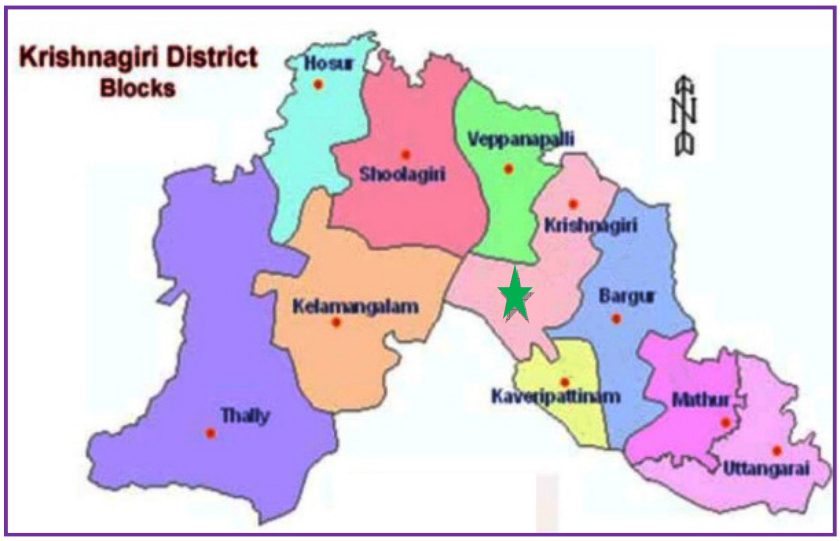
ICAR - Agricultural Technology Application Research Institute
(ICAR-ATARI)

KVK KRISHNAGIRI ACTION PLAN2021-22

1. General information about the Krishi Vigyan Kendra

1.1 Name of the KVK	ICAR - Krishi Vigyan Kendra, Krishnagiri
Address	**ICAR - Krishi Vigyan Kendra,** Elumichangiri Village, Mallinayanapalli Post, **Krishnagiri District** – 635 120.
Phone	080982 80123
Fax	
e-mail	kvk.Krishnagiri@icar.gov.in,drperumalkvk@gmail.com
1.2. Name of host organization	**Tamil Nadu Board of Rural Development**
Address	**Tamil Nadu Board of Rural Development,** No.24, 2nd floor, Crescent Park Street, T. Nagar, Chennai – 600 017
Phone	044 – 24360234
e-mail	tnbrd1978@gmail.com
1.3. Year of sanction	**1994**
1.4. Website of the KVK	www.krishnagirikvk.org
Date of last update	22.02.2021

1.5. District map with location of the KVK



2. Details of staff as on date

S. No.	Sanctioned post	Name	Discipline	Date of joining	Present pay scale
1	Senior Scientist & Head	Dr. T. Sundarraj	Plant Protection	06.12.2004	Level 13 A
2	SMS1	Mr. T.I. Ramesh Babu	Horticulture	06.12.2004	Level 10
3	SMS 2	Dr. S. Ramesh	Animal Science	20.01.2014	Level 10
4	SMS 3	Mr. K. Gunasekar	Soil Science	13.12.2004	Level 10
5	SMS 4	Mr. S. Senthilkumar	Agricultural Extension	15.10.2009	Level 10
6	SMS 5	Mrs. S. Poomathi	Home Science	01.04.1995	Level 10
7	SMS 6	Mr. S. Udhayan	Agronomy	03.03.2021	Level 10
8	Programme Assistant/T4-1	Mr. S. Mohamed Ismail	Agricultural Engineering	04.12.2004	Level 6
9	Programme Assistant/T4-2	Mr. N. Dinesh kumar	Computer Programmer	01.04.2021	Level 6
10	Farm Manager/T4	Mr. S. Karthikeyan	-	16.07.2012	Level 6
11	Administrative Staff 1 (Assistant)	Mr. K. Mareeswaran	Commerce	01.08.2019	Level 6
12	Administrative Staff 2 (Stenographer Grade III)	Mr. D. Arulmani	Stenography	26.06.2019	Level 4
13	Driver/T1 – 1	Mr. G. Mothish	-	12.02.2020	Level 3
14	Driver/T1 – 2	Mr. A. Poonusamy	-	28.05.2014	Level 3
15	Supporting Staff 1	Mr. M. Subramani	-	01.08.1998	Level 1
16	Supporting Staff 2	Mr. G. Muniraj	-	04.07.2003	Level 1

3. Details of SAC meeting conducted during 2020-21:

Date of SAC meeting Conducted: 12.02.2021

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	KVK may coordinate with all departments, NSS students and volunteers to plant more seedlings and maintain them.	Mr. S. Ramesh, The President, TNBRD, Chennai	Will be done during this year
	Trainings may be given to all farmers in coordination with the line departments.		Planned under ATMA training
2	Revolving Fund should be increased.	Dr. A. Bhaskaran, Principal Scientist, ICAR, ATARI, Hyderabad.	In Progress
	IFS demo unit and other demo units may be established in the upcoming 5year plan.		Will be done
	Document the farmers feedback of FLD/OFT technologies and share it with ICAR – ATARI, DEE and concern departments.		We will be planned to submit the FLD/OFT result through extension functionarie trainings to concern departments.
	15 parameters of farmers database (university format) are to be updated in the KVK database. Target for this year is 10,000.		In Progress
	Government Programmes are to be listed in the KVK Notice Board during the year.		Government programmes and schemes listed in KVK notice board.
3	Increase awareness and training programmes on flowers crops cultivation.	Dr. M. Jawaharlal, Director of Extension Education, TNAU, Coimbatore.	Training programmes planned
	Trainer's training may be done.		Will be done during this year
	Awareness on good agricultural practices for perennial crops is to be given to farmers especially for Mango.		Will be done during this year
	Motivate the dryland farmers to cultivate Semiarid fruits plants such as wood apple, jambu naval, manila tamarind, anona, etc.		
	Send Success stories from KVK, Krishnagiri to Ulavarin valarum velanmai with good photograph.		In Progress
	Awareness may be created on TNAU TV in youtube channel and may send some good quality technology videos from KVK, Krishnagiri to upload the same on TNAU TV.		Will be done during this year

4	TNAU varieties in millets (Ragi, Horsegram) may be popularized by KVK.	Dr. P. Parasuraman, Professor and Head Regional Research Station (TNAU), Paiyur	We will plan to conduct TNAU varieties popularized through FLD's.
	Grafted brinjal is to be popularized.		Will be done during this year
5	Technological Workshops may be conducted for technology sharing in horticulture.	Mrs. Umarani Joint Director of Horticulture, Krishnagiri	Will be done during this year
	Integrated Pest and Disease Management for horticulture & floriculture crops are to be disseminated.		
	New technologies, varieties should be implemented in farmer's field as demonstrations.		
	Specialized training for Mango value added products – Jam, Jelly may be organized.		
	Production technology for Brinjal grafting may be given.		
	KVK staff may participate in joint inspection for NHM scheme.		KVK staff participated in joint inspection for NHM scheme.
6	Brinjal grafted technology training may be given to farmers and popularized.	Mr. Shanmugam, Deputy Director of Agriculture	Will be done during this year
	Latest varieties in Ragi and Horsegram may be popularized.		Proposed in FLD's.
	Athiyanthal varieties may be popularized.		
7	Increase fodder seeds cultivation through identified farmers in PPP mode.	Dr. L. Rajendran Regional Joint Director of Animal Husbandry	In Progress
8	Encourage farmers to cultivate fodder crops.	Dr. R. Annal Villi Professor and Head, VUTRC, Krishnagiri.	We encouraged farmers to cultivate fodder crops through training programs
9	Banana new varieties – Kaveri Sabha, Kaveri Kalki may be promoted.	Dr. K. J. Jayabaskaran, Principal Scientist (Soil Science), ICAR-NRCB, Trichy	Will be done during this year
	Banana Shakthi micro nutrients formulation to be popularized.		We have planned to popularize Banana Shakthi through trainings.
10	Make entrepreneurs database and give good success story.	Dr. C. Karpagam, Senior Scientist, ICAR-NRCB, Trichy	In Progress
	Banana Shakthi incubation facility available in NRCB. KVK may utilize it if needed.		Will be done during this year
11	Backyard poultry farming demo model may be created in KVK.	Dr. J. Ramesh Professor & Head, CPPM (TANUVAS), Mathigiri,	Backyard poultry farming demo model created in KVK.

	Create awareness on agro forestry schemes, tree plantation and silage production to farmers.	Hosur.	Awareness created through training programmes.
12	Training on management in Mango Nematode is to be given to the nursery farmers. Promote top working demo in Mango. Small voice clippings on technologies related to agriculture and allied sectors may be sent to AIR Dharmapuri.	Dr. S. Sree Vidhya, Assistant Professor of Horticulture, ICAR – KVK, Dharmapuri.	Will be done during this year
13	Popularize the introduction of gift thilapia in NHM pond. KVK to organize training and awareness programmes for fish culture in water harvesting structures promoted by horticulture department.	Mrs. D. Gokilamani Sub-Inspector of Fisheries	Will be done during this year
14	KVK may give awareness to farmers to promote sericulture.	Mrs. V. Veeralakshmi Asst. Inspector of Sericulture	Will be done during this year
15	Small scale industries benefit 25% subsidy from government. KVK may create awareness about this to the entrepreneurs. KVK may organize training programme to small scale industries owners and request deputation of assistant engineer from district industries centre.	Mr. P. Kumar, Assistant Engineer (Industries), DIC, Krishnagiri.	Will be done during this year
16	Awareness may be given to farmers on the subsidies of farm mechanization given from AED department Solar drier and solar pump set 70% subsidy given to the farmers. KVK may popularize it. KVK may organize ToT training for solar drier to farmers.	Dr. K. Balathandayutham Assistant Engineer, Agricultural Engineering Department, Krishnagiri	Will be done during this year
17	Marigold seed production may be started in KVK.	Thiru. M. Murugan Farmer member, Maharajakadai, Krishnagiri Dist.	Will be done during this year
18	KVK may sell animal feed to the farmers at affordable prize if possible.	Thiru. N. Murugan, Farmer member, Kalliyur, Krishnagiri Dist.	Will be done during this year

Proposed date/month of SAC Meeting to be held in 2021-22: **3rd Week of November 2021**

4.0 Capacity Building activities planned for KVK Staff

4.1. Plan of Human Resource Development of KVK personnel during 2021-22

S. No.	Head/ SMS/Staff	Area of Training	Institution proposed to attend	Duration	Dates (dd/mm/yyyy)
1	SS & Head	Bio Control agent's production	NBAIR, Bangalore	10 Days	-
2	SMS (Soil Science)	Soil & Water Analysis	UAS, Bangalore, TNAU-Coimbatore	10 Days	-
3	SMS (Horticulture)	Organic farming	TNAU, Coimbatore, RCOF	10 Days	-
4	SMS (Animal Science)	Poultry and cattle disease management	TANUVAS, Chennai	10 Days	-
5	SMS (Agrl. Extn.)	Market led extension	MANAGE, Hyderabad	10 Days	-
6	SMS (Home Science)	Post-Harvest Technology of Food grains	IIFPT, CFTRI,	10 Days	-
7	SMS (Agronomy)	Weed management	TNAU, Coimbatore	10 Days	-
8	PA (Agrl. Engg.)	Farm Mechanization	CIAE, Bhopal	10 Days	-

5. Operational areas proposed during 2021-22

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
Kaveripattinam	Paddy	Low yield due to improper crop management & More pest & disease incidence in BPT 5204	850 ha	Jagatap	FLD & FFS
Kaveripattinam	Paddy	Low yield due to improper crop management & More pest & disease incidence	250 ha	Sappanipatti, Paiyur	FLD
Krishnagiri	Ragi	Low yield due to repeated cultivation of existing	200 ha	Bargur	FLD

		variety – GPU 28			
Bargur Block	Little millet	Low yield due to repeated cultivation of existing variety	100 ha	Bargur	FLD
Bargur	Horse gram	Low yield due to repeated cultivation of existing variety	400 ha	Bargur	FLD
Uthangarai	Maize	Yield loss due to incidence of Fall army worm	150 ha	Uthangarai	FLD
Uthangarai	Maize	Improper Nutrient Management	150 ha	Valathanur	FLD
Uthangarai	Chickpea	Low yield due to repeated cultivation of existing variety	75 ha	Uthangarai	OFT
Krishnagiri	Groundnut	Low yield due to repeated cultivation of existing variety	500 ha	Maharajakadai, Krishnagiri	OFT
Mathur	Mango	Heavy loss during the glut, delayed ripening	6,000 ha	Salamarathupatti	OFT
Bargur	Mango	Yield loss due to Mango gummosis	500 ha	Bargur	OFT
Uthangarai	Tapioca	Yield loss due to pest and disease instance	70 ha	Uthangarai	FLD
Uthangarai	Cotton	Improper Nutrient Management	100 ha	Karapattu	FLD
Bargur	Onion	Low yield due to white fly mites and viral infestation	50 ha	Varatanapalli, Thinur	FLD
Bargur	Mango	Improper Nutrient Management	500 ha	Bargur	FLD
Bargur	Banana	Improper Nutrient Management	100 ha	Thinnur	FLD
Krishnagiri	Tomato	Improper pest management in tomato	200 ha	Krishnagiri	OFT
Mathur	Turmeric	Improper Nutrient management	150 ha	Kallavi	OFT
Krishnagiri	Lime	Low yield due to lack of awareness on improper crop management	30 ha	Krishnagiri	FLD
Shoolagiri	French Beans	Low yield due to lack of awareness on latest hybrids resistant to pest and diseases	180 ha	Shoolagiri	FLD
Shoolagiri	Chilli	Introduction high yielding hybrid	80 ha	Shoolagiri	OFT
Kaveripattinam	Fodder	Unaware of high yielding fodder varieties	275 ha	Sappanipatti	FLD
Krishnagiri	Goats/Sheep	Lack of awareness of Mineral Mixture	10,000 nos	Maharajakadai	FLD
Bargur	Groundnut – Wild boar	Lack of awareness on wild animal management	200 ha	Keelpoonguruthi	OFT
Krishnagiri	Poultry	Farmers not aware of gut health enhancers and	10,000 nos	Valluvarpuram	FLD

		not using probiotics for scavenging desi chicken at field level			
Krishnagiri	Poultry	Lack of awareness on newly released poultry breeds.	10,000 nos	Dhaseripalli	FLD
Mathur	Farm mechanization – Groundnut	Unavailability of skilled labour in season & unaware of mechanical source	200 ha	Athipallam	FLD
Krishnagiri	Farm mechanization- Vegetable Planter	Unavailability of skilled labour in season & unaware of mechanical source	200 ha	Krishnagiri	FLD
Mathur	Farm mechanization – Cotton	Unavailability of skilled labour in season &unaware of mechanical source	200 ha	Kallavi	FLD
Krishnagiri	Value addition – Millets	Lack of awareness on value addition, Low income	-	Krishnagiri	OFT & FLD
Krishnagiri	Value addition – Watermelon	Lack of awareness on value addition, Low income	-	Krishnagiri	OFT
Shoolagiri	Nutrition Security	Lack of awareness on use of herbel wash	-	Shoolagiri	FLD
Denkanikottai	Value addition – Tamarind	Lack of awareness on value addition		Denkanikottai	FLD
Kaveripattinam	Nutrigarden	Lack of knowledge on balanced nutrition	-	Kaveripattinam	FLD
Kaveripattinam	Extension – Social Media	Lack of awareness on social media for dissemination of information	-	Pannanthur	OFT
Krishnagiri	Extension – TNAU Mobile Apps	Lack of awareness on TNAU Mobile Apps for dissemination of information	-	Dhaseripalli	FLD
Mathur	Oilseed – Groundnut	Improper crop management	500 ha	Mathur	CFLD - NMOOP
Uthangarai	Pulses – Redgram	Improper crop management	1,000 ha	Uthangarai	CFLD - NFSM

6.2. Details of adopted villages

District/ Taluk/ Block	Name of cluster villages	Major crops & Enterprises	Major problems identified in each crop/enterprise	Proposed type of interventions*
Shoolagiri	Shoolagiri, Uthanapalli, Keeranapalli	French beans, Chilli, Nutrition security	Improper crop management in French beans, Low yield due to lack of awareness on latest hybrids resistant to pest and diseases, Lack of awareness on use of herbal wash	OFT/FLD/Training/ Field day
Krishnagiri Uthangarai	Uthangarai, Valathanur, Karapattu	Tapioca, Maize, Chickpea, Cotton, Redgram	Improper crop management, Improper Nutrient Management, Low yield due to cultivation of existing local varieties, Yield loss due to incidence of pest and disease	OFT /FLD/CFLD/ Training/ Field day
Krishnagiri Mathur	Salamarathupatti, Athipallam, Olapatti, Sulakarai, Kallavi	Mango, Groundnut, Cotton, Turmeric	Improper Crop Management, Improper Nutrient Management, Low yield due to cultivation of existing local varieties, Unavailability of skilled labour in season & unaware of mechanical source	OFT/FLD/CFLD/ Training/ Field day
Krishnagiri Kaveripatinam	Kaveripatinam, Jagatap, Sappanipatti, Pannanthur,	Paddy, fodder, Nutrigarden, Ragi	Low yield due to repeated cultivation of existing variety,Lack of awareness on social media for dissemination of information, Lack of knowledge on balanced nutrition	OFT/FLD/FFS/ Training/ Field day/Method demonstrations
Krishnagiri, Bargur	Keelpoonguruthi, Thinnur, Varatanapalli, Bargur, Sakkilnatham	Little Millet, Horsegram, Mango, Onion, Banana, Groundnut - Wild boar management,	Low yield due to repeated cultivation of existing variety, Improper Nutrient Management, Wild boar infestation	OFT/FLD/Training/ Field day/ Method demonstrations
Krishnagiri, Krishnagiri	Maharajakadai, Krishnagiri, Dhaseripalli, Kalliyur, Valluvarpuram,	Groundnut, Tomato, Goat, Poultry, Millets Value Addition, Farm Mechanization	Improper Crop Management, Improper Nutrient Management, Low yield due to cultivation of existing local varieties, lack of awareness on newly released poultry breeds, lack of awareness of farm mechanization	OFT/FLD/Training/ Field day/Method demonstrations

6.3 Details of DFI villages

District/ Taluk/ Block	Name of cluster villages	Major crops & Enterprises	Major problems identified in each crop/enterprise	Proposed type of interventions (OFT/ FLD/ Training/Field day/ Method demonstrations/ Awareness camp)
Krishnagiri, Bargur	Keelpoonguruthi, Thinnur, Varatanapalli, Bargur, Sakkilnatham	Little Millet, Horsegram, Ragi, Mango, Onion, Banana, Groundnut - Wild boar management,	Low yield due to repeated cultivation of existing variety, Improper Nutrient Management, Wild boar infestation	OFT/FLD/Training/ Field day/ Method demonstrations
Krishnagiri, Krishnagiri	Maharajakadai, Krishnagiri, Dhaseripalli, Kalliyur, Valluvarpuram,	Groundnut, Tomato, Goat, Poultry, Millets Value Addition, Farm Mechanization	Improper Crop Management, Improper Nutrient Management, Low yield due to cultivation of existing local varieties, lack of awareness of farm mechanization	OFT/FLD/Training/ Field day/Method demonstrations

7. Summary (targets) of mandated activities planned for the year 2021-22

S.No.	Activities	Target
1. On- farm trials		
	a. No of OFTs	14
	b. No of Technologies (Total new technologies except FP)	28
	c. No. of locations (No. of Villages)	17
	d. No. of Beneficiaries (No. of Farmers fields)	100
	e. Area (Total area in ha)	8
2. Frontline Demonstrations		
	a. No. of FLDs	26
	b. No. of Locations (No of villages)	36
	c. No. of Beneficiaries (No of Farmers fields)	247
	d. Area (Total Area planned in ha)	58.4
3. Trainings for Farmers and Farm Women		
	a. No. of programmes	72
	b. No. of participants	1440
4. Trainings for Rural Youth		
	a. No. of programmes	17
	b. No. of participants	340
5. Trainings of Extension Personnel		
	a. No. of programmes	11
	b. No. of participants	220
6. Extension Activities		
	No. of activities (Total number of activities listed in Table ---)	903
	No. of participants	1,25,815
7. Production of seed (in quintals) (Crop-wise)		65
8. Production of planting materials (in Nos.) (Crop-wise)		84,100
9. Production of live-stock strains and finger lings (Category wise Nos.)		505
10. Production of bio inputs (quantity in kg) (Item-wise)		2000 nos
11. Production of other inputs (specify unit) (Item-wise)		3.15 tons
12. MKisan mobile advisories		
	No. of messages	40
	No. of technologies	40
	No. of farmers	1,20,000
Other mobile advisories		
	No. of messages	50
	No. of technologies	50
	No. of farmers	750
13. Soil testing		
	No. of soil sample testing using Mobile Soil Testing Kit	400
	No. of soil sample testing in conventional laboratory	-
Water sample Testing (samples in No.)		-
Soil Health Cards		
	No. of Cards using Mobile Soil Testing Kit data	400
	No. of Cards using Laboratory data	-

8. Technology Assessments proposed during 2021-22

8.1. Summary of OFTs

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
1	Chickpea	Assessment on Chickpea varieties	**TO1:** Cultivation of Chickpea variety Super Annigeri 1	UAS, Raichur, 2019	New	5	20,610	SMS (Agronomy & Soil Science)	**-**	**2**
			TO2: Cultivation of Chickpea variety Nandyal Gram 49	ARS, Nandyal – 2017						
			FP: Cultivation of CO 4 variety	**-**						
2	Groundnut	Assessment on the Performance of Groundnut varieties	**TO1:** Cultivation of Groundnut variety K1812 (Kadiri Lepakshi)	ARS, Kadiri, 2020	New	5	32500	SMS (Agronomy & Soil Science)	**-**	**-**
			TO2: Cultivation of Groundnutvariety TCGS 1043 (Dharani)	ANGRAU, 2013						
			FP: Cultivation of Local variety VRI 2	**-**						
3	Mango	Assessment of Technology modules against Mango Gummosis	**TO1:** Removal of infected twigs & branches & three sprays of Tebuconozole @0.1% at 15days interval	TNAU,2019	New	5	7,500	SS and Head, SMS (Horticulture)	5	**2**
			TO2: Removal of infected twigs, Two sprays of Chlorothalonil 2g/lt@ 15days interval	IARI,2018						

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
			FP: Spraying of combination of fungicides during flowering to harvest	-						
4	Tomato	Assessment of Technology modules against Tomato pinworm	**TO1:** Pheromone traps @ 8/acre, light traps @ 5/acre, release of egg parasitoid, Trichogrammapretiosum @ 75,000/ha five times at weekly intervals starting from first notice of adults in the field and alternating sprays of Metarhizhiumanisopliae @ 2 mL/L and Bacillus thuringiensis @ 1 mL/L. When the incidence of Tuta is high, a need-based spray with spinosad 45 SC @ 0.25 mL/L or flubendiamide 5 SC @ 0.2 mL/L	IIHR,2019	New	5	8,300	SS and Head, SMS (Horticulture)	**5**	**2**
			TO2: Use healthy seedlings for transplanting, pheromone traps @ 16 nos./ac, spray Chlorantraniliprole 18.5% SC @ 60 ml or Cyantraniliprole 10% OD @ 60 ml or Flubendiamide 20% WG @ 60 ml	TNAU,2018						
			FP: Application of combination							

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
			of fungicides							
5	Ground nut-wild boar	Assessment of management module against wild boar in Ground nut	**TO1:**Herboliv+ (Foliar Spray and Soil application of Herboliv @ 10 litre, Spray at 15 days interval – 6 times in crop duration)	Farmer Innovation, ICAR- KVK, Erode, 2018	New	5	26,750	SS&H, SMS (Agrl. Extension), SMS (Animal Science),	-	-
			TO2: Neelbo Repellant (Neelbo Repellant @ 500ml / 2.5 litres of water, Soak the coir /jute rope in solution for overnight (minimum 8 hrs) and tied at 1feet above ground level once in every 30 days interval – 4 times in crop duration)	PCI India Pvt Ltd						
			FP: Covering the field with wire, tying clothes around the fields to deter and intrude the fields	Covering the field with wire, tying clothes around the fields to deter and intrude the fields						
6	Turmeric	Assessment on Efficiency of Foliar nutrition modules in increasing the yield of Turmeric	**TO1:** Soil test based NPK application + IISR turmeric mixture	IISR, 2015	New	5	2,950	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl. Extn)	-	-
			TO2: Soil test based NPK application + Borax, Ferrous sulphate, Zinc sulphate dissolved	TNAU - 2013						

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
			in superphosphate solution with urea							
			FP: Injudicious soil application of NPK fertilizers and no proper micronutrient management.	-						
7	Tomato	Assessment on Efficiency of Zinc solubilising bacterial cultures for the optimization of yield in Tomato	**TO1:**Zinc solubilising bacteria (Seed treatment with Zn solubilising bacteria @ 600 g/ha of seed + Soil application of Zn solubilising bacteria @ 2 kg/ha mixed with FYM basally)	TNAU, 2019	New	5	10,500	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl.Extn)	-	-
			TO2: Arka Microbial Consortia – (Soil drenching of Arka Microbial Consortia @ 10 g/lit of water and applied near to root zone on 10th day after transplanting + Soil application of AMC @ 12.5 kg mixed with 1.25 t FYM/ha and applied near to the root zone of the standing crop)	IIHR, 2018						
			FP:Straight fertilizer application without any zinc solubilising bacterial cultures usage.	-						
8	Chilli	Assessment of Chilli Hybrids (Arka Saanvi	**TO1:**Chilli Hybrid – Arka Saanvi	IIHR, 2020	New	5	23,800	SMS (Horticulture),	-	-

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
		and COCH1) for higher productivity	**TO2:**Chilli Hybrid – COCH 1	TNAU, 2010				SMS (Soil Science)		
			FP: Mahyco – Sierra, East west ulka	-						
9	Mango	Assessment of Modules for the enhancement of shelf life of Mango	**TO1:**Application of 1 - Methyl Cyclo Propene (1 MCP)	IIHR, 2020	New	5	21,000	SMS (Horticulture), SMS (Home Science)	-	-
			TO2: Application of Nanotechnology with the chemical Hexanal	TNAU, 2019						
			FP: Washing, fungicide treatment	-						
10	Goats / Sheep	Assessment of Small Ruminant Mineral Mixture on growth performance in sheep	**TO1:**TANUVAS Small ruminant Mineral mixture	TANUVAS, 2019	New	5	19,125	SMS (Animal Science), SS&H, SMS (Agrl. Extension)	5	-
			TO2:NIANP Small ruminants mineral mixture	NIANP, 2018						
			FP: No mineral mixture feeding, Maintaining the flock normally with grazing, tree leaves, shrubs feeding. Some farmers feed the mineral mixture available for large ruminants in little quantity.	-						
11	Dairy cattle	Assessment of TANUVAS – TRPVB Tick Shield to mitigate the acaricidal resistance	**TO1:**Tick Shield (TANUVAS)	TRPVB-TANUVAS, 2021 (likely to be released)	New	10	9000	SMS(Animal Science), SS&H, SMS (Agrl.	-	-

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
		of ectoparasites in dairy cattle	**TO2:**Herbal Acaricidal Liquid/spray	ICAR – CIRG, 2018				Extension)		
			FP: Use of Deltamethrin (2%) / Flumethirin (1%)	-						
12	Agricultural Extension	Assessing the Effectiveness of e-Extension Methods in terms of Knowledge Gain and Skill acquirement and Symbolic Adoption Behavior among the Rural Youth	**TO1:**Transfer of Paddy technologies through Paddy Expert System	TNAU, 2014	New	30	7,500	SMS (Agrl. Extension), SMS (Animal Science)	-	
			TO2: Transfer of Paddy technologies through Agri-tech portal (http://agritech.tnau.ac.in)	TNAU						
			FP: Contact with local Extension workers for getting advisory service on paddy cultivation	-						
13	Value Addition - Post Harvest Technology (PHT)	Assessment of Different Coating Formulations to improve the Shelf life of Fruits and Vegetables	**TO1:**ICAR-IINRG Fresh coat	IINRG, Ranchi, 2019	New	5	10,000	SMS (Home Science) & SMS (Horticulture)	-	-
			TO2:TNAU Fruity Fresh	TNAU 2020						
			FP: Doesn't Follow any post-harvest practies.	-						

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 / TO-2 / FP	Source of Technology	Status*	No. of trials	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village	No. of trials targeted under SCSP
14	Value Addition – Mango	Assessment on different flavours of protein enriched mango bar using solar drier	**TO1:**Preparation of protein enriched mango bar using alphonso pulp	TNAU, 2018	New	5	15,000	SMS (Home Science) & SMS (Horticulture)	-	-
			TO2: Preparation of mango spicy bar using totapuri pulp	IIHR, 2017						
			FP: Direct sale of raw mango to the middlemen	-						

8.2. Details of OFTs:

OFT No.	**01**
Status (New proposal/2nd year /3rd year)	New Proposal (1st Year)
Subject	Agronomy
Theme	Varietal evaluation
Category (if applicable)	Pulses
Crop/ enterprise	Chick pea
Farming situation	Rainfed
Prioritized problem (short)	CO 4 variety is susceptible to dry root rot, wilt which leads to low yield (550 Kg/ha).
Title of the OFT	**Assessment of Chickpea varieties (Super Annigeri 1 and Nandyal Gram 49) for higher productivity.**
Technology options	
TO-1	Super Annigeri 1
Source and year	UAS,Raichur – ICRISAT, 2019
Description (short)	It has semi erect plant type, matured over 95 to 110 days and highly resistant to *Fusarium*wilt. It weighs around 18 – 20 g per 100 seeds.
Potential yield/income	1898 kg/ha
Critical Inputs	Seed 15 kg (Rs.2000), Rhizobium 200g-(Rs.12), Phosphobacteria 200g - (Rs.12) per demo
Source of Inputs	UAS,Raichur, Bangalore – ICRISAT- Hyderabad
Photos	 
TO-2	Nandyal Gram 49
Source and year	ARS (Nandyal), 2017
Description (short)	It is semi spreading plant type with medium height, tolerant to *Fusarium* wilt.
Potential yield/income	1600 Kg/ha
Critical inputs& quantity and cost	Seed 15 kg(Rs.1874), Rhizobium 200g -(Rs.12), Phosphobacteria 200g (Rs.12) per demo
Source of Inputs	ARS (Nandyal)

Photos	
Farmer's Practice	CO 4
Farmer's yield	550 kg/ha
Season	Rabi
Cost per replication (Rs.)	Rs. 4,122/-
No. of replications	5
Total cost for the OFT	Rs. 20,610/-
Parameters to be studied	Yield, pest and disease incidences, gross cost, gross income, net income, BCR
Parameters to be reported	Pod yield, gross cost, gross income, net income, BCR
Source of funding	KVK Main
Team members	SMS (Agronomy, Soil Science)

OFT No.	**02**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agronomy
Theme	Varietal evaluation
Category (if applicable)	Oil Seeds
Crop/ enterprise	Groundnut
Farming situation	Rainfed, red sandy loam
Prioritized problem (short)	Groundnut is cultivated in an area of 4500 ha in the district in which 2800 ha is irrigated. Major variety is VRI 2 which is susceptible to water stress, Helicoverpa, dry root rot, late leaf spot and rust; low yield (17.30 q/ha) Newly released groundnut varieties like K1812 and TCGS 1043 which are yielding 38% higher than VRI 2.
Title of the OFT	**Assessment of groundnut varieties (K1812 and TCGS 1043) for higher productivity**
Technology options	
TO-1	K1812 (Kadiri Lepakshi)
Source and year	ARS, Kadiri, 2020

Description (short)	It is a special Spanish bunch groundnut variety with Virginia blood having more primary and secondary branches requiring more spacing (30x15 cm) and less seed rate required but more number of pods, suitable for Kharif season,moderately resistant to root rot, 115 days duration
Potential yield/income	18.0 q/ha
Critical Inputs	Seed (25 kg), Rs. 4000/-
Source of Inputs	ARS, Kadiri
Photos	
TO-2	TCGS 1043
Source and year	ANGRAU 2013 (RARS, Tirupati)
Description (short)	TCGS 1043, released in 2013 as 'Dharani; drought tolerant (withstands up to 35 days dry spell), water use efficient, tolerant to stem and dry root rots, PBND and PSND. Pedigree: VRI 2-XTCGP-6;100-105 days;37-43 q/ha (Rabi); Shelling outturn: 75-77%; Oil content: 50 %; 100-seed weight: 40-43g; uniform maturity, high SMK%, attractive pods, moderate stature, tolerant to low light condition
Potential yield/income	3300Kg/ha
Critical inputs & quantity and cost	Seed (25 Kg) Rs.2500/- Field Board-Rs.200
Source of Inputs	KVK
Photos	
Farmer's Practice	VRI 2
Farmer's yield	16 q/ha
Season	Kharif, 2021
Cost per replication (Rs.)	Rs. 6,500 /-
No. of replications	5
Total cost for the OFT	Rs. 32,500/-
Parameters to be studied	Pod and haulm yield, pest and disease incidences, irrigation requirement, growth parameters, gross cost, gross income, net income, BCR
Parameters to be reported	Pod yield, gross expenditure, gross income, net income, BCR
Source of funding	KVK Main
Team members	SMS (Agronomy and Soil Science)

OFT No.	**03**
Status (New proposal/2nd year /3rd year)	New
Subject	Plant pathology
Theme	Integrated Disease management
Category (if applicable)	Fruit crops
Crop/ enterprise	Mango
Farming situation	Rainfed, red sandy loam
Prioritized problem (short)	Mango gummosis along with die back leads to the death of mango tree and yield reduction
Title of the OFT	**Assessment of Technology modules against Mango Gummosis**
Technology options	
TO-1	Removal of infected twigs, branches + sprays of *Tebuconozole*
Source and year	TNAU,2019
Description (short)	Removal of infected twigs & branches & three sprays of *Tebuconozole* -1 gram/lit,
Dose	1 gram/lit
Critical Inputs	*Tebuconozole* - 500ml/trial, Rs.800/trial
Source of Inputs	Pesticides Dealers
TO-2	Removal of infected twigs + Sprays of *Chlorothalonil*
Source and year	IARI,2018
Description (short)	Removal of infected twigs +Two sprays of *Chlorothalonil -2g/lt*
Dose	*2g/lt*
Critical inputs& quantity and cost	Chlorothalonil 400g/trial, Rs.500/trial, Field board- Rs.200/-
Source of Inputs	Pesticides Dealer
Farmers Practice	Application of combination of fungicides
Season	Kharif and Rabi
Cost per replication (Rs.)	Rs.1,500/-
No. of replications	5
Total cost for the OFT	Rs. 7,500/-
Parameters to be studied	Disease incidences
Parameters to be reported	Disease's incidences, Yield, C:B ratio
Source of funding	KVK-Main
Team members	SS and Head, SMS (Horticulture)

OFT No.	**04**
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Plant protection
Theme	Integrated Pest Management
Category (if applicable)	Vegetables
Crop/ enterprise	Tomato
Farming situation	Irrigated, sandy loam
Prioritized problem (short)	Tomato pinworm (Tutaabsulta is invasive pest and it cause economic yield loss upto 100 percentage.T. absoluta is one of the most devastating tomato pests because it feeds on foliage, stems, fruits and flowers. Larvae infest all stages of plant growth causing wounds which facilitate the invasion of secondary pathogens. The pest species has high reproductive potential with 12 generations in a year and female can lay up to 260 eggs.
Title of the OFT	**Assessment of Technology modules against Tomato pinworm**
Technology options	
TO-1	Pheromone traps @ 8/acre, light traps @ 5/acre, release of egg parasitoid, Trichogrammapretiosum @ 75,000/ha five times at weekly intervals starting from first notice of adults in the field and alternating sprays of Metarhizhiumanisopliae @ 2 mL/L and Bacillus thuringiensis @ 1 mL/L. When the incidence of Tuta is high, a need-based spray with spinosad 45 SC @ 0.25 mL/L or flubendiamide 5 SC @ 0.2 mL/L
Source and year	IIHR,2019
Description (short)	Adopting Integrated pest management practice's the number of spray schedule is reduced and the pest resurgence may be avoided.
Critical Inputs	Pheromone traps, light traps, Trichogrammapretiosum, Metarhizhium anisopliae, Bacillus thuringiensis
Source of Inputs	TNAU, IIHR, NBAIR
TO-2	Use healthy seedlings for transplanting, Keep pheromone traps @ 16 nos./ac to attract and kill the adult moths,If needed, spray Chlorantraniliprole 18.5% SC @ 60 ml or Cyantraniliprole 10% OD @ 60 ml or Flubendiamide 20% WG @ 60 ml or Indoxacarb 14.5% SC @ 100ml or Neem formulation (Azadirachtin 1% or 5%) @ 400 – 600 ml/ac.
Source and year	TNAU,2018
Description (short)	Combination of treatments leads to effective control of Pinworm
Critical inputs & quantity and cost	Pheromone traps- 30 traps – 1800 Metarhizhium anisopliae- 5 lit –Rs. 2000 Trichogramma pretiosum – 25 cc- Rs.1000 Bacillus thuringiensis– 5 lit- Rs. 2500 Field Board – 5 – Rs. 1000
Source of Inputs	NBAIR, TNAU,

Farmers Practice	Application of combination of fungicides
Season	Kharif
Cost per replication (Rs.)	Rs.1,660
No. of replications	5
Total cost for the OFT	Rs.8,300
Parameters to be studied	Pest incidences, yield loss
Parameters to be reported	Pest incidences, Yield, C:B ratio
Source of funding	KVK-Main
Team members	SS and Head, SMS (Horticulture)

OFT No.	**05**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Plant Protection
Theme	IPM
Category (if applicable)	Crop Management
Crop/ enterprise	Ground nut
Farming situation	Rainfed
Prioritized problem (short)	Wild boar menace in ground nut crop which causesCrop damage loss up to 40 %, Lack of awareness on wild animal management
Title of the OFT	**Assessment of management module against wild boar in Ground nut**
Technology options	
TO-1	Herboliv+
Source and year	Farmer Innovation, ICAR - KVK, erode (Products approved by Farm Innovators meet by ICAR), 2018
Description (short)	Foliar Spray and Soil application of Herboliv @ 10 litre per acre to control wild boar , Spray at 15 days interval – 6 times in crop duration
Potential yield/income	-
Critical Inputs	HerbolivRepellant , 30 litre , Rs.2550/-
Source of Inputs	Mivipro Products PVT, Ltd., Gobichettipalayam

Photos	
TO-2	NeelboRepellant
Source and year	PCI india Pvt Ltd
Description (short)	Neelbo Repellant @ 500ml / 2.5 litres of water , Soak the coir /jute rope in solution for overnight (minimum 8 hrs) and tied at 1 feet above groundlevel once in every 30 days interval – 4 times in crop duration
Potential yield/income	-
Critical inputs& quantity and cost	Neelbo & Field board – Rs. 200 , 2 litres - Rs.2600/-
Source of Inputs	PCI India Pvt Ltd, Chennai
Photos	
Farmer's Practice	Covering the field with wire, tying clothes around the fields to deter and intrude the fields etc.,
Farmer's yield	-
Season	Kharif 2021
Cost per replication (Rs.)	Rs.5,350
No. of replications	5
Total cost for the OFT	Rs.26,750
Parameters to be studied	Crop Damage %, crop health, Yield,BCR
Parameters to be reported	Percentage of control,Yield BCR
Source of funding	KVK Main
Team members	SMS (Animal Science), Senior Scientist and Head, SMS(Agrl. Extension)

OFT No.	**06**
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Soil Science
Theme	Nutrient Management
Category (if applicable)	Spices
Crop/ enterprise	Turmeric
Farming situation	Irrigated, red sandy loam soil
Prioritized problem (short)	Improper nutrient management in turmeric results in yield loss upto 30 to 35% in farmers fields. Though the primary nutrients have been addressed by most of the farmers, the micronutrients are generally ignored or neglected by them usually. Proper micronutrient management should be emphasized to obtain the potential yield in turmeric. 40-55 per cent of soils are moderately deficient in micronutrients like Zinc, while 25-30 per cent is deficient in Boron. Deficiency of other micronutrients occurs in 15 per cent of soils. Application of individual micronutrients after assessing the deficiency levels in soils and resolving it through individual fertilizers is a tedious proces by the farmers. Hence to ease the process Indian Institute of Spices Research, Kozhikode has developed a composite micronutrient mixture for the benefit of yurmeric farmers which is assessed in this OFT.
Title of the OFT	**Assessment on Efficiency of Foliar nutrition modules in increasing the yield of Turmeric**
Technology options	
TO-1	Soil test based NPK application + IISR turmeric mixture
Source and year	IISR, 2015
Description (short)	FYM – 25 t/ha + Soil test based NPK application + Foliar application of IISR turmeric micronutrient mixture @ 5 g/litre on 60 and 90 DAS.
Potential yield/income	-
Critical Inputs	IISR turmeric micronutrient mixture – 1 kg, Rs.250/- Soil test charge – Rs.50/-
Source of Inputs	IIHR
Photos	
TO-2	Soil test based NPK application + Borax, Ferrous sulphate, Zinc sulphate dissolved in superphosphate solution with urea
Source and year	CPG, 2020 (TNAU)
Description (short)	FYM – 25 t/ha + Soil test based NPK application + Foliar application of 375 g each of Borax, Ferrous sulphate, Zinc sulphate and Urea in 250 litres of Superphosphate solution/ha (15 kg Superphosphate dissolved in 25 lit.of

	water, stored overnight and the supernatant solution is made upto 250 lit.) – sprayed twice at 25 days interval during rhizome development stage.
Potential yield/income	-
Critical inputs& quantity and cost	Borax - 150 g, Rs. 12/-, Ferrous sulphate – 150 g, Rs. 6/-, Zinc sulphate – 150 g, Rs. 10/-, Urea – 150 g, Rs. 2/-, and Superphosphate – 6 kg, Rs. 60/- ,Field board – Rs.200/-
Source of Inputs	KVK
Photos	 
Farmer's Practice	Injudicious soil application of NPK fertilizers and no proper micronutrient management.
Farmer's yield	-
Season	Kharif, 2021
Cost per replication (Rs.)	Rs.590/-
No. of replications	5
Total cost for the OFT	Rs. 2,950/-
Parameters to be studied	Growth parameters, Dry recovery (%), Gross cost, Gross income, Net income and BCR
Parameters to be reported	Yield, Gross Cost, Gross Income, Net income and BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl.Extn)

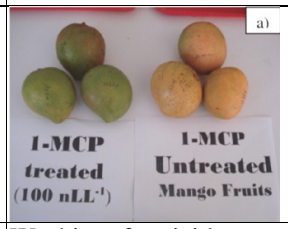
OFT No.	**07**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Soil Science
Theme	Nutrient Management
Category (if applicable)	Vegetables
Crop/ enterprise	Tomato
Farming situation	Irrigated, red sandy loam soil
Prioritized problem (short)	In Krishnagiri district 40-55 per cent of soils are moderately deficient in micronutrient zinc. The improper micronutrient management in tomato significantly affects the yield of the crop up to 25-35%. Though the availability of the soil nutrients is greatly influenced by many factors, it can be made available by the microbial

	consortia that can solubilize it in the soil. Hence here in this OFT, the Zinc solubilizing bacteria identified by TNAU is assessed with the Arka microbial consortia of IIHR to optimize the yield of tomato.
Title of the OFT	**Assessment on Efficiency of Zinc solubilizing bacterial cultures for the optimization of yield in Tomato**
Technology options	
TO-1	Zinc solubilizing bacteria
Source and year	TNAU, 2019
Description (short)	Seed treatment with Zn solubilizing bacteria @ 600 g/ha of seed + Soil application of Zn solubilizing bacteria @ 2 kg/ha mixed with FYM basally.
Potential yield/income	-
Critical Inputs	Zn solubilizing bacteria – 1 kg, Rs.300/-
Source of Inputs	TNAU
Photos	
TO-2	Arka Microbial Consortia
Source and year	IIHR, 2018
Description (short)	Soil drenching of Arka Microbial Consortia @ 10 g/lit of water and applied near to root zone on 10th day after transplanting + Soil application of AMC @ 12.5 kg mixed with 1.25 t FYM/ha and applied near to the root zone of the standing crop.
Potential yield/income	-
Critical inputs & quantity and cost	Arka Microbial Consortia - 8 kg, Rs.1,600 & Field board – Rs.200/-
Source of Inputs	KVK
Photos	 
Farmer's Practice	Straight fertilizer application without any zinc solubilizing bacterial cultures usage.
Farmer's yield	-
Season	Kharif, 2021
Cost per replication (Rs.)	Rs.2,100/-
No. of replications	5
Total cost for the OFT	Rs. 10,500/-
Parameters to be studied	Growth parameters, Gross cost, Gross income, Net income and BCR
Parameters to be reported	Yield, Gross Cost, Gross Income, Net income and BCR
Source of funding	KVK Main
Team members	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl.Extension)

OFT No.	08
Status (New proposal/2nd year /3rd year)	New
Subject,	Horticulture
Theme	Varietal evaluation
Category (if applicable)	Vegetables
Crop/ enterprise	Chilli
Farming situation	Irrigated, Red sandy loam
Prioritized problem (short)	Chilli is cultivated in about 500 ha in the district under irrigated condition. This is cultivated as for green chilli for vegetable purpose. Mostly private hybrids are cultivated. These hybrids are susceptible to water stress, thrips, helicoverpa, powdery mildew and viral diseases; low yield (8.0 t/ha). Newly released chilli Hybrids are high yielding and tolerant to major pest and diseases.
Title of the OFT	**Assessment of Chilli Hybrids (Arka Saanvi and COCH1) for higher productivity**
Technology options	
TO-1	Chilli Hybrid – 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. The yield potential 75 – 88 q dry chilli yield/ha. (or) 250 q green chilli yield/ha.
Potential yield/income	250 q/ha
Critical Inputs	Arka Saanvi Seedlings 30,000 Nos = Rs. 10,500/-
Source of Inputs	IIHR
Photos	
TO-2	Chilli Hybrid – CO 1
Source and year	TNAU, 2010
Description (short)	Unripe fruits light green in color, elongated, tapering towards the tip and 10.5 – 12.0 cm long. Capsaicin and oleoresin contents of 0.58 % and 14.0 % respectively. Moderately resistant to fruit rot disease. Yields about 67.4 q/ha of dry pod and 280.0 q/ha of green chilli in a crop duration of 195-205 days
Potential yield/income	280 q/ha
Critical inputs& quantity and cost	COCH1 seedling 30,000 nos = Rs. 10,500/-,Field board – Rs.200

Source of Inputs	TNAU, Coimbatore
Photos	
Farmer's Practice	Mahyco – Sierra, East west ulka
Farmer's yield	180 q/ha
Season	Kharif 2021
Cost per replication (Rs.)	Rs. 4,760/-
No. of replications	5
Total cost for the OFT	Rs. 23,800/-
Parameters to be studied	Growth parameters, Pest and disease incidence,Yield, gross and net income, BCR
Parameters to be reported	Growth parameters, Pest and disease incidence,Yield, gross and net income, BCR
Source of funding	KVK Main
Team members	SMS (Horticulture), SMS (Soil Science)

OFT No.	**09**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject,	Horticulture
Theme	Post-Harvest Management
Category (if applicable)	Enhancement of Shelf life of Mango
Crop/ enterprise	Mango
Farming situation	--
Prioritized problem (short)	Mango is cultivated in an area of around 40,000 ha in Krishnagiri district and average productivity of 4.5 t/ha which is low compared to the National average. The price of the mango drops down to even Rs.5 per kg during the peak season. The farmers incur heavy loss during the glut. The delayed ripening / increasing the shelf life of mango fetch better price and income to the farmers. Hence this OFT is proposed to compare two modules for delaying the ripening and increasing the shelf life of mango.
Title of the OFT	**Assessment of Modules for the enhancement of shelf life of Mango**

Technology options	
TO-1	Application of Nanotechnology with the chemical Hexanal
Source and year	TNAU, 2019
Description (short)	Hexanal, a naturally occurring plant derived compound is known to inhibit phospholipase-D and facilitates extension of shelf-life of fruits during storage. Pre-harvest sprays of EFF (1.6 mM) on 30 and 15 days before harvest. After harvest, the fruits should also be treated with hexanal. The fruits harvested from the sprayed trees remained fresh for 24 to 25 days of time under ambient condition.
Potential yield/income	Increasing the shelf life up to 2 weeks in addition to normal shelf life of 12 days.
Critical Inputs	Hexanal 5 lit @ Rs.1,000 per lit = Rs.5,000/-
Source of Inputs	TNAU Coimbatore
Photos	
TO-2	Application of 1 - Methyl Cyclo Propene (1 MCP)
Source and year	IIHR, 2020
Description	1-methylcyclopropene is a member of the class of cyclopropenes. A gas at room temperature and pressure, it is a (synthetic) ethylene perception inhibitor and is used to prolong the life of fruits & vegetables. It has a role as a plant growth regulator and an agrochemical. It increases the shelf life of mango up to 2 weeks.
Potential yield/income	Increasing the shelf life up to 2 weeks in addition to normal shelf life of 12 days.
Critical inputs& quantity and cost	1 MCP 5 gm @ Rs.3,000 per gm = Rs.15,000/-, Field board-Rs.200
Source of Inputs	Authorized firm
Photos	
Farmer's Practice	Washing, fungicide treatment
Farmer's yield	Normal shelf life of 12 days
Season	Kharif 2021-22
Cost per replication (Rs.)	Rs. 4,200/-

No. of replications	5
Total cost for the OFT	Rs. 21,000/- (including field board)
Parameters to be studied	Number of days the fruits stay fresh, change in appearance (color, shrinking), quality (TSS, acidity), gross cost, gross income, net income, BCR
Parameters to be reported	Number of days the fruits stay fresh, change in appearance (color, shrinking), quality (TSS, acidity), gross cost, gross income, net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Horticulture), SMS (Home Science)

OFT No.	**10**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Animal Science
Theme	Livestock Nutrition Management
Category (if applicable)	Small ruminants
Crop/ enterprise	Goats / Sheep
Farming situation	Semi intensive farming system
Prioritized problem (short)	Sheep and goat are not supplemented with concentrate feed and mineral deficiency is common, causing decreased growth rate. Also lack of knowledge on Mineral deficiency. 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 Small Ruminant Mineral Mixture on growth performance in sheep**
Technology options	
TO-1	TANUVAS Small ruminant Mineral mixture
Source and year	TANUVAS, 2019
Description (short)	The mineral mixture is formulated based on specific mineral requirement of sheep and goat, supplies essential minerals required for production and reproduction. Contains Calcium, phosphorus, sulphur, Zinc, iron, copper, Manganese, Cobalt and Selenium. Daily recommended dose is kid/lamb – 5gm, Ewe/Doe – 10 gm, Ram/Buck and Pregnant ewe/Doe – 15 gm
Potential yield/income	-

Critical Inputs	Mineral Mixture for Sheep and goats, 25 kgs ,Rs.1600
Source of Inputs	VCRI- TANUVAS, Tirunelveli
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.
Potential yield/income	-
Critical inputs& quantity and cost	NIANP Small ruminants mineral mixture & Field board, 25 Kgs , Rs.2225
Source of Inputs	ICAR- NIANP, Bengaluru
Photos	
Farmer's Practice	No mineral mixture feeding, Maintaining the flock normally with grazing, tree leaves, shrubs feeding. Some farmers feed the mineral mixture available for large ruminants in little quantity.
Farmer's yield	-
Season	Kharif 2021
Cost per replication (Rs.)	Rs.3,825
No. of replications	5
Total cost for the OFT	Rs.19,125
Parameters to be studied	Body weight (kg); Body weight gain (gm/day), BCR
Parameters to be reported	Body weight gain and body weight at marketing age (kg), BCR
Source of funding	KVK Main
Team members	SMS (Animal Science), Senior Scientist and Head, SMS (Agrl. Extension)

OFT No.	**11**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Animal Science
Theme	Dairy cattle health management
Category (if applicable)	Dairy Cattle
Crop/ enterprise	Goats / Sheep
Farming situation	Semi intensive farming system
Prioritized problem (short)	Ticks and tick-borne diseases (TTBDs) on an average cost Rs 400 per livestock owning household (Excluding productivity loss) Vector for LSD, Protozoal diseases.On an average 10% of clinical cases are TTBDs ; Acaricidal resistance to Synthetic drugs
Title of the OFT	**Assessment of TANUVAS –TRPVB Tick Shield to mitigate the acaricidal resistance of ectoparasites in dairy cattle**
Technology options	
TO-1	
Source and year	TANUVAS ,2021
Description (short)	Tick Shield To mitigate acaricidal resistance. Minimize Protozoal diseases and LSD transmission
Potential yield/income	-
Critical Inputs	Tick Shield, Rs,450
Source of Inputs	TANUVAS, Chennai
Photos	
TO-2	
Source and year	ICAR- CIRG, 2018
Description (short)	Herbal Acaricidal Liquid/spray to mitigate ectoparasites in Livestock
Potential yield/income	-
Critical inputs& quantity and cost	Meagatex, Herbal Acaricidal Spray Rs.450
Source of Inputs	ICAR – CIRG

Photos	
Farmer's Practice	Use of Deltamethrin (2%) / Flumethirin (1%)
Farmer's yield	-
Season	-
Cost per replication (Rs.)	900
No. of replications	10
Total cost for the OFT	9000
Parameters to be studied	Efficiency Recurrence rate after application of drug – 7th, 14th, 28th day
Parameters to be reported	Efficiency Recurrence rate after application
Source of funding	KVK Main
Team members	SMS (Animal Science), SMS (Agrl. Extension)

OFT No.	**12**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject,	Agricultural Extension
Theme	Information & Communication Technology (ICT)
Category (if applicable)	Cereals
Crop/ enterprise	Paddy
Farming situation	Irrigated, red sandy loam
Prioritized problem (short)	Paddy is cultivated in about 28000 ha in the district. Major variety cultivated is BPT 5204 and hybrid varieties. Farmers get low yield due to pest (leaf folder, stem borer & hopper) and disease (blast & gall midge) incidence in paddy. Technology transfer mechanism need to be improved to reach the individual farmers' farm holding in time. Adoption level of different technologies are also leading to low productivity in paddy, It is necessary to assess the Effectiveness of e-Extension Methods for Transfer of Technology to improve the knowledge level and adoption rate of the farmers.
Title of the OFT	**Assessing the Effectiveness of e-Extension Methods in terms of Knowledge Gain and Skill acquirement and Symbolic Adoption Behavior among the Rural Youth**
Technology options	

TO-1	Transfer of Paddy technologies through Paddy Expert System
Source and year	TNAU, 2014
Description (short)	TNAU's paddy expert system is a mobile app that covers Nursery Management for Paddy, Cultivation Practices for Paddy, Nutrient Management for Paddy, Crop Protection for Paddy, Farm Implements for Paddy, Post Harvest Technology for Paddy, Marketing for Paddy, Schemes and Institutes for Paddy
Potential yield/income	
Critical Inputs	Net connectivity charges for 15 farmers
Source of Inputs	Retail unit
Photos	
TO-2	Transfer of Paddy technologies through Agri-tech portal (http://agritech.tnau.ac.in)
Source and year	Ministry of Electronics & Information Technology, GOI
Description (short)	**Vikaspedia** is a knowledge portal targeting specific country needs in the domain with a specific objective of reaching the '**un-reached**' communities of India, especially poor. It catalyses the use of ICT tools for knowledge sharing, leading to development.
Potential yield/income	
Critical inputs& quantity and cost	Net connectivity Charges for 15 farmers
Source of Inputs	Retail unit
Farmer's Practice	Contact with local Extension workers for getting advisory service on paddy cultivation
Farmer's yield	
Season	Rabi 2021
Cost per replication (Rs.)	Rs. 250
No. of replications	30
Total cost for the OFT	Rs.7,500
Parameters to be studied	Percentage of Knowledge gain, Skill & Adoption behavior
Parameters to be reported	Percentage of Knowledge gain, Skill & Adoption behavior
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS – Agricultural Extension, Agronomy

OFT No.	**13**
Status (New proposal/2nd year /3rd year)	New proposal
subject	Home science
Theme	Post-Harvest Technology
Category (if applicable)	Post-harvest processing & value addition
Crop/ enterprise	Fruits and Vegetables
Farming situation	-
Prioritized problem (short)	Poor Shelf life of fruits and vegetables because its perishables in nature. Lack of Post-harvest facilities i.e., Non availability of refrigerated transport and high-quality cold storage facilities for farmers.
Title of the OFT	**Assessment of Different Coating Formulations to improve the Shelf life of Fruits and Vegetables**
Technology options	
TO-1	ICAR
Source and year	ICAR-Indian Institute of Natural Resins and Gums (IINRG, Ranchi (2019)
Description (short)	➢ Shelf-life enhancement, improved cosmetic appearance, specially glosses, mechanical strength of produce and prevent pathogenic attacks of vegetables like brinjal, capsicum, tomato and gourds. ➢ It is based on lac resin, which is used as food additive. It is completely odorless, flavorless, aqueous based and dried rapidly after application on suitable substrates.
Potential yield/income	-
Critical Inputs	ICAR-IINRG Fresh coat, Storage containers
Source of Inputs	ICAR-IINRG
Photos	
TO-2	TNAU Fruity Fresh
Source and year	TNAU (2020)
Description (short)	➢ Dilute 20 ml of fruity fresh formulation in one litre of water ➢ Dip fruits for five minutes in the diluted solution and dry the fruits before packing ➢ Post-Harvest dip in 2 % TNAU fruity fresh extends the shelf life of fruits by two weeks in ambient storage condition and up to 4 weeks under cold storage
Potential yield/income	-
Critical inputs& quantity and cost	TNAU Fruity Fresh, Storage containers
Source of Inputs	TNAU

Photos	
Farmer's Practice	-
Farmer's yield	-
Season	-
Cost per replication (Rs.)	Rs. 2,000
No. of replications	5
Total cost for the OFT	Rs 10,000
Parameters to be studied	Shelf life (Days), Appearance, Color, BCR
Parameters to be reported	Shelf life (Days), Appearance, Color, BCR
Source of funding	KVK Main
Team members	SMS (Home science & Horticulture)

OFT No.	**14**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Home science
Theme	Value addition
Category (if applicable)	Post-Harvest Technology
Crop/ enterprise	Mango
Farming situation	-
Prioritized problem (short)	➢ Unawareness on processing techniques ➢ Low price during glut and poor shelf life
Title of the OFT	**Assessment on different flavors of protein enriched mango bar using solar drier**
Technology options	
TO-1	Preparation of protein enriched mango spicy bar (Alphonso) using cabinet dryer
SOURCE	TNAU 2014
Description (short)	Mango pulp (Alphonso) is heated for 3 minutes to inactivate the enzymes. The pulp was mixed with corn flour, sugar, green gram flour, soy flour, skim milk powder for enriching the mango bar and can be used asconfectionary and is highly nutritive.
Potential yield/income	-

Critical Inputs	Mango pulps and raw materials Preservatives and packaging materials
Source of Inputs	KVK Main
Photos	
TO-2	Preparation of mango spicy bar (Bangalora) using solar dryer
Source and year	IIHR ,2017
Description (short)	Mango pulp (Alphonso) is heated for 3 minutes to inactivate the enzymes. The pulp was mixed with corn flour, sugar, Chilli powder, asafoetida, green gram flour, soy flower, skim milk powder for enriching the mango bar and can be used as a confectionary and in salads
Potential yield/income	-
Critical inputs	Mango pulps and raw materials, Preservatives and packaging materials
Source of Inputs	KVK Main
Photos	
Farmer's Practice	Fresh sale of raw produce
Farmer's yield	-
Season	-
Cost per replication (Rs.)	Rs.3,000/-
No. of replications	5
Total cost for the OFT	Rs. 15,000/-
Parameters to be studied	Drying hours, shelf life, Consumer preference, Yield, Organoleptic evaluation, BCR
Parameters to be reported	Drying hours, shelf life, Consumer preference, Yield, Organoleptic evaluation, BCR
Source of funding	KVK Main
Team members	SMS (Home Science, Horticulture)

9. Frontline Demonstrations proposed during 2021-22

9.1. Summary of FLDs:

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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	Cereals/ Paddy	Demonstration on Paddy variety ADT 53	More pest & disease incidence and low yield due to improper crop management	➢ Cultivation of variety ADT 53 ➢ Azospirillum 5 pkt/ha ➢ Phosphobacteria 5 pkt/ha	TNAU	2nd year	10	4 ha	11,600	SMS (Agronomy, Extension and Soil Science).	-	3
2	Millets/Ragi	Demonstration on Ragi variety CO 15	Repeated cultivation of existing variety Paiyur - 2	➢ Cultivation of variety CO 15 ➢ Azospirillum 5 pkt/ha ➢ Phosphobacteria 5 pkt/ha	TNAU	2nd year	10	4 ha	10,000	SMS (Agronomy, Extension and Soil Science)	5	5
3	Millets/Little Millet	Demonstration on Little Millet variety ATL 1	Lack of awareness on improved variety, Improper nutrient management and Low yield in existing variety	➢ Cultivation of variety Little Millet ATL 1 ➢ Azospirillum 5 pkt/ha ➢ Phosphobacteria 5 pkt/ha	TNAU	2nd year	15	6 ha	6,780	SMS (Agrl. Extension) & SMS (Soil Science)	5	5
4	Pulses/ Horsegram	Demonstration of Horsegram	Repeated cultivation of	➢ Horsegram variety CRIDA 18R	TNAU	2nd year	10	4 ha	10,200	SMS (Agronomy,	10	-

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
		variety CRIDA 18R for higher productivity	existing variety Paiyur 2 and Improper crop management	➢ Rhizobium 5 pkt/ha ➢ Phosphobacteria 5 pkt/ha						Extension and Soil Science)		
5	Horticulture crops/ Tapioca	ICM in YTP 2 Tapioca	Off late viral diseases, white fly, mites and mealy bug infestation is increasing, thereby reducing the yield by around 50%.	➢ Variety –YTP 2 tapioca, INM,IPM	TNAU	New	5	1 ha	23,500	SMS (Horticulture), SMS (Soil Science)	-	-
6	Horticulture crops/ Onion	ICM in CO 6 Onion	Improper Crop management	➢ Variety CO6 onion, INM,IPM	TNAU	New	5	1 ha	25,000	SMS (Horticulture), SMS (Soil Science)	-	-
7	Fruits / Lime	Demonstration on Balaji Lime	Less yield due to cultivation non-descriptive type variety	➢ Demonstration on Balaji Lime variety	Tirupati (Andhra Pradesh) & 2012	New	5	1 ha	17,000	SMS (Horticulture), SMS (Soil Science)	-	-
8	Horticulture crops/ French Beans	ICM in Arka Arjun French Beans	Improper Crop management	➢ Variety Arka Arjun	IIHR	New	5	1 ha	10,000	SMS (Horticulture), SMS (Soil Science)	-	-

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
9	Horticulture crops/ Mango	Integrated Crop Management in Mango	Improper nutrient, pest and disease management	➢ Integrated Nutrient Management with emphasis on IIHR Mango special spraying (4 sprays @ 0.5% - 2 preflowering and 2 post flowering) ➢ Pest Management with emphasis on Fruit fly management using Methyl eugenol traps @ 25/ha (For Hopper, Thrips and Stem borer) ➢ Disease Management (Anthracnose & Powdery mildew)	IIHR & TNAU	4th Year	10	4 ha	30,800	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl.Extension)	-	10
10	Horticulture crops/ Banana	Demonstration on Micronutrient Management in Banana	Low yield due to improper nutrient management	➢ Micro nutrient management in Banana ➢ Integrated Nutrient Management ➢ IIHR Banana special – 6 sprays@0.5%	IIHR	2nd Year	10	4 ha	16,400	SMS (Soil Science) & SMS(Horti.)	10	-

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
				➢ Bio-fertiliser as soil application								
11	Fibre crops/ Cotton	Demonstration on Micronutrient Management in Cotton	Improper nutrient management	➢ Integrated Nutrient Management ➢ Cotton Plus – 2 sprays @ 2.5 kg/acre during flowering and boll formation stage ➢ Bio-fertiliser as soil application	TNAU	New	10	4 ha	12,000	SMS (Soil Science), SMS (Agronomy) and SMS (Agrl.Extension)	-	2
12	Millets /Maize	Demonstration on Micronutrient Management in Maize	Improper nutrient management	➢ Integrated Nutrient Management ➢ Maize Maxim – 2 sprays @ 3 kg/acre during tassel initiation and grain filling stages. ➢ Bio-fertiliser as soil application	TNAU	New	10	4 ha	20,000	SMS (Soil Science), SMS (Agronomy) and SMS (Agrl.Extension)	-	2
13	Farm Implements /Groundnut	Farm Mechanization in Groundnut cultivation	The scarcity of labour is the major problem. High seed rate, wages and drudgery operations. Farmers unaware of mechanical source	➢ TNAU Decorticator – seed separation ➢ Tractor drawn groundnut seed drill – sowing ➢ Weeding by Improved weeder – balram weeder - weeding ➢ TNAU Stripper –	TNAU	New	10	4 ha	15,650	Prog. Assistant, SMS (Agronomy)	--	2

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
				Pots separation from plant								
14	Farm Implements /Cotton	Demonstration on Cotton plucker	Less labour efficiency (Harvesting in the morning 10 to 11 am requires more labours) High wages and drudgery Unawareness of new machines	➢ Cotton harvesting / kapas plucking by Cotton plucker	SIMA, Coimbatore	New	10	4 ha	12,000	Prog. Assistant, SMS (Agronomy)	-	2
15	Farm Implements/ Vegetable – Tomato	Demonstration on Vegetable planter (manual operated)	Unavailability of skilled labour, High wages and drudgery and Unawareness of new technologies / machines	➢ Vegetable seedlings transplanted by Vegetable planter	AMRC, TNAU, Coimbatore	New	5	2 ha	16,000	Programme Assistant & SMS (Horticulture)	-	2
16	Paddy	Demonstration on IPDM in Paddy	Lack of Knowledge on using of Pesticides	➢ Seed treatment with Imidacloprid 48%FS @ 2.5 g/kg, Foliar application of Lecanicillium lecanii @ 1 lit/acre ➢ Release of Trichogrammajaponicum @ 2 cc,Release of	TNAU,2020	2nd Year	10	4 ha	18,300	SS & Head & SMS (Agrl. Extension)	-	-

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
				Trichogramma chilonis @ 2 cc ➢ Installation of solar light trap @ 1/acre. Installation of Stem borer pheromone trap @ 10/acre ➢ Installation of Yellow sticky trap @ 5/acre, Need based application of Neem oil @ 3%. ➢ Foliar application of Cartop Hydrochloride 50% SP@ 400 g/ac (Stem borer & Leaf folder) Spraying of Spraying of Tricyclazole at 1g/lit of water, Foliar application of Thiomethaxam 25% WG@ 80 g/ac (BPH, Thrips, GLH)								
17	Cereals/ Maize	Demonstration on IPM on Maize Fall Army worm	Yield loss (upto 100%) due to Fall Army Worm	➢ Summer ploughing ➢ Border crop with sorghum (2-4 rows advance sowing) ➢ Seed treatment with	TNAU	2nd year	10	4 ha	17,400	SS & Head & SMS (Agrl. Extension)	-	2

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
				cyatranilprole19.8% +thiamethoxam 19.8%(Fortenza due 480FS@2ml/kg or thiamethoxam 30FS @10g/kg ➢ One row of rogue space for every 10 rows of maize for effective spraying ➢ Intercropping with redgram ➢ Installation of phereomone traps @ 4 Nos/ac at the time of sowing ➢ Collection and destruction of egg masses(8th day onwards) ➢ Azadirachtin 10,000 ppm@1ml/lit)8-10 days after crop emergence								

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
				➢ At 5-10% infestation Bacillus thringiensisformulation @2ml/lit or Metarhiziumanisopliae @ 2ml/lit or Beauveria bassianan@5ml/lit or EPN 20g/lit is recommended. ➢ If infestation is more than 10%, spray Emamectin benzoate 5% SG@ 4g/lit or Spinetoram 11.7SC @ 0.3 ml/lit (30-60DAS)								
18	Poultry/Desi Chicken	Popularization of TANUVAS Aseel under backyard condition	Less aware of improved native chicken breeds and poor weight gain in native chicken reared under backyard condition	➢ TANUVAS Aseel rearing under backyard condition	TANUVAS	2nd Year	10	-	27,000	SMS (Animal Science) &SMS (Agrl. Extension)	-	10

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
19	Livestock/ Fodder	Demonstration of 10 cent multi-crop fodder production model	Mono fodder cultivation mostly grasses(Co4), Less aware of latest High yielding varieties, less aware of balanced mixed fodder cultivation	➢ Multi crop 10 cent fodder production (Cumbu Napier CO 5 + Fodder Sorghum CoFS 29/31 + Hedge Lucerne + Tree fodder (Agathi)	TANUVAS	2nd Year	10	0.4 ha	15,250	SMS (Animal Science) & SMS (Agrl. Extension)	-	5

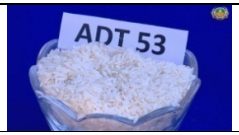
S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	Area (ha)/ Units	Total cost involved (Rs.)	Team members involved	No. of demos targeted in DFI village(s)	No. of demos targeted under SC-SP
20	Poultry/Desi Chicken	Demonstration of ProBeads-EC on growth performance of Desi-chicken	Pathogenic Bacteria in gut Challenge'shealth of desi chicken.Farmer's not aware of gut health enhancers and not using probiotics for scavenging desi chicken at field level	➢ Oral administration of Probeads EC beads @ 5beads / bird /day	TANUVAS	New	10	--	14,000	SMS (Animal Science) & SMS (Agrl. Extn)	-	-
21	Sorgum	Demonstration of multicut fodder sorghum CO (FS) 31	Repeated Cultivation of CO (FS) 29	➢ Fast growing and high tillering, First cut (60-65 days), subsequent cuts (every 45 days), Average green fodder yield (t/ha): 190-(6-7 cuts)	TNAU 2014	New	10	2 ha	9,200	SMS Animal Science	-	-
22	Nutritional security/	Demonstration on nutrigarden	Lack of awareness on	➢ Cultivation of multigreen and	TNAU	2nd Year	5	--	11,000	SMS (Home Science)	5	-

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
	Multigreen and vegetables		nutritional,medicinal,economical aspects of nutrigarden	vegetables in homestead area ➢ ➢ Organic method using farmyard manure and vermicompost ➢ Supply of seed kit ➢ Supply of vegetable seedlings						&SMS (Horticulture)		
23	Value Addition - Millets/ Foxtail millet	Demonstration on value added products in foxtail millet	Lack of value addition Post-harvest loss and enhance the income of the farmers	• Demonstration on value added ready to eat food products using foxtail millet • branding packaging labelling •	TNAU	New	1 (15 SHG Members)	--	5,000	SMS (Home Science)	-	-
24	Nutritional security/ Tamarind	Demonstration of value-added products from tamarind	Lowprice during glut, lack of awareness on processing, poor income during glut to farmers	• Popularization of value-added products from tamarind	TNAU	New	1 (15 SHG Members)	--	5,000	SMS (Home Science)	-	-
25	Others/	Demonstration	Lack of	Installation of TNAU	TNAU 2019	New	25	-	1,250	SMS (Agrl.	-	-

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technologies Demonstrated	Source of Technology	Status	No. of Demo	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
	Agricultural Extension	of TNAU Mobile Apps among Farmers Mobile User Group(FMG)	awareness of good management in cattle farm	specific Mobile Apps to Cattle rearer						Extension) &SMS (Animal Science)		
26	Others/ Agricultural Extension	Demonstration of Banana Expert System as android based mobile application	Lack of awareness of good management in banana growers	Installation of TNAU Banana Expert System Mobile Apps to Banana Growers	TNAU	New	25	-	1,250	SMS (Agricultural Extension)	-	-

9.2. Details of FLDs:

FLD No.:	**01**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Rice
Farming situation	Irrigated
Prioritized problem:	More pest & disease incidence and low yield due to improper crop management
Title	**Demonstration on Paddy variety ADT 53**
Technology to be demonstrated:	➢ Cultivation of variety **ADT 53** ➢ *Azospirillum* 5pkt/ha ➢ *Phosphobacteria* 5 pkt/ha
Hybrid or Variety:	Variety
Source of Technology:	TNAU
Description	➢ Suitable for Kuruvai, Kodai Navarai seasons ➢ High yielding, medium tall and erect variety ➢ Mean Grain Yield 6334 kg / ha ➢ Non-Lodging plant type with well exerted compact panicle ➢ 1000 grain weight: 14.5 g ➢ Medium slender rice with highMilling Outturn and Head Rice Recovery ➢ Rich in Zinc (26.06 ppm) and Iron (14.70 ppm) content ➢ White cooked rice with intermediate amylose and soft Gel Consistency ➢ Moderate resistance to pests (stem borer, leaf folder) ➢ Moderate Disease resistance (blast, sheath rot and brown spot) ➢ Highly adaptable to all ecosystems of Tamil Nadu
Potential yield	9875 kg / ha
Critical input, quantity and cost	Paddy ADT 53 seeds – 24 Kg, *Azospirillum - 1 Kg, Phosphobacteria – 1 Kg &* Field board - 1 no
Farmer's practice	White Ponni
Source of input	TNAU

Photos	 
Average farmers yield	4000 Kg /ha
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.11,600 /-
Parameters to be studied:	➢ Plant population per sq. m ➢ Productive tillers per hill ➢ Yield / ha ➢ BCR
Parameters to be reported	➢ Plant population per sq. m ➢ Productive tillers per hill ➢ Yield / ha ➢ BCR
Source of funding	KVK Main
Team members	SMS (Agronomy, Extension and Soil Science)

FLD No.:	**02**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Agronomy
Category:	Millets
Crop/ enterprise:	Finger Millet (Ragi)
Farming situation	Irrigated Clayey Loam soil
Prioritized problem:	Repeated cultivation of existing variety Paiyur 2 and Improper crop management
Title	**Demonstration on Ragi variety CO 15**
Technology to be demonstrated:	➢ Cultivation of variety **CO 15** ➢ *Azospirillum* 5pkt/ha ➢ *Phosphobacteria* 5 pkt/ha
Hybrid or Variety:	Variety
Source of Technology:	TNAU

Description	Highly responsive to nitrogenous fertilizer, non-lodging resistant to leaf, neck and finger blasts and nutritionally rich grain and fodder. Variety possesses consumer preferred bold and copper red grains.
Potential yield	3460 Kg/ha
Critical input, quantity and cost	Ragi CO 15 Seed (10 kg per Demo), Azospirillum - 1 Kg, Phosphobacteria – 1 Kg, Field board 1 no
Farmer's practice	ML 365
Source of input	KVK
Photos	 
Average farmers yield	2170Kg/ha
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.10,000
Parameters to be studied:	➢ Plant population ➢ Productive tillers/plant ➢ No. of fingers/plant ➢ Yield /ha ➢ BCR
Parameters to be reported	➢ Plant population ➢ Productive tillers/plant ➢ No. of fingers/plant ➢ Yield /ha ➢ BCR
Source of funding	KVK Main
Team members	SMS (Agronomy, Extension and Soil Science)

FLD No.:	**03**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Agronomy
Category:	Millets
Crop/ enterprise:	Little millet
Farming situation	Rainfed
Prioritized problem:	Lack of awareness on improved variety, Improper nutrient management and Low yield in existing variety
Title	**Demonstration on Little Millet variety ATL 1**
Technology to be demonstrated:	➢ Cultivation of variety Little Millet ATL 1 ➢ Seed treatment with *Trichoderma viride*4g/kg ➢ Soil application with *Trichoderma viride 2.5* kg/ha ➢ Application of Biofertilizers
Hybrid or Variety:	Variety
Source of Technology:	TNAU
Description	Semi compact panicle; Strong culm and non-lodging; uniform maturity; Suitable for mechanical harvesting; High milling recovery (66.3%); Nutrient rice grains
Potential yield	1590 Kg/ha
Critical input, quantity and cost	Little millet ATL 1 seed- 2 Kgs /demo, Azospirillum – 1Kg/demo , Phospobacteria – 1 Kg /demo, Field board -1 no/demo
Farmer's practice	Paiyur 2
Source of input	KVK
Photos	 
Average farmers yield	700 Kg/ha
Season	Kharif 2021
No. of Demos (replications)	15
Total cost for the Demo	Rs.6,780/-
Parameters to be studied:	Population, yield, Gross cost, gross and net income, BCR
Parameters to be reported	Population, yield, gross cost, gross and net income, BCR
Source of funding	KVK Main
Team members	SMS (Agronomy, Extension and Soil Science)

FLD No.:	**04**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Agronomy
Category:	Pulse
Crop/ enterprise:	Horsegram
Farming situation	Rainfed
Prioritized problem:	Repeated cultivation of existing variety Paiyur - 2
Title	**Demonstration of Horsegram variety CRIDA 18R for higher productivity**
Technology to be demonstrated:	Horsegram variety CRIDA 18R
Hybrid or Variety:	Variety
Source of Technology:	CRIDA
Description	It has higher yielding ability of both grain and fodder with high carbohydrate and protein content in the seed along with qualities of non-shattering pods, YMV tolerance, powdery mildew and mites.
Potential yield	1150 Kg/ha
Critical input, quantity and cost	Seed-10 kg, Rhizopium – 1 kg. Phosphobacteria – 1 Kg, Field board 1 no**,** Rs.1,020
Farmers practice	Paiyur1
Source of input	CRIDA
Photos	
Average farmers yield	850 Kg
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.10,200
Parameters to be studied:	Pod and haulm yield, pest and diseases, Gross cost, gross and net income, BCR
Parameters to be reported	Pod yield, gross cost, gross and net income, BCR
Source of funding	KVK Main
Team members	SMS (Agronomy, Extension and Soil Science)

FLD No.:	**05**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Tapioca
Farming situation	Irrigated, Red sandy loam
Prioritized problem:	Tapioca is grown in an area of around 1,000 ha in Uthangarai block of Krishnagiri district. Off late viral diseases, white fly, mites and mealy bug infestation is increasing, thereby reducing the yield by around 50%. Injudicious spraying of pesticides by the farmers causes environmental hazard and health problems to the consumers. Hence this FLD is proposed to demonstrate YTP 2 tapioca which is resistant to cassava mosaic virus and gives higher yield.
Title	**ICM in YTP 2 Tapioca**
Technology to be demonstrated:	Variety –YTP 2 tapioca, INM,IPM
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2020
Description	The tubers are long, cylindrical with pinkish white skin. The rind color is also pink with creamy white. The flesh is white in color. The mean tuber yield per plant is 6.28 kg (46.2 t/ha) with the starch content of 29.62 %. Duration is 270-300 days. Suitable for edible and industrial purpose. Cassava mosaic virus grade is one to two. Tolerant to drought and salt.
Potential yield	46.2 t/ha
Critical input, quantity and cost	YTP 2 setts 7,500 Nos @ Rs.3 per sett = Rs.22,500/-
Farmer's practice	Farmers use non-descript varieties of their own or obtained from other farmers
Source of input	Tapioca and cassava Research station,TNAU, Yethapur
Photos	
Average farmers yield	36.5 t/ha
Season	Rabi 2021
No. of Demos (replications)	5
Total cost for the Demo	Rs.23,500
Parameters to be studied:	Growth parameters, Pest and disease incidence,Yield, gross and net income, BCR

Parameters to be reported	Growth parameters, Pest and disease incidence, Yield, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Horticulture), SMS (Soil Science)

FLD No.:	**06**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Onion
Farming situation	Irrigated, Red sandy loam
Prioritized problem:	Low yield due to white fly mites and viral infestation
Title	**ICM in CO 6 Onion**
Technology to be demonstrated:	Variety CO6 onion, INM,IPM
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2020
Description	Onion CO 6, has the ability of free flowering and seed setting throughout Tamil Nadu. The bulb and seed yield are 19.10 tonnes / ha and 250- 300 kg/ha, respectively. It recorded 20.94 % increase over the check CO (On) 5. By switching over to cultivation of seed setting onion from the bulb propagated one, there is a saving of seed bulb to a tune of 1000 kg / ha. The bulbs are bolder in size with attractive pink in colour. Each clump has 5 - 7 bulbs and each clump weighs 90-100 g. For seed to bulb, it takes 130 days and bulb to seed it takes 140 days duration.
Potential yield	Bulb yield – 191.0 qtl/ha/yr, Seed yield 250-300 Kg/ha
Critical input, quantity and cost	CO 6 bulb 1,000 Kg – Rs. 25,000/-
Farmer's practice	Farmers use non-descript varieties of their own or obtained from other farmers
Source of input	TNAU, Coimbatore
Photos	

Average farmers yield	135 qtl/ha
Season	Rabi 2021
No. of Demos (replications)	5
Total cost for the Demo	Rs. 25,000/-
Parameters to be studied:	Growth parameters, Pest and disease incidence,Yield, gross and net income, BCR
Parameters to be reported	Growth parameters, Pest and disease incidence,Yield, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Horticulture) , SMS (Soil Science)

FLD No.:	**07**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Fruits
Crop/ enterprise:	Lime
Farming situation	Irrigated
Prioritized problem:	Farmers are growing local non-descript varieties of acid lime which is susceptible to wilt, bacterial canker and thrips. The fruits are small and give low yield. VRM 1 acid lime is sweeter and more suitable for the preparation of juice. This variety is tolerant to leaf miner and citrus canker.
Title	**ICM in Balaji Lime**
Technology to be demonstrated:	Variety VRM1 lime
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2016
Description	Lime (VRM 1) is suitable for home garden and preparation of juice and pickles. It has very less seeds and contains high vitamin 'C' (96 mg/100 ml), more ascorbic acid and less acidity than local lime. It has yield potential of 250 - 300 Qts/ha and resistant to Leaf miner and Citrus canker.
Potential yield	Yield 250 - 300 Qts/ha/year
Critical input, quantity and cost	VRM-1 plants 200 nos @ Rs.75 =Rs.17,000/-
Farmer's practice	Farmers use non-descript varieties
Source of input	KVK,TNAU, Virinjipuram
Average farmers yield	200 qtl/ha/year
Season	Kharif 2021

No. of Demos (replications)	5
Total cost for the Demo	Rs.17,000
Parameters to be studied:	Growth parameters, Pest and disease incidenceYield, gross and net income, BCR
Parameters to be reported	Growth parameters, Pest and disease incidenceYield, gross and net income, BCR
Source of funding	KVK Main
Team members	SMS (Horticulture), SMS (Soil Science)

FLD No.:	**08**
Status (New proposal/2nd year /3rd year)	New
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	French Beans
Farming situation	Irrigated
Prioritized problem:	French Beans is cultivated in an area of 1,500 ha in Krishnagiri district. The low productivity in this area is due to leaf miner, thrips, aphids and viral diseases. Farmers generally opt for enormous pesticide application and there by increases the cost of cultivation and environmental issues. Arka Arjun variety is resistant to yellow vine mosaic virus and gives higher yield.
Title	**ICM in Arka Arjun French Beans**
Technology to be demonstrated:	Variety Arka Arjun
Hybrid or Variety:	Variety
Source of Technology:	IIHR 2016
Description	Plants are bushy, vigorousand photo-insensitive. Pods are green, stringless with smooth surface. Suitable for both *rabi* and summer. Resistant to *MYMV* disease. Pod Yield: 170 qtl/ha in 70 days.
Potential yield	Yield 170 Qts/ha
Critical input, quantity and cost	French bean (variety - Arka Arjun) seed 30 kgs @ Rs. 300/kg = Rs. 9,000/-
Farmers practice	Farmers use private & non-descript varieties.
Source of input	IIHR Bangalore

Photos	
Average farmers yield	120.5 q/ha
Season	Kharif 2021
No. of Demos (replications)	5
Total cost for the Demo	Rs. 10,000/-
Parameters to be studied:	Growth parameters, Pest and disease incidence,Yield, gross and net income, BCR
Parameters to be reported	Growth parameters, Pest and disease incidence, Yield, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Horticulture), SMS (Soil Science)

FLD No.:	**09**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Soil Science
Category:	Fruit crops
Crop/ enterprise:	Mango
Farming situation	Rainfed; red sandy loam soil
Prioritized problem:	Mango is cultivated in Krishnagiri district in an area of 44,000 ha. Improper nutrient management and improper pest and disease management alone contribute about 30 – 40 yield loss in rainfed condition. In micronutrients, boron and zinc deficiencies are widely seen in mango orchards and the farmers have to be demonstrated with the proper micronutrient management technologies. Also the fruit fly management using Male Annihilation Technology with Methyl eugenol traps need to be popularized to increase the production and productivity of mango in the district.
Title	**Demonstration on Integrated Crop Management in Mango**
Technology to be demonstrated:	Integrated Crop Management
Hybrid or Variety:	Variety (Bengalura)
Source of Technology:	IIHR

Description	➢ Integrated Nutrient Management with emphasis on IIHR Mango special spraying (4 sprays @ 0.5% - 2 preflowering and 2 post flowering) ➢ Pest Management with emphasis on Fruitfly management using Methyl eugenol traps @ 25/ha (For Hopper, Thrips and Stem borer) ➢ Disease Management (Anthracnose & Powdery mildew)
Potential yield	8-10 t/ha
Critical input, quantity and cost	IIHR Mango special – 40 kg/ha, Rs.130/kg, Methyl eugenol traps – 25/ha, Rs.80/trap
Farmer's practice	No proper nutrient supplementation in time and no management for fruitfly infestation.
Source of input	KVK
Photos	
Average farmers yield	3 – 4 t/ha
Season	Kharif, 2021
No. of Demos (replications)	10 (4 ha)
Total cost for the Demo	Rs.30,800/- (Including field board)
Parameters to be studied:	Visual diagnosis for the deficiency symptoms, Fruit fly incidence, Yield, Gross Cost, Net income and BCR
Parameters to be reported	Yield, Gross Cost, Net income and BCR
Source of funding	KVK Main
Team members	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl.Extension)

FLD No.:	**10**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Soil Science
Category:	Fruit crops
Crop/ enterprise:	Banana
Farming situation	Irrigated; red sandy loam soil
Prioritized problem:	Banana is cultivated in Krishnagiri district in an area of 2,600 ha. Overll the improper nutrient management leads to 20 – 30 % yield loss. Usually, the farmers concentrate on major nutrients supplementation through

	fertilizers but mostly unaware of micronutrient deficiencies in banana. Hence demonstration on micronutrient management using IIHR Banana special may be done to get increased yield in banana.
Title	**Demonstration on Micronutrient Management in Banana**
Technology to be demonstrated:	Micronutrient management
Hybrid or Variety:	Variety (Elaki)
Source of Technology:	IIHR
Description	➢ Integrated Nutrient Management ➢ IIHR Banana special – 6 sprays @ 0.5% (Starting from 4th month onwards and continued upto 9th month) ➢ Bio-fertiliser as soil application
Potential yield	15 kg/bunch
Critical input, quantity and cost	IIHR Banana special – 8 kg/acre, Rs.180/kg, field board 1 no
Farmer's practice	No proper micronutrient supplementation in time.
Source of input	KVK
Photos	
Average farmers yield	10-13 kg/bunch
Season	Kharif, 2021
No. of Demos (replications)	10 (4 ha)
Total cost for the Demo	Rs.16,400/- (Including field board)
Parameters to be studied:	Visual diagnosis for the deficiency symptoms, Yield, Gross Cost, Net income and BCR
Parameters to be reported	Yield, Gross Cost, Net income and BCR
Source of funding	KVK-Main
Team members	SMS (Soil Science), SMS (Horticulture) and SMS (Agrl.Extension)

FLD No.:	**11**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Soil Science
Category:	Fibre crops
Crop/ enterprise:	Cotton
Farming situation	Irrigated; red sandy loam soil
Prioritized problem:	Cotton is cultivated in Krishnagiri district in an area of 3,500 ha. The improper nutrient management leads to 20 – 30 % yield loss in cotton. The Sulphur deficiency and micronutrient deficiencies in cotton are widely prevalent in most of the field in the district. The reduced number of flowers and square shedding due to micronutrient deficiencies has to be addressed to improve the yield in cotton. Hence to solve the problem the micronutrient formulation developed by TNAU is demonstrated here in this FLD.
Title	**Demonstration on Micronutrient Management in Cotton**
Technology to be demonstrated:	Micronutrient management
Hybrid or Variety:	Hybrid (RCH 2)
Source of Technology:	TNAU
Description	➢ Integrated Nutrient Management ➢ Cotton Plus – 2 sprays @ 2.5 kg/acre during flowering and boll formation stage ➢ Bio-fertiliser as soil application
Potential yield	-
Critical input, quantity and cost	Cotton Plus – 12.5 kg/ha, Rs.200/kg+GST
Farmer's practice	No proper nutrient management in time.
Source of input	KVK
Photos	
Average farmers yield	-
Season	Kharif, 2021
No. of Demos (replications)	10 (4 ha)
Total cost for the Demo	Rs.12,000/- (Including field board)
Parameters to be studied:	Visual diagnosis for the deficiency symptoms, Yield, Gross Cost, Net income and BCR
Parameters to be reported	Yield, Gross Cost, Net income and BCR

Source of funding	KVK-Main
Team members	SMS (Soil Science), SMS (Agronomy) and SMS (Agrl.Extension)

FLD No.:	**12**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Soil Science
Category:	Millets
Crop/ enterprise:	Maize
Farming situation	Irrigated; red sandy loam soil
Prioritized problem:	Maize is cultivated in Krishnagiri district in an area of 450 ha. Proper nutrient management can reduce the yield loss up to 20 – 30 % in maize. Maize greatly influenced by the deficiency of nutrients especially the micronutrients. The grain yield and drought tolerances can be improved if it is supplemented with proper nutrition. TNAU developed Maize Maxim can be a real boost to farmers and hence it is demonstrated in this FLD to improve the yield in maize.
Title	**Demonstration on Micronutrient Management in Maize**
Technology to be demonstrated:	Micronutrient management
Hybrid or Variety:	Hybrid
Source of Technology:	TNAU
Description	➢ Integrated Nutrient Management ➢ Maize Maxim – 2 sprays @ 3 kg/acre during tassel initiation and grain filling stages. ➢ Bio-fertiliser as soil application
Potential yield	-
Critical input, quantity and cost	Maize Maxim – 15 kg/ha, Rs.300/kg+GST
Farmer's practice	No proper nutrient management in time.
Source of input	KVK
Photos	
Average farmers yield	-
Season	Kharif, 2021
No. of Demos (replications)	10 (4 ha)

Total cost for the Demo	Rs.20,000/- (Including field board)
Parameters to be studied:	Visual diagnosis for the deficiency symptoms, Yield, Gross Cost, Net income and BCR
Parameters to be reported	Yield, Gross Cost, Net income and BCR
Source of funding	KVK-Main
Team members	SMS (Soil Science), SMS (Agronomy) and SMS (Agrl.Extension)

FLD No.:	**13**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agricultural Engineering
Category:	Farm Implements
Crop/ enterprise:	Groundnut / Farm Mechanization
Farming situation	Rainfed - red sandy loam
Prioritized problem:	Groundnut is cultivated in about 4500 ha in the district in which 1700 ha is under Rainfed. All the farmers start the cultivation operations immediately after receiving the rain which results in acute labour shortage for various operations. Hence the scarcity of labour is the major problem. High seed rate, wages and drudgery operations. Spacing between plant to plant and row to row is not maintained.Farmer's unaware of mechanical source
Title	**Farm Mechanization in Groundnut cultivation**
Technology to be demonstrated:	1) TNAU Decorticator – seed separation 2) Tractor drawn groundnut seed drill – sowing 3) Weeding by Improved weeder – Balram weeder - weeding 4) TNAU Stripper – Pots separation from plant
Hybrid or Variety:	Variety
Source of Technology:	TNAU
Description	Timely operation can be done with very few labours. Adopt a spacing of row to row is 30 cm & plant to plant is 10 cm and dibble the seeds at 4 cm depth. Drudgery reduction during weeding and stripping
Potential yield	23.6 q/ha
Critical input, quantity and cost	Decorticator and stripper machines are available with KVK. Tractor drawn groundnut seed drill – Hire charge Rs.1,100 per hr and Improved weeder Rs.1,100 per no.
Farmer's practice	Seed separation, weeding and stripping done by manually. Sowing behind the country plough.
Source of input	KVK

Photos	   Decorticator Seed drill Stripper
Average farmers yield	16 q/ha
Season	Kharif 2021-22
No. of Demos (replications)	10
Total cost for the Demo	TNAU Decorticator – Available with KVK Seed drill – For 1 ac. Requires 1 hr 15 min. @ Rs. 1,100 per hr = Rs.1,565 per ac. Improved weeder – Rs.1,100 per no, Field board 1 no = Rs. 200 For 10 demos. = Rs.15,650/-
Parameters to be studied:	Labour and time saving efficiency, Gross cost, net income, BCR
Parameters to be reported	Labour saving and time saving, gross cost, gross and net income, BCR
Source of funding	KVK Main
Team members	Prog. Assistant, SMS (Agronomy)

FLD No.:	**14**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agricultural Engineering
Category:	Farm Implements
Crop/ enterprise:	Cotton
Farming situation	Rainfed - sandy loam
Prioritized problem:	Less labour efficiency (Harvesting in the morning 10 to 11 am requires more labours) High wages and drudgery Unawareness of new machines
Title	**Demonstration on Cotton plucker**
Technology to be demonstrated:	Cotton harvesting / kapas plucking by Cotton plucker
Hybrid or Variety:	Hybrid
Source of Technology:	SIMA, Coimbatore
Description	Harvesting can be done with less labour and timely operations can be done. The machine is provided with a

	cotton collection bag and a 12 V rechargeable battery. With manual picking a labourer is able to pick 13 to 15 kgs of kapas per day at a daily wage of Rs.400. this way the cost works out to Rs.15-18 per kg of kapas that is plucked.
Potential yield	**18.5 q/ha**
Critical input, quantity and cost	Kapas cotton plucker 1 no - Rs. 1000, Field board 1 no – Rs. 200
Farmer's practice	Manually plucking
Source of input	KVK
Photos	 
Average farmers yield	**17.25 q/ha**
Season	Kharif 2021-22
No. of Demos (replications)	10
Total cost for the Demo	Rs. 12,000/-
Parameters to be studied:	Labour and time saving efficiency, Gross cost, net income, BCR
Parameters to be reported	Labour saving and time saving, gross cost, gross and net income, BCR
Source of funding	KVK Main
Team members	Prog. Assistant, SMS (Soil Science)

FLD No.:	**15**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agricultural Engineering
Category:	Farm Implements
Crop/ enterprise:	Vegetable – Tomato
Farming situation	Irrigated – clay sandy loam
Prioritized problem:	Unavailability of skilled labour, High wages and drudgery Unawareness of new technologies / machines
Title	**Demonstration on Vegetable planter (manual operated)**
Technology to be demonstrated:	Vegetable seedlings transplanted by Vegetable planter
Hybrid or Variety:	Variety
Source of Technology:	AMRC, TNAU, Coimbatore
Description	Transplanting the seedlings made easy and fast. The transplanter opens a hole to plant from the standing

	position. A pair of trowels can penetrate the soil. In order to operate the tool, drop a seedling into guide tube, push the shut pair of trowels into the soil, grasp the latch and handle together and lift the tool straight up. It can save labour cost, less stress and very easy to use. It is very useful for planting of tomato, brinjal, chilli and many other vegetable seedlings.
Potential yield	**300.0 q/ha**
Critical input, quantity and cost	Vegetable Transplanter 1 no – Rs. 3000, Field board 1 no – Rs. 200
Farmer's practice	Manually transplanting
Source of input	KVK
Photos	
Average farmers yield	285.0 q/ha
Season	Kharif 2021-22
No. of Demos (replications)	5
Total cost for the Demo	Rs. 16,000/-
Parameters to be studied:	Labour and time saving efficiency, Gross cost, net income, BCR
Parameters to be reported	Labour saving and time saving, gross cost, gross and net income, BCR
Source of funding	KVK Main
Team members	Prog. Assistant, SMS (Horticulture)

FLD No.	**16**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Plant protection
Category	Cereals
Crop / Enterprise	Paddy

Prioritized problem	Infestation on stem borer, leaf folder, Gall midge, Blast, BLB
Title	**Demonstration on IPDM in Paddy**
Technology to be demonstrated	➢ Seed treatment with Imidacloprid 48%FS @ 2.5 g/kg ➢ Foliar application of *Lecanicillium lecanii* @ 1 lit/acre ➢ Release of *Trichogrammajaponicum* @ 2 cc ➢ Release of *Trichogramma chilonis* @ 2 cc ➢ Installation of solar light trap @ 1/acre. ➢ Installation of Stem borer pheromone trap @ 10/acre ➢ Installation of Yellow sticky trap @ 5/acre ➢ Need based application of Neem oil @ 3%. ➢ Foliar application of Cartop Hydrochloride 50% SP@ 400 g/ac (Stem borer & Leaf folder) ➢ Spraying of Spraying of Tricyclazole at 1g/lit of water ➢ Foliar application of Thiomethaxam 25% WG@ 80 g/ac (BPH, Thrips, GLH)
Hybrid or Variety	Variety
Name of the Hybrid or Variety	ADT 53
Source of Technology	TNAU
Status (New proposal/ approved FLD:2nd/3rd year)	2nd Year
Critical input, quantity and cost	Neem oil- 1 lit, Pheromone trap-10 nos, Stem borer lure-10 nos, Yellow sticky trap-5 nos and Field board-1 no Rs 1830
Farmer's practice	Indiscriminate use of pesticides
Source of input	TNAU, Private companies
Average farmers yield	3.5 tons/ha
Season	Kharif,2021
No. of Demos	10
Total cost for the Demo	**Rs. 18,300/-**
Parameters to be studied	➢ Plant stand ➢ No. Sprays

	➢ Percentage damage ➢ Yield & BCR
Source of funding	KVK main
Team members	SS & Head & SMS (Extension)

FLD No.	**17**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Plant protection
Category	Cereals
Crop / Enterprise	Maize
Prioritized problem	Yield loss *(upto 100%)* due to Fall Army Worm
Title	**Demonstration on IPM on Maize Fall Army worm**
Technology to be demonstrated	➢ Application of neem cake @ 250 kg/ha, ➢ Seed treatment with *Beauveria bassiana* @ 10g/kg seed or thiamethoxam 30 FS @ 10 ml/kg seed, ➢ Plant spacing of 60x25 cm, rogue spacing of 75 cm for every 10 rows, ➢ Border cropping with cowpea &gingelly, intercropping with blackgram, ➢ Installation of pheromone traps @ 50/ha, ➢ Solar light trap @ one /ha for monitoring FAW adults, ➢ Spray of Azadirachtin @ 20ml/10 l or emamectin benzoate 5 SG @ 4 g/10 l or Thiodicarb @ 20 g/10 l at early whorl stage (20 DAS); ➢ Spraying of *Metarhizium anisopliae* @ 80g/10l or spinetoram 12 SC @ 5 ml/10 l or Novaluron @ 15 ml/10 l or flubendiamide @ 4 ml/10 l or chlorantraniliprole @ 4 ml/10 l at late whorl stage (40 DAS) and at tasseling 100 and cob formation stage (60 DAS) on need basis is recommended for management of fall armyworm in maize
Hybrid or Variety	Hybrid
Name of the Hybrid or Variety	Pioneer 30 B 7

Source of Technology	TNAU
Status (New proposal/ approved FLD:2nd/3rd year)	2nd Year
Critical input, quantity and cost	Cowpea-1 kg, *Metarhiziumanisopliae*- 1 lit, Pheromone trap and lure -20 nos, Neem formulations (1500 ppm)-1lit and Field board -1 no, Rs.1830
Farmer's practice	Indiscriminate use of pesticides
Source of input	KVK
Average farmers yield	4 tons
Season	Kharif
No. of Demos	10
Total cost for the Demo	**Rs. 17,400/-**
Parameters to be studied	➢ Plant stand ➢ No. Sprays ➢ Percentage damage ➢ Yield & BCR
Source of funding	KVK main
Team members	SS & Head & SMS (Agrl. Extension)

FLD No.:	**18**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Animal Science
Category:	Poultry
Crop/ enterprise:	Desi Chicken
Farming situation	Backyard Condition
Prioritized problem:	Less aware of improved native chicken breeds and poor weight gain in native chicken reared under backyard condition
Title	**Popularization of TANUVAS Aseel under backyard condition**

Technology to be demonstrated:	TANUVAS Aseel rearing under backyard condition
Hybrid or Variety:	TANUVAAS Aseel breed
Source of Technology:	TANUVAS, 2017
Description	TANUVAS Aseel, an improved native chicken with multicolor plumage, good disease resistance and adaptable to backyard condition which attains body weight of 1.0-1.2 kg at 12th week with FCR 3.5 and livability of 95% which can enhance a better production of meat and eggs.
Potential yield	-
Critical input, quantity and cost	TANUVAS Aseel chicks, Vaccine, 25 nos Rs.2600/-
Farmer's practice	Native chickens reared under backyard condition having low egg production, hatchability and very poor body weight gain compared to other desi chicken which provides a meager income in raising these birds. Feed conversion ratio were comparatively low than selectively raised variety of birds
Source of input	CPPM, TANUVAS- Hosur
Average farmers yield	-
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.27,000 /- (Including Field Board)
Parameters to be studied:	Body weight gain, Livability, Gross cost, gross and net income, BCR
Parameters to be reported	Body weight at 12th week, Livability, BCR
Source of funding	KVK Main
Team members	SMS (Animal Science), SMS (Agrl. Extension)

FLD No.:	**19**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Animal Science
Category:	Large Ruminants
Crop/ enterprise:	Fodder crop for Dairy cattle
Farming situation	Irrigated
Prioritized problem:	Mono fodder cultivation mostly grasses (CO 4), Less aware of latest High yielding varieties less aware of balanced mixed fodder cultivation
Title	**Demonstration of 10 cent Multicrop fodder production model**

Technology to be demonstrated:	Multi crop 10 cent fodder production
Hybrid or Variety:	Hybrid and variety
Source of Technology:	TANUVAS, 2019
Description	Increasing the forage production within the existing farming systems.Allocating the area under fodder production in small farm holdings – 10 cents area with grasses, cereals, legumes and tree fodders. Planting High biomass yielding grass fodders like Cumbu Napier grass variety Co(BN5) in 04 cents area. Cereals like Fodder sorghum COFS 29/31 each in 03 cents area. legumes like cowpea Hedge Lucerne in 03 cents area. Bordering the 10 cents area with tree fodders like *Sesbania grandiflora,Leucaena leucocephala.* Tree fodders provide feed for animals during lean periods. Able to meet the fodder requirement of dairy animals in small holdings throughout the year to maintain and improve Milk yield /lactation with a fat percentage of above 4 and SNF – 8%.
Potential yield	18 tons/ yr
Critical input, quantity and cost	Hybrid Cumbu Napier grass Co5 – 500 slips, Fodder Sorghum CoFS 31 – 250 gms, Cow pea – 200 gms, Hedge Lucerne – 250 gms, Tree fodder seeds – 100 gms and Field board, Rs.1325 /demo
Farmer's practice	Mono Fodder cultivation Any single fodder variety (CO4/COFS29) or crop residue feeding, CO4 is a grass type fodder rich in carbohydrate fed mostly by the farmers. The protein rich legume and minerals rich tree fodders normally not grown by them and the animals lack in essential nutrients expressed with poor production potential
Source of input	KVK Namakkal
Average farmers yield	10-12 tons/yr
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.15,250
Parameters to be studied:	Fodder yield of varieties, Milk yield (in lit), Economics and BCR
Parameters to be reported	Total fodder yield and increase in milk production
Source of funding	KVK Main
Team members	SMS (Animal Science) , SMS (Agrl. Extension), SMS(Agronomy)

FLD No.:	**20**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Animal Science
Category:	Poultry
Crop/ enterprise:	Desi Chicken
Farming situation	Backyard Condition
Prioritized problem:	Pathogenic Bacteria in gut Challenge's health of desi chicken Farmers not aware of gut health enhancers and not using probiotics for scavenging desi chicken at field level
Title	**Demonstration of ProBeads-EC on growth performance of Desi-chicken**
Technology to be demonstrated:	Oral administration of Probeads EC beads @ 5 beads / bird /day
Hybrid or Variety:	Desi Chicken
Source of Technology:	TANUVAS, 2020
Description	A technology to provide the enteric coated probiotics in the form of beads having enteric coated prebiotic strain @ 10^6 CFU/bead. Probead EC contains *Bacillus subtilis, Bacillus firmus, Enterococccus faecalis, Enterococcus faecium, Saccharomyces cereviciae*by using enteric coating technology, to ensure the targeted delivery of probiotics in the targeted area of action i.e., small intestine which maintains gut health in chicken by competitive exclusions of pathogenic bacteria in the intestine and improve the body weight gain. Dose is 5 beads/bird/day and can be used continuously by replacing antibiotics or other growth promoters. The application is oral route of administration. The vial has to be stored at 2- 8^{o}C (Refrigeration temperature) and has to be consumed with 90 days of manufacturing.
Potential yield	-
Critical input, quantity and cost	Probeads EC beads, Field board, 12 pack and Rs.1400/-
Farmer's practice	Native chickens reared under backyard scavenging condition with feeding poor quality grains and use of antibiotics / traditional medicines under disease condition
Source of input	TRPVB, TANUVAS, Chennai
Average farmers yield	-
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.14000
Parameters to be studied:	Body weight gain, Disease incidence, Net income and BCR
Parameters to be reported	Body weight gain, Disease incidence, Net income and BCR
Source of funding	KVK Main
Team members	SMS (Animal Science), SMS (Agrl. Extension)

FLD No.:	**21**
Status (New proposal/2nd year /3rd year)	New
Subject	Animal Science
Category:	Fodder
Crop/ enterprise:	Fodder sorghum
Farming situation	Irrigated
Prioritized problem:	➢ Lack of awareness on Latest fodder varieties ➢ Repeated cultivation of single cut variety
Title	**Demonstration of multicut fodder sorghum CO (FS) 31**
Technology to be demonstrated:	Demonstration of Multicut fodder sorghum CO(FS)31
Hybrid or Variety:	Variety
Source of Technology:	TNAU,2014
Description	➢ Higher green fodder yield (192 t/ha/year) ➢ High tillering with broad leaves ➢ Enhanced seed yield due to intact seeds ➢ High crude protein (9.86%) and dry matter yield (49.73 t/ha/yr) ➢ Low HCN (172 ppm) and crude fibre (19.8 %) ➢ Superior ratooning ability renders 6-7 harvests per year ➢ Highly palatable, preferred by milch cattle, goat and sheep.
Potential yield	192 tonnes/ha (7 cuts)
Critical input, quantity and cost	Seeds (10 Kg) Rs.7200/-
Farmer's practice	CO (FS) 29
Source of input	TNAU
photos	
Average farmers yield	25 t/ha
Season	Kharif
No. of Demos (replications)	10

Total cost for the Demo	Rs.9,200
Parameters to be studied:	• Plant population/sq.m • No. of cuttings • Yield /ha • BCR
Parameters to be reported	• Yield / ha • BCR
Source of funding	KVK Main
Team members	SMS (Animal science and Extension)

FLD No.:	**22**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Homescience
Category:	Nutritional security
Crop/ enterprise:	Multigreen and vegetables
Farming situation	Irrigated
Prioritized problem:	➢ Lack of awareness on nutritional,medicinal,economical aspects of nutrigarden ➢ Poor nutritional status ➢ Poor intake of dietary sources, malnourished of the vulnerable
Title	**Demonstration on Nutri Garden**
Technology to be demonstrated:	➢ Cultivation of multi greens and vegetables in homestead area ➢ Organic method using farmyard manure and vermicompost ➢ Supply of seed kit ➢ Supply of vegetable seedlings
Hybrid or Variety:	Variety
Source of Technology:	TNAU
Description	Establishment of nutrigarden in households for improving malnutrition To provide nutrient requirements of the household To grow organically
Potential yield	

Critical input, quantity and cost	Seed kit,seedlings,vermicompost and raw materials
Farmer's practice	Unorganized and hazard manner
Source of input	KVK
photos	
Average farmers yield	-
Season	-
No. of Demos (replications)	5
Total cost for the Demo	Rs.11,000
Parameters to be studied:	➢ Yield ➢ BCR
Parameters to be reported	➢ Yield / ha ➢ BCR
Source of funding	KVK Main
Team members	SMS (Home science & Horticulture)

FLD No.:	**23**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Home science
Category:	Millets
Crop/ enterprise:	Foxtail millet
Farming situation	-
Prioritized problem:	Low price of grains Lack of value addition Post-harvest loss and enhance the income of the farmers
Title	**Demonstration on value added products in foxtail millet**
Technology to be demonstrated:	➢ Demonstration on value added ready to eat food products using foxtail millet ➢ Branding

	➢ Packaging ➢ Labeling
Hybrid or Variety:	-
Source of Technology:	TNAU
Description	Highly nutritious, palatable,
Potential yield	-
Critical input, quantity and cost	Raw materials, packaging materials-10 kg, Rs 5000
Farmers practice	For normal cooking purposes
Source of input	TNAU
Photos	 
Average farmers yield	-
Season	-
No. of Demos (replications)	1 demo (SHG 15 members)
Total cost of demo	Rs.5000
Parameters to be studied:	BCR
Parameters to be reported	BCR
Source of funding	KVK Main
Team members	SMS (Home Science and Agrl.Extension)

FLD No.:	**24**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Home science
Category:	Nutritional security
Crop/ enterprise:	Tamarind
Farming situation	-
Prioritized problem:	Low price during glut, lack of awareness on processing, poor income during glut to farmers
Title	**Demonstration of value-added products from tamarind**
Technology to be demonstrated:	Popularization of value-added products from tamarind
Hybrid or Variety:	-
Source of Technology:	TNAU 2011
Description	Demonstration of value-added products from tamarind, for fetch high income to the women

	Product development and aiding in entrepreneurship activity Branding, packaging, licensing procedures
Potential yield	-
Critical input, quantity and cost	Raw materials, preservatives, packaging materials-10 kg-5000
Farmer's practice	Raw use only for cooking
Source of input	TNAU
Photos	
Average farmers yield	-
Season	-
No. of Demos (replications)	1 demo (15 SHG members)
Total cost for the Demo	Rs.5,000
Parameters to be studied:	Shelf life, Gross cost, gross and net income, BCR
Parameters to be reported	Shelf life, gross cost, gross and net income, BCR
Source of funding	KVK Main
Team members	SMS (Home Science) & Agrl. Extension

FLD No.	**25**
Status	New proposal
Subject	Agrl. Extension
Category	Others
Crop / Enterprise	Agricultural Extension
Prioritized problem	Lack of awareness of good management in cattle farm
Title	**Demonstration of TNAU Mobile Apps among Farmers Mobile User Group(FMG)**
Technology to be demonstrated	Installation of TNAU specific Mobile Apps to Cattle rearer
Hybrid or Variety	-

Name of the Hybrid or Variety	-
Source of Technology	TNAU 2018
Description	Awareness created on good cattle rear technology through mobile app to cattle rearer
Potential yield	-
Critical input,quantity and cost	Multicolor user guide pamphlet,1 Number and Rs 50
Source of input	KVK
No. of Demos	25
Total cost for the Demo	**Rs. 1,250/-**
Parameters to be studied	Enhancement in knowledge & Adoption Level
Team members	SMS (Agrl. Extension) & SMS(Animal Science)

FLD No.	**26**
Status	New proposal
Subject	Agrl. Extension
Category	Others
Crop / Enterprise	Agricultural Extension
Prioritized problem	Lack of awareness of good management in Banana Grower
Title	**Demonstration of Banana Expert System as android based mobile application**
Technology to be demonstrated	Installation of TNAU Banana Expert System Mobile Apps to Banana Growers
Hybrid or Variety	-
Name of the Hybrid or Variety	-
Source of Technology	TNAU 2018

Description	Installation of TNAU Banana Expert System Mobile Apps to Banana Growers
Potential yield	-
Critical input,quantity and cost	Multicolor user guide pamphlet,1 Number and Rs 50
Source of input	KVK
No. of Demos	25
Total cost for the Demo	**Rs. 1,250/-**
Parameters to be studied	Enhancement in knowledge & Adoption Level
Team members	SMS (Agrl. Extension) & SMS (Animal Science)

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	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
Pulses	Redgram	Improper Crop Management	**ICM in Redgram** (Latest varietal introduction, INM & IPDM)	Variety	CO 8	Tamil Nadu Agricultural University, Coimbatore, TN	CO 8 seeds	4 kg	364	50	3,600 (including contingency- 10%)	Growth parameters, Yield (q/ha), BCR	SMS (Agronomy, Soil Science and Agrl. Extension)
							Pulse wonder	2 kg	420				
							Azadiractin	1 lit.	714				
							Yellow sticky traps	10 nos	430				
							Funnel traps	8 nos	156				
							Heli-Lures	16 nos	256				
							Chlorantriniliprole	60 ml	900				
							Total		**3,240**				

8.3.2. 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	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
Oilseeds	Groundnut	Improper Crop Management	**ICM in Groundnut** (Latest varietal introduction, INM &IPDM)	Variety	TCGS 1043 (Dharani) (or) TMV 14	For Dharani: Acharya N.G.Ranga Agrl.University, Tirupati, AP For TMV14 TNAU, TN	Dharani seeds (TCGS 1043) (or) TMV 14	50 kg	4,320	75	4,800 (including contingency - 10%)	Growth parameters, Yield (q/ha), BCR	SMS (Agronomy, Soil Science and Agrl. Extension)

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	IFS	Low income due to single farming system	IFS model for dryland Agriculture	TNAU	5	0.2 ha	Desi chicks (25 nos), Fodder seeds, Vermi Compost (1 Unit), Waste decomposer,	50,000	SS & Head, SMS (Agronomy, Soil Science, Animal Science, Agrl. Extn.)
2	FFS	Integrated Pest and Disease Management	ICM in Paddy	TNAU	-	1 ha	-	30,000	SS & Head, SMS (Agronomy, Soil Science, Horticulture, Agrl. Extn.)

11. Externally funded projects

11.1. Project's 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	Good Agricultural Practices in Mango for Domestic and Export Markets	NABARD	2021-2022	2021	No. of Programmes: 1 No. of Participants: 100	8,70,000	3,00,000	SS and Head, SMS(Agrl. Extn)
2	Organic Farming	ATMA	2021-2022	2021	No. of Programmes: 1 No. of Participants: 26	42,000	-	SS and Head, SMS (Agrl. Extn.)

3	Training on coconut climbing & pest management	Coconut Development Board	2021-2022	2021	No. of Programmes:5 No. of Participants: 100	2,62,500	-	Prog. Assistant, SMS (Horticulture)
4	Training on Watershed Mgt. Techniques	Agricultural Engineering Department	2021-2022	2021	No. of Programmes:4 No. of Participants: 80	2,25,000	-	Prog. Assistant, SMS (Horticulture)
5	Scientific Dairy Farming/Desi Poultry	ESAF/CSR	2021-2022	2021	No. of Programmes:1 No. of Participants: 25	50,000	-	SMS (Animal Science) & SS and Head

11.2. Project details

Funding Agency	NABARD
State/Central/Over Seas	STATE
Title	Good Agricultural Practices in Mango for Domestic and Export Markets
Objectives	To provide Hands on training method of application of bio control agents and develop the skills through demonstrations.
Study area	Krishnagiri district
Methodology	Training and Demonstration
Team Members	SS and Head, SMS (Agrl. Extn)
Budget	Rs. 8,70,000/-

Funding Agency	ATMA
State/Central/Over Seas	STATE
Title	Organic Farming
Objectives	To create awareness on organic farming production techniques.
Study area	Krishnagiri district
Methodology	Training and Demonstration
Team Members	SS and Head, SMS (Agrl. Extn)
Budget	Rs. 42,000

Funding Agency	Coconut Development Board
State/Central/Over Seas	CENTRAL
Title	**Training on coconut climbing & pest management (FoCT)**
Objectives	➢To develop a professional group of youth under the banner of "Friends of Coconut Tree" for harvesting and plant protection operations in coconut. ➢To impart training to a group of unemployed youth in developing technical skills, entrepreneurship capacity, leadership qualities and communication skills to address the needs of the coconut growers. ➢To make them self-reliant and instill confidence in undertaking the responsibility of "Friends of CoconutTree". ➢To tackle the problem of unavailability of coconut tree climbers for coconut farming and plant protection activities. ➢Generate appropriate technologies to support sustainable growth of coconut sector and generate employment opportunities for the youth.
Study area	Krishnagiri
Methodology	Training and Demonstration
Team Members	Programme Assistant (Agrl. Engg.),SS & Head, SMS(Horticulture)
Budget	**Rs. 2,62,500**
Funding Agency	Agricultural Engineering Department
State/Central/Over Seas	STATE
Title	**Watershed Management Techniques under RVP**
Objectives	To create awareness on soil and water conservation
Study area	Krishnagiri district
Methodology	Training and Exposure Visit
Team Members	Programme Assistant (Agrl. Engg.) & SMS (Horticulture)
Budget	**Rs. 2,25,000**

Funding Agency	ESAF/CSR
State/Central/Over Seas	STATE
Title	Scientific Dairy Farming / Desi Poultry
Objectives	To create awareness on scientific dairy farming / desi poultry breeding.
Study area	Krishnagiri district
Methodology	Training
Team Members	SMS (Animal Science) & SS and Head
Budget	**Rs. 50,000**

12.Trainings planned during 2021-22

12.1. Trainings for Farmers and Farm Women planned during 2021-22

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	Low yield due to repeated cultivation of existing variety	FLD - Demonstration on Paddy variety ADT 53	INM & IPM in paddy	2	40	SMS (Agronomy, Agrl.Extn)
		Ragi	Low yield due to cultivation of existing variety	FLD - Demonstration on Ragi variety CO15	Integrated crop management in Ragi	2	40	SMS (Agronomy, Agrl.Extn)
		Groundnut	Improper crop management	OFT – Assessment on the performance of groundnut varieties	Agro techniques in Groundnut cultivation	1	20	SMS (Agronomy, Soil Science)
		Greengram	Improper crop management	OFT – Assessment on the performance of Greengram varieties	Agro techniques in Greengram cultivation	1	20	SMS (Agronomy, Soil Science)
		Chickpea	Improper crop	OFT -	Agro	1	20	SMS (Agronomy, Soil

			Management	Assessment on the performance of Chickpea varieties	techniques in Chickpea cultivation			Science)
		Little millet	Improper crop management	FLD-Demonstration on Little millet ATL 1	Latest agro techniques in little millet	2	40	SMS (Agronomy, Agrl.Extn)
		Horsegram	Improper crop management	FLD-Demonstration on horsegram variety CRIDA 18 R	Latest agro techniques in horsegram	2	40	SMS(Agronomy,Agrl.Extn)
2	Horticulture	Chilli	Low yield due to cultivation of existing variety	OFT – Assessment on the performance of Chilli hybrid varieties	Integrated crop management in Chilli	2	40	SMS (Horticulture, Soil Science)
		Mango	Lack of awareness on post-harvest technology	OFT-Assessment of Modules for the enhancement of shelf life of Mango	Post-harvest technologies in mango	2	40	SMS (Horticulture, Soil Science)
		Tapioca	Improper crop management	FLD-ICM in YTP 2 Tapioca	ICM in tapioca cultivation	2	40	SMS (Horticulture, Agrl.Extn.)
		Onion	Improper crop	FLD-ICM in	ICM in Onion	2	40	SMS (Horticulture,

			management	CO 6 Onion	cultivation			Agrl.Extn.)
		Lime	Improper crop management	FLD-ICM in VRM 1 Lime	ICM in lime cultivation	2	40	SMS (Horticulture, Agrl.Extn.)
		French beans	Improper crop management	FLD-ICM in Arka Arjun French Beans	ICM in French beans cultivation	2	40	SMS (Horticulture, Agrl.Extn.)
		Turmeric	Improper nutrient management	OFT-Assessment on Efficiency of Foliar nutrition modules in increasing the yield of Turmeric	INM in turmeric cultivation	2	40	SMS (Soil Science, Agrl.Extn.)
		Mango	Improper nutrient management	FLD-Demonstration on Integrated Crop Management in Mango	INM in mango cultivation	2	40	SMS (Soil Science, Agrl.Extn.)
		Banana	Improper nutrient management	FLD-Demonstration on Micronutrient Management in Banana	INM inBanana cultivation	2	40	SMS (Soil Science, Agrl.Extn.)
		Cotton	Improper nutrient	FLD-Demonstration	INM in Cotton cultivation	2	40	SMS (Soil Science, Agrl.Extn.)

			management	on Micronutrient Management in Cotton				
		Maize	Improper nutrient management	Demonstration on Micronutrient Management in Maize	INM in Maize cultivation	2	40	SMS (Soil Science, Agrl.Extn.)
4	Livestock Production and Management	Fodder	Monofodder cultivation, Unaware of high yielding fodder varieties	FLD – Demonstration on 10 cent Multicrop fodder production model	Feed and Fodder management	2	40	SMS (Animal science, Agrl. Extension)
		Sheep and goats	Lack of knowledge on mineral deficiency, not using mineral mixture for feeding	OFT – Assessment of TANUVAS Small Ruminant Mineral Mixture on growth performance of sheep and goats	Scientific Feeding management in sheep and goats	1	20	SMS (Animal Science, Agrl. Extension)
		Poultry	Unaware of gut health enhancers and not using probiotics for	FLD- Demonstration of ProBeads-EC on growth performance	Nutrition management in desi chicken	2	40	SMS (Animal Science, Agrl. Extension)

			scavenging desi chicken	of Desi-chicken				
		Poultry	Low body weight gain and high mortality in native chicken, Less aware of improved chicken varieties	FLD-Popularization of TANUVAS Aseel Chicken under backyard condition	Scientific native chicken management	2	40	SMS (Animal Science, Agrl. Extension)
5	Home Science/Women empowerment	Value addition	Lack of awareness of Value addition in Millet Cookies	OFT - Assessment of alternate natural sweeteners in preparation of millet cookies	Value addition in Millet products	2	40	SMS (Home Science, Agrl. Extn)
		Value addition	Lack of awareness of Value addition in watermelon	OFT - Assessment of alternate sweeteners for watermelon rind candy	Value addition in watermelon rind candy	2	40	SMS (Home Science, Agrl. Extn)
		Nutrigarden	Unbalanced intake of greens and vegetables	FLD - Demonstration of Nutri Garden	Demonstration of Nutri Garden	2	40	SMS (Home Science, Agrl. Extn)
		Value addition	Lack of awareness of Value	FLD - Demonstration on value added	Value addition in foxtail millet	2	40	SMS (Home Science, Agrl. Extn)

			addition in foxtail millet	products in foxtail millet				
		Popularization of arka herbiwash	Lack of awareness of of arka herbiwash	FLD - Demonstration of use of Arkaherbi wash in fruits and vegetables	Popularization of arka herbiwash	2	40	SMS (Home Science, Horticulture)
		Value addition	Lack of awareness of Value addition in tarmarind	FLD - Demonstration of value-added products from tamarind	Value addition in tarmarind	2	40	SMS (Home Science, Horticulture)
6.	Agrl. Engineering	Groundnut	Labour scarcity & huge wages in during groundnut cultivation	FLD – Farm Mechanization in Groundnut cultivation	Farm Mechanization in groundnut cultivation	2	40	PA (Agrl. Engg.) & SMS (Agronomy)
		Cotton	Labour scarcity & huge wages in during cotton cultivation	FLD - Demonstration on Cotton plucker	Farm Mechanization in cotton cultivation	2	40	PA (Agrl. Engg.) & SMS (Agronomy)
		Tomato	Labour scarcity & huge wages in during vegetable planting	FLD - Demonstration on Vegetable planter (manual operated)	Farm Mechanization in tomato cultivation	2	40	PA (Agrl. Engg.) & SMS (Agrl. Extn.)
8.	Plant Protection	Maize	Yield loss due to incidence	FLD- Demonstration	IPM in Maize	2	40	SS and Head SMS (Horticulture)

			of pest and disease	of IPM against maize fall army worm				
		Paddy	Low yield due to pest and disease	FLD - IPDM in Paddy	IPM in paddy	2	40	SS & Head, SMS (Soil Sci.) and Prog. Asst.
		Mango	Yield loss due to Mango gummosis	OFT- Assessment of technology modules against Mango gummosis	Integrated disease management in Mango	2	40	SS and Head, SMS (Agrl. Extension)
		Tomato	Yield loss due to tomato pinworm	OFT - Assessment of Technology modules against Tomato pinworm	Integrated pest management in Tomato	2	40	SS and Head, SMS (Horticulture)
		Jasmine	Yield loss due to budworm	Training on IPDM in Jasmine	Integrated pest management in Jasmine	2	40	SS and Head, SMS (Agrl. Extension)
9.	Extension	Cattle rearing	Lack of awareness of good management in cattle farm	FLD – Demonstration on good practices in cattle rearer through WhatsApp and TNAU Expert App	Usage of social media for the dissemination of cattle rearing technologies	2	40	SMS (Agrl. Extn. & Animal Science)

		ICT	Lack of awareness on ICT tools for dissemination of technologies	OFT - Assessing the Effectiveness of e-Extension Methods in terms of Knowledge Gain and Skill acquirement and Symbolic Adoption Behavior among the Rural Youth	Usage of social media for the dissemination of paddy growers	2	40	SMS (Agrl. Extn. & Agronomy)
	TOTAL					**72**	**1440**	

12.2. Trainings for Rural Youth planned during 2021-22

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	Tomato	Improper crop management	FLD	ICM in Tomato	1	20	SMS (Hort. Agrl. Extn.)
2	Training and pruning of orchards	Mango	Improper crop management	FLD	INM and IPM in Mango	1	20	SMS (Hort. Agrl. Extn.)
3	Protected cultivation of vegetable crops	Tomato	Improper crop management	Training	ICM in Tomato	1	20	SS & Head and SMS (Agrl. Extn.)
4	Integrated farming	IFS	Lack of awareness on IFS	Training	Integrated farming	1	20	SMS(Agrl Extn, Animal

					system			Science)
5	Seed production	Ragi	Improper crop management	Training	Organic seed production techniques	1	20	SMS (Agronomy, Agrl. Extn.)
6	Production of organic inputs	Compost	Low availability of organic inputs	Training	Composting techniques	1	20	SMS (Soil Science, Agrl. Extn)
7	Vermi-culture	Vermiculture	Lack of awareness on vermiculture	Training	Vermicompost production	1	20	SMS (Soil Science, Agrl. Extn
8	Mushroom Production	Mushroom	Lack of awareness in mushroom production	Training	Mushroom production	1	20	SMS(HS & Agrl.Extn)
9	Bee-keeping	Bee Keeping	Lack of awareness in bee keeping	Training	Bee Keeping techniques	1	20	PA (Agrl. Engg.) & SMS (Horticulture)
10	Sericulture	Mulberry	Lack of awareness in mulberry cultivation	Training	ICM in Mulberry	1	20	SS & Head and SMS (Agrl. Extn.)
11	Repair and maintenance of farm machinery and implements	Farm Mechanization	Lack of awareness on farm machineries	Training	Farm Mechanization in Paddy cultivation	1	20	PA (Agrl Engg) and SMS(Horti)
12	Value addition	Mushroom	Lack of Knowledge, Low Income,	Training	Mushroom Cultivation	1	20	SMS (Home Science)
13	Post-Harvest Technology	Tamarind	Lack of Knowledge, Low Income,	Training	Value addition in tamarind	1	20	SMS (Home Science)
14	Dairying	Goat	Lack of awareness on scientific dairy farming	Training	Scientific dairy farming	1	20	SMS (Animal science, Agrl. Extn.,)
15	Sheep and goat	Dairy cattle	Lack of awareness	OFT -	Profitable goat	1	20	SMS (Animal

	rearing		on scientific goat farming	Assessment of TANUVAS Small Ruminant Mineral Mixture on growth performance of sheep and goats	farming			science, Agrl. Extn.,)
16	Poultry production	Poultry	Low body weight gain and high mortality in native chicken, Less awareness on desi poultry farming	FLD-Popularization of TANUVAS Aseel Chicken under backyard condition	Desi poultry farming	1	20	SMS (Animal science, Agrl. Extn.,)
17	Organic farming	Agrl. crops	Lack of awareness on Organic farming	Training	Organic farming	1	20	SMS(Agrl.Extn & Agronomy)
	Total					**17**	**340**	

12.3. Trainings for Extension Personnel planned during 2021-22

S. No	Thematic area	Training Course Title	No. of Courses	No. of Participants
1	Productivity enhancement in field crops	Latest agro techniques in Groundnut cultivation	1	20
2	Integrated Pest Management	IPM in Coconut	1	20

3	Integrated Nutrient management	INM in Mango	1	20
4	Rejuvenation of old orchards	Rejuvenation of mango	1	20
5	Protected cultivation technology	Nematode Management techniques in polyhouse	1	20
6	Women and Child care	Nutrition Garden	1	20
7	Capacity building for ICT application	Latest mobile Agri apps	1	30
8	Livestock feed and fodder production	Scientific Interventions to improve productivity in dairy cows	1	20
9	Household food security	Nutrition and balanced diet	1	20
10	Value Addition	Processing on value addition in Tamarind	1	20
11	Farm Mechanization	Farm Mechanization in Agricultural crops	1	20
	Total		**11**	**220**

12.4. Skill trainings and vocational trainings planned during 2021-22

S.No	Training title	Duration (Days)	No. of programmes	Sponsoring agency	Participants (Nos.)	Name of the team members
1	Composting techniques and Organic farming	4	1	ATARI Zone X, Hyderabad	20	SMS (Soil Science & Agronomy)
2	Nursery techniques for quality Vegetable and fruit crop seedlings production,	4	1	ATARI Zone X, Hyderabad	20	SMS (Horticulture & Agrl. Extn.)
3	Mush room cultivation	4	1	ATARI Zone X, Hyderabad	20	SMS (Home Science & Agrl. Extn.)
4	Dairy farming	4	1	ATARI Zone X, Hyderabad	20	SMS (Animal Science & Agrl. Extn.)
5	Selection, operation and repair & maintenance of Farm implements.	4	1	ATARI Zone X, Hyderabad	20	PA (Agrl. Engg.) & SMS (Agronomy
	Total Courses	**20**	**5**		**100**	

12.5. Sponsored trainings planned during 2021-22

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 Production	Seed farm production	1 & 4	Farmers	20	Dept. of Agriculture	SMS (Agrl. Extn. Soil Science,)
2	Integrated Crop Management	Protected cultivation of vegetable crops	1 & 4	Rural youth	20	Dept of horticulture and NHM	SMS (Hort., Agrl. Extn)
3	Integrated Pest Management	Vegetable and field crops	1 & 4	Farmer	500	NABARD	SS and Head,SMS (Agrl. Extn., Soil Science, Hort.)
4	Processing of fruits and vegetables	Processing and preservation of fruits and vegetables	1 & 4	SHG	20	Mahalir thittam	SMS (Home Science, Agrl. Extn.)
5	Farm Mechanization	Usage of coconut climber	5 progs. & 6 days	Rural youth	100	Coconut development board, Chennai	PA (Agrl. Engg.), SMS(Horti)
6	Soil & Water conservation	Watershed Management Techniques	4 progs. &2 days	Water shed committee members	100	Agrl. Engg. Dept, RVP	PA (Agrl. Engg.), SMS(Horti)

13. Extension programmes planned during 2021-22

S. No.	Extension programme	No. of programmes	No. of Participants	Team member involved
1	Advisory Services	450	450	SS and Head, SMS (Agronomy, Horticulture, Soil Science, Agrl. Extn, Animal Husbandry, Home Science), PA (Agrl. Engg.)
2	Diagnostic visits	175	250	
3	Field Day	20	400	
4	Group discussions	6	120	
5	Kisan Ghosthi	5	100	
6	Film Show	15	450	
7	Kisan Mela	1	500	
8	Exhibition	2	150	
9	Scientists' visit to farmers field	20	50	
10	Plant/Soil health/Animal health camps	3	-	
11	Ex-trainees Sammelan	5	100	
12	Farmers' seminar/workshop	1	100	
13	Method Demonstrations	25	500	
14	Celebration of important days	8	160	
15	Special day celebration	3	60	
16	Exposure visits	1	25	
17	Technology week	1	250	
18	FFS	1	30	
19	Farm innovators meet	1	20	
20	Awareness programs	5	100	
21	Lecture delivered	50	2000	
22	TV/Radio Programme	12	-	
23	News clips	30	-	
24	Popular Articles	10	-	
25	Research Article	1	-	
26	Extension Literatures	12	-	
27	MKisan Mobile Advisory Services	40	1,20,000	
	Total	**903**	**1,25,815**	

14. Activities proposed as Knowledge and Resource Centre during 2021-22

14.1. Technological knowledge

Sl. No.	Category	Details of technologies	Area (ha) / number	Names of the team members involved
1	Technology Park / Crop cafeteria	Cafeteria of vegetable crops	0.2 ha	SMS (Soil Science, Horticulture, Agrl. Extn.), Farm Manager
		Cafeteria of Medicinal plants	0.1 ha	SMS (Horticulture, Home science), Farm Manager
		Cafeteria of Mixed Fodder	0.2 ha	SMS (Animal Science, Horticulture, Agrl. Extn.), Farm Manager
2	Demonstration Units	Vertical Garden	1 unit	SMS (Horticulture), Farm Manager

		Micro irrigation systems	2 units	
		Mini incubator	1 unit	SMS (Animal Science), Farm Manager
3	Lab Analytical services	Mini Soil Lab	1 Unit	SMS (Soil Science), Prog. Asst.

14.2. Technological products planned to be produced in the KVK during 2021-22 (Seeds, planting materials, livestock, bio-inputs and other inputs)

S. No	Category	Name of the product	Quantity (q) or Nos.	Names of the team members involved
1	Seeds	Cowpea	2 q	SS & Head, SMS (Agronomy, Horticulture, Animal Science), Farm Manager & PA (Agrl. Engg.)
		Fodder sorghum COFS 31, 29	3 q	
		Hedge Lucerne CO 2	4 q	
		Red gram	2 q	
		Horse gram	30 q	
		Paddy CO 53	20 q	
		Ragi ML 365/CO 15	4 q	
2	Planting materials	Banana sucker	2,000 nos	
		Fodder slips	30,000 nos	
		Mango seedlings	1000 nos	
		Tomato seedlings	40,000 nos	
		Guava seedlings	200 nos	
		Lemon seedlings	300 nos	
		Marigold seedlings	1000 nos	
		Coconut seedlings	100 nos	
		Chilli seedlings	5,000 nos	
		Moringa seedlings	2,000 nos	
		Tree seedlings	1,500 nos	
		Papaya seedlings	1,000 nos	
3	Livestock	Goat	5 nos	SMS (Animal Science) & Farm Manager
	Poultry	Desi chicken rearing	500 nos	
4	Bio products	Pheromone traps (fruitfly)	2,000 nos	SS & Head, SMS (Horticulture)
5	Micronutrient Mixture	Mango, Banana and Vegetable Special	1.5 tonnes	SMS (Horticulture & Soil Science)
6	Vermicompost	Vermicompost	1.5 tonnes	SMS (Agronomy) & Farm Manager
7	Home care products	Ready to eat products	150 Kg	SMS (Home Science)

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	Integrated Pest Management in Maize	SS and Head, SMS (Agronomy & Agrl. Extn.)
		Integrated Crop Management in Groundnut	
2	Horticulture	IPM in mango	SS and Head, SMS (Horticulture, Agrl. Extn.)
		Protected cultivation of cut-flowers	
		IPM in vegetables	
		INM in mango	SS and Head SMS (Soil Science, Agrl. Extn)
		INM in Vegetables	
3	Agricultural Engineering	Farm Mechanization in paddy	SS and Head, SMS (Horticulture) and PA (Agrl. Engg.),
		Capacity building on Watershed management	
4	Literature / Publication	Technological booklets on ICM, IPM, INM for paddy, Groundnut, Redgram, mango & vegetables and vaccination & Mastitis control.	SS and Head, SMS (Agrl. Extn, Agronomy, Horticulture, Animal Science, Soil Science, Home Science,) and PA (Agrl. Engg.)
5	Kisan Mobile Advisory Services	1,20,000 nos.	
6	Information on center / state sector schemes & service providers in the district	➢ GOI schemes: ➢ National mission on Oil seed & oil palm ➢ National food security mission (Pulses) ➢ National mission on sustainable agriculture ➢ Coconut development board	SS and Head, SMS (Agronomy, Horticulture, Animal Science, Soil Science, Home Science, Agrl. Extn) and PA (Agrl. Engg.)

14.3.2. Publications planned

S. No	Category of publication	Number	Names of the team members involved
1	Booklet	2	SS and Head, SMS (Agronomy, Horticulture, Soil Science, Agrl. Extn, Animal Husbandry, Home Science), PA (Agrl. Engg.), Farm Manager & Steno
2	Leaflet & Pamphlet	15	
3	Newsletter	4	

15. Additional (Collaborative) Activities Planned during 2021-22

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	Training and ICM	Good Agricultural Practices in Mango for Domestic and Export Markets	8,70,000	SS and Head, SMS (Agrl. Extn)
2	ATMA	Training	Organic Farming	42,000	SS and Head, SMS (Agrl. Extn.)
3	Coconut Development Board	Training on coconut climbing & pest management	Coconut tree climbing, Root feeding, identifications pests and diseases	2,62,500	Prog. Assistant, SMS (Horticulture)
4	Agricultural Engineering Dept	Training on Watershed Mgt. Techniques	Soil & Water conservation	2,00,000	Prog. Assistant, SMS (Horticulture)
5	ESAF/CSR	Training	Scientific Dairy Farming/Desi Poultry	50,000	SMS (Animal Science) & SS and Head

16. Revolving Fund

16.1. Status of Revolving fund

Opening balance as on 01.04.2020 (Rs.)	Receipts during 2020-21 (Rs)	Expenditure incurred during 2020-21 (Rs.)	Closing balance as on 20.03.2021 (Rs.)
632640.53	1129892.00	614284.10	1148248.43

16.2. Plan of activities under Revolving Fund during 2021-22

S.No	Proposed activities	Expected output	Anticipated income(Rs.)	Name of the team member involved
1	Seed	60 Qtl	1,00,000	SMS (Agronomy, Horticulture, Animal Science) and Farm Manager
2	Seedlings (Vegetables, flowers, fruits and trees, Pulses, Fodder, Cereals & Millets)	84,000 nos	1,00,000	
3	Production of fruit fly traps	2,000	1,60,000	SS and Head, SMS (Horticulture) and Farm Manager
4	Macro Banana Propagation	1,000	10,000	
5	Production of Micro Nutrient mixture for mango, Vegetables & Banana	1.5 tonnes	2,00,000	SMS (Soil Science), Farm Manager and Prog. Assistant
6	Fruit squashes, preserves	100 lits	10,000	SMS (Home science, Horticulture)

7	Goat rearing	5	25,000	SMS (Animal Science) & Farm Manager
8	Desi Chicken rearing	500	40,000	SMS (Animal Science) & Farm Manager
9	Sheep rearing	4 nos	20,000	
10	Vermi compost production	1.5 tons	12,000	SMS (Agronomy), Farm Manager

17. Activities of soil, water and plant testing laboratory during 2021-22

S. No.	Type	Through	No. of samples	No of soil health cards	Names of the team members involved
1	Soil	Min soil testing lab	400	400	SMS (Soil Science) & PA (Agrl. Engg.)
		Traditional lab	-		
		AAS	-		
2	Water		-		
3	Plant		-		

18. Plan of activity for Institutional Farm

S. No	Activity	Area (ha)	Names of the team members involved
1	Banana	0.8 ha	Farm Manager, SMS (Agronomy, Horticulture, Animal Science) and PA (Agrl. Engg.)
2	Paddy	0.4 ha	
3	Ragi	0.4 ha	
4	Redgram	0.4 ha	
5	Moringa	0.4 ha	
6	Green Manure	0.4 ha	
7	Fodder slips	0.4 ha	
8	Mixed Fodder	0.8 ha	
9	Horse gram	3.2 ha	
10	Nursery Production	1.0 ha	

19. Demonstration units in KVK premises

S. No	Name of Demo unit	Capacity for production (specify units)	Names of the team members involved
1	Mango-Ultra High-Density Plantation (100 plants)	500 kg	Farm Manager, SMS (Agronomy, Horticulture, Animal Science, Soil Science, Agrl. Extension) & PA (Agrl. Engg.)
2	Amla-High Density Plantation (100 plants)	600 kg	
3	Custard Apple-High Density Plantation (40 plants)	50 kg	
4	Guava-High Density Plantation	-	
5	Jamun-High Density Plantation	-	
6	Citrus-Mother Plants	100 seedlings	
7	Vermicompost	1.5 tonnes	

8	Slatted Floor Goat Rearing	5 nos	
9	Azolla Production Unit	50 kg	
10	Poultry Unit	500 nos	
11	Honeybee Rearing	-	
12	Sheep rearing	4 nos	
13	Banana Macro Propagation	1000 nos	

20. E-linkage activities status / proposed during 2021-22

Activity	**Particulars**	**No. of farmers in database/ involved in activity/ downloads/ users etc.,**
Website	Link: www.krishnagirikvk.org	-
Mobile App	Name and link	-
ICT initiative	-	-
KVK portal (update status)	Infrastructure details & photos uploaded (no): 10 & 10 Events uploaded: 905 News items submitted: 905	
KVK mobile App of ICAR	Downloaded and used by scientists (no.)	13
Other mobile Apps in use by KVK	Uzhavan App, TNAU Mobile App - Paddy	13
MKisan of DAC & FW	-	1,20,000
Social media		
a) WhatsApp groups	No. of groups/KVK: 4	1000
b) Facebook	Link:www.facebook.com/kvk.krishnagiri	290
c) Twitter	Handle name: @icarkendra	250
Membership / participation in online digital platforms for services/ marketing etc.	-	-
KVK Blogs etc.	-	-
Collaboration with public/ private firms for audio/ video conferencing etc.,	Agency: - MoU (yes/no): - No. of programs done: -	-

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	Integrated Crop Management	ICM in Paddy	30	0.3

Details of FFS

INTEGRATED CROP MANAGEMENT IN PADDY

1.	**Period**	**:**	August 2021
2.	**No. of Session**	**:**	14
3.	**Name of the village**	**:**	Pannanthur
4.	**No. of participants**	**:**	30
5.	**Name of the Facilitators**	**:**	Senior Scientist and Head, SMS (Agronomy) & SMS (Agrl. Extension)
6.	**Area of the FFS field**	**:**	1 ha
7.	**Name of the collaborator**	**:**	Mr. Selvaraj
8.	**Major problems in the FFS village relevant to the crop/enterprise**	**:**	Weed infestation
			Nutrient management
			Pest & Disease
9.	**Objectives of the FFS**	**:**	To grow healthy crop
			To conserve natural enemies
			Surveillance
			To farmers become experts
10.	**Guest Faculty to be involved**	**:**	Assistant Director of Agriculture, Innovative farmer

11. FFS Curriculum of Paddy Crop – model

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	Soil sample collection method	-
LTE		-	-
SS		Short studies on Soil profile study, soil erosion, soil sampling	Advantages of*Pseudomonas fluorescens*
ST			EFYM preparation
Others		BBE	Soil Test result sharing, Water holding capacity and organic manure
GD	Entry point activity – Signs and symptoms	Sub group formation	Chaining
Activity	**Session-4**	**Session-5**	**Session-6**
FA	Planting techniques, Paring and prolinage	Weed identification in main field	AES concept and transplanting seedling to main field
LTE	Finalizing LTEs	-	LTE observation
SS	Composting techniques	Main field preparation and planting techniques	Plant nutrient uptake studies and male annihilation technologies

ST	Weed management	Advantages of green manures	Living soil, weed management in main field
Others	-	-	-
GD	Longest line	Water brigade	Pen in Bottle
Activity	**Session-7**	**Session-8**	**Session-9**
FA	AESA	AESA	AESA
LTE	--	--	--
SS	Mulching techniques and bio agents	Nutrition application, parasites and predators	IPM, identification of harmful and useful insects
ST	Implements for weeding	Insect Zoo	Deficiency symptoms and importance of micronutrients
Others	-	Azolla production, Fodder production	Observations on biomass production in Azolla Mushroom production with various substrates
GD	Listening, seeing and sensing	Tower building	Broken squares
Activity	**Session-10**	**Session-11**	**Session-12**
FA	AESA	AESA	AESA
LTE	LTE observation	--	--
SS	Foliar nutrition		Vermi composting methods
ST	Pest and Disease management		Marketing options
Others		Observations on mushroom production	Biomass estimation of trees
GD	Inheritance	Occupation game	Nine dot game
Activity	**Session-13**	**Session-14**	**Session-15**
FA	AESA Sequential crops	AESA	Field Day
LTE	--	--	

FA- Field Activity, LTE- Long Term Experiment, SS- Short Studies, ST- Special Topic,

AESA – Agro Ecosystem Analysis, BBE- Ballot Box Exercise, GD – Group Dynamics

12. Budget

S.No	Particulars	Amount (Rs.)
1	Refreshment @ Rs.20/ -trainees for 14 classes (30*20*14)	8,400
2	Expenditure on POL	2,500
3	Contingent expenditure, Banner and refreshment for inaugural function of FFS	1,800
4	Distribution of Cost of training materials including IPM kit @ Rs150/kit = Rs.4500 Cost of bio pesticides, emergency spray, other relevant training materials = Rs.4500	9,000
5	Distribution of IPM literature for 30 trainees @ Rs.100/trainees	3,000
6	Farmers field day(one day)miscellaneous contingent including refreshment	2,300
7	Honorarium for two facilitators/trainers@Rs.1500/each for complete season	3,000
TOTAL		**30,000**

Additional information:

I. FFS Schedule

Time persons	Activity	Objectives
8.00AM -8.10AM	Roll call, brief recap	Know who is present. To remind ourselves of previous activities
8.10AM -10.00AM	AESA	Analysis of the Agro-ecosystem
10.00AM-10.30AM	Group dynamics planning	To energize (revitalize) the group To enhance participation To educate on group activities
10.30AM-11.00AM	Special topics	To input on a special topic which will widen scope of knowledge/ skills
11.30AM-11.40AM	Review of the day's activities	To evaluate our achievements
11.40AM-11.50AM	Roll call Announcements absentees	To note the late comer

LIST OF LONGTERM EXPERIMENTS (LTE)

S. NO	LTE	Treatments
LTE 1	Management Practice Trial	T1 – Farmer's practice T2 – Standard plot - Do nothing for AESA decision T3 – Crop management practice plot *(Practices of T2 and T3 given below)
LTE - 2	Nutrient management trial	T1 – Farmer practice T2 – INM package based on soil testing T3 –INM options

* Practices in T2 and T3 in LTE

1. Weed management
2. Compost - 5t/ac

3. Balanced nutrient application
4. IPM&IDM practices

22. Details of Innovative Farmers network established: NIL

23.Budget - Details of budget utilization (2020-21) up to 20th March 2021(Rs.in lakh)

S. No	Particulars	Sanctioned Grant for 2020-21	Released for 2020-21	Expenditure for the period from 1-4-2020 to 20-3-2021
A	**RECURRING**		**41.99**	
1	**Pay & Allowances**	125.29		125.20
2	**Travelling Allowances**	1.30		1.30
	a) Field activities & programmes			
	b) Training programmes			
3	**Contingencies**			
A	***Office Contingencies***	5.74		5.749
B	***Technical Programmes including TSP/ SCSP***	9.06		9.062
	Total of Contingencies	**14.80**		**14.81**
	Sub Total of Recurring Items (1+2+3)	**141.39**		**141.31**
4	**NON-RECURRING CONTINGENCIES:**			
	Works	-		
	Furniture& Equipment	-		
	Vehicle	-		
	TSP (creation of physical assets)	-		
	SCSP Component (Creation of Physical assets)	1.10		1.175
	Sub Total of non-recurring Items (4)	**1.10**		**1.175**
5	**GRAND TOTAL**	**142.49**		**142.48**

24. Details of Budget Estimate (2021-22) based on proposed action plan

S. No	Particulars	Budget Estimate (in lakhs) for 2021-22
A	**RECURRING ITEMS**	
1	**Pay & Allowances**	**181.00**
2	**Travelling Allowances**	**5.00**
a	Field activities & programmes	
b	Training programmes	
3	**Contingencies**	
	Office Contingencies	
a	Stationery, telephone, stamps and other expenditure on office running	8.00
b	POL, repair of vehicles, tractor and equipment including hiring of vehicle	
4	**Technical Programmes**	**13.00**
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)	
l	Soil Health Card (SHC)	
m	Website/mobile app etc.	
	Total of Contingencies	**21.00**
	Total of Recurring Items	**207.00**
B	**NON-RECURRING ITEMS:**	
a	Works	20.00
b	Vehicle (Jeep/Tractor/2 Wheeler)	2.00
c	Furniture	3.00
d	TSP (creation of physical assets)	2.00
e	SCSP Component (Creation of Physical assets)	3.65
	Total of Non-Recurring Items	**30.65**
	GRAND TOTAL (A+B)	**237.65**

Signature of the Senior Scientist and Head of the KVK