhances crop productivity to the tune of 8% with commensurate benefits in terms of better soil, air and water, and farmer's profitability.

### Soil Water and Plant Analysis

Category	No. of samples		No. of farmers	No. of villages	Amount realized (Rs.)
	Farmers in which OFT/FLD were implemented during the reported period	Other Farmers			
Soil	260	294	554	32	57100
water	158	206	364	22	28500
<b>Total</b>	<b>418</b>	<b>500</b>	<b>772</b>	<b>55</b>	<b>85600</b>

## SUCCESS STORY

### Template for preparing success stories/case studies

Name of farmer: **Thiru. P. Venkadesan**

Address: : No.72, Thottakudiyiruppu, ward 8, Thenpalani, Odaipatti, Uthamapalayam-625540, TamiNadu

Mobile Number: 9751281617

Age: 49

Education: 12th standard

Size of land holding (in acre): 05.00 ac



- 1. Situation analysis/Problem statement:** The farmers were hailing at Thenpalani village of Uthamapalayam Block, Theni District. He have 05.00 acres of land with required amount of water resources. He is cultivated grape and pomegranate crop throughout the year. In Theni district huge area of farmers are cultivated Muscat Grape cultivation. Due to market price variation getting less amount of income from the Muscat Grape.
- 2. Plan, Implement and Support:** CENDECT KVK, Theni implementing training programme on improved production technology in Grape at KVK, Theni. He was one of the participants. He learned improved new Y ankle method of grape production technologies and new cultivars from NRCG, Pune. After that training, he was introduced and established Y ankle method of Grape cultivation. He is adopted in high tech Grape cultivation in Theni District. Technologies sourced from NRCG, PUNE, Maharashtra and training was given by KVK Theni. Currently he is cultivating 5 different types of Grape varieties. He is cultivating new improved cultivars in pomegranate and rearing two cows, and five nos of Goat. He owns separate mother Grape dogridge nursery in own farm.

3. **Output:** Producing year-round good quality, chemical free table grape and pomegranate. He is selling chemical free (or) organic bottle gourd and lab lab in seasonal vegetables cultivation in own field. The farmers and local traders come to the farm and purchased the products from the farm itself. He is adopted water harvesting technologies in the farm. The rainy seasons the farm fulfilled by water scarcity and increase in the water table.

#### 4. Before Intervention

Component Names	Area (Acre)/No.	Production (Q/Liter/No.)	Gross income (Rs.)	Net Income (Rs.)
Grape	5 ac	30 t	1275000	840000
Cow	2 nos	-	58500	44600
<b>Total</b>			<b>1333500</b>	<b>884600</b>

#### After Intervention

Components Names	Area (Acre)/No	Production (Q/Liter/No.)	Gross income (Rs.)	Net income (Rs.)	% Increase over base year	
					Production	Income
	5 ac	63 t	2433000	1854000		
Cow	4 nos	-	92600	58300	-	30.7
<b>Total</b>			<b>2525600</b>	<b>1912300</b>	<b>-</b>	<b>192.2</b>

5. **Outcome:** He is producing year-round good quality, chemical free table grape and pomegranate fruits. Also he was selling own product in infront of the farm at the cost of Rs.50- Rs.100 per kg in Grape, and Rs.150 per kg for Pomegranate. He was able to take more yield and increase production and productivity through CENDECT KVK Support and guidance.



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

<b>Year</b>	<b>Title of the Innovative extension methodology spread</b>	<b>Concept in brief</b>	<b>Objectives</b>	<b>Usefulness/ used for</b>	<b>Models operated</b>	<b>Outcome results</b>
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.	To prescribe fertilizer 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 for different crops and different soil agro-climatic zones separately.	Efficient and profitable site specific fertilizer recommendation for increased crop production and for maintenance of soil fertility. Aims to provide balanced, efficient and profitable nutrient application rates for pre- set yield targets.	STCR methodology takes in to account the three factors; a) Nutrient requirement (NR) in kg/ quintal of the produce b) Percentage contribution from soil available nutrients (SE) c) Percentage contribution from added fertilizers towards making effective	In Theni district among 15 farmers are followed STCR based fertilizer application methods which results they are getting higher yield with optimum cost of fertilizer.



					fertilizer prescriptions for specific yields.	
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 group approach and formed FPOs with the NABARD funding	a.To bring the farmers under one umbrella for collective actions. b. To establish farmers group owned input shops, godown, value addition and marketing, etc.,	a. farm inputs especially seeds, pesticides, plant protection chemicals, feed, etc., b. To add the value to their produces and sell the products at remunerative prices to make agriculture as a profitable venture.	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 betterment.	FPO are formed on Grapes and sugarcane farmers are now benefited by this group formation approach
	Resource centre – Farmers field	Timely availability of Bio inputs, Pest repellent to	To develop the farmers on prodcuton of bio inputs like	Crop production and protection measures by	Learnig the new things at farmers	81 bio input preparation units like

		<p>farmers is highly difficult. To overcome this issue KVK developed the resource farmers at their respective places for production and distribution of bio inputs and guiding the farmers on bio input production</p>	<p>azolla, vermicompost, bio repellents and other inputs</p> <p>To enhance the large scale availability of bio inputs across the district</p>	<p>local based resources. It reduces the cost and promote the chemical free farming. Also helpful to generate the income of the bio input producers</p>	<p>level.</p> <p>Linking the farmers and innovative farmers through ICT tools</p>	<p>Azolla, Vermicompost, Panchakavya, Bio repellent preparation units established. Averagely Rs. 2500 generated per month/unit</p>
--	--	--	---	---	---	--

## 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.

Operational Area	Crop/Enterprises	ITK Practised	Purpose of ITK
Chinnamanur and Aundipatti Blocks	Red Gram/Sorghum (var-Irumbu Solam),	<u><b>Coating with Red Mud Soil</b></u> 1 kg of Red soil is required for 4 kg of Red Gram for coating	To prevent the pest and infestation during the storing period and also for good germinations.

Theni and Periyakulam Blocks	Paddy	<b><u>Storing with Pungam Leaves</u></b> Farmers are practising gunny bags to store paddy seeds for managing rice moth during storage period. Top of the gunny spreading Pungam for preventing storage pest in Paddy	To manage the pest and infestation during the storing period and also for good germinations.
Vellaiyammalpuram , Chinnamanur Block	Onion	Thalippu Vadagam is a sun dried condiment prepared using small onions and other spices during peak harvest time.	To minimize the post harvest losses during Peak harvest time and low market situations

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
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

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 2016	<b>Foliar Application of Banana Special for Quality Bunches</b>	<p><b>Name:</b> M.Jeyaraj</p> <p><b>Background:</b></p> <p>The farmer is hailing from Palarpatti village in Bodi Taluk of Theni District. He developed 10 acres of Land holding with adequate supply of irrigation water. This farmer has cultivated Banana, Rice and Coconut. But now he gives more importance to Banana Cultivation.</p> <p>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</p>

		<p>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.</p> <p>At particular point of time, interventions of KVK made him to 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 micronutrient consumption, crop improvement and increase in fruit size and color and fast correction of deficiency.</p> <p>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 an 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 a 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.</p>
2017-2018	Cashew Apple Squash Preparation	<p><b>Intervention Process:</b></p> <p>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.</p> <p><b>Impact:</b> Now one group of SHG members have started preparation of Cashew Squash for the home consumption.</p> <p><b>Economic Gains:</b></p>

		<p>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.</p>
<b>2016-2017</b>	<b>Onion Storage Structure</b>	<p><b>Background:</b></p> <p>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.</p> <p>In his initial farming, he cultivated Rice and Vegetables in 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.</p> <p>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 storing of Onion to take more advantages to get better market price.</p> <p>Onion storage structure is 80ft length, 3 ft width with the height of 6ft. In this storage structure, he stores 7,500kg of Onion.</p> <p>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.</p>
<b>2016-2017</b>	<b>CO-4 Bhendi Hybrid Cultivation</b>	<p><b>Background :</b> 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 in his field, he couldn't take up the lead in 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</p>

		<p>made him to aware and adopt Co-4 Bhendi features tall plants 135-150cm, dark green, bender medium size fruit, 25-29 fruits/plant, 22 harvest in 110 days starting 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 approach 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 followed by labours compared to other bhendi varieties. As the CO-4 bhendi was cultivated the yield increase was substantial 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.</p>
<b>2017 2018</b>	<p><b>CO 51 Paddy variety:</b></p> <p><b>Profitable Rice Production in Theni</b></p>	<p>Water scarcity was a major problem, its availability being dictated by the monsoon in Theni district. Lack of adoption of good agricultural practices reduces the productivity of paddy. There was an urgent need to reduce water consumption and implement the good agricultural practices for rice cultivation while enhancing productivity. CO 51 Paddy variety was shorter duration with 110 days duration with white medium slender grains. High milling capacity (69%) and Head rice recovery (63%) with intermediate amylase content (22%). CO 51 paddy has Average yield of 6623 kg/ha it is 11 % increase over ADT 43 with yield potential of 11377 in Tamil Nadu. This variety suitable for cultivation as Transplanted rice throughout Tamil Nadu except Nilgris District.</p> <p><b>Plan, Implement and Support</b></p> <p><b>Integrated Crop Management Practices for higher Productivity</b></p> <p><b>Split application of Urea</b></p> <p>Application of excessive Nitrogenous fertilizers Particularly Urea leads to Plants are dark green in colour, Abundant foliage, Restricted root system, Flowering and seed setting may be retarded and attract the sucking pests. Application of Urea and other Nitrogenous fertilizers at three split doses. Application of 50 % of N at the time of Transplanting. Remaining first 25 % at time of active tillering</p>

		<p>stage and second 25 % at the time of Panicle emergence stage. This method helps increased the Nitrogen use efficiency and reduces the cost of fertilizers. (Source:P. Pardha-Saradhi)</p> <p>In other hands, Productivity of Paddy is reduced when leaf Nitrogen content &lt; 2% at the time of tillering stage. Foliar application of Urea at 1 % at active tillering stage increase the No. of tillers per hills resulted from high tillering ability.</p> <p><b>Pheromone traps for controlling Yellow Stem Borer.</b></p> <p>Rice yellow stem borer is the major problem identified in paddy growers in Tamil Nadu. Appearance of Symptoms mostly at panicle emergence stage. In this stage unable to implement the control measures with 16 % yield losses. Pheromone traps installation at the rate of 5 No.s / Acre for monitoring the Yellow stem borer incidence in paddy from transplanting onwards. This method helps to farmers for manage the Yellow Stem borer from early Stages onwards.</p> <p><b>Integrated Disease Management:</b> 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 <i>Pyricularia oryzae</i> 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.</p> <p><b>PPFM (Methylobacteria) for Drought Mitigation</b></p> <p>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</p>
--	--	--



		<p>increase the growth of Paddy.</p> <p><b>Group approach for horizontal spread of the variety</b></p> <p>The CO 51 variety was first introduced at Veerapandi village of Theni district. After successful yield gain from co 51, district scientific advisory committee recommended the CO 51 variety for kharif and Rabi season. In collaboration with ATMA, KVK conducted the farm school in paddy with Co 51. Seed material also produce at seed farm in Theni district. Totally 800 ha among 1200 farmers were growing CO 51 with integrated crop management practices</p> <p><b>Results and outcome</b></p> <p>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.</p>
--	--	---

**Box item for APR 2023**  
**(similar to APR 2022)**

Name and contact details of farmer, few lines of farmers statement / achievement, good quality photo.

Name : Mrs.Bowsiya Begum. N  
Contact Details : 6-3-68/1, Govt.Girls hostel opp.,  
Indira Nagar, Uthamapalayam,  
Theni District – 625 533  
Phone No. : 8610987306, 9514138045  
Email : [bowsiyabegum5991@gmail.com](mailto:bowsiyabegum5991@gmail.com)

Few lines of farmers statement/achievement

**Box Items**

I am very proud to say that KVK Theni has developed me as a proprietor of “Millets Minar” today. KVK is playing a significant role on Entrepreneurship development by promoting healthy value-added products for empowering the rural women of the district. KVK Theni has provided technical, handholding and moral supports to introduce healthy products for creating a healthy nation.

\*\*\*\*\*

Name : Mrs.Regina Paulpandian  
 Contact Details : 334M vasantham Nagar, Aranmanaipudur ,  
 Theni district- 625 531, Tamil Nadu  
 Phone No. : 9940811844  
 Email : vahinfoodproducts@gmail.com

### **Box Items**

I am extremely happy to share that KVK Theni turned my dreams into reality. I started my journey with two products, now I have 60 healthy millets-based products and processing unit with the financial assistance of Rs.16 L from PMEGP scheme and marketing through e-commerce. I request all rural women to utilize KVK services for sustainable income and revitalize rural communities.

\*\*\*\*\*

Name : Mrs.S.Saleema  
 Contact Details :364 A, Pallivasal Street, Pallapatti, Koduvilarpatty  
 Theni district- 625 534, Tamil Nadu  
 Phone No. : 8148621443

### **Box Items**

I am very proud to say that KVK Theni has developed me as a Best Beekeeper, Women Entrepreneur and Millionaire Honey Farmer of India. Their technical knowledge and handholding support makes me to give an employment opportunity to 20 rural women. KVK is contributing a lot for Sweet Revolution and women empowerment in the District.

**One page report on skilling - outcome of skilling - entrepreneurship development programmes conducted, enterprises established, handholding by KVK - outcome in terms of income, employment generated etc.**

**One case of successful technology application and dissemination: a technology which has passed through OFT, FLD, Trainings, Mainstream Extension (State Department of Agriculture), large scale adoption by farmers (in terms of area, additional income, input savings, saving of natural resources *etc.*)**

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

Introduction: Paddy is the major crop in Theni District. The total area under cultivation is 14000 ha. Among all the paddy growing area the cropping pattern is Paddy-paddy-Pulses. The second paddy crop was short duration due to lack of availability of water. Farmers 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

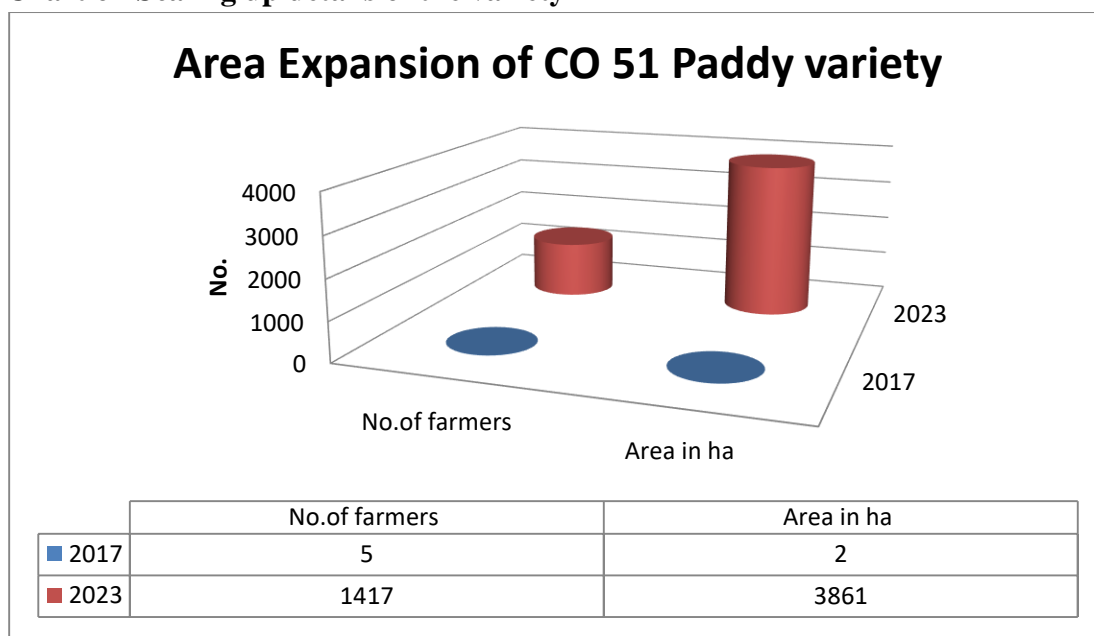
#### **Economics of the Variety**

	<b>Yield</b>	<b>Yield increase (%)</b>	<b>Cost of Cultivation (Rs)</b>	<b>Gross income (Rs)</b>	<b>Net income (Rs)</b>	<b>BCR</b>
C) 51	60.16	15.22	46257	102272	56015	2.34
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.

**Chart on Scaling up details of the variety**



## Linkages

### Functional linkage with different organizations

Name of Organization	Nature of Linkage
<b>ICAR Institutes</b>	
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
<b>DST Institute</b>	
National Innovation Foundation-India	Innovators Meet, Research Study, Dissemination of Grassroots Innovation Projects
<b>Line Departments</b>	
Department of Agriculture, Theni, TamilNadu.	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, TamilNadu.	Received Guidance and Assistance for Conducting Training Programmes. Received and supply of Quality Seedlings to Farmers
Department of Animal Husbandry, Theni, TamilNadu.	Creating awareness about mixed fodder cultivation
Department of Sericulture, Theni, TamilNadu.	Conducting Skill Trainings
VazhnthuKattuvomThittam, Theni, TamilNadu.	Organizing Training Programmes
MahalirThittam, Theni	Conducting Trainings to the SHGs Leaders/Members
ATMA, Theni, TamilNadu.	Conducting Farmers Field School Programmes, Scientist Visits, Field Visits, Capacity Building Trainings for ATMA Functionaries
FTC, TANUVAS, Theni, TamilNadu.	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

Name of Organization	Nature of Linkage
	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
<b>Board</b>	
Coffee Board, Bodinayakkanur, TamilNadu.	Conducting training to SHG members
Spices Board, Bodinayakkanur, ,TamilNadu.	Conducting Training and Awareness Programmes to Farmers, Rural Youth, SHGs
<b>Council</b>	
Tamil Nadu State Council of Science and Technology (TNSCST), Chennai, TamilNadu.	Publication of
<b>Commission</b>	
KVIC, Madurai,TamilNadu.	Organizing Basic Bee keeping Training and Distribution of Bee Boxes.
<b>Financial Sectors</b>	
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 Colleges</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 to students during Rural Agricultural Work Experience programme
Agricultural College and Research Institute, Madurai, TamilNadu.	Guidance to students for their Rural Agricultural Work Experience programme
Sri AdiChunchanagiri Women's College, Cumbum, Theni, TamilNadu.	Signed MOUs with College to transfer of technologies, joint implementation purposes
Sri Arul Anandar College, Madurai, TamilNadu.	Signed MOUs with College to transfer of technologies, joint implementation purposes
Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, TamilNadu.	Conducting Training to the Faculty, Scholars, Students, Joint Implementation 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

<b>Name of Organization</b>	<b>Nature of Linkage</b>
Coimbatore, TamilNadu.	Agricultural Work Experience programme
College of Agricultural Technology (CAT), Theni, TamilNadu.	Guidance to students for their Rural Agricultural Work Experience programme
Krishna College of Agriculture and Technology (KRISAT), Usilampatti, TamilNadu.	Guidance to students for their Rural Agricultural Work Experience programme
HajeeKaruthaRowtherHowdia College, Uththamapalayam, Theni, TamilNadu.	Guidance to students for their Rural Agricultural Work Experience programme
Tamil Nadu Teachers Education University, Chennai, TamilNadu.	Conducting 12 hours Assist World Record Programme
<b>Mass Media</b>	
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, Dinamalar, Thinakaran, Thinaboomi, MalaiMurasu, Agri-Doctor, TamilNadu.	Coverage of KVK activities
<b>Farmers Producer Group/ Organizations (FPOs)</b>	
Suruliaru Grapes Farmer Producer Company Ltd., Surulipatty, TamilNadu.	Conducting Training Programmes, Joint Implementation, Participation in Meeting, Scientist Visit
Vallalar Farmer Producer Company Ltd., Periyakulam, TamilNadu.	Conducting Training Programmes, Joint Implementation, Participation in Meeting
Malar Farmer Producer Company Ltd., Andipatty, TamilNadu.	Conducting Training Programmes, Joint Implementation, Participation in Meeting
Aghamalai Spices FPC Ltd., Periyakulam, TamilNadu.	Conducting Training Programmes, Joint Implementation, Participation in Meeting
KamathenuFPC Ltd.,Chinnamanur	Conducting Training Programmes, Participation in Meeting
Malligai Horticulture Farmer Producer Group, Seepalakottai, TamilNadu.	Conducting Training Programmes, Joint Implementation, Participation in Meeting
Salamalai Horticulture Development Farmer Producer Company Ltd., TamilNadu.	Conducting Training Programmes, Joint Implementation, Participation in Meeting
<b>NGO Network and other Institutes</b>	
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



## AWARDS and RECOGNITIONS

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

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

Name of the Award	Category (International/ National/ State/Regional/ District/ Institutional/ Society etc.,)	Awarded for what achievement	Category of Awardee	Name of the awardee/ FPO/SHG	Contact details of the awardee	Honoured by (VIP who handed over the award)	Award Institute/ Agency	Description about the Award/ Remarks if any
<b>KVK Staff</b>								
1st Prize- Best E-Poster	Institutional Level	Best Presenter	E-Poster	M.Ramya sivaselvi SMS (Home Science), KVK Theni	95788 84432	Designated Officer, Food Safety Wing, Coimbatore District	Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore	Received on 26.09.2023 during Poshan Maah Celebrations 2023
Best Agriculture based Value Addition Trainer	District	Entrepreneurship Development in Agriculture and Allied Sectors	Trainer	M.Ramya sivaselvi SMS (Home Science), KVK Theni District	95788 84432	<b>Dr. S. Saraswathy</b> Professor and Head Department of Fruits Science Horticultural College and Research Institute, Periyakulam-625 604	EDII PHBIF, HC&RI, TNAU, Periyakulam, Theni District	Received on 29.12.2023 during Semmai Madar 2.0 Programme at HC&RI, TNAU, Periyakulam, Theni District
<b>Farmers/Entrepreneurs</b>								
Best Entrepreneur	District	Traditional cum	Entrepreneur	Tmt.ReginaPaulp	99408	Dr.P.Patchaimal,	KVK Theni	Received on 4.3.2023

<b>Name of the Award</b>	<b>Category (International/ National/ State/Regional/ District/ Institutional/ Society etc.,)</b>	<b>Awarded for what achievement</b>	<b>Category of Awardee</b>	<b>Name of the awardee/ FPO/SHG</b>	<b>Contact details of the awardee</b>	<b>Honoured by (VIP who handed over the award)</b>	<b>Award Institute/ Agency</b>	<b>Description about the Award/ Remarks if any</b>
Award		Innovative products from millets		andian, Vahin Homemade Food Products, Aranmanaipudur	11844	Chairman, KVK Theni	and The Coco-Cola Foundation	during the International Womens Day Celebration and National Level Seminar on Empowering women through Emerging trends in business opportunities
Best Entrepreneur Award	District	Masala Products	SHG	Tmt.S.Fathima SAFA Masala, Cumbum	99941 97004	Dr.S.Susila, Head Management Studies, SAC Womens College, Cumbum	Coco-Cola foundation and KVK Theni	Received on 4.3.2023 during the International Womens Day Celebration and National Level Seminar on Empowering women through Emerging trends in business opportunities
Best Entrepreneur Award	District	Handicrafts – Welath from Waste	Entrepreneur	Tmt.Ushananthin i Kannan, Agam Handicrafts, Bodinayakkanur	90037 84527	Mrs.Saranya, Food Safety Officer, Bodinayakkanur	Coco-Cola foundation and KVK Theni	Received on 4.3.2023 during the International Womens Day Celebration and National Level Seminar on Empowering women through Emerging trends in business opportunities
Best Entrepreneur Award	District	Handmade soap and herbal products	Entrepreneur	Tmt.V.Muthulaks hmi, Akathiya natural, Bodinayakkanur	88383 43903	Dr.S.Susila, Head Management Studies, SAC Womens College, Cumbum	Coco-Cola foundation and KVK Theni	Received on 4.3.2023 during the International Womens Day Celebration and National Level Seminar on Empowering

<b>Name of the Award</b>	<b>Category (International/ National/ State/Regional/ District/ Institutional/ Society etc.,)</b>	<b>Awarded for what achievement</b>	<b>Category of Awardee</b>	<b>Name of the awardee/ FPO/SHG</b>	<b>Contact details of the awardee</b>	<b>Honoured by (VIP who handed over the award)</b>	<b>Award Institute/ Agency</b>	<b>Description about the Award/ Remarks if any</b>
								women through Emerging trends in business opportunities
Best Entrepreneur Award	District	RTU Millets Products	Entrepreneur	Tmt.Rajeswari Ravikumar, Suga Diet Natural Foods, Tanjavur	9488574308, 8608360308	Dr.P.Patchaimal, Chairman, KVK Theni	Coco-Cola foundation and KVK Theni	Received on 4.3.2023 during the International Womens Day Celebration and National Level Seminar on Empowering women through Emerging trends in business opportunities
Best Farmer Award	District	Outstanding contribution in the field of agriculture	Farm women	Tmt.Selvarani, Periyakulam	9976544390	Dr.S.Susila, Head Management Studies, SAC Womens College, Cumbum	Coco-Cola foundation and KVK Theni	Received on 4.3.2023 during the International Womens Day Celebration and National Level Seminar on Empowering women through Emerging trends in business opportunities
Best Beekeeper Award	Regional	Outstanding Contribution in the field of Beekeeping	Beekeeper	Mr.A.Vijayakumar	9943550174	Shri.R.P.Ashokan, Regional Director (i/c), KVIC, Madurai	KVIC, Regional Office, Madurai	Received on 20.05.2023 during World Bee Day Programme
Best Beekeeper Award	Regional	Outstanding Contribution in the field of Beekeeping	Beekeeper	Mr. C. Guruprabhu	9087684001	Dr.P.Patchaimal, Chairman, KVK Theni	KVIC, Regional Office, Madurai	Received on 20.05.2023 during World Bee Day Programme
Best Beekeeper	Regional	Outstanding	Beekeeper	Tmt.S.Saleema,	81486	Smt.Mahalakshmi,	KVIC,	Received on 20.05.2023

<b>Name of the Award</b>	<b>Category (International/ National/ State/Regional/ District/ Institutional/ Society etc.,)</b>	<b>Awarded for what achievement</b>	<b>Category of Awardee</b>	<b>Name of the awardee/ FPO/SHG</b>	<b>Contact details of the awardee</b>	<b>Honoured by (VIP who handed over the award)</b>	<b>Award Institute/ Agency</b>	<b>Description about the Award/ Remarks if any</b>
Award		Contribution in the field of Beekeeping		Shiffa Honey, Koduvilarpatti	21443	Assistant Manager, Canara Bank, Theni	Regional Office, Madurai	during World Bee Day Programme
Best Beekeeper Award	Regional	Outstanding Contribution in the field of Beekeeping	Beekeeper	Mr.C.Ambedraja, AMSA Honey	96594 94944	Mr.P.Suresh Kannan, Food Safety Officer, Chinnamanur Urban &Block, Theni District	KVIC, Regional Office, Madurai	Received on 20.05.2023 during World Bee Day Programme
Best Farmer Award	District	Organic Farmer & IFS	Organic Farmer	Mr.S.Suresh	93606 51260	Dr.P.Geetharani, Professor (SST), ARS, Vaigai Dam, Theni	Mary Matha CMI Public School, Theni	18.08.2023 on the eve of Independence Day 2023
Best Entrepreneur Award	District	Innovative products from Bees wax	Entrepreneur	Tmt.S. Amala Deepa, Natural Bee Ent	80561 87695	Dr.P.Sivaram, Deputy Director, CENDECT, Theni	KVK Theni and The Coco-Cola Foundation	Received on 26.08.2023 during the State Level Conference for Agriculture Women and Women Entrepreneurs
Best Entrepreneur Award	District	Low-cost weaning foods from millets	Entrepreneur	Tmt.N.Bowsiya Begum, Millets Minar	95141 438045	Dr.P.Sivaram, Deputy Director, CENDECT, Theni	KVK Theni and The Coco-Cola Foundation	Received on 26.08.2023 during the State Level Conference for Agriculture Women and Women Entrepreneurs
Best Entrepreneur Award	District	Handicrafts – Welath from Waste	Entrepreneur	Tmt.Ushananthin i Kannan, Agam Handicrafts	90037 84527	Dr.P.Sivaram, Deputy Director, CENDECT, Theni	KVK Theni and The Coco-Cola Foundation	Received on 26.08.2023 during the State Level Conference for Agriculture Women and Women Entrepreneurs

Name of the Award	Category (International/ National/ State/Regional/ District/ Institutional/ Society etc.,)	Awarded for what achievement	Category of Awardee	Name of the awardee/ FPO/SHG	Contact details of the awardee	Honoured by (VIP who handed over the award)	Award Institute/ Agency	Description about the Award/ Remarks if any
Best Entrepreneur Award	District	Unique Products from Banana	Entrepreneur	Tmt.Preethi Krishnakumar, KP Tamil Products	80561 87695	Dr.P.Sivaram, Deputy Director, CENDECT, Theni	KVK Theni and The Coco-Cola Foundation	Received on 26.08.2023 during the State Level Conference for Agriculture Women and Women Entrepreneurs
Best Entrepreneur Award	District	Unique products Mango and Jackfruit	Entrepreneur	Tmt.R.Uma Maheswari, RR Food Products	94422 91505	Dr.P.Sivaram, Deputy Director, CENDECT, Theni	KVK Theni and The Coco-Cola Foundation	Received on 26.08.2023 during the State Level Conference for Agriculture Women and Women Entrepreneurs
Millionaire Honey Farmer of India	National	Beekeeping and Value-Added Products from Honey	Beekeeping	Mrs.S.Saleema, Shiffa Honey, Koduvilarpatti	81486 21443	Shri.Justice P.Sathasivam, Former Governor of Kerala	Krishi Jagran at New Delhi	Received on 06.12.2023 during Millennium Farmers Meet
Best Millet Entrepreneur award	District	Innovative Millets Products	Entrepreneur	Mrs.P.Hema, Vahin Homemade Food Products, Aranmanaipudur	90032 13233	Tmt.R.V.Shajeevana District Collector, Theni	Collectorate, Theni	Received on 06.12.2023 during Millennium Farmers Meet
Best Women Entrepreneur Award	District	Beekeeping and Value-Added Products from Honey	Entrepreneur	Mrs.S.Saleema, Shiffa Honey, Koduvilarpatti	81486 21443	Dr. E. Somasundara m, Director, ABD, TNAU, Coimbatore and <b>Dr. J. Rajangam</b> DEAN Horticulture College and Research	EDII PHBIF, HC&RI, TNAU, Periyakulam, Theni District	Received on 29.12.2023 during Semmai Madar 2.0 Programme at HC&RI, TNAU, Periyakulam, Theni District

Name of the Award	Category (International/ National/ State/Regional/ District/ Institutional/ Society etc.,)	Awarded for what achievement	Category of Awardee	Name of the awardee/ FPO/SHG	Contact details of the awardee	Honoured by (VIP who handed over the award)	Award Institute/ Agency	Description about the Award/ Remarks if any
						Institute, Periyakulam		
Best Women Entrepreneur D2C Online Startup	District	D2C Online Startup	E-Commerce	Mrs.Nithya Kuppusamy, Akathiyanatural, Bodinayakkanur	97912 34259	Ms.Dhanalakshmi, PA to Collector (Agri), Department of Agriculture, Theni	EDII PHBIF, HC&RI, TNAU, Periyakulam, Theni District	Received on 29.12.2023 during Semmai Madar 2.0 Programme at HC&RI, TNAU, Periyakulam, Theni District
Asia Book of Records- 2023	International	285 products from millets and speaker	Entrepreneur	Mrs.Subashini Sankar, Sri Sai Swashini Foods	70102 89098	Shri.S.Sundar, Co-organizer, Millet Foundation and Tanmillets of Tamil Nadu	Millet Foundation and Tanmillets of Tamil Nadu	International Millet Expo and Conclave 2023
Asia Book of Records- 2024	International	Value Added Products from Millets	Entrepreneur	Mrs.Subashini Sankar, Sri Sai Swashini Foods	70102 89098	Shri.S.Sundar, Co-organizer, Millet Foundation and Tanmillets of Tamil Nadu	Millet Foundation and Tanmillets of Tamil Nadu	Asia Book of Records- 2024
<b>Trainers</b>								
Best Beekeeping Master Trainer	Regional	Outstanding Contribution in the field of Beekeeping	Trainer	Mr.M.Meenatchi sundaram	94862 58847	Shri.R.P.Ashokan, Regional Director (i/c), KVIC, Madurai	KVIC, RO, Madurai	Received on 20.05.2023 - World Bee Day
Best Beekeeping Master Trainer	Regional	Outstanding Contribution in the field of Beekeeping	Trainer	Mr.R.Anbuselvan	97875 78468	Shri.R.P.Ashokan, Regional Director (i/c), KVIC, Madurai	KVIC, RO, Madurai	Received on 20.05.2023 - World Bee Day

**Important Visitors to KVKs during 2023 (with photographs)**

## **PHOTOS**

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

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

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

Also upload the photo in the link provided



**One photo for Annual Zonal Award**

**High resolution jpg format. Also to be uploaded in the link**

**\*copy of SAC proceedings along with list of participants.**

## **24<sup>th</sup> SCIENTIFIC ADVISORY COMMITTEE MEETING PROCEEDINGS**

**Date:** 22.02.2023

**Place:** Seminar Hall, ICAR KVK, CENDECT,

Theni

The meeting was started with the prayer Tamil Thai Vazhthu

**Mr.P.Maheswaran, Programme Coordinator (i/c), ICAR KVK, CENDECT, Theni** welcomed the SAC members. The presidential address was given by **Dr.P.Patchaimal, Chairman, ICAR KVK, CENDECT, Theni**. During his address he explained the various activities conducted by KVK, Theni. He also explained that major activities carried out by KVK during past 28 years for the upliftment of farmers and farm women in Theni District. He also indicated that more than 30000 farmers and farm women were benefitted through KVK activities.

**Mr. P.Maheswaran, Programme Coordinator (i/c), ICAR KVK, CENDECT, Theni** presented the Action Taken Report on the suggestions given by 23<sup>rd</sup> SAC meeting held on 29.12.2021. This was followed by the suggestions given by the SAC members.

**Mr. R. Venkatesh Farm Telecast, AIR, Madurai** has suggested that giving prior information about horticulture training programme details to the AIR Madurai for broadcasting. He also suggests that share the upcoming Training / Events details with AIR Madurai for wide spread of information.

**Dr.P.Geetharani, Professor & Head, ARS Vaigai Dam** suggested that KVK should popularize the latest technologies and newly releasing varieties of ARS, Vaigaidam. KVK should collaborate with ARS, Vaigai dam for Seed Production training. KVK should give training on “Seed Production technology & seed certification procedure” to the farmers and give more training on “Pulse production technology” and seed storage training to the farmers.

**Mr. T. Mohankumar Lead Bank Manager, Theni KVK** should facilitate farmers, Farm women and entrepreneurs with Financial Linkage Programmes, Credit Linkage activities. He also suggested that KVK should conduct the entrepreneur success meet.

**Mrs. P. Rejina, Women entrepreneur, PC Patti KVK** should facilitate loan opportunities to the entrepreneurs for improving their business activities.

**Mrs. K. Preethi Women Entrepreneur, Seepalakottai** suggested that KVK should give Training on “Entrepreneurship Development programme” to the farm women.

**Ms. Nivethitha Devi, Case Worker, DSW Office, Theni** suggested that KVK should give EDP Training collaborate with DSW to the depressed women in Theni District. KVK should share the list of training programme with DSW Office, Theni for participation of women.

**Mrs. Malaiyakkal Farm Women, Ethakovil** suggested that KVK should conduct training on “Cow and Poultry rearing” to the farmers and farm women.

**Mr. C. Rajamanikkam, Forest Ranger, Chinnamanur Division** suggested that KVK should give training on “Agro forestry” to the farmers. KVK should develop “Agro forestry unit” in the KVK campus for create awareness to the farmer.

**Mr. O. Chinnasamy Progressive farmer, Mayandipatti** suggested that KVK should organize training on improved production technologies in Jasmine, Banana, Tomato and Onion. KVK should give training on “Silk worm rearing” to the farmers. He also suggested that KVK should create awareness about Mushroom cultivation technology among farm

women for income generation. KVK should promote “Production of value added products from all crops” for minimize the wastage and price fluctuation.

**Mr. A. Chelladurai, Progressive farmer, Andipatty** suggested that KVK should give training on “Improved Brinjal Production Technology” for increasing Productivity and give training on Pest and disease management Practices in Vegetable Crops.

**Mr .P. Sokkar selvam Progressive farmer, Kamatchipuram** suggested that KVK should give Training on Micro nutrient management practices in Banana. He also suggested that KVK should give the technology for Banana Sigatoka Leaf spot management practices for prevent early ripening of Fruits at Field. KVK should promote Farm mechanization activities for reduce the labour shortage problem. KVK should promote and demonstrate “Drone Technology” to minimize the labour shortage problem. KVK should develop the Sustainable Packages of Practices for Cucumber under Poly House Production technology.

**Mr. Venketaesan, Director, LAW NGO, Kadamalaikundu** suggested that KVK should promote the Minor Millets cultivation. KVK should organize the Agriculture oriented programmes for NGO representatives.

**Mr. Kalimuthu, District Coordinator, MSSRF, Theni** suggested that KVK should promote Minor Millets Production in Theni District. He also suggested that KVK should conduct the training Programmes in collaboration with Vaalnthu Kaaatuvom Thittam, Theni.

**Mr. P. Saravanan AAO, Agricultural Marketing, Chinnamanur** suggested that KVK should promote value added products from various crops; he also suggested that give capacity building development training programmes to the FPOs.

**Mr.G. Senthil kumar , Executive officer Vaazhandhu Kattuvom Project, Theni** suggested that KVK should give training on “Business Plan Preparation procedures and FSSAI Certification process” to the farm women.

**Mr. S. Murugan MESAP Trust, Periyakulam** suggested that KVK should give training on “Mango Pruning Technologies” to the Mango Growers and KVK should promote Arka Supreme- Avacoda variety from IIHR in Theni District. KVK should conduct training on Tomato Post Harvesting Technology and create awareness about seed treatment technology among the farming community. KVK should distribute the Price forecast calendar for crops to the benefit of farmers.

**Mr. M. Pandiyan Periyakulam,** suggested that KVK should promote coconut value addition and minor millet production technology. He also suggested that KVK should promote Ragi Malt Production Technology, promote Ground water improvement activities and create awareness about Medicinal value of coconut oil to the farmers and farm women.

**Dr. S. Senthil Kumar, Associate Professor & Head FTC, Theni** suggested that KVK should include TANUVAS Technologies in OFTs & FLDs programme viz., Masteguard spary, Herbal spray, Sheep & Goat APP, Ranikhet disease. He also suggested that KVK should conduct PRA meeting at Village level, KVK should promote Quail rearing among the farmers level in collaboration with FTC, TANUVAS Theni and KVK should develop IFS model in KVK Campus. KVK should facilitate preparation of Business plan for credit purpose. KVK should educate Ethno veterinary practices to cattle rearing farmer

**Dr.C. Muhaiyah Professor & Head, HC&RI, Periyakulam,** suggested that KVK should share the newly emerging pest & disease with HC&RI, Periyakulam. KVK should popularize drought resistance fruit crops like Manila Tamarind, Jamun & Wood apple (HC&RI varieties) in Theni district. KVK should include the following problems management

practices in upcoming FLD programme, Cashew - Dieback disease management, Banana - Sikotoka leaf spot disease management, Cucumber - Pest & disease management under poly house condition.

**Mr. M.Ganapathy, ADA, Sericulture Department,** suggested that KVK should develop mulberry cultivation demo unit at the KVK campus; organize the Training programmes in collaboration with Sericulture department, Theni.

**Dr.V. Nadana Sabapathy Chiarmen, CREED KVK, Ariyalur,** suggested that KVK should promote organic agriculture at farmer level and include the small millets in upcoming OFT & FLD programme.

**Dr.A. Baskaran Principal Scientist, ATARI, Hyderabad** suggested that KVK should develop a sales centre in Rural & Urban area for selling of planting material, seeds, saplings, crop booster & coconut tonic; improve RF for upcoming year; maintain farmer's database with 13 parameters; popularize the Central & State Govt Schemes among the farmers; prepare & distribute the Bankable projects to the farmers and entrepreneurs. He also suggested that organize training on "Recent Agricultural Technology and Entrepreneurship development activities to the rural youths; should promote on Millet cultivation in Theni District; share the farmer's success story with AIR, Madurai for widespread.

**Dr. P.P. Murugan, Director of Extension Education, TNAU** suggested that KVK should include the all types farmers like small, marginal & big farmer in the training programme; record the farmer's feedback of new technology; develop and promote Ready to Eat (RTE) products from millets; promote seed production activities in KVK & farmer field level; give training on Balanced food system in Animal husbandry (like green fodder, Concentrate feed & Mineral mixture); Popularize PKM 1 Manila Tamarind at farmer field level; include off season Jasmine Production technology with new variety in upcoming OFT (or) FLD Programme; conduct training programmes on "Value addition from all crops" to the farmers and farm women; create market linkage to the banana farmer; promote solar energy based machineries among the farmers level and develop weather and price forecast system for the benefit of farmers; give training on "Nematode management in flower crops. He also suggested that popularize TNAU Coconut Tonic, Booster's and Bio mineralizer among the farming community; To develop Trichoderma production unit in KVK, Campus; To develop One stop sales shop at KVK campus.

S.No	Details of SAC members
1.	Dr.P. Patchaimal, Chairman, CENDECT KVK, Theni
2.	Dr. P.P. Murugan, DEE, TNAU, Coimbatore
3.	Dr.A.Bhaskaran, Principal Scientist, ATARI,Hyderabad
4.	Dr.C. Muthaiya, Professor and Head, Department of Fruit Science, Horticultural college and research Institute Periyakulam
5.	Mr. Vengadesan LAW NGO, Theni
6.	Dr. Senthil kumar, , Professor and Head,FTC, TANUVAS, Theni
7.	Mr. T. Mohan Kumar, LDM, Theni
8.	Dr. P. Geetharani, Professor, ARS, Vaigaidam
9.	Mr. R. Vengadesh, Farm division, All India Radio, MADurai
10.	Dr.V.Nadanasabapathy, Chairman, KVK, Ariyalur

11.	Mr.M.Pandiyan, President, Farmers association, Theni
12.	Mr. S. Manikkam, All India Radio, Madurai
13.	Dr. Sivaram, CENDECT health centre, Kamatchipuram
14.	Mr. P. Saravanan AAO, Chinnamanur Block, Theni
15.	Mr. A. Mayilraja, Asst Inspector of Sericulture, Theni
16.	Mr. C. Rajamanickam, Forester, Chinnamanur
17.	S. Murugan, Managing Trustee, MESAP TRUST - Periyakulam
18.	Mr. Pandiarajan, Progressive Farmer, Periyakulam
19.	Mr. M.Kalimuthu, District Coordinator, Vzhanthu kattuvom thittam, Theni
20.	Mr. Senthilkumar, VKP, Theni
21.	Mr.P. Sockar selvam Progressive farmer, Kamatchipuram
22.	Mr. A. Chelladurai, Progressive Farmer, K.Kamatchipuram
23.	Mr. O. Chinnasamy, Progressive farmer, Mayandipatti
24.	Mrs. Subhasini, Women entrepreneur, PC Patti
25.	Mr. K. Mukunthan, BOD, Grapes FPO, Surulipatti
26.	Mrs. T. Nivethitha devi, District Social welfare office, Theni
27.	Mrs. Janani, DSW, Theni
28.	Mrs. K. Preethi, Farm women, Seepalakottai
29.	Mrs. P. Regina, Women entrepreneur, Theni
30.	Mr. P. Maheswaran, Programme Coordinator(i/c), CENDECT KVK, Theni