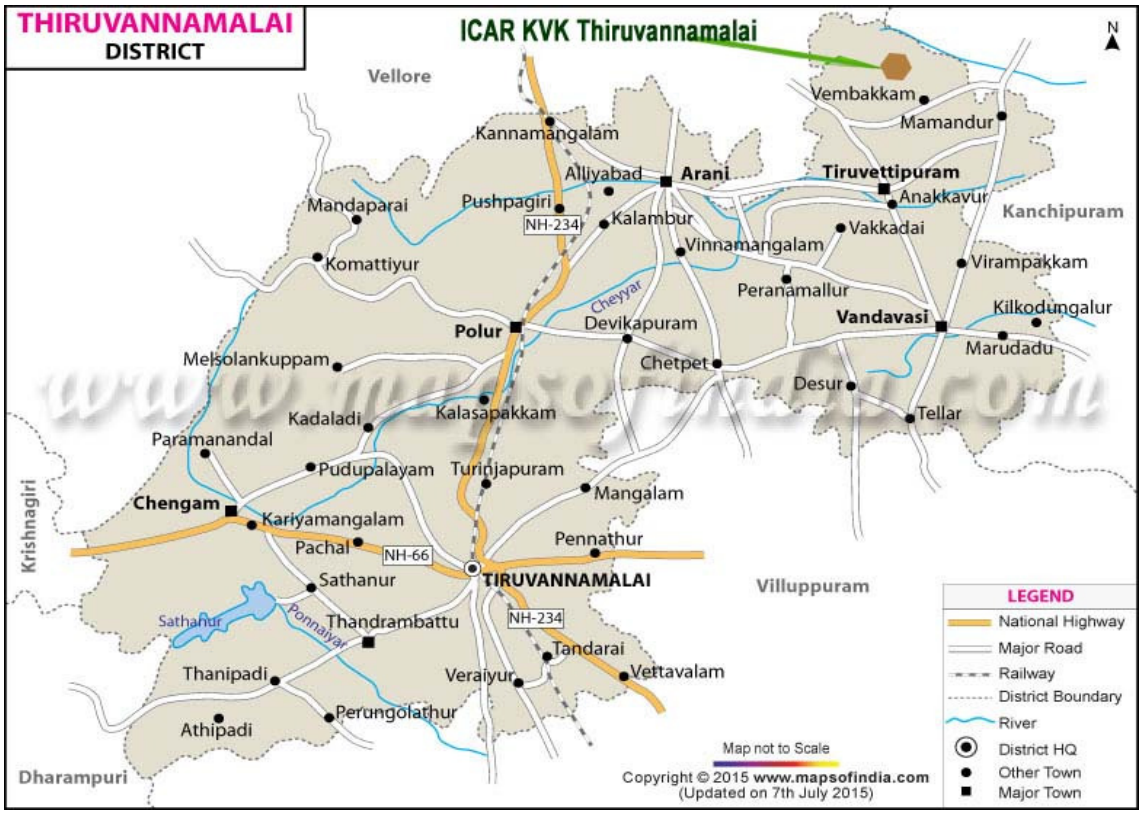
ACTION PLAN 2023-24

1. General information about the Krishi Vigyan Kendra

1.1 Name of the KVK	**ICAR - Krishi Vigyan Kendra**
Address	Kilnelli village, Chithathur post, Vembakkam Taluk, Thiruvannamalai District, Tamil Nadu – 604 410
Phone	04182 – 290551, +91 6384093303.
Fax	-
e-mail	kvktvmalai91@gmail.com
1.2. Name of host organization	**Tamil Nadu Board of Rural Development**,
Address	No:24, IInd floor, Crescent park street, T.Nagar, Chennai-17.
Phone	044-24361319
e-mail	tnbrd1978@gmail.com
1.3. Year of sanction	1991
1.4. Website of the KVK	www.kvkthiruvannamalai.com
Date of last update	27.03.2023

1.5. District map with location of the KVK : (12.75123, 79.61514)



2. Details of staff as on date (31-03-2023)

S. No	Sanctioned Post	Name	Discipline	Date of joining	Present Pay Scale
01	Senior Scientist and Head	Vacant	-	-	-
02	Subject Matter Specialist	Mr.V.Suresh SS & Head i/c	M.Sc., (Agricultural Extension)	20.01.2014	Level 10
03		Mrs.T.Margaret	M.Sc., M.Phil., (Home Science)	04.07.2003	
04		Mr.P.Narayanan	M.Sc., (Plant Pathology)	08.01.2014	
05		Dr.K.Mayakrishnan	M.V.Sc., (Veterinary Extension)	01.07.2019	
06		Miss.M.Ishwarya	M.Sc., (Agronomy)	10.03.2021	
07		Mr.R.Vijayakumar	M.Sc., (Horticulture)	01.02.2023	
08	Programme Assistant/T4-1	Mr.O.Sekar	MCA Computer Science	01.09.1997	Level 6
09	Programme Assistant/T4-2	Mr.P.Chowthry	B.Sc., Agriculture	02.02.2023	
10	Farm Manager/T4	Miss.M.Santhi	B.Sc., Agriculture	28.06.2019	
11	Administrative Staff 1 (Assistant)	Mrs.M.Viji	M.Com.,	01.02.1993	
12	Administrative Staff 2 (Stenographer Grade III)	Mr.K.Vasimalai	B.Com.,	01.02.2023	Level 4
13	Driver/T1 - 1	Mr.S.Janarthanan	VIII std	01.09.1993	Level 3
14	Driver/T1 - 2	Mr.T.Selvaraj	X std	01.01.1996	
15	Supporting Staff 1	Mr.T.Varadhan	V std	01.02.1994	Level 1
16	Supporting Staff 2	Mr.G.Selvam	IV std	01.07.1995	

3. Details of SAC meeting(s) conducted during 2022-23

Date(s) of SAC meeting(s) Conducted : 20.03.2023

Suggestions and recommendations of the SAC and Action Taken on the Recommendations

S.No.	Suggestions/ Recommendations	Name of the SAC Member	Action Taken in brief
1	Export oriented training programmes may be organized in collaboration with APEDA.	**Shri.S.Ramesh,** President, TNBRD, Chennai	Training and awareness programme on export of agri products is planned in linkage with APEDA.
	Importance may be given for the crop and animal insurance coverage by the Departments of Agriculture and Animal Husbandry.		Awareness programme may be organized in collaboration with state line department.
	Documentation of success stories of Mr.M.Velayutham and Mrs.P.Manimozhi in cultivation of traditional paddy varieties may be taken up.		Documentation of success stories will be planned.
	Agri marketing facilities should be strengthen with the line departments. The line department should also engage FPOs and SHGs to strengthen the marketing facilities.		Farmers-Traders meeting can be organized in collaboration with state line department.
	The KVK may prepare a booklet on all department schemes with the support of line department in details.		Booklet will be prepared on schemes implementing by the line department.

2	The existing vacant positions if any may be filled for the effective functioning.	**Dr. P.P.Murugan** Director of Extension Education, TNAU, Coimbatore.	The necessary step will be taken to fill the existing vacant post in the KVK.
	Importance may be given for the promotion of Integrated Organic Farming System.		The IOFS system will be promoted by trainings, Exposure visit and other extension activities.
	The Indian Institute of Oilseeds Research, Hyderabad technologies on Groundnut value added products may be promoted.		The IIOR technologies on value added products in groundnut is planned through various KVK activities.
	Promotion of Millets cultivation, traditional varieties and its value addition may be taken up by the KVK.		In collaboration with CEM and FPOs, demonstration and training will be planned to promote millets and traditional varieties.
	Displays to be made available on all the department schemes in the KVK campus.		Posters will be displayed on various schemes implemented by the line departments in the KVK.
	The KVK may promote low cost machineries and equipments for the benefit of small and marginal farmers.		Awareness cum exhibition may be organized in association with custom hiring centers and line department.
	The KVK may organize the training programmes on e-commerce to facilitate e-marketing facilities to the FPOs and farmer collectives.		The digital e-commerce platform may be established by the KVK in association with existing digital media providers.
	Demonstrations may be conducted on Rice fallow pulses and Millets in the KVK instructional farm.		Planned during late kharif 2023.
3	Training programmes on value added products in millets for the SHGs and FPOs may be given by the KVK.	**Mr.C.Harakumar** Joint Director of Agriculture, Thiruvannamalai	In collaboration with CEM and FPOs, demonstration and training will be planned to promote millets and traditional varieties.
	Bund cropping technology with Blackgram and Marigold may be promoted.		The technology will be promoted through training and demonstrations.

4	Training for BODs and CEOs of FPOs on alternate business opportunities may be organized.	**Dr.N.Muthukrishnan** The Dean, AC & RI, TNAU, Vazhavachanur, Thiruvannamalai.	The activity is planned in collaboration with private and government agencies.
	Training may be given on Nursery management, Mushroom production, new pest and disease management and Agro forestry.		Trainings, demonstration and awareness programmes are planned for farmers and rural youth.
5	Demonstrations on new varieties released by CEM, Athiyandal may be promoted.	**Dr.M.Vaithiyalingan** The Professor and Head, Centre of Excellence in Millets, Thiruvannamalai.	FLD, Training, awareness programme and extension activities are proposed.
	The exposure visit of farmers may be organized to CEM, Athiyandal by the KVK.		Planned to organized an exposure visit to CEM, Athiyandal for benefit of farmers.
	Importance may be given for the millet value added products in the KVK.		FLD, Training, awareness programme and extension activities are proposed.
6	The trainings may be given on Goat farming, Mastitis management, Repeat breeding and Ecto parasite management.	**Dr. G.Somasundaram** Regional Joint Director, Department of Animal Husbandry, Thiruvannamalai.	FLD, OFT, Trainings, Animal health camps may be organized.
7	Seasonal problem based training programmes on live stock management may be given.	**Dr. P.Balamurugan** Associate Professor and Head, VURTC, TANUVAS, Thiruvannamalai**.**	Training and awareness camp on livestock management is planned.
	The KVK may concentrate trainings on Japanese quail farming and Rabbit farming.		Training on Japanese quail farming and Rabbit farming is planned.
	Displays on all the department schemes may be placed in the KVK campus.		Booklet and posters will be prepared on schemes implementing by the line department.
8	Export oriented training to FPOs may be organized.	**Mrs.T.Soundarya** The Deputy Director, Department of Agrimarketing and Agribusiness, Thiruvannamalai.	Training and awareness programme on export of agri products is planned in linkage with APEDA.

9	Low cost IFS models may be promoted by the KVK in the farmer's field.	**Mr.Vijay Neehar** The District Development Manager, NABARD, Chennai Metro cluster, Thiruvannamalai.	Training and demonstrations may be organized.
	The KVK may give importance on millet cultivation.		FLD, OFT, Training and extension activities are planned for promotion of millet cultivation.
	The KVK may prepare booklet on all department schemes with the financial support of NABARD.		Booklet and posters will be prepared with financial support of NABARD on schemes available in the line state department.
10	Monthly convergence meeting for the farmers may be organized in coordination with Indian Bank.	**Mr.K.Subramaniyan** The Lead District Manager, Indian Bank, Thiruvannamalai.	Planned to conduct convergences meeting for the farmers may be organized in coordination with Indian Bank.
11	Convergence programme with fisheries department may be taken up by the KVK.	**Mr.B.Vivek** Assistant Director, Fisheries and Fisherman Welfare, Vellore.	Planned to conduct convergences meeting for the farmers may be organized.
12	The KVK should give importance on value addition in groundnut.	**Mr.K.Dhanapal** District Industrial Centre, Thiruvannamalai	Planning to conduct trainings and demonstration in collaboration with line departments.
	Importance may be given in KVK activities for the promotion of value addition in Groundnut, since the crop is selected for One District One Product (ODOP) scheme.		Trainings, demonstrations and awareness programme are planned.
13	Training may be given on IPDM in Chillies.	**Mr.N.Mohan** The Deputy Horticulture Officer, Thiruvannamalai	Trainings, demonstration and extension activities are planned.
	Organic farming, Mushroom production, Vermicompost production technology related training may be imparted to the farmers.		Trainings and demonstration are planned to conduct trainings to the farmers.
	Promotion of dry land horticulture may be taken up by the KVK.		Planned at the KVK instructional farm.

14	Training may be conducted on Millet value addition to the farmers.	**Mr.R.Panchapakesan** The Executive Engineer, Agri Engineering, Thiruvannamalai.	Awareness programme and trainings are planned.
	The KVK may exhibit the products of entrepreneurs in the mega events organized by the KVK and other stakeholders.		Exhibition and awareness programmes are planned with entrepreneurs in the district.
15	Importance may be given for the introduction of new millet varieties at village level.	**Mr.K.V.Palani,** Farmer, Kalambur, Polur, Thiruvannamalai.	Planned in association with CEM, Thiruvannamalai.
	KVK may promote other value added products in groundnut other than groundnut oil.		Chikki, peanut butter, peanut milk preparation technologies will be promoted in association with other stakeholders.
16	The technology may be provided for organic method of paddy straw decompose by the KVK.	**Mr.M.Velayutham,** Farmer, Brammadesam, Vembakkam, Thiruvannamalai.	The TNAU technologies for paddy straw decompose will be disseminated through various activities.
	Promotion of CO57 Kavuni paddy variety among the farmers may be taken up by the KVK.		FLD, training and extension activities is planned.

Proposed date/month of SAC Meeting to be held in 2023-24 : 10.01.2024

4.0. Capacity Building activities planned for KVK Staff

4.1. Plan of Human Resource Development of KVK personnel during 2023-24

S. No	Name of the Head/ SMS/Staff	Area of Training	Institution proposed to attend	Duration	Dates (dd/mm/yy)
1	V.Suresh, SMS and SS&H	Dissemination through e-Platforms for Extension Professionals	MANAGE, Hyderabad	3 days	11-07-23 to 13-07-23
2		Digital Marketing tools for Extension Professionals	MANAGE, Hyderabad	3 days	29-08-23 to 31-08-23
3	Mr.R.Vijayakumar, SMS Horticulture	Protected cultivation of high value vegetables	Krishi Vishvavidyalaya, Himachal Pradesh	3days	14-06-23 to 16-06-23
4		Extension for Horticulture Technologies	ICAR-IIHR, Hessaraghatta Lake post, Bengaluru	3 days	11-07-23 to 13-07-23
5	Mrs.T.Margaret, SMS Home Science	Natural Farming: Mission Millets	MANAGE, Hyderabad	1 days	July 2023
6		Webinar on Role of FPOs in Millets promotion and value addition	MANAGE, Hyderabad	1 days	14-09-2023
7	Mr.P.Narayanan, SMS Plant Protection	ICT in Plant protection	ICAR- National Research Centre for Integrated Pest Management, New Delhi	5 days	15-05-2023 to 19-05-2023
8		Production protocol for bio control agents	NIPHM	20 days	05-07-2023 to 25-07-2023
9	Dr.K.Mayakrishnan, SMS Animal Science	Optimizing dairy cattle production under changing climate	ICAR Central Institute for Research on Cattle	3 days	05-06-23 to 08-06-23

10	Miss.M.Ishwarya SMS Agronomy	Climate Smart Agricultural Technologies	MANAGE, Hyderabad	5 days	05-06-23 to 09-06-23
11		On line training on Organic Farming and Natural Farming with certification	MANAGE, Hyderabad	1 days	June 2023
12	Mr.O.Sekar, PA, computer programmer	Training on video production techniques for dissemination of Information in agriculture	MANAGE, Hyderabad	3 day	08-05-2023-10-05-2023

5. Cross-learning across KVKs planned during 2023-24

S.No.	What expertise/ resources KVK can offer/ share to other KVKs		What you expect from other KVKs	
	Subject area/ resource/ expertise	**Mention Other KVK**	**Subject area/ resource/ expertise**	**Mention source KVK**
1	Vegetable special supply	KVK Dharmapuri, Krishnagiri, Thirunelveli	Different models of IFS, seed production through PPP mode and FPO activities.	Within state – KVK, Namakkal
2	Pulses seeds	KVK Thirunelveli	Dry land agriculture	Within the zone – KVK Vizag
3	Integrated farming system	KVK Theni, Tuticorin	Advanced vegetables growing techniques, Innovative extension activity.	Outside zone - KVK, Baramati
4	Millet processing	KVK Krishnagiri	-	-
5	Organic farming in vegetables	KVK Erode	-	-

6 . Operational areas proposed during 2023-24

6.1. Details of operational area/cluster villages

District/ Taluk/Block	Major crops & enterprises	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected	Names of cluster Villages identified for intervention	Proposed intervention
Vembakkam	Paddy	Cultivation of old varieties, lack of awareness on season specific varieties, Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut and wild boar, rat and extensive use of chemical pesticides.	1720	Hasanamapettai	OFT, FFS, Training, Extension activities.
	Groundnut	Cultivation of old varieties, Low yield, Less drought tolerant variety, Incidence of Root rot, leaf spot, rust, Leaf minor and Spodoptera, Wild boar damage, poor yield. Lack of knowledge on value addition.	778		
	Blackgram	Lack of knowledge on disease resistant variety, Low market price for small size and non-shiny seeds, Non synchronized maturity, Incidence of YMV, Aphids, and Powdery mildew.	138		
	Millet	Lack of awareness on high yielding & drought tolerant variety, Lack of knowledge on value addition. Low market value for raw millets.	86		
	Bhendi	Lengthy time consuming process, crucial process during harvest (Thorny stems leads cuts injuries and rashes).	24		
	Goat	The ticks, fleas, sucking and biting lice are major issues in Goat production. it will affect the feed intake in turn it will reduce the growth of animals.	350		
	Fish	High mortality, Low yield, Lack of knowledge on fish farming.	22		

Cheyyar	Paddy	Cultivation of old varieties, lack of awareness on season specific varieties, Yield reduction. Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides.	970	Siruveniyanallur	OFT, FLD, Training, Extension activities.
	Redgram	Prolonged cultivation of age old varieties, Low market price for small size and non-shiny seeds, Non synchronized maturity, Incidence of sterility mosaic virus, Aphids and Powdery mildew. More labour required for grading and, winnowing of pulses.	92		
	Groundnut	Incidence of Root rot, leaf spot, rust, Leaf minor and Spodoptera, Wild boar damage, poor yield. Lack of knowledge on value addition.	537		
	Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency.	6738		
	Drudgery reduction	Drudgery during weeding operations, Lack of knowledge on post harvest management.	-		
	Cow	Low milk production, High disease incidence of mastitis. Lack of awareness on clean milk production.	47		
Vandavasi	Paddy	Cultivation of old varieties, Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides.	1375	Kilsembedu	OFT, FLD, Training, Extension activities.
	Blackgram	Prolonged cultivation of age old varieties, Low market price for small size and non-shiny seeds, Non synchronized maturity, Incidence of YMV, Aphids, and Powdery mildew. More labour required for grading and, winnowing of pulses.	490		

	Ridge gourd, Bitter gourd, Snake gourd	Low fruit set, Maleness, Lack of adoption of location specific hybrids, Imbalanced nutrition, Lack of adoption of improved technologies, High incidence of mosaic, fruit fly, Sucking pests, Downy mildew and powdery mildew.	81		
	Water melon		68		
	Cattle	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production, Wounds by flies and Maggots occurs.	5450		
	Fruits and Vegetables	No value addition, Low market price, Lack of knowledge on value addition.	520		
	Fodder	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	271		
Thellar	Paddy	Cultivation of old varieties, lack of awareness on season specific varieties, Yield reduction. Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides. Lack of awareness on value addition, Low market price	1850	Sorapathur	OFT, FLD, Training, Extension activities.
	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, rust, Leaf minor and Spodoptera, poor yield. Lack of knowledge on value addition.	1110		
	Blackgram	Prolonged cultivation of age old varieties, Low market price for small size and non-shiny seeds, Non synchronized maturity, Incidence of YMV and Aphids. More labour required for grading, winnowing of pulses.	390		
	Little millet	Lack of awareness on high yielding & drought tolerant variety, Lack of knowledge on value addition. Low market value for raw millets.	86		

	Brinjal	Low yield, Flower drop, Lack of application of growth regulators, Cultivation of local variety, Lack of adoption of improved hybrids and technologies, Leaf curl in tomato, Incidence of shoot & fruit borer and little leaf, hadda beetle, Imbalanced nutrition, Poor quality seedlings and field establishment. Low market price during on season.	52		
	Cattle	Low milk production, High disease incidence, Ecto parasites infestation, Infertility due to repeat breeding and Lack of awareness on clean milk production.	4300		
	Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency	2750		
Polur	Paddy	Cultivation of old varieties, lack of awareness on season specific varieties, Yield reduction. Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides.	2450	Kalambur	OFT, FLD, Training, Extension activities.
	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Lack of awareness on non diary flavoured milk, Low market price	1050		
	Banana	Low bunch grade and weight, Fusarium wilt, Nematode incidence and Sigatoka leaf spot, Imbalanced nutrition, Lack of knowledge on improved planting methods, Lack of knowledge on value addition.	501		
	Tomato	Low yield, Flower drop, Lack of application of growth regulators, Cultivation of local variety, Lack of adoption of improved hybrids, Incidence of pin worm, white fly, wilt, nematode, Early leaf blight, Tospo virus. Imbalanced nutrition.	92		

	Maize	Cultivation of old varieties, Poor yield, Lack of knowledge on value addition. High incidence of Fall army worm, Charcoal rot and downy mildew.	65		
	Goat	Lack of knowledge scientific goat rearing, High kid mortality, Low body weight gain, Infertility problem.	8030 Nos		
	Nutritional security	Wide spread prevalence on macro and micronutrient deficiency, Lack of awareness on linkage between sanitation, health and nutrition.	-		
Kalasapakkam	Paddy	Cultivation of old varieties, lack of awareness on season specific varieties, Yield reduction. Lack of adoption of improved varieties, lack of awareness on IPDM, Severe infestation of Brown plant hopper, BLB, stem borer, leaf folder, Tungro, False smut, wild boar.	1950	Mottur	OFT, FLD, Training, Extension activities.
	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, rust, Leaf minor and Spodoptera, poor yield. Lack of knowledge on value addition.	475		
	Finger millet	Cultivation of old varieties ,Lack of awareness on high yielding & drought tolerant variety, High incidence of Blast disease , Low yield, Lack of knowledge on value addition. Low market value for raw millets.	86		
	Redgram	Prolonged cultivation of age old varieties, Low market price for small size and non-shiny seeds, Non synchronized maturity, Incidence of sterility mosaic virus, Aphids and Powdery mildew. More labour required for grading and winnowing of pulses.	105		
	Tuberose	Low yield, Non adoption of improved production technologies and varieties, High incidence of nematode, Mealy bug and Sucking pests.	16		

Arni	Paddy	Cultivation of old varieties, lack of awareness on season specific varieties, Yield reduction. Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides.	1820	Athanur	OFT, FLD, Training, Extension activities.
	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, leaf minor and Spodoptera, poor yield. Lack of knowledge on value addition.	530		
	Turmeric	Shortage of quality seed rhizomes, Imbalanced nutrition and incidence of leaf spot, rhizome rot, sucking pest and lack of knowledge on IDM practices.	92		
	Bhendi	Low yield, Imbalanced nutrition, Non adoption of improved technologies, Yellow vein Mosaic Virus. Lengthy time consuming process, crucial process during harvest (Thorny stems leads cuts injuries and rashes).	29		
	Maize	Cultivation of old varieties, Poor yield, Lack of knowledge on value addition. High incidence of Fall army worm, Charcoal rot and downy mildew.	65		
	Fodder	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	310		
	Feed	High feed cost Imbalanced nutrient supply of scavenging birds.	-		
	Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency, Low body weight gain.	-		
	Mushroom	Lack of awareness on ready to use mushroom product, Low market price during on-season	-		

Chetpet	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, leaf minor and Spodoptera, poor yield. Lack of knowledge on value addition.	830	Vallam	OFT, FLD, Training, Extension activities
	Chilli	Low yield, Imbalanced nutrition, Lack of adoption of location specific hybrids, Flower drop, Low Dry Recovery and incidence of Fruit rot, Leaf curl. High incidence of leaf curl, mites, thrips and fruit borer.	82		
	Cow	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production.	4550		
	Sheep and goat	Lack of knowledge scientific goat and sheep rearing, High kid mortality, High ectoparasite infestation. Lower body weight gain in lambs during pre-weaning phase (first 90-100 days).	9500		
Kilpennathur	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, rust and Spodoptera, poor yield. Lack of knowledge on value addition.	652	Vettavalam	OFT, FLD, Training, Extension activities
	Pulses	Lack of awareness on storage methods, high incidence of storage pests.	320		
	Millet	Lack of knowledge on improved variety and value addition. Low market value for raw millets.	125		
	Brinjal	Flower drop, Cultivation of local variety, Lack of adoption of improved hybrids and technologies, Incidence of shoot & fruit borer and little leaf, Imbalanced nutrition. Low market price.	97		
	Cassava	Low yield, Lack of adoption of location specific varieties, Imbalanced nutrition, Mealy bug, White fly, Mosaic virus.	196		

	Sheep	Lack of knowledge scientific sheep rearing, High kid mortality, High endoparasite infestation.	6500		
	Milk	Distress sale of milk, Lack of awareness in processing, Low shelf life, Bland flavour of paneer , Lack of variety in paneer.	18100 Nos		
All blocks	Sugarcane	Low yield due to water scarcity, Lack of awareness on irrigation schedule, Lack of awareness on value addtion	504	All cluster	Training, Extension activities
All blocks	Goat & Sheep	Low body weight, High mortality, High morbidity.	9508 Nos	All cluster	Training, Extension activities
All blocks	Milk	Distress sale of milk, Lack of awareness in processing, Low shelf life, Bland flavour of paneer, Lack of variety in paneer.	18550 Nos	All clusters	Training, Extension activities
All blocks	Fruits and Vegetables	No value addition, Low market price, Lack of knowledge on value addition.	-	All clusters	Training, Extension activities
All blocks	Medicinal plants	Lack of adoption of improved production and post harvest management technologies.	178	All clusters	Training, Extension activities

6.2. Details of adopted villages

District/Taluk / Block	Name of cluster villages	Major crops & Enterprises	Major problems identifies in each crop/enterprise	Proposed type of interventions
Thiruvannamalai district	Sathupperipalayam Vazhur, Padavedu, Kilnelli, Palli	Paddy	Cultivation of old varieties, High infestation of pest &diseases BPH, Stem borer, Tungro, BLB and Blast, High incidence of pest and disease, Yield reduction. No value addition.	Training, Extension activities, Special programme
		Millet	Cultivation of old varieties, Lack of awareness on high yielding & drought tolerant variety, High incidence of Blast disease, Low yield, Lack of knowledge on value addition. Low market price.	FFS, Training, Awareness programme
		Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, rust and Spodoptera, poor yield. Lack of knowledge on value addition.	Training, Special programme
		Blackgram	Prolonged cultivation of age old varieties, Non synchronized maturity, Incidence of YMV, Aphids, and Powdery mildew. More labour required for grading and, winnowing of pulses.	Training and Extension activities
		Banana	Low bunch grade and weight, Fusarium wilt, Nematode incidence and Sigatoka leaf spot, Imbalanced nutrition, Lack of knowledge on improved planting methods, Lack of knowledge on value addition.	OFT, Training, Extension activities
		Tomato	Low yield, Flower drop, Lack of application of growth regulators, Lack of adoption of improved hybrids and technologies, Leaf curl in tomato, Imbalanced nutrition, Poor quality seedlings and field establishment. No value addition.	OFT, Training, Extension activities
		Cow	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production.	Training, Extension activities
		Goat	Low body weight, High mortality, High morbidity.	
		Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency.	

6.3. Details of DFI villages

District/ Taluk/ Block	Name of cluster villages	Major crops & Enterprises	Major problems identifies in each crop/enterprise	Proposed type of interventions
Vandavasi	Kilsembedu	Paddy	Cultivation of old varieties, Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides.	Training and Extension activities
		Blackgram	Low market price for small size and non-shiny seeds, Non synchronized maturity, Incidence of YMV, Aphids, and Powdery mildew. More labour required for grading.	OFT, Training and Extension activities
		Gourds	Low fruit set, Maleness, Lack of adoption of location specific hybrids, Imbalanced nutrition, Lack of adoption of improved technologies, High incidence of mosaic, fruit fly, Sucking pests, Downy mildew and powdery mildew.	OFT, Trainings, Method demonstration, Field day and Awareness camp.
		Water melon		
		Cattle	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production, Wounds by flies and Maggots occurs.	OFT, Training and Extension activities
		Fruits and Vegetables	No value addition, Low market price, Lack of knowledge on value addition.	Training and Extension activities
		Fodder	Feeding of low protein fodder for dairy animals, Lack of awareness about cultivation of fodder crops.	FLD, Training and Extension activities

Arni	Athanur	Paddy	Cultivation of old varieties, Yield reduction. Lack of adoption of improved varieties, low yield, lack of awareness on IPDM, Severe infestation of Brown plant hopper, Blast, BLB, stem borer, leaf folder Gall midge, Tungro, False smut, wild boar & extensive use of chemical pesticides.	FLD, Trainings, Extension activities
		Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, leaf minor and Spodoptera, poor yield. Lack of knowledge on value addition.	Trainings, Extension activities
		Turmeric	Shortage of quality seed rhizomes, Imbalanced nutrition and incidence of leaf spot, rhizome rot, sucking pest and lack of knowledge on IDM practices.	FLD, Trainings, Extension activities
		Bhendi	Low yield, Imbalanced nutrition, Non adoption of improved technologies, Yellow vein Mosaic Virus. Lengthy time consuming process, crucial process during harvest (Thorny stems leads cuts injuries and rashes).	Trainings, Extension activities
		Maize	Cultivation of old varieties, Poor yield, Lack of knowledge on value addition. High incidence of Fall army worm, Charcoal rot and downy mildew.	Trainings, Extension activities
		Fodder	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	Trainings, Extension activities
		Feed	High feed cost Imbalanced nutrient supply of scavenging birds.	Trainings, Extension activities
		Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency, Low body weight gain.	FLD, Trainings, Extension activities
		Mushroom	Lack of awareness on ready to use mushroom product, Low market price during on-season	FLD, Trainings, Extension activities

7. Summary (targets) of mandated activities planned for the year 2022-23

S.No.	Activities	Target
1. On- farm trials		
	a. No of OFTs	17
	b. No of Technologies (Total new technologies except FP)	34
	c. No. of locations (No. of Villages)	17
	d. No. of Beneficiaries (No. of Farmers fields)	85
	e. Area (Total area in ha)	16
2. Frontline Demonstrations		
	a. No. of FLDs	20
	b. No. of Locations (No of villages)	20
	c. No. of Beneficiaries (No of Farmers fields)	190
	d. Area (Total Area planned in ha)	37.4
3. Trainings for Farmers and Farm Women		
	a. No. of programmes	110
	b. No. of participants	2200
4. Trainings for Rural Youth		
	a. No. of programmes	15
	b. No. of participants	300
5. Trainings of Extension Personnel		
	a. No. of programmes	9
	b. No. of participants	180
6. Extension Activities		
	No. of activities	820
	No. of participants	7535
7. Production of seed (in quintals)		
Paddy CO 51 (TFL)		50
Blackgram VBN-8, 11		7
Groundnut TCGS1694 & VRI 8/10		10
Fodder seeds		5
Native vegetable seeds		0.1
8. Production of planting materials (in Nos.)		
Fruit plants		500
Coconut seedlings		250
Forest seedlings		1000
Fodder setts		25000

9. Production of live-stock strains and finger lings (Category wise Nos.)		
Goat		10
Poultry desi birds		500
Japanese quail		1000
10. Production of bio inputs (quantity in kg) (Item-wise)		
Trichoderma asperellum		500
Bacillus subtilis		500
11. Production of other inputs (specify unit) (Item-wise)		
Vermicompost (kg)		8000
Vermiworm (kg)		50
Azolla (kg)		100
Spawn (kg)		50
Vegetable Special (kg)		200
12. Kisan mobile advisories		
	No. of messages	15
	No. of technologies	15
	No. of farmers	40000
Other mobile advisories		
	No. of messages	25
	No. of technologies	25
	No. of farmers	40000
13. Soil testing		
	No. of soil sample testing using Mobile Soil Testing Kit	-
	No. of soil sample testing in conventional laboratory	1000
Water sample Testing (samples in No.)		100
Soil Health Cards		
	No. of Cards using Mobile Soil Testing Kit data	-
	No. of Cards using Laboratory data	1100

8. Technology Assessments proposed during 2023-24

8.1. Summary of OFTs

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1, TO-2 FP	Source of Technology TO-1 TO-2	Status *	No. of trials (replications)	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village (s)	No. of trials targeted under SC-SP
1	Paddy	Assessment of Paddy varieties for higher productivity	**TO1:** Paddy-ADT 54 **TO2:** Paddy - RNR 15048 **FP:** BPT 5204	**TO1:** TNAU – 2020 **TO2:** ICAR- IIRR 2015	New	5	15000.00	SMS-Agronomy, SMS- Plant Protection, Senior Scientist and Head.	-	2
2	Groundnut	Assessment of Groundnut varieties for higher yield	**TO1:** Groundnut TCGS 1694 **TO2:** Groundnut VRI 9 **FP:** Groundnut VRI 2	**TO1:** ANGRAU 2022 **TO2:** TNAU, 2022	New	5	17500.00	SMS-Agronomy, SMS- Plant Protection, Senior Scientist and Head.	-	2
3	Redgram	Assessment of Redgram varieties for higher yield	**TO1:** Redgram variety LRG 105 **TO2:** Redgram variety CO 8 **FP:** Local variety	**TO1:** ANGRAU, 2020 **TO2:** TNAU 2017	New	5	9000.00	SMS-Agronomy, SMS- Plant Protection, Senior Scientist and Head.	-	2

4	Blackgram	Assessment of effectiveness of root nodulation bacteria in Blackgram	**TO1:** Seed treatment with Nodule Associated Plant Probiotics. **TO2:** Seed treatment with liquid Rhizobium 50ml/acre **FP:** No seed treatment	**TO1:** TNAU, 2022 **TO2:** TNAU, 2012	New	5	10000.00	SMS-Agronomy, SMS- Plant Protection, Senior Scientist and Head.	3	2
5	Ridge gourd	Assessment of suitable Ridge gourd varieties for higher productivity	**TO1:** Cultivation of MDU 1 Ridge gourd variety **TO2:** Cultivation of Arka Prasan ridge gourd variety **FP:** Cultivation of Private varieties	**TO1:** TNAU, 2023 **TO2:** IIHR 2016	New	5	14200.00	SMS-Horticulture SMS- Plant Protection, Senior Scientist and Head.	3	2
6	Tomato	Assessment of Improved Hybrids for higher productivity in tomato	**TO1:** Cultivation of Arka Vikash tomato hybrid **TO2:** Cultivation of COTH 4 tomato hybrid **FP:** Cultivation of Private hybrids	**TO1:** IIHR, 2022 **TO2:** TNAU, 2020	New	5	14750.00	SMS-Horticulture SMS- Plant Protection, Senior Scientist and Head.	-	2
7	Chilli	Assessment of microbial inoculants for yield enhancement in chilli	**TO1:** Application of CSR Grow sure **TO2:** Application of Arka Microbial Consortium **FP:** Application of NPK	**TO1:** CSSRI, 2021 **TO2:** IIHR, 2015	New	5	8200.00	SMS-Horticulture SMS- Plant Protection, Senior Scientist and Head.	-	2

8	Banana	Assessment of micro nutrient formulation for higher productivity in banana	**TO1:** Application of Banana sakthi **TO2:** Application of Banana special **FP**: Application of NPK	**TO1:** NRCB, 2019 **TO2:** IIHR, 2014	New	5	8250.00	SMS- Horticulture SMS- Plant Protection, Senior Scientist and Head.	-	2
9	Groundnut	Assessment of bio repellants against wild boar in Groundnut	**TO1 :** Wild boar repellant @ 500 ml per acre. Pour in 100 bottles @ 5 ml per bottle and it needs to be tied in the poles at a distance of 10 feet around the field bunds. **TO2 :** Spraying of Innovative Herboliv+ (10% dilution) with 10 days interval – 3 Application **FP :** Manual monitoring.	**TO1 :** TNAU (KVK, Vellore) 2022 **TO2 :** Mivipro products, Erode 2019	2nd Year	5	14500.00	SMS- Plant Protection, SMS- Agronomy, Senior Scientist and Head.	-	2
10	Blackgram	Assessment of Mungbean Yellow Mosaic Virus resistant Blackgram varieties	**TO1-** LBG 884 **TO2**- VBN 11 **FP:** Cultivation of local variety	**TO1:** ANGRAU, 2022 **TO2:** TNAU, 2020	New OFT	5	15500.00	SMS- Plant Protection, SMS- Agronomy, Senior Scientist and Head.	-	1

11	Tomato	Assessment of biological methods for the management of root knot nematode in Tomato	**TO-1 :** Basal application of bio-enriched farm yard manure @ 1.0 ton /acre (*Purpureocillium lilacinum*) + Application of liquid formulation of *P.lilacinum* @ 1.0 l/ac through drip at the time of planting and repeated thrice at 30, 60 and 90 days after planting. **TO-2 :** Basal application of bio-enriched farm yard manure @ 1.0 ton /acre (*Pochonia chlamydosporia*) + Application of liquid formulation of *P.chlamydosporia* @ 1.0 l/ac through drip at the time of planting and repeated thrice at 30, 60 and 90 days after planting. **FP:** Indiscriminate use of pesticides	**TO1:** TNAU, AICRP on nematodes, 2021-2022 **TO2:** TNAU-CSM (H) –2020	New OFT	5	10500.00	SMS – Plant protection, SMS – Horticulture, Senior Scientist and Head.	-	1
12	Banana	Assessment of biological methods for the management of fusarium wilt in banana	**TO-1 :** Application of Microbial consortia for Fusarium wilt disease in banana @ 50 g per plant at the time of planting and during 2 nd and 4 th month after planting	**TO1:** NRCB, 2020	New OFT	5	15000.00	SMS – Plant protection, SMS – Horticulture, Senior Scientist and Head.	-	1

			TO-2 : *Bacillus subtilis* and *Trichoderma asperellum* 2.5 kg/ha (Each) + FYM + neem cake for 3 times at 2nd, 4th, 6th month after planting. Corm injection of Carbendazim 0.2 % for 3 times at 2nd, 4th, 6th month after planting. **FP:** Soil drenching with carbendazim	**TO2:** TNAU, 2020 -						
13	Poultry	Assessment of poultry breeds under backyard condition	**TO1:** TANUVAS Star Chicken **TO2:** Vanashree **FP:** Assel, Assel cross, chiruvidai	**TO1:** TANUVAS 2021 **TO2:** DPR, Hyderabad, 2019	New	5	17250.00	SMS-Animal Science, Senior Scientist and Head.	-	5
14	Sheep	Assessment of milk replacer for lambs	**TO1:** NIANP Milk replacer **TO2:** CSWRI Milk replacer **FP:** Cow milk	**TO1:** NIANP 2021 **TO2:** CSWRI, 2018	New	5	16000.00	SMS-Animal Science, Senior Scientist and Head.	-	5
15	Cattle	Assessment of wound healer in cattle	**TO1:** Nano Heal cream **TO2:** Healex-FR **FP:** Application of turmeric with neem leaves.	**TO1:** TRPVB, 2021 **TO2:** CIRG 2015	New	5	15000.00	SMS-Animal Science, Senior Scientist and Head.	2	3

16	Goat	Assessment of insecticides for the control of ticks in Goat	**TO1:**TANUVAS-Methicone. **TO2:** Megatex **FP:** Amitraz	**TO1:** TANUVAS, Chennai 2021. **TO2:** CIRG, Mathura - 2018	New	5	16500.00	SMS-Animal Science, Senior Scientist and Head.	-	5
17	PHT-Pulses	Assessment of different storage methods for pulses	**TO1:** Sweet flag treatment (10ml/kg). **TO2:** Super grain bag **FP:** Normal gunny bag with no treatment	**TO1:** TNAU,2020 **TO2:** IRRI,2018	New	5	10250.00	SMS – Home Science, SMS – Plant protection and Senior Scientist and Head	-	3
Total					-	**85**	**227400.00**	-	8	42

8.2. Details of OFTs

1. Assessment of Paddy varieties for higher productivity

OFT No.	01
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Agronomy
Theme	Varietal evaluation
Category (if applicable)	Cereals
Crop/ enterprise	Paddy
Farming situation	Irrigated, clay loam
Prioritized problem (short)	Poor yield and lack of awareness on high yielding varieties, High incidence of pest and disease
Title of the OFT	**Assessment of Paddy varieties for higher productivity**
Technology options	
TO-1	**Paddy-ADT 54**
Source and year	TNAU – 2020
Description (short)	The duration is 130 days, High yielding , Medium slender rice, Medium tall erect variety, Resistant to leaf folder, Moderately resistant to stem borer and blast. Average yield is 6305kg/ha
Potential yield/income	50-60q/ha
Critical Inputs	Paddy ADT 54 Seed -75 kg, *Bacillus subtilis* - 5 Kg
Source of Inputs	TNAU, Coimbatore
Photos	
TO-2	**Paddy - RNR 15048**
Source and year	ICAR IIRR 2015
Description (short)	Duration (125 days) , short slender grain type, resistant to leaf blast. Potential yield is 6500kg/ha
Potential yield/income	Eg.55 to 60 q/ha
Critical inputs& quantity and cost	Paddy RNR 15048 Seed - 75 kg, *Bacillus subtilis* - 5 Kg , Field board – 5Nos
Source of Inputs	ICAR
Photos	
Farmers Practice	Cultivation of old varieties
Farmers yield	35 q/ha
Season	Kharif

Cost per replication (Rs.)	Rs.3000.00
No. of replications	5
Total cost for the OFT	**Rs.15000.00**
Parameters to be studied	Plant population, No. of tillers per plant, Yield-Q/ha.
Parameters to be reported	Yield (Q/ha), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS, (Agronomy), SMS (Plant Protection), Senior Scientist and Head

2. Assessment of Groundnut varieties for higher yield

OFT No.	**02**
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Agronomy
Theme	Varietal evaluation
Category (if applicable)	Oilseeds
Crop/ enterprise	Groundnut
Farming situation	Rainfed, Sandy loam
Prioritized problem (short)	Poor yield and lack of awareness on high yielding varieties, High incidence of pest and disease
Title of the OFT	**Assessment of Groundnut varieties for higher yield**
Technology options	
TO-1	**TCGS 1694**
Source and year	ANGRAU 2022
Description (short)	The duration of this variety is 105 to 110 days . The yield per hectare in Kharif is 22-25 quintal and Rabi it is 25to 30 quintals per hectare . Tolerant to early leaf spot, late leaf spot and rust, Uniform maturity.
Potential yield/income	22-25q/ha
Critical Inputs	Groundnut TCGS 1694 Seed - 50 kg, Groundnut rich-5kg
Source of Inputs	ANGRAU
Photos	
TO-2	**VRI 9**
Source and year	TNAU 2022
Description (short)	It has duration of 115 days. The average yield of culture is 2500 kg/ha. It has moderate resistance to late leaf spot and rust besides thrips and leaf hopper.
Potential yield/income	20-22q/ha

Critical inputs& quantity and cost	Groundnut VRI 9 Seed- 50 kg, Groundnut rich-5kg, Field board - 5 nos
Source of Inputs	TNAU, Coimbatore
Photos	
Farmers Practice	Cultivation of VRI 2
Farmers yield	15 q/ha
Season	Rabi
Cost per replication (Rs.)	**Rs. 3500.00**
No. of replications	5
Total cost for the OFT	**Rs.17500.00**
Parameters to be studied	Plant population, No. of pods/plant, Yield-Q/ha.
Parameters to be reported	Yield (Q/ha), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS, (Agronomy), SMS (Plant Protection), Senior Scientist and Head

3. Assessment of Redgram varieties for higher yield

OFT No.	03
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Agronomy
Theme	Varietal evaluation
Category (if applicable)	Pulses
Crop/ enterprise	Redgram
Farming situation	Irrigated, Clay loam
Prioritized problem (short)	Poor yield and lack of knowledge about high yielding varieties, High incidence of pest and disease
Title of the OFT	**Assessment of Redgram varieties for higher yield**
Technology options	
TO-1	**Redgram variety LRG 105**
Source and year	ANGRAU, 2020
Description (short)	It matures about 160-170 days. The average yield is about 23 q/ha. It is tolerant to Fusarium wilt and SMD
Potential yield/income	20q/ha
Critical Inputs	Redgram variety LRG-105 Seed - 15 kg, *Bacillus subtilis* - 5 Kg, *Trichoderma asperellum* - 5Kg
Source of Inputs	ANGRAU

Photos	
TO-2	**Redgram variety CO 8**
Source and year	TNAU 2017
Description (short)	It matures about 150-165 days. The average yield is about 17 q/ha. It is moderately resistant to Fusarium wilt and *Helicoverpa armigera.*
Potential yield/income	14-15 q/ha
Critical inputs& quantity and cost	Redgram variety CO-8 Seed-15 kg, *Bacillus subtilis* -5 Kg, *Trichoderma asperellum* - 5Kg, Field board - 5 nos
Source of Inputs	TNAU,Coimbatore
Photos	
Farmers Practice	Cultivation of local variety
Farmers yield	12 q/ha
Season	Kharif
Cost per replication (Rs.)	Rs.1800.00
No. of replications	5
Total cost for the OFT	**Rs.9000.00**
Parameters to be studied	Plant population, No. of pods/plant, Yield-Q/ha.
Parameters to be reported	Plant population, No. of pods/plant, Yield-Q/ha.
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS, (Agronomy), SMS (Plant Protection), Senior Scientist and Head

4. Assessment of effectiveness of root nodulation bacteria in Blackgram

OFT No.	04
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Agronomy
Theme	Crop production and management
Category (if applicable)	Pulses
Crop/ enterprise	Blackgram
Farming situation	Irrigated, Clay loam
Prioritized problem (short)	Lack of awareness about new technology, low yield
Title of the OFT	**Assessment of effectiveness of root nodulation bacteria in Blackgram**

Technology options	
TO-1	Seed treatment with Nodule Associated Plant Probiotics
Source and year	TNAU, 2022
Description (short)	Seed treatment Nodule associated plant probiotic for blackgram (Enhancing growth and yield, it can survive under drought and produce several growth harmones and enhance 14% higher yield)
Potential yield/income	15q/ha
Critical Inputs	Blackgram seeds VBN 8 – 20 kg, Nodule associated plant probiotic – 2 litre
Source of Inputs	TNAU, 2022
Photos	
TO-2	Seed treatment with liquid rhizobium
Source and year	TNAU, 2012
Description (short)	Seed treatment with liquid Rhizobium 50ml/acre
Potential yield/income	12q/ha
Critical inputs& quantity and cost	Blackgram seeds VBN 8 – 20 kg, Rhizobium – 2.5 litre, Field board - 5 nos
Source of Inputs	Department of Agriculture
Photos	
Farmers Practice	No seed treatment
Farmers yield	8q/ha
Season	Kharif
Cost per replication (Rs.)	Rs.2000.00
No. of replications	5
Total cost for the OFT	**Rs.10000.00**
Parameters to be studied	Plant population, No. of pods per plant, Yield -q/ha)
Parameters to be reported	Plant population, No. of pods per plant, Yield -q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS, (Agronomy), SMS (Plant Protection), Senior Scientist and Head

5. Assessment of suitable Ridge gourd varieties for higher productivity

OFT No.	**05**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Theme	Varietal Evaluation
Category (if applicable)	Vegetable
Crop/ enterprise	Ridge gourd
Farming situation	Sandy loam, Kharif and Irrigated.
Prioritized problem (short)	Low yield in existing variety, Lack of awareness on improved varieties, Low productivity.
Title of the OFT	**Assessment of suitable Ridge gourd varieties for higher productivity**
Technology options	
TO-1	MDU 1 Ridge gourd
Source and year	TNAU, 2023
Description (short)	Early flowering, produce medium size fruit, soft flesh, suitable for export purpose, yield – 18.5 t/ha. Tolerant to fruit fly attack.
Potential yield/income	18.5 t/ha
Critical Inputs	MDU 1 Ridge gourd - 2 Kg, Vegetable special - 10 kg, *Bacillus subtilis-5kg.*
Source of Inputs	TNAU, Madurai and KVK, Thiruvannamalai.
Photos	
TO-2	Arka prasan
Source and year	IIHR, 2016
Description (short)	Open pollinated ridge gourd variety, Early flowering, Produces green, long, tender fruits. Excellent cooking quality, Yields 26.0 t/ha in 120-135 days duration.
Potential yield/income	26 t/ha
Critical inputs& quantity and Cost	Arka prasan - 2 kg, Vegetable special - 10 kg, *Bacillus subtilis* - 5 kg, Field board - 5 No.
Source of Inputs	IIHR, Bangalore
Photos	
Farmers Practice	Cultivation of private varieties
Farmers yield	15t/ha

Season	Kharif
Cost per replication (Rs.)	Rs.2840
No. of replications	5
Total cost for the OFT	**Rs.14200.00**
Parameters to be studied	Days to 50 % flowering, Average fruit wt. (g), Average fruit length(cm), Yield Q/ha, BCR
Parameters to be reported	Days to 50 % flowering, Average fruit wt. (g), Yield Q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

6. Assessment of Improved Hybrids for higher productivity in tomato

OFT No.	**06**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Horticulture
Theme	Varietal Evaluation
Category (if applicable)	Vegetable
Crop/ enterprise	Tomato
Farming situation	Sandy loam, Rabi and Irrigated.
Prioritized problem (short)	High seed cost in private hybrids, lack of awareness on improved hybrids, the yield levels are low due to lack of adoption of location specific hybrids and cultivation of private hybrids with susceptibility to pest and diseases by farmers.
Title of the OFT	**Assessment of improved hybrids for higher productivity in tomato**
Technology options	
TO-1	Arka vikas
Source and year	IIHR, 2022
Description (short)	Fruits are medium (80-90g), light green shoulder, deep red on ripening, suitable for fresh market, adapted for both rainfed and irrigated conditions and yield – 35 t/ha in 140 days.
Potential yield/income	35 t/ha
Critical Inputs	Arka vikas seeds - 150 g, Vegetable special - 10 kg.
Source of Inputs	IIHR, Bangalore and KVK, Thiruvannamalai.

Photos	
TO-2	COTH 4
Source and year	TNAU, 2020
Description (short)	Fruits are flat round with thick pericarp (5.84 mm). green shoulder at breaker stage which turns to red colour at ripening. Fruits are borne in clusters of 5-6,with an average fruit weight of 80-85g. Moderately resistance to leaf curl virus, Yield: 92.3 t/ha.
Potential yield/income	92.3 t/ha
Critical inputs& quantity and Cost	COTH 4 seeds - 150 g, Vegetable special - 10 kg, Field board - 5 No.
Source of Inputs	TNAU, Coimbatore
Photos	
Farmers Practice	Cultivation of private hybrids
Farmers yield	25t/ha
Season	Rabi
Cost per replication (Rs.)	Rs.2950.00
No. of replications	5
Total cost for the OFT	**Rs.14750.00**
Parameters to be studied	Days to 50 % flowering, Average fruit wt. (g), , Yield Q/ha, BCR
Parameters to be reported	Days to 50 % flowering, Average fruit wt. (g), , Yield Q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

7. Assessment of Microbial inoculants for yield enhancement in Chilli

OFT No.	**07**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Horticulture
Theme	Crop production and Management
Category (if applicable)	Vegetable
Crop/ enterprise	Chilli

Farming situation	Sandy loam, Rabi and Irrigated.
Prioritized problem (short)	Lack of knowledge on seed treatment, Low yield, High incidence of sucking pest.
Title of the OFT	**Assessment of Microbial inoculants for yield enhancement in Chilli.**
Technology options	
TO-1	CSR grow sure
Source and year	CSSRI, 2021
Description (short)	Contains highly efficient salt tolerant bacteria strains. Enhances the yield in horticultural crops especially vegetables. Soil drenching of 1% solution at 10,30,50 days after sowing.
Potential yield/income	-
Critical Inputs	CSR grow sure - 15 litres, Field board - 5 No.
Source of Inputs	CSSRI, karnal and KVK, Thiruvannamalai.
Photos	
TO-2	Arka Microbial Consortium
Source and year	IIHR, 2015
Description (short)	Contains N fixing, P and Zn solubilising and plant growth promoting microbes. Soil drenching @2% at 10th day of sowing. Soil application @5kg per acre mixed with 500 kg of FYM and applied near root zone
Potential yield/income	-
Critical inputs& quantity and Cost	Arka Microbial Consortium - 15 kg
Source of Inputs	IIHR, Banaglore
Photos	
Farmers Practice	Application of NPK
Farmers yield	20 t/ha
Season	Rabi
Cost per replication (Rs.)	Rs. 1640.00
No. of replications	5
Total cost for the OFT	**Rs. 8200.00**

Parameters to be studied	Days to 50 % flowering, Average fruit wt. (g), Yield Q/ha, BCR
Parameters to be reported	Days to 50 % flowering, Average fruit wt. (g), Yield Q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

8. Assessment of micro nutrient formulation for high productivity in banana

OFT No.	**08**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Horticulture
Theme	Crop production and Management
Category (if applicable)	Fruit crop
Crop/ enterprise	Banana
Farming situation	Clay loam, Rabi and Irrigated.
Prioritized problem (short)	Lack of knowledge on micro nutrient application, Low yield, Poor quality
Title of the OFT	**Assessment of micro nutrient formulation for higher productivity in banana**
Technology options	
TO-1	Banana Sakthi
Source and year	NRCB, 2019
Description (short)	It is micro nutrient mixture. To increases the productivity by 15 – 20 % and enhances the quality in all varieties. Increase the fruit TSS content.
Potential yield/income	-
Critical Inputs	Banana sakthi - 15 Kg, Field board - 5 No.
Source of Inputs	NRCB, Trichy and KVK, Thiruvannamalai.
Photos	
TO-2	Banana Special
Source and year	IIHR, 2014
Description (short)	It helps in increase the fruit size, color and length of the finger. Reduce flower drop and increase fruit set. Increase fruit quality and bunch weight.
Potential yield/income	-

Critical inputs& quantity and Cost	Banana special - 15 kg
Source of Inputs	IIHR, Bangalore
Photos	
Farmers Practice	Application of NPK
Farmers yield	25t/ha
Season	Rabi
Cost per replication (Rs.)	Rs.1650.00
No. of replications	5
Total cost for the OFT	**Rs.8250.00**
Parameters to be studied	Bunch weight (kg), number of hands per bunch, yield Q/ha, BCR
Parameters to be reported	Bunch weight (kg), Yield Q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

9. Assessment of bio repellants against wild boar in Groundnut

OFT No.	**09**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Plant Protection
Theme	Integrated Pest Management
Category (if applicable)	Oilseed
Crop/ enterprise	Groundnut
Farming situation	Sandy clay loam, Kharif
Prioritized problem (short)	Heavy crop damage, Yield loss (25-35%), Lack of knowledge on management
Title of the OFT	**Assessment of bio repellants against wild boar in Groundnut**
Technology options	
TO-1	Wild boar repellant
Source and year	TNAU (KVK, Vellore 2022)

Description (short)	Wild boar repellant @ 500 ml per acre. Pour in 100 bottles @ 5 ml per bottle and it needs to be tied in the poles at a distance of 10 feet around the field bunds.
Potential yield/income	-
Critical Inputs	▪ Bio repellent - 5 lit – Rs.700/ lit, Bottles – 250 nos – Rs 5/ Bottle
Source of Inputs	KVK, Vellore
Photos	-
TO-2	Innovative Herboliv
Source and year	Mivipro products, Erode 2019
Description (short)	Spraying of Innovative Herboliv+ (10% dilution) with 10 days interval – 3 Application
Potential yield/income	-
Critical inputs& quantity and cost	▪ Herboliv - 75 lit – Rs.110/Lit, Field board – 5 Nos – Rs Rs.300/No
Source of Inputs	Mivipro products, Erode
Photos	-
Farmers Practice	Manual monitoring
Farmers yield	16.00 qtl/ha
Season	Kharif
Cost per replication (Rs.)	**Rs. 2900.00**
No. of replications	5
Total cost for the OFT	**Rs. 14500.00**
Parameters to be studied	Damage percentage, Benefit Cost Ratio, Yield Q/ha
Parameters to be reported	Yield, Gross expenditure, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Plant Protection, SMS- Agronomy, Senior Scientist and Head

10. Assessment of Mungbean Yellow Mosaic Virus resistant Blackgram varieties

OFT No.	**10**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Plant Protection
Theme	Integrated Pest Management
Category (if applicable)	Pulses
Crop/ enterprise	Blackgram
Farming situation	Sandy clay loam, Kharif

Prioritized problem (short)	High incidence of YMV, Lack of knowledge on resistant variety, poor yield (5.24/ha).
Title of the OFT	**Assessment of Mungbean Yellow Mosaic Virus resistant Blackgram varieties**
Technology options	
TO-1	LBG 884
Source and year	ANGRAU, 2022
Description (short)	Tolarent to Mungbean Yellow Mosaic Virus, Photo insensitive variety, Medium bold and shiny variety, Yield: Irrigated –2000 - 2200 kg/ha, Duration: 80-85 days
Potential yield/income	2000-2200 kg/ha
Critical Inputs	▪ LBG 884 seed - 20 Kg – Rs.150/ Kg, *Trichoderma* – 10kg - Rs.175/ Kg, *Bacillus* – 10 kg - Rs.175/ Kg.
Source of Inputs	ARS, Tirupathi/ ANGRAU, Hyderabad, KVK Thiruvannamalai
Photos	-
TO-2	VBN 11
Source and year	TNAU, 2020
Description (short)	Resistant to Mungbean Yellow Mosaic Virus and Leaf Curl Virus diseases. Duration: 70-75 days, Yield: Irrigated –940 kg/ha; Rainfed: 865 kg/ha, Suitable for all seasons of Tamil Nadu
Potential yield/income	865kg/ha
Critical inputs& quantity and cost	▪ VBN 11 seed - 20 Kg – Rs.120/ Kg, *Trichoderma* – 10kg - Rs.175/ Kg, *Bacillus* – 10 kg - Rs.175/ Kg, Field board – 5 Nos – Rs Rs.300/No
Source of Inputs	Progressive farmer, KVK Thiruvannamalai
Photos	-
Farmers Practice	Cultivation of local varieties
Farmers yield	524 kg/ha
Season	Kharif
Cost per replication (Rs.)	**Rs. 3100.00**
No. of replications	5
Total cost for the OFT	**Rs. 15500.00**
Parameters to be studied	% Disease incidence Benefit Cost Ratio, Yield Q/ha
Parameters to be reported	Yield, Gross expenditure, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Plant Protection, SMS- Agronomy, Senior Scientist and Head

11. Assessment of biological methods for the management of root knot nematode in Tomato

OFT No.	**11**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant protection
Theme	Integrated Nematode Management
Category (if applicable)	Vegetable crop
Crop/ enterprise	Tomato
Farming situation	Sandy clay loam, Kharif
Prioritized problem (short)	High incidence of Nematode, Lack of knowledge, Low yield
Title of the OFT	**Assessment of biological methods for the management of root knot nematode in Tomato**
Technology options	
TO-1	
Source and year	TNAU,AICRP on nematodes, 2021-2022
Description (short)	Basal application of bio- enriched farm yard manure @ 1.0 ton /acre (*Purpureocillium lilacinum*) + Application of liquid formulation of *P.lilacinum* @ 1.0 l/ac through drip at the time of planting and repeated thrice at 30,60 and 90 days after planting.
Potential yield/income	
Critical Inputs	▪ *Purpureocillium lilacinum* – 10 lit – Rs.350/ lit
Source of Inputs	TNAU
Photos	-
TO-2	
Source and year	TNAU-CSM(H) – 2020
Description (short)	Basal application of bio- enriched farm yard manure @ 1.0 ton /acre (*Pochoniachlamydosporia*) + Application of liquid formulation of *P.chlamydosporia* @ 1.0 l/ac through drip at the time of planting and repeated thrice at 30,60 and 90 days after planting.
Potential yield/income	-
Critical inputs& quantity and cost	▪ *Pochonia chlamydosporia* - 10 lit – Rs.350/ lit, Field board – 5 Nos – Rs Rs.300/No
Source of Inputs	TNAU
Photos	-
Farmers Practice	Application of Carbofuron 10 kg/ha
Farmers yield	432 qtl/ha
Season	Kharif
Cost per replication (Rs.)	**Rs. 2100.00**

No. of replications	5
Total cost for the OFT	**Rs. 10500.00**
Parameters to be studied	% Disease incidence Benefit Cost Ratio, Yield Q/ha
Parameters to be reported	Yield, Gross expenditure, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Plant Protection, SMS- Horticulture, Senior Scientist and Head

12. Assessment of biological methods for the management of *Fusarium* wilt in banana

OFT No.	**12**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant protection
Theme	Integrated Disease Management
Category (if applicable)	Fruit crop
Crop/ enterprise	Banna
Farming situation	Sandy clay loam, Rabi
Prioritized problem (short)	High incidence of Panama wilt, Lack of knowledge on IDM, Low yield
Title of the OFT	**Assessment of biological methods for the management of *Fusarium* wilt in banana**
Technology options	
TO-1	
Source and year	NRCB, 2020
Description (short)	Application of Microbial consortia for *Fusarium* wilt disease in banana @ 50 g per plant at the time of planting and during 2 nd and 4 th month after planting.
Potential yield/income	
Critical Inputs	▪ Microbial Consortium – 25 kg – Rs.300/ Kg
Source of Inputs	NRCB
Photos	-
TO-2	
Source and year	TNAU, 2020
Description (short)	*Bacillus subtilis* and *Trichoderma asperellum* 2.5 kg/ha (Each) + FYM + neem cake for 3 times at 2nd, 4th, 6th month after planting. Corm injection of Carbendazim 0.2 % for 3 times at 2nd, 4th, 6th month after planting.
Potential yield/income	-
Critical inputs& quantity and cost	▪ *Trichoderma* – 15 kg - Rs.175/ Kg, *Bacillus* – 15 kg - Rs.175/ Kg, *Field board* – 5 Nos – Rs Rs.300/No

Source of Inputs	KVK Thiruvannamalai
Photos	-
Farmers Practice	Soil drenching with carbendazim
Farmers yield	486 qtl/ha
Season	Rabi
Cost per replication (Rs.)	**Rs. 3000.00**
No. of replications	5
Total cost for the OFT	**Rs. 15000.00**
Parameters to be studied	% Disease incidence Benefit Cost Ratio, Yield Q/ha
Parameters to be reported	Yield, Gross expenditure, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Plant Protection, SMS- Horticulture, Senior Scientist and Head

13. Assessment of poultry breeds under backyard condition

OFT No.	**13**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Animal Science
Theme	Breed Evaluation
Category (if applicable)	Poultry
Crop/ enterprise	Chicks
Farming situation	-
Prioritized problem (short)	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency
Title of the OFT	**Assessment of poultry breeds under backyard condition**
Technology options	
TO-1	**TANUVAS Star Chicken**
Source and year	TANUVAS 2021
Description (short)	Brown shelled egg producer, Flightiness to evade predation, Optimum egg number of 220 eggs per annum, Good survivability of 92.43% under the backyard system, Multi coloured feather pattern.
Potential yield/income	-
Critical Inputs	Day old chicks –star chicken : 125 Nos, Deworming & Vaccination : 10 dose.
Source of Inputs	TANUVAS, Chennai.

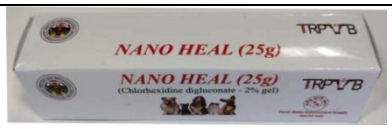
Photos	
TO-2	**Vanashree** (Evolved from Aseel-Peela (PD-4) breed through selective breeding with production of 195 eggs per annum).
Source and year	DPR, Hyderabad, 2019
Description (short)	Evolved from Aseel-Peela (PD-4) breed through selective breeding with production of 195 eggs per annum.
Potential yield/income	-
Critical inputs& quantity and Cost	Day old chicks –Vanashree cross : 125 Nos, Deworming & Vaccination : 10 dose, Field Board : 5 No.
Source of Inputs	DPR, Hyderabad
Photos	
Farmers Practice	Assel, Assel cross, Chiruvidai
Farmers yield	-
Season	Kharif
Cost per replication (Rs.)	Rs. 3450.00
No. of replications	5
Total cost for the OFT	**Rs. 17250.00**
Parameters to be studied	Body weight (Kg), Egg production (Nos), Mortality (%), BCR
Parameters to be reported	Body weight (Kg), Egg production (Nos), Mortality (%), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science and Senior Scientist and Head

14. Assessment of milk replacer for lambs

OFT No.	**14**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Animal Science
Theme	Production Management
Category (if applicable)	Sheep
Crop/ enterprise	Lambs
Farming situation	-

Prioritized problem (short)	One of the major concerns in sheep production is the lower body weight gain in lambs during pre-weaning phase (first 90-100 days). The low plane of nutrition during the early phase of growth in lambs reduces the immunity and increases the susceptibility to diseases resulting in lower body weight gains and high mortality.
Title of the OFT	**Assessment of milk replacer for lambs**
Technology options	
TO-1	**NIANP Milk replacer**
Source and year	NIANP 2021
Description (short)	Special diet rich in protein, energy, minerals and vitamins for pre weaning lambs, Contains quality ingredients with high digestibility and palatability
Potential yield/income	-
Critical Inputs	NIANP Milk replacer : 20 Kg
Source of Inputs	TANUVAS, Chennai.
Photos	
TO-2	**CSWRI Milk replacer**
Source and year	CSWRI, 2018
Description (short)	Rich in protein , minerals and vitamins
Potential yield/income	-
Critical inputs& quantity and Cost	CSWRI Milk replacer : 20 Kg, Field board : 5 No.
Source of Inputs	CSWRI
Photos	
Farmers Practice	Cow milk
Farmers yield	-
Season	Kharif
Cost per replication (Rs.)	Rs. 3200.00
No. of replications	5
Total cost for the OFT	**Rs. 16000.00**
Parameters to be studied	Body weight (Kg), lamb Mortality (%), BCR
Parameters to be reported	Body weight (Kg), lamb Mortality (%), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science and Senior Scientist and Head

15. Assessment of wound healer in cattle

OFT No.	**15**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Animal Science
Theme	Disease Management
Category (if applicable)	Cattle
Crop/ enterprise	Cow
Farming situation	-
Prioritized problem (short)	Open wounds by flies and Maggots are commonly occurs in cattle, it will affect the feed intake in turn reduce milk production.
Title of the OFT	**Assessment of wound healer in cattle**
Technology options	
TO-1	**Nano Heal cream**
Source and year	TANUVAS 2021
Description (short)	Nano heal cream is indicated for burn wounds, cuts and scratches.
Potential yield/income	-
Critical Inputs	Nano Heal cream : 20 Nos.
Source of Inputs	TANUVAS, Chennai.
Photos	
TO-2	**Healex-FR**
Source and year	CIRG, 2015
Description (short)	Herbal antiseptic gel
Potential yield/income	-
Critical inputs& quantity and Cost	Healex-FR : 20 Nos, Field board : 5 No.
Source of Inputs	CIRG, UP
Photos	
Farmers Practice	Application of turmeric with neem leaves
Farmers yield	-
Season	Kharif
Cost per replication (Rs.)	Rs. 3000.00
No. of replications	5
Total cost for the OFT	**Rs. 15000.00**

Parameters to be studied	Wound healing(Days), Milk production (lits), BCR
Parameters to be reported	Wound healing(Days), Milk production (lits), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science and Senior Scientist and Head

16. Assessment of insecticides for the control of ticks in Goat

OFT No.	**16**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Animal Science
Theme	Disease Management
Category (if applicable)	Small ruminants
Crop/ enterprise	Goat
Farming situation	-
Prioritized problem (short)	The ticks, fleas, sucking and biting lice are major issues in Goat production. it will affect the feed intake in turn it will reduce the growth of animals.
Title of the OFT	**Assessment of insecticides for the control of ticks in Goat**
Technology options	
TO-1	**TANUVAS- Methicone**
Source and year	TANUVAS 2021
Description (short)	Dimethicone, also known as polydimethylsiloxane, is a substance that comes from silicone. Silicone comes from silica, which is a natural compound present in sand, sandstone, granite, and quartz.
Potential yield/income	-
Critical Inputs	TANUVAS Methicone : 50 Nos.
Source of Inputs	TANUVAS, Chennai.
Photos	
TO-2	**Megatex**
Source and year	CIRG, Mathura - 2018
Description (short)	Each contains per 100ml Annona squamosal 2 gm, Adhatoda vasica 3gm, Anacylus Pyrethrum 3 gm, Sodium benzoate q.s
Potential yield/income	-
Critical inputs& quantity and Cost	Megatex : 50 Nos, Field board : 5 No.

Source of Inputs	CIRG, Mathura
Photos	
Farmers Practice	Application of Amitraz for control of ticks.
Farmers yield	-
Season	Rabi
Cost per replication (Rs.)	Rs. 3300.00
No. of replications	5
Total cost for the OFT	**Rs. 16500.00**
Parameters to be studied	Infestation(%), Body weight(Kg), Kid Mortality(%), BCR
Parameters to be reported	Infestation(%), Body weight(Kg), Kid Mortality(%), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science and Senior Scientist and Head

17. Assessment of different storage methods for pulses

OFT No.	**17**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Home Science
Theme	Post harvest technology
Category (if applicable)	-
Crop/ enterprise	Pulses
Farming situation	-
Prioritized problem (short)	Lack of awareness on storage methods, high incidence of storage pests.
Title of the OFT	**Assessment of different storage methods for pulses**
Technology options	
TO-1	**Sweet flag treatment (10ml/kg)**
Source and year	TNAU 2020
Description (short)	The ***IRRI Super Bag*** is a farmer-friendly storage bag that allows cereal grains and other crops to be safely stored for extended periods.
Potential yield/income	-
Critical Inputs	▪ Sweet flag 5 lit
Source of Inputs	TNAU, Coimbatore

Photos	
TO-2	**Super grain bag**
Source and year	IRRI 2018
Description (short)	TNAU SWEET FLAG 6EC @ 10ml/kg of pulse seeds, germination of treated seeds was not affected after six months of storage.
Potential yield/income	-
Critical inputs& quantity and Cost	Super grain bag 50 nos, field board 5 no.s
Source of Inputs	
Photos	
Farmers Practice	Normal gunny bag with no treatment
Farmers yield	-
Season	Kharif 2023
Cost per replication (Rs.)	Rs. 2050.00
No. of replications	5
Total cost for the OFT	**Rs. 10250.00**
Parameters to be studied	Moisture, germination percentage, shelf life and pest incidence
Parameters to be reported	Moisture, germination percentage, shelf life and pest incidence
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Home Science, SMS – Plant protection and Senior Scientist and Head

9. Frontline Demonstrations proposed during 2023-24

9.1. Summary of FLDs

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technology	Source of Technology	Status *	No. of Demo (replications)	Area (ha)/ units	Total cost involved (Rs.)	Team members involved	No. of demos targeted in DFI village (s)	No. of demos targeted under SC-SP
1	Barnyard millet	Demonstration of Barnyard millet variety ATL-1	Cultivation of old varieties which are susceptible to stem borer and lodging which leads to yield reduction	Varietal demonstration	TNAU 2023	New	10	4	11000.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	-	5
2	Finger millet	Demonstration of Finger millet variety ATL-1	▪ Cultivation of old varieties. ▪ Lack of awareness on high yielding & drought tolerant variety. ▪ High incidence of disease. Low yield.	Varietal demonstration	TNAU 2020	2nd Year	10	4	11500.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	-	5

3	Paddy	Demonstration of Rice Reap	Lack of awareness about the usage of growth promoters and micronutrients which leads to yield reduction	Integrated Crop Management	TNAU, 2022	New	10	2	10200.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	5	5
4	Paddy	Demonstration of improved kavuni CO57 under organic farming	Lack of knowledge about organic inputs, enormous use of inorganic fertilizers and pesticides leads to environment pollution and fertility loss in soil	Integrated Crop Management	TNAU, 2023	New	10	2	19000.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	-	5
5	Brinjal	Demonstration of improved variety VRM (Br) 2	Low yield due to cultivation of local variety	Varietal demonstration	TNAU 2021	2nd year	10	4	12000.00	SMS-Horticulture SMS-Plant Protection, SS& Head	-	3
6	Watermelon	Demonstration of watermelon variety Arka shyama	Low yield due to cultivation of local variety	Varietal demonstration	IIHR, 2020	New	10	1	17000.00	SMS-Horticulture SMS-Plant Protection, SS& Head	7	3
7	Turmeric	Demonstration of TNAU Micro Nutrient mixture in Turmeric	Micro nutrient formulations not followed	Integrated Nutrient management	TNAU, 2020	New	10	4	12500.00	SMS-Horticulture SMS-Plant Protection, SS& Head	-	3

8	Tuberose	Demonstration on Integrated Crop Management in Tuberose	Low yield due to lack of adoption of improved production technologies	Integrated Crop Management	TNAU, 2020	New	10	4	12500.00	SMS-Horticulture SMS-Plant Protection, SS& Head	7	3
9	Paddy	Demonstration on IPDM in Rice	Intensive application of pesticides (6-7 sprays). High infestation of Stem borer, leaf folder, Blast, Tungro, False smut and BLB. Lack of awareness on IPDM.	IPDM	TNAU 2020	New	10	4	18500.00	SMS- Plant Protection, SMS-Agronomy, SS& Head	8	2
10	Maize	Demonstration of refined IPM Module for Maize Fall Armyworm	High incidence of FAW, Yield loss (25-40 %) and lack of knowledge on pest management.	IPM	TNAU 2022	New	10	2	15000.00	SMS- Plant Protection, SMS-Agronomy, SS& Head	-	2
11	Groundnut	Demonstration of IPDM in Groundnut	High infestation of root rot, Leaf spot and Spodaptera. Poor yield, Lack of awareness on IPDM	IPDM	TNAU 2020	New	10	4	18500.00	SMS- Plant Protection, SMS-Agronomy, SS& Head	-	2

12	Chilli	Demonstration of IPDM in Chilli	Injudicious use of pesticides for the management of sucking pest. High infestation of viral disease and sucking pests. Non adoption of IPM practices.	IPDM	TNAU 2022	New	5	2	14500.00	SMS- Plant Protection, SMS- Horticulture, SS& Head	-	2
13	Fodder	Demonstration on 10 cent model mixed fodder cultivation	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	Fodder Production and Management	TANUVAS, 2019	New	10	0.4	14000.00	SMS – Agrl. Extension, SMS Animal Science	5	5
14	Cow	Demonstration of Teat Protect in Milch Cow	Low milk production, High disease incidence of mastitis. Lack of awareness on clean milk production.	Disease management	TRPVB, TANUVAS, 2018	2nd Year	10	0	16750.00	SMS – Animal Science, SS& Head	-	10
15	Poultry	Demonstration of Probeads EC to improve the health and productivity of Desi Chicken	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency, Low body weight gain.	Poultry Production management	TANUVAS, 2020	New	10	0	17250.00	SMS – Animal Science, SS& Head	2	8
16	Sheep	Demonstration of herbal anthelmintic bolus for sheep	Lack of knowledge scientific sheep rearing, High kid mortality, High endoparasite infestation.	Disease management	CIRG, 2018	New	10	0	16500.00	SMS – Animal Science, SS& Head	-	10

17	Goat	Demonstration of Amino Biotic mix for Goat	Lack of knowledge scientific goat rearing, High kid mortality, Low body weight gain, Infertility problem.	Feed and Nutrient management	TANUVAS 2020	New	10	0	18000.00	SMS – Animal Science, SS& Head		10
18	Value addition	Demonstration of non dairy flavoured milk beverages from peanut	Lack of awareness in non dairy milk products, Low market price for peanut.	Value addition in peanut	TNAU 2020	New	10	0	12000.00	SMS – Home Science, SMS Agronomy, SS& Head	-	5
19	Value addition	Demonstration on nutrient dense ready to use (RTU) multigrain mix	Lack of knowledge on value addition. Low market value for raw millets.	Value addition in multigrains	TNAU 2022	New	10	0	14000.00	SMS – Home Science, SMS Agronomy, SS& Head	-	5
20	Value addition	Demonstration of Ready to eat and ready to Cook Mushroom products – EDP mode	Lack of knowledge on value addition. Low market value for raw mushroom.	Value addition in mushroom.	TNAU & IIHR 2020	New (Group)	5	0	15000.00	SMS – Home Science, SMS Plant Protection, SS& Head	1	-
Total							**190**	**37.4**	**295700.00**	-	**35**	**93**

9.2. Details of Front Line Demonstrations

1. Demonstration of Barnyard millet Variety ATL 1

FLD No.:	01
Status (New proposal/2nd year /3rd year)	1st year
Subject	Agronomy
Category:	Millets
Crop/ enterprise:	Barnyard millet
Farming situation	Rainfed, Sandy loamy
Prioritized problem:	Cultivation of old varieties which are susceptible to stem borer and lodging which leads to yield reduction
Title	**Demonstration of Barnyard millet Variety ATL 1**
Technology to be demonstrated:	Barnyard millet Variety ATL 1
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2023
Description	It mature in 90 days Rainfed: Aadi (June–July) & Purattaasi (September–October) Grain: 2123 kg/ha; Dry fodder: 3057 kg/ha Drought tolerant; Non lodging, Long, compact, cylindrical and non-shattering panicle Resistant to stem and borer shoot fly; Moderately resistant to grain smut
Potential yield	20-25q/ha
Critical input, quantity and cost	ATL 1 Seed - 50 Kg, *Trichoderma asperellum*-10 Kg, *Bacillus subtilis* -10 Kg, Field Board - 10 Nos
Farmers practice	Cultivation of local traditional varieties
Source of input	CEM, Athiyandal, KVK
Photos	
Average farmers yield	15q/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs.11000.00**
Parameters to be studied:	Plant population, Yield : qtl/ha, Benefit cost ratio
Parameters to be reported	Yield : qtl/ha, Benefit cost ratio
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Agronomy, SMS-Plant Protection and Senior Scientist and Head

2. Demonstration of Finger millet Variety ATL 1

FLD No.:	**02**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Agronomy
Category:	Millets
Crop/ enterprise:	Finger millet
Farming situation	Irrigated, Sandy loamy
Prioritized problem:	Cultivation of old varieties which are susceptible to lodging and pest and diseases leads to yield reduction
Title	**Demonstration of Finger millet Variety ATL 1**
Technology to be demonstrated:	Finger millet Variety ATL 1
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2020
Description	Synchronized maturity and non-lodging growth habit. Moderately resistant to leaf, neck and finger blasts. It has recorded 3128 kg/ha and 2879 kg/ha under irrigated and rainfed conditions respectively.
Potential yield	20-25q/ha
Critical input, quantity and cost	ATL 1 Seed - 50 Kg, *Trichoderma asperellum*-10 Kg, *Bacillus subtilis* -10 Kg, Field Board - 10 Nos
Farmers practice	Cultivation of local varieties
Source of input	CEM, Athiyandal, KVK
Photos	
Average farmers yield	20q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.11500.00**
Parameters to be studied:	Plant population, Yield : qtl/ha, Benefit cost ratio
Parameters to be reported	Yield : qtl/ha, Benefit cost ratio
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Agronomy, SMS-Plant Protection and Senior Scientist and Head

3. Demonstration of Rice Reap

FLD No.:	**03**
Status (New proposal/2nd year /3rd year)	1st year
Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Paddy (Rice Reap)
Farming situation	Irrigated , Sandy loamy soil
Prioritized problem:	Lack of awareness about the usage of growth promoters and micronutrients which leads to yield reduction
Title	**Demonstration of Rice Reap**
Technology to be demonstrated:	Rice reap
Hybrid or Variety:	-
Source of Technology:	TNAU 2022
Description	It Improves spikelet fertility and grain filling rate. Increases grain yield up to 15 % It also Improves tolerance against drought and high temperature
Potential yield	
Critical input, quantity and cost	Rice reap – 60 kg, Field Board - 10 Nos
Farmers practice	No usage of micronutrients
Source of input	TNAU, Coimbatore
Photos	
Average farmers yield	-
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.10200.00**
Parameters to be studied:	Plant population, Yield : qtl/ha, Benefit cost ratio
Parameters to be reported	Yield : qtl/ha, Benefit cost ratio
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Agronomy, SMS-Plant Protection and Senior Scientist and Head

4. Demonstration of improved kavuni CO57 under organic farming

FLD No.:	**04**
Status (New proposal/2nd year /3rd year)	1st year
Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Paddy
Farming situation	Irrigated , Sandy loamy soil
Prioritized problem:	Lack of knowledge about organic inputs, enormous use of inorganic fertilizers and pesticides leads to environment pollution and fertility loss in soil
Title	**Demonstration of improved kavuni CO57 under organic farming**
Technology to be demonstrated:	Improved kavuni CO57 under organic cultivation
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2023
Description	Duration-130-135 days, Photo – insensitive, resistant to bacterial leaf blight, sheath blight and false smut. Grain yield is 4638 kg /ha
Potential yield	35-40q/ha
Critical input, quantity and cost	Improved kavuni CO 57 Seed - 50 Kg, *Bacillus subtilis* -10 Kg, Neem oil-5lit, Jeevamirtham– 200 liter, Field Board - 10 Nos
Farmers practice	Old variety with inorganic fertilizers
Source of input	TNAU, Coimbatore
Photos	
Average farmers yield	30q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.19000.00**
Parameters to be studied:	Plant population, Yield : qtl/ha, Benefit cost ratio
Parameters to be reported	Yield : qtl/ha, Benefit cost ratio
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Agronomy, SMS-Plant Protection and Senior Scientist and Head

5. Demonstration of improved variety VRM (Br) 2

FLD No.	**05**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Horticulture
Category:	Vegetable
Crop/ enterprise:	Brinjal
Farming situation	Irrigated, Sandy loam soil
Prioritized problem:	▪ Low yield due to cultivation of local variety
Title	**Demonstration of improved variety VRM (Br) 2**
Technology to be demonstrated:	Varietal Assessment
Hybrid or Variety:	Variety – VRM (Br) 2
Source of Technology:	TNAU 2021
Description	▪ Fruits are dark violet in colour ▪ Oval shape with green tinge in the distal end ▪ Fruits are with less seeds and more flesh ▪ Moderately resistant to pest and diseases ▪ Suitable for both Kharif and Rabi seasons
Potential yield	500-550 q/ha
Critical input, quantity and cost	▪ Brinjal VRM (Br) 2 seed - 1.5 kg ▪ Vegetable special - 20 kg ▪ *Bacillus subtilus* - 10 kg ▪ Field board - 10 No
Farmers practice	Cultivation of local spiny brinjal variety with conventional production practices
Source of input	TNAU, Virinjipuram and KVK, Thiruvannamalai.
Photos	
Average farmers yield	335 q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 12000.00**
Parameters to be studied:	Days to 50% flowering, Average fruit weight (g), Percentage of pest infestation (Borer), Yield Q/ha, BCR.
Parameters to be reported	Yield (Q/ha),BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

6. Demonstration of watermelon variety Arka shyama

FLD No.	**06**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Vegetable
Crop/ enterprise:	Watermelon
Farming situation	Irrigated, Sandy loam soil
Prioritized problem:	▪ Low yield due to cultivation of local variety
Title	**Demonstration of watermelon variety Arka Shyama**
Technology to be demonstrated:	Varietal Assessment
Hybrid or Variety:	Variety – Arka shyama
Source of Technology:	IIHR, 2020
Description	▪ It is dark greenish black rind, oblong fruit shape ▪ Early (65-70 days to harvest) possessing dark red coloured, crispy, sweet (TSS-12%) flesh.
Potential yield	25 t/ha
Critical input, quantity and cost	▪ Arka shyama seed - 1 kg ▪ Vegetable special - 10 kg ▪ Field board - 10 No
Farmers practice	Cultivation of local variety with conventional production practices
Source of input	IIHR, Bangalore and KVK, Thiruvannamalai.
Photos	
Average farmers yield	16 t/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 17000.00**
Parameters to be studied:	Days to 50% flowering, Average fruit weight (kg), Yield Q/ha, BCR.
Parameters to be reported	Yield (Q/ha),BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

7. Demonstration of TNAU Micro Nutrient mixture in Turmeric

FLD No.	**07**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Spice
Crop/ enterprise:	Turmeric
Farming situation	Irrigated, Sandy loam soil
Prioritized problem:	▪ Micro nutrient formulations not followed
Title	**Demonstration of TNAU Micro Nutrient mixture in Turmeric**
Technology to be demonstrated:	Crop Production and Management
Hybrid or Variety:	TNAU Micro nutrient mixture
Source of Technology:	TNAU 2020
Description	▪ Alleviates multi-micronutrients deficiencies ▪ Increased pest and disease resistance ▪ High yield - 11-20%, Improved quality ▪ Split application of 15 kg TNAU Micronutrients mixture as EFYM at 50% basal and 50% top dressing on 90 DAP
Potential yield	-
Critical input, quantity and cost	▪ TNAU micro nutrient mixture - 60 kg, ▪ *Bacillus* substilus - 10kg, ▪ *Tricoderma viride* - 10kg, ▪ Field Board - 10 nos.
Farmers practice	Application of NPK only
Source of input	TNAU, Coimbatore and KVK, Thiruvannamalai.
Photos	
Average farmers yield	18 t/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 12,500.00**
Parameters to be studied:	Dry recovery(%) Yield Q/ha, BCR
Parameters to be reported	Yield (Q/ha),BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

8. Demonstration on Integrated Crop Management in Tuberose

FLD No.	**08**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Flower crop
Crop/ enterprise:	Tuberose
Farming situation	Irrigated, Sandy loam soil
Prioritized problem:	▪ Low yield due to lack of adoption of improved production technologies
Title	**Demonstration on Integrated Crop Management in Tuberose**
Technology to be demonstrated:	Integrated Crop Management
Hybrid or Variety:	-
Source of Technology:	TNAU 2020
Description	▪ NPK application based on soil test ▪ Soil application of *Pecilomyces* and *Bacillus* @ 2.5kg/ha ▪ Soil application of neem cake – 250 kg/ha ▪ MN mixture application @ 0.1% ▪ Installation of yellow sticky traps @ 12No/ha
Potential yield	-
Critical input, quantity and cost	▪ MN mixture - 20kg ▪ *Bacillus subtilus* -10kg ▪ *Pecilomyces* -10kg, ▪ Yellow sticky trap -50 nos, ▪ Field board -10Nos.
Farmers practice	Adoption of conventional production practices with soil application of NPK fertilizers (conventional) without proper micro nutrition.
Source of input	TNAU, Coimabtore and KVK, Thiruvannamalai.
Photos	-
Average farmers yield	11 t/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 12,500.00**
Parameters to be studied:	Days to 50% flowering, flower length (cm),Yield Q/ha, BCR.
Parameters to be reported	Yield (Q/ha),BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS- Horticulture, SMS- Plant Protection, Senior Scientist and Head.

9. Demonstration on IPDM in Paddy

FLD No.	**09**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Category:	Cereals
Crop/ enterprise:	Paddy
Farming situation	Bore well, irrigated upland, clay loam
Prioritized problem:	Intensive application of pesticides (6-7 sprays). High infestation of Stem borer, leaf folder, Blast, Tungro, False smut and BLB. Lack of awareness on IPDM.
Title	**Demonstration on IPDM in Paddy**
Technology to be demonstrated:	IPDM
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2020
Description	▪ Cowpea and sunflower as border crops ▪ *Bacillus subtilis*-Seed treatment @ *10 g/kg,* Soil application @ 1kg/acre, Seedling root dip @ 1kg/acre ▪ Release of *T. japonicum* @ 2 cc &*T. chilonis* @ 2 cc. ▪ Installation of solar light trap@ 1/acre , sticky trap @ 5/acre,Stem borer pheromone trap-Nano Sci-Lure @ 10/acre. ▪ Application of Neem oil @ 3% and Camphor oil 400 ml/acre. ▪ Need based Foliar application of CartopHydrochloride 50% SP@ 400 g/ac, Azoxystrobin25 SC @ 200 ml ac.
Potential yield	-
Critical input, quantity and cost	*Bacillus subtilis* - 30 kg, NanoSci lure - 100 No, Yellow sticky trap - 50 No, Neem oil - 5 Lit, Field board - 10 No
Farmers practice	Application of plant protection chemicals.
Source of input	KVK, PCI Chennai, Local Agri clinic.
Photos	-
Average farmers yield	44.51 Q/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs.18500.00**
Parameters to be studied:	Percent infestation, % disease index, Yield Q/ha, BCR
Parameters to be reported	Percent infestation, % disease index, Yield Q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS - Plant Protection, SMS – Agronomy, Senior Scientist and Head.

10. Demonstration of Integrated Pest Management practices for Fall Armyworm in Maize.

FLD No.	**10**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Category:	Millets
Crop/ enterprise:	Maize
Farming situation	Irrigated and black soil
Prioritized problem:	Incidence of fall armyworm
Title	**Demonstration of Integrated Pest Management practices for Fall Armyworm in Maize.**
Technology to be demonstrated:	IPM
Hybrid or Variety:	Private hybrid
Source of Technology:	TNAU 2022
Description	▪ Monitoring of FAW adults using pheromone traps @ 12/ha and damage score at weekly intervals following TNAU 1-5 scale. Release of Telenomus remus @ 1,25,000/ha @ early vegetative stage. ▪ Application of insecticides as follows: ▪ Chlorantraniliprole 18.5 SC @ 0.4 ml/ lit (or) flubendiamide 480 SC @ 0.5 ml/lit followed by azadirachtin 1500 ppm @ 5 ml/lit on need basis. ▪ Metarhizium anisopliae (TNAU-MA-GDU isolate) @ 2.5 kg/ha (1.6 x 1011 spores / ml) or emamectin benzoate 5 SG @ 0.4 g/lit or novaluron 10 EC @1.5 ml/lit or spinetoram 11.70 SC @ 0.5 ml/lit ▪ Spinetoram 11.70 SC @ 0.5 ml/lit (or) emamectin benzoate 5 SG @ 0.4 g/lit on need basis (Do not repeat insecticide sprayed at late whorl stage)
Potential yield	-
Critical input, quantity and cost	Pheromone trap - 25 No, FAW Lure -50 No, Azadirachtin – 2.5 Lit, *Metarhizium anisopliae* - 5 Kg, Chlorantraniliprole - 200 ml, Field board – 10 No
Farmers practice	Application of plant protection chemicals.
Source of input	KVK, PCI Chennai, Local Agri clinic.
Photos	-
Average farmers yield	21.54 Q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.15000.00**
Parameters to be studied:	Percent infestation, Yield Q/ha, BCR
Parameters to be reported	Percent infestation, Yield Q/ha, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS - Plant Protection, SMS – Agronomy, SS and Head.

11. Demonstration of IPDM in Groundnut

FLD No.:	**11**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Plant Protection
Category:	Oilseeds
Crop/ enterprise:	Groundnut
Farming situation	Rainfed, sandy loam soil
Prioritized problem:	High infestation of root rot, Leaf spot and Spodaptera. Poor yield, Lack of awareness on IPDM
Title	**Demonstration of IPDM in Groundnut**
Technology to be demonstrated:	IPDM
Hybrid or Variety:	Variety – Dharani (TCGS 1043)
Source of Technology:	TNAU 2020
Description	▪ Planting of Castor as border crop and Black gram as Intercrop ▪ Seed treatment with *Bacillus subtilis* 10g /kg of seed ▪ Soil application of *Bacillus subtilis* and *Trichoderma asperillum* @ 2.5kg/ha (Each) ▪ Setting of S. litura and Helicoverpa Pheromone trap @ 12 per ha ▪ Setting of Yellow sticky trap 12 per /ha, Need based application Azadiractin 0.03% ▪ Foliar application of Hexaconazole 0.1 % and imidachloprid 17.8 % SL 100 ml/ ac.
Potential yield	-
Critical input, quantity and cost	*Bacillus subtilis*- 20 kg, *Trichoderma asperillum* - 20kg , Pheromone trap- 100 No, Spodaptera lure- 100 No, Yellow sticky trap - 5 No, Field board - 1 No
Farmers practice	Application of plant protection chemicals.
Source of input	KVK, PCI
Photos	-
Average farmers yield	16.05 qtl/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.18500.00**
Parameters to be studied:	Percent infestation, % disease index, Yield Q/ha, Benefit Cost Ratio
Parameters to be reported	Yield, Gross cost, Gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS - Plant Protection, SMS – Agronomy, SS and Head.

12. Demonstration of IPDM in Chilli

FLD No.:	**12**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Category:	Vegetable
Crop/ enterprise:	Chilli
Farming situation	Irrigated and black soil
Prioritized problem:	Incidence of Thrips, Fruit borer, Cutworm, Aphids and mealybug and yield loss up to 60%
Title	**Demonstration of IPDM in Chilli**
Technology to be demonstrated:	IPDM
Hybrid or Variety:	Hybrid
Source of Technology:	TNAU 2022
Description	▪ Seed treatment with *Bacillus subtilis* (Bbv57) @ 10g/kg of seed. ▪ Three rows of closely sown maize as barrier crop and agathi as intercrop. ▪ Soil application of *Bacillus subtilis* and *Trichoderma asperellum* 2.5 kg/ha (Each) ▪ Installation of Yellow sticky traps @ 12 Nos./ha. ▪ Roguing out of virus infected plants upto 45 days after transplanting. ▪ Application of imidacloprid 17.8% SL @ 150 ml/ha followed by pyriproxyfen 10%EC @ 500 ml/ha at 10 days interval. ▪ Application of Azoxystrobin 18.2% w/w + Difenoconazole 11.4% w/w SC @ 1 ml/lit thrice at 15 days interval immediately after noticing the powdery mildew / die-back
Potential yield	-
Critical input, quantity and cost	*Bacillus subtilis - 10 Kg, Trichoderma asperillum- 10 Kg,* Pyriproxyfen- 1 lit, Azoxystrobin 18.2% + Difenoconazole 11.4% – 1 lit, Yellow sticky trap - 25 No, Field board-5No.
Farmers practice	Indiscriminate use of chemicals.
Source of input	KVK, PCI, local Agri clinic
Photos	-
Average farmers yield	16.05 qtl/ha
Season	Rabi
No. of Demos (replications)	5
Total cost for the Demo	**Rs.14500.00**
Parameters to be studied:	Percent infestation, % disease index, Yield Q/ha, Benefit Cost Ratio
Parameters to be reported	Yield, Gross cost, Gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS - Plant Protection, SMS – Horticulture, SS and Head.

13. Demonstration on 10 cent model mixed fodder cultivation

FLD No.	**13**
Status (New proposal/2nd year /3rd year)	Direct FLD (1st year)
Subject	Animal Science
Category:	Fodder production management
Crop/ enterprise:	Fodder
Farming situation	-
Prioritized problem:	▪ Feeding of low protein fodder for dairy animals. ▪ Lack of awareness about cultivation of fodder crops.
Title	**Demonstration on 10 cent model mixed fodder cultivation**
Technology to be demonstrated:	Demonstrate the CO-5 (4 cent), Desmanthus (3 cent), COFS 31 (3 cent) and Agathi and Subabul as Border crops.
Hybrid or Variety:	-
Source of Technology:	TANUVAS 2019
Description	▪ Demonstrate the multi fodder cuttings in 10cents to increase the fodder production and its management.
Potential yield	-
Critical input, quantity and cost	▪ CO 5 setts – 6400 Nos, ▪ Desmanthus seeds – 1.5 kg, ▪ COFS 31 seeds – 0.5 kg, ▪ Subabul seeds- 0.5 kg, ▪ Agathi seeds- 0.5 kg, ▪ Field board – 10 Nos.
Farmers practice	Feeding dry fodder
Source of input	KVK Thiruvannamalai and TANUVAS, Chennai
Photos	
Average farmers yield	-
Season	Kharif 2023
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 14000.00**
Parameters to be studied:	Green fodder Biomass (q/ha.), Milk yield (%), Fat & SNF content in milk, BCR
Parameters to be reported	Green fodder Biomass (q/ha.), Milk yield (%), Fat & SNF content in milk, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Agri. Extension, SMS – Animal Science

14. Demonstration of Teat Protect in Milch Cow

FLD No.	**14**
Status (New proposal/2nd year /3rd year)	Direct FLD (2nd year)
Subject	Animal Science
Category:	Disease management
Crop/ enterprise:	Cow
Farming situation	-
Prioritized problem:	▪ Low milk production, High disease incidence of mastitis. ▪ Lack of awareness on clean milk production.
Title	**Demonstration of Teat Protect in Milch Cow**
Technology to be demonstrated:	Teat protect is a safe disinfectant spray in cow.
Hybrid or Variety:	-
Source of Technology:	TANUVAS 2018
Description	▪ Teat protect is a safe disinfectant spray in cow ▪ Teat protect forms an antibacterial coating and prevents infection of teats and udder Immediately after milking wash the udder and spray teat protect.
Potential yield	-
Critical input, quantity and cost	▪ Teat Protect spray : 50 Nos, ▪ Field Board : 10 Nos
Farmers practice	Application of turmeric with lime powder.
Source of input	TANUVAS, Chennai
Photos	
Average farmers yield	-
Season	Kharif 2023
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 16750.00**
Parameters to be studied:	Incidence of Mastitis, Milk yield (%), BCR
Parameters to be reported	Incidence of Mastitis, Milk yield (%), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Animal Science, SS& Head.

15. Demonstration of Probeads EC to improve the health and productivity of Desi Chicken

FLD No.	**15**
Status (New proposal/2nd year /3rd year)	Direct FLD (New)
Subject	Animal Science
Category:	Production Management
Crop/ enterprise:	Poultry
Farming situation	-
Prioritized problem:	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency, Low body weight gain.
Title	**Demonstration of Probeads EC to improve the health and productivity of Desi Chicken**
Technology to be demonstrated:	▪ Supplementation of probiotics play an important role on the growth performance of native chicken to achieve early market weight. Dose- 1 tablet/per birds.
Hybrid or Variety:	-
Source of Technology:	TANUVAS 2020
Description	▪ Probeads-EC is cocktail of probiotic microbes in bead format for use as feed supplement. ▪ Probeads-Ec can be administered daily as five beads per bird by mixing the regular feed.
Potential yield	-
Critical input, quantity and cost	▪ Probeads- EC : 150 Nos, ▪ Field Board : 10 Nos
Farmers practice	Feeding of rice
Source of input	TANUVAS, Chennai
Photos	
Average farmers yield	-
Season	Kharif 2023
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 17250.00**
Parameters to be studied:	Poultry Weight(Kg), Egg Production (Nos), BCR
Parameters to be reported	Poultry Weight(Kg), Egg Production (Nos), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Animal Science, SS& Head.

16. Demonstration of herbal anthelmintic bolus for sheep

FLD No.	**16**
Status (New proposal/2nd year /3rd year)	Direct FLD (New)
Subject	Animal Science
Category:	Disease Management
Crop/ enterprise:	Sheep
Farming situation	-
Prioritized problem:	Lack of knowledge scientific sheep rearing, High kid mortality, High endoparasite infestation.
Title	**Demonstration of herbal anthelmintic bolus for sheep**
Technology to be demonstrated:	▪ Anthelmintic bolus to control gastrointestinal parasitic in sheep.
Hybrid or Variety:	-
Source of Technology:	CIRG 2018
Description	▪ For control of gastrointestinal parasitic infestation in animals
Potential yield	-
Critical input, quantity and cost	▪ Herbal anthelmintic bolus: 400 Nos, ▪ Field Board -10 Nos
Farmers practice	Oral application of neem leaves.
Source of input	CIRG, UP.
Photos	
Average farmers yield	-
Season	Rabi 2023-24
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 16500.00**
Parameters to be studied:	Lamb mortality (%), Weight gain(Kg), BCR
Parameters to be reported	Lamb mortality (%), Weight gain(Kg), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Animal Science, SS& Head.

17. Demonstration of Amino Biotic mix for Goat

FLD No.	**17**
Status (New proposal/2nd year /3rd year)	Direct FLD (New)
Subject	Animal Science
Category:	Production Management
Crop/ enterprise:	Goat
Farming situation	-
Prioritized problem:	Lack of knowledge scientific goat rearing, High kid mortality, Low body weight gain, Infertility problem.
Title	**Demonstration of Amino Biotic mix for Goat**
Technology to be demonstrated:	▪ Amino biotic mix for body growth of goat
Hybrid or Variety:	-
Source of Technology:	TANUVAS 2020
Description	▪ Amino Biotic Mix powder contains Vitamins, Amino acids and Minerals supplements for all livestock animals. Amino Biotic Mix is a vital fast releasing nano formulation powder that is quite helpful for instantly boosting overall health and metabolism of animals.
Potential yield	-
Critical input, quantity and cost	▪ Amino Biotic mix -10 Kg, ▪ Field Board - 10 Nos
Farmers practice	Grassing
Source of input	TANUVAS, Chennai.
Photos	
Average farmers yield	-
Season	Rabi 2023-24
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 18000.00**
Parameters to be studied:	Kid mortality (%), Weight gain(Kg), BCR
Parameters to be reported	Kid mortality (%), Weight gain(Kg), BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Animal Science, SS& Head.

18. Demonstration of non dairy flavoured milk beverages from peanut

FLD No.	**18**
Status (New proposal/2nd year /3rd year)	Direct FLD (New)
Subject	Home Science
Category:	Value addition
Crop/ enterprise:	Groundnut
Farming situation	-
Prioritized problem:	Lack of awareness on non dairy milk product, Low market price.
Title	**Demonstration of non dairy flavoured milk beverages from peanut**
Technology to be demonstrated:	Alternative non dairy milk from peanut.
Hybrid or Variety:	-
Source of Technology:	TNAU 2020
Description	▪ Alternative milk for cow's milk allergy, Hypercholesterolemia, Protein rich drink for mal nourished children.
Potential yield	-
Critical input, quantity and cost	▪ Groundnut 20 kg, ▪ Palm sugar10 kg, ▪ Stabilizer 500 gm, ▪ Cardamom 200gm, ▪ Packing materials 500 nos ▪ Field board 5 nos
Farmers practice	Consume cow milk.
Source of input	Local market
Photos	
Average farmers yield	-
Season	Kharif 2023
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 12000.00**
Parameters to be studied:	Shelf life, consumer acceptability, BCR
Parameters to be reported	Shelf life, consumer acceptability, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Home Science, SMS – Agronomy and Senior Scientist and Head

19. Demonstration on nutrient dense ready to use (RTU) multigrain mix

FLD No.	**19**
Status (New proposal/2nd year /3rd year)	Direct FLD (New)
Subject	Home Science
Category:	Health and nutritional security
Crop/ enterprise:	Value addition – Traditional rice, millets
Farming situation	-
Prioritized problem:	Lack of knowledge on value addition in millet and traditional rice. Low market price.
Title	**Demonstration on nutrient dense ready to use (RTU) multigrain mix**
Technology to be demonstrated:	Demonstration on multigrain mix formulation.
Hybrid or Variety:	-
Source of Technology:	TNAU 2022
Description	Brown rice flour (25 %), Finger millet flour (20 %), Whole wheat flour (20 %), Green gram dhal flour (10 %), Roasted groundnut flour (10 %), Roasted sesame flour (10 %), Drumstick leaves powder (2.5 %) and Carrot powder (2.5 %).
Potential yield	-
Critical input, quantity and cost	▪ Brown rice flour 6 kg, Finger millet flour 4kg, ▪ Whole wheat flour 4 kg, Green gram dhal flour 4 kg, ▪ Roasted groundnut flour 4 kg, ▪ Roasted sesame flour 4 kg, ▪ Drumstick leaves powder 1kg, ▪ Carrot powder 1kg and packing materials 100 no.s, ▪ Field board 10 No.
Farmers practice	Selling as raw rice and raw millets.
Source of input	KVK Thiruvannamalai and Local market
Photos	
Average farmers yield	-
Season	Rabi 2023-24
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 14000.00**
Parameters to be studied:	Shelf life, consumer acceptability, BCR
Parameters to be reported	Shelf life, consumer acceptability, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Home Science, SMS – Agronomy and Senior Scientist and Head

20. Demonstration of Ready to eat and ready to Cook Mushroom products – EDP mode

FLD No.	**20**
Status (New proposal/2nd year /3rd year)	Direct FLD (New)
Subject	Home Science
Category:	Mushroom
Crop/ enterprise:	Value addition -Mushroom
Farming situation	-
Prioritized problem:	Lack of awareness on value addition in mushroom, Low market price during on season.
Title	**Demonstration of Ready to eat and ready to Cook Mushroom products – EDP mode**
Technology to be demonstrated:	Demonstration Mushroom pickle, mushroom powder, soup mix, mushroom millet cookies.
Hybrid or Variety:	-
Source of Technology:	TNAU & IIHR 2020
Description	Preparation of mushroom pickle, mushroom powder, soup mix, mushroom and millet cookies.
Potential yield	-
Critical input, quantity and cost	▪ Mushroom – 20 kg, ▪ Spices, oil and other Miscellaneous items, ▪ Packaging materials -50, weighing balance – 1 no, ▪ Hand sealing machine – 1, Field board- 1no.
Farmers practice	Selling as raw mushroom and No value addition.
Source of input	KVK Thiruvannamalai and Local market
Photos	
Average farmers yield	-
Season	Rabi 2023-24
No. of Demos (replications)	1Group (5 farm women)
Total cost for the Demo	**Rs. 15000.00**
Parameters to be studied:	Sensory Attributes (colour, flavour, texture, taste & over all acceptability), Shelf life study, BCR.
Parameters to be reported	Sensory Attributes (colour, flavour, texture, taste & over all acceptability), Shelf life study, BCR.
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Home Science, SMS – Plant Protection and Senior Scientist and Head

9.3. National Food Security Mission (NFSM)

9.3.1. Cluster Frontline Demonstrations on Pulses

Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology
Pulses	Blackgram	Lack of awareness on improved varieties, Poor tolerance to drought, Cultivation of VBN4, Non availability of bold varieties, Incidence of YMV, Sucking pest and Spodoptera, Low yield.	▪ Seed treatment with *Rhizobium* @ 200 gm, *Bacillus subtillis* 10 gm/kg and *T. asperellum* 4 gm /kg of seed. ▪ Soil application of *Rhizobium* and *Phosphobacteria* @ 2.5 kg /ha each, *Bacillus subtillis* 2.5kg/ha and *T. asperellum* @ 2.5 kg / ha. ▪ Foliar spray of TNAU pulse wonder 5 kg/ha at pre flowering and Yellow sticky trap @ 12 no./ha. ▪ Application of NPV @ 625 SL/ha during incidence.	Variety	VBN-8 & 11	TNAU

Crop/ enterprise	Name of critical input	Qty per Demo	Cost per Demo (Rs)	No. of Demo	Total cost for the Demo (Rs.)	Parameters to be studied	Team member
Blackgram	VBN 8 Seeds, Rhizobium, Phosphobacteria, *Bacillus subtilis, Trichoderma asperellum*, TNAU pulse wonder, Neem oil, Yellow sticky traps, Indoxicarb 10% EC, MN Mixture & NPV 250 SL.	▪ VBN 8 Seeds - 8 Kgs. ▪ Rhizobium - 1 Kg. Phosphobacteria - 1 Kg. ▪ *B.subtilis* - 2 Kg. ▪ *T. asperellum*- 2 Kgs, ▪ TNAU pulse wonder-2kgs. ▪ Neem oil-250 ml. ▪ Yellow sticky trap - 5 nos. ▪ Indoxicarb 10% EC-100ml. ▪ NPV 250 SL- 250 ml. ▪ Soil health card.	3600.00	150	540000.00	▪ Plant population/ sqm. ▪ No. of branches /plant. ▪ Yield (q/ha). ▪ BCR	SMS Agronomy, SMS Plant Protection, Senior Scientist and Head.

9.3.2. Cluster Front Line Demonstrations on Oil Seeds

Category	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Variety	Source of Technology
Oilseeds	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, rust and Spodoptera, Leaf minor, Low yield	▪ Demonstration of TMV-14/ TCGS 1043 groundnut variety. ▪ Seed treatment and soil application of Rhizobium @ 1 kg /acre. ▪ Seed treatment and soil application of T.asperellum and *Bacillus subtilis* (Consortia) @ 2 kg /acre each. ▪ Basal application of micronutrient mixture @ 5 kg /acre. ▪ Foliar application of groundnut rich @ 2.25 kg/acre at 30 and 45 DAS. Application of gypsum @ 160 kg/acre at Basal and 45 DAS.	Variety	VRI-9/ TMV-14 / TCGS1694	RARS, Tirupathi/ TNAU

Crop/ enterprise	Name of critical input	Qty per Demo	Cost per Demo (Rs)	No. of Demo	Total cost for the Demo (Rs.)	Parameters to be studied	Team member
Groundnut	Groundnut Seed, *Bacillus* *Trichoderma*	33 kg 2 kg 2 kg	4800.00	150	**720000.00**	▪ Plant population/ sqm. ▪ No. of pods /plant. ▪ Yield (q/ha). ▪ BCR	SMS Agronomy, SMS Plant Protection, Senior Scientist and Head.

10. Special Programmes

S. No.	Category/ Crop or enterprise	Prioritized problem	Title of Technology	Source	No. of Demo	Area (ha)/ Units	Details of critical inputs	Total cost involved (Rs.)	Names of the team members involved
1	Integrated farming system	Low income, Poor Employment, Poor resource recycling, Lack of knowledge on scientific farming.	Integrated farming system	ICAR	4	4	▪ Goat – 2 farmers. ▪ Honey bee boxes -2 farmers	40000.00	SS & Head, SMS Animal Science, SMS Agronomy.
2	FFS	Low yield, Pest and disease incidence	ICM in Millets	TNAU	1	0.4		30000.00	SS & Head, SMS Agronomy, SMS Plant Protection
3	NFDB	-	-	-	-	-	-	-	-
4	SERP	-	-	-	-	-	-	-	-
5	Enterprise	-	-	-	-	-	-	-	-

11. Externally funded projects

11.1. Projects summary

S.No.	Title	Funding agency	Duration in years	Year of start	Physical details (no. of programmes, participants, area etc.)	Total budget (Rs)	Current year budget (Rs)	Team Members Involved
1	Food Processing Training Centre	Ministry of food processing	10	2014-15	3 Nos (60 participants)	1500000/-	-	SMS–Home Science , SS & Head
2	Value added products in millets	NABARD	0.6	2023-24	25 SHG members	150000/-	-	SMS Home Science and SS & Head

11.2. Project details

1. Food Processing Training Centre

Funding Agency	Ministry of food processing
State/Central/Over Seas	Central
Title	Person power development in rural areas through Food Processing and Training Center.
Objectives	To promote more number of food processing units for the farmers' economic upliftment.
Study area	Thiruvannamalai district.
Methodology	Training and demonstrations
Team Members	SMS Home Science, Senior Scientist and Head i/c,
Budget	**Rs. 1500000/-**One time during the year of starting (2014-15)

2. Value added products in millets

Funding Agency	NABARD
State/Central/Over Seas	Tamil Nadu
Title	Capacity building training for adoption of technology on value added products in millets
Objectives	To create awareness on millet based value added products to the SHG members
Study area	Two blocks in Thiruvannamalai district
Methodology	Training and exposures
Team Members	SMS Home Science, SS and Head
Budget	**Rs. 150000/-**

12. Trainings planned during 2023-24

12.1. Trainings for Farmers and Farm Women planned during 2023-24

S.No	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (OFT/ FLD)	Training Course Title	No. of Courses	Expected No. of participants (including SC/ST Farmers)	Names of the team members involved
1	Crop Production	Paddy	Lack of awareness on season specific varieties, Low yield, lack of awareness on IPDM	**OFT:** Assessment of Paddy varieties for higher productivity. **FLD:** Demonstration of Rice reap	ICM practices for paddy	3	60	SMS Agronomy, SMS Plant protection., SS & Head
		Paddy	Adequate use of inorganic fertilizer leads to loss of soil fertility.	**FLD:** Demonstration of improved Kavuni CO-57 under organic farming	Integrated organic farming in traditional paddy	2	40	SMS Agronomy, SMS Plant protection., SS & Head
2	Crop production	Barnyard millet	Lack of awareness on high yielding variety, High incidence of pest and disease.	**FLD:** Demonstration of Barnyard millet Variety ATL 1	ICM practices for Barnyard millet	2	40	SMS Agronomy, SMS Plant protection., SS & Head

3	Crop Production	Finger millet	Cultivation of long duration and old varieties, Lack of awareness on high yielding variety, High incidence of pest and disease.	**FLD:** Demonstration of Finger millet Variety ATL 1	ICM practices for Finger millet	1	20	SMS Agronomy, SMS Plant protection., SS & Head
4	Crop Production	Redgram Blackgram, Greengram,	Cultivation of low yielding varieties, Severe incidence of YMV, Sterility mosaic virus, Powdery mildew, Shattering during harvest, Long duration, Labour intensive, Low yield.	**OFT:** Assessment of Redgram varieties for higher yield **OFT:** Assessment of effectiveness of root nodulation bacteria in blackgram	ICM practices for pulses	3	60	SMS Agronomy, SMS Plant protection., SS & Head
5	Crop Production	Groundnut	Lack of awareness on the new varieties, less drought tolerant, Cultivation of VRI 2, Incidence of Root rot, leaf spot, rust and Spodoptera, Low yield.	**OFT:** Assessment of Groundnut varieties for higher yield	ICM practices for groundnut	3	60	SMS Agronomy, SMS Plant protection., SS & Head

6	Crop Production	Maize	Cultivation of old varieties, Lack of knowledge on high yielding & drought tolerant varieties, Poor yield, Lack of knowledge on value addition. High incidence of Fall army worm.	-	Improved maize production technologies	1	20	SMS Agronomy, SMS Plant protection, SS & Head
7	Crop Production	Sugarcane	Lack of awareness on the new varieties, Irrigation schedule, Low yield and lack of knowledge about cultivation practices	-	ICM practices for sugarcane	1	20	SMS Agronomy, SMS Plant protection, SS & Head
8	Horticulture	Ridge gourd Bitter gourd, Snake gourd,	Low fruit set, Lack of adoption of improved production technologies, Maleness	**OFT**: Integrated Crop Management in Ridge gourd	Precision farming technologies	2	40	SMS Horticulture, SMS Plant protection SMS Home Science
					ICM in cucurbits	3	60	
9	Horticulture	Banana	Low bunch grade and weight	**OFT :** Integrated Nutrient Management in Banana	Precision farming technologies	2	40	SMS Horticulture, SMS Plant protection, SMS Home science
					INM in Banana	1	20	
10	Horticulture	Brinjal, Chillies, Tomato	Low yield, Flower drop, Lack of adoption of location specific hybrids/varieties, Lack of application of growth	**OFT :** Assessment of Improved hybrids for higher	Integrated Crop Management technologies	3	60	SMS Horticulture, SMS Plant protection, SS & Head

			regulators, Lack of adoption of improved technologies, Imbalanced nutrition,	productivity in Tomato **OFT:** Assessment of microbial inoculants for yield enhancement in Chilli **FLD:** Demonstration of improved variety VRM(Br)2.				
			Low germination rate, Poor quality seedlings and field establishment	-	Improved nursery management technologies	2	40	SMS Horticulture, SMS Plant protection, SS & Head
		Bhendi	Lack of adoption of improved production technologies	**-**	Integrated Crop Management technologies	1	20	SMS Horticulture, SMS Plant protection, SS & Head
11	Horticulture	Watermelon	Low yield due to cultivation of local variety, Non adoption of improved production practices	**FLD:** Demonstration of watermelon variety arka shyama	ICM in watermelon	1	20	SMS Horticulture, SMS Plant protection, SMS Home Science

12	Horticulture	Turmeric	Shortage of quality seed rhizomes, Imbalanced nutrition and incidence of leaf spot, rhizome rot, sucking pest and lack of knowledge on IDM practices.	**FLD :** Demonstration of TNAU Micro Nutrient mixture in Turmeric	ICM in Turmeric	1	20	SMS Horticulture, SMS Plant protection, SS & Head
13	Horticulture	Vegetables	Lack of knowledge on organic farming technologies	**-**	Organic vegetable production technologies	2	40	SMS Horticulture, SMS Plant protection, SS & Head
14	Horticulture	Tuberose	Low yield, Non adoption of improved production technologies and varieties, High incidence of nematode, Mealy bug and Sucking pests.	**FLD :** Demonstration of Integrated Crop Management in Tuberose	Integrated Crop Management technologies	1	20	SMS Horticulture, SMS Plant protection, SS & Head
15	Soil Health and Fertility Management	Horticultural crops	Imbalanced nutrition	**-**	Integrated Plant Nutrition system.	1	20	SMS, Horticulture, SS & Head
16	Fodder Production and Management	Fodder	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	**FLD:** Demonstration on mixed fodder (10 cent model)	Mixed fodder production technology	1	20	SMS Agricultural Extension. SMS Animal Science

17	Livestock Production and Management	Cow	Low milk production, High disease incidence. Infertility due to repeat breeding, Mastitis and Wound.	**OFT:** Assessment of wound healer in cattle	Integrated Disease Management	2	40	SMS Animal Science, SS & Head
				FLD: Demonstration of Teat Protect in Milch Cow	Mastitis management in cow	2	40	SMS Animal Science, SS & Head
			Lack of awareness on clean milk production.	-	Clean milk production	2	40	SMS Animal Science, SS & Head
			High cost of feed, Lack of awareness on low cost feed formulation.	-	Feed production and management	1	20	SMS Animal Science, SS & Head
18	Livestock Production and Management	Sheep & Goat	Lower body weight gain in lambs, High kid mortality, High infestation of ecto and endo parasite.	**OFT :** Assessment of milk replacer for lambs **OFT:** Assessment of insecticides for the control of ticks in Goat. **FLD:** Demonstration of herbal anthelmintic bolus for sheep.	Integrated Nutrient Management	3	60	SMS Animal Science, SS & Head
					Integrated Disease management in sheep and goat	2	40	
					Importance of deworming and vaccination in small ruminants	2	40	

				FLD: Demonstration of Amino Biotic mix for Goat				
19	Poultry Production and Management	Poultry	Lack of awareness on improved breeds, Low body weight, High mortality in backyard condition, Low disease resistance**.**	**FLD :** Demonstration of Probeads EC to improve the health and productivity of Desi Chicken. **OFT:** Assessment of poultry breeds under backyard condition	Production and Disease management in native chicken	2	40	SMS Animal Science, SS & Head
			Lack of awareness on improved breeds, Low body weight, Low number of eggs		Backyard poultry farming	2	40	SMS Animal Science, SS & Head
			High feed cost, Imbalanced nutrient supply of scavenging birds.	**-**	Feed management in poultry	2	40	SMS Animal Science, SS & Head
		Quail	Lack of awareness on improved breeds, Low number of eggs	**-**	Japanese quail farming	2	40	SMS Animal Science, SS & Head
20	Livestock Production and Management	Piggery	Lack of knowledge on Piggery farming	**-**	Piggery farming	1	20	SMS Animal Science, SS & Head

21	Home Science/Women empowerment	Paddy, Millets& Pulses	Lack of awareness value addition in traditional rice in millets. Low market price. Lack of awareness on alternate sources for refined wheat flour.	**FLD:** Demonstration of nutrient dense ready to use (RTU) multigrain mix	Preparation of traditional rice and millet based products.	2	40	SMS Home science, SS & Head
22	Home Science/Women empowerment	Pulses	Lack of awareness on storage methods, high incidence of storage pests.	**OFT :** Assessment of suitable pulse storage techniques	Demonstration on IRRI super grain bags and sweet flag.	2	40	SMS Home science, SS & Head
23	Plant Protection	Paddy	Lack of awareness on IPDM practices, Blast, Stem borer, leaf folder, Leaf spot, BLB, False smut and BPH, Rat and wild boar damage.	**FLD:** Demonstration on IPDM in Paddy	Integrated pest & disease management in paddy	3	60	SMS Plant protection, SMS Agronomy SS & Head
		Maize	Lack of awareness on IPDM practices, fall army worm, downy mildew.	**FLD:** Demonstration of refined IPM Module for Maize Fall Armyworm	Integrated pest management in maize	2	40	SMS Plant protection, SMS Agronomy SS & Head
24	Plant Protection	Blackgram, Greengram	Lack of awareness on Resistant variety, pod borer and Poor yield. Severe incidence of YMV	**OFT:** Assessment of Mungbean Yellow Mosaic Virus resistant Blackgram varieties	Integrated pest & disease management	2	40	SMS Plant protection, SMS Agronomy SS & Head

25	Plant Protection	Groundnut	Incidence of root rot, tikka leaf spot, Rust Spodoptera and Helicoverpa and wild boar. Poor yield.	**OFT:** Assessment of bio repellants against wild boar in Groundnut **FLD :** Demonstration of IPDM in Groundnut	Integrated pest & disease management in Groundnut	2	40	SMS Plant protection, SMS Agronomy SS & Head
26	Plant Protection	Sugarcane	Yield loss due to different borers and severe incidence of root grub.	-	Integrated pest management in sugarcane	1	20	SMS Plant protection, SMS Agronomy SS & Head
27	Plant Protection	Banana	Lack of knowledge on wilt, Nematode, weevil, leaf spot, Improper management practices and lack awareness on IPDM.	**OFT :** Assessment of biological methods for the management of fusarium wilt in banana	Integrated disease management	1	20	SMS Plant protection, SMS Horticulture. SS & Head
28	Plant Protection	Tomato	Lack of knowledge on disease resistant hybrids, Pinworm, wilt, root rot, early blight, helicoverpa, Tospo virus, Whitefly, Nematode incidence	**OFT :** Assessment of biological methods for the management of root knot nematode in Tomato	Integrated pest and disease management	1	20	SMS Plant protection, SMS Horticulture. SS & Head

29	Plant Protection	Brinjal, Chilli	Thrips, die back, powdery mildew, Shoot and Fruit borer, wilt, root rot, little leaf and blight, yield loss.	**FLD:** Demonstration of IPDM in Chilli	Integrated pest and disease management	3	60	SMS Plant protection, SMS Horticulture. SS & Head
30	Plant Protection	Biter gourd, Snake gourd & Watermelon	Severe incidence of fruit fly, mosaic, sucking pests, poor yield.	**-**	Integrated pest and disease management	2	40	SMS Plant protection, SMS Horticulture.
31	Plant Protection	Mulberry	Root rot, poor quality leaf for silkworm.	-	Integrated Disease Management	1	20	SMS Plant protection, SS & Head
32	Enterprises development	Mushroom	Lack of awareness on mushroom value added products. Low market price during on season,	**FLD:** Demonstration of Ready to eat and ready to Cook Mushroom products – EDP mode	Preparation of ready to use mushroom products	2	40	SMS Home science, SS and Head.
			Lack of knowledge on alternate variety, Low income	**-**	Production technologies for oyster mushroom	2	40	SMS Plant protection, Home science, SS & Head
		Production of honey	Lack of awareness on bee keeping, Low income.	**-**	Bee keeping technologies	2	40	SMS Plant protection, SMS Agrl. Extn.

33	Fisheries	Fish farming	High incidence of mortality due to *Aeromonas hydrophila.* Low yield in existing varieties (4 t/ha.). Higher cost of feed	**-**	Fish farming	1	20	SMS Animal Science, SMS SS & Head
34	Production of Inputs at site	Vermi compost	Low soil fertility, Low yield, Lack of knowledge on composting techniques	**-**	Compost production technology	2	40	SMS Agronomy, SMS Agrl. Extn.
35	Capacity Building and Group Dynamics	Producer company	Low market price	-	Various Business Avenues in agriculture.	2	40	SMS Agrl. Extn. SS and Head
		ICT	Poor technology transfer mechanism and lack of awareness on soil fertility	**-**	Mobile apps	2	40	SMS Agrl. Extn. SMS Animal Science
36	Agro-forestry	Forest trees	Lack of awareness on improved agro forestry systems	-	Agro forestry systems for income generation	1	20	SMS Horticulture, SMS Plant Protection
37	Others- Balanced diet	Nutrigarden	Imbalanced diet, improper utilization of household waste water	**-**	Nutrigarden for balanced diet	2	40	SMS Home science, Horticulture, SS and Head
38	Others- Value addition	Groundnut	Lack of awareness on non dairy flavoured milk and Low market price.	**FLD :** Demonstration of non dairy flavoured milk beverages from peanut	Preparation of groundnut based value added products.	2	40	SMS Home science, SMS Agrl. Extn.

39	Others- Value addition	Vegetables	Lack of knowledge on value addition. Low market price, Poor Shelf life of fruits and vegetables, Lack of Post harvest facilities.	-	Preparation dehydrated vegetables	2	40	SMS Home science, SMS Horticulture, SMS Agrl. Extn.
40	Others- Value addition	Amla	Low market price during season, lack of awareness in value addition.	-	Preparation of value added products from Amla	2	40	
41	Others- Value addition	Medicinal plants	Lack of adoption of improved production and post harvest management technologies.	-	Value addition in medicinal plants	2	40	SMS Home science, SMS Agrl Extn., SS and Head
42	Others- Value addition	Milk	Low shelf life of paneer, Bland flavour of paneer, Lack of variety in paneer.	-	Preparation of spice and herbs incorporated panneer	2	40	SMS Home science, SMS Animal Science, SMS Agrl. Extn
43	Drudgery reduction	Field crops	Acute labour scarcity, Time consuming process, lack of knowledge in women friendly equipments.	-	Drudgery reducing farming equipments	2	40	SMS Home science, SMS Agrl. Extn
TOTAL					**-**	**110**	**2200**	

12.2. Trainings for Rural Youth planned during 2023-24

S. No	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (OFT/ FLD)	Training Course Title	No. of Courses	Expected No. of participants	Names of the team members involved
1	Nursery Management of Horticulture crops	Fruits and vegetables	Shortage of availability of quality planting materials	-	Nursery management in horticultural crops	1	20	SMS Horticulture, SMS Plant Protection, SS & Head
2	Training and pruning of orchards	-	-	-	-	-	-	-
3	Protected cultivation of vegetable crops	-	-	-	-	-	-	-
4	Commercial fruit production	-	-	-	-	-	-	-
5	Integrated farming	Enterprises	Lack of awareness	-	Awareness on IFS	1	20	All SMS
6	Seed production	Millets	Lack of knowledge about millet cultivation	-	Production Technology for Millet cultivation	1	20	SMS Agronomy, SMS Plant Protection
7	Production of organic inputs	Paddy	Lack of awareness	-	Traditional Preparations as organic inputs	1	20	SMS Agronomy, SMS Plant Protection, SS & Head

		Horticultural crops	Low productivity and soil fertility reduction	-	Organic farming in horticultural crops	1	20	SMS, Horticulture, SMS Plant protection SMS Agronomy
		Field and horticultural crops	Intensive application of pesticides, Residual effects, Resurgence development and Lack of knowledge on bio pesticides.	-	Bio pesticides production	1	20	SMS Plant protection SMS Agrl Extn.,
8	Planting material production	-	-	-	-	-	-	-
9	Vermi-culture	-	-	-	-	-	-	-
10	Mushroom Production	Mushroom	Lack of knowledge on alternate variety, Low income	-	Production technologies for oyster mushroom	2	40	SMS Plant protection, SMS Home science, SS & Head
11	Bee-keeping	Bee Keeping	Lack of awareness on bee keeping, Low income.	-	Bee keeping technologies	1	20	SMS Plant protection, SS & Head

12	Sericulture	-	-	-	-	-	-	-
13	Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-
14	Value addition	Millets	Lack of awareness in value addition, Low market price during season.	-	Preparation millet based value added products	2	40	SMS Home science, SMS Agronomy, SS & Head
		Mushroom	Lack of awareness in value addition.	-	Preparation of value added products in mushroom	1	20	SMS Home science, SMS Plant Protection, SS & Head.
15	Small scale processing	-	-	-	-	-	-	-
16	Post Harvest Technology	-	-	-	-	-	-	-
17	Tailoring and Stitching	-	-	-	-	-	-	-
18	Rural Crafts	-	-	-	-	-	-	-
19	Production of quality animal products	-	-	-	-	-	-	-
20	Dairy farming	Cow	Low milk yield, Repeat breeding, Mastitis	-	Mastitis management in cow	1	20	SMS Animal Science, SMS, SS&H
21	Sheep and goat rearing	-	-	-	-	-	-	-
22	Quail farming	Japanese quail	Lack of awareness on improved breeds, Low	-	Intensive quail farming	1	20	SMS Animal Science, SMS, SS&H

			body weight, Poor livability.					
23	Piggery	-	-	-	-	-	-	-
24	Rabbit farming	-	-	-	-	-	-	-
25	Poultry production	Desi birds	Lack of knowledge on improved breeds, Low egg production, Low feed efficiency	-	Backyard poultry farming	1	20	SMS Animal Science, SMS, SS&H
26	Ornamental fisheries	-	-	-	-	-	-	-
27	Composite fish culture	-	-	-	-	-	-	-
28	Freshwater prawn culture	-	-	-	-	-	-	-
29	Shrimp farming	-	-	-	-	-	-	-
30	Pearl culture	-	-	-	-	-	-	-
31	Cold water fisheries	-	-	-	-	-	-	-
32	Fish harvest and processing technology	-	-	-	-	-	-	-
33	Fry and fingerling rearing	-	-	-	-	-	-	-
34	ICT	-	-	-	-	-	-	-
Total						**15**	**300**	-

12.3. Trainings for Extension Personnel planned during 2023-24

S. No	Thematic area	Training Course Title	No. of Courses	No. of Participants
1	Productivity enhancement in field and horticultural crops	Advanced production technologies in agricultural crops	1	20
2	Integrated Pest Management	Advances on pest and disease management in agriculture	1	20
3	Integrated Nutrient management	Integrated Plant Nutrition Systems in horticultural crops	1	20
4	Rejuvenation of old orchards	-	-	-
5	Protected cultivation technology	-	-	-
6	Production and use of organic inputs	Bio pesticides production and their application methods	1	20
7	Care and maintenance of farm machinery and implements	-	-	-
8	Gender mainstreaming through SHGs	-	-	-
9	Formation and Management of SHGs	-	-	-
10	Women and Child care	-	-	-
11	Low cost and nutrient efficient diet designing	-	-	-
12	Group Dynamics and farmers organization	Business plan for Farmer producer company shareholders	1	20
13	Information networking among farmers	-	-	-
14	Capacity building for ICT application	-	-	-
15	Management in farm animals	-	-	-
16	Poultry production and management	Backyard poultry farming	1	20
17	Household food security	-	-	-
18	Any other-Organic farming	Organic production technologies in horticultural crops	1	20
19	Any other-Value addition	Value addition in millet	1	20
20	Any other-Value addition	Value addition in groundnut	1	20
Total			**9**	**180**

12.4. Skill trainings and vocational trainings planned during 2023-24

S.No.	Training title	Duration (Days)	No. of programmes	Sponsoring agency	Participants (Nos.)	Name of the team members
1	Natural Farming/Organic farming	3 days	1	-	15	SMS Agronomy, SS& Head
2	Bio pesticides production and application.	3 days	1	-	15	SMS Plant Protection, SMS Agronomy, SS& Head
3	Value addition in millets	3 days	1	-	15	SMS Home science, SMS Agronomy
4	Poultry rearing	3 days	1	-	15	SMS Animal Science, SS& Head
Total Courses		**-**	**4**	-	**60**	-

12.5. Sponsored trainings planned during 2023-24

S.No.	Thematic area and the Crop/Enterprise	Training title	No. of programmes and Duration (days)	Type of Clientele*	Expected No. of participants	Sponsoring agency	Names of the team members involved
1	Crop Management	Organic production in fruits and vegetables	1 (6 days)	Rural youth	28	ATMA	SMS Horticulture, SMS Agrl. Extn. SMS Plant protection.
2	Crop Management	Improved Groundnut cultivation and value addition	4 (3 days)	Practicing farmers and farm women	100	Tamil Nadu Rural Transformation Project	SMS Agronomy, SMS Plant protection, SMS Home Science

3	Organic farming	Integrated Organic farming System	10 Nos (3 days)	Practicing farmers & Rural youth	200	NABARD	SMS Agrl. Extn, SMS Animal Science
4	Value addition (Fruits & vegetables)	Fruits and vegetable preservation techniques.	1 (3 days)	Women	20	National Mission on Food Processing	SMS Home science, SMS Horticulture
5	Value addition (Field crops)	Preparation of instant mix.	1 (3 days)	Women	20		SMS Home science, SMS Agronomy
6	Value addition (Field crops)	Preparation of Bakery products.	1 (3 days)	Women	20		SMS Home science, SMS Agronomy
Total					**388**	-	-

13. Extension programmes planned during 2023-24

S. No.	Extension programme	No. of programmes	No. of Participants	Team member involved
1	Advisory Services including mobile	400	1500	Senior Scientist and Head, SMS Agrl. Extension, SMS Agronomy, SMS Horticulture, SMS Home Science, SMS Plant Protection, SMS Animal Science.
2	Diagnostic visits	5	75	
3	Field Day	20	625	
4	Group discussions	5	180	
5	Kisan Gosthi/Kisan Mela	3	300	
6	Film Show	10	200	
7	Exhibition	5	500	
8	Scientists' visit to farmers field	50	400	
9	Plant/Soil health/Animal health camps	12	600	
10	Ex-trainees Sammelan	2	80	
11	Farmers' seminar/workshop	2	100	
12	Method Demonstrations	20	400	
13	Celebration of important days	4	300	
14	Special day celebration	2	200	
15	Exposure visits	2	50	
16	Technology week	1	200	
17	FFS	1	25	
18	Farm innovators meet	1	30	
19	Awareness programs	5	270	
20	Lecture delivered	50	1250	
21	Farmers visit to KVK	220	250	
Total		**820**	**7535**	
Other Extension activities				
1	TV/Radio Programme	10	-	
2	News coverage	50	-	
3	Popular Articles	10	-	
4	Research Article	1	-	
5	Extension Literatures	20	-	
6	Kisan Mobile Advisory Services	40	-	

13.1 Impact Studies

a. Impact of CFLD Oilseeds on yield, economics and spread of technology.

Title	**Impact of CFLD Oilseeds on yield, economics and spread of technology in the district.**
KVKs Involved	KVKs with CFLD (Oilseeds), **Team Leader :** V.Suresh, SMS Agri. Extension.
Rationale	CFLD is being conducted under NMOOP to improve the oilseed production in the country hence it is imperative to assess its impact in the district.
Objective	To study the yield, economics and technology spread among farmers.
Methodology	Total sample size : 60 Assessment Year : Past 3 / 5 years. Data collection Tool : Interview Schedule (Common Template).
Expected Outcome	**Output :** Varietal spread, Horizontal spread, Technology adoption , Yield & BCR. **Outcome :** To evolve / develop suitable KVK intervention, Midterm correction Policy decision
Budget	**Rs.10,000/-** (Survey schedule, focused group discussions / meetings).

b. Documentation and Potential of Natural / Organic farming

Title	**Documentation and Potential of Natural / Organic farming as practiced by the farmers.**
KVK included	KVKs team, Team Leader : V.Suresh, SMS Agri. Extension.
Background	Natural farming is being practiced by farmers . A preliminary survey revealed that the natural farming practices adopted by farmers are unique to every farmer and the practices need to be documented, validated and GAP to be made available to other farmers.
Objectives	▪ To identify the farmers practicing Natural and Organic farming in Tiruvallur district ▪ To document the best Natural / Organic farming practices followed by farmers through process documentation methods.
Methodology	▪ Process documentation Interview schedule will be developed for the study and used. ▪ In addition, Audio / Video / Photography documentation will be done.
Expected output	▪ A repository of farmers practicing Natural and Organic farming will be

and outcome	made available for further research and interventions. ▪ A list of Organic and Natural farming practices will be available for further research / extension.
Budget	**Rs. 10000/-** (Video documentation, survey schedule, focused group discussions / meetings).

14. Activities proposed as Knowledge and Resource Centre during 2023-24

14.1. Technological knowledge

Sl. No.	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
1	Technology Park/ Crop cafeteria	Paddy CO51	0.001	SMS Agrl. Extn., SMS Agronomy SMS Plant protection, Farm manager
		Little millet ATL 1	0.001	
		Groundnut TMV(Gn)14	0.001	
		Groundnut TCGS 1694	0.001	
		Brinjal VRM(Br)2	0.02	SMS Horticulture, SMS Plant protection, SMS Agrl. Extn. Farm manager
		Chilli Arka Saanvi	0.01	
		Tomato COTH4	0.02	
		Multi fruit garden	0.02	
		Nutrigarden	0.02	
		Herbal garden	0.02	
2	Demonstration Units	Azolla production unit	1 No	SMS Agronomy SMS Agrl. Extn. Farm manager
		Vermicompost production	1 No	
		Food processing units	1 No	SMS Home Science SMS Agril. Extn.
		Fruit orchard	7.0	SMS Horticulture SMS Plant Protection Farm manager
		Miyawaki Agroforestry	0.34	
		Mushroom production	1 No	SMS Plant protection
		Bee hives	5 No	SMS Plant Protection Farm manager
		Poultry	1 No	SMS Animal Science Farm manager
		Dairy	1 No	
		Duck	1 No	
		Goatery	1 No	

		Quail	1 No	
		Turkey	1 No	
		Fish	1 No	
		Hatchery	1 No	
		Fodder cafeteria	1 No	
		Nursery	1 No	SMS Horticulture Farm Manager
		Mist Chamber	1 No	
3	Lab Analytical services	Soil	1 No	PA Lab Technician SMS Plant Protection
		Water		
		Plant	1 No	
4	Technology Week	Drought mitigation technologies for Groundnut and pulses. Direct sown paddy Mechanization in groundnut Integrated Organic farming System IPDM modules Scientific livestock farming Precision farming in vegetables High density planting in fruit crops. Soil health enhancement Foliar nutrition Value addition in millets	1 No	All staff

14.2 Technological products planned to be produced in the KVK during 2023-24

Sl.No.	Category	Name of the product	Quantity (Qtl.)/ Number planned to be produced during 2022-23	Names of the team members involved
1	Seeds	Paddy CO 51 (TFL)	50	SMS Agronomy SMS Plant protection SMS Agrl. Extn. Farm Manager
		Black gram VBN-8 & 11	7	
		Groundnut VRI 10/TCGS1694	10	
		Fodder seeds	5	
		Native vegetable seeds	0.1	
2	Planting materials	Fruit plants	500	SMS Horticulture SMS Plant protection SMS Animal Science Farm Manager
		Coconut seedlings	250	
		Forest Tree seedlings	1000	
		Fodder setts	25000	

3	Bio-products	*T.asperellum*	5	SMS Plant protection PA Lab technician
		B.subtilis	5	
		Vermicompost	80	SMS Agronomy SMS Plant Protection Farm Manager
		Vermiworms	0.5	
		Azolla	1	
4	Livestock strains	Goat (Nos)	10	SMS Animal Science Farm Manager
		Poultry desi birds	500	
		Quail	1000	
5	Mushroom	Spawn	0.5	SMS Plant Protection PA Lab technician
6	Micronutrient formulation	Vegetable special	2	SMS Horticulture PA Lab technician

14.3. Technological Information

14.3.1. Technology backstopping to line departments

S.No	Category	Technological capsules / Number	Names of the team members involved
1	Agriculture	ICM in Paddy	SMS Agronomy SMS Plant Protection Senior Scientist and Head
		ICM in Blackgram	
		ICM in Groundnut	
		ICM in Millets	
2	Horticulture	Protected cultivation of vegetable crops.	SMS Horticulture, SMS Plant protection Senior Scientist and Head
		Nursery management in vegetable crops.	
		Organic farming in horticultural crops	
3	Plant protection	Integrated pest and disease management in location specific crop.	SMS Plant Protection, Senior Scientist and Head
		Oyster mushroom production.	
		Honey bee rearing.	
4	Animal Science	Integrated Disease Management in livestock and poultry.	SMS Animal Science Senior Scientist and Head
		Fodder production and management	
5	Home science	Nutrigarden and value addition of fruit and vegetables	SMS Home Science, SMS Plant protection Senior Scientist and Head.
		Value addition in millets	

14.3.2. Publications planned

S.No	Category of publication	Number	Names of the team members involved
1	Leaf lets	ICM in Paddy	SMS Agronomy, SMS Agrl. Extn. SMS Plant protection Sr. Scientist & Head
		ICM in millets	
		ICM in Black gram	
		Bio pesticides production technology	SMS Plant protection Senior Scientist & Head
		Biological management pest and diseases	
		Growth regulator application in vegetables	SMS Horticulture
		Value addition in vegetables	SMS Home Science, SMS Agrl. Extn.
		Value addition in traditional rice varieties	
2	Pamphlets	ICM in groundnut	SMS Agrl. Extn. SMS Plant protection Sr. Scientist & Head
		Vermicompost production	
		ICM in Brinjal	SMS Horticulture SMS Plant protection SMS Agrl. Extn.
		ICM in cucurbits	
		Nursery management in vegetable crops	
		IPDM in Paddy	SMS Plant protection Senior Scientist & Head
		IPDM in horticultural crops	
		Bee keeping technologies	
		Fodder production technologies	SMS Animal Science SMS Agrl. Extn.
		Backyard poultry production	
		Japanese quail rearing	
		Value addition in fruits and vegetables	SMS Home Science
		Value addition in millets and pulses	
2	Booklet	Organic farming	SMS Agronomy SMS Plant protection Senior Scientist and Head
		Nursery management in horticultural crops	SMS Horticulture SMS Plant protection Senior Scientist and Head
		IPDM in Paddy	SMS Plant protection Senior Scientist and Head
		Production and value addition in Banana	SMS Horticulture SMS Home Science
		Fodder production technology	SMS Animal Science
		Nutritional garden for balanced diet	SMS Home Science SMS Horticulture

15. Additional (Collaborative) Activities Planned during 2023-24

S.No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	NABARD	CAT training	1 Nos.	125000.00	All SMS
		FSPF	1 No	100000.00	
2	TNVKP	ICM in Groundnut	1 No	100000.00	

16. Revolving Fund

16.1. Status of Revolving fund

Opening balance as on 01.04.2022 (Rs.)	Receipts during 2022-23 (Rs)	Expenditure incurred during 2022-23 (Rs.)	Closing balance as on 31.03.2023 (Rs.)
1679066.00	3721573.00	3607960.00	**1792679.00**

16.2. Plan of activities under Revolving Fund during 2023-24

S.No.	Proposed activities	Expected output (Qtl / Nos)	Anticipated income (Rs.)	Names of the team members involved
1	**Seed production**			
	Paddy CO 51 (TFL)	50	150000.00	SMS Agronomy SMS Horticulture SMS Agricultural Extension. Farm Manager
	Blackgram VBN-8, 11	7	70000.00	
	Groundnut TCGS1694 & VRI 8/10	10	40000.00	
	Fodder seeds	5	300000.00	
	Native vegetable seeds	0.1	8000.00	
2	**Planting materials**			
	Fruit plants	500	65000.00	SMS Horticulture SMS Plant protection SMS Animal Science Farm Manager
	Coconut seedlings	250	25000.00	
	Forest Tree seedlings	1000	15000.00	
	Fodder setts	25000	25000.00	
3	**Bio-inputs**			
	Vermicompost	80	80000.00	SMS Agronomy Farm Manager
	Vermiworms	0.50	20000.00	

	Azolla	1	10000.00	
	Trichoderma asperellum	5	87500.00	SMS Plant protection PA Lab Technician
	Bacillus subtilis	5	87500.00	
4	Goat	10	30000.00	SMS Animal Science Farm Manager
5	Poultry Chicks- Desi bird	500	100000.00	
	Japanese quail	1000	45000.00	
6	Spawn	0.5	5000.00	SMS Plant protection PA Lab Technician
	Mushroom	0.2	4000.00	
	Value added products – pickles, instant mix, Oil	5	100000.00	SMS Home science
7	**Fruit production**			
	Mango	20	80000.00	SMS Horticulture SMS Plant protection Farm Manager
	Sapota	1	3000.00	
	Tamarind	1	16000.00	
	Amla	0.5	2000.00	
	Coconut	700	70000.00	
8	**Vegetable production**			
	Brinjal	2	4000.00	SMS Horticulture SMS Plant protection Farm Manager
	Chillies	1	4000.00	
9	Vegetable special (MN mixture)	2	35000.00	SMS Horticulture PA Lab Technician

17. Activities of soil, water and plant testing laboratory during 2023-24

S. No.	Type	Through	No. of samples	No of soil health cards	Names of the team members involved
1	Soil	Min soil testing lab	-		PA Lab Technician SMS Plant Protection
		Traditional lab	1000		
		AAS	-		
2	Water		100		
3	Plant		20		

18. Plan of activity for Institutional Farm

S.No.	Activity	Area (ha)	Names of the team members involved
1	Production and supply of paddy seeds	2.0	SMS Agronomy SMS Agricultural Extension, Farm Manager
2	Production and supply of blackgram seeds	2.0	
3	Production and supply of groundnut seeds	4.5	
4	Production and supply of quality fruit plants	0.1	SMS Horticulture, Farm Manager
5	Production and supply of quality Forestry tree seedlings	0.2	
6	Production and supply of quality coconut seedlings	0.1	
7	Production and sale of fruits for revolving fund	8.09	SMS Horticulture, SMS Plant Protection Farm Manager
8	Production and sale of vegetables for revolving fund	0.3	

19. Demonstration units in KVK premises

S.No.	Name of Demo unit	Capacity for production (specify units)	Names of the team members involved
1	Vermicompost and worms production	8000 kg	SMS Agronomy
2	Vegetable special Micro nutrient mixture	300 kg	SMS Horticulture
3	Azolla production	50 kg	SMS Agronomy
4	Bio pesticides and fungicides production	1200 kg	SMS Plant Protection
5	Mushroom production	100 kg	
6	Slatted floor Goat unit	10 Nos.	SMS Animal Science
7	Backyard poultry	500 Nos.	
8	Japanese quail	1000 Nos.	
9	Fish	50 kgs	
10	Value added products pickles, Instant mix, Groundnut oil	500 kg	SMS Home Science

20. E-linkage activities status / proposed during 2023-24

Activity	Particulars	No. of farmers in database/ involved in activity/ downloads/ users etc
Website	Link : www.kvkthiruvannamalai.com	48880
Mobile App	Name and link : -	Smart crop mobile app is under construction.
ICT initiative	-	-
KVK portal (update status)	Infrastructure details & photos uploaded (no):15 Events uploaded : 2332 News items submitted : 116	-
KVK mobile App of ICAR	Downloaded and used by scientists (no.)	12
Other mobile Apps in use by KVK	Uzhavan, Nithra, Santhai, Pasumai Vivasayam	8 Technical experts
mKisan of DAC & FW	Messages to the district database farmers 3 in a month.	40000
Social media		
a) Whatsapp groups	No. of groups/KVK: 7	1600
b) Face book	Link : https://www.facebook.com/kvk.thiruvannamalai	4957
c) Twitter	Handle name:@kvktvm	327, 42 follows
d) You tube	No. of subscribers	1.51K
Membership / participation in online digital platforms for services/ marketing etc.	Participated	-
KVK Blogs etc.	-	-
Collaboration with public/ private firms for audio/ video conferencing etc	Agency : ICICI foundation, Aaramadhu FPCL, SST trust, TNVKP, HAND in HAND, AAVIN MoU (Yes/No): No. No. of programs planned: 9	-
Any other (specify)	-	-

21. Farmer's Field School planned

S. No	Thematic area	Title of the FFS	No. of members in FFS group	Budget proposed in Rs. In lakhs
1	ICM	Integrated Crop Management in Little millet	25	30000.00

Details of FFS

Activity	Session-1	Session-2	Session-3
FA	Baseline collection, Problem identification and prioritization, Introduction to FFS Finalizing FFS plot, session days, drafting rules and regulations Input assessment	Main Field Preparation	Varieties uses and benefits
LTE		Soil profile study, soil sampling	
SS		--	Know your soil
ST		--	EFYM preparation
Others		Ballot Box Exercise	–
Activity	**Session-4**	**Session-5**	**Session-6**
FA	Bio fertilizers and organic manures, Field layout and sowing	Spacing, Plant population, Gap filling, sowing techniques	AESA concept
LTE	Finalizing LTEs	--	LTE observation
SS	Germination test	--	Plant nutrient uptake studies
ST	Seed & soil application with bio fertilizer	--	--
Others	Soil Test result sharing, Water holding capacity and organic manure	Spacing, Plant Population maintenance	Observations on germination
Activity	**Session-7**	**Session-8**	**Session-9**
FA	AESA	AESA, Fertilizer and micro nutrient mixture	Irrigation management Techniques.
LTE	Weeding & Intercultural operations	--	--
SS	--	-	Identification of pests
ST	Implements for weeding	Deficiency symptoms and importance of micronutrient	--
Others	Weeding operations	--	-
Activity	**Session-10**	**Session-11**	**Session-12**
FA	AESA, Pesticide application methods	Disease control measures	AESA
LTE	LTE observation	--	--

SS	Organic pesticides	IDM techniques	Composting techniques
ST	IPM techniques	--	Marketing options
Others	Insect Zoo	Fungicides	Groundnut value added products

Activity	Session-13	Session-14
FA	Harvesting	Field day
LTE	--	--
SS	--	--
ST	--	Economics of crop production
Others	Storage techniques	Post knowledge test - BBE

FA- Field Activity, LTE- Long Term Experiment, SS- Short Studies, ST- Special Topic, AESA – Agro Ecosystem Analysis, BBE- Ballot Box Exercise

Budget

S.No	Item	Amount (Rs.)
1	Critical inputs – Seeds, Soil Testing, Fertilizers, & Bio control agents	7,000.00
2	Main field Preparation, Inter culture operations, weeding, harvesting	2,500.00
3	Distribution of IPM Kit @ Rs 200 per kit for 25 numbers	5,000.00
4	Banner, charts, Pencil, sketch pen, field board , inaugural session refreshments and miscellaneous	3,000.00
5	Refreshment @ Rs. 30 per trainee for 14 no. of sessions 25*14**20	10,500.00
6	Field day celebration	2,000.00
Total Rs.		**30000.00**

22. Details of Innovative Farmers network established

A KVK innovative farmer's network covering 200 farmers has been established through whatsapp messenger for the procurement and sale of agri commodities. The members of the group are regularly sharing, technical and marketing information among them. Most of the content shared has been knowledge intensive with a mix of personal farming experiences.

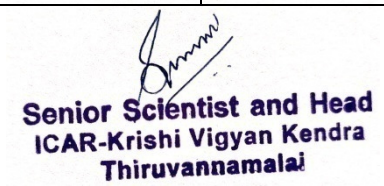
23. Budget - Details of budget utilization (2022-23) up to 31st March 2023 (Rs. In lakhs)

S. No	Particulars	Sanctioned Grant for 2022-23	Released for 2022-23	Expenditure for the period from 1-4-2022 to 31-3-2023
A	**RECURRING**			
1	**Pay & Allowances**	152.63	152.63	133.78
2	**Travelling Allowances**	1.40	1.40	1.40
	a) Field activities &programmes			
	b) Training programmes			
3	**Contingencies**			
A	*Office Contingencies*	4.69	4.69	6.41
B	*Technical Programmes including TSP/ SCSP*	8.31	8.31	9.19
	Total of Contingencies			
	Sub Total of Recurring Items (1+2+3)	**167.03**	**167.03**	**150.78**
4	**NON-RECURRING CONTINGENCIES:**			
	Works	5.00	5.00	5.04
	Furniture& Equipment (IT)	-	-	-
	Vehicle	9.00	9.00	9.17
	TSP (creation of physical assets)	-	-	-
	SCSP Component (Creation of Physical assets)	6.40	6.40	6.42
	Sub Total of non-recurring Items (4)	**20.40**	**20.40**	**20.63**
	GRAND TOTAL	**187.43**	**187.43**	**171.41**

24. Details of Budget Estimate (2023-24) based on proposed action plan(Rs. In lakhs)

S. No	Particulars	Budget Estimate for 2023-24
A	**RECURRING ITEMS**	
1	**Pay & Allowances**	165.00
2	**Travelling Allowances**	3.00
a	Field activities &programmes	
b	Training programmes	
3	**Contingencies**	
	Office Contingencies	
a	Stationery, telephone, stamps and other expenditure on office running	7.00
b	POL, repair of vehicles, tractor and equipment including hiring of vehicle	
4	**Technical Programmes**	6.50
a	Rs.150/- per person per day towards food and refreshments for KVK training programmes for farmers/extension personnel	
b	Teaching materials for training and demonstrations	
c	Training of extension functionaries	
d	Publications of extension literature for farmers and extension functionaries	
e	Honorarium for trainers	
f	On Farm Testing (Problem Oriented)	
g	Front Line Demonstration on major crops including oilseeds & pulses, fodder crops, animal husbandry, fisheries, etc.,	
h	Kisan Meals /Farmers Fair (at KVK farm)	
i	Library (Purchase of newspaper, journals, etc.,)	
j	Maintenance of farm	
k	Value chain management of FPO/Integrated Farming System (IFS)/Farmers Field School(FFS), EDP	
l	Soil Health Card (SHC)	
m	Website/mobile app etc.	
n	SCSP Component	3.50
	Total of Contingencies	**17.00**
	Total of Recurring Items	**185.00**

S. No	Particulars	Budget Estimate for 2023-24
B	**NON-RECURRING ITEMS:**	
a	(i).Construction of Buffer roofing for seminar hall in Administrative building (2400 Sft)	15.00
	(ii) Establishment of Bio control agents Lab (200 Sft),	5.00
	(iii) Establishment of spawn and mushroom production unit	4.50
	(iv) Bore well – 2Nos (450 ft each)	14.00
	(v) Solar fencing for 2000 Sqm	4.50
	(vi) Renovation of old buildings (Staff quarters and farmers hostel)	3.00
	(v) Electrical and plumbing works for Administrative building	4.50
b	Furniture and Equipment's (Office automation)	5.00
c	Computer and its accessories	3.00
d	TSP (creation of physical assets)	0.00
e	SCSP Component (Creation of Physical assets)-Model IFS unit and Farm pond	15.00
f	Lab Equipment's for Soil Testing Lab	4.50
	Total of Non-Recurring Items	**78.00**
	GRAND TOTAL (A+B)	**263.00**



Signature of the Senior Scientist and Head of the KVK

Forwarded **Verified** **Approved**

[DEE/Chairman] **[Nodal Officer (ATARI)]** **[Director (ATARI)]**

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