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

Action Plan 2023-24: Summary of Technical Activities

1. Name and address of KVK: Ariyalur KVK
ICAR- Krishi Vigyan Kendra
(Hosted by CREED)
Cholamadevi Post, Jayankondam (via),
Udayarpalayam Taluk,
Ariyalur District – 612 902
Tamil Nadu

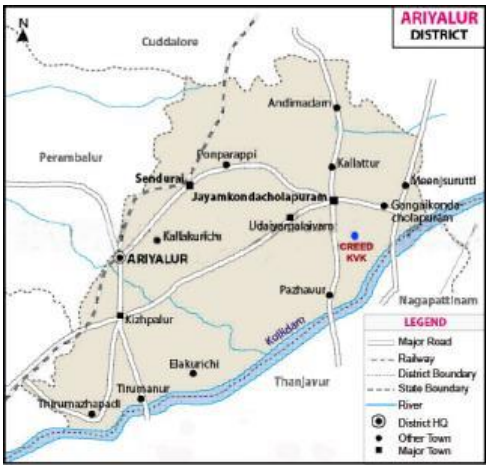
Phone/Mobile: 9751280089
Fax: ---
e-mail: kvk.Ariyalur@icar.gov.in
Website: www.kvkariyalur.org

2. District map with location of the KVK

GPS reading (from Google Maps) of the Entrance of KVK

11°8'11"N 79°24'17"E

District map with the location of KVK marked on it



3.1 Operational area/Cluster villages details

District/Taluk/ Block	Names of cluster Villages	Major crops & enterprises	Major problems identified in each crop/enterprise	Proposed interventio n*
Ariyalur/ Thirumanur	Thirumalapadi	Paddy, Sugarcane, Vegetables, Dairy, Goat & Poultry	**Paddy** • Low yield (4600kg/ha) from existing fine grain varieties under Navarai	• OFT on Assessme nt of Paddy varieties for Navarai

			season. • Non availability of high yielding varieties with high market demand. • Brown Leaf spot and sheath blight causes 28 % yield loss during Navarai season	season at Ariyalur district • Training • Method demonstration
			Sugarcane • The yield loss caused by early shoot borer, mealy bug and pokkah boeng disease recorded up to 28% to complete yield loss. • Low yield (55 tons/ha). Unable to perform pesticide application after 6 months	• FLD on Demonstration on management of early shoot borer in Sugarcane • Training • Method demonstration • Field day
			Sugarcane • Farmers practicing burning of sugarcane trashes and other agriculture waste in situ that affects soil micro flora • Poor recycling of organic resources • Reduction in germination and yield loss to the tune of 10 -15% in the ratoon crop due to burning of trashes • Air pollution	• OFT on Assessment of composting of Sugarcane trash using different microbial decomposers towards Climate Smart Agriculture • Training • Method demonstration

			and leads to global warming	
Udayarpalayam /T.Palur	Parukkal	Groundnut, Paddy, Blackgram, Sesame, Vegetables, Dairy, goat & Poultry	**Groundnut** • Reduced yield due to tikka leaf spot (38%) & root rot (14%) • Cultivation of low yield (1950kg/ha) bunch type varieties like GJG 3 & local under irrigated condition	• OFT on Assessment of Groundnut varieties for Rabi season under irrigated condition at Ariyalur district • Training • Method demo
Udayarpalayam / Jayankondam	Melanikuzhi	Groundnut, Drumstick, Blackgram, Vegetable, Dairy, goat & Poultry	**Blackgram** • MYMV causes yield loss up to 35 % in existing varieties like T9 and ADT varieties • Low yield in the existing variety (ADT 5 & VBN 6) about 6.1 q/ha against potential yield of 8.5 q/ha • Lack of synchronized maturity in ADT 5	• OFT on Assessment of Blackgram varieties under garden land condition at Ariyalur District • Training • Method demonstration
Udayarpalayam /T.Palur, Jayankondam, Thirumanur	Sripuranthan, Silal & Thirumanur	Paddy, Cotton, Sesame, Dairy, Goat & Poultry	**Paddy** • Low yield (2600kg/ ha) due to less adoption of complete organic practices in traditional paddy varieties. • Lodging character of Karuppu kavuni tend to harvesting difficulties	• OFT on Assessment of organic nutrient management techniques in traditional rice variety - Karuppu Kavuni • Training • Method demonstration

Udayarpalayam /T.Palur	Karaikuruchi	Paddy, Groundnut, Blackgram, Brinjal, Chilli, Dairy, Goat & Poultry	**Chilli** • Leaf curl disease Field-spread occurs through whitefly, an insect vector (Bemisia tabaci). This disease increases with increases in temperature and relative humidity. • Reduces yield upto 30-40% due to no productive flower and fruit formation • Repeated application of same insecticides develops resistance in insects • Flower drop (42%) & poor fruit set and low yield (28%) due to nutrient deficiency.	• OFT on Assessment on management of chilli leaf - curl disease • Training • Method demonstration
				• OFT on Assessment of foliar nutrition for getting higher yield in chilli (green purpose) • Training • Method demonstration
		Vegetables	**Vegetables** Farmers cultivates vegetables like Brinjal, Bhendi, Cluster bean, Chilli and have the practice of drying marketable surplus and pest affected vegetables as a value addition practice. Prolonged Sun drying results drying and black colour development in the products results in less price.	• FLD on Demonstration on Domestic Solar Dryer for drying domestic agricultural products • Training • Method demonstration • Field day

Udayarpalayam /T.Palur	Keelakudikadu	Paddy,Sesame, Blackgram, Dairy, Goat & Poultry	**Cattle** • Outbreak of LSD last year (2020) led to severe economical loss for cattle farmers • Proper vaccination or timely vaccination not done • Severe mortality in calves and morbidity in adult cattle	• OFT on Assessment of lumpy skin disease management practices in cattle • Training • Method demonstration
			Paddy • Lodging of crop at harvest stage and flood situations. • Low yield with existing variety CR 1009 (5.1t/ha) and BPT-5204 (4.8 t/ha.) • Incidence of bacterial leaf blight (8 %), leaf spot (12%), false smut (11 %) and stem borer (10%)	• FLD on Demonstration of Non – lodging paddy variety CO 56 for samba season • Training • Method demonstration • Field day
				• FLD on Demonstration on Slot modifications in Paddy drum seeder for wet seeded Rice • Training • Method demonstration Field day

Ariyalur/ Thirumanur	Sembiyakudi	Paddy, Sugarcane, Sesame, cotton, Dairy, Goat & Poultry	**Paddy** • Cultivating of low yield (5600kg/ha) existing paddy varieties like ADT 37, ADT 39 and ADT 45 etc., • Heavy incidence of Leaf folder and sheath rot causes 30 % yield loss during Thaladi season	• FLD on Demonstration of paddy variety ADT 58 for Thaladi season • Training • Method demonstration • Field day
Ariyalur/ Ariyalur	Ootakovil	Sorghum, Cotton, Vegetables, Dairy, goat & Poultry	**Sorghum** • Cultivating low yield (860kg/ha) existing local cowpea varieties • Cultivating of Single purpose sorghum only for grain purpose.	• FLD on Demonstration of Dual purpose sorghum CO 32. • Training • Method demonstration • Field day
Udayarpalayam /Suthamalli	Suthamalli	Maize, Groundnut, Sesame, Cashewnut, Paddy, Dairy, goat & Poultry	**Maize** The damage intensity of Fall armyworm, *Spodoptera frugiperda* is high in the kharif season with the yield loss of 34%. Low yield (15.30 q/ha). Use of chemical pesticides alone ineffective.	• FLD on Demonstration on Refined IPM Module for Fall Army Worm in Maize • Training • Method demonstration • Field day
			Groundnut The yield loss caused by *Sclerotium rolfsii* recorded up to 23%. Low yield (2.5 tons/ha). Use of chemical pesticides alone is ineffective.	• FLD on Demonstration on Stem and Pod rot management in Groundnut • Training • Method demonstration • Field day

3.2. Adopted villages

District/Taluk / Block	Name of cluster villages	Major crops & Enterprises	Major problems identified in each crop/enterprise	Proposed type of interventions*
Andimadam/ Andimadam	Kuvagam	Cashewnut, Blackgram, Groundnut, Tuberose, Dairy, Goat & Poultry	**Tuberose** • The root knot nematode - *Meloidogyne incognita* is one of the serious concerns for commercial tuberose cultivation. Estimated yield loss upto 30–45%.	OFT on Assessment on management of nematodes in Tuberose
	Athukuruchi	Cashewnut, Blackgram, Groundnut, Tuberose, Jasmine, Dairy, Goat & Poultry	**Jasmine** • Less flowering during November to March months due to pruning of plants during the last week of November. • Low yield and low income during the off season of flowering.	OFT on Assessment of off season flowering in Jasmine through nutrient management.
			Jasmine Cultivation of low yielding varieties (4500kg/ha), less flower yield during winter season.	FLD on Demonstration on Winter Jasmine variety CO 1 for higher yield
Udayarpalayam/ T.Palur	Kodalikaruppur	Paddy, Cotton, Groundnut, Blackgram, Gourds, Dairy, Goat & Poultry	**Gourds** The melon fruit fly is one of the important pests in gourds which cause 30 to 50 percent yield loss depending on the season. The damaged vegetables have shortened growth & has low market rate	• OFT on Assessment of TNAU food baited traps for female fruit flies in gourds • Training • Method demonstration
			Cotton • The damage intensity caused by both pests and diseases leads to yield loss up to 35%. Low yield (3.5 q/ha). Use of chemical pesticides alone is ineffective.	• FLD on Demonstration on Integrated Pest and Disease Management in Cotton • Training • Method demonstration

Udayarpalayam/ T.Palur	Puliyankuzhi	Paddy, Cotton, Groundnut, Blackgram, Banana, Dairy, Goat & Poultry	**Banana** • Low yield with existing Poovan variety (21 t/ha.) • Incidence of leaf spot disease (32%) and nematode incidence (12%)	• FLD on Demonstration of banana variety CO 2 • Training • Method demonstration • Field day
Sendurai/ Sendurai	Keelamaligai	Cashewnut, Blackgram, Groundnut, Finger Millet, Dairy, goat, Poultry & Fish	**Finger Millet** • Reduction of area under millets due to low yield from local varieties and thereby less income than other crops • Lack of suitable variety for the preparation of value-added products like health mix	• OFT on Assessment of suitable Finger millet (Ragi) varieties (ATL 1 & KMR-630) for Value addition • Training • Method demonstration
			Cashewnut Low yield due to heavy weed infestation in Cashewnut gardens and low fertility of soil	• OFT on Assessment of cover crops for weed management in Cashewnut gardens • Training • Method demonstration
			Cowpea • Underutilization of land resources • Lack of knowledge about intercrop and their varieties on short duration pulses crops • Cultivating low yield (860kg/ha) existing local cowpea varieties	• FLD on Demonstration of VBN 4 cowpea as intercrop in Cashewnut under rainfed condition • Training • Method demonstration • Field day
			Jack • Low yield (80 fruits/tree) from existing local Jack fruit varieties • Low quality fruits with gum and latex. Fruit rot disease incidence (43%)	• FLD on Demonstration of PLR 3 variety in Jack fruit • Training • Method demonstration • Field day

			Fish Fish rearing is the upcoming venture and IMC is the normally grown varieties. But it fetches minimum price in the market and thereby farmers lack interest now a days in fish rearing.	• FLD on Pangas Catfish (*Pangasianodon hypophthalmus*) culture in Lined ponds • Training • Method demonstration • Field day
Sendurai/ Sendurai	Periyakuruchi	Cashewnut, Blackgram, Groundnut, Finger Millet, Tapioca, Dairy, Goat, Poultry & Fish	**Tapioca** Existing Thailand white and mulluvadi varieties are susceptible to cassava mosaic virus (48%), Mealy bug incidence (32%) and Low yield (22t/ha).	• OFT on Assessment of the performance of Tapioca varieties for higher yield • Training • Method demonstration
Andimadam/ Andimadam	Ayyur	Cashewnut, Groundnut, Blackgram, Pearl millet, Dairy, Goat & Poultry	**Pearlmillet** Farmers are cultivating millet very rarely and they are selling millet products directly without doing any value addition by which they are getting low income.	• OFT on Assessment of Quality Parameters of Millet substituted Flavoured Milk • Training • Method demonstration

3.3 DFI villages

District/Taluk/ Block	Name of cluster villages	Major crops & Enterprises	Major problems identified in each crop/enterprise	Proposed type of interventions
Sendurai/ Sendurai	Veerakan	Cashewnut, Blackgram, Groundnut, Vegetables, Dairy, Goat & Poultry	**Cashewnut** Tea mosquito Bug is one of the major devasting pests in cashew plantation in the Sendurai block. The TMB occurs severely during shoot forming, flower blooming and nut forming stages. Yield losses by TMB have observed around 40-50 percent.	• OFT on Assessment on TNAU Nano Bia against Tea Mosquito Bug (TMB) in Cashew • Training • Method demonstration
			Goat • Increased ecto-parasite infestation • Indiscriminate use of chemical ecto-	• OFT on Assessment of the performance of ecto-parasiticide on

			parasiticide leading to chemical residues	small ruminants • Training • Method demonstration
			Poultry Breakage or contamination or spoilage of eggs to the tune of 25 – 30%	• FLD on Demonstration of Nano guard egg tray • Training • Method demonstration • Field day
Udayarpalayam /T.Palur	Venmankondan	Paddy, Blackgram, Groundnut, Vegetables, Dairy, goat & Poultry	**Dairy** Dairy farmers selling milk directly to the milk stores where they get only Rs.28 – 35 according to SNF. They also have less knowledge on value addition. Through value addition in milk, they can reap high income.	• FLD on Demonstration of Different Value Added Products from Milk • Training • Method demonstration • Field day
			Elephant Foot Yam • Cultivation of low yielding varieties (21 t/ha). • Incidence of Corm rot and leaf spot disease	• FLD on Demonstration on Elephant foot yam variety CO 1 • Training • Method demonstration • Field day
			Dairy Current feeding practices of dairy animals resulted in emission of 200 lit of methane per day per cow by belching that led to global warming	• FLD on Demonstration Harit Dhara as a feed supplement in dairy cattle to improve milk production • Training • Method demonstration • Field day

***(OFT/ FLD/ Training/ Field day/ Method demonstrations/ Awareness camp)**

4. Details of technological interventions

4.1 Technology Assessment (OFTs) 2023-24

S. No.	Crop/ enterprise	Title of intervention	Technological options TO-1 TO-2 FP	Source of Technology TO-1 TO-2	Status*	No. of trials (replications)	Total cost involved (Rs.)	Team members involved	No. of trials targeted in DFI village(s)	No. of trials targeted under SC-SP
1.	Paddy	Assessment of Paddy varieties for Navarai season at Ariyalur district	**TO 1:** CO 55 **TO 2:** RNR 15048 **FP:** ADT 43	TNAU, 2022 PJTSAU, 2021	New	5	11,840	SMS (Agronomy) SMS (Plant Protection)	--	5
2.	Groundnut	Assessment of Groundnut varieties for Rabi season under irrigated condition at Ariyalur district	**TO 1:** VRI 10 **TO 2:** TCGS 1694 **FP:** GJ 9	TNAU, 2022 ANGRAU, 2022	New	3	28,200	SMS (Agronomy) and SMS (Plant Protection)	3	--
3.	Blackgram	Assessment of Blackgram varieties under garden land condition at	**TO 1:** LBG 884 **TO 2:** VBN 11 **FP:** VRI 8	ANGRAU, 2022 TNAU, 2022	New	5	6,200	SMS (Agronomy) and SMS (Plant Protection)	2	--

		Ariyalur District								
4.	Paddy	Assessment of organic nutrient management techniques in traditional rice variety - Karuppu Kavuni	**TO1** • Apply Azospirillum @ 2.5 kg/ha mixed with 25 kg FYM 30 min before sowing. • Basal application of Vermicompost 1000 kg/ha. • Basal application Neem seed cake @150 kg/ha, Top dressing @ 60 kg/ha on30 DAT; Groundnut cake @ 100 kg/ha, Top dressing @ 25 kg/ha on 30 DAT. • Spray Sanjeevani mixture 1st and 2nd after weeding. • Spray panchakavya 3 % during tillering and Booting stage. • Soil application of	TNAU, 2022	New	5	13750	SMS (Agronomy) and SMS (Plant Protection)	5	--

			Amirthakaraisal @ 25 lit/ha on 15 DAT. **TO2** • Seedling root dipping in Azospirillum and Phosphorus solubilizing bacteria @ 600 g/ha seedlings. • Soil application of Vermicompost @ 2 t/ha at last ploughing. • Azospirillum and Phosphorus solubilizing bacteria @ 2-3 kg/ha mixed with 25 kg Vermicompost @ 2 t/ha at just before planting. • Apply Azolla @ 1t/ha 7-10 DAP, Blue green algae @ 10 kg/ha 10 DAP incorporate after 3 weeks.	IIRR, Hyderabad-2020						

			FP: Traditional method – FYM application and Panchagavya 3% foliar spray at 30 days interval							
5	Tapioca	Assessment of the performance of Tapioca varieties for higher yield	**TO 1:** Sree Raksha **TO2:** Yethapur 2 FP: Thailand white	CTCRI, 2017 TNAU, 2020	New	3	8,850	SMS (Horticulture) and SMS (Plant Protection)	--	--
6	Chilli	Assessment of foliar nutrition for getting higher yield in chilli (green purpose)	**TO 1:** Foliar spraying of TNAU WSF 19:19:19 @ 2% + liquid Multi MN @ 1% on 30 DAS 3 times at 10 days interval **TO 2:** Foliar spraying of IIHR Arka Vegetable special @ 0.5% on 40-45 DAS 3 times at 20 days interval **FP:** No foliar nutrition	TNAU, Coimbatore, 2021 ICAR IIHR, Bangalore, 2016	New	3	6,650	SMS (Horticulture) and SMS (Plant Protection)	2	--
7	Jasmine	Assessment of off season flowering in Jasmine through	**TO 1:** Pruning during second week of August and application of	IIHR, Bangalore, 2020	New	5	6,625	SMS (Horticulture) and SMS (Plant Protection)	--	--

		nutrient management.	Mepiquat chloride (500 ppm) 15 days after pruning induced off season flowering **TO 2:** ➢ Advancing the pruning operation to September instead of end of November. ➢ Foliar spray of CCC @ 1000PPM(8ml/lit) 15 days after pruning ➢ Foliar spray of 4% Humic Acid + 19:19:19 on 21days after pruning followed by additional 3 times spray of the same mixture at 15 days interval ➢ Soil application of biofertilizers - Azospirillum 2 kg/ha and Phosphobacteria @ 2 kg/ha **FP :** Pruning in the month of December	TNAU, 2013						

8	Cashewnut	Assessment of cover crops for weed management in Cashewnut gardens	**TO1:** Cultivation of Muccuna as cover crop **TO2:** Cultivation of Horse gram as cover crop **FP:** Cultivation of Cashewnut as sole crop	IIHR, Bangalore, 2020 TNAU, 2014	New	5	8,750	SMS (Horticulture) and SMS (Plant Protection)	5	--
9	Chilli	Assessment on management of chilli leaf - curl disease	**TO 1:** • Soaking seeds in a solution containing 150 g Trisodium orthriphosphate per litre of water for 30 minutes inhibits seed - borne inoculum. • Raise 2-3 rows of maize or sorghum as border crop. • Flubendiamide 39.35% SC 2ml per litre of water **TO 2:** Soil-application of Furadon @ 1.5 Kg ai/ha at the time of sowing. Raise 2-3 rows of	TNAU, 2019 IIHR, 2021	New	5	8,125	SMS (Plant Protection & Horticulture)	5	--

			bajra as border crop. Spray Flubendiamide 39.35% SC 1.5ml/litre followed by neem seed kernel extract (2%) **FP : Nil**							
10	Gourds	Assessment of TNAU food baited traps for female fruit flies in gourds	**TO 1:** • TNAU food baited female fruit fly trap @ 10 nos. /0.4 acre • Cue-lure trap @ 10 nos. /0.4 acre **TO 2:** Crush pumpkin 1 kg and add 100g Jaggery and 10 ml Thiamethoxam 25 WG and keep in the plot (5 places /acre). Erect cue-lure traps at 10 traps/acre to annihilate male flies Spray deltamethrin 1 ml/L+ 1 % Jaggery at fruit formation/ ripening stage. Repeat 2-3 times in cropping season. **FP : Nil**	TNAU, 2019 IIVR, 2015	New	5	24,000	SMS (Plant Protection & Horticulture)	--	--
11	Tuberose	Assessment	**TO 1:**	TNAU,	New	5	14,550	SMS (Plant	--	--

		on management of nematodes in Tuberose	Neem cake (50 kg / 0.4 acre) and *Bacillus thuringiensis (*1 L/ 0.4 acre), *Pseudomonas fluorescens (*1 kg/ 0.4 acre) + *Trichoderma harzianum (*1 kg/ 0.4 acre) + *Paecilomyces lilacinus (*1 kg/ 0.4 acre) mixed with a ton of organic matter and apllied as basal **TO 2:** Soil mixture or any substrate prepared by mixing Neem cake @ 50kg + carbofuran or phorate @ 5kg or Neem cake @ 50kg + *Trichoderma harzianum* and *Pseudomonas fluorescens* each at the rate of 2 kg /ton **FP:Nil**	2022 IIHR, 2020				Protection & Horticulture)		
12	Cashewnut	Assessment on TNAU Nano Bia against Tea Mosquito Bug (TMB) in Cashew	**TO 1:** TNAU Nano Bia (biopesticide) is diluted @ 5ml/litre and sprayed at the time of new shoot emerging, blooming	TNAU, 2022	New	5	20,100	SMS (Plant Protection & Horticulture)	5	--

			and nut forming stage. **TO 2:** Neem oil @ 1litre/ 0.4 acre, *Beauveria bassiana* @ 1Kg/0.4 acre, Sex pheromone trap @ 5/0.4 acre. **FP: Nil**	IIHR, 2020						
13	Caprine	Assess the performance of ecto-parasiticide on small ruminants	**TO 1:** Nano Methicone lotion **TO 2:** Megatex Spray **FP:** Vasambu (Acorus calamus) + Cow's urine	TANUVAS, 2020 CIRG, 2020	New	5	25,000	SMS (AS) and Farm manager	--	5
14	Bovine	Assessment of lumpy skin disease management practices in cattle	**TO 1:** EVM practices (Preparation 1: Ingredients: One dose contains:Betel leaves-10 nos., black pepper-10g, common salt-10g, jaggery – as required; Preparation 2: Ingredients (for 2 doses), Garlic-2 pearls, coriander-10g,cumin-10g, tulsi leaves–1 handful, bay leaves-10g, black	TANUVAS, 2022	New	5	12,500	SMS (AS) and Farm manager	--	5

			pepper-10g, betel leaves–5 nos., shallots-2 bulbs, turmeric powder-10g, chirata leaf powder-30g, sweet basil-1 handful, neem leaves-1 handful, Aegle marmalos (bel) leaves–1 handful, jaggery-100g **TO 2:** Chemotherapy (Antibiotics + Analgesia+ Wound treatment) **FP:** Cissus quadrangularis + Tamarind (internal); Neem oil + Turmeric (external)	NDDP, 2022						
15	Ragi	Assessment of suitable Finger millet (Ragi) varieties (ATL 1 & KMR-630) for Value addition	**TO 1:** ATL-1 **TO 2:** KMR630 **FP: Nil**	TNAU, 2021 ZARS, Mandya, 2020	New	3	12,000	SMS (Home Science), SMS (Agronomy) and SMS (Plant Protection)	3	--
16	Millets	Assessment of Quality	**TO 1:** Millet Milk	TNAU, 2022	New	5	12,500	SMS (Home Science) and	--	5

		Parameters of Millet substituted Flavoured Milk	(Germinated millet, jaggery, cardamom) **TO 2:** Millet Milk (millet, skim milk powder, jaggery, cardamom) Carotene enriched **FP:** Selling millet as produce	TANUVAS, 2019				PA (Lab Tech)		
17	Sugarcane	Assessment of composting of Sugarcane trash using different microbial decomposers towards Climate Smart Agriculture	**TO 1:** Composting using Pusa decomposer **TO 2:** Composting using TNAU bio mineralizer **FP:** Burning of sugarcane trashes after harvesting of canes in the field. Next day after burning they will irrigate the field for germination of ratoon crop	ICAR-IARI,2020 TNAU,2017	New	5	2,900	SMS (Agriculture Extension) , SMS (Agronomy)	--	--
			Total			**77**	**2,22,540**			

4.2. Frontline Demonstrations (FLDs) 2023-24

S. No.	Category/Crop or enterprise	Title	Prioritized problem	Technology demonstrated	Source of Technology	Status *	No. of Demo (replications)	Area (ha)/ units	Total cost involved (Rs.)	Team members involved	No. of demos targeted in DFI village (s)	No. of demos targeted under SC-SP
1	Paddy	Demonstration of paddy variety ADT 58 for Thaladi season	• Cultivating of low yield (5600kg/ha) existing paddy varieties like ADT 37, ADT 39 and ADT 45 etc., • Heavy incidence of Leaf folder and sheath rot causes 30 % yield loss during *Thaladi* season	Paddy variety ADT 58	TNAU 2023	New	10	0.4	28,800	SMS (Agronomy) and SMS (Plant Protection)	--	5
2	Paddy	Demonstration of Non – lodging paddy variety CO 56 for samba season	• Lodging of crop at harvest stage and flood situations. • Low yield with existing variety CR 1009 (5.1t/ha) and BPT-5204 (4.8 t/ha.) • Incidence of bacterial leaf blight (8 %), leaf	Paddy variety CO 56	TNAU, 2023	New	10	0.4	26,000	SMS (Agronomy) and SMS (Plant Protection)	--	--

			spot (12%), false smut (11 %) and stem borer (10%)									
3	Cowpea	Demonstration of VBN 4 cowpea as intercrop in Cashewnut under rainfed condition	• Underutilization of land resources • Lack of knowledge about intercrop and their varieties on short duration pulses • Cultivating low yielding (860kg/ha) existing local cowpea varieties	VBN 4 Cowpea	TNAU, 2023	New	10	0.4	25,200	SMS (Agronomy) and SMS (Plant Protection)	--	5
4	Sorghum	Demonstration of Dual purpose sorghum CO 32	• Cultivating low yielding (860kg/ha) existing local cowpea varieties • Cultivating of Single purpose sorghum only for grain purpose.	CO 32 Dual purpose Sorghum	TNAU, 2020	New	10	0.4	20,500	SMS (Agronomy) and SMS (Agriculture Extension)	--	--
5	Jasmine	Demonstration on Winter Jasmine variety CO 1 for higher yield	Cultivation of low yielding varieties (4500kg/ha), less flower yield during winter season.	Winter Jasmine variety CO 1	TNAU, 2023	New	10	0.4	20,000	SMS (Horticulture) and SMS (Plant Protection)	--	--
6	Banana	Demonstration of banana variety CO 2	• Low yield with existing Poovan variety (21 t/ha.)	Banana variety CO 2	TNAU, 2020	New	10	0.4	16,800	SMS (Horticulture) and SMS	--	--

			• Incidence of leaf spot disease (32%) and nematode incidence (12%)							(Plant Protection)		
7	Eelephant Foot Yam	Demonstration on Elephant foot yam variety CO 1	• Cultivation of low yielding varieties (21 t/ha). • Incidence of Corm rot and leaf spot disease	Yelephant Foot Yam variety CO 1	TNAU, 2022	New	5	0.4	17,750	SMS (Horticulture) and SMS (Agriculture Extension)	--	--
8	Jackfruit	Demonstration of PLR 3 variety in Jack fruit	• Low yield (80 fruits/tree) from existing local Jack fruit varieties • Low quality fruits with gum and latex. Fruit rot disease incidence (43%)	PLR 3 Jack fruit variety	TNAU, 2021	New	5	0.4	22,000	SMS (Horticulture) and SMS (Agriculture Extension)	2	--
9	Maize	Demonstration on Refined IPM Module for Fall Armyworm in Maize	• Maize is cultivated in about 12500 ha in the district. • The damage intensity of Fall armyworm, *Spodoptera frugiperda* is high in the kharif season with the	Refined IPM Module: 1. Crop rotation 2. Summer ploughing 3.Timely sowing 4. Seed treatment	NIPHM, 2014	New	5	0.4	21,150	SMS (Plant Protection & Agronomy)	--	--

			yield loss of 34%. • Low yield (15.30 q/ha). Use of chemical pesticides alone ineffective.	5.Spacing 6. Intercrop & Border crop 7. Pheromone trap								
10	Cotton	Demonstration on Integrated Pest and Disease Management in Cotton	• Cotton is cultivated in about 6750 ha in the district. • The damage intensity caused by both pests and diseases leads to yield loss up to 35%. • Low yield (3.5 q/ha). • Use of chemical pesticides alone is ineffective.	1. Seed treatment 2. Soil application 3.Foliar spray 4. Release of natural enemies	CICR, 2019	New	10	0.4	20,000	SMS (Plant Protection & Agronomy)	--	--
11	Sugarcane	Demonstration on management of early shoot borer in Sugarcane	• Sugarcane is cultivated in about 3850 ha in the district. The yield loss caused by Early shoot borer recorded up to 28%. Low yield (55 tons/ha). • Unable to	1. Tricho cards 2. Pheromone traps 3.Border crops 4. Green lacewing	SBI, 2016	New	5	0.4	14,150	SMS (Plant Protection & Agronomy)	--	--

			perform pesticide application after 6 months									
12	Groundnut	Demonstration on Stem and Pod rot management in Groundnut	• Groundnut is cultivated in about 2500 ha in the district • The yield loss caused by *Sclerotium rolfsii* recorded up to 23%. • Low yield (2.5 tons/ha). • Use of chemical pesticides alone is ineffective	1. Seed treatment with bio-agents 2. Soil application of neem cake and bio-agent 3.Foliar spray with three different chemicals	ANGRAU, 2022	New	10	0.4	12,100	SMS (Plant Protection & Agronomy)	--	--
13	Poultry	Demonstration of Nano guard egg tray	Breakage or contamination or spoilage of eggs to the tune of 25 – 30%	Nanoguard egg tray	TANUVAS, 2022	New	10	5 trays for 50 birds	12,000	SMS (AS) and SMS (HS)	--	--
14	Dairy	Demonstration Harit Dhara as a feed supplement in dairy cattle to augment milk yield	• Milch animals are reared under semi intensive system. • Current feeding practices of dairy animals resulted in emission of 200 lit of methane per day per cow by belching that led	Harit Dhara as a feed supplement in dairy cattle @ 500 g/ animal/ day	ICAR - NIANP, 2022	New	10	1 cow	13,500	SMS (AS) and SSH	--	--

			to global warming.									
15	Pangas Catfish	Pangas Catfish (*Pangasianodon hypophthalmus*) culture in Lined ponds	Fish rearing is the upcoming venture and IMC is the normally grown varieties. But it fetches minimum price in the market and thereby farmers lack interest now a days in fish rearing	Growing catfish in lined ponds with proper feed and disease management	TNJJFU, 2022	New	3	2500 finger lings	16,200	SMS (AS) and SSH		
16	Vegetables	Demonstration on Domestic Solar Dryer for drying domestic agricultural products	• Farmers cultivates vegetables like Brinjal, Bhendi, Cluster bean, Chilli and have the practice of drying marketable surplus and pest affected vegetables as a value addition practice. Prolonged Sun drying results drying and black colour development in the products results in less price	Drying vegetables in domestic solar dryer	TNAU, 2023	New	5	1 unit / demo	27,500	SMS (Home Science) and SMS (Horticulture)	--	--
17	Paddy	Demonstration on	High cost for nursery	Slot	TNAU,	New	5	0.4	13,000	SMS	--	--

		Slot modifications in Paddy drum seeder for wet seeded Rice	raising, Shortage of labor, high seed rate in existing drum seeder	modifications in Paddy drum seeder	2023					(Home Science) and SMS (Agronomy)		
18	Milk	Demonstration of Different Value Added Products from Milk	Dairy farmers selling milk directly to the milk stores where they get only Rs.28 – 35 according to SNF. They also have less knowledge on value addition. Through value addition in milk, they can reap high income.	Providing demonstration on milk value addition- Flavoured Milk, Ice Cream, Channa, Ghee and Khoa, Lassi and Dahi, Cheddar Cheese	TANUVAS, 2017	New	5	1 group	20,000	SMS (Home Science) and SMS (Agricultural extension)	--	5
	Total						**138**		**346650**			

***New FLD/already approved FLD: 2nd year/3rd year)**

4.3. Training Programmes 2023-24

4.3.1 Details of trainings programmes for Farmers and Farm Women 2023-24

S. No	Thematic area	Crop / Enterprise	Major problem	Linked field intervention (OFT/ FLD)	Training Course Title	No. of Courses	Expected No. of participants	Names of the team members involved
1	**Crop Production**							
	Integrated Crop management	Paddy	• Low yield (4600kg/ha) from existing fine grain varieties under Navarai season. • Non availability of high yielding varieties with high market demand. • Brown Leaf spot and sheath blight causes 28 % yield loss during Navarai season • Lodging of crop at harvest stage and flood situations • Low yield with existing variety CR 1009 (5.1t/ha) and BPT-5204 (4.8 t/ha.)	OFT & FLD	ICM in Paddy	2	40	SMS(Ag) SMS(PP)
					INM in paddy	1	20	SMS (Ag) SMS (PP)

			• Incidence of bacterial leaf blight (8 %), leaf spot (12%), false smut (11 %) and stem borer (10%) • Low yield (2600kg/ ha) due to less adoption of complete organic practices in traditional paddy varieties. • Lodging character of Karuppu kavuni tend to harvesting difficulties.					
		Maize	Lack of knowledge on improved cultivation & modified Fall Army worm management practices	---	ICM in Maize	1	20	SMS(Ag) SMS(AE)
		Sorghum	• Cultivating low yield (860kg/ha) existing local cowpea varieties • Cultivating of Single purpose sorghum only for grain purpose.	FLD	ICM in Dual purpose sorghum	1	20	SMS(Ag) SMS(AE)

		Minor millet	• Lack of knowledge on improved cultivation • Unaware of importance of minor millets and its value addition	---	Hi end technologies in Millet cultivation	1	20	SMS (Ag) SMS (AE)
		Groundnut	• Unaware of high yielding variety • Non adoption of disease resistant varieties for irrigated condition • Reduced yield due to tikka leaf spot (38%) & root rot (14%) • Cultivation of low yield (1950kg/ha) bunch type varieties like GJG 3 & local under irrigated condition	OFT	ICM in Groundnut	2	40	SMS (Ag) SMS (PP)
			• Lack of knowledge on INM practices in Groundnut	--	INM in Groundnut	1	20	SMS (Ag) SMS (AE)
		Blackgram	• MYMV causes yield loss up to 35 % in existing varieties like T9 and	OFT	ICM in Blackgram	1	20	SMS (Ag) SMS (PP)

			ADT varieties • Low yield in the existing variety (ADT 5 & VBN 6) about 6.1 q/ha against potential yield of 8.5 q/ha • Lack of synchronized maturity in ADT 5					
			• Non availability of seed in Season	---	Seed production in Blackgram	2	40	SMS (Ag) SMS (AE)
		Cowpea	• Underutilization of land resources • Lack of knowledge about intercrop and their varieties on short duration pulses crops • Cultivating low yield (860kg/ha) existing local cowpea varieties	FLD	ICM in Cowpea	1	15	SMS (Ag) SMS(AE)
		Sunflower	• Lack of knowledge on sunflower cultivation techniques in delta region • Non availability of seed in Season	---	ICM in Sunflower	1	15	SMS (Ag) SMS (AE)

		Sugarcane	• Farmers practicing burning of sugarcane trashes and other agriculture waste in situ that affects soil micro flora • Poor recycling of organic resources • Reduction in germination and yield loss to the tune of 10 -15% in the ratoon crop due to burning of trashes • Air pollution and leads to global warming	OFT	Residue management in Sugarcane	1	15	SMS (AE) SMS(Ag)
			• Use of heavy seed rate & reduction of Yield	---	SSI in Sugarcane	1	20	SMS (Ag) SMS (AE)
			• Unaware of intercrop cultivation • Poor soil health due to trash burning	---	Intercrop cultivation techniques Crop residue management technologies	1 1	20 20	SMS (Ag) SMS (AE) SMS (Ag) SMS (AE)
		Cotton	• Unawareness of inter and border crops, reddening of leaves and bolls & heavy square and	---	ICM in cotton	1	20	SMS (Ag) SMS (AE)

			fruit drop • Poor post flood nutrient management causes yield loss • Unawareness of HDP system of Rainfed cultivation		HDP system with suitable varieties	1	20	SMS (Ag) SMS (AE)
		Fodder	• Scarcity of green fodder in summer season	---	Fodder cultivation techniques	1	20	SMS (AS) SMS (Ag)
		Green manure	• Non availability of seeds at right time	FLD	Seed production techniques in green manure crops	1	20	SMS (AE) SMS (Ag)
		All crops	• Low income due to cultivation of sole crop	---	Integrated Farming System	1	20	SMS (Ag) SMS (AS)
		All crops	• Lack of knowledge about soil & water conservation	---	Techniques on Soil & water conservation	1	20	SMS (Ag) SMS (AE)
		All crops	• Lack of knowledge about micro irrigation Techniques	---	Micro irrigation Techniques	1	20	SMS (Ag) SMS (AE)
			Total			**25**	**500**	
2	**Horticulture**							
		Cashew	• Low yield due to heavy weed incidence. • lack of knowledge on cover crops for	OFT	Assessment of cover crops for weed management in Cashewnut	1	20	SMS (Hor.) SS & H

			weed management. • Low soil fertility and less population of trees (40trees/ha) • Tea mosquito bug incidence, stem borer damage.		gardens			
			• Lack of knowledge on high density planting in Cashew	---	High density planting in Cashew	1	20	SMS (Hor.) SS & H
			• Lack of Water conservation technology	---	Soil and water conservation practices	1	20	SMS (Hor.) SS & H
		Drumstick	• Low yield from local varieties, low market price during peak season, Occurrence of fruit fly damage (20%) and less market preference	--	Integrated crop management in Drumstick	1	20	SMS (Hor.) SS & H
		Brinjal	• Low yield due to fruit and shoot borer incidence, White fly attack, little leaf disease and less market price	--	Integrated Crop Management in Brinjal	1	20	SMS (Hor.) SS & H

		Banana	• Low net return from paddy (Rs.35,000/ha in 2 crops), Faster rate of ground water depletion make the farmers to think about alternate crops' • Low yielding of existing varieties. • Incidence of sigatoka leaf spot disease. • Incidence of Root knot nematode pest.	FLD	Demonstration of Banana variety CO 2	1	20	SMS (Hor.) SS & H
		Chilli	• Low yield due to poor nutrition, heavy flower and fruit drop. • Poor fruit setting due to nutrient deficiency.	OFT	Assessment of foliar nutrition for getting higher yield in Chilli (green purpose)	1	20	SMS (Hor.) SS&H
		Tuberose	• Lack of awareness on bulp treatment. • Bulb Cormrot incidence (8-10 %) at initial establishment • Severe infestation of nematode (32	FLD	ICM in Tuberose	1	20	SMS (Hor.) SS&H

			%) leading to yellowing and drying of plants					
		Jasmine	• Low yield of flower during the off season. • Low income during off season. • Low flower quality. • Low keeping quality. • Low consumer preference. • Bud worm pest incidence.	OFT FLD	Assessment of off-season flowering in jasmine through nutrient management. Demonstration of winter Jasmine variety CO 1 as alternate for Jasmine in winter.	1 1	20 20	SMS (Hor.) SMS (PP) SMS (Hor.) SMS (PP)
		Elephant Foot Yam	• Low yield from existing local varieties (15t/ha), Corm rot incidence, Heavy leaf spot disease incidence.	FLD	Demonstration of Elephant foot yam variety CO 1	1	20	SMS (Hor.) SS&H
		Panthal Vegetables	• Fruit fly incidence, • Flower dropping, Cercospora leaf spot incidence	---	ICM in Cucurbits	1	20	SMS (Hor.) SS&H
		Water melon	• Low yield from local varieties, • Occurrence of white fly & thrips, anthracnose	d---	Integrated crop management in Watermelon	1	20	SMS (Hor.) SS&H

			disease (24%) and Leaf eating caterpillar (28%)					
		Tapioca	• Lack of knowledge on Tapioca cultivation. • Low yield from existing Thailand white and mulluvadi varieties which is susceptible to cassava mosaic virus (48%). • Incidence of mealy bug (32%).	OFT	Assessment of the performance of Tapioca varieties for higher yield.	1	20	SMS (Hor.) SS&H
		Guava	• Low yield due to lack of knowledge on high density planting. • Fruit fly incidence bark feeder damage & Rust disease	---	Integrated Crop Management in Guava	1	20	SMS (Hor.) SS&H
		Jack fruit	• Low yield from local varieties, low Income, low market price during peak season, Occurrence of fruit fly damage (30%).	FLD	Demonstration of PLR 3 Jack fruit variety	1	20	SMS (Hor.) SS & H
		Total				**16**	**320**	

3	**Plant Protection**							
		Paddy	• Severe incidence of rice gall midge, false smut and bacterial leaf blight	--	Bio control of Pest & Disease Management	1	20	SMS (PP) SMS (AE)
		Maize	• Damage intensity of Fall armyworm, *Spodoptera frugiperda* is high in the kharif • Yield loss of 34%. • Low yield (15.30 q/ha).	FLD	Integrated pest and disease management in Maize	1	20	SMS (PP) SMS (AE)
		Groundnut	• Low yield due to Incidence of sucking pest, leaf eating cater pillar and disease like, root rot, early and late tikka leaf spot	OFT	Integrated pest and disease management in groundnut	2	40	SMS (PP) SMS (AE)
		Chilli	• Low yield due to Fruit borer, fruit rot and flower dropping.	OFT	Integrated pest and disease management in chilli	1	20	SMS (PP) SMS (AE)
		Drumstick	• Low yield due to occurrence of damping off disease, leaf webber and fruit fly damage (20%)	--	IPM in Drumstick	2	40	SMS (PP) SMS (Hor.) SMS (AE)

		Brinjal	• Low yield due to fruit and shoot borer incidence, White fly attack, Hoppers and little leaf disease	--	IPDM in Brinjal	2	40	SMS (PP) SMS (Hor.) SMS (AE)
		Cucurbits	• Fruit fly incidence, • Damaged fruits, • Flower dropping, Cercospora leaf spot incidence	OFT	ICM in Cucurbits	1	20	SMS (PP) SMS (AE) SMS (Hor.)
		Cotton	• Severe incidence of sucking pest, Severe incidence of reddening& alternaria blight	FLD	Integrated pest and disease management in Cotton	2	40	SMS (PP) SMS (AE)
		Sugarcane	• Severe incidence of red rot, white fly, shoots borer, internodes borer and pokka boeng disease	FLD	Integrated pest and disease management in Sugarcane	2	40	SMS (PP) SMS (AE)
		Cashew	• Severe incidence of tea mosquito bug and stem borer	FLD	Integrated pest and disease management in Cashew	2	40	SMS (PP) SMS (AE)
		Water melon	• Low yield from local varieties, Occurrence of white fly & thrips, anthracnose disease (24%) and Leaf	---	Integrated crop management in Watermelon	1	20	SMS (PP) SMS (AE) SS & H

			eating caterpillar (28%)					
		Major crops	• Lack of knowledge on pest control through organic way	----	Production of pest repellents and spraying methods	2	40	SMS (PP) SMS (AE)
		Tuberose	• Nematode damaged plants are stunted, lowering growth & development, where it reduces the flower quality and no. of plucking. Estimated yield loss upto 30 - 45 percentage	OFT	Nematode Management in Tuberose	1	20	SMS (PP) SMS (AE)
	Total					**20**	**400**	
4	**Home Science**							
		Cashew	• Shorter shelf life • Large quantities of cashew apple wasted in land without proper usage	---	Nutritional importance of Cashew apple, preparation of Cashew apple juice and preservation of Cashew apple juice	1	20	SMS (HS) SMS (Ho) SMS (AE)
		Paddy	• High seed rate • Increased labour wage	FLD	Slot modifications in Paddy drum seeder for wet seeded rice	1	20	SMS (HS) SMS (Ag.) SMS (AE)

		Drumstick	• Poor intake of greens in diet & Low market price during peak season	--	Nutritional importance and dietary requirement of greens in diet and value addition in Drumstick	1	20	SMS (HS) SMS (Ho) SMS (AE)
		Vegetables	• Prolonged sun drying • Appearance of black color and foreign particles	FLD	Solar Dryer for drying domestic agriculture products	1	20	SMS (HS) SMS (Ho) SMS (AE)
		Millet	• Poor intake of millets in diet & Non availability of millet based products in local market	----	Design and development low cost diet	1	20	SMS (HS) SMS (Ag.) SMS (AE)
		----	• Malnutrition in school children and pregnancy women	----	Design and development high nutrient deficiency diet	1	20	SMS (HS) SMS (Ho) SMS (AE)
		Millet	• Less consumption of millet • Lack of awareness on value added millet products	OFT	Millet substituted flavored milk	1	20	SMS (HS) SMS (Ag) SMS (AE)

		Millet	• Lack of knowledge on new fortified millet varieties	OFT	Fortified Ragi varieties suitable for millet value addition and its nutritive value	1	20	SMS (HS) SMS (Ag) SMS (AE)
		Dairy	• Low price in milk	FLD	Value addition in Milk	1	20	SMS (HS) SMS (AS) SMS (AE)
		Blackgram	• Unaware of mechanized threshing	--	Location specific drudgery reduction technologies	1	20	SMS (HS) SMS (Ag.) SMS (AE)
		Total				**10**	**200**	
5	**Livestock**							
		Dairy	• Lack of knowledge about reproduction management	FLD	Nutritional Management in Dairy	1	20	SMS (AS) SMS (AE)
			• Improper feed management like feeding more rice gruel and avoidance of mineral mixture	FLD & OFT	Importance of mineral mixture and rumen bypass fat	1	20	SMS (AS) SMS (AE)
		Goat	• Lack of knowledge on disease management	OFT	Scientific goat rearing	1	20	SMS (AS) SMS (AE)
			• Weight loss, High mortality in kids	FLD	Importance of mineralized salt lick in Goats	1	20	SMS (AS) SMS (AE)
		Poultry	• Low egg production in desi birds	FLD	Native chicken rearing	1	20	SMS (AS) SMS (AE)

			• Improper disease management	FLD	Disease management in poultry	1	20	SMS (AS) SMS (AE)
			• Lack of alternate protein source in feed	---	Use of BSF larvae has alternate feed in poultry	1	20	SMS (AS) SMS (PP)
		Fish	• Lack of technical knowledge on fish rearing	FLD	Integrated Fish Rearing	1	20	SMS (AS) SMS (AE)
					Composite fish culture	1	20	SMS (AS) SMS (AE)
		Azolla	• Increased cost of concentrate feed • Lack of alternate protein source in feed	FLD	Azolla cultivation techniques	1	20	SMS (AS) SMS (AE)
		Fodder	• Scarcity of green fodder during summer	FLD	Fodder production techniques and 10 cent model	1	20	SMS (AS) SMS (AE)
		Quail	• Lack of knowledge on quail rearing	---	Quail rearing	1	20	SMS (AS) SMS (AE)
		Poultry	• Lack of awareness about ethno veterinary practices	-	Ethno veterinary practices in Poultry	1	20	SMS (AS) SMS (AE)
		Piggery	• Lack of awareness about pig rearing	---	Piggery rearing	1	20	SMS (AS) SMS (AE)
			Total			**14**	**280**	

6	**Production of Inputs at Site**							
		Groundnut, Blackgram & fodder	• Lack of awareness on seed production techniques	---	Seed Production	1	20	SMS(Ag) SMS (AE)
		Cashew	• Unavailability high yielding planting materials	---	Planting Material Production	1	20	SMS (Ho) SMS (AE)
		All crops	• Unavailability of bio products	---	Bio – agent Production	1	20	SMS (PP) SMS (AE)
		All Crops	• Unemployment of Rural youth	---	Bio – fertilizer production	1	20	SMS (PP) SMS (AE)
		All Crops	• Unawareness about vermicompost uses	--	Vermicompost production	1	20	SMS(Ag) SMS (AE)
		Livestock	• High cost of feed	---	Production of livestock feed & fodder	1	20	SMS (AS) SMS (AE)
		Mushroom	• Low income from landless labours	---	Mushroom production	1	20	SMS (PP) SMS (AE)
		Apiculture	• Unaware about apiculture	--	Apiculture	1	20	SMS (PP) SMS (AE)
			Total			**8**	**160**	
7	**Soil Health and Fertility**							
		Paddy, Groundnut, Blackgram	• Improper nutrient management	---	Integrated nutrient management	2	40	SMS(Ag.) PA(LT)
				--	Soil fertility Management	1	20	SMS(Ag.)
		Paddy	• Lack of awareness about management of problematic soil	---	Management of acid & saline soil	1	20	PA(LT)

		All crops	• Low yield due to micro deficiency in crops	---	Management of micro deficiency in crops	2	40	SMS(Ag.)
		All crops	• Lack of knowledge on soil & water test	---	Soil & water sampling techniques	1	20	PA(LT)
			Total			**7**	**140**	
8	**Capacity Building Group Dynamics**							
			Lack of knowledge in management of groups in FIG & FPO	---	Formation and management of FIG	2	40	SMS (AE) SMS (HS)
			Uncapable of group maintenance	---	Leader ship Development	2	40	SMS (AE) SMS (HS)
			Low income	---	Entrepreneurship development of farmers	3	60	SMS (AE) SMS (HS)
			Total			**7**	**140**	
Total						**107**	**2140**	

4.3.2. Details of trainings programmes for Rural Youth 2023-24

Area of Training	No. of Courses proposed	No. of participants expected (including SC/ST farmers)	SMS involved
Nursery Management of Horticulture crops	1	20	SMS (Horti) FM
Training and pruning of orchards	1	20	SMS (Ho) FM
Protected cultivation of vegetable crops	1	20	SMS (Horti) FM
Sericulture	1	20	SMS (PP)
Integrated farming system	1	20	SMS (AE) SMS (Ag)
Seed production	2	40	SMS (Ag) PA (lab)
Production of organic inputs	2	40	SMS (Ag) SMS (PP)
Vermi-culture	1	20	SMS(AE) SMS(Ag)
Mushroom Production	1	20	SMS(PP) SMS(HS)
Bee-keeping	1	20	SMS(PP) SMS(HS)
Value addition	1	20	SMS (HS) SMS (AE)
Post Harvest Technology	1	20	SMS (HS) SMS (HO)
Dairying	1	20	SMS(AS) SMS(HS)
Sheep and goat rearing	1	20	SMS(AS) FM
Rabbit farming	1	20	SMS(AS) SMS(AE)
Poultry production	1	20	SMS(AS) SMS(AE)
Composite fish culture	1	20	SMS(AS) SMS(AE)
Any other (pl. specify) Mechanization	1	20	SMS (HS) SMS (Ag)
Total	**20**	**400**	

4.3.4. Training programmes for Extension Personnel including sponsored training programmes 2023-24

Area of Training	No. of Course proposed	No. of participants expected (including SC/ST farmers)	SMS Involved
Productivity enhancement in field crops	1	20	SMS (Ag.) SMS (AE)
Integrated Pest Management	1	20	SMS (PP) SMS (AE)
Integrated Nutrient management	2	40	SMS (Ag.) SMS (AE)

Integrated farming system	1	20	SMS (Ag.) SMS (AE)
High Density Planting and pruning techniques	1	20	SMS (Hor.) SMS (AE)
Protected cultivation technology	1	20	SMS (Hor.) SMS (AE)
Production and use of organic inputs	2	40	SMS (Ag.) SMS (AE)
Care and maintenance of farm machinery and implements	1	20	SMS (HS) SMS (AE)
Formation and Management of SHGs	1	20	SMS (AE) SMS (HS)
Women and Child care	1	20	SMS (HS) SMS (AE)
Low cost and nutrient efficient diet designing	1	20	SMS (HS) SMS (AE)
Management in farm animals	1	20	SMS (AS) SMS (AE)
Livestock feed and fodder production	1	20	SMS (AS) SMS (AE)
Total	**15**	**300**	

5. Targets for mandated activities for the year 2023-24

S.No.	Activities	Target (2023-24)
1.	On- farm trials (No. of technologies)	17
	On- farm trials (No. of locations)	20
2.	Frontline Demonstrations (No.)	18
	Frontline Demonstrations (No. of locations)	20
3.	Trainings for Farmers and Farm Women (No. of programmes)	107
	Trainings for Farmers and Farm Women (Participants) Nos.	2140
	Trainings for Rural Youth (No. of programmes)	20
	Trainings for Rural Youth (Participants (No.)	400
4.	Trainings of Extension Personnel (No. of programmes.)	15
	Trainings of Extension Personnel (Participants in Nos.)	300
5.	No. of Extension Activities (No. of activities)	853
	Participants in Extension activities (in lakh)	38175
6.	Production of seed (in quintal) (Crop-wise)	
	Blackgram - VBN 8	10 q.
	COFS 29	2 q.
7.	Production of planting materials (Nos.) (Crop-wise)	
	Guava layers	1000 Nos.
	Chinese potato tuber	50 q.
	Coconut seedling	2000 Nos.
	Dragon fruit saplings	200 Nos.
	Banana suckers	500 Nos.
	Forest tree saplings (Teak)	2500 Nos.
	Cashew grafts	1000 Nos.
	Mango grafts	500 Nos.
	Jack grafts	500 Nos.
	Ornamental plants	500 Nos.

8.	Live-stock strains and finger lings produced (in lakh)	
	Goat – Tellichery	20 Nos.
	Goat – Salem black	20 Nos.
	Cattle	5 Nos.
	Earth worm	20 kg.
	Pro duction of bio inputs and other inputs (List with unit)	
	Bacillus subtilus	750 kg.
	Trichoderma viride	750 kg.
	Azophos	200 kg.
	Rhizhophos	200 kg.
	VAM	500 kg.
	Panchakavya	2000 lit.
	Azolla	500 kg.
	Vermicompost	5 t.
	Predators	2000 cards
9.	Kisan Mobile Advisory (KMA) (No. of messages)	24
	Kisan Mobile Advisory (KMA) (No. of farmers)	31130
10.	Soil testing using Mobile Soil Testing Kit (No. of samples)	500
	Soil testing in laboratory (No. of samples)	---
	Water sample Testing (samples in No.)	500
11.	Soil Health Card using Mobile Soil Testing Kit data (No. of Cards)	500
12.	Soil Health Card using Laboratory data (No. of Cards)	1000

6. Special Activities (NFSM, Skill Development, IFS, EDP, FFS, NFDB, SERP etc.) 2023-24

Activity or Programme	Seasons (Kharif/Rabi/Summer) / Physical assets created	Area (Ha)	Demos (No.)	Budget (Rs. lakhs)	Team members involved
NFSM Pulses					
Blackgram	Rabi	30	75	2.70	SMS(Ag) SMS(PP) SMS(AE)
NFSM Oilseeds					
Groundnut	Rabi	30	75	3.60	SMS (Ag) SMS (PP) SMS (AE)
Sesame	Summer	10	25	0.52	SMS (Ag) SMS (PP) SMS (AE)
Sunflower	Kharif	10	25	0.645	SMS (Ag) SMS (PP) SMS (AE)
IFS	---	2.5	6	0.2916	SMS (AE) SMS (Ag) SMS (AS)
EDP	---	---	1 SHG	0.15	SMS (AS) SMS(AE)
FFS	Rabi	1	1	0.30	SMS (Ag) SMS(AE)

7. Externally funded Activities (continuing / anticipated during 2023-24)

Activity or Programme	Program duration	Funding agency	Physical details (no. of programmes, participants, area etc.)	Financial outlay (Rs. lakh)	Team members involved
Agri based S&T backstopping towards socio-economic improvement of SC people of Ariyalur District, Tamil Nadu (Sanctioned)	3 years	Department of Science and Technology, New Delhi	1000	71.30	Dr.G.Alagukannan Dr..A.Rajkala Mr.M.AShokkumar
Mushroom Production Techniques & Seed production in Pulses (Sanctioned)	1 week	MANAGE	20	0.84	Dr.G.Alagukannan Mr.M.Ashokkumar Dr.A.Rajkala
Tribal development through on-farm and non farm ventures	3 years	NABARD	100 ST families	65.00	Dr.G.Alagukannan Dr.A.Rajkala S.Shobana
Publication on hi-end technologies in animal husbandry	---	NABARD	1000 books	1.00	Dr.G.Alagukannna Mr.Thirumalaivasan Mr.S.Prabu
Total				**138.14**	

8. Date of SAC meeting conducted during 2022-23:

Date of submission of proceedings of SAC meeting held in 2022-23: 02.02.2023

9. Proposed date/month of SAC Meeting to be held in 2023-24

State	Designated slot	Proposed month/week
Tamil Nadu	---	December last week

10. Revolving fund status (2022-23) & expected revenue (2023-24) (Rs. in Lakhs):

Opening balance as on 1st April 2022	Receipts during 2022-23	Expenditure during 2022-23	Closing balance as on 31st March 2023	Expected revenue (2023-24)
9.12	26.29	25.37	10.05	19.75

11. Proposed Budget 2023-24

S.No	Particulars	Proposed BE 2023-24 (Rs lakhs) (Indicative)
A	**RECURRING ITEMS**	
1	**Pay & Allowances**	**184.42**
2	**Travelling Allowances**	**2.50**
a	Field activities & programmes	
b	Training programmes	
3	**Contingencies**	
	Office Contingencies	
a	Stationery, telephone, stamps and other expenditure on office running	3.50
b	POL, repair of vehicles, tractor and equipment including hiring of vehicle	3.50
4	**Technical Programmes**	
a	Rs.150/- per person per day towards food and refreshments for KVK training programmes for farmers/extension personnel	3.21
b	Teaching materials for training and demonstrations	1.07
c	Training of extension functionaries	0.45
d	Publications of extension literature for farmers and extension functionaries	1.00
e	Honorarium for trainers	0.20
f	On Farm Testing (Problem Oriented)	1.63
g	Front Line Demonstration on major crops including oilseeds & pulses, fodder crops, animal husbandry, fisheries, etc.,	2.3095
h	Kisan Meals /Farmers Fair (at KVK farm)	1.00
i	Library (Purchase of newspaper, journals, etc.,)	0.10
j	Maintenance of farm	1.00
k	Value chain management of FPO/Integrated Farming System (IFS)/Farmers Field School (FFS)	1.00
l	Soil Health Card (SHC)	0.63
m	Website/mobile app etc.	0.50
n	Extension Activity	1.00
o	SCSP Component	3.65
	Total of Contingencies	**18.7495**
	Total of Recurring Items	**212.67**
B	**NON-RECURRING ITEMS:**	
a	Works(Building Maintenance(20L), Compound wall (5L) &Bore well(10L))	35.00
b	Vehicle (Jeep/Tractor/2 Wheeler)	
c	Furniture	2.00
d	Establishment of Organic Recourse Centre	15.00
e	SCSP Component (Creation of Physical assets)	7.00
	Total of Non-Recurring Items	**59.00**
	GRAND TOTAL (A+B)	**271.67**

25/4/23

Signature of the Senior Scientist and Head of the KVK

Senior Scientist and Head
ICAR - Krishi Vigyan Kendra (CREED)
Cholamadevi, Ariyalur District.

Forwarded
[DEE/Chairman]

CHAIRMAN
ICAR-Krishi Vigyan Kendra (CREED)
Cholamadevi. Ariyalur District

Verified
[Nodal Officer (ATARI)]

Approved
[Director (ATARI)