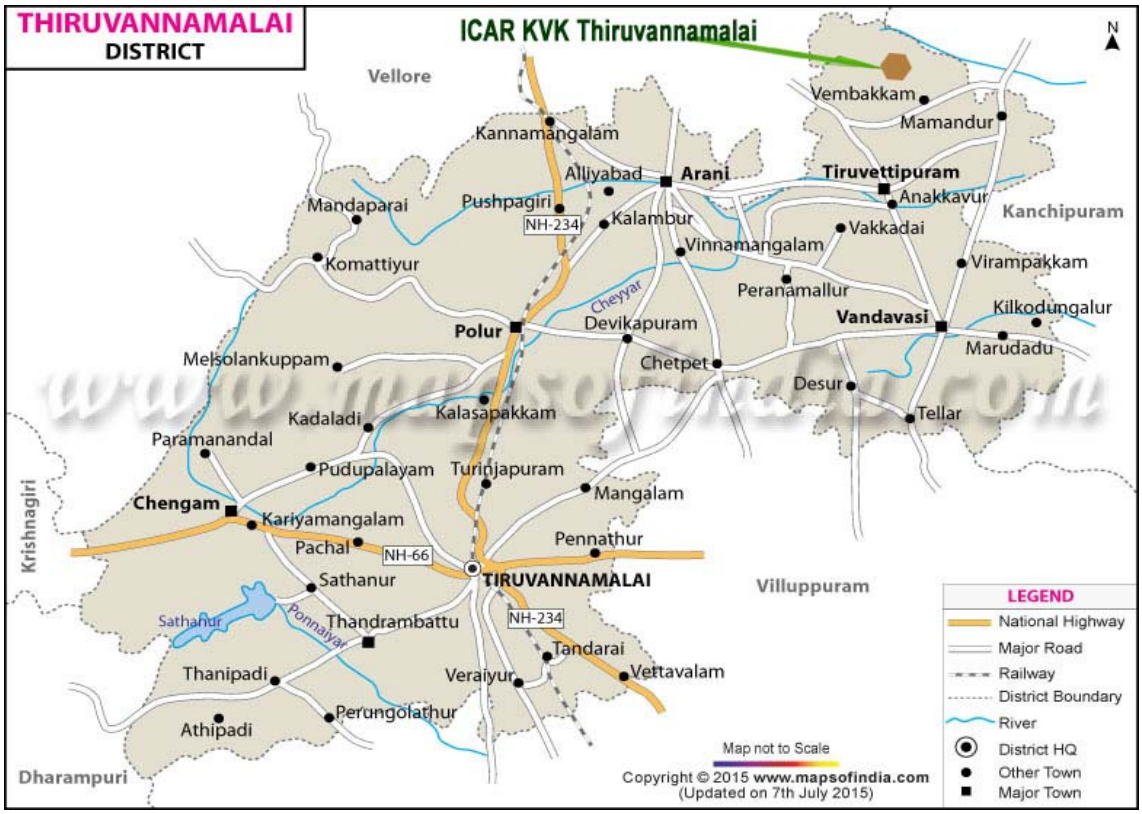
ACTION PLAN 2022-23

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	28.02.2022

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



2. Details of staff as on date (31-03-2022)

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	Agrl. Extn.	20.01.2014	Level 10
03		Mr.N.Rameshraja	Horticulture	04.07.2003	
04		Mrs.T.Margaret	Home Science	04.07.2003	
05		Mr.P.Narayanan	Plant Protection	08.01.2014	
06		Dr.K.Mayakrishnan	Animal Science	01.07.2019	
07		Miss.M.Ishwarya	Agronomy	10.03.2021	
08	Programme Assistant/T4-1	Mr.O.Sekar	-	01.09.1997	Level 6
09	Programme Assistant/T4-2	Miss.N.K.Tamilarasi	-	29.07.2019	
10	Farm Manager/T4	Miss.M.Santhi	-	28.06.2019	
11	Administrative Staff 1 (Assistant)	Mrs.M.Viji	-	01.02.1993	
12	Administrative Staff 2 (Stenographer Grade III)	Mrs.A.K.Geetha	-	01.10.1997	Level 4
13	Driver/T1 - 1	Mr.S.Janarthanan	-	01.09.1993	Level 3
14	Driver/T1 - 2	Mr.T.Selvaraj	-	01.01.1996	
15	Supporting Staff 1	Mr.T.Varadhan	-	01.02.1994	Level 1
16	Supporting Staff 2	Mr.G.Selvam	-	01.07.1995	

3. Details of SAC meeting(s) conducted during 2021-22:

Date(s) of SAC meeting(s) Conducted : 17.03.2022

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	Importance may be given to the promotion of inland fish culture among farmers.	**Shri.S.Ramesh,** President, TNBRD, Chennai	Training and awareness programme is planned for the farmers
	The KVK should promote ten cent model fodder cultivation in collaboration with line departments in the district.		Promotion of ten cent model in the FLD programme included.
	Low cost bee hive boxes production may be promoted in collaboration with other stakeholders in the district.		Identified a farmer in Jamunamarathur block in association with ICICI foundation. Planning to link the farmer with DIC and other financial institution for the commercial production.
2	Technologies on ecto parasites control in animals may be promoted among farmers.	**Dr. S.Nandakumar** KVK, Vellore.	OFT and Training programmes included in the KVK activities.
	Micro irrigation system models can be established in the KVK instructional farm.		The KVK has a plan to establish micro irrigation system in all possible demo units in the instructional farm.
3	Participatory Rural Appraisal (PRA) techniques need to be conducted to assess the problems of farmers in the district.	**Dr.C.V.Sairam** Principal Scientist, CIBA, ICAR, Chennai.	Planning to conduct PRA exercise in the DFI village and KVK adopted village in the forthcoming season.
	Location specific Integrated Farming System models need to be promoted to doubling the income of farmers.		Promotion of IFS models by the KVK is in progress. Exposure visits and trainings are planned for the year 2022-23.

4	Promotion of mechanization in millet cultivation may be given importance in the district.	**Dr.A.Nirmalakumari** Professor and Head, Centre of Excellence in Millets, Athiyanthal, Thiruvannamalai.	FLD, trainings and awareness programmes are planned in collaboration with Centre of Excellence in Millets, Thiruvannamalai.
	Importance may be given by KVK for value addition in millets.		FLD, trainings and awareness programmes are planned in collaboration with CEM, Thiruvannamalai for the SHGs, School children and Anganwadi workers.
5	Hog farming (White pig) may be promoted among farmers.	**Dr.G.Somasundaram** RJD, Department of Animal Husbandry, Thiruvannamalai	Training and awareness programme is planned for the farmers
6	The KVK may give importance and promote organic farming practices to all the Farmer Producer Organizations in the district.	**Mr.V.Sriram** DDM, NABARD, Thiruvannamalai	Planning more number of trainings and demonstration of bio inputs to Thiruvannamalai Farmer producer company consortium members are planned.
	Collaborative programmes may be organised by KVK for marketing linkages of FPO products.		Awareness, buyers sellers meet involving domestic, corporate and other stakeholders planned in collaboration with Department of Agrimarketing and Agribusiness.
7	Awareness may be created on mobile applications of TANUVAS viz., sheep & goat farming and feed calculator among farmers for the instant decision making.	**Dr. P.Balamurugan** Assistant Professor & Head, VURTC, TANUVAS, Thiruvannamalai.	Included in the FLD programme for the year 2022-23.
	Awareness programme may be created on Ranikhet disease in poultry birds.		Awareness programme, Method Demonstration, Trainings are planned.
8	Importance may be given for the promotion of organic farming or Natural farming.	**Mr.M.Shanmugam** ADA, Vembakkam, Thiruvannamalai.	More number of trainings, Exposure visits and demonstration of bio inputs are planned in the forth coming year.

9	Awareness may be created on banking schemes in Agriculture and allied enterprises among farmers.	**Mr.R.Maniraj** Lead Bank Manager, Indian Bank, Thiruvannamalai.	Collaborative trainings with DIC, Lead bank and NABARD are planned with the participation of local bankers.
10	Gift tilapia fish farming may be promoted among farmers.	**Mr.V.K.Gangadaran** Assistant Director, Fisheries and Fisherman Welfare, Vellore.	FLD, Method Demonstration, Trainings are planned.
11	Technical support may be given by the KVK on organic farming to the beneficiaries of various schemes implemented by the department of horticulture.	**Mr.E.Pandiyan** Deputy Horticulture Officer, Vembakkam, Thiruvannamalai.	More number of trainings and demonstration of bio inputs are planned in the forthcoming year for the beneficiaries of horticulture department.
12	Awareness may be created among farmers about DIC schemes.	**Mr.A.Balaguru** Assistant Director, DIC, Thiruvannamalai.	Planning to conduct trainings in collaboration with District Industrial Centre in this year.
	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.		Skill and vocational trainings are planned for the promotion of value addition in groundnut.
13	Importance may be given for promotion of organic farming in the district.	**Mr.V.Vasudevan,** Farmer, Vazhur, Vandavasi.	Trainings, Exposure visits and demonstration of bio inputs are planned in the forthcoming year.
14	Importance may be given for the promotion of solar energy based activities in agri and allied fields.	**Mr.D.Manivanan,** Farmer, Sathupperipalayam, Arni.	Awareness programme and trainings are planned for the year 2022-23.
15	Trainings may be conducted on improved technologies in tuberose cultivation.	**Mr.N.Parthasarathi** Athanur, Arni taluk, Thiruvannamalai district.	Trainings are planned in this year.

Proposed date/month of SAC Meeting to be held in 2022-23 : 16.02.2023

4.0. Capacity Building activities planned for KVK Staff

4.1. Plan of Human Resource Development of KVK personnel during 2022-23

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	New Age Skills for Mentoring Agri-Start-ups	MANAGE, Hyderabad	3 days	03-05-22 to 05-05-22
2		Governance and Management of Farmers producer organizations	ICAR - Indian Institute of Millets Research, Hyderabad	4 days	01-06-22 to 04-06-22
3	Mr.N.Rameshraja, SMS Horticulture	Promotion of Agro-forestry as Climate Risk Mitigation	MANAGE, Hyderabad	2days	25-05-22 to 26-05-22
4		promotion of Climate Resilient Horticultural Technologies in Hot Arid and Semi-Arid Regions of India*	ICAR-CIAH, Bikaner, Rajasthan	5 days	14-09-22 to 18-09-22
5	Mrs.T.Margaret, SMS Home Science	International Training Program on Nutrition Sensitive Agriculture for Nutrition secured Community	Michigan State University, USA	3 days	14-06-22 to 16-06-22
6		Women Empowerment Through Agripreneurship	IMAGE, Siripur, Bhubaneswar, Odisha	3 days	25-07-22 to 27-07-22
7	Mr.P.Narayanana, SMS Plant Protection	AESA and Ecological engineering in pest management	NIPHM, Hyderabad	5 days	25-07-22 to 29-07-22
8		Climate change: Changing pest & Disease scenarios in India. - Present status, challenges & their mgt strategies	PJTSAU, Hyderabad.	3 days	10-08-22 to 12-08-22
9	Dr.K.Mayakrishnan, SMS Animal Science	Nutritional and Health Management of Dairy Animals	SAU, GADVAU, Ludhiana, Punjab.	3 days	07-06-22 to 09-06-22
10		Integrated Fish Farming	KVAFSU, Bidar	3 days	16-08-22 to 18-08-22

11	Miss.M.Ishwarya SMS Agronomy	Soil and Water Conservation Techniques in Rainfed Areas	WALAMTARI Water and land Management Training and Research Institute, Himayathsagar, Hyderabad	3 days	10-05-22 to 12-05-22
12		Natural Farming - Principles and Practices	SAMETI, Mashobra, Shimla, Himachal Pradesh	4 days	17-05-22 to 20-05-22
13	Mr.O.Sekar, PA, computer programmer	Webinar on Application of Internet of Things (IoTs) in Agriculture	MANAGE, Hyderabad	1 day	19-10-22
14	Miss.N.K.Tamilarasi PA, Lab Technician	Carbon Credit in Agriculture - Climate Offset Mechanism	SAMETIJammu	2 days	04-07-22 to 05-07-22
15		Ensuring soil health in the scenario of climate change	ICAR-Central Agro Forestry Research Institute, Jhansi, Uttar Pradesh	3 days	04-10-22 to 06-10-22

5. Cross-learning across KVKs planned during 2022-23

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 2022-23

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, 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 and wild boar and extensive use of chemical pesticides.	1702	Hasanamapettai	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.	941		
	Tomato	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, Poor quality seedlings and field establishment. Low market price during On season. Demonstration of Nutrigarden	45		
	Fish	High mortality, Low yield, Lack of knowledge on fish farming.	22		
	Compost	Low fertility, Lack of knowledge on composting techniques.	-		
	Bhendi	Lengthy time consuming process, crucial process during harvest (Thorny stems leads cuts injuries and rashes).	24		

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.	1908		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	Siruveniyanallur	
	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.	79		
	Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency.	6738		
	Value addition	Value addition in herbal powder, Drudgery during weeding operations, Lack of knowledge on post harvest management.	-		
Vandavasi	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.	2205	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		

	Snake gourd, Bitter 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		
	Cattle	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production.	5450		
	Fruits and Vegetables	No value addition, Low market price, Lack of knowledge on value addition.	-		
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.	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		
	Snake gourd, Bitter gourd, Ridge gourd	Low fruit set, Maleness, Lack of adoption of location specific hybrids and improved technologies. Imbalanced nutrition, High incidence of mosaic, fruit fly, Sucking pests, Downy mildew and powdery mildew.	88		
	Cattle	Low milk production, High disease incidence, Ecto parasites infestation, Infertility due to repeat breeding and Lack of awareness on clean milk production.	5466		

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	FLD, Training, Extension activities.
	Tomato	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, Wilt, Imbalanced nutrition, Poor quality seedlings and field establishment. No value addition.	66		
	Cassava	Low yield, Lack of adoption of location specific varieties, Imbalanced nutrition, Mealy bug, White fly, Mosaic virus.	196		
	Machinery	Labour shortage, Lack of knowledge on mechanization	-		
	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		
	Nutritional security	Wide spread prevalence on macro and micronutrient deficiency, Lack of awareness on linkage between sanitation, health and nutrition.	-		FLD, Training, Extension activities.
Kalasapakkam	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.	2150	Mottur	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		
	Little 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		
	Tuberose	Low yield, Non adoption of improved production technologies and varieties, High incidence of nematode, Mealy bug and Sucking pests.	16		
Arni	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	Athanur	OFT, FLD, Training, 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).	29		
	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		
	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.	295		
	Tree leaf meal	High feed cost Imbalanced nutrient supply of scavenging birds.	-		
Chetpet	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.	1982	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.	5405 Nos		
	Sheep and goat	Lack of knowledge scientific goat and sheep rearing, High kid mortality, High ectoparasite infestation.	9508 Nos		
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
	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, Wilt, Imbalanced nutrition, Poor quality seedlings and field establishment. Low market price during on season.	67		

All blocks	Turmeric	Shortage of quality seed rhizomes, Imbalanced nutrition and incidence of leaf spot, rhizome rot, sucking pest and lack of knowledge on IDM practices.	292	All cluster	Training, Extension activities
All blocks	Sugarcane	Low yield due to water scarcity, Lack of awareness on irrigation schedule.	504	All cluster	Training, Extension activities
All blocks	Fodder	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops	295	All cluster	Training, Awareness programme
All blocks	Goat & Sheep	Low body weight, High mortality, High morbidity.	9508 Nos	All cluster	Training, Extension activities
All blocks	Cow	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	FLD,Training, Extension activities
All blocks	Medicinal plants	Lack of adoption of improved production and post harvest management technologies.	178	All clusters	OFT, 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, lack of awareness on season specific varieties, High infestation of pest &diseases BPH, Stem borer, Tungro, BLB and Blast, High incidence of pest and disease, Yield reduction. Lack of knowledge on value addition.	Training, Special programme
		Finger millet, Little 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.	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, Special programme
		Bhendi	Low yield, Imbalanced nutrition, Non adoption of improved technologies, YVMV. Lengthy time consuming and Crucial process during harvest.	Trainings, Awareness programme
		Brinjal, Tomato, Chilli	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, Wilt and Sucking pests. Imbalanced nutrition, Poor quality seedlings and field establishment. No value addition.	FLD, Training, Method demonstration, Field day, Soil health camp

		Cow	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production.	Training, Health camp
		Goat	Low body weight, High mortality, High morbidity.	Training, Health camp
		Poultry	Less number of egg production, Low hatchability, Chick mortality, Less feed efficiency.	Trainings, Entrepreneurship development.

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 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.	Trainings, awareness programme, Soil health camp
		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.	Training and Extension activities, Soil Health camp
		Snake gourd, Bitter 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.	FLD, Trainings, Method demonstration, Field day and Awareness camp.
		Cattle	Low milk production, High disease incidence. Infertility due to repeat breeding, Lack of awareness on clean milk production.	OFT, Trainings, Animal health camp
		Value addition-Fruits and Vegetables	No value addition, Low market price, Lack of knowledge on value addition.	OFT, Trainings, Method demonstration, Entrepreneurship development.

Arni	Athanur	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, Entrepreneurship development, Awareness camp
		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).	OFT, Training, Method demonstration
		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.	Training, Method demonstrations.
		Fodder	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	FLD, Training, Method demonstrations, Field day

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

S.No.	Activities	Target
1. On- farm trials		
	a. No of OFTs	10
	b. No of Technologies (Total new technologies except FP)	20
	c. No. of locations (No. of Villages)	10
	d. No. of Beneficiaries (No. of Farmers fields)	55
	e. Area (Total area in ha)	9
2. Frontline Demonstrations		
	a. No. of FLDs	24
	b. No. of Locations (No of villages)	24
	c. No. of Beneficiaries (No of Farmers fields)	215
	d. Area (Total Area planned in ha)	31.4
3. Trainings for Farmers and Farm Women		
	a. No. of programmes	115
	b. No. of participants	2300
4. Trainings for Rural Youth		
	a. No. of programmes	15
	b. No. of participants	300
5. Trainings of Extension Personnel		
	a. No. of programmes	12
	b. No. of participants	240
6. Extension Activities		
	No. of activities	776
	No. of participants	7811
7. Production of seed (in quintals)		
Paddy seed (CO51)		10
Blackgram seeds VBN-8		5
Groundnut (TCGS1043, VRI8)		8
Fodder seeds		2
8. Production of planting materials (in Nos.)		
Fruit plants		1000
Coconut seedlings		250
Forest seedlings		1000
Fodder setts		25000
9. Production of live-stock strains and finger lings (Category wise Nos.)		
Goat		15

Poultry desi birds		1000
Japanese quail		1500
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)		6000
Vermiworm (kg)		30
Azolla (kg)		100
Spawn (kg)		50
Vegetable Special (kg)		300
12. Kisan mobile advisories		
	No. of messages	24
	No. of technologies	24
	No. of farmers	42000
Other mobile advisories		
	No. of messages	6
	No. of technologies	6
	No. of farmers	300
13. Soil testing		
	No. of soil sample testing using Mobile Soil Testing Kit	-
	No. of soil sample testing in conventional laboratory	800
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	900

8. Technology Assessments proposed during 2022-23

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	Redgram	Assessment of Redgram varieties for higher productivity	**TO1:** Cultivation of WRGE 93 Redgram variety. **TO2:** Cultivation of CO 8 Redgram variety. **FP:** Cultivation of local varieties	**TO1:**SAU, Warangal 2019 **TO2:**TNAU-2017	New	5	13000.00	SMS-Agronomy, SMS- Plant Protection, Senior Scientist and Head.	-	2
2	Groundnut	Assessment of improved varieties for higher productivity in Groundnut	**TO1:** Cultivation of VRI 9 Groundnut variety. **TO2:** Cultivation of Kadiri 1812 Groundnut variety **FP:** Cultivation of local varieties	**TO1:**TNAU-2022 **TO2:** ARS Kadiri 2021	New	5	51000.00	SMS-Agronomy, SMS- Plant Protection, Senior Scientist and Head.	-	2
3	Chilli	Assessment of improved hybrids for higher productivity in Chilli	**TO1:** Cultivation of Arka Saanvi Chilli hybrid. **TO2:** Cultivation of COCH1 Chilli hybrid **FP:** Cultivation of private hybrids	**TO1:**IIHR-2020 **TO2:** TNAU-2010	2nd Year	5	13400.00	SMS Horticulture, SMS – Plant Protection, SMS Home Science, SS& Head	-	2

4	Bhendi	Assessment of microbial inoculants for yield enhancement in bhendi	**TO1:** Application of CSR-Grow sure **TO2:** Application of Arka microbial consortium. **FP:** Cultivation of private hybrids	**TO1:** CSSRI,Karnal 2021 **TO2:** IIHR,Bangalore 2015	New	5	7875.00	SMS Horticulture, SMS – Plant Protection, SMS Home Science, SS& Head	5	-
5	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 (ARS, Vellore) 2016 **TO2 :** Farmer innovation, 2019	New	5	15200.00	SMS- Plant Protection, SMS-Agronomy, Senior Scientist and Head.	-	2
6	Brinjal	Assessment of pest management modules against Brinjal Shoot and Fruit borer	**TO1 :** Soil application of neem cake @250Kg/ha, Installation of pheromone traps @5 no/acre, Spraying of neem oil 1% EC @ 2ml /lit, Release of Trichogramma chilonis @ 50,000/ha @10days interval 6 times, Need based insecticide of Emamectin benzoate 5 % SG @ 4g/10 lit.	**TO1 :** TNAU CPG - 2020 **TO2 :** IIHR 2016	New	5	12500.00	SMS- Plant Protection, SMS-Horticulture. Senior Scientist and Head.	-	2

			TO2 : Pheromone traps @ 1 for 400 sq.m, Weekly release of 50,000 to 60,000 Trichogramma chilonis + Two sprays of Bacillus thuringensis @1ml/L at 10 days interval at peak flowering stage for control **FP :** Spraying of insecticides.							
7	Cattle	Assessment of herbal extract for managing ectoparasite infestation in cattle	**TO1:** Tick shield **TO2:** Herbal extract base liquid spray (Megatex liquid spray). **FP:** No usage of herbal extracts base liquid spray.	**TO1:** TRBVP, TANUVAS 2021 **TO2:**ICAR-Central Institute for Research on Goats (CIRG)-2017	New	10	21500.00	SMS-Animal Science, Senior Scientist and Head.	10	-
8	Goat	Assessment of AFTD based mineralized salt lick over Mineral Mixture for goat on growth performance.	**TO1:** AFTD based mineralized Salt **TO2:** NIANP Small ruminants mineral mixture **FP:** No mineral mixture feeding.	**TO1:** TANUVAS-2020 **TO2:** NIANP-2018	New	5	15250.00	SMS-Animal Science, Senior Scientist and Head.	-	5

9	Enterprise	Assessment of different types of herbal powder incorporated instant nuti-mix	**TO1:** Shade dried Hibiscus incorporated herbal drink. Solar dried Hibiscus incorporated herbal drink Colorant agent from hibiscus. **TO2:** Shade dried Clitoria ternatea incorporated herbal drink. Solar dried Clitoria ternatea incorporated herbal drink Colorant agent from Clitoria ternatea. **FP:** No processing in Clitoria ternatea and under utilized edible flower	**TO1:** TNAU-2021 **TO2:** CS & RI, TNAU, 2017	New	5	11000.00	SMS-Animal Science, Senior Scientist and Head.	-	2
10	Value addition	Assessment of Different Coating Formulations to improve the Shelf life of Fruits and Vegetables	**TO1:** Dipping in 2 % TNAU Fruity Fresh coat for 5 minutes, surface drying & packing. **TO2:** Dipping in 2 % ICAR-IINRG Fresh coat for 5 minutes, surface drying & packing **FP:** No coating	**TO1:** TNAU-2020 **TO2:** ICAR-IINRG, Ranchi, 2019	2nd year	5	12400.00	SMS- Home Science, Senior Scientist and Head.	5	-
Total						**55**	**173125**	**-**	**20**	**17**

8.2. Details of OFTs

1. Assessment of Redgram varieties for higher productivity

OFT No.	**01**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Agronomy
Theme	Varietal Evaluation
Category (if applicable)	Pulses
Crop/ enterprise	Redgram
Farming situation	Clay loam, Kharif and Irrigated.
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 Redgram varieties for higher productivity
Technology options	
TO-1	Redgram variety- WRGE 93
Source and year	SAU, Warangal 2019
Description (short)	Suitable for both rainfed and irrigated condition during kharif season. 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	1700 kg/ha
Critical Inputs	▪ WRGE 93 Seed - 15 Kg ▪ *Trichoderma asperellum* - 5 Kg ▪ *Rhizobium* - 1.25 liter ▪ *Phospobacteria* - 1.25 liter ▪ Pulse wonder - 5 kg ▪ Soil health card - 5 No. ▪ Field board - 5 No.
Source of Inputs	SAU Warangal,KVK, Dept. of Agriculture
Photos	 
TO-2	Redgram variety – CO - 8
Source and year	TNAU 2017
Description (short)	Suitable for both rainfed and irrigated condition during kharif season. 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	1700 kg/ha
Critical inputs& quantity and Cost	▪ CO 8 seed - 15 kg ▪ *Trichoderma asperellum* - 5 Kg ▪ *Rhizobium* - 1.25 liter ▪ *Phospobacteria* - 1.25 liter ▪ Pulse wonder - 5 kg
Source of Inputs	TNAU, KVK, Dept. of Agriculture
Photos	
Farmers Practice	Cultivation of local varieties
Farmers yield	2 t/ha
Season	Kharif
Cost per replication (Rs.)	Rs. 2600.00
No. of replications	5
Total cost for the OFT	**Rs. 13000.00**
Parameters to be studied	Plant population, No. of pods/plant, Yield (Q/ha), Benefit cost ratio
Parameters to be reported	Grain yield, gross expenditure, gross income, net income, 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 improved varieties for higher productivity in Groundnut

OFT No.	**02**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Agronomy
Theme	Varietal Evaluation
Category (if applicable)	Oilseed
Crop/ enterprise	Groundnut
Farming situation	Sandy loamy soil, Irrigated, Rabi
Prioritized problem (short)	Poor yield and Lack of awareness on new varieties

Title of the OFT	Assessment of improved varieties for higher productivity in Groundnut
Technology options	
TO-1	VRI 9
Source and year	TNAU 2022
Description (short)	It is a Spanish bunch variety derived from VG 0420 x VRI Gn6. It has duration of 115 days. The average yield of culture is 2500 kg/ha. The oil content of the culture is 47- 90% with seed viability. It has moderate resistance to late leaf spot and rust besides thrips and leaf hopper.
Potential yield/income	2500 kg/ha
Critical Inputs	▪ VRI 9 - 175 kg ▪ *Rhizobium* - 1. 25 liter ▪ *Phosphobacteria* - 1.25 liter ▪ *Bacillus subtilis* - 5 Kg ▪ *Trichoderma* asperellum - 5 Kg ▪ Groundnut rich - 5 kg
Source of Inputs	RRS, Vridhachalam, Crop physiology (TNAU), KVK, Dept. of Agriculture
Photos	
TO-2	Kadiri 1812
Source and year	ARS Kadiri 2021
Description (short)	It is a very high yielding, profuse bearing spanish variety with high oil and high protein. Multiple resistant to drought, pest and diseases. The parentage of this variety is (ICGV 92069/ICGV 93184) X ICGV 98300. It has the oil content up to 51%. The average yield of this variety is 2000 kg/ha. It has the duration of 112 days.
Potential yield/income	2000 kg/ha
Critical inputs& quantity and Cost	▪ Kadiri 1812 - 175 kg ▪ *Rhizobium* - 1. 25 liter ▪ *Phosphobacteria* - 1.25 liter ▪ *Bacillus subtilis* - 5 Kg ▪ *Trichoderma* asperellum - 5 Kg ▪ Groundnut rich - 5 kg ▪ Soil health card - 5 Nos. ▪ Field board - 5 Nos.
Source of Inputs	ARS, Kadiri, Crop physiology (TNAU), KVK, Dept. of Agriculture

Photos	 
Farmers Practice	Cultivation of Local varieties
Farmers yield	1400 kg/ha
Season	Rabi
Cost per replication (Rs.)	Rs. 10200.00
No. of replications	5
Total cost for the OFT	**Rs. 51000.00**
Parameters to be studied	Plant population, No. of leaves, No. of branches, No. of pods/plant
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- Agronomy, SMS- Plant Protection, Senior Scientist and Head

3. Assessment of improved hybrids for higher productivity in Chilli

OFT No.	**03**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Horticulture
Theme	Varietal Evaluation
Category (if applicable)	Vegetables
Crop/ enterprise	Chilli
Farming situation	Open well irrigated, upland, Clay loam
Prioritized problem (short)	Chilli is cultivated over an area of about 1443 ha in Thiruvannamalai district. Mostly dual purpose hybrids are cultivated. But, 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. Fruit borer, Fruit rot and leaf curl are the major pest and diseases. Yield gap of 22.77% has been found, as compared to potential yield levels of improved public sector hybrids.
Title of the OFT	**Assessment of improved hybrids for higher productivity in Chilli**

Technology options	
TO-1	**Arka Saanvi**
Source and year	IIHR, 2020
Description (short)	Suitable for dual small (green & dry) segment, plants medium tall & spreading, fruits pendent, 7-8 x 1-1.2 cm, firm, medium pungent (50-60,000 SHU), green and turn red (80-90 ASTA) on maturity , medium wrinkled and resistant to ChLCV. Yield potential 75-87.5q dry chilli /ha (or) 250 q green chilli /ha.
Potential yield/income	Yield:250q/ha(Fresh) (or) 75-87.5q/ha(dry)
Critical Inputs	▪ Arka Saanvi seeds(150g) Rs.4700/- ▪ Vegetable special(10kg) Rs.1750/-
Source of Inputs	IIHR,Bengaluru and KVK Thiruvannamalai
Photos	 **Arka Saanvi**
TO-2	**CO(CH)1**
Source and year	TNAU,Coimbatore, 2010.
Description (short)	CO(CH)1 is a F1 hybrid.Plants semi tall, spreading and highly branched. Unripe fruits light green in colour, elongated, tapering towards the tip and 10.5 – 12.0 cm long. Capsaicin and oleoresin contents of 0.58 % and 14.0 % respectively. Ascorbic acid 120 mg/100 g fruit. Moderately resistant to fruit rot disease. Yield: 281 q/ha (Fresh) & 674Q/ha (dry). Duration: 195-205 days.
Potential yield/income	Yield: 281 Q/ha(Fresh)& 674 Q/ha(dry).
Critical inputs& quantity and cost	▪ CO(CH)1 chilli seeds(150g) Rs.3700/- ▪ Vegetable special(10kg) Rs.1750/- ▪ Field board (5Nos).Rs.1500/-
Source of Inputs	Tamil Nadu Agricultural University (TNAU), Coimbatore; KVK Thiruvannamalai.
Photos	 **CO(CH)1**
Farmers Practice	Private hybrids (Priyanka)
Farmers yield	Yield:217Q/ha (Fresh fruits)

Season	*Rabi* 2021-22
Cost per replication (Rs.)	**Rs. 2680.00**
No. of replications	5
Total cost for the OFT	**Rs.13,400.00**
Parameters to be studied	Days to 50 % flowering, Average fruit wt. (g), Average fruit length(cm), Culinary characters, PDI, 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 Home science, SMS Plant Protection, SMS(Agrl Extension).

4. Assessment of microbial inoculants for yield enhancement in Bhendi

OFT No.	**04**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Horticulture
Theme	Organic farming
Category (if applicable)	Vegetables
Crop/ enterprise	Bhendi
Farming situation	Open well irrigated, upland, Sandy clay loam
Prioritized problem (short)	Bhendi is cultivated over an area of about 653 ha in Thiruvannamalai district. But, the yield levels are low due to imbalanced nutrition, lack of adoption of improved technologies and fluctuation in soil fertility levels. Yield gap of 27% has been found, as compared to potential yield level.
Title of the OFT	**Assessment of microbial inoculants for yield enhancement in Bhendi**
Technology options	
TO-1	**Application of CSR-Grow sure**
Source and year	CSSRI, Karnal, 2021.
Description (short)	CSR grow sure 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& quantity and cost	▪ CSR Grow sure (15 litre) Rs.3375/-
Source of Inputs	CSSRI,Karnal

Photos	 **CSR-Grow sure**
TO-2	**Application of Arka microbial consortium:**
Source and year	IIHR, 2015
Description (short)	It Contains N fixing,P and Zn solubilising and plant growth promoting microbes. Soil drenching @2% at 10 th day of sowing. Soil application @5kg per acre mixed with 500 kg of FYM and applied near root zone:
Potential yield/income	-
Critical Inputs	▪ Arka microbial consortium (15kg) Rs.3000/-, ▪ Field board (5Nos) Rs.1500/-
Source of Inputs	IIHR,Bengaluru
Photos	 **Arka Microbial consortium**
Farmers Practice	Soil application of crop specific micro nutrient formulations not practiced.
Farmers yield	186 q/ha (Fresh fruits)
Season	*Kharif* 22-23
Cost per replication (Rs.)	**Rs.1575.00**
No. of replications	5
Total cost for the OFT	**Rs.7875.00**
Parameters to be studied	Days to 50 % flowering, Average fruit wt. (g), Culinary characters, 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 Home science, SMS Plant Protection, SMS (Agrl Extension).

5. Assessment of bio repellants against wild boar in Groundnut

OFT No.	**05**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Theme	Integrated Pest Management
Category (if applicable)	Oilseed
Crop/ enterprise	Groundnut
Farming situation	Sandy clay loam, Kharif
Prioritized problem (short)	Yield loss due to crop damage (25-35%), Lack of knowledge on wild boar 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 (ARS, Vellore 2016)
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, Bottles – 250 nos
Source of Inputs	ARS, Vellore
Photos	-
TO-2	Innovative Herboliv
Source and year	Farmer innovation, 2019
Description (short)	Spraying of Innovative Herboliv+ (10% dilution) with 10 days interval – 3 Application
Potential yield/income	-
Critical inputs& quantity and cost	▪ Innovative Herboliv : 25 lit, ▪ Field board – 5 nos
Source of Inputs	Mivipro products, Erode
Photos	-
Farmers Practice	Manual monitoring
Farmers yield	16.15 qtl/ha
Season	Kharif
Cost per replication (Rs.)	**Rs. 3040.00**
No. of replications	5
Total cost for the OFT	**Rs. 15200.00**
Parameters to be studied	Damage percentage, Benefit Cost Ratio, Yield Q/ha
Parameters to be reported	Pod 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

6. Assessment of pest management modules against Brinjal Shoot and Fruit borer

OFT No.	**06**
Status (New proposal/2nd year /3rd year)	1st Year
Subject,	Plant Protection
Theme	Integrated Pest Management
Category (if applicable)	Vegetable crops
Crop/ enterprise	Brinjal
Farming situation	Sandy loamy soil, Irrigated, Rabi
Prioritized problem (short)	▪ High infestation of Shoot and fruit borer ▪ Poor yield ▪ Lack of awareness on IPM
Title of the OFT	**Assessment of pest management modules against Brinjal Shoot and Fruit borer**
Technology options	
TO-1	IPM
Source and year	TNAU CPG 2020
Description (short)	Soil application of neem cake @250Kg/ha, Installation of pheromone traps @5 no/acre, Spraying of neem oil 1% EC @ 2ml /lit, Release of Trichogramma chilonis @ 50,000/ha @10days interval 6 times, Need based insecticide of Emamectin benzoate 5 % SG @ 4g/10 lit.
Potential yield/income	-
Critical Inputs	▪ Pheromone trap – 25 Nos, ▪ Lure – 50 Nos, ▪ Neem oil – 2.5 Lit
Source of Inputs	PCI, Chennai and Local Agri clinic
Photos	-
TO-2	IPM
Source and year	IIHR 2016
Description (short)	Pheromone traps @ 1 for 400 sq.m, Weekly release of 50,000 to 60,000 Trichogramma chilonis + Two sprays of Bacillus thuringensis @1ml/L at 10 days interval at peak flowering stage for control
Potential yield/income	-
Critical inputs& quantity and	▪ Emamectin benzoate – 250 gram

cost	▪ Field board – 5 no
Source of Inputs	Local Agri clinic
Photos	-
Farmers Practice	Spraying of insecticides
Farmers yield	235.35 qtl/ha
Season	Rabi
Cost per replication (Rs.)	**Rs. 2500.00**
No. of replications	5
Total cost for the OFT	**Rs. 12500.00**
Parameters to be studied	Percent infestation, Benefit Cost Ratio, Yield Q/ha
Parameters to be reported	Fruit 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

7. Assessment of herbal extract for managing ecto parasite infestation in cattle

OFT No.	**07**
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Animal Science
Theme	Livestock Disease management
Category (if applicable)	Large ruminants
Crop/ enterprise	Cattle
Farming situation	Bore well irrigated, upland, sandy loam
Prioritized problem (short)	Insects such as stable flies, house flies, horn flies, face flies, mosquitoes,, cattle grubs, and lice as well as ticks and mites are the major external parasites of dairy animals These pests cause obvious discomfort to livestock and economic effects in dairy farming.
Title of the OFT	**Assessment of herbal extract for managing ecto parasite infestation in cattle**
Technology options	
TO-1	**Tick shield**
Source and year	TRBVP, TANUVAS 2021
Description (short)	100 ml spray of tick shield can be spray on the skin surface of infested animals and allowed to dry. The mouth and eyes should be protected whiles praying.
Potential yield	-
Critical Inputs	Herbal extract base liquid spray (Megatex liquid spray) : 80 Nos.

Source of Inputs	TRBVP, TANUVAS 2021
Photos	
TO-2	**Herbal extract base liquid spray (Megatex liquid spray)**
Source and year	ICAR- Central Institute for Research on Goats (CIRG) ,2017
Description (short)	100 ml spray of Megatex can be spray on the skin surface of infested animals and allowed to dry. The mouth and eyes should be protected whiles praying. One pack of 100 ml can be enough for a single spray. Spray can be repeated after next emerge of external parasites
Potential yield	-
Critical inputs& quantity and cost	▪ Herbal extract base liquid spray : 80 Nos. ▪ Field Board : 10 No.
Source of Inputs	ICAR- Central Institute for Research on Goats (CIRG)
Photos	
Farmers Practice	No usage of herbal extracts base liquid spray.
Potential yield	-
Season	Rabi 2022
Cost per replication (Rs.)	**Rs.2150.00**
No. of replications	10
Total cost for the OFT	**Rs.21500.00**
Parameters to be studied	Infestation %, Milk yield, Gross expenditure, Gross income, Net income, BCR
Parameters to be reported	Infestation %, Milk Yield,Gross expenditure, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science, Senior Scientist and Head i/c,

8. Assessment of AFTD based mineralized salt lick over Mineral Mixture for goat on growth performance.

OFT No.	**08**
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Animal Science
Theme	Livestock Nutritional management
Category (if applicable)	Small ruminants
Crop/ enterprise	Goat
Farming situation	Semi intensive farming system
Prioritized problem (short)	Sheep and goat rearing is becoming more intensive in Tamil Nadu. Normally the animals are not supplemented with concentrate feed and mineral deficiency is common, causing decreased growth rate (10-11 Kg at 6months of age). Commercial mineral mixtures comprising the essential minerals are available only for large ruminants like cattle and buffalo. Although, small ruminants have specific mineral requirements which are quite different from the large ruminants are commercially not available. Hence the new technology of small ruminants' mineral mixture has to be assessed on the growth performance of small ruminants
Title of the OFT	**Assessment of AFTD based mineralized salt lick over Mineral Mixture for Goat on growth performance**
Technology options	
TO-1	AFTD based mineralized Salt
Source and year	TANUVAS 2020
Description (short)	The food grade micro algae grown in ponds harvested after sufficient growth and the water is filtered through membrane filter and the concentrated water finally passed through Agitated Thin Film Drier (ATFD) to remove the moisture content. The salt obtained by this process is incorporated in salt lick up to 48% since it is a rich source of sodium, selenium, good source of calcium, magnesium and sulphur, not contaminated with heavy metals, can be stored for a prolonged period. No adverse health effects noticed in AFTD salt lick supplemented goat.
Average weight gain	8gm/day
Critical Inputs	AFTD based mineralized Salt – 50 Nos, Field board-5Nos.
Source of Inputs	IAN, Kattupakkam, TANUVAS

Photos	
TO-2	NIANP Small ruminants mineral mixture
Source and year	NIANP 2018
Description (short)	Formulated based on the specific mineral requirement of sheep and goat to meet 100% requirement of most deficient trace minerals and partially meet the requirement of other minerals, with a consideration that remaining is to be met through feed and fodder. In sheep involving Rambouillet and Bannur lambs, an additional body weight gain of 17 and 7 gm/day/sheep observed. Similarly, in Sirohi kids, an additional body weight gain of 8 gm/day/goat was recorded. Also the immune status in lambs in terms of antibody titre against PPR vaccine and lymphocyte proliferation assay was higher in supplemented lambs.
Average weight gain	7 –17 gm/day
Critical inputs& quantity and cost	Small ruminants'mineral mixture – 50kgs @ 15gm/animal/day
Source of Inputs	NIANP, Bengaluru
Photos	
Farmers Practice	No mineral mixture feeding
Average weight gain	5gm/day
Season	Kharif 2022
Cost per replication (Rs.)	**Rs.3050**
No. of replications	5
Total cost for the OFT	**Rs : 15250.00**
Parameters to be studied	Body weight (kg);Gross expenditure, Gross income, Net income, BCR
Parameters to be reported	Body weight (kg); Gross expenditure, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science, Senior Scientist and Head i/c,

9. Assessment of different types of herbal powder incorporated instant Nutri-mix

OFT No.	**9**
Status (New proposal/2nd year /3rd year)	New
Subject,	Home Science
Theme	Value addition
Category (if applicable)	-
Crop/ enterprise	Enterprise
Farming situation	-
Prioritized problem (short)	Underutilized high medicinal value plants, Poor Shelf life, Lack of Post harvest facilities, and lack of knowledge on value addition during on-season.
Title of the OFT	**Assessment of different types of herbal powder incorporated instant Nutri-mix**
Technology options	
TO-1	Shade dried Hibiscus incorporated herbal drink. Solar dried Hibiscus incorporated herbal drink Colorant agent from hibiscus.
Source and year	TNAU, 2021
Description (short)	Solar dried Hibiscus incorporated herbal drink Colorant agent from hibiscus.
Potential yield/income	-
Critical Inputs	Solar dried Hibiscus, Cinnamon, Gloves, Lemon, Lemon grass, Ginger, Honey, All spices, Basil leaves, Field board.
Source of Inputs	Local
Photos	
TO-2	Shade dried Clitoria ternatea incorporated herbal drink. Solar dried Clitoria ternatea incorporated herbal drink Colorant agent from Clitoria ternatea.
Source and year	CS & RI, TNAU, 2017
Description (short)	Solar dried Clitoria ternatea incorporated herbal drink Colorant agent from Clitoria ternatea.
Potential yield/income	-
Critical inputs& quantity and cost	Shade dried Clitoria ternatea, Cinnamon, Gloves, Lemon, Lemon grass, Ginger, Honey, All spices, Basil leaves,
Source of Inputs	CS & RI, TNAU

Photos	
Farmers Practice	FP: No processing in Clitoria ternatea and underutilized edible flower
Farmers yield	-
Season	Throughout the year
Cost per replication (Rs.)	**Rs.2200.00**
No. of replications	5
Total cost for the OFT	**Rs.11000.00**
Parameters to be studied	Shelf life (in days), Sensory evaluation, economics
Parameters to be reported	Shelf life (in days), Sensory evaluation, economics
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK
Team members	SMS-Home Science, SMS-Horticulture, Senior Scientist and Head.

10. Assessment of Different Coating Formulations to improve the Shelf life of Fruits and Vegetables

OFT No.	**10**
Status (New proposal/2nd year /3rd year)	2nd year
Subject,	Home Science
Theme	Value addition
Category (if applicable)	-
Crop/ enterprise	Enterprise
Farming situation	-
Prioritized problem (short)	Low market price, Poor Shelf life of fruits and vegetables because its perishables in nature, Lack of Post harvest facilities viz., Non availability of refrigerated transport and high quality cold storage facilities for food manufactures and sellers.
Title of the OFT	**Assessment of Different Coating Formulations to improve the Shelf life of Fruits and Vegetables**
Technology options	
TO-1	Dipping in 2 % ICAR-IINRG Fresh coat for 5 minutes, surface drying & packing.
Source and year	ICAR-IINRG, Ranchi 2019

Description (short)	Dipping in 2 % ICAR-IINRG Fresh coat for 5 minutes, surface drying & packing.
Potential yield/income	-
Critical Inputs	ICAR-IINRG Fresh coat
Source of Inputs	ICAR-IINRG, Ranchi.
Photos	
TO-2	Dipping in 2 % TNAU Fruity Fresh coat for 5 minutes, surface drying & packing.
Source and year	TNAU, 2020
Description (short)	Dipping in 2 % TNAU Fruity Fresh coat for 5 minutes, surface drying & packing.
Potential yield/income	-
Critical inputs& quantity and cost	TNAU Fruity Fresh coat
Source of Inputs	TNAU
Photos	
Farmers Practice	FP: No coating
Farmers yield	-
Season	Kharif
Cost per replication (Rs.)	**Rs.2480.00**
No. of replications	5
Total cost for the OFT	**Rs.12400.00**
Parameters to be studied	Shelf life (Days), Appearance, Colour, BCR
Parameters to be reported	Shelf life (Days), Appearance, Colour, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK
Team members	SMS-Home Science, SMS-Horticulture, Senior Scientist and Head.

9. Frontline Demonstrations proposed during 2022-23

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	Paddy	Organic cultivation and demonstration of Paddy variety ADT 57	Prolonged cultivation of old varieties and enormous use of chemical fertilizers.	Varietal demonstration with organic cultivation	TNAU 2022	New	10	4	30400.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	-	3
2	Blackgram	Demonstration of VBN 11 Black gram variety for higher productivity	Cultivation of old varieties, Yield reduction, Lack of adoption of improved varieties and Low yield.	Varietal demonstration with ICM	TNAU 2020	2nd year	10	4	23000.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	-	3
3	Little millet	Demonstration of Little millet variety ATL-1	Prolonged cultivation of old varieties, Low yield, Lack of knowledge about crops suitable for drought situation.	Varietal demonstration with ICM	TNAU 2019	OFT to FLD (New)	10	4	16000.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	2	3

4	Compost production	Demonstration of rapid vermicomposting techniques	Natural decomposition is a time consuming process.	Compost production	TNAU 2022	New	5	0	18250.00	SMS-Agronomy , SMS-Plant Protection, SS& Head	-	3
5	Brinjal	Demonstration of improved variety VRM(Br)2	Low yield due to cultivation of local variety	Varietal demonstration	TNAU 2021	New	10	2	24250.00	SMS-Horticulture SMS-Plant Protection, SS& Head	-	3
6	Tomato	Demonstration of Tomato hybrid COTH4	Low yield due to lack of adoption of location specific hybrids	Varietal demonstration	TNAU 2020	New	10	2	20750.00	SMS-Horticulture SMS-Plant Protection, SS& Head	-	3
7	Cassava	Demonstration of Cassava YTP2	Low yield due to cultivation of local variety	Varietal demonstration	TNAU 2020	New	10	1	24500.00	SMS-Horticulture SMS-Plant Protection, SS& Head	-	3
8	Bitter gourd	Integrated Crop Management in Bittergourd	Low yield due to lack of adoption of improved production technologies	ICM	TNAU 2020	New	10	2	22500.00	SMS-Horticulture SMS-Plant Protection, SS& Head	2	3

9	Fodder production	Demonstration on mixed fodder (10 cent model)	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.	Fodder production	TANUVAS 2015	New	10	0.4	13000.00	SMS-Extension SMS-Agronomy, SMS-Animal Science, SS& Head	2	3
10	Seed drill	Demonstration on Rotary dibbler (Multi crop seed drill) through EDP mode	Uniform spacing and depth is not maintained in farmer's field.	Farm Mechanization	AICRP on Farm Implements & Machinery-CIAE-2012	New	10	0	16600.00	SMS-Agronomy, SMS-Horticulture, SS& Head	-	3
11	Paddy	IPDM in Paddy and pesticides application through drone	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 CPG, 2020	2nd Year	10	4	27000.00	SMS – Plant Protection, SMS – Agronomy, SS& Head	-	3
12	Maize	Demonstration on management of Fall Army Worm in Maize	High incidence of FAW, Yield loss (40-50 %) and lack of knowledge on pest management.	IPM	TNAU CPG 2020	1st Year	10	4	23500.00	SMS – Plant Protection, SMS – Agronomy, SS& Head	-	3

13	Chilli	Demonstration on management module against sucking pests in Chilli	Injudicious use of pesticides for the management of sucking pest. Non adoption of IPM practices, High infestation of viral disease and sucking pests (Thrips, Aphid, Mite)	IPM	TNAU CPG 2020	OFT to FLD	10	2	14200.00	SMS – Plant Protection, SMS – Horticulture, SS& Head	-	3
14	Snake gourd	Integrated pest and disease management in Snakegourd	High incidence of Fruitfly, Mosaic. Poor yield, Lack of awareness on IDM practices	IPDM	TNAU CPG 2020	1st year	10	2	17500.00	SMS – Plant Protection, SMS – Horticulture, SS& Head	-	3
15	Fish	Demonstration of GIF Tilapia fish Variety	High mortality, Low weight gain, Low yield	Fish production	TNJFU, 2019	New	10	-	24000.00	SMS – Animal Science, SS& Head	-	5
16	Poultry	Demonstration of tree leaf meal incorporated concentrate feed for backyard native chickens	High feed cost Imbalanced nutrient supply of scavenging birds.	Feed management	IAN, TANUVAS 2019	2nd Year	10	-	22500.00	SMS – Animal Science, SS& Head		10

17	Cow	Demonstration on Mastiguard in milch Cow	High incidence of Mastitis, Low Milk yield	Disease Management	TANUVAS, 2018	New	10	-	17000.00	SMS – Animal Science, SS& Head	-	10
18	Poultry	Demonstration of Nandanam chicken-IV under backyard condition	Lack of awareness on improved breeds. Low body weight and Low number of eggs	Nandanam chicken-IV	TANUVAS, 2018	2nd year	10	-	21000.00	SMS – Animal Science, SS& Head	-	10
19	Value addition	Demonstration of Banana pseudo stem RTS beverage	Low market price, Lack of knowledge in processing of vegetables during on-season	Ginger flavoured ready to serve beverage	TNAU 2021	New	5	-	12000.00	SMS – Home Science, SMS Horticulture, SS& Head	-	2
20	Value addition	Demonstration of Tomato powder	Low market price, Lack of knowledge in processing of vegetables during on-season	Preparation of dehydrated tomato powder and instant mix	TNAU 2021	New	5	-	7000.00	SMS – Home Science, SMS Horticulture SS& Head	-	2
21	Drudgery reduction	Demonstration of improved Ring harvester for Bhendi	Lack of knowledge on farmers friendly tool, thorn injured the fingers.	Improved ring harvester, Hand gloves and harvesting bag,	TNAU 2020	New	5	-	8000.00	SMS – Home Science, SMS Horticulture SS& Head	-	2

22	Nutritional security	Demonstration of Nutri garden	Poor utilization of backyard land and vegetables purchased from shop	Demonstration on Nutri garden	TNAU	3rd year	5	-	7500.00	SMS – Home Science, SMS Horticulture, SS& Head	-	2
23	Mobile app	Demonstration of TANUVAS Sheep & Goat farming mobile application	-	ICT	TANUVAS 2019	New	10	-	3500.00	SMS – Extension, SS& Head	-	3
24	Mobile app	Demonstration of TNAU Soil Doc mobile application	-	ICT	TNAU 2021	New	10	-	3500.00	SMS – Extension, SS& Head	-	3
Total							**215**	**31.4**	**417450.00**	-	6	91

9.2. Details of Front Line Demonstrations

1. Organic cultivation and demonstration of Paddy variety ADT 57

FLD No.	**01**
Status (New proposal/2nd year /3rd year)	New FLD
Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Paddy
Farming situation	Irrigated, Sandy loam soil
Prioritized problem:	▪ Prolonged cultivation of old varieties. ▪ Enormous use of chemical fertilizers
Title	**Organic cultivation and demonstration of Paddy variety ADT 57**
Technology to be demonstrated:	Integrated Crop Management
Hybrid or Variety:	Variety – ADT 57
Source of Technology:	TNAU 2022
Description	▪ It is a derivative of ADT 45 x ACK 03002. ▪ It is medium slender rice with 115 days. ▪ The average yield of the culture is 6500 kg/ha. ▪ It has milling of 69% and head rice recovery of 60%. ▪ This variety is suitable for Sorrnavari / Kar / Kuruvai / Navarai in Tamil Nadu.
Potential yield	6500 kg/ha
Critical input, quantity and cost	▪ ADT 57 seed - 150 kg ▪ *Bacillus* - 20 Kg, ▪ *Bijamirtham* - 150 lit ▪ P*anchagavya* - 20 lit, ▪ Neem cake - 500 kg, ▪ Soil health card -10 No ▪ Field board - 10 No
Farmers practice	Cultivation of old varieties using more chemical fertilizers.
Source of input	RRS, Aduthurai, KVK, Dept. of Agriculture
Photos	 
Average farmers yield	4000 kg/ha
Season	Kharif 2022
No. of Demos	10

(replications)	
Total cost for the Demo	**Rs. 30400.00**
Parameters to be studied:	Plant population, Yield kg/ha, Benefit Cost Ratio
Parameters to be reported	Grain yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Agronomy, SMS - Plant Protection, SS& H

2. Demonstration of VBN 11 Black gram variety for higher productivity

FLD No.	**02**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Agronomy
Category:	Pulses
Crop/ enterprise:	Blackgram
Farming situation	Borewell irrigated, Sandy loam soil
Prioritized problem:	▪ Cultivation of old varieties, ▪ Yield reduction. ▪ Lack of adoption of improved varieties. ▪ Low yield.
Title	**Demonstration of VBN 11 Black gram variety for higher productivity**
Technology to be demonstrated:	ICM
Hybrid or Variety:	Variety – VBN 11
Source of Technology:	TNAU 2020
Description	▪ The Parentage of this variety is PU 31 X Co 6. ▪ It is resistant to MYMV ▪ Moderately resistant to Powdery mildew disease. ▪ The Duration of this variety is 70-75 days, with synchronized maturity, determinate type. ▪ The average Yield is 940 kg/ ha,
Potential yield	940 kg/ Ha
Critical input, quantity and cost	▪ VBN 11 Seed - 80 Kg ▪ *Trichoderma asperellum* -10 Kg ▪ *Rhizobium* - 5 lit ▪ *Phospobacteria* - 5 liter ▪ Pulse wonder - 20 kg ▪ Soil health card - 10 No ▪ Field Board - 10 No

Farmers practice	Cultivation of local varieties
Source of input	NPRC, Vamban& Crop Physiology (TNAU), KVK, Dept of Agriculture
Photos	
Average farmers yield	532Kg/ha
Season	Rabi 2022
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 23000.00**
Parameters to be studied:	Plant population, No. of pods per plant, Yield kg/ha, Benefit Cost Ratio
Parameters to be reported	Pod yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Agronomy, SMS - Plant Protection, , SS& H

3. Demonstration of Little millet variety ATL-1

FLD No.	**03**
Status (New proposal/2nd year /3rd year)	OFT converted to FLD
Subject	Agronomy
Category:	Millet
Crop/ enterprise:	Little millet
Farming situation	Irrigated, Sandy clay loam
Prioritized problem:	▪ Prolonged cultivation of old varieties. ▪ Low yield ▪ Lack of knowledge about crops suitable for drought situation.
Title	**Demonstration of Little millet variety ATL-1**
Technology to be demonstrated:	Integrated Crop Management
Hybrid or Variety:	Variety – ATL-1
Source of Technology:	TNAU 2019

Description	▪ The Parentage of this variety is CO (Samai) 4 X TNAU 141. ▪ It has the duration of 85-90 days. ▪ The Season is June –July, September – October. ▪ The average grain yield is 1587 kg/ha
Potential yield	1587 kg/ha
Critical input, quantity and cost	▪ Little millet ATL 1 Seed - 50 Kg ▪ *Azospirillum* - 5 liter ▪ *Phosphobacteria* - 5 liter ▪ *Bacillus subtilis* - 10 Kg ▪ Soil health card - 10 No ▪ Field Board - 10 No
Farmers practice	Cultivation of Old Variety
Source of input	CEM, Athiyanthal, KVK, Dept of Agriculture
Photos	
Average farmers yield	1100 kg/ha
Season	Rabi 2022
No. of Demos (replications)	10
Total cost for the Demo	**Rs. 16000.00**
Parameters to be studied:	Plant population, Yield :Q/ha, Test weight, 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 – Agronomy, SMS - Plant Protection, , SS& Head

4. Demonstration of Rapid vermicomposting techniques

FLD No.	**04**
Status (New proposal/2nd year /3rd year)	New FLD
Subject	Agronomy
Category:	Composting techniques
Crop/ enterprise:	Rapid Vermicompost
Prioritized problem:	Natural decomposition is a time consuming process.
Title	**Demonstration of Rapid vermicomposting techniques**
Technology to be demonstrated:	Composting techniques

Source of Technology:	TNAU 2022
Description	▪ It is a Cost effective, time saving and easy farm recycling
Critical input, quantity and cost	▪ Bio decomposer -200 gm, ▪ Worms -15 kg ▪ Vermi bag -5 Nos ▪ Field board -5 Nos
Farmers practice	Natural decomposition
Source of input	TNAU, KVK,
Photos	
Season	Kharif 2022
No. of Demos (replications)	5
Total cost for the Demo	**Rs. 18250/-**
Parameters to be studied:	Time of maturity, net income, BCR
Parameters to be reported	Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Agronomy, SMS - Plant Protection, , SS& Head

5. Demonstration of improved Brinjal variety VRM(Br)2

FLD No.	**05**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Brinjal
Farming situation	Openwell irrigated upland, Sandy clay loam
Prioritized problem:	Brinjal is cultivated over an area of about 991ha in Thiruvannamalai district. The yield levels are low due to problems viz., Cultivation of local varieties, Imbalanced nutrition ,Flower drop, Incidence of shoot & fruit borer and Lack of adoption of improved technologies by farmers. Yield gap of 39% has been found, as compared to potential yield.

Title	**Demonstration of Improved Brinjal variety VRM(Br)2**
Technology to be demonstrated:	Brinjal variety VRM(Br)2
Hybrid or Variety:	Variety
Source of Technology:	TNAU, Coimbatore, 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.Yield:500-550q/ha.
Potential yield	550 q/ha
Critical input, quantity and cost	▪ Seeds of VRM(Br)2 (1.5kg) : Rs.3000.00 ▪ Vegetable special (20kg) : Rs 3500.00 ▪ *Bacillus subtilis (*10kg) : Rs.1750.00 ▪ Neem soap (15kg) : Rs. 4250.00 ▪ Pongamia soap (15kg) : Rs 3350.00 ▪ Water trap (30Nos) : Rs. 1800.00 ▪ *Leucinodes* lure (120Nos) : Rs. 3600.00 ▪ Field board (10 Nos) : Rs. 3000.00
Source of input	TNAU, Coimbatore; IIHR,Bengaluru; Pest Control India, Chennai; ICAR KVK Thiruvannamalai
Photos	 **VRM(Br)2** 
Farmers practice	Cultivation of local spiny brinjal variety with conventional production practices
Average farmers yield	335 q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.24250.00**
Parameters to be studied:	Days to 50% flowering, Average fruit weight (g), Culinary characters, 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 Home science, SMS Plant Protection, SS& Head

6. Demonstration of Tomato hybrid COTH4

FLD No.:	**06**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Tomato
Farming situation	Open well irrigated upland, Sandy clay loam
Prioritized problem:	Tomato is cultivated over an area of about 717 ha in Thiruvannamalai district. But, 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. Fruit borer, Fruit borer, Tomato leaf curl, Bacterial wilt are the major pest and diseases. Yield gap of 49% has been found, as compared to potential yield levels of improved public sector hybrids.
Title	**Demonstration of Tomato hybrid COTH 4**
Technology to be demonstrated:	Tomato hybrid COTH 4
Hybrid or Variety:	Hybrid
Source of Technology:	TNAU, Coimbatore, 2020.
Description	COTH4 Tomato is a F1 hybrid of LE 1226 X LE 1249 Fruits are flat round with thick pericarp (5.84 mm). The fruits have green shoulder at breaker stage which turns to red colour at ripening. Fruits are borne in clusters of 5-6, with an average fruit weight of 75.3 g. The hybrid has long harvesting period with 20-22 harvests in 150 days with a yield of 2.94 kg per plant. Yield: 923 q/ha (27.31 % increase over TNAU tomato hybrid CO3 and 40.91% over Lakshmi).
Potential yield	923 q/ha(Fresh)
Critical input, quantity and cost	▪ Seeds of COTH4 (0.35kg) : Rs. 8400.00 ▪ Vegetable special (20kg) : Rs. 3500.00 ▪ *Bacillus subtilis* (10kg): : Rs. 1750.00 ▪ Pheromone trap (30Nos) : Rs. 750.00 ▪ Yellow sticky trap (50Nos) : Rs. 2000.00 ▪ Lures (90Nos) : Rs. 1350.00 ▪ Field board (10Nos) : Rs. 3000.00
Source of input	TNAU, Coimbatore; Pest Control India, Chennai; ICAR KVK Thiruvannamalai

Photos	 **Tomato hybrid COTH4**
Farmers practice	**Cultivation of private hybrids(lakshmi)**
Average farmers yield	463q/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs: 20750.00**
Parameters to be studied:	Days to 50 % flowering, Average fruit wt. (g), Culinary characters, PDI, 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 Home science, SMS Plant Protection, SS& Head

7. Demonstration of Cassava YTP2

FLD No.	**07**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Cassava(Tapioca)
Farming situation	Open well irrigated upland, Sandy clay loam
Prioritized problem:	Tapioca is cultivated over an area of about 1530 ha in Thiruvannamalai district. The yield levels are low due to problems viz., Cultivation of local varieties, Imbalanced nutrition , Cassava Mosaic Virus, Yield gap of 21% has been found, as compared to potential yield.
Title	**Demonstration of Cassava YTP2**
Technology to be demonstrated:	**Cassava YTP2**
Hybrid or Variety:	Variety
Source of Technology:	TNAU, Coimbatore, 2020.
Description	Cultivation of cassava YTP2 : Duration:270-300 days,Yield:46.2t/ha, No visual symptom of mosaic Noticed.
Potential yield	462 q/ha
Critical input, quantity and cost	▪ Setts of YTP2(9000Nos) :Rs.16500.00 ▪ Cassava booster (50kg) :Rs 5000.00 ▪ Field board (10 Nos) :Rs. 3000.00
Source of input	TNAU, Coimbatore

Photos	 **Cassava YTP2**
Farmers practice	**Cultivation of white rose variety**
Average farmers yield	367 q/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs.24500.00**
Parameters to be studied:	Average tuber length and weight (kg), PDI, 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 Home science, SMS Plant Protection, SS& Head

8. Integrated Crop Management in Bittergourd

FLD No.	**08**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Bittergourd
Farming situation	Open well irrigated upland, sandy clay loam
Prioritized problem:	Bittergourd is cultivated over an area of about 552 ha in Thiruvannamalai district. The yield levels are low due to lack of adoption of location specific technologies. Fruit fly, Downy mildew, Powdery mildew are the major pest and diseases affecting the crop in the district. Yield gap of 36 % has been found.
Title	**Integrated crop Management in Bittergourd**
Technology to be demonstrated:	**Integrated crop Management**
Hybrid or Variety:	Hybrid
Source of Technology:	TNAU, Coimbatore, 2020.
Description	▪ NPK application based on soil test ▪ Soil application of *Bacillus subtilis* @ 2.5kg/ha ▪ Soil application of neem cake – 250 kg/ha., Vegetable special Spray @ 0.1 % ▪ Spraying of Ethrel @ 250 ppm., Spraying of Neem, Pongamia soap @ 1% ▪ Installation of Pheromone traps @ 12No/ha.

Potential yield	520 q/ha
Critical input, quantity and cost	▪ Vegetable special (20kg) : Rs. 3500.00 ▪ *Bacillus subtilis* (10kg) : Rs. 1750.00 ▪ Pheromone trap (30Nos) : Rs. 3000.00 ▪ Lures (90Nos) : Rs. 3150.00 ▪ Neem soap (15kg) : Rs. 4250.00 ▪ Pongamia soap (15kg) : Rs. 3350.00 ▪ Soil test (10Nos) : Rs. 500.00 ▪ Field board (10Nos) : Rs. 3000.00
Source of input	TNAU, Coimbatore; Pest Control India, Chennai; IIHR Bangalore;ICAR KVK Thiruvannamalai
Photos	
Farmers practice	Adoption of conventional production practices with soil application of NPK fertilizers (conventional) without proper micro nutrition.
Average farmers yield	330 q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs: 22500.00**
Parameters to be studied:	Days to 50% flowering, Average fruit weight (g),Percent pest infestation(Fruit fly), 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 Home science, SMS Plant Protection, SS& Head

9. Demonstration on mixed fodder (10 cent model)

FLD No.:	**9**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Extension
Category:	Fodder
Crop/ enterprise:	Mixed fodder
Farming situation	Irrigated, sandy clay loam

Prioritized problem:	Feeding of low protein fodder for dairy animals Lack of awareness about cultivation of fodder crops.
Title	**Demonstration on mixed fodder (10 cent model)**
Technology to be demonstrated:	**Fodder Production**
Hybrid or Variety:	Variety
Source of Technology:	TANUVAS 2015
Description	▪ 4 cent of high yielding multi cut grass variety (CO 5) ▪ 3 cent of high yielding multi cut desmanthus ▪ 3 cent of high yielding multi cut COFS 31 or single cut fodder cowpea ▪ Agathi and Subabul as Border crops
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.
Source of input	ICAR KVK Thiruvannamalai
Photos	
Farmers practice	• Feeding of mainly paddy straw and single cut fodder • Minimal area under multicut fodder cultivation
Average farmers yield	-
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs: 13000.00**
Parameters to be studied:	Green fodder Biomass (q/ha.), Milk yield, Fat & SNF content in milk, 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 Extension, SMS Agronomy, SMS (Animal Science).

10. Demonstration on Rotary dibbler (Multi crop seed drill) through EDP mode

FLD No.:	**10**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agronomy
Category:	Farm mechanization
Crop/ enterprise:	Rotary dibbler
Prioritized problem:	Uniform spacing and depth is not maintained in farmers field.

Title	**Demonstration on Rotary dibbler (Multi crop seed drill) Through EDP mode**
Technology to be demonstrated:	Seed driller for seed sowing
Source of Technology:	AICRP on Farm Implements & Machinery – CIAE (2012)
Description	It is used for all kinds of seed – Cereal, Pulses, Oilseeds, Maize, beans etc,. The coverage of this seed drill is 0.6 to 1.0 ha per day. It maintains uniform spacing, depth maintained, Gender free
Critical input, quantity and cost	▪ Multi crop seed drill –2Nos (2 Groups) ▪ Field board – 2 Nos
Farmers practice	Manual
Source of input	CIAE, Bhopal, KVK
Photos	
Season	Rabi 2022
No. of Demos (replications)	10 (2 Groups)
Total cost for the Demo	**Rs. 16600.00**
Parameters to be studied:	Labour and time saving efficiency, Gross cost, net income, BCR
Parameters to be reported	Gross cost, net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Agronomy, SMS - Plant Protection, , SS& Head

11. IPDM in Paddy and pesticides application through drone

FLD No.	**11**
Status (New proposal/2nd year /3rd year)	2nd year
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	**IPDM in Paddy and pesticides application through drone**
Technology to be demonstrated:	IPDM
Hybrid or Variety:	Variety – CO51
Source of Technology:	TNAU CPG 2020
Description	▪ *Bacillus subtilis- Seed treatment @ 10 g/kg, Soil application @ 1kg/acre, Seedling root dip @ 1kg/acre* ▪ *Release of Trichogramma japonicum @ 2 cc & Trichogramma chilonis @ 2 cc.* ▪ *Installation of solar light trap @ 1/acre and Installation of Yellow sticky trap @ 5/acre* ▪ *Installation of Stem borer pheromone trap @ 10/acre* ▪ *Need based application of Neem oil @ 3% and Camphor oil 400 ml/acre through drone.* ▪ *Foliar application of Cartop Hydrochloride 50% SP@ 400 g/ac, Azoxystrobin 25 SC @ 200 ml ac through drone.*
Potential yield	-
Critical input, quantity and cost	▪ *Bacillus subtilis* - 30 kg ▪ Pheromone trap - 100 No ▪ Stem borer lure - 200 No ▪ Yellow sticky trap - 50 No ▪ Neem oil - 5 Lit ▪ Drone hiring charge - 1 time ▪ Field board - 10 No
Farmers practice	Application of plant protection chemicals.
Source of input	KVK, PCI Chennai, Local Agri clinic, Garuda aerospace
Photos	-
Average farmers yield	43.61 Q/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.27000.00**
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.

12. Demonstration on management of Fall Army Worm in Maize

FLD No.:	**12**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Category:	Cereal
Crop/ enterprise:	Maize
Farming situation	Irrigated, sandy loam soil
Prioritized problem:	High incidence of FAW, Yield loss (40-50 %) and lack of knowledge on pest management.
Title	**Demonstration on management of Fall Army Worm in Maize**
Technology to be demonstrated:	IPM
Hybrid or Variety:	Hybrid – NK 6240
Source of Technology:	TNAU CPG 2020
Description	▪ Application of neem cake @ 250 kg/ha ▪ Seed treatment with Cyantraniliprole 19.8% + Thiamethoxam 19.8% FS @ 4 ml/kg seed ▪ Installation of pheromone traps @ 12/ha, Border Crop with fodder sorghum, Spray of Chlorantraniliprole @ 4 ml/10 l 40 DAS or Flubendiamide @ 5ml/10 (15-20 DAS), Spraying of Azadirachtin @ 1500PPM @50ml/10l ▪ Spraying of *Metarhizium anisopliae* @ 80g/10l (35-40 DAS) Spray of Emamectin benzoate 5 SG @ 4 g/10 l or Spinetoram 111.7 SC @ 5 ml/10 l (40-60 DAS), Spinetoram 11.70 SC @0.5ml/lit or Emamectin Benzoate 5 SG @ 0.4g/lit at Tasselling & Cob formation stage (60 DAE) if required
Potential yield	-
Critical input, quantity and cost	▪ Pheromone trap - 50 nos ▪ Lure - 100 Nos ▪ Azadirachtin - 5 lit ▪ *Metarhizium anisopliae* - 10 kg ▪ Chlorantraniliprole - 400 ml ▪ Field board - 10 No
Farmers practice	Application of plant protection chemicals.
Source of input	PCI Chennai, Local Agri clinic
Photos	-
Average farmers yield	34.21 qtl/ha
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.23500.00**
Parameters to be studied:	Percent infestation, Yield Q/ha, Benefit Cost Ratio

Parameters to be reported	Percent infestation, Yield Q/ha, Benefit Cost Ratio
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS - Plant Protection, SMS – Agronomy, Senior Scientist and Head.

13. Demonstration on management module against sucking pests in Chilli

FLD No.:	**13**
Status (New proposal/2nd year /3rd year)	New proposal-OFT converted to FLD
Subject	Plant Protection
Category:	Vegetables
Crop/ enterprise:	Chilli
Farming situation	Irrigated, sandy clay loam soil
Prioritized problem:	Injudicious use of pesticides for the management of sucking pest. Non adoption of IPM practices, High infestation of viral disease and sucking pests (Thrips, Aphid, Mite)
Title	**Demonstration on management module against sucking pests in Chilli**
Technology to be demonstrated:	IPDM
Hybrid or Variety:	Hybrid (Priyanka)
Source of Technology:	TNAU CPG 2020
Description	▪ Application of Neem Cake@250kg/ ha ▪ Growing Agathi as border crop ▪ Intercrop with Sesbania, to provide barrier which regulate the thrips ▪ Yellow sticky trap @ 12/ ha ▪ Need based application of Fipronil 5 % SC – 1.5 ml/l for thrips, Spiromesifen 5 ml / 10 l for mites
Potential yield	-
Critical input, quantity and cost	▪ Agathi – 1 Kg ▪ Yellow sticky trap – 50 No ▪ Fipronil – 2.5 Lit ▪ Spiromesifen – 500 ml ▪ Field board – 10 No
Farmers practice	Application of plant protection chemicals.
Source of input	KVK, PCI, Local agri clinic
Photos	-
Average farmers yield	180.53 qtl/ha

Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs.14200.00**
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 – Horticulture, Senior Scientist and Head.

14. Integrated pest and disease management in Snakegourd

FLD No.	**14**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Category:	Vegetable
Crop/ enterprise:	Snakegourd
Farming situation	Irrigated, sandy loam soil
Prioritized problem:	High incidence of Fruit fly, Mosaic. Poor yield, Lack of awareness on IDM practices
Title	**Integrated pest and disease management in Snakegourd**
Technology to be demonstrated:	IPDM
Hybrid or Variety:	Hybrid – Mahyco-1
Source of Technology:	TNAU CPG 2020
Description	▪ Soil Application of Neem cake @ 100kg/acre ▪ Soil application of *Bacillus subtilis* @ 1kg/ac ▪ Soil application of *Trichoderma asperellum* @ 1kg/ac ▪ Installation of Pheromone traps and lures for fruit fly @ 12/ha ▪ Installation of yellow sticky trap @ 12/ha, Foliar application of Neem oil 3 %
Potential yield	-
Critical input, quantity and cost	▪ *Bacillus subtilis* - 20 kg ▪ *Trichoderma asperillum* - 20 kg ▪ Pheromone trap – 30 No ▪ Fruit fly Lure – 60Nos ▪ Yellow sticky trap – 50 No ▪ Neem oil – 5 lit ▪ Field board – 10 No
Farmers practice	Application of Chemical pesticide

Source of input	KVK, PCI Chennai, Local Agri clinic
Photos	-
Average farmers yield	410.22 qtl/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	**Rs.17500.00**
Parameters to be studied:	Percent pest & disease incidence, % Disease index, Yield Q/ha, BCR
Parameters to be reported	Percent pest & disease incidence, % 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 – Horticulture, Senior Scientist and Head.

15. Demonstration of GIF Tilapia fish Variety

FLD No.	**15**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Animal Science
Category:	Fish
Crop/ enterprise:	GIF Tilapia
Farming situation	-
Prioritized problem:	High incidence of mortality due to *Aeromonas hydrophila.* Low yield in existing varieties (4 t/ha.). Prolonged culture period (> 9months). Size variation among fish population at the time of harvest. Higher cost of feed
Title	**Demonstration of GIF Tilapia fish Variety**
Technology to be demonstrated:	**GIF Tilapia**
Hybrid or Variety:	-
Source of Technology:	TNJFU, 2019
Description	Better growth and survival of Gif Tilapia fish compared to the performance of the local fish Variety
Potential yield	-
Critical input, quantity and cost	▪ Fish fingerlings : 2500 nos ▪ Fish feed : 250 Kg ▪ Field board : 10 No.
Farmers practice	Local Tilapia
Source of input	TNJFU

Photos	
Average farmers yield	-
Season	Rabi 2022
No. of Demos (replications)	10
Total cost for the Demo	**Rs.24000.00**
Parameters to be studied:	1.Growth rate 2.Survival rate 3.Yield (q/ha.), Gross cost, gross and net income, BCR
Parameters to be reported	1.Growth rate 2.Survival rate 3.Yield (q/ha.), Gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science, Senior Scientist and Head i/c,

16. Demonstration of tree leaf meal incorporated concentrate feed for backyard native chickens

FLD No.	**16**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Animal Science
Category:	Poultry
Crop/ enterprise:	Native chicken
Farming situation	-
Prioritized problem:	High feed cost (70-75 % of total production cost), Imbalanced nutrient supply of scavenging birds, Soft shelled eggs. Low body weight gain, Low egg production and reduced hatchability percentage.
Title	**Demonstration of tree leaf meal incorporated concentrate feed for backyard native chickens**
Technology to be demonstrated:	Tree leaf meal incorporated concentrate feed
Hybrid or Variety:	-
Source of Technology:	IAN, TANUVAS 2019
Description	Tree leaf meal based concentrated feed is prepared with following ingredients, Maize 59.7%, Soya bean 23.75%, DORB1.5%,Tree leaf meal 2.5%, Mineral mixture for poultry 2%, Fish meal 10%, Sodium bicarbonate 0.05%, and salt 0.5%.
Potential yield	
Critical input, quantity and cost	Tree leaf meal incorporated concentrate feed (10birds x 80 g x 90 days). : 750 kg

	Dewormer : 20 dose. Field board : 10 No.
Farmers practice	Open grazing
Source of input	IAN, TANUVAS , Kattupakkam
Photos	
Average farmers yield	-
Season	Kharif 2022
No. of Demos (replications)	10
Total cost for the Demo	**Rs.22500.00**
Parameters to be studied:	1. Livability (%), 2.Weight gain (kg), 3. Mortality (%) ,Gross cost, gross and net income, BCR
Parameters to be reported	1. Livability (%), 2.Weight gain (kg), 3. Mortality (%) , Egg production Gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science, Senior Scientist and Head i/c,

17. Demonstration on Mastiguard in milch Cow

FLD No.	**17**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Animal Science
Category:	Large Ruminants
Crop/ enterprise:	Cow
Farming situation	Irrigated, sandy loam soil
Prioritized problem:	High incidence of Mastitis in Cow, Low milk Yield
Title	**Demonstration on Mastiguard in milch Cow**
Technology to be demonstrated:	Mastiguard
Hybrid or Variety:	-
Source of Technology:	**TANUVAS 2016**
Description	**TANUVAS Mastiguard** TEAT PROTECT is a unique germicidal teat protective spray for preventing mastitis. This gel works by preventing common mastitis causing bacteria from entering the teat canal and provides extended anti microbial protection. .
Potential yield	-

Critical input, quantity and cost	Mastiguard teat spray : 10 Nos Field board : 10Nos
Farmers practice	Detection through observation of gross changes in milk and / or udder
Source of input	-
Photos	
Average farmers yield	-
Season	Rabi 2022
No. of Demos (replications)	10
Total cost for the Demo	**Rs.17000.00**
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, Senior Scientist and Head i/c, .

18. Demonstration of Nandanam chicken-IV under backyard condition

FLD No.	**18**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Animal Science
Category:	Poultry
Crop/ enterprise:	Layer
Farming situation	-
Prioritized problem:	Lack of awareness on improved breeds. Low body weight and Low number of eggs.
Title	Demonstration of Nandanam chicken-IV under backyard condition
Technology to be demonstrated:	**Nandanam chicken-IV**
Hybrid or Variety:	Breed
Source of Technology:	TANUVAS 2018
Description	Weight of day old chick (g) : 36, Weight at 20 weeks of age (kg) : 1.3, Egg production (21-72 weeks of age) : 190, Livability (20-40 weeks) : 97

Potential yield	Egg production (21-72 weeks of age) : 190
Critical input, quantity and cost	Day old chicks : 250 Nos. Deworming, Vaccination and deticking : 20 dose Brooding and feeding charges : 10 Nos. Field board : 10 Nos.
Farmers practice	Local breed
Source of input	TANUVAS, Chennai
Photos	 
Average farmers yield	Egg production (21-72 weeks of age) : 70
Season	Kharif 2022
No. of Demos (replications)	10
Total cost for the Demo	**Rs.21000.00**
Parameters to be studied:	Body weight (Kg), Egg production (Nos), Mortality (%), Gross cost, gross and net income, BCR
Parameters to be reported	Body weight (Kg), Egg production (Nos), Mortality (%), Gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Animal Science, Senior Scientist and Head

19. Demonstration of Banana pseudo stem RTS beverage

FLD No.	**19**
Status (New proposal/2nd year /3rd year)	New
Subject	Home Science
Category:	Value addition
Crop/ enterprise:	Enterprise
Farming situation	-
Prioritized problem:	Wasted at farm and sale for cooking
Title	**Demonstration of Banana pseudostem RTS beverage**
Technology to be demonstrated:	Ginger flavoured ready to serve beverage
Hybrid or Variety:	-
Source of Technology:	TNAU, 2021
Description	Nutri garden is the growing nutrients rich crops in backyard or in their vicinity to meet the requirements of the family all year

	round, fresh and safe (Chemical free).
Potential yield	-
Critical input, quantity and cost	Banana pseudo stem-180 kg, sugar-25kg, stabilizer-5kg, preservative-5kg, Ginger-20kg, bottle-500 Nos, field board-5Nos.
Farmers practice	Wasted at farm and sale for cooking
Source of input	Local
Photos	
Average farmers yield	-
Season	Kharif 2022
No. of Demos (replications)	5
Total cost for the Demo	**Rs.12000.00**
Parameters to be studied:	Shelf life, economics
Parameters to be reported	Shelf life, economics
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Home Science, SMS-Horticulture, Senior Scientist & Head

20. Demonstration of Tomato powder

FLD No.	**20**
Status (New proposal/2nd year /3rd year)	New
Subject	Home Science
Category:	Value addition
Crop/ enterprise:	Enterprise
Farming situation	-
Prioritized problem:	Lack of awareness on value addition
Title	**Demonstration of Tomato powder**
Technology to be demonstrated:	Tomato powder
Hybrid or Variety:	-
Source of Technology:	TNAU, 2021
Description	Tomato powder is a product made from dehydrated tomatoes during on-season that can be used as a spices, instant mix, seasoning and garnish.
Potential yield	-
Critical input, quantity	Tomato-200 kg, Corn flour-20 kg, Spices – 3.5 kg, packing

and cost	materials-300 Nos, field board-5 Nos.
Farmers practice	No value addition.
Source of input	Local
Photos	
Average farmers yield	-
Season	Kharif 2022
No. of Demos (replications)	5
Total cost for the Demo	**Rs.7000.00**
Parameters to be studied:	Shelf life, economics
Parameters to be reported	Shelf life, economics
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Home Science, SMS-Horticulture, Senior Scientist & Head

21. Demonstration of improved Ring harvester for Bhendi

FLD No.	**21**
Status (New proposal/2nd year /3rd year)	New
Subject	Home Science
Category:	Drudgery reduction
Crop/ enterprise:	Bhendi
Farming situation	-
Prioritized problem:	Physical injury during harvesting.
Title	**Demonstration of improved Ring harvester for Bhendi**
Technology to be demonstrated:	Improved ring harvester
Hybrid or Variety:	-
Source of Technology:	TNAU, 2021
Description	**Improved ring harvester:** It is an ergonomically designed tool to harvest vegetables such as bhendi, brinjal etc., and flowers like marigold. It is a small tool which can be worn around the finger and the blade can be used to cut the stalk of flowers and vegetables.
Potential yield	-
Critical input, quantity and cost	Improved ring harvester, Hand gloves and harvesting bag, field board-5 Nos.

Farmers practice	No tools used for drudgery reduction
Source of input	TNAU
Photos	
Average farmers yield	-
Season	Rabi 2022-2023
No. of Demos (replications)	5
Total cost for the Demo	**Rs.8000.00**
Parameters to be studied:	Labour requirement (Man days/ha), cost of operation (Rs/Ha), savings in cost(%) and overall discomfort score
Parameters to be reported	Labour requirement (Man days/ha), cost of operation (Rs/Ha), savings in cost(%) and overall discomfort score
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Home Science, SMS-Horticulture, Senior Scientist & Head

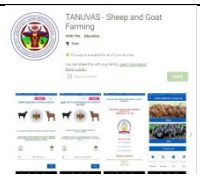
22. Demonstration of Nutrigarden

FLD No.	**22**
Status (New proposal/2nd year /3rd year)	3nd year
Subject	Home Science
Category:	Nutritional security
Crop/ enterprise:	Nutri garden
Farming situation	-
Prioritized problem:	Imbalanced diet, improper utilization of waste water
Title	**Demonstration on Nutri garden**
Technology to be demonstrated:	Nutri garden
Hybrid or Variety:	-
Source of Technology:	TNAU
Description	Nutri garden is the growing nutrients rich crops in backyard or in their vicinity to meet the requirements of the family all year round, fresh and safe (Chemical free).
Potential yield	-
Critical input, quantity and cost	Seed kit and Field board

Farmers practice	Purchase of vegetables from local vendors.
Source of input	TNAU
Photos	
Average farmers yield	-
Season	Kharif
No. of Demos (replications)	5
Total cost for the Demo	**Rs.7500.00**
Parameters to be studied:	Intake quantity/Person/Day, Yield/unit (kg)
Parameters to be reported	Intake quantity/Person/Day, Yield/unit (kg)
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS-Home Science, SMS-Horticulture, Senior Scientist & Head

23. Demonstration of TANUVAS Sheep & Goat farming mobile application

FLD No.	**23**
Status (New proposal/2nd year /3rd year)	New FLD
Subject	Agricultural Extension
Category:	Extension
Crop/ enterprise:	Mobile application
Farming situation	-
Prioritized problem:	Lack of awareness and non adoption of new technology through mobile app.
Title	**Demonstration of TANUVAS Sheep & Goat farming mobile application**
Technology to be demonstrated:	Facilitating instant decision making process of the Sheep & Goat by the farmers.
Hybrid or Variety:	-
Source of Technology:	TANUVAS 2019
Description	
Potential yield	-
Critical input, quantity and cost	Internet Connectivity charges
Farmers practice	Traditional knowledge and practices
Source of input	-

Photos	
Average farmers yield	-
Season	Kharif
No. of Demos (replications)	10
Total cost for the Demo	**Rs.3500.00**
Parameters to be studied:	% of adoption and Knowledge gain
Parameters to be reported	% of adoption and Knowledge gain
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Agriculture Extension, Senior Scientist and Head.

24. Demonstration of TNAU Soil Doc mobile application

FLD No.	**24**
Status (New proposal/2nd year /3rd year)	New FLD
Subject	Agricultural Extension
Category:	Extension
Crop/ enterprise:	Mobile application
Farming situation	-
Prioritized problem:	Lack of awareness on mobile application
Title	**Demonstration of TNAU Soil Doc mobile application**
Technology to be demonstrated:	Soil doc mobile application.
Hybrid or Variety:	-
Source of Technology:	TNAU 2021
Description	
Potential yield	-
Critical input, quantity and cost	Internet Connectivity charges
Farmers practice	Own practices
Source of input	-
Photos	
Average farmers yield	-
Season	Kharif

No. of Demos (replications)	10
Total cost for the Demo	**Rs.3500.00**
Parameters to be studied:	% of adoption and knowledge gain
Parameters to be reported	% of adoption and Knowledge gain
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS Agriculture Extension, Programme Asst (Labtech).

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	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. ▪ MN Mixture - 5 Kgs. ▪ NPV 250 SL- 250 ml. ▪ Soil health card.	3600.00	100	360000.00	▪ Plant population/ sqm. ▪ No. of branches /plant. ▪ Yield (q/ha). ▪ BCR	SMS Agricultural Extension, 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	TCGS 1043/VRI 8	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*	45 kg 2 kg 2 kg	4800.00	100	**480000.00**	▪ 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, Lack of knowledge on scientific farming Poor resource recycling	Integrated farming system	ICAR	4	4	Goat - 2 farmers Honey bee boxes – 2 Farmers	40000.00	Senior Scientist and Head, SMS Animal Science, SMS Agronomy.
2	FFS	Low yield, Pest and disease incidence	Integrated Crop Management in Millets	TNAU	1	0.4		30000.00	Senior Scientist and Head, SMS Agronomy, SMS Plant Protection
3	NFDB	-	-	-	-	-	-	-	-
4	SERP	-	-	-	-	-	-	-	-
5	Enterprise	Low usage of palmyrah root tubers	Demonstration of Palmyrah products (EDP mode)	TNAU	10	-	Palmyrah root tubers-100kg, cereals and pulses-25kg, Spices-2kg, packing materials-500 Nos, Weighing scale-1No, Sealing machine-1No, field board-1 No.	17000.00	SMS-Home Science, SMS-Horticulture SMS Agriculture Extn.

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	Farmer Producer Organization	NABARD	3	2019	500	1144000/-	288500/-	SMS – Agrl. Extension & SMS – Animal Science
2	Food Processing Training Centre	Ministry of food processing	10	2014-15	3 Nos (60 participants)	150000/-	-	SMS – Home Science
3	Promotion of medicinal plants	National Medicinal Plants Board	1	2022	100 farmers	200000/-		SMS Horticulture & Senior Scientist and Head i/c,

11.2. Project details

1. Farmer Producer Organization

Funding Agency	NABARD
State/Central/Over Seas	State
Title	Promotion of farmer producer organization
Objectives	To collectivize farmers especially small producer to foster technology penetration, to improve productivity, to enable access to inputs and services for increased farmers income.
Study area	Vandavasi taulk of Thiruvannamalai district.
Methodology	Group Approach
Team Members	Senior Scientist and Head i/c, SMS Agricultural Extension, SMS Animal Science
Budget	**Rs. 1144000/-**

2. 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)

3. Promotion of medicinal plants

Funding Agency	National Medicinal Plants Board, Ministry of Ayush.
State/Central/Over Seas	Central
Title	Improved cultivation technologies for commercially viable medicinal plants suitable for Thiruvannamalai district of Tamilnadu
Objectives	To promote medicinal plants cultivation through training and awareness among the farmers.
Study area	Thiruvannamalai district.
Methodology	Training
Team Members	SMS Horticulture & Senior Scientist and Head i/c,
Budget	**Rs. 200000/-**

12. Trainings planned during 2022-23

12.1. Trainings for Farmers and Farm Women planned during 2022-23

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	**FLD:** Organic cultivation and demonstration of Paddy variety ADT 57	ICM practices for paddy	3	60	SMS Agronomy, SMS Agrl. Extn. SMS Plant protection.
2	Crop Production	Finger millet	Cultivation of long duration and old varieties ,Lack of awareness on high yielding variety, High incidence of pest and disease.	-	ICM practices for pearl millet	1	20	SMS Agronomy, SMS Agrl. Extn. SMS Plant protection.
3	Crop Production	Little millet	Cultivation of local variety – Chitam samai, Perum samai, Senj samai Long duration, Non resistant to Lodging, Susceptible to drought, Low yield	**FLD:** Demonstration of Little millet variety – ATL 1	ICM practices for Little millet	2	40	SMS Agronomy, SMS Agrl. Extn. SMS Plant protection.

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 productivity	ICM practices for redgram	2	40	SMS Agronomy, SMS Agrl. Extn. SMS Plant protection.
				FLD: Demonstration of blackgram VBN11	ICM practices for Blackgram	2	40	
				-	ICM practices for Greengram	1	20	
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 improved varieties for higher productivity in Groundnut	ICM practices for groundnut	4	80	SMS Agronomy SMS Agrl. Extn. SMS Plant protection.
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 Agrl. Extn. SMS Plant protection.

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	2	40	SMS Agrl. Extn. SMS Agronomy, SMS Plant protection.
8	Horticulture	Bitter gourd, Snake gourd, Ridge gourd	Low fruit set, Lack of adoption of improved production technologies, Maleness	**FLD**: Integrated Crop Management in Bitter 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	-	Precision farming technologies	2	40	SMS Horticulture, SMS Plant protection, SMS Home science
			Low market price, Lack of knowledge in processing of vegetables during on-season	**FLD:** Demonstration of Banana pseudostem RTS beverage	Preparation of banana pseudostem RTS beverage	2	40	SMS Home science, SMS Horticulture, SMS Agrl. Extn.
10	Horticulture	Brinjal, Chillies, Tomato	Low yield, Flower drop, Lack of adoption of location specific hybrids/varieties, Lack of application of growth regulators, Lack of adoption of improved technologies, Imbalanced nutrition,	**OFT :** Assessment of chilli hybrids for higher productivity. **FLD:** Demonstration of improved variety	Integrated Crop Management technologies	3	60	SMS Horticulture, SMS Plant protection, SMS Agrl. Extn.

				VRM(Br)2. **FLD:** Demonstration of Tomato hybrid COTH4				
			Low germination rate, Poor quality seedlings and field establishment	-	Improved nursery management technologies	2	40	SMS Horticulture, SMS Plant protection, SMS Agrl. Extn.
		Tomato	Low market price, Lack of knowledge in processing of vegetables during on-season	**FLD:** Demonstration of Tomato powder	Preparation of Tomato powder and instant mix	2	40	SMS Horticulture, SMS Plant protection, SMS Agrl. Extn.
		Brinjal	Low market price, Poor Shelf life of fruits and vegetables because its perishables in nature, Lack of Post harvest facilities viz.,	**OFT :** Assessment of different coating formulation to improved the shelf life of fruits and vegetables	Demonstration on different types of coating formulations	2	40	SMS Home science, SMS Horticulture, SMS Agrl. Extn.
		Bhendi	Lack of adoption of improved production technologies	**OFT:** Assessment of microbial inoculants for yield enhancement in Bhendi	Integrated Crop Management technologies	1	20	SMS Horticulture, SMS Plant protection, SMS Home science SMS Agrl. Extn.
			Lack of knowledge on farmers friendly tool, thorn injured the fingers.	**FLD:** Demonstration of improved ring harvester for bhendi	Drudgery reducing harvest equipments	2	40	SMS Home science, SMS Horticulture, SMS Agrl. Extn.

11	Horticulture	Cassava	Low yield, Non adoption of improved production practices, Mosaic disease, Sucking pests	**FLD:**Demonstration of Cassava YTP2	Integrated Crop Management technologies	1	20	SMS Horticulture, SMS Plant protection, SMS Home Science, SMS Agrl. Extn.
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.	-	Integrated Crop Management technologies	1	20	SMS Horticulture, SMS Plant protection, SMS Agrl. Extn.
13	Horticulture	Vegetables	Lack of knowledge on organic farming technologies	-	Organic vegetable production technologies	2	40	SMS Horticulture, SMS Plant protection, SMS Agrl Extn.
14	Horticulture	Tuberose	Low yield, Non adoption of improved production technologies and varieties, High incidence of nematode, Mealy bug and Sucking pests.	-	Integrated Crop Management technologies	1	20	SMS Horticulture, SMS Plant protection, SMS Agrl Extn.
15	Soil Health and Fertility Management	Horticultural crops	Imbalanced nutrition	-	Integrated Plant Nutrition system.	1	20	SMS, Horticulture, SMS Agrl. Extn.

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	**OFT:** Assessment of herbal extract for managing ectoparasite infestation in cattle	Integrated Disease Management	2	40	SMS Animal Science, SMS Agricultural Extension.
				FLD: Demonstration of Masiguard in Cow	Breeding management in cow	2	40	SMS Animal Science, SMS Agricultural Extension.
			Lack of awareness on clean milk production.	-	Clean milk production	2	40	SMS Animal Science, SMS Home Science.
18	Livestock Production and Management	Sheep & Goat	Sheep and goat rearing is becoming more intensive in Tamil Nadu. Normally the animals are not supplemented with concentrate feed and mineral deficiency is common, causing decreased growth rate.	**OFT :** Assessment of AFTD based mineralized salt lick over Mineral Mixture for Goat on growth performance	Nutrient Management	2	40	SMS Animal Science, SMS Agricultural Extension.
					Integrated Disease management in sheep and goat	2	40	

19	Livestock Production and Management	Poultry	Lack of awareness on improved breeds, Low body weight, High mortality in backyard condition, Low disease resistance**.**	**FLD :** Demonstration of Nandanam chicken-IV under backyard condition.	Disease management in native chicken	2	40	SMS Animal Science, SMS Agricultural Extension.
			Lack of awareness on improved breeds, Low body weight, Low number of eggs		Backyard layer poultry farming	2	40	SMS Animal Science, SMS Agricultural Extension.
			High feed cost, Imbalanced nutrient supply of scavenging birds.	**FLD :** Demonstration on Tree leaf meal incorporated concentrate feed	Feed management in poultry	2	40	SMS Animal Science, SMS Agricultural Extension.
20	Livestock Production and Management	Piggery	Lack of knowledge on Piggery farming	**-**	Piggery farming	1	20	SMS Animal Science, SMS Agricultural Extension.
21	Home Science/Women empowerment	Paddy, Millets& Pulses	Lack of awareness on therapeutic properties of millets and brown rice, Gluten allergy – consumption of refined wheat flour based products. Lack of awareness on alternate sources for refined wheat flour.	-	Preparation of brown rice and millet based products.	2	40	SMS Home science, SMS Agrl. Extn.

22	Home Science/Women empowerment	Pulses	More labour required for grading and winnowing of pulses. Time consuming process.	-	Demonstration on spiral separator	2	40	SMS Home science, SMS Agrl Extn.
23	Agril. Engineering	Maize	Labour shortage, Lack of knowledge on mechanization	**FLD:** Demonstration on Rotary dibbler (Multi crop seed drill) through EDP mode	Improved maize production technologies	1	20	SMS Agronomy, SMS Agrl. Extn. SMS Plant protection.
24	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:** IPDM in Paddy and pesticides application through drone	Integrated pest & disease management in paddy	3	60	SMS Plant protection, SMS Agronomy
		Maize	Lack of awareness on IPDM practices, fall army worm, downy mildew.	**FLD:** Demonstration on management of Fall Army Worm in Maize	Integrated pest management in maize	2	40	SMS Plant protection, SMS Agronomy

25	Plant Protection	Blackgram, Greengram	Lack of awareness on Resistant variety, , pod borer and Poor yield. Severe incidence of YMV	-	Integrated pest & disease management	2	40	SMS Plant protection, SMS Agronomy
26	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	Integrated pest & disease management in Groundnut	2	40	SMS Plant protection, SMS Agronomy
27	Plant Protection	Sugarcane	Yield loss due to different borers and severe incidence of root grub.	-	Integrated pest management in sugarcane borers	1	20	SMS Plant protection, SMS Agronomy
28	Plant Protection	Banana	Lack of knowledge on wilt, Nematode, weevil, leaf spot, Improper management practices and lack awareness on IPDM.	-	Integrated disease management	1	20	SMS Plant protection, SMS Horticulture.
29	Plant Protection	Brinjal, Chilli	Thrips, die back, powdery mildew, Shoot and Fruit borer, wilt, root rot, little leaf and blight, yield loss.	**OFT :** Assessment of pest management modules against Brinjal Shoot and Fruit borer **FLD:** Demonstration on management module against sucking pests in Chilli	Integrated pest and disease management	4	80	SMS Plant protection, SMS Horticulture.

30	Plant Protection	Biter gourd, Snake gourd & Watermelon	Severe incidence of fruit fly, mosaic, sucking pests, poor yield.	**FLD:** Integrated pest and disease management in snakegourd	Integrated pest and disease management	4	80	SMS Plant protection, SMS Horticulture.
31	Plant Protection	Mulberry	Root rot, poor quality leaf for silkworm.	-	Integrated Disease Management	1	20	SMS Plant protection, SMS Agrl. Extn.
32	Enterprises development	Mushroom	Lack of knowledge on alternate variety, Low income	**-**	Production technologies for oyster mushroom	2	40	SMS Plant protection, SMS Home science, SMS Agrl. Extn.
33	Enterprises development	Production of honey	Lack of awareness on bee keeping, Low income.	**-**	Bee keeping technologies	2	40	SMS Plant protection, SMS Agrl. Extn.
34	Fisheries	Fish farming	High incidence of mortality due to *Aeromonas hydrophila.* Low yield in existing varieties (4 t/ha.). Prolonged culture period (>9months). Higher cost of feed	**FLD :** Demonstration Gif Tilapia fish variety	Fish farming	2	40	SMS Animal Science, SMS Agricultural Extension.
35	Production of Inputs at site	Vermi compost	Low soil fertility, Low yield, Lack of knowledge on composting techniques	**FLD:** Demonstration of rapid vermicompostin g techniques	Compost production technology	2	40	SMS Agronomy, SMS Agrl. Extn.

36	Capacity Building and Group Dynamics	Producer company	Low market price	-	Various Business Avenues in agriculture.	2	40	SMS Agrl. Extn. Senior Scientist and Head.
		ICT	Poor technology transfer mechanism and lack of awareness on soil fertility	**FLD:** Demonstration of TANUVAS Sheep & Goat farming mobile application **FLD:** Demonstration of TNAU Soil Doc mobile application	Mobile apps	2	40	SMS Agrl. Extn. SMS Animal Science
37	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
38	Others- Balanced diet	Nutrigarden	Imbalanced diet, improper utilization of household waste water	**FLD:** Demonstration on Nutrigarden	Nutrigarden for balanced diet	2	40	SMS Home science, SMS Horticulture, SMS Agrl Extn.
39	Others- Value addition	Groundnut	Lack of knowledge on value addition.	-	Preparation of value added products.	2	40	SMS Home science, SMS Agrl. Extn.

40	Others- Value addition	Vegetables	Lack of knowledge on value addition during on season. 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.
41	Others- Value addition	Amla	Low market price during season, lack of awareness in value addition.	-	Preparation of value added products from Amla	2	40	SMS Home science, SMS Horticulture, SMS Agrl. Extn.
42	Others- Value addition	Medicinal plants	Lack of adoption of improved production and post harvest management technologies.	**OFT:** Assessment of different types of herbal powder incorporated nutrimix	Value addition in medicinal plants	2	40	SMS Home science, SMS Agrl Extn., Senior Scientist and Head.
43	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
44	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					-	**115**	**2300**	

12.2. Trainings for Rural Youth planned during 2022-23

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, SMS Agrl Extn.,
2	Training and pruning of orchards	-	-	-	-	-	-	-
3	Protected cultivation of vegetable crops	-	-	-	-	-	-	-
4	Commercial fruit production	-	-	-	-	-	-	-
5	Integrated farming	Paddy	Lack of awareness	-	Awareness on IFS	1	20	SMS Agronomy, SMS Animal Science
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 Animal Science

		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., Senior Scientist and Head.
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, SMS Agrl. Extn.
11	Bee-keeping	Bee Keeping	Lack of awareness on bee keeping, Low income.	-	Bee keeping technologies	1	20	SMS Plant protection, SMS Agrl. Extn.

12	Sericulture	Silkworm rearing	Lack of knowledge on silkworm rearing	-	Silkworm rearing techniques	1	20	SMS Plant protection, SMS Agrl. Extn.
13	Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-
14	Value addition	Banana	Low market price during season, lack of awareness in value addition.	-	Preparation banana based pickles and instant mix	1	20	SMS Home science, SMS Horticulture, SMS Agrl. Extn.
		Milk	Distress sale of milk, Lack of awareness in processing.	-	Value addition in milk (Preparation of falvoured milk and pannier.	1	20	SMS Home science, SMS Animal Science, SMS Agrl. Extn.
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 Agri. Extn.

21	Sheep and goat rearing	Goat	Low body weight, High mortality, High morbidity.	-	Slatted floor goat farming	1	20	SMS Animal Science, SMS Agri. Extn.
22	Quail farming	Japanese quail	Lack of awareness on improved breeds, Low body weight, Poor livability.	-	Intensive quail farming	1	20	SMS Animal Science, SMS Agri. Extn.
23	Piggery	-	-	-	-	-	-	-
24	Rabbit farming	-	-	-	-	-	-	-
25	Poultry production	-	-	-	-	-	-	-
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 2022-23

S. No	Thematic area	Training Course Title	No. of Courses	No. of Participants
1	Productivity enhancement in field and horticultural crops	Production enhancement in field crops	1	20
		Advanced production technologies in horticultural crops	1	20
2	Integrated Pest Management	Advances on pest and disease management in agriculture	1	20
3	Integrated Nutrient management	-	-	-
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	2	40
13	Information networking among farmers	-	-	-
14	Capacity building for ICT application	Training on TNAU soil Doc application	1	20
15	Management in farm animals	Management of farm animals	1	20
16	Livestock feed and fodder production	Feed and fodder production management	1	20
17	Household food security	Nutrigarden for balanced diet	2	40
18	Any other-Organic farming	Organic production technologies in horticultural crops	1	20
Total			**12**	**240**

12.4. Skill trainings and vocational trainings planned during 2022-23

S.No.	Training title	Duration (Days)	No. of programmes	Sponsoring agency	Participants (Nos.)	Name of the team members
1	Integrated Farming System	3 days	1	-	20	SMS Animal Science, SS& Head
2	Improved nursery management in fruit and vegetable crops.	3 days	1	-	20	SMS Horticulture, SMS Plant Protection, SMS Agrl. Extn.
3	Bio pesticides production and application.	3 days	1	-	20	SMS Plant Protection, SMS Agronomy, SS& Head
4	Natural Farming/Organic farming	3 days	1	-	20	SMS Agronomy, SS& Head
5	Value addition in millets	3 days	1	-	20	SMS Home science, SMS Agronomy
6	Poultry rearing	3 days	1	-	20	SMS Animal Science, SS& Head
Total Courses		**-**	**6**	-	**120**	-

12.5. Sponsored trainings planned during 2022-23

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 (Fruits)	Good agricultural practices in banana	1 (3 days)	Practicing farmer	20	NABARD	SMS Horticulture, SMS Agrl. Extn. SMS Plant protection.
2	Crop Management	Organic farming in horticultural crops	1 (3 days)	Practicing farmers and farm women	20	Department of Horticulture	SMS Horticulture, SMS Plant protection, SMS Agronomy

3	Crop Management	Production technologies of commercially viable medicinal plants	4 (3 days)	Practicing farmers and farm women	100	National Medicinal and Aromatic Plants Board	SMS Horticulture, SMS Plant protection, SMS Agronomy SMS Home Science, SMS Agri. Extension
4	Crop Management	Improved Groundnut cultivation and value addition	4 (3 days)	Practicing farmers and farm women	160	Tamil Nadu Rural Transformation Project	SMS Agronomy, SMS Plant protection, SMS Home Science
5	Honey production	Bee keeping technologies.	1 (5 days)	Practicing farmers and farm women	20	Department of Agriculture	SMS Plant protection, SMS Agrl. Extn.
6	Mushroom production	Oyster mushroom production technologies	2 (3 days)	Practicing farmers and farm women1	40	TNRTP	SMS Plant protection, SMS Home Scince SMS Agrl. Extn.
7	Feed management	Feed manufacturing technologies	1 (3 days)	FPO members	20	NABARD	SMS Animal Science SMS Agrl. Extn.
8	Value addition (Fruits & vegetables)	Fruits and vegetable preservation techniques.	1 (3 days)	Women	20	National Mission on Food Processing	SMS Home science, SMS Horticulture
9	Value addition (Field crops)	Preparation of instant mix.	1 (3 days)	Women	20		SMS Home science, SMS Agronomy
10	Value addition (Field crops)	Preparation of Bakery products.	1 (3 days)	Women	20		SMS Home science, SMS Agronomy
Total					**340**	-	-

13. Extension programmes planned during 2022-23

S. No.	Extension programme	No. of programmes	No. of Participants	Team member involved
1	Advisory Services	525	2626	Senior Scientist and Head, SMS Agrl.Extension SMS Agronomy, SMS Horticulture, SMS Home Science, SMS Plant Protection, SMS Animal Science.
2	Diagnostic visits	10	120	
3	Field Day	20	625	
4	Group discussions	5	180	
5	Kisan Gosthi/Kisan Mela	3	300	
6	Film Show	15	300	
7	Exhibition	2	600	
8	Scientists' visit to farmers field	105	320	
9	Plant/Soil health/Animal health camps	10	420	
10	Ex-trainees Sammelan	1	40	
11	Farmers' seminar/workshop	1	75	
12	Method Demonstrations	25	500	
13	Celebration of important days	3	250	
14	Special day celebration	2	80	
15	Exposure visits	2	50	
16	Technology week	1	200	
17	FFS	1	25	
18	Awareness programs	5	300	
19	Lecture delivered	40	800	
Total		**776**	**7811**	
Other Extension activities				
22	TV/Radio Programme	10	-	
23	News coverage	50	-	
24	Popular Articles	10	-	
25	Research Article	1	-	
26	Extension Literatures	30	-	
27	Kisan Mobile Advisory Services	24	-	

14. Activities proposed as Knowledge and Resource Centre during 2022-23

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
		Finger millet ATL 1	0.001	
		Groundnut TMV(Gn)14	0.001	
		Groundnut TCGS 1043	0.001	
		Greengram CO 8	0.001	
		Greengram VBN 4	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	
		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	
		Fodder cafeteria	1 No	
		Mist Chamber	1 No	
		Rabbit unit	1 No	
		Nursery	1 No	SMS Horticulture Farm Manager

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 paddy and groundnut Organic farming IPDM modules Scientific livestock farming Precision farming in vegetables High density planting in fruit crops. Soil health enhancement Foliar nutrition and fertigation Value addition in minor millets Kisan gosthi (Exhibition)	1 No	All staff

14.2 Technological products planned to be produced in the KVK during 2022-23

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)	10	SMS Agronomy SMS Plant protection SMS Agrl. Extn. Farm Manager
		Black gram VBN 8	5	
		Groundnut TMV14/VRI 8	8	
		Fodder seeds	2	
2	Planting materials	Fruit plants	1000	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	60	SMS Agronomy SMS Plant Protection Farm Manager
		Vermiworms	0.3	
		Azolla	1	
4	Livestock strains	Goat (Nos)	15	SMS Animal Science Farm Manager
		Poultry desi birds	1000	
		Quail	1500	

5	Mushroom	Spawn	0.5	SMS Plant Protection PA Lab technician
6	Micronutrient formulation	Vegetable special	3	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 Pulses	
		ICM in Oilseeds	
2	Horticulture	Precision farming in vegetables	SMS Horticulture, SMS Plant protection Senior Scientist and Head
		Protected cultivation of 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	
4	Animal Science	Integrated Disease Management in livestock	SMS Animal Science Senior Scientist and Head
5	Home science	Nutrigarden and value addition of fruit and vegetables	SMS Home Science, SMS Plant protection Senior Scientist and Head.

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	
		ICM in Redgram	
		Bio pesticides production technology	SMS Plant protection Senior Scientist & Head
		Biological management pest and diseases	
		Growth regulator application in vegetables	SMS Horticulture

		Protray seedlings production technologies	
		Value addition in vegetables	SMS Home Science, SMS Agrl. Extn.
		Value addition in traditional rice varieties	
2	Pamphlets	Roles and activities of KVK	SMS Agrl. Extn. SMS Plant protection Sr. Scientist & Head
		ICM in groundnut	
		Vermicompost production	
		ICM in Brinjal	SMS Horticulture SMS Plant protection SMS Agrl. Extn.
		ICM in cucurbits	
		ICM in Chillies	
		ICM in Bhendi	
		ICM in Tomato	
		ICM in Cassava	
		Nursery management in vegetable crops	
		Bee keeping technologies	SMS Plant protection Senior Scientist & Head
		IPDM in chilli	
		IPDM in brinjal	
		Fodder production technologies	SMS Animal Science SMS Agrl. Extn.
		Goat farming	
		Japanese quail rearing	
		Value addition in fruits and vegetables	SMS Home Science
		Value addition in millets and pulses	
2	Booklet	Organic farming	SMS Horticulture 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 2022-23

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	4 Nos.	480000.00	All SMS
		MEDP training	2 Nos.	100000.00	
		FSPF	1 No	100000.00	
		Farmer Producer Company	1 No.	1144000.00	
2	Coconut Development Board	FoCT training	2 Nos.	120000.00	SMS Plant protection Sr. Scientist and Head

16. Revolving Fund

16.1. Status of Revolving fund

Opening balance as on 01.04.2021 (Rs.)	Receipts during 2021-22 (Rs)	Expenditure incurred during 2021-22 (Rs.)	Closing balance as on 31.03.2022 (Rs.)
15,26,421.61	24,68,272.00	21,30,627.00	**18,64,066.61**

16.2. Plan of activities under Revolving Fund during 2022-23

S.No.	Proposed activities	Expected output (Qtl / Nos)	Anticipated income (Rs.)	Names of the team members involved
1	**Seed production**			
	Paddy CO 51 (TFL)	10	45000.00	SMS Agronomy Farm Manager
	Blackgram VBN 8	5	96000.00	
	Groundnut TCGS1043 & TMV 14	8	108000.00	
	Fodder seeds	2	80000.00	
2	**Planting materials**			
	Fruit plants	1000	100000.00	SMS Horticulture SMS Plant protection SMS Animal Science Farm Manager
	Coconut seedlings	250	20000.00	
	Forest Tree seedlings	1000	15000.00	
	Fodder sets	25000	25000.00	

3	**Bio-inputs**			
	Vermicompost	60	48000.00	Farm Manager
	Vermiworms	0.3	4500.00	
	Azolla	1	4000.00	
	Trichoderma asperellum	5	87500.00	SMS Plant protection
	Bacillus subtilis	5	87500.00	
4	Goat	15	75000.00	SMS Animal Science Farm Manager
5	Poultry Chicks	1000	35000.00	
	Japanese quail	1500	60000.00	
	Desi bird	1000	150000.00	
6	Spawn	0.5	5000.00	SMS Plant protection PA Lab Technician
	Mushroom	1	20000.00	
	Value added products – pickles, instant mix	0.5	10000.00	SMS Home science
7	**Fruit production**			
	Mango	100	150000.00	SMS Horticulture SMS Plant protection Farm Manager
	Sapota	1	3000.00	
	Tamarind	1	15000.00	
	Amla	1.5	4500.00	
	Coconut	500	5000.00	
8	**Vegetable production**			
	Brinjal	3	4500.00	SMS Horticulture SMS Plant protection Farm Manager
	Chillies	2	4000.00	
9	Vegetable special (MN mixture)	3	52500.00	SMS Horticulture

17. Activities of soil, water and plant testing laboratory during 2022-23

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	800		
		AAS	-		
2	Water		100		
3	Plant		25		

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	6000 kg	SMS Agronomy
2	Vegetable special Micro nutrient mixture	300 kg	SMS Horticulture
3	Azolla production	100 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	50 kg	SMS Home Science

20. E-linkage activities status / proposed during 2022-23

Activity	Particulars	No. of farmers in database/ involved in activity/ downloads/ users etc
Website	Link : www.kvkthiruvannamalai.com	43306
Mobile App	Name and link : -	Smart crop mobile app is under construction.
ICT initiative	-	-
KVK portal (update status)	Infrastructure details & photos uploaded (no):16 Events uploaded : 840 News items submitted : 116	-
KVK mobile App of ICAR	Downloaded and used by scientists (no.)	11
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 twice in a month.	42900
Social media		
a) Whatsapp groups	No. of groups/KVK: 5	976
b) Face book	Link : https://www.facebook.com/kvk.thiruvannamalai	4977
c) Twitter	Handle name:@kvktvm	308
d) You tube	No. of subscribers	1150
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, TVS Educational Societies, TNRTP MoU (Yes/No): No. No. of programs planned: 10	-
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 millets	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 farmers network covering 125 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 (2021-22) up to 31st March 2022 (Rs. In lakhs)

S. No	Particulars	Sanctioned Grant for 2021-22	Released for 2021-22	Expenditure for the period from 1-4-2021 to 31-3-2022
A	**RECURRING**			
1	**Pay & Allowances**	151.03	151.03	151.03
2	**Travelling Allowances**	1.40	1.40	1.40
	a) Field activities & programmes			
	b) Training programmes			
3	**Contingencies**			
A	*Office Contingencies*	4.50	4.50	4.50
B	*Technical Programmes including TSP/ SCSP*	10.16	10.16	10.16
	Total of Contingencies	**14.66**	**14.66**	**14.66**
	Sub Total of Recurring Items (1+2+3)	**167.09**	**167.09**	**167.09**
4	**NON-RECURRING CONTINGENCIES:**			
	Works	-	-	-
	Furniture& Equipment (IT)	1.00	1.00	1.00
	Vehicle	-	-	-
	TSP (creation of physical assets)	-	-	-
	SCSP Component (Creation of Physical assets)	3.65	3.65	3.65
	Sub Total of non-recurring Items (4)	**4.65**	**4.65**	**4.65**
	GRAND TOTAL	**171.74**	**171.74**	**171.74**

24. Details of Budget Estimate (2022-23) based on proposed action plan

S. No	Particulars	Budget Estimate for 2022-23
A	**RECURRING ITEMS**	
1	**Pay & Allowances**	174.00
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	5.00
b	POL, repair of vehicles, tractor and equipment including hiring of vehicle	
4	**Technical Programmes**	12.00
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.	
	Total of Contingencies	**17.00**
	Total of Recurring Items	**194.00**

S. No	Particulars	Budget Estimate for 2022-23
B	**NON-RECURRING ITEMS:**	
a	(i).Demolition of Seminar hall in the Administrative building (2400 Sft)	4.96
	(ii) Establishment of Bio control agents Lab (200 Sft),	5.00
	(iii) Establishment of spawn and mushroom production unit	4.50
	(iv).Bore well – 1 No (450 ft each)	6.00
	(v) Solar fencing for 2000 Sqm	4.50
	(vi) Renovation of buildings	3.00
b	Vehicle (Jeep/Tractor/2 Wheeler)-Replacement of Jeep and purchase of new two wheel for female staff.	11.00
c	Furniture and Equipments (Office automation)	0.00
d	TSP (creation of physical assets)	0.00
e	SCSP Component (Creation of Physical assets)-Model IFS unit)	0.00
	Total of Non-Recurring Items	**38.96**
	GRAND TOTAL (A+B)	**232.96**

Senior Scientist and Head
ICAR-Krishi Vigyan Kendra
Thiruvannamalai

Signature of the Senior Scientist and Head of the KVK

Forwarded **Verified** **Approved**

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

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