TAMIL NADU DR.J.JAYALALITHAA FISHERIES UNIVERSITY

Annual Action Plan 2021-22

ICAR-Krishi Vigyan Kendra

Nagapattinam Dt.

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

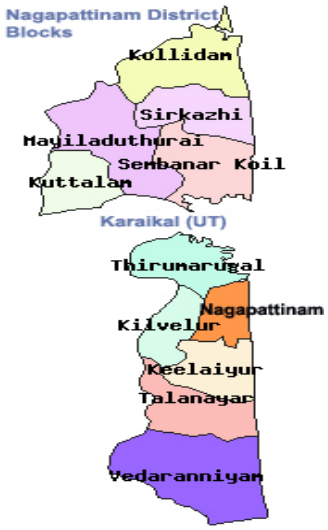
ACTION PLAN 2021-22

1. General information about the Krishi Vigyan Kendra

1.1 Name of the KVK	ICAR-KVK, Nagapattinam
Address	ICAR-Krishi Vigyan Kendra, Sikkal – 611 108. Nagapattinam District.
Phone	04365-246266
Fax	
e-mail	kvksikkal@tnfu.ac.in
1.2. Name of host organization	TAMIL NADU Dr. J. JAYALALITHAA FISHERIES UNIVERSITY
Address	Tamil Nadu Dr. J. Jayalalithaa Fisheries University Vettar River View Campus, Nagapattinam – 611 002.
Phone	04365- 241444
e-mail	info@tnjfu.ac.in
1.3. Year of sanction	2004
1.4. Website of the KVK	https://www.tnjfu.ac.in/otherconstituentunits/otherscon/kvksikkal/
Date of last update	

1.5. District map with location of the KVK

Agro-climatic zone	**Cauvery Delta Zone and Eastern Coastal plain**
Revenue Divisions	**2**
Taluks	**8**
Blocks	**11**
No. of Villages	**Revenue villages – 519 Panchayath villages - 434**
Coastline	**187 Kilometers**



2. Details of staff as on date

S. No.	Sanctioned post	Name	Discipline	Date of Joining	Present pay scale
1	Senior Scientist & Head/ Programme Coordinator	Dr. A. Gopalakannan	Fisheries Biotechnology	04.03.2019	139400
2	SMS1	Mr. E. Hino Fernando	Fisheries Extension	03.12.2018	59500
3	SMS 2	Dr. K. Chandrasekar	Agriculture Entomology	06.12.2018	57800
4	SMS 3	Dr. S. Muthukumar	Veterinary Science	28.12.2018	57800
5	SMS 4	Dr. V. Kannan	Agronomy	13.06.2019	57800
6	SMS 5	Dr. A. Mathivanan	Fish Processing Technology	14.06.2019	57800
7	SMS 6	Mr. K. Ragu	Horticulture	17.07.2019	57800
8	Programme Assistant/T4-1	Mr. V. Gnanabharathi	Agriculture	05.06.2007	61000
9	Programme Assistant/T4-2	Ms. G. Ramya	Computer Application	07.12.2018	36500
10	Farm Manager/T4	Mr. R. Vedharethinam	Agronomy	04.06.2007	61000
11	Administrative Staff 1 (Assistant)	Mr. S. Tamilselvan	Office	05.06.2018	26100
12	Administrative Staff 2 (Stenographer Grade III)	Vacant			
13	Driver/T1 - 1	Mr. S. Prasath	-	07.12.2018	19700
14	Driver/T1 - 2	Mr. J. Sathishkumar	-	07.12.2018	19700
15	Supporting Staff 1	Vacant			
16	Supporting Staff 2	Vacant			

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

Date(s) of SAC meeting(s) Conducted: 8th SAC meeting conducted on 03.03.2021

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	• Fish in Rice culture, Red and Gift Tilapia needs to be popularized	Dr. G. Sugumar, Vice Chancellor, TNJFU, Nagapattinam	To be taken out in this year
2	• Separate website should be created for KVK. • Training should be given to School dropouts and Diploma Agriculture holders • Paddy with fisheries model IFS farm needs to be popularized • Establishment of Micro Irrigation	Dr. J. V. Prasad, Director, ICAR-ATARI, Hyderabad	To be taken out in this year

	unit in the KVK • Establishment of Organic Farm unit in the KVK • Sea weed cultivation training to Rural Youth related fisheries.		
3	• Fish culture, Mushroom production, Vermi Compost production under Rice based cropping system should be encouraged among the farmers. • Integrated Farming System should be popularized among the farming community.	Dr.V.Ambethgar, Director, TRRI, Aduthurai.	To be taken out in this year
4	• Saline tolerant rice variety TRY 4 needs to be popularized. • Black gram CO7 and VBN 8 needs to be popularized. • Brinjal VRM variety needs to be popularized • PPFM spray for drought mitigation needs to be demonstrated • Silk worm, Bee keeping, Gobar gas plant needs to be demonstrated. • Poultry farming, Dairy farming needs to be popularized. • Telechery goat needs to be popularized • Exposure visit for popularize IFS among the farmers needs to be carried out.	Dr.Velayutham, Dean, AC&RI, Thanjavur.	To be taken out in this year
5	• Weed management for rain fed DSR and suitable herbicide needs to be demonstrated. • DSR x Transplanted Rice x SRI cultivation needs to be demonstrated in KVK farm. • Training on Value addition in all Agriculture and allied products needs to be done. • Suitable new variety of Groundnut needs to be demonstrated. • Nano Fertilizer application needs	P. Kalyanasundharam, Joint Director of Agriculture, Nagapattinam	To be taken out in this year

	to be demonstrated. • Black gram ADT 6 for rice fallow season needs to be demonstrated • Fish seed (fingerlings) production facility at KVK needs to be done. • Coconut D x T variety needs to be popularized. • Saline tolerant rice variety needs to be demonstrated. • Mushroom cultivation and mother spawn production needs to be done at KVK. • Desi bird poultry needs to be popularized.		
6	• You tube channel may be created by KVK for technology transfer • Paid Skill training needs to be given under Animal husbandry. • Booklet preparation containing all the schemes with all line departments need to be prepared and distributed to the farmers • Success farmers should be recognized. • Separate news letter for KVK. • Paddy –DSR-SRI-Machine transplanting -Manual planting should be demonstrated at KVK like cafeteria. • Cotton cultivating area needs to be concentrated.	Dr.Ramasubramaniyan, Programme Coordinator, KVK, Tiruvarur Dt.	To be taken out in this year
7	• Black gram ADT 6 variety needs to be demonstrated • Fish fingerlings hatchery facility needs to be setup in KVK. • Andhra technology for Inland carp culture needs to be demonstrated. • Nursery pond for Fish fingerlings	Mr. G. Jeevnantham, Farmer Member, Nangudi, Kilvelur block	To be taken out in this year

	technology needs to be demonstrated. • Monthly awareness meeting on Animal husbandry should be conducted at KVK.		
8	• Field diagnostic visit needs to be sent to AIR for immediate broadcast to the farmers. • Farmers Innovation meet should be done every year at KVK.	R.Venkateswaran, Farm Radio Officer, AIR, Karaikal	To be taken out in this year
9	• Quality Groundnut seeds like VRI 8 need to be given through demonstration. • Introduction of Thothapuri Mango variety needs to be done to farmers.	Mr.Mariyappan, Farmer Member, Koilpathu. Thalainayar block:	To be taken out in this year
10	• Telechery goat training needs to be given to farmers. • Coconut nursery management technology needs to be given to farmers.	Mr.Pakkirisamy, Farmer Member, Puliyur, Nagapattinam Block.	To be taken out in this year
11	• PPFM technology may be popularized. • Training and demonstration on Rhinocerous beetle management in Coconut may be conducted.	Mr.Aravamudhan, Progressive Farmer, Arupathy, Sembanarkoil Block.	To be taken out in this year
12	• Establishment of Kitchen garden at KVK and training should be conducted to farmers. • Annual Moringa needs to be popularized to the farmers. • Cashew nut cultivation technologies need to be popularized to the farmers.	Mrs. N.Kala, Deputy Director of Horticulture, Nagapattinam Dt.	To be taken out in this year
13	• Awareness on Green fodder cultivation needs to be given to farmers. • Napier grass needs to be popularized to the farmers and as well as production in KVK farm	Dr.B.Chakkalingam, Deputy Director of Animal Husbandry, Nagapattinam Dt.	To be taken out in this year
14	• Raniket disease control measures needs to be given • Training and demonstration on	Mrs.M.Taju Nisha, Women farmer Member,	To be taken out in this year

	Azolla production technology needs to be given.	Manjakollai, Nagapattinam Block:	
15	• Establishment of Mulberry nursery model farm at KVK • Sericulture scheme may be informed through KVK trainings.	Mrs.S.Shanthi, Inspector, Sericulture Department:	To be taken out in this year
16	• Groundnut variety VRI 8 needs to be popularized through demonstration.	Dr.S.Elamathi, Asst. Prof. TRRI, Aduthurai	To be taken out in this year
17	• Greeen muscardine fungi may be popularized for Rhinocerous beetle management.	R.Mathiarasan, Deputy Director of Agriculture (SS), Nagapattinam Dt.	To be taken out in this year

Proposed date/month of SAC Meeting to be held in 2021-22: January 2022

4.0 Capacity Building activities planned for KVK Staff

Annual training plan (ATP) to be prepared by each KVK for its HRD of staff.

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

S. No	Name of the Head/ SMS/Staff	Area of Training	Institution proposed to attend	Duration	Dates (dd/mm/yy)
1	Dr.V.Kannan, SMS (Agronomy)	Good agricultural practices for biotic stress management and productivity improvement in millets as nutricereals	CRIDA, Hyderabad	5 days	7.6.2021-11.6.2021
2	Dr.V.Kannan, SMS (Agronomy)	Agro forestry for sustainable income	IFGTB, Coimbatore	3days	4.10.2021-6.10.2021
3	Dr.K.Chandrasekar, SMS(Agri. Ento)	Pesticide Application Techniques and Safety Measures"	NIPHM	5 days	-
4	Dr.S.Muthukumar, SMS(Animal Husbandry)	Poultry processing	VC&RI	30 days	-
5	Mr.K.Ragu, SMS(Horticulture)	Mushroom Production technologies	IIHR, Bangaluru	5 days	Jan-2021
6	Mr.K.Ragu, SMS(Horticulture)	Recent advances in Horticulture	IIHR, Bangaluru	5 days	-
7	Dr.A.Mathivanan, SMS(Fish Processing Tech.)	Processing and Value addition of Fruits and Vegetables	CFTRI	5 days	-
8	Dr.A.Mathivanan, SMS(Fish Processing Tech.)	Baking Technology	CFTRI	7 days	-
9	Mr. E. Hino Fernando	Documentation and Writing Skills for Extension Functionaries	MANAGE, Hyderabad	5 days	5-9 July, 2021 Online mode

5 . Operational areas proposed during 2021-22

6.1. Details of operational area/cluster villages

S. No	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*
1	Mayiladuthurai, Sembanarkovil block	Rice, Pulses, Banana, Mango, Cashew, Paddy, Groundnut, Pulses	Banan is cultivated in an area of 500 ha in Nagapattinam district under irrigated condition in Rabi seasons. Existing cultivation practices and varieties alone farmers practiced. Hence alternate sustainable method is of prime importance. The farmers are unaware of nutritional deficiency/pest/abiotic stress. Low yield of existing local varieties and unawareness of New Variety. In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests and diseases. In order to provide an alternate choice of variety to farmers and besides to find the alternative, ADT 51 like variety needs to be popularized.	350 ha	Keelaiyur	OFT-Assessment of new high yielding Banana varieties for Nagapattinam District. Training/Field day. FLD-Demonstration of Newly Released Long Duration Rice Variety ADT 55 for higher productivity

2	Nagapattinam, Keelaiyur block,	Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Ridgegourd is cultivated in an area of 20 ha in Nagapattinam district under irrigated condition in both kharif and rabi seasons. Farmers used to cultivate local varieties by purchase of locally available seeds. The farmers facing a problem of late bearing, Immature fruit drop, Fruit fly infestation and low yield.	20 ha	Kameshwaram	OFT-Assessment of Early bearing Ridgegourd hybrids for Nagapattinam district. Training/Field day
3	Nagapattinam, Keeelaiyur block,	Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Brinjal is cultivated in an area of 120 ha in Nagapattinam district under irrigated condition in both kharif and rabi seasons. Farmers used to cultivate local variety viz., Poyyur bnrinjal. The farmers are facing problems of heafy infestation of shoot and fruit borer, wilt incidence and poor crop growth due to non uptake of	120 ha	Vetaikaraniruppu	FLD-Demonstration on Biointensive crop management practices in brinjal. Training/Field day

			nutrients. The farmers use to apply more chemical pesticides and fertilizers. This led to high cost of cultivation and deterioration in quality of the produce and soil as well.			
4	Nagapattinam, Vedharanyam TK, Vedharanyam block	Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Low yield due to less flowers induction and fruit setting Mango is cultivated in an area of 170 ha in Nagapattinam district under irrigated condition in Kharif season.	170/ha	Pushbavanam	FLD-Demonstration of flower induction and fruit setting in Mango. Training/Field day
5	Nagapattinam, Vedharanyam TK, Thalainayuru block	Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Non availability of improved variety and low yield (14-17 t/ha). Short shelf life. Yield reduction due to improper Pest, Disease and Nutrient management.	5/ha	Vellapallam	FLD-Demonstration of Onion Variety CO 6 in Nagapattinam District. Training/Field day
6	Thalainayar block	Rice, Pulses	Nagapattinam is a coastal district, the ecosystems are characterized by sea water intrusion, low lying water logged areas, flood prone and ill drained lands.	Salt affected area in the dt.- 6000 ha	Mundram Sethi	FLD-Demonstration of Saline tolerant Rice Variety TRY 4 for higher productivity

7	Thalainayar block	Rice, vegetables and Ground Nut, coconut, Flowers, Forestry, livestock and fish.	Groundnut is extensively cultivated in both rainfed as well as irrigated conditions. The major problem of the district is intermittent dry spells and lack of knowledge in high yielding varieties.	Groundnut cultivated area in the dt.- 2623ha.	Kovilpathu	FLD -Demonstration of Groundnut variety VRI 8 for higher productivity
8	Keelaiyur Block	Rice, vegetables and Ground Nut, Mango, coconut, Flowers, Forestry, livestock and fish.	Groundnut is extensively cultivated in both rainfed as well as irrigated conditions. The major problem of the district is intermittent dry spells and lack of knowledge in high yielding varieties.	Groundnut cultivated area in the dt.- 2623 ha.	Vilunthamavadi	FLD-Demonstration of Groundnut variety VRI 8 for higher productivity
9	Keelaiyur block	Ground Nut, Vegetables, Mango, Coconut, livestock and fish	Unawareness of Newly released hybrids.	Groundnut cultivated area in the dt.- 2623 ha.	Kameshwaram ,	FLD-Demonstration of Groundnut variety VRI 8 for higher productivity
10	Kilvelur block	Rice, Pulses, Vegetable, livestock and fish	Unawareness of high yielding varieties. Grown under poor management with less inputs. Direct seeded Rice is cultivated about 70,000 ha of land in Nagapattinam during samba season. Direct seeding of rice may	30% yield due to weed problem in DSR.	Agarakadambanur ,	OFT-Weed mgt. FLD-Demonstration of Newly Released short duration Rice Variety ADT 55. FLD-Demonstration of Newly Released Long Duration Rice Variety ADT 51. OFT-Assessment of Suitable Green gram varieties. FLD-Demonstration of ICM practices for Black Gram VBN 9.

			involve sowing pregerminated seed onto a puddled soil surface. Low yield of existing local varieties and unawareness of New Variety. In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests and diseases. In order to provide an alternate choice of variety to farmers and besides to find the alternative. Low Yielding nature of existing varieties. Unawareness of new variety. Variety resistance to MYMV should be needed. Low Yielding nature of existing varieties. Unawareness of new variety.			
11	Nagapattinam block	Rice, Pulses, Forestry, livestock and fish	Unawareness of high yielding varieties. Grown under poor management with less inputs.	Green gram area in the dt-37990 ha.	Ponveli	OFT-Assessment of Suitable Green gram varieties OFT-Assessment of suitable Integrated Weed Management. FLD-Demonstration of Newly

			Direct seeded Rice is cultivated about 70,000 ha of land in Nagapattinam during samba season. Direct seeding of rice may involve sowing pregerminated seed onto a puddled soil surface. Low yield of existing local varieties and unawareness of Variety. In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests and diseases. In order to provide an alternate choice of variety to farmers and besides to find the alternative. Low Yielding nature of existing varieties. Unawareness of new variety. Variety resistance to MYMV should be needed. Low Yielding nature of existing varieties. Unawareness of new			Released short duration Rice Variety ADT 55 for higher productivity. FLD-Demonstration of Newly Released Long Duration Rice Variety ADT 55. FLD-Demonstration of ICM practices for Black Gram VBN 9.

			variety.			
12	Nagapattinam, Vedharanyam TK, Thalainayuru block	Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Sucking pest like Thrips, Aphids and mites cause severe yield losses in Chillies. The growth is stunted reducing fruit yield per plant. This results in excess pesticide spray by the farmers thereby increasing cost of cultivation.	25 ha	Vellapallam	OFT- Assessment of Technologies for management of sucking pests in Chilli Training/Field day
13	Nagapattinam Nagapattinam-TK, Thirumarugal-block	Paddy, Cotton, Pulses	Sucking pest like mealy bug, leafhoppers, cotton aphid and thrips cause severe yield losses in cotton. The growth is stunted reducing yield per plant. This results in excess pesticide spray by the farmers thereby increasing cost of cultivation.	470 ha	Mela Poothanur	OFT- Assessment of IPM modules against major sucking Pest of Cotton Training/Field day
14	Nagapattinam Nagapattinam-,TK, Nagapattinam-block	Paddy, Pulses	Paddy is cultivated in around 1,67,019 ha of land of Nagapattinam district. Indiscriminate use of pesticides has significantly reduced the occurrence of	60,000 ha	Ponveli	FLD- Demonstration of Integrated Pest and Disease Management (IPDM) in Paddy Training/Field day

			natural enemies thereby reducing the yield.			
15	Nagapattinam Nagapattinam -TK, Nagapattinam, block	Paddy, Pulses	Black gram is cultivated in around 71,819 ha of land of Nagapattinam district. Indiscriminate use of pesticides has significantly reduced the yield.	23,000/ha	Ponveli	FLD **Demonstration of IPM against Viral diseases of Black gram** Training/Field day
16	Nagapattinam, Vedharanyam TK, Thalainayuru block	Coconut,Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Coconut is cultivated in around 3421.46 ha of land of Nagapattinam district. Larger plantation areas were affected by Rugose spiraling whitefly.	50/ha	Vellapallam	FLD- Demonstration of Integrated Management package for Rugose spiraling whitefly Training/Field day
17	Nagapattinam, Vedharanyam TK, Thalainayuru block	Coconut, Brinjal, Ridgegourd, Bhendi, Snake guard, Bitter gouard, Bottle gouard, Mango, Cashew, Paddy, Groundnut, Pulses	Irrigated condition. The soil pH of the village is 6.3 – 8.1 and EC 0.1 - 1 dSm^{-1}. The soil type is clay loam with low availabile N, high available P and K. 30 – 40 %	170/ha	Vellapallam	FLD- Demonstration of IPM in brinjal training/Field day
18	Nagapattinam	Livestock- Goat.	High feed cost, Nutritional deficiency Poor Reproducing	-	Naluvethapathi, Pushbavanam, Ponveli	Assessment on Tree Leaf Meal incorporated concentrate feed on Pre weaning goat Kid.

			Poor weight gain.			
19	Nagapattinam	Livestock- Goat	Poor weight gain Delayed puberty delayed age at kidding Lack of awareness on mineral supplements.	-	Pushbavanam, Ponveli,Keelaiyur, Thethakudi	Assessment of different salt licks on pre weaning growth performance of goat kids.
20	Nagapattinam	Livestock- Poultry	Poor nutrition, Decreased production, Lack of awareness on newer technology.	-	Thethakudi, Chettipulam, Thevur, Ponveli (DFI)	Demonstration of ProBeads-EC on growth performance of Desi chicken.
21	Nagapattinam	Livestock- Dairy	Poor nutrition, Increased medical expenses, Decreased fertility Decreased milk production Lack of awareness on newer technologies	-	Perunkadambanoor, Sikkal	Demonstration on metabolic disease management by using Rapid sensitive detection kit for ketosis in dairy animal.
22	Nagapattinam/kilvelur	Fisheries	Lack of awareness among farmers regarding scientific fish culture methods	-	Andakudi	OFTs- Growth assessment of incorporation of murrel with Indian major carps. Growth assessment of Pacu (Piarachtus brachypomus) in monoculture and polyculture system. Assessment of Intensive Integrated Farming system
23	Nagapattinam/kilvelur	Fisheries	Lack of awareness among farmers regarding scientific fish culture methods	-	Satiyakudi	FLD-Demonstration of GIFT Tilapia culture, Demonstration of murrel culture, Demonstration of Rice Expert System as android based

						mobile app, Demonstration of Milk fish culture in farm ponds
24	Nagapattinam	Masmin and Fish Wafers	1.Lack of awareness of value added fishery products. 2.Lack of knowledge of different method of Masmin preparation. 3.Lack of /less popularization of Masmin although huge demand in market 4.Low income of women and rural youth entrepreneurs.	-	Ponveli	OFT-1: Assessment of different methods of Masmin and Fish Wafers preparation and their Quality Evaluation
25	Nagapattinam	Dry fish	1.Lack of awareness of hygienic Dry fish preparation methods. 2.Lack of knowledge of Solar drying method of Dry fish preparation. 3.Lack of /less popularization of Solar drying method of Dry fish preparation although huge demand in market 4.Low income of	-	Ponveli	OFT-2: Assessment of Conventional & Solar drying methods of Dry fish preparation and their Quality Evaluation

			women and rural youth entrepreneurs.			
26	Nagapattinam	Masmin	1.Lack of awareness of value added fishery products. 2.Lack of knowledge of method of Masmin preparation. 3.Lack of /less popularization of Masmin although huge demand in market. 4.Low income of women and rural youth entrepreneurs.	-	1.Ponveli 2. Keechankuppam	FLD-1: Demonstration of Masmin Production
27	Nagapattinam	Rice	1.Lack of /less popularization of Rice based value added products although huge demand in market. 2. Low income of women and rural youth entrepreneurs.	-	1.Ponveli 2.Sikkal	FLD-2: Demonstration of Value Added Products from Rice

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

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*
Nagapattinam Block	Akkaraipettai	Fisheries	Lack of awareness of value added fishery products. Lack of knowledge of different method of Prawn pickle preparation.	OFT, FLD, Training, Method demonstrations, and Awareness programme

			Low income of women and rural youth entrepreneurs.	

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
Nagapattinam block	Ponveli	Rice, Pulses, Forestry, livestock and fish	Unawareness of high yielding varieties. Grown under poor management with less inputs. Direct seeded Rice is cultivated about 70,000 ha of land in Nagapattinam during samba season. Direct seeding of rice may involve sowing pregerminated seed onto a puddled soil surface. Low yield of existing local varieties and unawareness of New Variety. In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests and diseases. In order to provide an alternate choice of variety to farmers and besides to find the alternative. Low Yielding nature of existing varieties. Unawareness of new variety. Variety resistance to MYMV should be needed. Low Yielding nature of existing varieties. Unawareness of new variety. Lack of knowledge and non utilization of new high yielding Green gram varieties. Low yielding existing varieties. High J. quail chicks mortality	OFT, FLD, Training, Method demonstrations, and Awareness prgramme

			Increased demand for J. quail meat. Retarded growth rate. Kid mortality.	
Kilvelur block	Agarakadambanur	Rice, Pulses, Vegetable, livestock and fish	Unawareness of high yielding varieties. Grown under poor management with less inputs. Direct seeded Rice is cultivated about 70,000 ha of land in Nagapattinam during samba season. Direct seeding of rice may involve sowing pregerminated seed onto a puddled soil surface. Low yield of existing local varieties and unawareness of New Variety. In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests and diseases. In order to provide an alternate choice of variety to farmers and besides to find the alternative. Low Yielding nature of existing varieties. Unawareness of new variety. Variety resistance to MYMV should be needed. Low Yielding nature of existing varieties. Unawareness of new variety. Low yielding existing varieties. High J. quail chicks mortality Increased demand for J. quail meat. Retarded growth rate. Kid mortality. Lack of Knowledge on Fish culture and Value addition	OFT, FLD, Training, Method demonstrations, and Awareness prgramme

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

S.No.	Activities	Target
1. On- farm trials		
	a. No of OFTs	13
	b. No of Technologies (Total new technologies except FP)	26
	c. No. of locations (No. of Villages)	13
	d. No. of Beneficiaries (No. of Farmers fields)	55
	e. Area (Total area in ha)	7.2
2. Frontline Demonstrations		
	a. No. of FLDs	20
	b. No. of Locations (No of villages)	20
	c. No. of Beneficiaries (No of Farmers fields)	151
	d. Area (Total Area planned in ha)	49.2
3. Trainings for Farmers and Farm Women		
	a. No. of programmes	66
	b. No. of participants	2280
4. Trainings for Rural Youth		
	a. No. of programmes	14
	b. No. of participants	415
5. Trainings of Extension Personnel		
	a. No. of programmes	7
	b. No. of participants	300
6. Extension Activities		
	No. of activities (Total number of activities listed in Table ---)	806
	No. of participants	10730
7. Production of seed (in quintals) (Crop-wise)		373
8. Production of planting materials (in Nos.) (Crop-wise)		57200
9. Production of live-stock strains and finger lings (Category wise Nos.)		755
10. Production of bio inputs (quantity in kg) (Item-wise)		2550
11. Production of other inputs (specify unit) (Item-wise)		2000
12. Kisan mobile advisories		
	No. of messages	40
	No. of technologies	40
	No. of farmers	4000
Other mobile advisories		
	No. of messages	300
	No. of technologies	300
	No. of farmers	300
13. Soil testing		
	No. of soil sample testing using Mobile Soil Testing Kit	200
	No. of soil sample testing in conventional laboratory	100
Water sample Testing (samples in No.)		150
Soil Health Cards		
	No. of Cards using Mobile Soil Testing Kit data	200
	No. of Cards using Laboratory data	100

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 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	Rice	Assessment of suitable Integrated Weed Management practices for Direct sown rice	TO-1: PE of pyrazosulfuron ethyl + Hand weeding on 25 DAS TO-2:Pretilachlor and Bispyripac sodium TO-3: FP	TNAU, 2015 TNAU, 2015	New Proposal	5	Rs.15,000	Dr. V. Kannan SMS (Agronomy) and Dr. A. Gopalakannan (Programme Coordinator)	1	-
2	Greengram	Assessment of Suitable Green gram varieties for higher productivity	TO-1: VBN 4 TO-2: WGG 42 FP: ADT 3	TNAU, 2019 PJSTAU 2015	Last year OFT	5	Rs.10000	Dr. V. Kannan SMS (Agronomy) and Dr. A. Gopalakannan (Programme Coordinator)	1	-
3	Banana	Assessment of new high yielding Banana varieties for Nagapattinam District.	To-1 Kaveri Kalki, TO -2 CO 2 FP- Karpooravalli	TO-1- NRCB, Trichy, 2019 TO-2 TNAU Coimbatore, 2020	New proposal	5	Rs.16850/-	K.Ragu, SMS (Hort), Dr. K.Chandrasekar, SMS (PP)	-	1
4	Ridgegourd	Assessment of Early bearing Ridgegourd hybrids for Nagapattinam district	TO-1 Ridgegourd hybrid Arka Vikram TO-2 Ridgegourd hybrid CO1 FP Local variety	TO-1 IIHR, 2016 TO-2 TNAU, 2017	New proposal	5	Rs.8500/-	K.Ragu, SMS (Hort), Dr. K.Chandrasekar, SMS (PP)	-	1
5	Chilli	Assessment of Technologies for management of sucking pests in Chilli	To-1 Application of Neem Cake@250kg/ ha, Intercrop with *Sesbania*, to provide barrier which regulate the	TO-1- TNAU 2020 TO-2 IIHR -2016	New proposal	5	Rs.14250/-	Dr. K.Chandrasekar, SMS (PP) K.Ragu, SMS (Hort),	-	1

			thrips, Yellow sticky trap @ 12/ ha, Spraying of Emamectin benzoate 5SG@ 200g/ ha TO -2 Seed treatment with Imidacloprid 70% WS@ 12g/ kg, Border Crop with Maize, Blue sticky trap@ 12/ ha, Foliar application of Neem oil 1% @ 1000ml/ ha + adjuvant 1ml/ lit FP- Pesticide spray							
6	Cotton	Assessment of IPM modules against major sucking Pest of Cotton	TO-1 ST with Imidacloprid 70WS at 7g / kg ; Spraying of NSKE 5% or Neem oil @ 5 ml/lt or Fish oil rosin soap 25g / lit / Fish oil - 2 ml/lt; Installation of YST @ 5nos/ac. ; Second spray with Buprofezin 25% SC 400ml/ac or Thiamethoxam 25%WG 40 g/ac or Profenophos @800 ml /ac TO-2 CICR Management module: ST with Imidacloprid	TO-1 TNAU, 2019 TO-1 CICR, 2017	New proposal	5	Rs.18500/-	Dr. K.Chandrasekar, SMS (PP), Dr.V.Kannan (Agronomy)	-	1

			70WS at 8g / kg ; Inter-crop with cowpea or sorghum or blackgram ; Spraying of Neem oil 1 % + Neem Seed Kernel Extract 5 % or *Verticillium lecanii* 10gms/lit of water; Installation of YST @ 5nos/ac. ;Second spray with Diafenthiuron 50WP 320g /ac FP – Heavy use of pesticide spray							
7	Livestock	Assessment on Tree Leaf Meal incorporated concentrate feed on Pre weaning goat Kid.	TO1: Tree Leaf Meal incorporated (30 %) concentrate feed. TO2: Concentrate feed mix without tree meal TO3: Extensive / Zero input farming of rearing.	TANUVAS, IAN, 2019 IAN,2012 -	New	5	40,000	SMS-AH SMS- PPSMS-Agronomy	1	2
8	Livestock	Assessment of different salt licks on pre weaning growth performance of goat kids	TO1: GOATMIN TO2: AFTD Salt lick TO3: Zero input farming	NIANP, 2012, Bangalore IAN, 2018	Second	5	15000	SMS- AH, SMS-PP, PC	1	2
9	Fisheries	Growth assessment of incorporation of	Carp polycultue with murrel 10% - TO1	CIFRI, Barrackpore (2014)	NEW	3	81,000	SMS (Fish Extn) and PC, KVK	1	2

		murrel with Indian major carps polyculture system	Carp polyculture with stripped murrel 16%- TO2 Wild collected seeds with IMC-FP	CIFA, 2017						
10	Fisheries	Growth assessment of Pacu (Piarachtus brachypomus) in monoculture and polyculture system	Pacu in monoculture system – TO1 Pacu in polyculture system with carps – TO2 Pacu, IMC and Tilapia polyculture- FP	KUFOS, 2015 KUFOS, 2015	New	3	51,000	SMS (Fish Extn) and PC, KVK	1	2
11	Fisheries	Assessment of Intensive Integrated Farming system	TO1-Integrated Farming system with 15 components- TO2-Integrated Farming system with 10 components. FP -Integrated Farming with regular practices-	ICAR-NAIP,2018 CIFA, 2015	New	3	45,000	PC, SMS (AH), SMS (Hor) & SMS (FE)	1	2
12	Masmin and Fish Wafers	Assessment of different methods of Masmin and Fish Wafers preparation and their Quality Evaluation	TO-1: TNJFU method TO-2: CIFT method FP: Conventional method	TO-1: TNJFU, 2018 TO-2: CIFT (2018)	New	3	29,250/-	Dr. A. Mathivanan, SMS (Fish Processing Technology)	2	2
13	Dry fish	Assessment of Conventional and Solar drying	**TO-1:** TNJFU method **TO-2:** CIFT method	**TO-1:** TNJFU, 2018 **TO-2:** CIFT (2018)	New	3	Rs. 34,200/-	Dr. A. Mathivanan, SMS (Fish Processing Technology)	2	2

		methods of Dry fish preparation and their Quality Evaluation	**FP:** Conventional method							

*** New OFT/2nd year/3rd year**

8.2. Details of OFTs (Use one table for each OFT) (TECHNOLOGY WRITEUP)

Furnish existing/continuing OFTs first followed by newly proposed OFTs

OFT No.	**01**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agronomy
Theme	Weed control evaluation
Category (if applicable)	Cereals
Crop/ enterprise	Rice
Farming situation	Direct seeded Rice
Prioritized problem (short)	Direct seeded Rice is cultivated about 70,000 ha of land in Nagapattinam during samba season. Direct seeding of rice may involve sowing pregerminated seed onto a puddled soil surface. The risk of crop yield loss due to competition from weeds by all seeding methods is higher than for transplanted rice because of the absence of the size differential between the crop and weeds and the suppressive effect of standing water on weed growth at crop establishment. To overcome this issue and in a way of finding solution to the farmers this oft is formulated
Title of the OFT	Assessment of suitable Integrated Weed Management practices for Direct sown rice
Technology options	
TO-1	Pretilachlor as pre-emergence herbicide (750 ml/ha) application 3 DAS+ Hand weeding
Source and year	TNAU, 2020
Description (short)	Pre emergence application of pyrazosulfuron ethyl at 20 g a.i /ha on 3 DAS followed by Hand weeding on 25 DAS
Potential yield/income	6000 kg ha^{-1}
Critical Inputs	pyrazosulfuron ethyl at 20 g a.i /ha and Rs. 1000
Source of Inputs	Fertilizer shop

Photos	
TO-2	Chlorimuron methyl + Metsulfuron methyl as post emergence herbicide 15 DAS+ Hand weeding
Source and year	TNAU, 2020
Description (short)	Pre-emergence application of Pretilachlor + safener (Sofit) 0.45kg/ha on 3 DAS followed by post emergence application of Bispyribac sodium 25 g/ha at 25 DAS along with one hand weeding 45 DAS
Potential yield/income	6000 kg ha^{-1}
Critical inputs & quantity and cost	Pretilachlor, Bispyripac sodium and Rs. 3000
Source of Inputs	Fertilizer shop
Photos	
Farmers Practice	**Two hand weeding**
Farmers yield	4500 kg^{-1}
Season	Samba
Cost per replication (Rs.)	3,000/-
No. of replications	5
Total cost for the OFT(Rs.)	15,000/-
Parameters to be studied	No. of Productive tillers/m^2, Weed control efficiency, TSC, Gross income, Net income, BCR
Parameters to be reported	No. of Productive tillers/m^2, Weed control efficiency, TSC, Gross income, Net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V. Kannan SMS (Agronomy) and Dr. A. Gopalakannan, Programme Coordinator

OFT No.	**02**
Status (New proposal/2nd year /3rd year)	Existing OFT
Subject,	Agronomy
Theme	Varietal evaluation
Category (if applicable)	Pulses

Crop/ enterprise	Green gram
Farming situation	Rice Fallow
Prioritized problem (short)	• Unawareness of high yielding varieties • Low productivity. • Grown under poor management with less inputs • Short duration pulses are prone to vagaries of monsoon. • Requirement of location specific high yielding varieties and production technologies.
Title of the OFT	Assessment of Suitable Green gram varieties for higher productivity
Technology options	
TO-1	VBN 4
Source and year	TNAU, 2019
Description (short)	Multi bloom, non shattering type, moderate resistance to Mungbean Yellow Mosaic Virus (MYMV) and powdery mildew diseases and resistance to urdbean leaf crinkle virus disease
Potential yield/income	1250 kg/ha
Critical Inputs	Seed 4 kg; Rs.600
Source of Inputs	NPRC, Vamban
Photos	
TO-2	WGG 42
Source and year	PJTSAU, 2015
Description (short)	55-60 days duration, Synchronous maturity, photo- insensitive, short stature, Long pods, Green shining bold seed, Resistant to MYMV and suitable for Rainfed / Irrigated conditions
Potential yield/income	12 q/ha
Critical inputs& quantity and cost	Seed; 4 kg; Rs.800
Photos	
Farmers Practice	Local unnamed variety
Farmers yield	6 q/ha
Season	Rabi 2021
Cost per replication (Rs.)	Rs.2,000
No. of replications	5
Total cost for the OFT	Rs. 10,000/-
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/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V. Kannan SMS (Agronomy) and Dr.A. Gopalakannan, Programme Coordinator

OFT No.	**03**
Status	New proposal
Subject,	Horticulture
Theme	Varietal evaluation
Category	Fruits
Crop/ enterprise	Banana
Farming situation	Irrigated, clay loam
Prioritized problem	Banan is cultivated in an area of 500 ha in Nagapattinam district under irrigated condition in Rabi seasons. Existing cultivation practices and varieties alone farmers practiced. Hence alternate sustainable method is of prime importance. The farmers are unaware of nutritional deficiency/pest/abiotic stress.
Title of the OFT	Assessment of new high yielding Banana varieties for Nagapattinam District.
Technology options	
TO-1	**Kaveri Kalki**
Source and year	NRCB 2019
Description	➢ Kaveri Kalki is a dwarf short duration variety with an annual yield of 52 - 60 t/ha. ➢ Fruit quality is on par Karpuravalli but with higher TSS. ➢ Suitable for high density planting without propping. ➢ A drought tolerant, dual purpose (both culinary and dessert)
Potential yield/income	52 t/h
Critical Inputs	Kaveri Kalki - Banana Suckers 100 Nos, Banana Sakthi 3.5 kg, *Pseudomonas fluorescens 2.5 kg,* (Rs.1685)
Source of Inputs	NRCB Trichy
Photos	
TO-2	**CO 2**
Source and year	TNAU 2020
Description	➢ The yield potential of the culture is 32 tonnes/ha. ➢ Average bunch weight is 12-13 kg with 12-14 hands/bunch and 150-160¬ fingers/bunch.

	➢ Crop duration is 12-13 months (planting to harvest). ➢ It is suitable for planting during October to January. ➢ This improved culture has tolerance to nematodes, lesser incidence of Sigatoka leaf spot and Fusarium wilt. ➢ The banana culture, H.212 (AB) is a seedling selection made from the progenies derived from the cross combination of Karpooravalli (ABB) x Pisang Lilin (AA) (resistant source for nematode).
Potential yield/income	32t/ha
Critical inputs& quantity and cost	CO 2- Banana Suckers 100 Nos, Banana Sakthi 3.5 Kg, *Pseudomonas fluorescens 2.5 kg.* (Rs.1685)
Source of Inputs	TNAU Coimbatore
Photos	
Farmers Practice	Karpooravalli
Farmers yield	40 t/ha
Season	Rabi 2021
Cost per replication (Rs.)	Rs.3370/-
No. of replications	5
Total cost for the OFT	Rs.16850/-
Parameters to be studied	➢ No. of hands per bunch ➢ Pests and diseases incidence (%) ➢ Yield per plant(Kg) ➢ Yield q/ha ➢ BCR
Parameters to be reported	Fruit yield (q/ha), gross expenditure, gross income, net income, BCR
Source of fund	KVK Main
Team members	SMS (Hort), SMS (PP)

OFT No.	**04**
Status	New proposal
Subject,	Horticulture

Theme	Varietal evaluation
Category	Vegetables
Crop/ enterprise	Ridgegourd
Farming situation	Irrigated, Sandy loam
Prioritized problem	Ridgegourd is cultivated in an area of 20 ha in Nagapattinam district under irrigated condition in both kharif and rabi seasons. Farmers used to cultivate local varieties by purchase of locally available seeds. The farmers facing a problem of late bearing, Immature fruit drop, Fruit fly infestation and low yield.
Title of the OFT	Assessment of Early bearing Ridgegourd hybrids for Nagapattinam district
Technology options	
TO-1	Ridgegourd hybrid Arka Vikram
Source and year	IIHR, 2016
Description	Early flowering hybrid (46 days for first picking), green, long, tender fruits, excellent cooking quality, nutritionally rich in antioxidant activity and minerals like potassium, calcium, iron, zinc and manganese . Duration 120-135 days.
Potential yield	340q/ha
Critical Inputs	Seed-50g, Micro nutrient-500g, Cucurlure 4Nos. (Rs.850)
Source of Inputs	IIHR, Pvt agency.
Photos	
TO-2	Ridgegourd hybrid CO1
Source and year	TNAU, 2017
Description	Early hybrid (first harvest at 30-35 days), Prolific bearer,fruits are attractive green with soft pulp, less seed content, long (40-45cm), ridged with an average fruit weight of 370-380g, 15-17 harvests in 4 months duration.
Potential yield	337q/ha
Critical inputs& quantity and cost	Seed-50g, Micro nutrient-500g, Arka Cucurlure 4Nos. (Rs.850)
Source of Inputs	TNAU, IIHR, Pvt agency.

Photos	
Farmers Practice	Local variety
Farmers yield	15q/ha
Season	Kharif 2021
Cost per replication (Rs.)	Rs.1700/-
No. of replications	5
Total cost for the OFT	Rs.8500/-
Parameters to be studied	Days to first harvest, fruit weight, No.of fruits/plant, yield (q/ha)
Parameters to be reported	Fruit yield (q/ha), gross expenditure, gross income, net income, BCR
Source of funding	KVK Main
Team members	SMS (Hort), SMS (PP)

OFT No.	**05**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject,	Plant Protection
Theme	Pest Management
Category (if applicable)	Vegetable
Crop/ enterprise	Chillies
Farming situation	Irrigated
Prioritized problem (short)	Sucking pest like Thrips, Aphids and mites cause severe yield losses in Chillies. The growth is stunted reducing fruit yield per plant. This results in excess pesticide spray by the farmers thereby increasing cost of cultivation.
Title of the OFT	**Assessment of Technologies for management of sucking pests in Chillies**
Technology options	
TO-1	Application of Neem Cake@250kg/ ha, Intercrop with *Sesbania*, to provide barrier which regulate the thrips, Yellow sticky trap @ 12/ ha, Spraying of Emamectin benzoate 5SG@ 200g/ ha

Source and year	TNAU 2020
Description (short)	Neem cake application before seedling transplanting will reduce the pest attack in the crops. Sesbania as border crop helps to trap the pest and prevent its attack on the crops. Traps helps to monitor the pest activity.
Critical Inputs	*Sesbania*,Yellow sticky trap and Emamectin benzoate(Neem cake – Farmers contribution)
Source of Inputs	Input dealers, KVK for traps
Photos	
TO-2	Seed treatment with Imidacloprid 70% WS@ 12g/ kg, Border Crop with Maize, Blue sticky trap@ 12/ ha, Foliar application of Neem oil 1% @ 1000ml/ ha + adjuvant 1ml/ lit
Source and year	NIPHM 2014
Description (short)	Seed treatment with Imidacloprid will protect the seedlings from sucking pest damage. Maize as border crop reduces the incidences of sucking pests. Blue sticky trap@ 12/ ha monitors the pests. Neem oil spray reduces the cost of chemical pesticides.
Critical inputs & quantity and cost	Imidacloprid 70% WS, Maize, Blue sticky trap (Neem oil – Farmers contribution)
Source of Inputs	Input dealers, KVK for traps
Photo	
Farmers Practice	Pesticide spray
Farmers yield	12.5t/ha
Season	Rabi
Cost per replication (Rs.)	Rs.2850/-
No. of replications	5
Total cost for the OFT	Rs.14250/-
Parameters to be studied	Yield t/ha, pest and disease incidences, irrigation requirement, growth parameters, gross cost, gross income, net income, BCR
Parameters to be reported	Fruit yield, gross expenditure, gross income, net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Plant protection) and SMS (Horticulture)

OFT No.	**06**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject,	Plant Protection
Theme	Pest Management
Category (if applicable)	Fiber crop
Crop/ enterprise	Cotton
Farming situation	Irrigated
Prioritized problem (short)	Sucking pest like mealy bug, leafhoppers, cotton aphid and thrips cause severe yield losses in cotton. The growth is stunted reducing yield per plant. This results in excess pesticide spray by the farmers thereby increasing cost of cultivation.
Title of the OFT	**Assessment of IPM modules against major sucking Pest of Cotton**
Technology options	
TO-1	ST with Imidacloprid 70WS at 7g / kg ; Spraying of NSKE 5% or Neem oil @ 5 ml/lt or Fish oil rosin soap 25g /lit / Fish oil - 2 ml/lt; Installation of YST @ 5nos/ac. ; Second spray with Buprofezin 25% SC 400ml/ac or Thiamethoxam 25%WG 40 g/ac or Profenophos @800 ml / ac
Source and year	TNAU 2019
TO-2	CICR Management module: ST with Imidacloprid 70WS at 8g / kg ; Inter-crop with cowpea or sorghum or blackgram ; Spraying of Neem oil 1 % + Neem Seed Kernel Extract 5 % or *Verticillium lecanii* 10gms/lit of water; Installation of YST @ 5nos/ac. ;Second spray with Diafenthiuron 50WP 320g /ac
Source and year	CICR 2017
Critical inputs & quantity and cost	*Verticillium lecanii* , yellow sticky trap, Neem oil, Imidacloprid 70WS at 8g / kg and Thiamethoxam 25%WG 40 g/ac
Source of Inputs	PKKVK, Grenicon Agrotech Pvt ., Ltd and Dealers .
Photo	
Farmers Practice	Pesticide spray
Season	Kharif
Cost per replication (Rs.)	Rs.3700/-
No. of replications	5
Total cost for the OFT	Rs.18500/-
Parameters to be studied	Yield t/ha, pest and disease incidences, irrigation requirement, growth parameters, gross

	cost, gross income, net income, BCR
Parameters to be reported	Fruit yield, gross expenditure, gross income, net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Plant protection)

OFT No.	**07**
Status (New proposal/2nd year /3rd year)	New proposal
Subject,	Veterinary
Theme	Animal Nutrition Management
Category (if applicable)	Total Mixed Ration
Crop/ enterprise	Goat Farming
Farming situation	Semi Intensive farming
Prioritized problem (short)	High feed cost, Nutritional and Reproduction deficiency and poor weight gain
Title of the OFT	**Assessment on Tree Leaf Meal incorporated concentrate feed on Pre weaning goat Kid**
Technology options	
TO-1	**Tree Leaf Meal incorporated (30 %) concentrate feed**
Source and year	TANUVAS, **IAN, 2019**
Description (short)	The Tree leaf meal (Glyricidia/Subabul/ Luciana lecocephala) is included @30 % level in concentrate feed of goats. This will doubtfully reduces the cost of production in commercial goat farms.
Potential yield/income	Reduced feed cost, Improves weight gain and Reproductive efficiency.
Critical Inputs	Concentrate feed, Tree leaf meal and Dewormer – 50 Kg/ Unit
Source of Inputs	IAN- TANUVAS, Local market
Photos	 
TO-2	**Concentrate feed Mix without Tree Leaf Meal**

Source and year	IAN, 2012
Description	Maize, Oil cake, wheat bran, mineral mixture etc., are mixed in a proportion to meet the nutritional demand of the animal
Potential yield/income	Improves weight and Reproductive efficiency.

Critical inputs& quantity and cost	Commercial concentrate feed – 50 Kg/Unit, Dewormer
Source of Inputs	Local market
Photos	
Farmers Practice	Extensive system/ zero input farming of rearing
Farmers yield	Poor weight gain and delay in Reproduction
Season	Throughout the year
Cost per replication (Rs.)	8000
No. of replications	5
Total cost for the OFT	40000
Parameters to be studied	Weight gain, BCR, Palatability, Consumption rate, Age of first kidding
Parameters to be reported	Weight gain, BCR and cost of production
Source of funding (KVK-	KVK-Main
Main/TSP/ /SC SP/	-
Project/Others (specify)	-
Team members	SMS (Veterinary), SMS (Agronomy), SMS (PP)

OFT No.	**08**
Status (New proposal/2nd year /3rd year)	2nd year
Subject,	Veterinary Science
Theme	Animal Nutrition Management
Category (if applicable)	Supplementary Feeding

Crop/ enterprise	Goat Farming
Farming situation	Semi Intensive farming
Prioritized problem (short)	Poor weight gain and delayed age at kidding
Title of the OFT	**Assessment of different salt licks on pre weaning growth performance of goat kids**
Technology options	
TO-1	**GOATMIN**
Source and year	**NIANP, 2012, Bangalore**
Description)	This mineral mixture is formulated based on the specific mineral requirement of goat. Antagonistic/synergistic action of individual minerals was considered while formulating specific mineral mixture. Accordingly, mineral mixture was formulated for 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. The synergistic action of calcium, phosphorus and antagonistic action of copper and sulfur were also considered, while formulating mineral mixture. The cost of this mineral mixture is lower as compared to that of conventional mineral mixture of large ruminants.
Potential yield/income	Reduced feed cost, Improves weight gain and Reproductive efficiency .
Critical Inputs	Goat Min mineral mixture
Source of Inputs	NIANP- Bangalore
Photo	
TO-2	**Incorporation of AFTD (Aerated film dry technologies) salt in mineralized salt lick for ruminants**
Source and year	IAN, 2018
Description (short)	Spirulina film coated salt licks.
Potential yield/income	Improves weight and Reproductive efficiency.
Critical inputs& quantity and cost	Salt licks, dewormer, Banner 
Source of Inputs	Local market

Photos	
Farmers Practice	zero input farming of rearing
Farmers yield	Poor weight gain and delay in Reproduction
Season	Throughout the year
Cost per replication (Rs.)	3000
No. of replications	5
Total cost for the OFT	15000
Parameters to be studied	Weight gain, BCR, Palatability, Age of first kidding and pre weaning survivability
Parameters to be reported	Weight gain, BCR and Kid survivability
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK-Main
Team members	SMS (Veterinary), SMS (PP)

OFT No.	**09**
Status	New
Subject,	Fisheries
Theme	Inland fisheries
Category	Carp culture
Crop/ enterprise	Murrel and IMC
Farming situation	Clayey loam soil
Prioritized problem	• Lack of carp polyculture practices • Low yield in carp culture • Lack of scientific fish culture methods
Title of the OFT	Growth assessment of incorporation of murrel with Indian major carps polyculture system
Technology options	
TO-1	Carp polycultue with murrel 8%
Source and year	CIFRI, Barrackpore (2014)

Description	Murrel varities like Channa marulius and Channa punctatus will be cultured along with Indian major carps in the farm ponds of 1000m2 area with 8% incorporation. Murrels will be stocked in a size smaller than the size of carp fingerlings
Potential yield/income	1 ton/acre
Critical Inputs	Murrel seed, carp seed and fish feed
Source of Inputs	Fish feed and seed will be procured from private hatchery and feed manufacturer
Photos	 
TO-2	Carp polyculture with stripped murrel 16%
Source and year	CIFA, 2017
Description	Striped Murrel (Channa striatus) will be stocked in the farm pond of 1000m2 area along with Indian Major carps with 16% incorporation
Potential yield/income	<1 ton/acre
Critical inputs& quantity and cost	Murrel seed, carp seed and fish feed
Source of Inputs	Fish feed and seed will be procured from private hatchery and feed manufacturer
Photos	 
Farmers Practice	Farmers do murrel culture with the wild collected seeds along with fingerlings of IMC.
Farmers yield	< 500 kgs/acre
Season	Northeast and Southwest monsoon
Cost per replication (Rs.)	Rs. 27000
No. of replications	3
Total cost for the OFT	81,000

Parameters to be studied	Growth, suruvival rate and total yield
Parameters to be reported	Growth, suruvival rate and total yield
Source of fund	ICAR- KVK
Team members	SMS (Fish Extn) and PC, KVK

OFT No.	**10**
Status	
Subject,	Fisheries
Theme	Inland fisheries
Category	Freshwater fish production
Crop/ enterprise	Pacu and IMC
Farming situation	All season
Prioritized problem	• Low production of Indian major carps • Slow growth rate of IMC • Lack of awareness among farmers about Pacu
Title of the OFT	Growth assessment of Pacu (Piarachtus brachypomus) in monoculture and polyculture system
Technology options	
TO-1	**Pacu in monoculture system**
Source and year	KUFOS, 2015
Description	Pacu fish will be stocked in the well prepared pond of 1000m2 area in a monoculture method.
Potential yield/income	<1 ton/ acre
Critical Inputs	Fish seed and fish feed
Source of Inputs	Fish feed and seed will be procured from private hatchery and feed manufacturer
Photos	
TO-2	**Pacu in polyculture system with carps**
Source and year	KUFOS, 2015
Description	Pacu fish will be stocked with Indian major carps in the farm pond of 1000m2 area

Potential yield/income	<1 ton/ acre
Critical inputs& quantity and cost	Fish seed and fish feed
Source of Inputs	Fish feed and seed will be procured from private hatchery and feed manufacturer
Photos	 
Farmers Practice	Farmers do polyculture stocking pacu, IMC and Tilapia in the same pond which results in the poor growth and production.
Farmers yield	
Season	All season
Cost per replication (Rs.)	17,000
No. of replications	3
Total cost for the OFT	51000
Parameters to be studied	Growth, survival rate and yield
Parameters to be reported	Growth, survival rate and yield
Source of fund	ICAR- ATARI
Team members	SMS (Fish Extn) & PC, KVK

OFT No.	**11**
Crop/ enterprise	Fisheries - IFS
Prioritized problem	Unawareness among farmers, Low income for monoculture, Long culture duration, Lack of knowledge and improper utilization of the available land resource.
Title of intervention	Assessment of Intensive Integrated Farming system
Technology options	
TO-1	Intensive Integrated Farming system
TO-2	Improved integrated farming system
FP	Integrated Farming with regular practices
Source of Technology	
TO-1	ICAR – NAIP, 2018

TO-2	CIFA, 2015
Status (New proposal/already approved OFT - 2nd year / 3rd year)	New proposal
Name of critical input	Fingerlings of Indian Major carp and Exotic carps Chicks Quail Duck Vegetable seeds
Qty per trial	Fingerlings of Indian Major carp and Exotic carps: 1000 Nos. Chicks: 15 Nos. Quail: 50 Nos. Duck: 10 Nos. Vegetable seeds: 200 Nos.
Cost per trial (Rs.)	15,000
No. of trials	3
Total cost for the Intervention (Rs.)	45,000
Parameters to be studied	Growth rate, water quality management Survival, Production and BCR
Team members	Dr. A. Gopalakannan, Dr. S. Muthukumar and Mr. K. Ragu

OFT No.		**12**
Status		New proposal
Subject	:	Fisheries (Home Science)
Theme	:	Evaluation of different methods
Category	:	Value Addition
Crop	:	Masmin
Farming situation	:	
Prioritized problem	:	1. Lack of awareness of value added fishery products. 2. Lack of knowledge of different method of Masmin preparation. 3. Lack of /less popularization of Masmin although huge demand in market 4. Low income of women and rural youth entrepreneurs.
Title of the OFT	:	**Evaluation of two different methods of Masmin preparation and their Quality Evaluation**
Technology Options		
TO-1	:	TNJFU method
Source and year	:	TNJFU, 2018

Description	:	Masmin preparation method by TNJFU was released during the year 2018 by Rathnakumar et al., in his book 'Preparation of Value Added Fishery Products'. This method widely popularized among the coastal districts of Tamilnadu.
Potential yield/income	:	Rs.80/Kg
Critical Inputs	:	Fish - Tuna, Salt and Packaging materials
Source of Inputs	:	Fish Landing Centers - **Akkaraipettai**, Nagapattinam.
		 
TO-2	:	CIFT method
Source and year	:	CIFT (2018)
Description	:	Masmin preparation method by CIFT was released during the year 2018. This method widely popularized among the coastal districts of Lakshadweep and Kerala.
Potential yield/income	:	Rs.70/Kg
Critical Inputs	:	Fish - Tuna, Salt and Packaging materials
Source of Inputs	:	Fish Landing Centers - **Akkaraipettai**, Nagapattinam.
		
Farmers practice	:	Conventional method
Description of FP	:	Conventional method of Masmin preparation widely practiced among the fishermen in Lakshadweep and coastal districts of Tamilnadu and Kerala by using varieties of Tuna for their own taste preference.
Farmers yield	:	Rs.50/Kg
Season		Feb - May
Cost per replication (Rs.)	:	Rs. 9,750/-

Number of replications	:	3
Total cost for the OFT	:	Rs. 29,250/-
Parameters to be studied	:	Self life, Moisture content, Sensory Evaluation.
Parameter to be reported	:	Self life
Source of funding (KVK-Main/TSP/SCSP/ Project/Others (specify)	:	KVK Main
Team members		**Dr. A. MATHIVANAN, SMS (Fish Processing Technology)**

OFT No.		**13**
Status		New proposal
Subject	:	Fisheries (Home Science)
Theme	:	Evaluation of different methods
Category	:	Value Addition
Crop	:	Dry fish
Farming situation	:	
Prioritized problem	:	1. Lack of awareness of hygienic Dry fish preparation methods. 2. Lack of knowledge of Solar drying method of Dry fish preparation. 3. Lack of popularization of Solar drying method of dry fish preparation although huge demand in market 4. Low income of women and rural youth entrepreneurs.
Title of the OFT	:	**Assessment of Conventional and Solar drying methods of Dry fish preparation and their Quality Evaluation**
Technology Options		
TO-1	:	TNJFU method
Source and year	:	TNJFU (Rathnakumar, 2018. Preparation of Value Added Fishery Products.)
Description	:	Dry fish preparation by Solar drying method was developed by TNJFU. The superior quality of dry fish to the consumers in terms of Hygienic, Self life, Salt content, Microbial quality, Nutritional profile can be easily achieved through Solar drying method.
Potential yield/income	:	Rs.300/Kg of Dry fish (Rs.90/Kg of raw fish)
Critical Inputs	:	Fish, Salt and Packaging materials

Source of Inputs	:	Fish Landing Centers - **Akkaraipettai**, Nagapattinam.
  		
TO-2	:	CIFT method
Source and year	:	CIFT (2018)
Description	:	Dry fish preparation by Solar drying method was developed by CIFT. The superior quality of dry fish to the consumers in terms of Hygienic, Self life, Salt content, Microbial quality, Nutritional profile can be easily achieved through Solar drying method.
Potential yield/income	:	Rs.300/Kg
Critical Inputs	:	Fish, Salt and Packaging materials
Source of Inputs	:	Fish Landing Centers - **Akkaraipettai**, Nagapattinam.
		
Farmers practice	:	Conventional method
Description of FP	:	Conventional method of Dry fish preparation widely practiced among the fishermen in coastal districts of India by using Sun drying methods.
Farmers yield	:	Rs.234/Kg
Season		Throughout year
Cost per replication (Rs.)	:	Rs. 11,400/-
Number of replications	:	3
Total cost for the OFT	:	Rs. 34,200/-

Parameters to be studied	:	Self life, Salt content, Microbial quality, Nutritional profile and Sensory Evaluation.
Parameter to be reported	:	Self life, Microbial quality and Nutritional profile
Source of funding (KVK-Main/TSP/SCSP/ Project/Others (specify)	:	KVK Main
Team members		**Dr. A. Mathivanan, SMS (Fish Processing Technology)**

9. Frontline Demonstrations proposed during 2021-22

9.1. Summary of FLDs

S. No.	Category/ Crop or enterprise	Title	Prioritized problem	Technology	Source of Technology	Status*	No. of Demo (replications)	Area (ha)/ units	Total cost involved (Rs.)	Team members involved	No. of demos targeted in DFI village (s)	No. of demos targeted under SC-SP
1	Rice	Demonstration of Newly Released short duration Rice Variety CO 54 for higher productivity	Low yield of existing local varieties and unawareness of New Variety	Varietal Evaluation – CO 54	TNAU, 2021	New proposal	10	4	Rs.15,000	Dr.V.Kannan SMS (Agronomy) and Dr.A. Gopalakannan, Programme Coordinator	4	
2	Rice	Demonstration of Newly Released Long Duration Rice Variety ADT 51 for higher productivity	In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests and diseases. In order to provide an alternate choice of variety to farmers	Varietal Evaluation – ADT 55	TNAU, 2018	New proposal	10	4	Rs.15,000	Dr.V.Kannan SMS (Agronomy) and Dr.A. Gopalakannan, PC	4	

			and besides to find the alternative, ADT 55 variety needs to be popularised.									
3	Rice	Demonstration of Saline tolerant Rice Variety TRY 4 for higher productivity	Nagapattinam is a coastal district, the ecosystems are characterized by sea water intrusion, low lying water logged areas, flood prone and ill drained lands. There is a need to popularize saline tolerant variety in the district	Varietal Evaluation – TRY 4	TNAU, 2021	New proposal	10	4	Rs.15,000	Dr.V. Kannan SMS (Agronomy) and Dr.A. Gopalakannan, Programme Coordinator	-	
4	Pulses (Blackgram)	Demonstration of ICM practices for Black Gram VBN 9	Low Yielding nature of existing varieties. Unawareness of new variety. Variety resistance to MYMV should be needed.	Varietal Evaluation – VBN 9	TNAU 2020	New proposal	10	4	Rs.10000	Dr.V. Kannan SMS (Agronomy) and Dr.A. Gopalakannan, Programme Coordinator		
5	Groundnut	Demonstration of ICM practices for Groundnut VRI 8	Low Yielding nature of existing varieties. Unawareness of new variety.	Varietal Evaluation – VRI 8	TNAU 2016	New proposal	10	4	Rs.36,000	Dr.V. Kannan SMS (Agronomy) and Dr.A. Gopalakannan, Programme Coordinator	-	
6	Brinjal	Demonstration on Bio intensive crop management practices in brinjal	Brinjal is cultivated in an area of 120 ha in Nagapattinam district under irrigated condition in both kharif and rabi seasons. Farmers used to	Soil application of Arka Actino plus @1kg/acre. Pheromone trap@1 for 400 sq.m. +	IIHR, (2017),	New proposal	10	4/ha	Rs.9500/-	K.Ragu, SMS (Hort), Dr. K.Chandrasekar, SMS (PP)	2	3

			cultivate local variety viz., Poyyur bnrinjal. The farmers are facing problems of heavy infestation of shoot and fruit borer, wilt incidence and poor crop growth due to non uptake of nutrients. The farmers use to apply more chemical pesticides and fertilizers. This led to high cost of cultivation and deterioration in quality of the produce and soil as well.	weekly release of 50,000 to 60,000 *Tric hogramma chilonis* + two sprays of Bt @1ml/L at 10 days interval at peak flowering.								
7	Mango	Demonstration of flower induction and fruit setting in Mango.	Low yield due to less flowers induction and fruit setting Mango is cultivated in an area of 170 ha in Nagapattinam district under irrigated condition in Kharif season.	NAA @ 20 ppm is sprayed at flowering to increase the fruit retention. During February 0.5% Urea (5 g/lit.) or 1% Potassium Nitrate (10g/lit.) may be sprayed to induce flowering, if trees do not flower	TNAU, 2016	New proposal	10	4/ha	Rs.12800/-	K.Ragu, SMS (Hort), Dr. K.Chandrasekar, SMS (PP)	-	3

				by that time. Spraying of 2% KNO3 at mustard size will increase the fruit set and retention of fruits. Application of Paclobutrazol @ 10 g a.i. for non-bearing trees during first fortnight of September will induce flowering and fruit set yield during off years.								
8	Onion	Demonstration of Onion Variety CO 6 in Nagapattinam District	Non availability of improved variety and low yield (14-17 t/ha). Short shelf life. Yield reduction due to improper Pest, Disease and Nutrient management.	Onion Variety CO 6	TNAU, 2020	New proposal	10	4/ha	7500	K.Ragu, SMS (Hort), Dr. K.Chandrasekar, SMS (PP)	-	2
9	Paddy	Demonstration of Integrated Pest and Disease Management (IPDM) in Paddy	Paddy is cultivated in around 1,67,019 ha of land of Nagapattinam district. Indiscriminate use	*Pseudomonas fluorescens* - Seed treatment @ 10 g/kg	TNAU (2016),	New proposal	10	4/ha	25,000	Dr. K.Chandrasekar, SMS (PP), Dr.V.Kannan	10	7

			of pesticides has significantly reduced the occurrence of natural enemies thereby reducing the yield.	Soil application @ 1 kg/ac Seedling root dip @ 1kg/ac Foliar application of *Lecanicillium lecanii* @ 1 L/ac Releases of *Trichogramma spp.* @ 2 cc (Stem borer & Leaf folder). Installation of Solar light trap @ 1/ac; Stem borer pheromone trap @ 10/ac and Yellow sticky trap @ 5/ac. Application of Neem oil @ 3%or Cartap Hydrochloride 50% SP @ 400 g ac^{-1} (Stem borer & Leaf folder) or						(Agronomy)		

				Azoxystrobin 25 SC @ 200 ml ac-								
10	Blackgram	Demonstration of IPM against Viral diseases of Black gram	Black gram is cultivated in around 71,819 ha of land of Nagapattinam district. Indiscriminate use of pesticides has significantly reduced the yield.	Growing resistant varieties such as VBN 8, VBN-9, VBN-10 and VBN-11. Seed treatment with Imidacloprid 600 FS@5 ml/Kg of seeds Installation of yellow sticky traps @ 12 number / ha Rogue out the virus infected plants up to 45 days Foliar spray of 10% Notchi leaf extract at 30 DAS (or) Neem formulation @ 3 ml / litre Spray	TNAU, 2020	New proposal	10	4/ha	20000	Dr. K.Chandrasekar, SMS (PP) Dr.V.Kannan (Agronomy)	10	7

				Imidaclopri d 17.8 SL @ 250 ml / ha (or) Thiametho xam 75 WG @ 100 grams / ha and repeat after 15 days. (if necessary).								
11	Coconut	Demonstration of Integrated Management package for Rugose spiraling whitefly	Coconut is cultivated in around 3421.46 ha of land of Nagapattinam district. Larger plantation areas were affected by Rugose spiraling whitefly.	Release of *Encarsia* (100 parasitoids /ac) and *Chrysoper la* (500 eggs/ac*)* , Yellow sticky traps (5/ac) – 5 x 1.5 -2 feet size Applicatio n of 1% starch solution on leaflets to flake out the sooty moulds In severe case, spray neem oil 0.5%	TNAU, 2020	New proposal	10	4/ha	15000	Dr. K.Chandrase kar, SMS K.Ragu, SMS (Hort), (PP)	-	2
12	Brinjal	Demonstration of IPM in	Irrigated condition. The soil pH of the	Soil Application	TNAU, 2020	New proposal	10	4/ha	15,500	Dr. K.Chandrase	-	2

		brinjal	village is 6.3 – 8.1 and EC 0.1 - 1 dSm^{-1}. The soil type is clay loam with low availabile N, high available P and K.	Of Neem Cake 250kg /Ha Soil Application Of *Pseudomonas* And *Trichoderma* @ 2.5 Kg /Ha Clipping Of Border Damaged Shoots Maize As Border Crop against Movement Of Whiteflies Installation Of Yellow Sticky Trap @ 12 / Ha Installation Of Shoot And Fruit Borer Pheromone Trap @ 12 / Ha Release Of *Trichogramma Chilonis* @ 5 Cc/Ha Foliar Application of Neem Soap @10						kar, SMS(PP), K.Ragu, SMS (Hort)		

				g /lit								
13	Livestock-Poultry	Demonstration of Pro Beads-EC on growth performance of Desi chicken.	Poor nutrition, Decreased production, Lack of awareness on newer technology.	Pro Beads - EC supplements in poultry feed.	TANUVAS, 2020.	Second	5	-	12,000	SMS –VET SMS- PP PC	1	1
14	Livestock	Demonstration on metabolic disease management by using Rapid sensitive detection kit for ketosis in dairy animal	Poor nutrition, Increased medical expenses, Decreased fertility Decreased milk production Lack of awareness on newer technologies	Ketoquant kit in detection of bovine ketosis.	TANUVAS, 2020	New proposal	5	-	10,000	SMS (AH) SMS(PP) PC.	-	1
15	Fisheries	Demonstration of GIFT Tilapia culture in Farm ponds	Prolific breeding nature of tilapia leads to low production Unawareness of the technology of culture of GIFT Tilapia	Demonstration on prestocking, stocking and poststocking management	RajivGandhi Centre for Aquaculture, 2011	2nd year	3	1 acre	64200	SMS (Fish Extn) and PC, KVK	1	2
16	Fisheries	Demonstration of murrel culture in Farm ponds	Lack of seed availability for murrel farming Low survival rate Lack of awareness about Murrel culture technology among farmers	Demonstration on feeding and pond management in murrel culture	CIFA, 2016	2nd year	3	1 acre	69000	SMS (Fish Extn) and PC, KVK	1	2

17	Rice - Extension	Demonstration of Rice Expert System as android based mobile app	Farmers could not visit KVK due to many constraints including time and distance Timely information is the key for timely agricultural operations for which Agricultural Expert advice is needed Farmer: Extension worker ratio has been drastically reduced	Rice expert system interface will be demonstrated Demonstration of usage of Rice Expert system to farmers	TNAU, 2018	New	2	-	7000	SMS (Fish Extn) and PC, KVK	-	-
18	Fisheries	Demonstration of Milk fish culture in farm ponds		Demonstration on prestocking, stocking and poststocking management	CIBA, Chennai, 2018	New	3	1 acre	45,000	PC & SMS (FE)	1	3
19	Home Science-Masmin	Demonstration of Masmin Production	1.Lack of awareness of value added fishery products. 2.Lack of knowledge of method of Masmin preparation. 3.Lack of /less popularization of Masmin although huge demand in market. 4.Low income of women and rural youth entrepreneurs.	TNJFU method	TNJFU, 2018	New	5	-	Rs.36000	Dr. A. Mathivanan, SMS (FPT)	2	2
20	Home	Demonstration of	1.Lack of /less	TNAU	TNAU,	New	5	-	Rs.10500	Dr. A.	2	3

	Science-Rice	Value Added Products from Rice	popularization of Rice based value added products although huge demand in market. 2.Low income of women and rural youth entrepreneurs.	method	2018					Mathivanan, SMS (FPT)		

***New FLD/2nd year/3rd year)**

9.2. Details of FLDs (Use one table per FLD)(TECHNOLOGY WRITEUP)

FLD No.:	**01**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Rice
Farming situation	Canal irrigation, Clay loam, Soil fertility status: Low N, Medium P and High K
Prioritized problem:	Low yield of existing local varieties and unawareness of New Variety
Title	Demonstration of Newly Released short duration Rice Variety CO 54 for higher productivity
Technology to be demonstrated:	Rice Variety- CO 54
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2021
Description	ADT 55 is a short duration variety – 110- 115 days, suitable to Kar/Kuruvai/Summer seasons. Its yield 6000 kg/ha and grain is medium slender. Importantly, it has moderate resistance to bacterial leaf blight.
Potential yield	64 q/ha
Critical input, quantity and cost	Seed, 16 kg, Rs.480
Farmers practice	CO 51
Source of input	TNAU
Photos	
Average farmers yield	6400 kg/ha
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.15000
Parameters to be studied:	Plant height, Panicles and Grain yield, pest and diseases, Gross cost, gross and net income, BCR
Parameters to be reported	Grain yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V, Kannan, SMS (Agronomy) and Dr. A. Gopalakannan, Programme Coordinator

FLD No.:	**02**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Rice
Farming situation	Canal irrigation, Clay loam, Soil fertility status: Low N, Medium P and High K
Prioritized problem:	In Nagapattinam, rice is the predominant crop during samba season. In Samba season CR 1009 is predominantly grown variety without any alternate varieties. Mono cropping of CR 1009 leads to susceptibility to pests such as brown plant hoppers (BPH) stem borers and diseases such as blast, bacterial leaf blight (BLB), grain discoloration and false smut. In order to provide an alternate choice of variety to farmers and besides to find the alternative, ADT 55 variety needs to be popularised.
Title	Demonstration of Newly Released Long Duration Rice Variety ADT 55 for higher productivity
Technology to be demonstrated:	Rice Variety- ADT 55
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2018
Description	ADT 55 matures in 155 to 160 days with tall, erect and high tillering plant habit and well adapted to single season canal dependent rice growing areas of Cauvery delta for Samba season (August-September sowing). ADT 55 has recorded a mean grain yield of 6533 kg/ha which is 9.8 and 12.7 per cent higher than CR 1009 (5947 kg/ha) and ADT 50 (5796 kg/ha) respectively.
Potential yield	6,533 kg/ha
Critical input, quantity and cost	Seed, 12 kg, Rs.400
Farmers practice	CR 1009
Source of input	TNAU
Photos	
Average farmers yield	6533 kg/ha
Season	RABI 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.15000
Parameters to be studied:	Plant height, Panicles and Grain yield, pest and diseases, Gross cost, gross and net income, BCR
Parameters to be reported	Grain yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V, Kannan, SMS (Agronomy) and Dr.A.Gopalakannan, Programme Coordinator

FLD No.:	**03**
Status (New proposal/2nd year /3rd year)	New proposal

Subject	Agronomy
Category:	Cereals
Crop/ enterprise:	Rice
Farming situation	Canal irrigation, Clay loam, Soil fertility status: Low N, Medium P and High K
Prioritized problem:	Nagapattinam is a coastal district, the ecosystems are characterized by sea water intrusion, low lying water logged areas, flood prone and ill drained lands. The soil texture of coastal saline soils is coarse sandy to fine loamy, moderately saline to alkaline. These soils are low in nitrogen, phosphorous, zinc and organic matter. There is a need to popularize saline tolerant variety in the district.
Title	Demonstration of Saline tolerant Rice Variety TRY 4 for higher productivity
Technology to be demonstrated:	Rice Variety- TRY 4
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2021
Description	TRY 4 is a 130 days duration, Medium slender variety. Average grain yield of 5,730 kg per hectare (ha) with 22% increased yield over TKM 13, 16.5% over ADT and 7.0% over TRY 3 with pest and disease
Potential yield	5,730 kg/ha
Critical input, quantity and cost	Seed, 16 kg/trial, Rs. 512
Farmers practice	CR 1009
Source of input	TNAU
Photos	
Average farmers yield	5730 kg/ha
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.15000
Parameters to be studied:	Plant height, Panicles and Grain yield, pest and diseases, Gross cost, gross and net income, BCR
Parameters to be reported	Grain yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V, Kannan, SMS (Agronomy) and Dr.A.Gopalakannan, Programme Coordinator

FLD No.:	**04**
Status (New proposal/2nd year /3rd year)	New Proposal
Subject	Agronomy
Category:	Pulses

Crop/ enterprise:	Black gram
Farming situation	Rice fallow, Clay loam, Soil fertility status: Low N, Medium P and High K
Prioritized problem:	Low Yielding nature of existing varieties. Unawareness of new variety. Variety resistance to MYMV should be needed.
Title	Demonstration of ICM practices for Black Gram VBN 11
Technology to be demonstrated:	Black Gram VBN 11
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2020
Description	Parentage: PU 31 x CO 6 Duration: 70-75 days Yield: Irrigated –940 kg/ha; Rainfed: 865 kg/ha Resistant to Mungbean Yellow Mosaic Virus and Leaf Curl Virus diseases. Suitable for all seasons of Tamil Nadu
Potential yield	940 kg/ha
Critical input, quantity and cost	Seed, 8 kg, Rs. 1040
Farmers practice	ADT 3
Source of input	NPRC Vamban
Photos	
Average farmers yield	940 kg/ha
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.10000
Parameters to be studied:	Plant height, Pods and Grain yield, pest and diseases, Gross cost, gross and net income, BCR
Parameters to be reported	Grain yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V, Kannan, SMS (Agronomy) and Dr.A.Gopalakannan, Programme Coordinator

FLD No.:	**05**
Status (New proposal/2nd year /3rd year)	OFT converted to FLD – 2nd Year
Subject	Agronomy
Category:	Oil Seeds
Crop/ enterprise:	Groundnut

Farming situation	Irrigated/ Rainfed, Sandy Clay loam, Soil fertility status: Low N, Medium P and High K
Prioritized problem:	Low Yielding nature of existing varieties. Unawareness of new variety.
Title	Demonstration of ICM practices for Groundnut VRI 8
Technology to be demonstrated:	Groundnut VRI 8
Hybrid or Variety:	Variety
Source of Technology:	TNAU 2016
Description	Duration : 105 – 110 days Season : Rainfed: April-May, June-July, October-November Irrigated: December-January, February-March, April-May Yield : Rainfed: 2130 kg/ha (22.0% over VRI 6) Irrigated: 2700 kg/ha (26.6% over VRI 6) Highest yield obtained : 5170 kg/ha Area of adoption : Groundnut growing district of Tamil Nadu Special features : Moderately resistant to late leaf spot and rust; Shelling outturn 70.0%; Oil content 49.0% Medium bold kerne
Potential yield	2,130 kg/ha
Critical input, quantity and cost	Seed, 40 kg, Rs. 3600
Farmers practice	
Source of input	KVK Virudhachalam
Photos	
Average farmers yield	2130 kg/ha
Season	Rabi 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.36,000
Parameters to be studied:	Pods and Grain yield, pest and diseases, Gross cost, gross and net income, BCR
Parameters to be reported	Grain yield, gross cost, gross and net income, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	Dr.V, Kannan, SMS (Agronomy) and Dr.A.Gopalakannan, Programme Coordinator

FLD No.:	**06**
Status	New proposal
Subject	Horticulture
Category:	Vegetables
Crop/ enterprise:	Brinjal
Farming situation	Borewell irrigated, Upland, Sandy loam

<table>
<tr><td>Prioritized problem:</td><td>Brinjal is cultivated in an area of 120 ha in Nagapattinam district under irrigated condition in both kharif and rabi seasons. Farmers used to cultivate local variety viz., Poyyur bnrinjal. The farmers are facing problems of heafy infestation of shoot and fruit borer, wilt incidence and poor crop growth due to non uptake of nutrients. The farmers use to apply more chemical pesticides and fertilizers. This led to high cost of cultivation and deterioration in quality of the produce and soil as well.</td></tr>
<tr><td>Title</td><td>Demonstration on Biointensive crop management practices in brinjal</td></tr>
<tr><td>Technology to be demonstrated:</td><td>Soil application of Arka Actino plus @1kg/acre.
Pheromone trap@1 for 400 sq.m. + weekly release of 50,000 to 60,000 Trichogramma chilonis + two sprays of Bt @1ml/L at 10 days interval at peak flowering.</td></tr>
<tr><td>Hybrid or Variety:</td><td>Variety</td></tr>
<tr><td>Source of Technology:</td><td>IIHR, (2017),</td></tr>
<tr><td>Description</td><td>Arka actino plus : P & Zn solubilizing, phytohormone producing, actinobacterial strains. 25% N and P fertilizers can be reduced.</td></tr>
<tr><td>Potential yield</td><td>300q/ha</td></tr>
<tr><td>Critical input, quantity and cost</td><td><table>
<tr><td>Critical input</td><td>Arka Actinio plus</td><td>Bacillus thuringiensis</td><td>Field board</td></tr>
<tr><td>Quantity</td><td>10 kg</td><td>10 kg</td><td>10 Nos</td></tr>
<tr><td>Cost (Rs)</td><td>2000</td><td>4500</td><td>3000/-</td></tr>
</table></td></tr>
<tr><td>Farmers practice</td><td>Soil application of carbofuron, Foliar application of Monocrotophos, Flubendiamide, Chlorantraniliprole.</td></tr>
<tr><td>Source of input</td><td>IIHR,</td></tr>
<tr><td>Photos</td><td>  </td></tr>
<tr><td>Average farmers yield</td><td>180 q/ha</td></tr>
<tr><td>Season</td><td>Kharif 2021</td></tr>
<tr><td>No. of Demos (replications)</td><td>10</td></tr>
<tr><td>Total cost for the Demo</td><td>Rs.9500/-</td></tr>
<tr><td>Parameters to be studied:</td><td>PDI for wilt, No. of larvae killed/plant Marketable Fruit yield q/ha</td></tr>
<tr><td>Parameters to be reported</td><td>Fruit yield, gross cost, gross and net income, BCR</td></tr>
<tr><td>Source of funding</td><td>KVK Main</td></tr>
<tr><td>Team members</td><td>SMS (Hort), SMS (PP)</td></tr>
</table>

FLD No.:	**07**

<table>
<tr><td>Status</td><td>New proposal</td></tr>
<tr><td>Subject</td><td>Horticulture</td></tr>
<tr><td>Category:</td><td>Fruits</td></tr>
<tr><td>Crop/ enterprise:</td><td>Mango</td></tr>
<tr><td>Farming situation</td><td>Borewell irrigated, upland, Sandy loam</td></tr>
<tr><td>Prioritized problem:</td><td>Low yield due to less flowers induction and fruit setting Mango is cultivated in an area of 170 ha in Nagapattinam district under irrigated condition in Kharif season.</td></tr>
<tr><td>Title</td><td>Demonstration of flower induction and fruit setting in Mango.</td></tr>
<tr><td>Technology to be demonstrated:</td><td>Naphthaleneacetic acid (NAA), Potassium Nitrate, Paclobutrazol ,</td></tr>
<tr><td>Hybrid or Variety:</td><td>Variety</td></tr>
<tr><td>Source of Technology:</td><td>TNAU, 2016</td></tr>
<tr><td>Description</td><td>NAA @ 20 ppm is sprayed at flowering to increase the fruit retention. During February 0.5% Urea (5 g/lit.) or 1% Potassium Nitrate (10g/lit.) may be sprayed to induce flowering, if trees do not flower by that time. Spraying of 2% KNO3 at mustard size will increase the fruit set and retention of fruits.
Application of Paclobutrazol @ 10 g a.i. for non-bearing trees during first fortnight of September will induce flowering and fruit set yield during off years.</td></tr>
<tr><td>Potential yield</td><td>90q/ha</td></tr>
<tr><td>Critical input, quantity and cost</td><td>
<table>
<tr><td>Critical input</td><td>NAA</td><td>Potassium Nitrate</td><td>Paclobutrazol</td><td>Mango special</td><td>Field board</td></tr>
<tr><td>Quantity</td><td>200g</td><td>20kg</td><td>2kg</td><td>20 Kg</td><td>10 Nos.</td></tr>
<tr><td>Cost (Rs)</td><td>2000</td><td>3000</td><td>1600</td><td>3200</td><td>3000</td></tr>
</table>
</td></tr>
<tr><td>Farmers practice</td><td>Without spraying of PGR</td></tr>
<tr><td>Source of input</td><td>TNAU Coimbatore</td></tr>
<tr><td>Photos</td><td></td></tr>
<tr><td>Average farmers yield</td><td>110 q/ha</td></tr>
<tr><td>Season</td><td>Kharif 2021</td></tr>
<tr><td>No. of Demos (replications)</td><td>10</td></tr>
<tr><td>Total cost for the Demo</td><td>Rs.12800/-</td></tr>
<tr><td>Parameters to be studied:</td><td>No of fruits / tree, No. of marketable fruit/tree, Fruit yield q/ha</td></tr>
<tr><td>Parameters to be reported</td><td>Fruit yield, gross cost, gross and net income, BCR</td></tr>
<tr><td>Source of funding</td><td>KVK Main</td></tr>
<tr><td>Team members</td><td>SMS (Hort), SMS (PP)</td></tr>
</table>

FLD No.:	**08**
Status (New proposal/2nd year /3rd year)	New proposal
Subject	Horticulture

Category:	Vegetable crops
Crop/ enterprise:	Onion
Farming situation	Irrigated, Red loamy soil
Prioritized problem:	Non availability of improved variety and low yield (14-17 t/ha). Short shelf life. Yield reduction due to improper Pest, Disease and Nutrient management.
Title	**Demonstration of Onion Variety CO 6 in Nagapattinam District**
Technology to be demonstrated:	Onion Variety CO 6
Hybrid or Variety:	Variety
Source of Technology:	HC & RI, TNAU, COIMBATORE
Description	A free flowering and seed setting throughout Tamil Nadu. Bulb yield :19.10 tonnes / ha ; Seed yield: 250- 300 kg/ ha. It recorded 20.94 % increase over the check CO(On) 5. 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. The bulb has a TSS of 15.4 ^{0} brix and ascorbic acid content of 10.8 mg/100 g.
Potential yield	19.10 t/ha
Critical input, quantity and cost	Seed: 250 g/0.25 ac,*Azospirillum* :1Kg, Field board :1 and Rs.750.
Farmers practice	Local Variety
Source of input	HC & RI, TNAU, COIMBATORE
Photos	
Average farmers yield	12-14 t/ha
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.7500
Parameters to be studied:	Fresh yield (t/ha), Dry bulb yield (t/ha), Market Preference, Pest and Disease incidence, BCR
Parameters to be reported	Fresh yield (t/ha), Market Preference, Pest and Disease incidence, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK Main
Team members	SMS (Horticulture), SMS (Plant Protection),

FLD No.	**09**
Status (New proposal/2nd year /3rd year)	Second Year
Subject	Plant Protection
Category:	Cereal
Crop/ enterprise:	Paddy
Farming situation	Irrigated, Clayey loam
Prioritized problem:	Paddy is cultivated in around 1,67,019 ha of land of Nagapattinam district. Indiscriminate use of pesticides has significantly reduced the occurrence of natural enemies thereby reducing the yield.
Title	**Demonstration of Integrated Pest and Disease Management (IPDM) in Paddy**
Technology to be demonstrated:	• *Pseudomonas fluorescens* - Seed treatment @ 10 g/kg • Soil application @ 1 kg/ac • Seedling root dip @ 1kg/ac • Foliar application of *Lecanicillium lecanii* @ 1 L/ac • Releases of *Trichogramma spp.* @ 2 cc (Stem borer & Leaf folder). • Installation of Solar light trap @ 1/ac; • Stem borer pheromone trap @ 10/ac and • Yellow sticky trap @ 5/ac. • Application of Neem oil @ 3%or Cartap Hydrochloride 50% SP @ 400 g ac^{-1} (Stem borer & Leaf folder) or Azoxystrobin 25 SC @ 200 ml ac^{-}
Hybrid or Variety:	Variety
Source of Technology:	TNAU, 2016
Description	*Pseudomonas fluorescens* Seed treatment @ 10 g/kg and Soil application @ 1 kg/ac along with Seedling root dip @ 1kg/ac reduces disease incidences. Foliar application of *Lecanicillium lecanii* @ 1 L/ac controls sucking pests in Paddy. Releases of *Trichogramma spp.* @ 2 cc (Stem borer & Leaf folder), Installation of Solar light trap @ 1/ac, Stem borer pheromone trap @ 10/ac and Yellow sticky trap @ 5/ac reduces the application of pesticides. Need based application of Neem oil @ 3%or Cartap Hydrochloride 50% SP @ 400 g ac^{-1} (Stem borer & Leaf folder) or Azoxystrobin 25 SC @ 200 ml/acre reduces the cost of cultivation.
Potential yield	3.0t/ha
Critical input, quantity and cost	*Pseudomonas fluorescens, Lecanicillium lecani*, *Trichogramma spp*, pheromone trap @ 10/ac and Yellow sticky trap
Farmers practice	Pesticide and fungicide spray

Source of input	TNAU, PKKVK , Grenicon Agrotech Pvt ., Ltd and Dealers.
Photos	
Average farmers yield	2.5t/ha
Season	Rabi
No. of Demos (replications)	10
Total cost for the Demo	Rs.25000/-
Parameters to be studied:	Grain yield, Pest and disease incidences, BCR and presence of Natural enemies
Parameters to be reported	Grain yield, Pest and disease incidences, BCR
Source of funding (KVK-Main/TSP/ /SC SP/ Project/Others (specify)	KVK main
Team members	SMS (Plant Protection)

FLD No.	**10**
Subject	Plant Protection
Theme	Integrated Pest Management (IPM)
Category	Pulses
Crop	Black gram
Farming situation	Irrigated, silty clay
Title of the OFT	**Demonstration of IPM against Viral diseases of Black gram**
Problem	Black gram is cultivated in around 71,819 ha of land of Nagapattinam district. Indiscriminate use of pesticides has significantly reduced the yield.

Technology	TNAU
Source and year	TNAU 2020
Description	Growing resistant varieties such as VBN 8, VBN-9, VBN-10 and VBN-11. Seed treatment with Imidacloprid 600 FS@5 ml/Kg of seeds Installation of yellow sticky traps @ 12 number / ha Rogue out the virus infected plants up to 45 days Foliar spray of 10% Notchi leaf extract at 30 DAS (or) Neem formulation @ 3 ml / litre Spray Imidacloprid 17.8 SL @ 250 ml / ha (or) Thiamethoxam 75 WG @ 100 grams / ha and repeat after 15 days. (if necessary).
Pest and disease reduction Yield/ha	30 – 40 %
Critical Inputs	• Imidacloprid 600 FS@5 ml/Kg • Yellow sticky traps • Neem formulation @ 3 ml / litre
Source of Inputs	Grenicon Agrotech Pvt ., Ltd and Dealers
	
Farmers practice	Spraying of insecticides
Description of FP	The farmers usually apply three or four sprays of insecticide
Pest and disease reduction Yield/ha	30 – 40 %
Parameters to be measured	Percentage reduction of pest incidence Reduction in number of insecticide spray Yield parameters
Major parameter to be reported	Percentage pest reduction Yield (q/ha)
Source of funding (TSP/KVK/SC SO/	KVK Main

Project/Others (specify)	
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.20,000
Team members	SMS (Plant Protection)

FLD No.	**11**
Subject	Plant Protection
Theme	Integrated Pest Management (IPM)
Category	Plantation crops
Crop	Coconut
Farming situation	Irrigated, silty clay and sandy soil
Title of the FLD	**Demonstration of Integrated Management package for Rugose spiraling whitefly**
Problem	Coconut is cultivated in around 3421.46 ha of land of Nagapattinam district. Larger plantation areas were affected by Rugose spiraling whitefly.
Technology	TNAU
Source and year	TNAU 2020
Description	Release of *Encarsia* (100 parasitoids /ac) and *Chrysoperla* (500 eggs/ac*)* , Yellow sticky traps (5/ac) – 5 x 1.5 -2 feet size Application of 1% starch solution on leaflets to flake out the sooty moulds In severe case, spray neem oil 0.5%
Pest and disease reduction Yield/ha	30 – 40 %
Critical Inputs	• *Encarsia* (100 parasitoids /ac) & *Chrysoperla* (500 eggs/ac*)* • Neem oil or Azadirachtin • Yellow sticky traps
Source of Inputs	TNAU, Grenicon Agrotech Pvt ., Ltd and Dealers

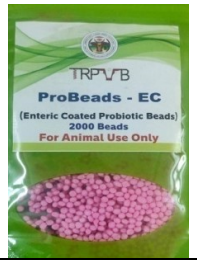
Photo	
Farmers practice	Spraying of Insecticides
Description of FP	-
Pest and disease reduction Yield/ha	30 – 40 %
Parameters to be measured	Percentage reduction of pest incidence Reduction in number of insecticide spray Yield parameters
Major parameter to be reported	Percentage pest reduction Yield (q/ha)
Source of funding (TSP/KVK/SC SO/ Project/Others (specify)	KVK Main
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.15000
Team members	SMS (PP) and SMS (Hort),
Subject	Plant Protection

FLD No.	**12**
Subject	Plant Protection
Theme	Integrated Pest Management (IPM)
Category	Vegetables
Crop	brinjal
Farming situation	Irrigated, silty clay and sandy soil
Title of the FLD	**Demonstration of IPDM in brinjal**
Problem	Irrigated condition.The soil pH of the village is 6.3 – 8.1 and EC 0.1 - 1 dSm^{-1}. The soil type is clay loam with low availabile N, high available P and K.

Technology	TNAU
Source and year	TNAU 2020
Description	Soil Application Of Neem Cake 250kg /Ha Soil Application Of *Pseudomonas* And *Trichoderma* @ 2.5 Kg /Ha Clipping Of Border Damaged Shoots Maize As Border Crop against Movement Of Whiteflies Installation Of Yellow Sticky Trap @ 12 / Ha Installation Of Shoot And Fruit Borer Pheromone Trap @ 12 / Ha Release Of *Trichogramma Chilonis* @ 5 Cc/Ha Foliar Application of Neem Soap @10 g /lit
Pest and disease reduction Yield/ha	30 – 40 %
Critical Inputs	• *Pseudomonas* – 2 kg • *Trichoderma* – 2 kg • Fruit Borer Pheromone Trap • Yellow Sticky Trap
Source of Inputs	TNAU, Grenicon Agrotech Pvt ., Ltd and Dealers
Photo	
Farmers practice	Spraying of Insecticides
Description of FP	-
Pest and disease reduction Yield/ha	30 – 40 %
Parameters to be measured	Percentage infestation % Disease index Yield parameters
Major parameter to be reported	Percentage pest reduction Yield (q/ha)
Source of funding (TSP/KVK/SC SO/	KVK Main

Project/Others (specify)	
Season	Kharif 2021
No. of Demos (replications)	10
Total cost for the Demo	Rs.15500
Team members	SMS (PP) and SMS (Hort),
Subject	Plant Protection

FLD No.:	**13**
Status (New proposal/2nd year /3rd year)	2nd year
Subject	Veterinary
Category:	Improved Feeding practices
Crop/ enterprise:	Poultry farming
Farming situation	Semi intensive rearing
Prioritized problem:	Poor nutrition, decreased Low production
Title	**Demonstration of ProBeads-EC on growth performance of Desi chicken**
Technology to be demonstrated:	**ProBeads-EC supplements in poultry feed**
Hybrid or Variety:	-
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. By using enteric coating technology, to ensure the targeted delivery of probiotics in the targeted area of action ie. small intestine which maintains gut health in chicken by competitive exclusions of pathogenic bacteria in the intestine. 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°C (Refrigerationtemperature) and has to be consumed with 90 days of manufacturing.
Potential yield	Helps for faster growth and improves disease resistance
Critical input, quantity and cost	**ProBeads-EC**
Farmers practice	No growth promoters feeding
Source of input	TANUVAS,2020

Photos	
Average farmers yield	750 gm at 100 days
Season	Throughout the year
No. of Demos (replications)	5
Total cost for the Demo	Rs.12000
Parameters to be studied:	Fortnight weight gain , Survivability, BCR
Parameters to be reported	Fortnight weight gain , Survivability , BCR
Source of funding (KVK-Main/TSP/	KVK Main
/SC SP/ Project/Others (specify)	
Team members	SMS (Veterinary) & SMS (PP)

FLD No.	**14**
Status (New proposal/2nd year /3rd year)	New proposal- Approved and carried from last year action plan.
Subject	Veterinary
Category:	Improved Feeding practices
Crop/ enterprise:	Dairy farming
Farming situation	Semi intensive
Prioritized problem:	Poor nutrition, Decreased fertility and decreased milk production
Title	**Demonstration on Metabolic disorder management in dairy animals**
Technology to be demonstrated:	Ketoquant kit in detection of bovine ketosis
Hybrid or Variety:	-
Source of Technology:	**TRPVB, TANUVAS**

Description	Ketoquant, a rapid sensitive detection kit for ketosis is a colorimetric test which measures ketone bodies. It is an enzymebased test that accurately detects ketone bodies in any biological sample. It is point of care diagnostic kit for the detection of increased ketone bodies that appear in the early lactating cows.
Potential yield	Helps for faster detection and management of animals in energy loss and reduces the more production loss.
Critical input, quantity and cost	**Keto check kit, Kitonil gel, Display board, Training**
Farmers practice	No kit used
Source of input	TANUVAS
Photos	
Average farmers yield	
Season	All season
No. of Demos (replications)	5
Total cost for the Demo	Rs.10000
Parameters to be studied:	INCIDENCE OF DISEASE, TIME TO RECOVER
Parameters to be reported	Time to recover, BCR, incidence of disease.
Source of funding (KVK-Main/TSP/	KVK Main
/SC SP/ Project/Others (specify)	
Team members	SMS (Veterinary), PC & SMS (PP)

FLD No.:	**15**
Status	New

Subject	Fisheries Science
Category:	Inland Fisheries
Crop/ enterprise:	GIFT Tilapia
Farming situation	Borewell/river water
Prioritized problem:	• Prolific breeding nature of tilapia leads to low production • Unawareness of the technology of culture of GIFT Tilapia
Title	**Demonstration of GIFT Tilapia culture in Farm ponds**
Technology to be demonstrated:	Demonstration on prestocking, stocking and poststocking management
Hybrid or Variety:	Hybrid
Source of Technology:	RajivGandhi Centre for Aquaculture, 2011
Description	Genetically Improved Farmed Tilapia (GIFT), is one of the important candidate species for aquaculture in India. It has become a fish of choice because it is fast growing and an affordable source of animal protein.Tilapia is the third most important fish after carps and salmon in the world. India's contribution for export to outside countries of Tilapia is recently insignificant and there is vast potential for exporting this fish. This species is most suitable for culture in tropical zones as the temperatures are highly suitable for fast growth. This fish can tolerate wide range of temperatures. This fish is a prolific breeder and the production of mono sex all male culture restricts them to reproduce as they may increase recruitment. It is a highly resistant species against disease. This species takes only 6 months to reach to 600-900 gms size from 50-80 gm size stocking.
Potential yield	2 tons/acre
Critical input, quantity and cost	Fish feed (315kg @ Rs.60/kg) - Rs. 18,900 Fish seed (500 nos @ Rs.5/seed) – Rs. 2500
Farmers practice	Country tilapia seeds are used for tilapia culture by farmers. The prolific breeding nature of tilapia leads to excessive recruitment that causes stunting in growth.
Source of input	KVK
Photos	 
Average farmers yield	< 1 ton/acre
Season	Year round
No. of Demos (replications)	3

Total cost for the Demo	Rs. 64,200
Parameters to be studied:	Growth , survival rate and yield
Parameters to be reported	Growth , survival rate and yield
Source of funding	ICAR-ATARI
Team members	SMS (Fish Extn) and PC, KVK

FLD No.:	**16**
Status	2nd year
Subject	Fisheries Science
Category:	Inland Fisheries
Crop/ enterprise:	Murrel
Farming situation	Borewell/river water
Prioritized problem:	• Lack of seed availability for murrel farming • Low survival rate • Lack of awareness about Murrel culture technology among farmers
Title	**Demonstration of murrel culture in Farm ponds**
Technology to be demonstrated:	Demonstration on feeding and pond management in murrel culture
Hybrid or Variety:	Variety
Source of Technology:	CIFA, 2016
Description	Murrel is an airbreathing fish which comes under family channidae. It fetches a good market value due to its palatability and medicinal values. It can also tolerate low dissolved oxygen level. Central Institute of Freshwater aquaculture standardized the technology of murrel culture. Fingerlings of murrel are stocked at the rate of 1/m2. As murrel are carnivorous, good quality protein rich pellets can be given to the fishes at the rate of 5% of body weight initially and then reduced to 2% during later stages of culture. Harvesting can be done at the size of 600-700 gms. It can be sold in open markets at Rs. 400-500 in live condition.
Potential yield	1 ton/acre
Critical input, quantity and cost	Fish seed (100 nos @ Rs.80/seed) – Rs.8000 Fish feed (150kg @ Rs.100/kg) - Rs. 15,000
Farmers practice	Farmers' stock wild collected murrel seeds in the ponds. Wild seeds are not domesticated for pellet feeds. So they prefer live feeds. It is difficult to provide live fishes for their diets. Hence the production is usually low for the farmers
Source of input	KVK

Photos	 
Average farmers yield	< 500kgs/acre
Season	Year round
No. of Demos (replications)	3
Total cost for the Demo	Rs. 69,000
Parameters to be studied:	Growth , survival rate and yield
Parameters to be reported	Growth , survival rate and yield
Source of funding	ICAR-ATARI
Team members	SMS (Fish Extn) and PC, KVK

FLD No.:	**17**
Status	New
Subject	Agriculture
Category:	Agriculture Extension (ICT)
Crop/ enterprise:	Paddy
Farming situation	-
Prioritized problem:	• Farmers could not visit KVK due to many constraints including time and distance • Timely information is the key for timely agricultural operations for which Agricultural Expert advice is needed • Farmer: Extension worker ratio has been drastically reduced
Title	**Demonstration of Rice Expert System as android based mobile app**
Technology to be demonstrated:	• Rice expert system interface will be demonstrated • Demonstration of usage of Rice Expert system to farmers
Hybrid or Variety:	ICT Tool
Source of Technology:	TNAU, 2018
Description	• A demonstration will be given about how the Expert system works and its integrated components. The respondents will be called thrice in one cropping season of rice • At the end of the season, again the respondents will be called for a results sharing participatory

	workshop during which the effectiveness of the Rice Expert system will be analysed
Potential yield	
Critical input, quantity and cost	
Farmers practice	Farmer to farmers information transfer for information on decision support
Source of input	
Photos	 
Average farmers yield	
Season	Year round
No. of Demos (replications)	2
Total cost for the Demo	Rs. 7000
Parameters to be studied:	Extent of knowledge and skill gained Degree of information exchange and motivation of other farmers Perceived cost and time saved due to the utility of Expert system
Parameters to be reported	Extent of knowledge and skill gained Degree of information exchange and motivation of other farmers Perceived cost and time saved due to the utility of Expert system
Source of funding	ICAR-ATARI
Team members	SMS (Fish Extn) and PC, KVK

FLD No.:	**18**
Category:	Fisheries
Crop/ enterprise:	Milk fish culture
Prioritized problem:	Unutilized land suitable for aquaculture activities. Most of the shrimp farmers stopped shrimp culture activities due to frequent occurrence of diseases (WSSV, AHPND and EHP).
Technology to be demonstrated:	Demonstration of Milk fish (*Chanos channos*) culture in farm ponds
Hybrid or Variety:	Variety
Name of the Hybrid or Variety:	Milk fish culture

Source of Technology:	CIBA, 2018
Status (New proposal/approved FLD : 2nd / 3rd Year)	New proposal
Name of critical input:	Fish seed and Display board
Qty per Demo:	Fish seed : 1000 nos. (Rs.8/- seed) Display board: Rs. 500/-
Cost per Demo (Rs.):	15,000
No. of Demos:	3
Total cost for the Demo (Rs.):	45,000
Parameters to be studied:	Growth rate, specific growth rate, FCR and production
Team members	Dr. A. Gopalakannan & Mr. E. Hino Fernando

FLD No.		**19**
Status		New proposal
Subject	:	Fisheries (Home Science)
Category	:	Value Addition
Crop	:	Masmin
Farming situation	:	-
Prioritized problem	:	1. Lack of awareness of value added fishery products. 2. Lack of knowledge of method of Masmin preparation. 3. Lack of /less popularization of Masmin although huge demand in market 4. Low income of women and rural youth entrepreneurs.
Title	:	**Demonstration of Masmin Production**
Technology to be demonstrated		Masmin Production
Hybrid or Variety	:	Variety
Source of Technology	:	TNJFU 2018 (Rathnakumar, 2018. Preparation of Value Added Fishery Products.)
Description	:	Masmin preparation method by TNJFU was released during the year 2018 by Rathnakumar et al., in his book 'Preparation of Value Added Fishery Products'. This method widely popularized among the coastal districts of Tamilnadu.
Potential yield/income	:	Rs.80/Kg
Critical Inputs	:	Fish - Tuna, Salt and Packaging materials

 		
Farmers practice	:	Conventional method
Source of Inputs	:	Fish Landing Centers - **Akkaraipettai**, Nagapattinam.
Photos		
Ave. farmers yield or income	:	Rs.50/Kg
Season	:	Feb - May
Cost per Demo (Rs.)	:	Rs. 7,200/-
No. of Demos (replications)	:	5
Total cost for the FLD	:	Rs. 36,000/-
Parameters to be studied	:	Self life, Moisture content, Sensory Evaluation.
Parameter to be reported	:	Self life and Sensory Evaluation
Source of funding	:	KVK Main
Team members		Dr. A. Mathivanan, SMS (Fish Processing Technology)

FLD No.	**:**	**20**
Status	:	New proposal
Subject	:	Home Science
Category	:	Value Addition
Crop	:	Mango
Farming situation	:	-

Prioritized problem	:	1. Lack of awareness of value added mango products. 2. Lack of knowledge of method of Mango RTS preparation. 3. Lack of /less popularization of Mango RTS although huge demand in market 4. Low income of women and rural youth entrepreneurs.
Title	:	**Demonstration of Mango RTS Beverage Production**
Technology to be demonstrated	:	Mango RTS Production
Hybrid or Variety	:	Variety
Source of Technology	:	TNAU 2019
Description	:	Mango RTS production technology was released by TNAU to increase the farmers income through value addition of mango. Although the mango cultivable area is very high in Nagapattinam district but the adoption of technology of value addition of mango is very less. So, this technology should be widely popularized among the farmers.
Potential yield/income	:	Rs.120/Lit.
Critical Inputs	:	Mango, Sugar, Acid and Packaging materials
 		
Farmers practice	:	Conventional method
Source of Inputs	:	Mango farms, Nagapattinam.
Photos		
Ave. farmers yield or income	:	Rs.80/Lit.

Season		May – Sep.
Cost per Demo (Rs.)	:	Rs. 2,100/-
No. of Demos (replications)	:	5
Total cost for the FLD	:	Rs. 10,500/-
Parameters to be studied	:	Self life, TSS, Sensory Evaluation.
Parameter to be reported	:	Self life and Sensory Evaluation
Source of funding	:	KVK Main
Team members		Dr. A. Mathivanan, SMS (Fish Processing Technology)

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
1	Blackgram	Low Yield	ICM	Variety	VBN 8	TNAU	Seed, Pseudomonas, Pulse wonder, Azadiractin, PPFM Yellow Sticky Trap	10 kg 1 kg 2 kg 200 ml 500 ml 5	Rs. 1300 Rs. 168 Rs. 420 Rs 200 Rs. 200 Rs.250	50	Rs.2538	No. of Pods, Yield	Dr.V, Kannan, SMS (Agronomy) and Dr.A.Gopalakannan, Programme Coordinator
2	Greengram	Low Yield	ICM	Variety	CO 8	TNAU	Seed, Pseudomonas, Pulse wonder, Azadiractin, PPFM Yellow Sticky Trap	10 kg 1 kg 2 kg 200 ml 500 ml 5	Rs. 1300 Rs. 168 Rs. 420 Rs. 200 Rs. 200 Rs.250	50	Rs.2538	No. of Pods, Yield	Dr.V, Kannan, SMS (Agronomy) and Dr.A.Gopalakannan, Programme Coordinator
	Total									**100**	**2,53,800**		

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
Nil													

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
	IFS	-	-	-	-	-	-	-	-
	EDP	-	--	-	-	-	-	-	-
	FFS								
	NFDB	-	-	-	-	-	-	-	-
	SERP	-	-	-	-	-	-	-	-

11. Externally funded projects

11.1. Projects summary

S.No.	Title	Funding agency	Duration in years	Year of start	Physical details (no. of programmes, participants, area etc.)	Total budget (Rs)	Current year budget (Rs)	Team Members Involved
1	Poultry Rearing (other than Chicken) under LEDP	NABARD	1 year	2020	5 programme (5 villages, 150 beneficiaries)	6,18,000	-	SMS(Veterinary), SMS(Plant Protection) and Programme Coordinator
2	Goat Rearing –value chain integration of Goat farming through returns migrants of Nagapattinam Dt.	NABARD	2 year	2021	50 nos. beneficiaries	16,80,000	-	SMS(Veterinary), SMS(Plant Protection) and Programme Coordinator

11.2. Project details

Project No. : 1

Funding Agency	NABARD
State/Central/Over Seas	State
Title	Poultry Rearing (other than Chicken) under LEDP
Objectives	To empower vulnerable women group livelihood
Study area	Livestock-Poultry rearing
Methodology	Technical Training, Demonstration and Exposure visit
Team Members	SMS(Veterinary), SMS(Plant Protection) and Programme Coordinator
Budget	Rs. 6,18,000/-

Project No. : 2

Funding Agency	NABARD
State/Central/Over Seas	State
Title	Goat Rearing –value chain integration of Goat farming through returns migrants of Nagapattinam Dt.
Objectives	To restore and rehabilitate the migrant workers of Nagapattinam Dt.empower vulnerable women group livelihood
Study area	Livestock-Goat farming
Methodology	Training with value chain integration
Team Members	SMS(Veterinary), SMS(Plant Protection) and Programme Coordinator
Budget	Rs. 16,80,000

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	Names of the team members involved
1	ICM	Rice	Lack of knowledge on ICM and IPDM technologies	FLD	ICM in Rice	1	30	SMS(Agronomy)
2	ICM	Rice	Lack of knowledge on ICM Practices	FLD	Irrigation and weed management	1	40	SMS(Agronomy)

3	Organic farming	Vermi compost production	Lack of knowledge on composting technology	-	Farm waste management	1	30	SMS (Agronomy)
4	ICM	Pulses	Lack of knowledge on ICM technologies	FLD	ICM in pulses	1	30	SMS(Agronomy)
5	ICM	Groundnut	Lack of knowledge on ICM technologies	FLD	ICM in Oilseeds	1	40	SMS(Agronomy)
6	Organic farming	Waste management	Lack of knowledge on composting technology	-	Organic farming – input management	1	40	SMS(Agronomy)
7	ICM	Fodder crop	Lack of awareness for the cultivation of fodder crops.	-	Fodder crop cultivation	1	30	SMS(Agronomy)
8	ICM	Vegetables	Lack of awareness for the cultivation of Pandhal vegetables	OFT & FLD	ICM in Panthal Vegetables	1	30	Mr.K.Ragu, SMS(Horti)
9	ICM	Vegetables	Lack of awareness for the cultivation of Pandhal vegetables	OFT & FLD	Production technology of Vegetable crops	1	30	Mr.K.Ragu, SMS(Horti)
10	ICM	Vegetables	Lack of awareness for the cultivation of Grafting technologies	OFT & FLD	Grafting technology in fruits and vegetables	1	30	Mr.K.Ragu, SMS(Horti)
11	ICM	Mango	Lack of	FLD	ICM in Mango	1	30	Mr.K.Ragu,

			knowledge on ICM in Mango					SMS(Horti)
12	ICM	Banana	Lack of knowledge on ICM in banana	OFT	Production technology of Banana	1	30	Mr.K.Ragu, SMS(Horti)
13	ICM	Vegetables	Lack of knowledge on ICM in Vegetable crops	OFT & FLD	Nursery preparation and seedling production in Vegetables	1	30	Mr.K.Ragu, SMS(Horti)
14	ICM	Flower crop	Lack of knowledge on ICM in flower crops	-	ICM in Flower crops	1	30	Mr.K.Ragu, SMS(Horti)
15	ICM	Mango	Lack of knowledge on ICM in Mango	FLD	Training and Pruning of fruit crops	1	30	Mr.K.Ragu, SMS(Horti)
16	INM	Vegetable	Lack of knowledge on ICM in Vegetable crops	OFT & FLD	INM in Vegetable crops	1	30	Mr.K.Ragu, SMS(Horti)
17	INM	Mango	Lack of knowledge on ICM and INM in Mango	FLD	INM in Fruit crops	1	30	Mr.K.Ragu, SMS(Horti)
18	IPDM	Paddy	Lack of knowledge on IPDM in Paddy	FLD	IPDM in Paddy	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)
19	IPDM	Pulses	Lack of knowledge on IPDM in pulses	FLD	IPDM in pulses	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)
20	IPDM	Oilseeds	Lack of knowledge on IPDM in Oilseeds	FLD	IPDM in Oilseeds	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)

21	IPDM	Cotton	Lack of knowledge on IPDM in cotton	OFT	IPDM in cotton	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)
22	IPDM	Vegetables	Lack of knowledge on IPDM in vegetables	OFT & FLD	IPDM in vegetables	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)
23	IPDM	Flowers	Lack of knowledge on IPDM in flowers	FLD	IPDM in flowers	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)
24	IPDM	Fruit crops	Lack of knowledge on IPDM in Fruit crops	FLD	IPDM in Fruit crops	1	30	Dr.K.Chandrasekar, SMS (Plant Protection)
25	Livestock production	Goat	Lack of knowledge on Scientific goat farming	OFT	Scientific goat farming	2	60	SMS (AH) & PP
26	Livestock production	Poultry	Lack of knowledge on Desi bird rearing	FLD	Desi bird rearing	1	30	SMS (AH) & PP
27	Dairying	Dairy	Lack of knowledge on Value addition of milk	FLD	Value addition of milk	2	60	SMS (AH) & PP
28	IFS	IFS	Lack of knowledge on Integrated farming	FLD	Integrated farming	1	30	PC, SMS (AH) & PP
29	Livestock production	Poultry	Lack of knowledge on Alternate poultry farming	FLD	Alternate poultry farming	1	30	SMS (AH) & PP
30	Fisheries	Carp Culture	Lack of knowledge on	OFT & FLD	Carp Culture techniques	1	30	Mr.E.Hino Fernando , SMS(Fisheries

			Carp Culture					Extension)
31	Fisheries	Freshwater fish	Lack of knowledge on Freshwater fish culture	OFT & FLD	Freshwater fish culture technology	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
32	Fisheries	GIFT Tilapia	Lack of knowledge on GIFT Tilapia culture	OFT & FLD	GIFT Tilapia culture technology	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
33	Fisheries	Murrel	Lack of knowledge on Murrel culture	OFT & FLD	Murrel culture technology	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
34	Fisheries	Composite Fish	Lack of knowledge on Composite Fish culture	OFT & FLD	Composite Fish culture technology	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
35	Fisheries	Carp	Carp seed production technology	OFT & FLD	Carp seed production technology	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
36	Fisheries	Fish	Lack of knowledge on Fish culture in HDPE ponds	OFT & FLD	Fish culture in HDPE ponds	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
37	Fisheries	Ornamental fish	Lack of knowledge on Ornamental fish culture techniques	FLD	Ornamental fish culture techniques	1	30	Mr.E.Hino Fernando , SMS(Fisheries Extension)
38	IFS	-	Lack of knowledge and improper utilization of the available land resource	OFT	Integrated fish farming	1	30	Dr.A.Gopalakannan, Programme Coordinator
39	Production and	Fisheries	High cost of commercial	-	Shrimp culture by	1	30	Dr.A.Gopalakannan, Programme

	Management		growth enhancer		Biofloc Technology			Coordinator
40	Production and Management	Aqua culture	Lack of Scientific knowledge	-	Disease management in shrimp farming	1	30	Dr.A.Gopalakannan, Programme Coordinator
41	Production and Management	Fisheries	Lack of Scientific knowledge	FLD	Disease Management in carp Farming	1	30	Dr.A.Gopalakannan, Programme Coordinator
42	Production and Management	Fisheries	Lack of Scientific knowledge	-	Aquaponics	1	30	Dr.A.Gopalakannan, Programme Coordinator
43	Production and Management	Aqua culture	Lack of Scientific knowledge	-	Spirulina culture	1	30	Dr.A.Gopalakannan, Programme Coordinator
44	Value added fishery Products	Fish	Lack of popularization of Value added fishery Products although huge demand in the market	OFT & FLD	Masmin preparation	1	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
45	Value added fishery Products	Fish	Lack of popularization of Value added fishery Products although market demand.	OFT & FLD	Fish Cake preparation	1	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
46	Value added fishery Products	Fish	Lack of popularization of Value added	OFT & FLD	Fish Pasta preparation	1	40	Dr. A. MATHIVANAN, SMS (Fish Processing

			fishery Products although huge demand in the market					Technology)
47	Value added Mango Products	Mango	Lack of popularization of Value added Mango Products although huge demand in the market	FLD	Mango Squash preparation	1	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
48	Value added Mango Products	Mango	Lack of popularization of Value added Mango Products although huge demand in the market	FLD	Mango Squash preparation	1	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
49	Value added Mango Products	Mango	Lack of popularization of Value added Mango Products although huge demand in the market	FLD	Mango Pickle preparation	1	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
50	Value added Mango Products	Mango	Lack of popularization of Value added Mango Products although huge demand in the market	FLD	Mango Pickle preparation	2	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
51	Value added		Lack of	FLD	Fish/Prawn	2	40	Dr. A. Mathivanan,

	fishery Products	Fish	popularization of Value added fishery Products although huge demand in the market		Pickle preparation			SMS (Fish Processing Technology)
52	Value added fishery Products	Fish	Lack of popularization of Value added fishery Products although huge demand in the market	OFT	Dry Fish & Masala dry fish preparation	2	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
53	Value added fishery Products	Fish	Lack of popularization of Value added fishery Products although huge demand in the market	OFT & FLD	Freshwater fishes - Value added Products	3	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
54	Value added fishery Products	Fish	Lack of popularization of Value added fishery Products although huge demand in the market	OFT & FLD	Ready to eat fishery Products	4	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)

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	Seed	Paddy	Lack of	FLD	seed	1	25	SMS(Agronomy)

	production		knowledge on seed production		production technolgies in Rice			
2	Production of Inputs	Vermi compost	Lack of knowledge on Waste management	-	Production of organic inputs	1	25	SMS(Agronomy)
3	ICM	Vegetable crop	Lack of knowledge on quality seedling production	OFT & FLD	Nursery preparation and seedling production in Vegetables	1	25	Mr.K.Ragu, SMS(Horti)
4	ICM	Vegetable crop	Lack of knowledge on Grafting technologies	FLD	Grafting technology in fruits and vegetables	1	25	Mr.K.Ragu, SMS(Horti)
5	EDP	Bee keeping	Lack of knowledge on Beekeeping	-	Beekeeping	1	25	Dr.K.Chandrasekar, SMS (Plant Protection)
6	EDP	Mushroom	Lack of knowledge on Mushroom	-	Mushroom Production Technology	1	25	Dr.K.Chandrasekar, SMS (Plant Protection)
7	EDP	Silkworm	Lack of knowledge on Silkworm Production	-	Silkworm Production Technology	1	25	Dr.K.Chandrasekar, SMS (Plant Protection)
8	EDP	Dairying	Lack of knowledge on Milk value addition	FLD	Milk value addition	1	30	SMS (AH) & PP
9	Livestock production	Dairy	Lack of knowledge on Scientific dairy farming	FLD	Scientific dairy farming	1	30	SMS (AH) & PP
10	Fisheries	Seed production	Lack of	FLD	Induced	1	30	SMS (Fish. Extn.)

			knowledge on seed production technology of carp		seed production technology of carp			
11	Fisheries	Ornamental fish	Lack of knowledge on Ornamental fish culture	FLD	Ornamental fish culture technology	1	30	SMS (Fish. Extn.)
12	Fish Handling	Fish	Unhygienic handling of fishes in On-board, Landing centers & in Fish farms	-	Hygienic fish handling practices	2	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
13	Fishing practices	Fish	Unhygienic handling of fishes in On-board, Landing centers & in Fish farms	-	Responsible Fishing practices	1	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)
14	Fish Handling	Fish	Unhygienic handling of fishes in On-board, Landing centers & in Fish farms	-	Hygienic farm fish handling practices	2	40	Dr. A. Mathivanan, SMS (Fish Processing Technology)

12.3. Trainings for Extension Personnel planned during 2021-22

S. No	Thematic area	Training Course Title	No. of Courses
1	Crop Production	Productivity enhancement in field crops	1
2	INM	Integrated Nutrient management	1
3	Nursery Production	Grafting technology in fruits and vegetables	1
4	Integrated pest and disease management	Ecological Engineering Methods for Pest Management in Paddy	1

5	Livestock production and management	Training programme on Advanced field diagnostic kit usages developed by SVU	1
6	Fisheries	Advanced aquaculture technologies	1
7	Fisheries	Scientific carp culture techniques	1

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

S.No.	Training title	Duration (Days)	No. of programmes	Sponsoring agency
1	Beekeeping	7	2	National Bee Board (NBB)
2	Friends of Coconut Tree (FoCT) Training	3	2	CDB
3	Goat farming value chain	1	1	NABARD

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	ICM	ICM	1	ATMA Farmer Members	50	NADP-ATMA	SMS Agronomy
1	Integrated Crop Management	Scientific Cashew Cultivation Technology	2	Farmer and farm woman	100	DCCD Kochin	SMS Horticulture
1	Bee keeping	Scientific Beekeeping	2	Farmer and farm woman	50	NBB	SMS(Plant Protection)
2	Livestock production	Goat farming value chain integration	1		50	NABARD	SMS (AH) & PP
3	Fisheries	Integration of dairy farm with fisheries	1		30	NFDB	PC, SMS (AH) & PP

***SHGs, NYKs, Women, Youth etc.**

13. Extension programmes planned during 2021-22

S. No.	Extension programme	No. of programmes	No. of Participants	Team member involved
1	Advisory Services	250	250	PC, All SMS and PAs
2	Diagnostic visits	150	150	PC, All SMS and PAs
3	Field Day	10	250	PC, All SMS and PAs
4	Group discussions	5	100	PC, All SMS and PAs
5	KisanGhosthi	-	-	-
6	Film Show	50	200	PC, All SMS and PAs
7	KisanMela	2	1000	PC, All SMS and PAs
8	Exhibition	2	1000	PC, All SMS and PAs
9	Scientists' visit to farmers field	50	100	PC, All SMS and PAs
10	Plant/Soil health/Animal health camps	5	500	PC, All SMS and PAs
11	Ex-trainees Sammelan	-	-	-
12	Farmers' seminar/workshop	2	200	PC, All SMS and PAs
13	Method Demonstrations	10	300	PC, All SMS and PAs
14	Celebration of important days	5	250	PC, All SMS and PAs
15	Special day celebration	5	250	PC, All SMS and PAs
16	Exposure visits	5	200	PC, All SMS and PAs
17	Technology week	1	700	PC, All SMS and PAs
18	FFS	1	30	PC, All SMS and PAs
19	Farm innovators meet	1	100	PC, All SMS and PAs
20	Awareness programs	2	200	PC, All SMS and PAs
21	Lecture delivered	30	150	PC, All SMS and PAs
22	TV/Radio Programme	50	-	PC, All SMS and PAs
23	News clips	50	-	PC, All SMS and PAs
24	Popular Articles	15	-	PC, All SMS and PAs
25	Research Article	5	-	PC, All SMS and PAs
26	Extension Literatures	20	500	PC, All SMS and PAs
27	Kisan Mobile Advisory Services	30	4000	PC, All SMS and PAs
28	Others (Specify)	-	-	-
	Total	**806**	**10730**	

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

14.1. Technological knowledge

S. No.	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
1	Crop cafeteria	Newly released crop varieties	1.0 ha	SMS(Agronomy) and SMS(Horticulture)
2	Micro Irrigation Cafeteria	Kitchen gardening and Nutri gardening	2 no.	SMS(Agronomy) and SMS(Horticulture)
3	Demonstration Units	Vermi compost production	1000 kgs	PC and All SMS
		Azolla production	500 kg	
		Quail	500 Nos	

		Backyard poultry- chicks	500 Nos	
		Goat kids	10 nos.	
		Moringa seedlings	1000 Kg	
		Aquaphonics - Vegetables	500 Kg	
		Coconut seedlings	5000 Nos	
		Fodder cafeteria- Fodder slips	5,000 Nos	
		Pseudomonas production	1000 Kg	
		Mushroom production unit	--	
		Ornamental fish production	500 nos	
4	Lab Analytical services	Soil and Water testing	300 +150 Nos.	Programme Asst. (Technical) & SMS (Agronomy)
5	Technology Week	Laser leveling, machine transplanting, power weeding, machine harvesting, SRI, Drum seeding, Micro irrigation, Honey bee rearing, Vermicompost production Backyard poultry, Goat rearing, Fish culture Integrated Farming System Value Addition	1 No	P.C, SMS (Agronomy) SMS (Horticulture) SMS(Agri. Entomology) SMS(Animal Husbandry) SMS(Fisheries Extension) SMS(Fish Processing Tech.) Programme Asst. (Tech)

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	Paddy seed – CO53	5 ton	PC,FM, SMS(Agronomy)
2	Seeds	Paddy seed – CR1009	15 ton	PC,FM, SMS(Agronomy)
3	Seeds	Paddy seed – VGD 1	2 ton	PC,FM, SMS(Agronomy)
4	Seeds	Paddy seed – ADT 54	10 ton	PC,FM, SMS(Agronomy)
5	Seeds	Black gram seed - VBN8	5 ton	PC,FM, SMS(Agronomy)
6	Planting materials	Fodder Slips and Seeds	Seeds-300 kg Green fodder 1.5 ton Fodder Slips 50,000 nos.	PC,FM, SMS(Agronomy)
7	Planting materials	Vegetables Nursery production	Moringa -1000 nos., Mango	SMS (Horticulture)

			saplings-200 nos.,	
8	Planting materials	Coconut seedling production	5000 nos.	SMS(Horticulture)
9	Planting materials	Tree seedling production	1000 nos.	SMS(Horticulture)
10	Livestock	Quail Unit	200 nos.	SMS(AH)
11	Livestock	Dairy unit	500 litres	SMS(AH)
12	Livestock	Goat rearing unit	5 kids	SMS(AH)
13	Livestock	IFS Unit	Fish-200 kg, Egg-100 nos., Duck-50 nos.	SMS(AH)
14	Bio products	*Bacillus* sp.	1000 kg	SMS(Agri Ento)
15	Bio products	Panchakavya production	500 litres	SMS(Agri Ento)
16	Bio products	Azolla	1000 kg	SMS(AH)
17	Apiculture	Bee hives	5 kg	SMS(Agri Ento)
18	Other inputs	Vermicompost	2000 kg	SMS(Agri Ento)
19	Fisheries	Fish farm pond unit	500 kg	SMS(Fisheries Extension), PC
20	Fisheries	Aqua phonics	Fish-100 kg, Vegetables- 200 kg	SMS(Fisheries Extension), PC and SMS(Horticulture)
21	Fisheries	Ornamental fish	500 nos.	SMS(Fisheries Extension), PC
22	Value added products	Fish/Prawn Pickle production unit	420 bottles/10 kg/single time	SMS(Fish Processing Tech)
23	Bio products	Fish Amino Acid	50 litres	SMS(Fish Processing Tech)

14.3. Technological Information

14.3.1. Technology backstopping to line departments

Sl. No	Category	Technological capsules / Number	Names of the team members involved
1	Agriculture	INM for rice, pulses, groundnut, sugarcane, cotton, vegetables and fruits IPDM for Agriculture and Horticulture Crops	P.C, SMS(Agronomy) SMS(Horticulture) SMS(Agri. Entomology) SMS(Animal Husbandry) SMS(Fisheries Extension) SMS (Fish Processing Tech.)
2	Horticulture	Hi tech technologies for higher production in vegetables and fruits	
3	Agricultural Engineering	Mechanization in rice cultivation, groundnut, Coconut tree climber, Operation and maintenance of transplanters, vegetable transplanter, spading machine and sprayers	
4	Agricultural marketing	Strengthening of group approach -FPOs, Farmers club etc., Post harvest technologies and value addition of rice, pulses, groundnut, sugarcane, cotton, vegetables, fruits, dairy products and Fish	

		products	
5	Department of Animal Husbandry	Conducting of Animal Health camp, Vaccination and Training programme	
6	Department of Fisheries	Training and demonstration to Fish farmers	
7	Soil health camp and Soil Advisory Services	Training, Demonstration of soil fertility management and advisory	SMS(Agronomy) and Programme Asst. (Technical)

14.3.2. Publications planned

S. No.	Category of publication	Number	Names of the team members involved
1	Popular article	15	PC, All SMS
2	Research article	10	PC, SMS-Agronomy, SMS (Agri. Entomology), SMS (Fish processing Tech)
3	Technical bulletin	5	PC, All SMS
4	Seminar paper	5	PC, All SMS
5	Training Manual	5	PC, All SMS
6	Book	5	PC, All SMS
7	Book let	5	PC, All SMS
8	Leaflet	12	PC, All SMS
9	Pamphlets	12	PC, All SMS
10	Folders	11	PC, All SMS

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	Department of Agriculture	ATMA-NADP	Trainings to farmers and Farm women	-	PC, All SMS
2	Department of Agriculture	ATMA-NADP	Farmers Seminar/workshop,	-	PC, All SMS
3	Department of Agriculture	ATMA-NADP	Field diagnostic visit,	-	PC, All SMS
4	Department of Agriculture	ATMA-NADP	Scientific visit to farmers field	-	PC, All SMS
5	Department of Horticulture	ATMA-NADP	Trainings to farmers and Farm women	-	PC, All SMS
6	Department of	ATMA-NADP	Farmers Seminar/workshop,	-	PC, All SMS

	Horticulture				
7	Department of Horticulture	ATMA-NADP	Field diagnostic visit,	-	PC, All SMS
8	Department of Horticulture	ATMA-NADP	Scientific visit to farmers field	-	PC, All SMS
9	Department of Animal Husbandry	ATMA-NADP	Trainings to farmers and Farm women	-	PC, All SMS
10	Department of Animal Husbandry	ATMA-NADP	Diagnostic visit/ and Animal health camp	-	PC, All SMS
11	Department of Animal Husbandry	ATMA-NADP	Scientific visit to farmers field	-	PC, All SMS
12	Department of Fisheries	NADP	Skill training, Farmers Exposure visit	-	PC, All SMS
13	TANUVAS	VUTRC	Scientific visit to farmers field	-	PC, All SMS
14	NABARD	NADP	Skill training, Farmers Exposure visit	-	PC, All SMS
15	IOB	RSETI	Training and Farmers Exposure visit	-	PC, All SMS

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 31.12.2021 (Rs.)
3,55,582	6,74,744	9,21,436	1,08890

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 Production-Paddy	17000 kg	527000	PC,FM, SMS(Agronomy)
2	Fodder Production	Seeds-300 kg Green fodder 1.5 ton Fodder Slips 50000 nos.	105000, 5000, 50000	PC,FM, SMS(Agronomy)
3	Seedling production	Moringa -1000 nos., Mango saplings-200 nos., Guava saplings-200 nos.,	10000, 6000, 6000	SMS (Horticulture)
4	Coconut seedling production	5000 nos.	300000	SMS (Horticulture)

5	Tree seedling production	1000 nos.	10000	SMS (Horticulture)
6	Bioagent production	1000 kg	168000	SMS (Agri Ento)
7	Bee hives	5 kg	4000	SMS (Agri Ento)
8	Panchakavya production	500 litres	60000	SMS (Agri Ento)
9	Vermicompost	2000 kg	40000	SMS (Agri Ento)
10	Poultry-Chicks(1week old)	100 nos.	5000	SMS (AH)
11	Quail Unit	200 nos.	8000	SMS(AH)
12	Dairy unit	500 litres	22500	SMS(AH)
13	Goat rearing unit	5 kids		SMS(AH)
14	IFS Unit	Fish-200 kg, Egg-100 nos., Duck-50 nos.	30000, 5000 -	SMS(AH)
15	Azolla	500 kg	10,000	SMS(AH)
16	Fish farm pond unit	500 kg	75000	SMS(Fisheries Extension), PC
17	Aqua phonics	Fish-100 kg, Vegetables- 200 kg	15000, 4000	SMS(Fisheries Extension), PC and SMS(Horticulture)
18	Ornamental fish production	500 nos	5000	SMS(Fisheries Extension), PC
19	Fish/Prawn Pickle production unit	420 bottles/10 kg/single time	8,800//10 kg/single time	SMS(Fish Processing Tech)
20	Fish Amino Acid production	50 litres	5000	SMS(Fish Processing Tech)

17Activities 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	200	200	P.A(Technical) and SMS(Agronomy)
		Traditional lab	100	**100**	
		AAS	-	**-**	
2	Water		150	**150**	
3	Plant		-	**-**	

18.Plan of activity for Institutional Farm

S.No.	Name of Demo unit	Capacity for production (specify units)	Names of the team members involved
1.	Seed Production-Paddy	17000 kg	PC,FM, SMS(Agronomy)
2	Fodder Production	Seeds-300 kg Green fodder 1.5 ton Fodder Slips 50000 nos.	PC,FM, SMS(Agronomy)

19.Demonstration units in KVK premises

S.No.	Name of Demo unit	Capacity for production (specify units)	Names of the team members involved
1.	Seed Production-Paddy	10000 kg	PC SMS(Agronomy), Farm Manager,
2	Fodder Production	Seeds-300 kg Green fodder- 1.5 ton Fodder Slips -5000 nos.	SMS(Agronomy), SMS(AH) & Farm Manager,
3	Seedlings production	Moringa -1000 nos., Mango saplings-200 nos., Guava saplings-200 nos.,	SMS(Horticulture)
4	Coconut seedling production	5000 nos.	SMS (Horticulture)
5	Tree seedling production	1000 nos.	SMS (Horticulture)
6	Bioagent production	1000 kg	SMS (Agri Ento)
7	Bee hives	5 kg	SMS (Agri Ento)
8	Panchakavya production	500 litres	SMS (Agri Ento)
9	Vermicompost	1000 kg	SMS (Agri Ento)
10	Quail Unit	200 nos.	SMS(AH)
11	Dairy unit	500 litres	SMS(AH)
12	Goat rearing unit	5 kids	SMS(AH)
13	IFS Unit	Fish-200 kg, Egg-100 nos., Duck-50 nos.	SMS(AH)
14	Azolla	1000 kg	SMS (AH)
15	Fish farm pond unit	500 kg	SMS (Fisheries Extension), PC
16	Aqua phonics	Fish-100 kg, Vegetables- 200 kg	SMS (Fisheries Extension), PC and SMS (Horticulture)
17	Ornamental fish production	500 nos.	SMS(Fisheries Extension), PC
18	Fish/Prawn Pickle production unit	420 bottles/10 kg/single time	SMS (Fish Processing Tech)
19	Fish Amino Acid production	50 litres	SMS (Fish Processing Tech)

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.tnjfu.ac.in	-
Mobile App	Name and link: Nil	-
KVK portal (update status)	Infrastructure details & photos uploaded (no): 16 nos. Events uploaded: 182 nos. News items submitted: nil	330
KVK mobile App of ICAR	Downloaded and used by scientists	-

	(no.)	
Other mobile Apps in use by KVK	Rice Expert system to be demonstrated	-
mKisan of DAC & FW	Recent and need based agriculture and allied technologies, training information, weather forecast is being sent through mKisan portal	4500
Social media		
a) Whatsapp groups	No. of groups/KVK: 3 no.	115
b) Facebook	Link: Nil	-
c) Twitter	Handle name: nil	-
Membership / participation in online digital platforms for services/ marketing etc.	-	-
KVK Blogs etc.	-	-
Collaboration with public/ private firms for audio/ video conferencing etc	Agency: Reliance foundation MoU (yes/no): No No. of programs done: 5 audio and 5 video conferencing	210
Any other (specify)	-	-

21. Farmer's Field School planned

S. No	Thematic area	Title of the FFS	No. of members in FFS group	Budget proposed in Rs. In lakhs
1	Aqua Culture	Sustainable Shrimp Culture Technology	30	0.30

Details of FFS

Title : Sustainable Shrimp Culture Technology
Area : 1 ha
No. of farmers : 30
Village : Paravai, Nagapattinam Block
Budget : Rs. 30,000

Lecture Schedules:

1.	Different types of shrimp culture technologies in India
2.	Site selection
3.	Farm design and Construction
4.	Pre stocking management of pond
5.	Selection of shrimp seed and stocking procedures
6.	Water quality management
7.	Shrimp feed and feed management
8.	Advanced shrimp culture techniques
9.	Shrimp diseases and management

10.	Bio security methods
11.	Harvesting
12.	Post harvest management
13.	Preparation of Value added shrimp products
14.	Economics of shrimp farming

Budget split-up:

	Activities	Amount(Rs.)
	Materials for product preparation (14x Rs. 750)	10,500
	Training banner and preparation	2,000
	Refreshment classes (14x30x30)	12,600
	Training manual @ Rs 130/farmer for 30 farmers (30x120)	3,900
	Field day	1,000
	Total	**30,000**

22. Details of Innovative Farmers network established:

23.Budget - Details of budget utilization (2020-21) up to31March 2021(Rs.)

S. No	Particulars	Sanctioned Grant for 2020-21	Released for 2020-21	Expenditure for the period from 1-4-2020 to 31-3-2021
A	**RECURRING**			
1	**Pay & Allowances**	**96,00,000**	**1,18,00,000**	**1,15,32,749**
2	**Travelling Allowances**	1,30,000	1,30,000	1,30,000
	a) Field activities & programmes			
	b) Training programmes			
3	**Contingencies**			
A	***Office Contingencies***	4,50,000	4,50,000	4,50,000
B	***Technical Programmes including TSP/ SCSP***	7,80,000	7,80,000	7,80,000
	Total of Contingencies	**12,30,000**	**12,30,000**	**12,30,000**
	Sub Total of Recurring Items (1+2+3)	**1,31,60,000**	**1,31,60,000**	**1,31,60,000**
4	**NON-RECURRING CONTINGENCIES:**			
	Works	-	-	
	Furniture& Equipment	-	-	
	Vehicle	-	-	
	TSP (creation of physical assets)	-	-	
	SCSP Component (Creation of Physical assets)	1,50,000	1,50,000	1,50,000
	Sub Total of non-recurring Items (4)	**1,50,000**	**1,50,000**	**1,50,000**
5	**GRAND TOTAL**	**1,11,10,000**	**1,33,10,000**	**1,30,42,749**

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

S. No	Particulars	Budget Estimate for 2021-22
A	**RECURRING ITEMS**	
1	**Pay & Allowances**	126.16
2	**Travelling Allowances**	
a	Field activities & programmes	1.40
b	Training programmes	
3	**Contingencies**	
	Office Contingencies	
a	Stationery, telephone, stamps and other expenditure on office running	4.95
b	POL, repair of vehicles, tractor and equipment including hiring of vehicle	
4	**Technical Programmes**	
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. -	11.85
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	**16.80**
	Total of Recurring Items	**144.36**
B	**NON-RECURRING ITEMS:**	
a	Works	
b	Vehicle (Jeep/Tractor/2 Wheeler)	
c	Furniture	
d	TSP (creation of physical assets)	
e	SCSP Component (Creation of Physical assets)	4.05
	Total of Non-Recurring Items	
	GRAND TOTAL (A+B)	**148.41**

(Match with BE 2021-22 allocation including of research & operational expenses head including TSP and SCSP (15% of operational expenses for OFTs, 40% to FLDs, 25% to trainings and 20% to extension activities (indicative)

Signature of the Senior Scientist and Head of the KVK

Forwarded **Verified** **Approved**

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