

TAMIL NADU DR.J.JAYALALITHAA FISHERIES UNIVERSITY



# ANNUAL ACTION PLAN (2019-20)



ICAR - KRISHI VIGYAN KENDRA SIKKAL – 611 108 NAGAPATTINAM DISTRICT. TAMIL NADU

#### ICAR-Agricultural Technology Application Research Institute

## ZONE X, Hyderabad

#### ACTION PLAN OF KVKs IN ZONE X FOR 2019-20

## 1. General information about the Krishi Vigyan Kendra

1.1	Name and address of KVK with :	ICAR-Krishi Vigyan Kendra
	Phone, Fax and e-mail	Sikkal-611 108
		Nagapattinam District
		Phone: 04365 – 246266
		E-mail: kvksikkal@tnau.ac.in
		Website : <u>www.kvknagapattinam.com</u>
1.2	Name and address of host :	Tamil Nadu Dr. J. Jayalalithaa Fisheries University
	organization	Nagapattinam-611 001
		Phone: 04365- 240088
		Fax: 91-4365-240088
		Email: vc@tnfu.ac.in
1.3	Year of sanction :	2004
1.4	Website address of KVK	www.kvknagapattinam.com

#### 2. Details of staff as on date:

SI. No.	Sanctioned post	- incumbent		Pay Scale	Date of joining KVK	Permanent /Temporary
1.	Programme Dr. A. Fi		Fisheries	39000+	04.03.2019	Permanent
	Coordinator	Gopalakannan	Biotechnology	9000		
2.	Subject matter Specialist	Mr. E. Hino Fernando	Fisheries Extension	56100	03.12.2018	Permanent
3.	Subject matter Specialist	Dr. K. Chandrasekar	Agriculture Entomology	56100	06.12.2018	Permanent
4.	Subject matter Specialist	Dr. S. Muthukumar	Veterinary Science	56100	28.12.2018	Permanent
5.	Subject matter Specialist		· · · ·			
6.	Subject matter Specialist	]		Vacant		
7.	Subject matter Specialist					
8.	Programme Assistant (Technical)	Mr. V. Gnanabharathi	Agriculture	55800	05.06.2007	Permanent
9.	Programme Assistant (Computer)	Ms. G. Ramya	Computer Application	35400	07.12.2018	Permanent
10.	Farm Manager	Mr. R. Vedharethinam	Agronomy	55800	04.06.2007	Permanent
11.	Assistant	Mr. S. Tamilselvan	Office	26100	05.06.2018	Permanent
12.	Jr. Stenographer		·	Vacant		
13.	Driver	Mr. S. Prasath	-	18500	07.12.2018	Permanent
14.	Driver	Mr. J. Sathishkumar	-	18500	07.12.2018	Permanent
15. 16.	Supporting staff Supporting staff			Vacant	·	

#### 3. Details of SAC meeting conducted during 2018-19: Yes 25.03.2019

Last Date:25.03.2019Tentative date of SAC meeting proposed during 2018-19:November 2019

## 4. Capacity Building of KVK Staff

## 4.1. Plan of Human Resource Development of KVK personnel during 2019-20

S. No	New Areas of Training	Institution proposed to attend	Justification			
1	IFS under Rice based cropping system –Wet land	CRRI, Cutack	To improve the professional skills for transfer of technologies for IFS under wetland ecosystem			
2	<ul><li>Recent advances in biopesticides</li><li>Eco friendly pest management</li></ul>	NCIPM, New Delhi	To popularize the eco friendly pest management techniques at farmers level			
3	Advances in vegetable cultivation	IIHR, Bengaluru, IARI, New Delhi	To know about the recent technologies in vegetable cultivation			
4	Advances in Horticultural technologies	IIHR, Bangalore	To know about the recent technologies in Horticulture			
5	Food processing industry application techniques	IICPT, Thanjavur	To develop the food processing technologies in Fruits ,cereals ,millets and vegetables			
6	Professional skills for trainers of extension institutes of Agriculture	MANAGE, Hyderabad	To improve the professional skills for transfer of technologies			
7	Value addition in marketing of fishery products	CIFT, Kochi, CMFRI, Kochi and CIFA, Bhubaneswar	To develop the value addition related to fish products, Mariculture and Fresh water aqua culture			
8	Management of saline and Sodic soils	Central Soil Salinity Research Institute, Karnal	Salt affected areas of Nagapattinam district was 13,500 ha. Hence, management on salt affected areas is needed			
9	Good Management practices for arid horticulture crops to combat current Agrarian Crisis	ICAR-Central Institute for Arid Horticulture (CIAH), Bikaner	To enrich the knowledge on arid horticulture crops			
10	Advances in Banana cultivation	NRCB, Trichy	To enrich the knowledge on advances in Banana cultivation			
11	Advances in fish rearing	TNJFU, Nagapattinam	To enrich the knowledge on advances in fish rearing techniques			
12	ICT application for Technology transfer	MANAGE, Hydrabad	To aquanaut with recent developments in ICT enabled extension			

#### 4.2. Cross-learning across KVKs during 2019-20

S. No	Name of the KVK proposed	Specific learning areas					
1	Within ring: KVK, Dharmapuri & KVK, Kattupakkam	To learn about technological products & To learn about IFS					
2	Within the zone - KVK, Nellore	To learn about technological products					
3	Outside zone - KVK, Thumkur, Kannur	Exposure visit/ Training/Demonstration – Farm mechanization					

# 5. Proposed cluster of KVKs (3 to 5 neighboring KVKs) to be formed for sharing knowledge/expertise, resources and activities during 2018-19

S.No.	Name of the KVKs included	What do you intend to share with Cluster KVKs	What do you expect from Cluster KVKs
5.110.	in the cluster		
5.1	KVK, Tiruvarur	IFS and Nutritional Roof top garden	Demo units
5.2	KVK, Dharmapuri	Aquaculture and ornamental fish culture	Demo units
5.3	KVK, Kattupakkam	Integrated Farming System and Goat farming	Demo units on Goat, Poultry and Fishery

#### 6. Operational areas details proposed during 2019-20

District*/Tal uk/ Block	Name of cluster villages	Major crops & Enterprises	Major problems identifies in each crop/enterprise	Proposed type of interventions (OFT/ FLD/ Training/ Field day/ Method demonstrations/ Awareness camp)
Sembanarkovi 1	Keelaiyur	Rice, Pulses, Banana, Forestry, livestock and fish	Low weight gain of bird Lack of awareness of Desi bird rearing. Low income of rural youth entrepreneurs. Slow growth rate of carps Short duration of water availability Lack of awareness of Tilapia culture Low income of rural youth entrepreneurs.	<ul> <li>OFT-IPM of Fall Army Worm (<i>Spodoptera fugiperda</i>) on Maize</li> <li>OFT-Assessment of production performance of improved aseel and kadaknath poultry breed under back yard system of rearing</li> <li>OFT-Demonstration of Mixed fodder Cultivation (Grasses, Cereal, Pulse &amp; Tree Fodder)</li> <li>FLD-Demonstration of Newly released rice variety ADT 53 in Nagapattinam District</li> </ul>

Vatharanyam	Vellappallam	Rice, vegetables and Ground Nut, coconut, Flowers, Forestry, livestock and fish.	Low due to existing local variety Unawareness of new variety. Heavy infestation of Smut disease Yield reduced 25%. Low yield of existing groundnut variety under rainfed condition. Slow growth rate of carps Short duration of water availability Lack of awareness of Tilapia culture Low income of rural youth entrepreneurs. Larger coconut plantation areas were affected by pests. Severe incidence Yield reduction up to 25%. Jasmine-Severe incidence of sucking pests. Low yield of existing groundnut	<ul> <li>FLD-Demonstration of ICM in Black gram VBN 8 in Nagapattinam Dt.</li> <li>FLD-Demonstration of Newly released Greengram variety VBN 4 in Nagapattinam District</li> <li>FLD-Demonstration IDM strategies for False smut in Rice</li> <li>FLD-Demonstration on Eco friendly IPM strategies for major Sucking pests in cotton</li> <li>FLD-Demonstration on IDM strategies for major Diseases in Banana.</li> <li>FLD-Popularization of Scientific Rearing of Japanese Quail among rural farmers</li> <li>(Packages and Practices )</li> <li>FLD-Demonstration of Hydroponics fodder cultivation technology to rural farmer</li> <li>OFT-Assessment of drought tolerant groundnut varieties under rainfed condition</li> <li>FLD-Demonstration on Eco friendly IPM strategies for major pests in Coconut</li> <li>FLD-Demonstration on Eco friendly IPM strategies for major pests in Jasmine</li> <li>FLD-Demonstration of Azolla cultivation to rural farmers</li> </ul>
		Vegetables, Mango, Coconut, livestock and fish	variety under rainfed condition. Low yield of pulp content in existing variety	rainfed condition. OFT-Assessment of production performance of improved aseel and kadaknath poultry breed under back yard system of

	Lack of technical knowledge in preparation of tomato products. Low weight gain of bird Lack of awareness of Desi bird rearing. Low income of rural youth entrepreneurs. Lack of awareness about mixed fodder crops. Poor green feeding/ Nutritionally Inferior grass feeding. Low due to existing local variety Unawareness of new variety. Yield reduction due to saline problem Use of Saline water for irrigation Larger coconut plantation areas were affected by pests. Severe incidence Yield reduction up to 25%. Jasmine-Severe incidence of sucking pests. Poor crop establishment. yield reduction up to 25% Lack of awareness of Agro forestry concept Failure of monocrop due to nature calamities Less income generation oppturnity in monocrop cultivation. Lack of awareness of Quail culture Low income of the rural women.	rearing FLD-Demonstration of Saline tolerant rice varieties for Nagapattinam District FLD-Demonstration of ICM in Black gram VBN 8 in Nagapattinam Dt. FLD-Demonstration on Eco friendly IPM strategies for major pests in Coconut FLD-Demonstration on Eco friendly IPM strategies for major pests in Jasmine
--	---	--

Nagapattinam	Ponveli	Rice, Pulses,		FLD-Demonstration of Newly released rice variety ADT 53				
		Forestry, livestock	Low yield of pulp content in existing	in Nagapattinam District				
		and fish	variety	FLD-Demonstration of Newly released rice variety VGT 1 in				
			Lack of technical knowledge in	Nagapattinam District				
			preparation of tomato products.					
			Low due to existing local variety	FLD-Demonstration of Eco friendly pest and disease				
			Unawareness of new variety.	management in Thaladi (Rabi) paddy				
			Lack of awareness of Agro forestry	FLD-Demonstration of Newly released Greengram variety				
			concept	VBN 4 in Nagapattinam District				
			Failure of monocrop due to nature	FLD-Demonstration IDM strategies for False smut in Rice				
			calamities	FLD-Classical model on multifunctional agroforestry for small				
			Less income generation oppturnity in	and marginal farmers				
			monocrop cultivation.	FLD-Popularization of Scientific Rearing of Japanese Quail				
				among rural farmers				
			Lack of awareness of Quail culture	FLD-Demonstration of Hydroponics fodder cultivation technology to rural farmer				
			Low income of the rural women.					
				FLD-Demonstration of seed production technology of Gold				
				Fish in cement tanks				
Kilvelur	Agarakadamb	Rice, Pulses,	Low weight gain of bird	OFT-Assessment of drought tolerant groundnut varieties under				
	anur	Vegetable,	Lack of awareness of Desi bird	rainfed condition				
		livestock and fish	rearing.	OFT-Demonstration of Mixed fodder Cultivation				
			Low income of rural youth	(Grasses, Cereal, Pulse & Tree Fodder)				
			entrepreneurs.	FLD-Demonstration of Newly released rice variety ADT 53				
			Lack of awareness about mixed fodder	in Nagapattinam District				
			crops.	FLD-Demonstration of Eco friendly pest and disease				
			Poor green feeding/ Nutritionally	management in Thaladi (Rabi) paddy				
			Inferior grass feeding.	FLD-Demonstration of ICM in Black gram VBN 8 in				
			Slow growth rate of carps	Nagapattinam Dt.				
			Short duration of water availability	FLD-Demonstration of Newly released Greengram variety				
			Lack of awareness of Tilapia culture	VBN 4 in Nagapattinam District				
			Low income of rural youth	FLD-Classical model on multifunctional agroforestry for small				
			entrepreneurs.	and marginal farmers				

Low due to existing local variety	FLD-Popularization of Scientific Rearing of Japanese Quail
Unawareness of new variety.	among rural farmers
Heavy infestation of Smut disease	(Packages and Practices)
Yield reduced 25%.	FLD-Demonstration of Hydroponics fodder cultivation
Severe incidence	technology to rural farmer
Yield reduction up to 25%.	FLD-Demonstration of Azolla cultivation to rural farmers
Lack of awareness of Quail culture	FLD-Demonstration of seed production technology of Gold
Low income of the rural women.	Fish in cement tanks

## 7. Technology Assessment during 2019-20

S. No.	Crop/ enterprise	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty per	Cost per	No. of trials	Total cost for the	Parameters to be studied	Team members
							trial	trial (Rs.)		intervention (Rs.)		
7.1	Millets- Maize	Severe outbreak of Fall Army Worm in Maize	Assessment on IPM of Fall Army Worm <i>Spodoptera</i> <i>fugiperda</i> ) on Maize	TO1: Farmers TO2: Integrated Pest Management (IPM) Module.	' Practice ICAR	Seed treatment chemical <i>Metarhizium</i> <i>anisopliae</i> Pheromone traps Fodder seeds Neem soap Need based insecticides	40 ml 1 lt 4 nos 100g 1 Kg -	200 600 400 50 200 1000	5	24750	Percent plant infestation – damage level. Yield (Kg/Ha), Costs and returns, BC ratio	SMS(Agri. Ento), P.A. Tech & PC
							Total	4950	5	24750		

S. No.	Сгор	Prioritized problem	Title of intervention	Technology options	Source of Technology	Name of critical input	Qty / trial	Cost per trial	No. of trials	Total cost for the intervention (Rs.)	Parameters to be studied	Team members
7.2	Oil Seeds- Ground Nut	Low yield of existing	Assessment of drought	TO1:farmers Practice	-	-	-	-	5		pods/plant Ento	SMS(Agri. Ento) &
		groundnut variety under rainfed condition	tolerant groundnut varieties under rainfed	TO2: K 9 Seeds (kernal) @120 Kg/ha	IIOR	K9 Seed	40 kg (Pods)	3,600			Yield Economics	P.A. Tech and PC
			condition	TO3: TMV 14 – Seeds (kernal) @120 Kg/ha	TNAU	TMV 14 Seed	40 kg 3 (Pods)	3,600				
	1	1	1	I I		1	Total	7200	5	36000		

S.	Crop/ enter	Prioritized	Title of	Technology	Source of	Name of	Qty per	Cost per	No. of	Total cost for	Parameters to	Team members
No.	prise	problem	intervention	options	Technology	critical input	trial	trial	trials	the	be studied	
								(Rs.)		intervention		
										(Rs.)		
7.3	Vegetable-	Lesser	Assessment of	TO1:Farmers Practic	ce				5	25000	Plant height.	SMS(Agri.
	Bhendi	productivity of existing private hybrids. Yield loss due to Yellow Vein Mosaic Virus up to 30 %	Performance of Bhendi hybrids in Nagapattinam district	TO2: Hybrid CO 4 TO3: Arka Nikita	(TNAU, 2016) (IIHR, 2017)	Co 4 Seeds Arka Nikita Seeds	1 kg 1 kg	2,000 2,500	-		No. of harvests. Fruits per plant. Yield per ha BCR	Ento), P.A. Tech & PC
						Arka Vegetable Special	2 kg	500				
						Total		50000	5	25000		

S.	Crop/ enter	Prioritized	Title of	Technology	Source of	Name of	Qty	Cost	No. of	Total cost	Parameters to be	Team members
No.	prise	problem	intervention	options	Technology	critical input	per	per	trials	for the	studied	
							trial	trial		intervention		
								(Rs.)		(Rs.)		
7.4	Fodder	Low production	Assessment of	TO 1- Farmer'	s practice		•	•	5	10300	Milk yield.	SMS(Veterinar
	crop	of milk	Effect on	TO2: Mixed	TNAU	Co FS 31	0.125	50				y) and PC
		Non availability	Mixed Fodder	fodder crop		seed	kg				Palatability .	57
		of fodder crop in	bank on			Co (BN) 5	1200	720			5	
		Nagapattinum	livestock			cuttings	Nos				BCR.	
		district	productivity			Hedge	0.6	330			DCK.	
						lucerne (CO	Kg				Yield.	
						1)					r ield.	
						Agathi	0.075	30				
							Kg				Economics	
						Subabul	0.075	30				
							Kg					
						Other		900	1			
						Expenses	-					
	I		1				Total	2060	5	10300		

7.5	Fishe	Slow growth rate of	Evaluation of	TO1- Farmers Pra	actice				2	78000	Growth performance.	SMS(Fisheries
	ries	carps	growth									Extn.) & PC
		Short duration of	performance of	TO2:	TNJFU	Fish seed	900	4500			Survival rate.	,
		water availability	Red Tilapia	Red Tilapia			nos					
		Lack of awareness	and GIFT								Yield.	
		Low income	Tilapia in farm	<b>TO</b>		<b>F</b> '1 1	000	4500				
			ponds.	TO3:	TNJFU	Fish seed	900	4500				
			1	GIFT Tilapia			nos					
						Fish feed	750	30000				
							kg					
			•			•	Total	39000	2	78000		

## 8. Technology Refinement during 2019-20: NIL

# 9. Frontline Demonstrations during 2019-20

S.	Category	Crop/	Prioritized	Technology	Hybrid	Name of the	Source	Name of critical	Qty	Cost	No.	Total	Parameters to	Team
No		enterprise	problem	to be	or	Hybrid	of	input	per	per	of	cost for	be studied	members
				demonstrated	Variety	or Var.	Tech		Demo	Demo	Demo	the		
							nology			(Rs.)		Demo		
												(Rs.)		
9.1	Cereals	Paddy	Low due to existing	Demonstration of Newly	Variety	ADT 53	TNAU	Seed @ 60 kg/ha	24 Kg	900	20	20400	Productive tillers/ m <sup>2</sup>	SMS(Agri Ento),
			local variety. Unawareness of new variety	released rice variety ADT 53 in Nagapattinam District			Ť	Pseudomonas	1 Kg	120			Yield Economics	P.A Tech & PC
			variety	District					Total	1020	20	20400		

9.2	Cereals	Paddy	Low due to existing local variety.	Demonstration of Newly released rice	Variety	VGT 1	TNAU	Seed @ 40 kg/ha	16 Kg	640	20	15200	-
			Unawareness of new variety	variety VGT 1 in Nagapattinam District				Pseudomonas @ 2.5 kg/ha	1 Kg	120			
									Total	760	20	15200	

9.3	Cereals	Paddy	Yield reduction due to saline problem. Use of Saline water for irrigation	Demonstration of Saline tolerant rice variety CSR 36 for Nagapattinam District	Variety	CSR 36	CSSRI	Seed @ 40 kg/ha Pseudomonas	16 Kg 1 Kg	1200	10	13200	EC, pH of initial soil. Plant height (cm). No. of panicles/m <sup>2</sup> . Yield (Q/ha). Economics.	PC & P.A Tech
		•							Tota	1320	10	13200		

9.4	Cereals	Paddy	Reduction in natural enemies due to indiscriminate use of pesticides. Lack of knowledge on eco friendly pest and disease management strategies	Demonstration of Eco friendly pest and disease management in Thaladi (Rabi) paddy	Variety	BPT 5204	CRRI	Seed treatment with <i>Pseudomon</i> as fluorescens @ 10 gm/kg Border crops - Gingelly, sunflower, daincha, cowpea, marigold Spray fresh cow dung extract 20% Pheromone traps @ 12/ha. Sucking pests Azadirachti n (10,000 ppm) @ 1.25 lit/ ha. Stemborer & LF – Beuveria bassiana @ 5kg/ha. BPH - <i>Lecanicilliu</i> <i>m lecanii</i> @ 5 kg/ha.	100 gm each 5 kg 5 Nos. 500 ml 2 kg 2 kg	500 600 500 600 600	10	31000	P:D ratio (Pest and Defenders), Pest Infestation Percentage, Types and number of natural enemies, Yield, Economics	SMS(A gri Ento), P.A Tech & PC
									Total	3100	10	31000		

9.5	Cereals	Paddy	Heavy infestation of Paddy. Yield reduced 25%	Demonstratio n IDM strategies for False smut in Rice	Variety	BPT 5204	TNAU	Pseudomona s @ 2.5 kg/ha Propiconazo le @ 1250 ml/ha	1 kg 500 ml	120 500	10	12400	Disease incidence, Productive tillers/ m <sup>2</sup> Yield Economics	SMS(Agri Ento), P.A Tech & PC
									Total	620	20	12400		

9.6	Pulses	Black Gram	Low due to existing local variety. Unawareness of new variety	Demonstration of ICM in Black gram VBN 8 in Nagapattinam Dt.	Variety	V B N 8	TNAU 2016	Black gram seeds Rhizobium <i>T. viride</i> Pulses wonder Yellow sticky trap	10 kg 1 kg 1 kg 2 kg 5 No.	1500 100 100 400 300	10	24000	No of plants/m <sup>2</sup> . No of pods/plant Yield. (Q/Ha) Economics	SMS(Agri Ento), P.A Tech & PC
	1					•	1		Total	2400	10	24000		

9.7	Pulses	Green Gram	Low due to existing local variety. Unawareness of new	Demonstration of Newly released Green gram variety VBN 4 in Nagapattinam	Variety	VBN 4	TNAU 2018	Black gram seeds Rhizobium <i>T. viride</i> Pulses wonder Yellow sticky	10 kg 1 kg 1 kg 2 kg 5 No.	1500 100 100 400 300	10	24000	No of plants. No of pods/plant Yield. (Q/Ha)	SMS(Ag ri Ento), P.A Tech & PC
								Total		2400	10	240000	Economics	

S.	Category	Crop/	Prioritized problem	Technology	Specify	Name	Source	Name of	Qty	Cost	No.	Total	Parameters to be	Team
No.		enter		to be demonstrated	Hybrid	of the	of Tech	critical input	per	per	of	cost	studied	members
		prise			or	Hybrid	nology		Demo	Demo	Demo	for		
					Variety	or Var.				(Rs.)		Demo		
9.8	Fiber crop	Cotton	Severe incidence	Demonstration	Hybrid	RCH	TNAU	Azadiractin	1 lit	700	10	14000	% pest reduction	SMS(Agri
			of sucking pests.	on Eco friendly									(sucking pest)	Ento),
				IPM strategies									Yield	P.A Tech
			Poor crop	for major									Economics	& PC
			establishment. yield reduction up to 25%	Sucking pests in cotton				Yellow sticky trap	5 Nos.	300				
								2						
								Verticillium	2 Kg	400				
								lecanii						
			•						Total	1400	10	14000		

S. No.	Cate gory	Crop/ enterprise	Prioritized problem	Technology to be demonstrated	Specify Hybrid or Variety	Name of the Hybrid or Var.	Source of Techno logy	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 members
9.9	Planta tion crop	Coconut	Larger plantation areas were affected by Pests.	Demonstration on Eco friendly IPM strategies for major pests in Coconut	Varity	ECT	TNAU	Metarrhi zium anisoplia e Rhino lure pheromo ne trap Ferrolure pheromo ne trap	11it 3 1	300 900 450	10	16500	% pest reduction Yield Economics	SMS(Agri Ento), P.A Tech & PC
								1	Total	1650	10	16500		

S.	Cate	Crop/	Prioritized	Technology	Specify	Name of	Source	Name of	Qty per	Cost per	No.	Total	Parameters to be	Team
No.	gory	enterprise	problem	to be demonstrated	Hybrid or	the	of	critical	Demo	Demo	of	cost for	studied	members
					Variety	Hybrid	Techno	input		(Rs.)	Demo	the		
						or Var.	logy					Demo		
												(Rs.)		
9.10	Fruits	Banana	Severe incidence Yield reduction up to 25%	Demonstration on IDM strategies for major Diseases in Banana	Variety	Poovan	TNAU	Pseudomo nas fluorescen s Trichoder ma viride Carbofura n	1 10 kg 10 Kg	120 1200 1200	10	25200	% Disease reduction. Yield. Economics	SMS(A gri Ento), P.A Tech & PC
									Total	2520	10	25200		

9.11	Flower s	Jasmine	Severe incidence of sucking	Demonstration on Eco friendly IPM strategies for	Variety	Local	TNAU	Bacillus thuringien sis	400 g	500	10	16200	% pest reduction (sucking	SMS(Agri Ento), P.A Tech & PC
			pests. Poor crop	major pests in Jasmine				Trichoder ma viride	1kg	120			pest). Yield	
			establishmen t.					Azadiracti n	1 lit	700			Economics	
			yield reduction up to 25%					Yellow sticky trap	5 Nos	300				
	1 1		1	1	1	1			Total	1620	10	16200		

9.12	Agro	Agro	Lack of	Demonstration of	Variety	-	TNAU	Co 5 Slips	4000	2000	2	24100	Econo	SMS(Veter
	Forest	Forestry	awareness of	classical model on					<u> </u>				mics &	inary),
	ry	1	Agro forestry	multifunctional				Vegetables	-	1000			BCR	SMS(Agri
		1	concept.	agroforestry for				eeds						Ento) and
		1	_	small and				Jasmine	100	3000				PC
		1	Failure of	marginal farmers				Jasinine	plants	5000				
		1	monocrop					Moringa		1500			1	
		1	due to nature	1				Moringa	500 g	1300				
		1	calamities.	1				Amla	50 Nos	1350				
		1	,	1				Aillia	50 1105	1550				
		1	Less income	1				Rosewood	50 Nos	1500				
		1	generation	1				100000000	501,05	1500				
		1	opportunity					Guava	50	1500			l I	
	1	1	monocrop	1				Guara	Nos.	1000				
		1	cultivation					Agathi	250 g	200			1	
		1	Cultivation	1				Agatin	250 g	200				
	I		/	<u> </u>		1	1		Total	12050	2	24100		
									I otur	12000	-	21100	l	

9.13	Livesto	Quail	Lack of	Demonstration of	Variety	Namakk	TANUV	Purchase of	1000	1400	5	45800	Growth	SMS(Veter
	ck		awareness of	Scientific Rearing		al	AS	Namakkal	nos				parameter	inary) and
	UK		Quail	of Japanese Quail				quail					Yield	PC
			culture.	among rural				Chicks					Economics	
				farmers				Feed	600	3960				
			Low income	(EDP)					kg					
			of the rural					Brooding	2000	2000				
			women.					-						
								Medical	Rs1/Bi	200				
								care	rd					
								Feeder	1 set	1600				
								and						
								Waterer						
									Total	9160	5	45800		

9.14			Poor water	Demonstration of Hydroponics	Variety	TANUV AS	Input Seed cost	-	1,200	2	60400	Yield. Economics	SMS(Vete
	Husban dry	Maize	availability for fodder cultivation during offseason. Lack of awareness of hydroponic technology. Non availability of good quality fodder during lean	Hydroponics fodder cultivation technology to rural farmer		AS	cost Constructio n of unit Other expenses (Tray, watering arrangemen ts etc)	-	25,000			Economics	rinary) and PC
			season.										
								Total	30200	2	60400		

9.15	Livest	Poultry	Low weight	Demonstration	Variety	Namakk	TANUV	Cost Of	30 nos.	1,350	5		Body	SMS(Veter
	ock	-	gain of bird.	of improved		al	AS	chicks					weight	inary) and
			Lack of	Aseel				Cost of	-	200			Survivabil	PC
			awareness of	performance				vaccine					ity	
			Desi bird	under back yard				Cost of	120 kg	3,840			Egg	
			rearing.	system				Feed	l C				productio	
			Low income of rural	5				Cost of	1 set	800			n	
			youth					Feeder &						
			entrepreneurs					Drinker						
			chucpreneurs					Cost of	1 No.	3,500				
								Brooder						
								Brooding	-	500				
								Time						
								Therapeut						
								ic care						
									Total	10190	5	50950		
I										I				

9.16	Fisheri	Fisheries	Lack of	Demonstration	Improved	Gold fish	TNJFU	Circular	1 no	4000	2	14000	Spawning	SMS
	es		awareness	of seed	variety			cement					frequency	(Fisheries
			about	production				tanks					Growth rate	Extn.) &
			ornamental	technology of				Brooder	1 no	2000			of offsprings	PC
			fish culture	Gold Fish in				fish					Survival rate	
			Livelihood	cement tanks				Tank	-	1000			of offsprings Yield	
			opportunity					accessorie					Tield	
			for rural					S						
			youths.											
									Total	7000	2	14000		

#### Farmer's Field School (FFS) planned - 2019-20

Thematic area	:	Value addition
Title of the FFS	:	Value addition in Milk
Budget proposed in Rs	:	30,000
Season and Period	:	June to December 2019
Periodicity of the session	:	14 weekly classes
Name of the village	:	Sembanarkovil-Sembanarkovil block
Number of participants	:	30
Name of the Facilitators	:	KVK staff & Animal Husbandry Department Officials
Area of the FFS field	:	Preparation of value added products from milk

#### Major problems in the FFS village relevant to the crop/enterprise:

- Lack of knowledge in value added products
- Lack of knowledge in dairy products

#### **Objectives of the FFS**

- To create awareness on value addition
- Marketing of products
- To enhance the annual income

#### Lecture Schedule

- 1. Milk synthesis and its composition
- 2. Mastitis & Clean milk production
- 3. Milk, Toned milk, Double Toned and skim milk preparation
- 4. BIS specification of various products and its importance
- 5. Cream preparation
- 6. Flavored milk preparation
- 7. Peda preparation
- 8. Khoa preparation
- 9. Panner preparation
- 10. Whey drink preparation
- 11. Curd and Lassi preparation
- 12. Ghee and Butter milk preparation
- 13. Marketing and Storage
- 14. Field day

## **Budget breakup for FFS**

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

## Special Programme- Integrated Farming System:

Sl. No	Components	Nos.	Amount (Rs.)
1	Silpaulin vermi bag	3 Nos.	9,000
2	Nandhanam1 chicks	300 Nos.	12,000
3	Japanese Quail	300 Nos.	2,100
4	Fish seed - major carps @ Rs.5/No.	1500 Nos.	7,500
5	Bee hives	9 nos.	10,000
5	Fodder Sorghum CO(FS)31 @ Rs 5 Kg /ha	6 Kg.	3,000
	·	Total	43,600

S. No.	Thematic area	Crop /Enter prise	Major problem	Linked field intervention (Assessment/Refinement /FLD)	Training Course Title	No. of Courses	Expected No. of participant s	Names of the team members involved
1	ICM	Paddy, Cotton	Lack of knowledge on ICM and IPDM technologies	FLD-Demonstration of Newly released rice variety ADT 53 and VGD 1 in Nagapattinam District FLD-Demonstration of Saline tolerant rice varieties for Nagapattinam District FLD-Demonstration of Eco friendly pest and disease management in Thaladi (Rabi) paddy FLD-Demonstration on Eco friendly IPM strategies for major Sucking pests in cotton	ICM in Rice and cotton	2	60	SMS(Agri. Entomology)
2	IPDM	Vegetab les	Lack of knowledge on IPDM technologies	OFT-Assessment of Performance of Bhendi hybrids in Nagapattinam district	IPDM in vegetables	2	60	SMS(Agri. Entomology)
3	Skill development	Bee hive	Lack of knowledge on Bee hive technologies	-	Honey bee training	1	30	SMS(Agri. Entomology)
4	ICM	Paddy	Lack of knowledge on ICM and IPDM technologies	-	Irrigation and weed management	1	40	SMS(Agri. Entomology)

## 10. Training for Farmers/ Farm Women during 2019-20

5	IPDM	Paddy	Lack of knowledge on IPDM technologies	FLD-Demonstration of Eco friendly pest and disease management in Thaladi (Rabi) paddy FLD-Demonstration IDM strategies for False smut in Rice	IPDM in rice	2	60	SMS(Agri. Entomology)
6	Organic farming	Vermi compost producti on	Lack of knowledge on composting technology	-	Farm waste management	1	30	SMS(Animal Husbandry)
7	IPDM	Flowers	Lack of knowledge on IPDM technologies	FLD-Demonstration on Eco friendly IPM strategies for major pests in Jasmine	IPDM in flowers	1	40	SMS(Agricultural Entomology)
8	Skill development	Bee hive	Lack of knowledge on Bee hive technologies	-	Honey bee Training	1	30	SMS(Fisheries Extension)
9	IPDM	Fruits	Lack of knowledge on IPDM technologies		IPDM in Fruits crops	1	40	SMS(Animal Husbandry) & SMS(Agricultural Entomology)
10	Home science	Mushro om	Lack of knowledge on human nutrition	-	Mushroom production	1	30	SMS(Agricultural Entomology) & SMS(Fisheries Extension)
11	ICM and IPDM	Pulses	Lack of knowledge on IPDM technologies		ICM and IPDM in pulses	2	60	SMS(Agricultural Entomology) & SMS(Animal Husbandry)

12	IPDM	Ground nut	Lack of knowledge on IPDM technologies	OFT-Assessment of drought tolerant groundnut varieties under rainfed condition	IPDM in oilseeds	1	40	SMS(Agricultural Entomology)
13	Animal Husbandry	Milch animal rearing	Poor management of milch animals lead to low milk yield	OFT-Effect of Mixed fodder bank on livestock productivity (Grasses, Cereal, Pulse & Tree Fodder)	Profitable Dairy farming	2	60	SMS(Animal Husbandry)
14	Livestock	Poultry	Lack of knowledge on poultry farming	FLD-Demonstration of improved Aseel performance under back yard system	Desi bird Rearing	2	80	SMS(Animal Husbandry)
15	Live stock	Goat farming	Poor management of goats lead to low weight gain	OFT-Effect of Mixed fodder bank on livestock productivity (Grasses, Cereal, Pulse & Tree Fodder)	Scientific Goat Rearing	2	60	SMS(Animal Husbandry)
16	Organic farming	Waste manage ment	Lack of knowledge on composting technology	_	Green farming / Zero waste farming	1	40	SMS(Animal Husbandry)
17	Animal husbandry	Fodder crop	Poor management of milch animals lead to low milk yield	OFT-Effect of Mixed fodder bank on livestock productivity (Grasses, Cereal, Pulse & Tree Fodder)	Fodder crop cultivation(IFS)	3	40	SMS(Animal Husbandry)
18	Livestock	Poultry	Lack of knowledge on poultry farming	FLD-Demonstration of improved Aseel performance under back yard system	Broiler / Layer Farming	2	60	SMS(Animal Husbandry)

19	Value addition	Dairy	Lack of awareness on Value addition in milk products	FFS on Value addition in Milk	Milk & Hygenic Milk Production	1	40	SMS(Animal Husbandry)
20	Livestock	Quail	Lack of knowledge on poultry farming	FLD-Demonstration of Scientific Rearing of Japanese Quail among rural farmers (EDP)	Scientific Quail farming	2	60	SMS(Animal Husbandry)
21	Animal husbandry	Cattle	Lack of knowledge on health care for cattle	-	Ethno veterinary Medicinal practices	1	40	SMS(Animal Husbandry)
22	IFS	IFS	Lack of knowledge on IFS	IFS under Special programme	Integrated Farming System	1	40	SMS(Animal Husbandry)
23	Value addition	Milk products	Lack of knowledge on value addition in milk		Value addition of Milk	1	30	SMS(Animal Husbandry)
24	IFS	IFS	Lack of knowledge on IFS	IFS under Special programme	IFS	1	40	SMS(Animal Husbandry)
25	Animal husbandry	Fodder Maize	Poor management of milch animals lead to low milk yield	FLD-Demonstration of Hydroponics fodder cultivation technology to rural farmer	Hydroponics and silage production	1	30	SMS(Animal Husbandry)
26	Fisheries	Dry fish	Lack of awareness on Value addition in fish and prawn	-	Hygienic dry fish production	1	30	SMS(Fisheries Extension)
27	Fisheries	Fish producti on	Lack of entrepreneur activity among rural youth	FLD-Demonstration of seed production technology of Gold Fish in cement tanks.	Ornamental fish culture techniques	1	40	SMS(Fisheries Extension)

28	Fisheries	Fish culture	Unaware of scientific fish culture practices and Low weight gain in existing fish culture.	OFT-Evaluation of growth performance of Red Tilapia and GIFT Tilapia in farm ponds.	Disease management in carp culture	1	40	SMS(Fisheries Extension)
29	Value addition	Dry fish producti on	Lack of awareness on Value addition in fish and prawn		Masala dry fish production	1	40	SMS(Fisheries Extension)
30	Value addition	Fish	Lack of awareness on Value addition in fish		Fish pickle preparation	1	40	SMS(Fisheries Extension)
31	Entrepreneursh ip development	Fish producti on	Lack of entrepreneur activity among rural youth	-	Fabrication of aquarium tanks	1	30	SMS(Fisheries Extension)
32	Fisheries	Fish and vegetabl es	Unaware of scientific fish culture practices and Low weight gain in existing fish culture.	OFT-Evaluation of growth performance of Red Tilapia and GIFT Tilapia in farm ponds.	Aquaponics	1	40	SMS(Fisheries Extension)
33	Value Addition	Sea weed	Lack of knowledge on Spirulina culure	-	Spirulina culture	1	30	SMS(Fisheries Extension)
34	Entrepreneursh ip development	Fish culture	Lack of entrepreneur activity among rural youth	OFT-Evaluation of growth performance of Red Tilapia and GIFT Tilapia in farm ponds.	Carp seed production	1	40	SMS(Fisheries Extension)
35	IFS	IFS	Lack of knowledge on IFS	IFS under Special programme	Integrated Farming System	1	40	SMS(Animal Husbandry)

S.No.	Thematic area	Crop / Enterprise	Major problem	Training Course Title**	No. of Courses	Expected No. of participants	Team members involved
1	ICM	Vegetable and fruits	Non availability of vegetable and fruit seedlings	Nursery Management of Horticulture crops	1	25	SMS(Agricultural Entomology)
2	Skill development	Fruits	Lack of knowledge on orchard management	Training and pruning of orchards	1	25	SMS(Agricultural Entomology)
3	ICM	Vegetable	Lack of knowledge on Protected cultivation	Protected cultivation of vegetable crops	1	25	SMS(Agricultural Entomology)
4	ICM	Mango and banana	Lack of knowledge on commercial fruits cultivation	Commercial fruit production	1	25	SMS(Agricultural Entomology)
5	IFS	Mixed farming	Lack of knowledge on IFS	Integrated farming	1	25	SMS(Animal Husbandry)
6	Seed production	Paddy	Lack of knowledge on seed production	Seed production	1	25	SMS(Agricultural Entomology)
7	Production of Inputs	Vermi compost	Lack of knowledge on Waste management	Production of organic inputs	1	25	SMS(Agricultural Entomology)
8	Seedling production	Forest tree seedling	Lack of knowledge on tree seedling production	Planting material production	1	25	SMS(Agricultural Entomology)
9	Production of Inputs	Vermi compost	Lack of knowledge on Waste management	Vermi-culture	1	25	SMS(Agricultural Entomology)
10	Home science	Mushroom production	Lack of knowledge on mushroom production	Mushroom Production	1	25	SMS(Agricultural Entomology)
11	Skill development	Bee hive technologies	Lack of entrepreneur activity among rural youth	Bee-keeping	1	25	SMS(Agricultural Entomology)
12	Value addition	Fisheries	Lack of awareness on preservation techniques of fish and Lack of awareness on processing and value addition	Value addition	1	25	SMS(Fisheries Extension) & SMS(Animal Husbandry)

#### 11. Training for Rural Youth during 2019-20

13	Value addition	Fisheries	Lack of awareness on preservation techniques of fish and Lack of awareness on processing and value addition	Post Harvest Technology	1	25	SMS(Fisheries Extension) & SMS(Animal Husbandry)
14	Value addition	Dairying	Lack of awareness on preservation techniques of fish and Lack of awareness on processing and value addition	Production of quality animal products	1	25	SMS(Animal Husbandry)
15	Animal Husbandry	Dairying	Rearing of milch cow	Dairying	1	25	SMS(Animal Husbandry)
16	Livestock	Goat farming	Lack of entrepreneur activity among rural youth	Sheep and goat rearing	1	25	SMS(Animal Husbandry)
17	Livestock	Quail farming	Lack of entrepreneur activity among rural youth	Quail farming	1	25	SMS(Animal Husbandry)
18	Live stock	Piggery	Lack of entrepreneur activity among rural youth	Piggery production	1	25	SMS(Animal Husbandry)
19	Livestock	Poultry farming	Lack of entrepreneur activity among rural youth	Poultry production	1	25	SMS(Animal Husbandry)
20	Fisheries	Fish production	Lack of entrepreneur activity among rural youth	Ornamental fisheries	1	25	SMS(Fisheries Extension)
21	Fisheries	Fish production	Lack of knowledge on fish culture	Composite fish culture	1	25	SMS(Fisheries Extension)
22	Fisheries	Fish production	Lack of knowledge on prawn culture	Freshwater prawn culture	1	25	SMS(Fisheries Extension)
23	Fisheries	Fish production	Lack of entrepreneur activity among rural youth	Shrimp farming	1	25	SMS(Fisheries Extension)

24	Value addition	Fish products	Lack of awareness on	Fish harvest and processing	1	25	SMS(Fisheries
			preservation techniques	technology			Extension)
			of fish and				
			Lack of awareness on				
			processing and value				
			addition				
25	Fisheries	Fish production	Lack of entrepreneur	Fry and fingerling rearing	1	25	SMS(Fisheries
			activity among rural				Extension)
			youth				

S.No.	Thematic area	Training Course Title**	No. of	Expected No.	Names of the
			Courses	of participants	team members
1	Crop	Productivity enhancement in field	3	40	SMS(Agricultural
	Production	crops	5		Entomology)
2	IPDM	Integrated Pest Management	5	40	SMS(Agricultural
			5		Entomology)
3	INM	Integrated Nutrient management	2	40	SMS(Agricultural
			2		Entomology)
4	ICM	Rejuvenation of old orchards	1	40	SMS(Agricultural
			1		Entomology)
5	Farmers club	Formation and Management of	1	60	All SMS
		SHGs	1		
6	Farmers club	Group Dynamics and farmers	1	60	All SMS
		organization	1		
7	ICT	Capacity building for ICT	1	50	PC, P.A Tech &
		application	1		P.A. Computer
8	Livestock	Management in farm animals	1	40	SMS(Animal
	management		1		Husbandry)
9	Animal	Livestock feed and fodder	1	40	SMS(Animal
	husbandry	production			Husbandry)

## 12 Trainings for Extension Personnel during 2019-20

## 13. Vocational trainings during 2019-20

SI.No ·	Thematic area and the Crop/Enterpr ise	Training title*	No. of program mes and Duration (days)	Type of Clientele	Expected No. of participa nts	Sponsorin g agency if any	Names of the team members involved
1	Production of Inputs at Site	Bio fertilizers production technology	1	SHG, Youth	30	-	SMS(Agricultura l Entomology)
2	Livestock	Desi birds rearing technology	1	SHGs, Rural youth and farmers	30	-	SMS(Animal Husbandry)
3	Post harvest Technologies	Value addition in Fish and Prawn	1	SHG, Youth	30	-	SMS(Fisheries Extension)
4	Honey bee	Training on Honey production	1	SHGs, Rural youth	30	-	SMS(Agricultura l Entomology)
5	Post Harvest Technologies	Processing and value addition milk	2	SHGs, Rural youth , farm women	30	-	SMS(Animal Husbandry)

## 14. Sponsored trainings during 2019-20

S.No ·	Thematic area and the Crop/Enterpris e	Training title*	No. of programme s and Duration (days)	Type of Clientele	Expected No. of participa nts	Sponsorin g agency	Names of the team members involved
1	ICM	Managemen t practices for cyclone damaged Coconut and Cashew crop	1	ATAM Farmer Members	50	ATMA under NADP, Departmen t of Agriculture	
2	Sericulture	Sericulture Technologie s	1	ATAM Farmer Members	50		
3	Floriculture	ICM in Flowers	1	ATAM Farmer Members	50		-
4	Agro -Forestry	Suitable Agro- Forestry model for Nagapattina m Dt.	1	ATAM Farmer Members	50		SMS (Agri. Ento), P.A.Tech
5	Plant Protection	IPDM technologies for Fall army worm in Maize and Rugose Spiraling Whitefly in Coconut	1	ATAM Farmer Members	50		P.A. Iech and P.A Computer
6	Horticulture	ICM in Vegetable	1	ATAM Farmer Members	50		
7	Fruits	Ultra High Density Planting techniques	1	ATAM Farmer Members	50		
8	Horticulture	Grafting technologies for Brinjal	1	ATAM Farmer Members	50		
9	Livestock	Desi Bird- Poultry rearing technologies	1	ATAM Farmer Members	50		SMS(Animal
10	Livestock	Stall fed goat farming	1	ATAM Farmer Members	50		Husbandry), P.A.Tech and
11	IFS	Integrated Farming System Technologie s	1	ATAM Farmer Members	50		P.A Computer

12	Value Addition	Value Addition in milk	1	ATAM Farmer Members	50	
13	Animal Health Care	Ethno veterinary Medicinal practices	1	ATAM Farmer Members	50	
14	Fisheries	Gift Tilapia fish culture	1	ATAM Farmer Members	50	
15	Fisheries	Ornamental fish production	1	ATAM Farmer Members	50	SMS
16	Fisheries		1	ATAM Farmer Members	50	(Fisheries Extn.), P.A.Tech
17	Fisheries	Inland composite fish culture	1	ATAM Farmer Members	50	and P.A Computer
18	Fisheries	Fish fingerling rearing technologies	1	ATAM Farmer Members	50	

# 15. Extension programmes during 2019-20

Sl.No.	Extension programme	No. of programmes or activities	Expected No. of participants	Names of the team members involved
1	Advisory Services	250	1000	
2	Diagnostic visits	200	350	
3	Field Day	15	450	
4	Group discussions	10	100	
5	Film Show	15	750	
6	Self -help groups	5	150	
7	Kisan Mela	5	1000	
8	Exhibition	5	1000	
9	Scientists' visit to farmers field	100	200	
10	Soil health/Animal health camps	2	100	P C, SMSs and PAs
11	Farm Science Club	2	75	
12	Farmers' seminar/workshop	2	200	
13	Method Demonstrations	30	450	
14	Celebration of important days	5	250	
15	Special day celebration	3	150	
16	Exposure visits	3	75	
17	Technology week	1	500	
18	Farm innovators meet	1	50	
19	Awareness programs	3	300	
	Total	657	7150	

## 16. Activities proposed as Knowledge and Resource Centre during 2018-19

## 16.1 Technological knowledge

Sl.No.	Category	Details of technologies	Area (ha)/ Number	Names of the team members involved
16.1.1	Technology Park/ Crop cafeteria	Latest released varieties	Each 0.2 ha	
16.1.2	Demonstration	Pro tray nursery unit	1 No.	
	Units	Coconut nursery unit	1 No.	
		Bio pesticides production unit	1 No.	
		Vermi compost	1 No.	P.C, SMS(Agricultural
		Azolla demo unit	1 No.	Entomology)
		Poultry unit	1 No.	SMS(Animal
		Quail rearing		Husbandry) SMS(Fisheries
		Fodder production	2 nos.	Extension)
		Coir pith compost production	1 No.	and Farm Manager
		Tree seedlings production	1 No.	
		Fish production unit	4 nos.	
		IFS unit	1 no.	
		Panchagavya production	1 no.	
		Aquaponics	1 no.	
16.1.3	Lab Analytical services	pH, EC, OC, N, P and K analysis	500 water and 300 soil samples	P.A. (Tech)

#### **17.1 Technological Products to be produced:**

Proposed activities	Expected output	Anticipated income (Rs.)
Rice: TFL seeds- TKM 13, TRY3, ADT 51, ADT 53.	300 qtl	9,90,000
Pulses- BG VBN6, VBN 8, GG CO8	100 qtl	12,00,000
Planting materials	Coconut seedlings- 5000 Nos.	2,10,000
	Vegetable seedlings (400 portrays)	40,000
	Fodder slips- 5000 Nos.	5,000
	Teak - 5000 Nos	50,000
Bio-products	Pseudomonas – 2 ton	2,00,000
	Vermicompost-10 ton	10,00,000
	Azolla- 1 ton	10,000
	Coir pith Compost - 5 ton	50,000
IFS demonstration (1 ac)	Fish- 5000 kgPoultry- 1000 nosVegetables- 500 kgBanana- 500 kgPaddy- 1000 kg	2,00,000

SI.N o	Category	<b>Technological capsules / Number</b>	Names of the team members involved
1	Agriculture	INM for rice, pulses, groundnut, sugarcane, cotton, vegetables and fruits	
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	P.C, SMS(Agricultural
4	Agricultural marketing	Strengthening of group approach -FPOs, Farmers club etc., Post harvest technologies and value addition of rice, pulses, groundnut, sugarcane, cotton, vegetables and fruits	Entomology) SMS(Animal Husbandry) SMS(Fisheries Extension)
5	Department of Animal Husbandry	Conducting of Animal Health camp and vaccination programme	
6	Department of Fisheries	Training to Fish farmers	
7	Kisan Mobile Advisory Services	50 (4000 farmers)	P.A Technical and P.A Computer

#### 17.2. Technology backstopping to line departments

# 18. Additional Activities Planned during 2019-20

S. No.	Name of the agency / scheme	Name of activity	Technical programme with quantification	Financial outlay (Rs.)	Names of the team members involved
1	Animal Husbandry	IFS	Training	10000	P.C, SMS(Animal Husbandry) SMS(Fisheries Extension
2	NABARD	Capacity building of FPO members	Workshop	10000	P.C, SMS(Animal Husbandry) and P.A Technical
3	NABARD CAT programme	Backyard Poultry	Training	10000	P.C, SMS(Animal Husbandry)
4	NABARD CAT programme	Traditional Varieties of Paddy Cultivation	Training	10000	P.C, SMS(Agri. Ento)

#### 19. Revolving Fund:

19.1 Financial status

Opening balance as on 1.04.2018	Receipts	Expenditure	Closing balance as on 31.03.2019
1.73	13.60125	13.44805	0.15320

#### 19.2 Plan of activities under Revolving Fund

Proposed activities	Expected output	Anticipated income (Rs.)	Names of the team members involved
Rice-TFL seeds- TKM 13, CR1009, Sub-1, CSR 36, CO51, ADT 45	300 qtl	7,00,000	
Pulses- BG ADT 3, VBN8, GG CO8	100 qtl		
Planting materials	Coconut seedlings- 2000 Nos.	60,000	
	Vegetable seedlings – (400 Protray) Grafting materials-500 Nos	50,000	P.C, SMS(Agricultural Entomology) SMS(Animal Husbandry) SMS(Fisheries Extension)
	Tree seedlings-3000 Nos	30,000	and Farm Manager
	Fodder slips-10000 Nos	5000	
Bio-products	<i>Pseudomonas</i> – 2 ton	2,00,000	
	Vermicompost-10 ton	1,00,000	
	Azolla- 1 ton	5,000	
	Cocopeat – 5 ton	30,000	
	Fish	200000	
	Poultry	10000	]

#### 20. Activities of soil, water and plant testing laboratory during 2019-20

Sl.No.	Туре	No. of samples to be analyzed	Names of the team members involved
20.1	Soil	500	P.A. (Technical) and
20.2	Water	300	P.A computer

#### 21. E-linkage during 2019-20

S. No	Nature of activities	Status	Remarks if any
21.1	Title of the technology module to be prepared	District agricultural inventory	-
21.2	Creation and maintenance of relevant database system for KVK	Farmers database	Being updated
21.3	Creation of web-site	Already created.( <u>www.kvknagapattinam.com</u> )	Being updated at weekly intervals
21.4	Creation of KVK Face book	Already created.( <u>kvknagapattinam.com</u> )	Being updated at weekly intervals

21.5	Kisan Mobile Advisory	Registration Completed in the farmers portal	Advisory Service are
	Service		being sent to the
			beneficiaries
21.6	Whats App utility	Whats App group on "Farmers of	
		Nagapattinam district" was created during	and training
		2017	information is being
			shared very
			effectively.

#### 22. Activities planned under Rainwater Harvesting Scheme: NIL

#### 23. Innovative Farmer's Meet

Sl.No.	Particulars	Details
23.1	Are you planning for conducing Farm Innovators meet in your district?	Yes
23.2	If Yes likely month of the meet	October 2019
23.3	Brief action plan in this regard	The innovative farmers from various crops/enterprise in the district will be called at KVK and make them to demo their products and get the feedback from the innovative farmers and share their experience with other farmers and capacity building through their innovation in the field of agriculture and allied sector. In the presence of district level higher officials and progressive farmers the salient features of innovations will be explained and demonstrated by the innovators. Based on the scores, the farm innovators will be selected and suitably rewarded.

#### 24. Farm Land Utilization Details:

S. No	Particulars	Details
01	Total land available with the KVK in ha	22.67 ha
02	Total Wetland available with the KVK in ha	22.20 ha
03	Total Garden land available with the KVK in ha	0.47 ha
04	Total Dryland available with the KVK in ha	-
05	Total Cropped Area in ha	16.12 ha
06	Total Non Cropped Area in ha	6.55 ha
07	Crops planned to be cultivated in KVK campus during June	
	to September 2019	
08	Crops planned cultivated in KVK campus during October to	
	February 2019-20	
09	Crops planned to be cultivated in KVK campus during March	
	to May 2019 (Please furnish area in ha for each crop in	
	brackets after indicating the name of the crop)	
10	Area under buildings in ha	2.40 ha
11	Area under Demonstration units in ha	3.60 ha

#### 24.1 Cropping Programme for the year 2019-20

Field No.	Area (ac)	June-Aug	Sept-Jan	Feb- May
A block- West	4.13	Green Manure	Paddy	Paddy
A block- East	3.11	Pulses,Fodder	Fodder	Pulses,Fodder
B block-West	4.0	Green Manure	Paddy	Paddy
B block-East	6.33	Green Manure	Rice	Pulses
C block-East	5.9	Green Manure	Rice	Pulses
D block- West	2.75	Tree sps	Tree sps	Tree sps
D block- East	4.47	Green Manure	Rice	Pulses
E block- West	3.52	Tree sps	Tree sps	Tree sps
E block- East	2.78	Green Manure	Rice	Pulses
F block- East	1.12	Green Manure	Rice	Pulses
F block- West	2.25	Tree sps	Tree sps	Tree sps
Total	40.36	40.36	40.36	40.36

**Area under cultivation** – 40.36 acre (16.14 ha) **Cropping intensity for the year** 2019-2020 = 121.08/40.36 X 100 = 300 %

S.No	Particulars	Proposed BE 2019-20 (Rs lakhs) (indicative)
1	Recurring Items:	
	Pay & Allowances	97.95
	Traveling allowances	2.00
	Field activities & Programmes	0.50
1.1	Contingencies	-
Α	Office Contingencies	-
a.	Stationery, telephone, stamps and other expenditure on office	
	running	5.00
b.	POL, repair of vehicles, tractor & equipments including hiring of vehicle	- 5.00
В	Technical Programmes	-
a.	Rs. 150/- per person per day towards food and refreshments for	2.20
	KVK training programmes for farmers/ extension personnel	2.30
b.	Teaching materials for training and demonstrations	0.25
c.	Training of extension functionaries	0.60
d.	Publication of extension literature for farmers and extension functionaries	0.50
e.	Honorarium for trainers	0.10
f.	On farm testing (Problem oriented)	1.75
g.	Front Line Demonstration on major crops including oilseeds & pulses, fodder crops, animal husbandry, fisheries etc.	4.10
h.	Kisan Melas/ Farmers Fair (at KVK farm)	1.00
i.	Library (Purchase of newspaper, journals, etc.)	0.10
j.	Maintenance of farm	1.00
k.	Entrepreneurship development programme (EDP)/ Integrated Farming system (IFS)/ Farmers Field School (FFS), Strengthening of Demo units	8.116
1.	Mobile App & Website updating/maintenance	1.25
m.	Soil Health Card (SHC)	0.25
n.	SCSP Plan activities	2.05
C.	Tribal Sub-Plan (TSP Component)	-
	Total of Contingencies	28.366
	Total Recurring items	128.816
2	Non-Recurring Contingencies	-
	Works	1.00
	Total	1.00
	SC-SP Component	2.84
	Furniture	-
	Equipment	_
	Vehicle (Jeep & tractor)	-
	Total Non-Recurring Contingencies	4.840
	Grand Total (1+2)	133.656

## 25. Budget - Details of Budget Estimate (2019-20) based on proposed action plan

## 26. Summary of OFT and FLDs proposed for the year 2019-20 A. On Farm Testing (OFT)

Sl. No	Technology to be Assessed	No of Trial	Area (Ha)	Budget (Rs)
1	IPM of Fall Army Worm ( <i>Spodoptera fugiperda</i> ) on Maize	5	2	24750
2	Assessment of drought tolerant groundnut varieties under rainfed condition.	5	2	36,000
3	Assessment of Performance of Bhendi hybrids in Nagapattinam district	5	1	25,000
4	Effect of Mixed fodder bank on livestock productivity (Grasses, Cereal, Pulse & Tree Fodder)	5	1	10,300
5	Evaluation of growth performance of Red Tilapia and GIFT Tilapia in farm ponds	2	-	78,000
	Total	22	6.0	1,74,050

## (B) Frontline Demonstration (FLD) 2019-20

Sl. No	Title of the FLDs	No of Demo	Area (Ha)	Budget (Rs)
1	Demonstration of Newly released rice variety ADT 53 in Nagapattinam District	20	8	20,400
2	Demonstration of Newly released rice variety VGD 1 in Nagapattinam District	20	8	15,200
3	Demonstration of Saline tolerant rice varieties for Nagapattinam District	10	4	13,200
4	Demonstration of Eco friendly pest and disease management in Thaladi (Rabi) paddy	10	4	31,000
5	Demonstration IDM strategies for False smut in Rice	20	8	12,400
6	Demonstration of ICM in Black gram VBN 8 in Nagapattinam Dt.	10	4	24,000
7	Demonstration of Newly released Greengram variety VBN 4 in Nagapattinam District	10	4	24,000
8	Demonstration on Eco friendly IPM strategies for major Sucking pests in cotton	10	4	14000
9	Demonstration on Eco friendly IPM strategies for major pests in Coconut	10	4	16,500

10	Demonstration on IDM strategies for major Diseases in Banana	10	4	25200
11	Demonstration on Eco friendly IPM strategies for major pests in Jasmine	10	4	17,200
12	Classical model on multifunctional agroforestry for small and marginal farmers	2	1	24,100
13	Demonstration of Scientific Rearing of Japanese Quail among rural farmers (EDP)	10	-	45,800
14	Demonstration of Hydroponics fodder cultivation technology to rural farmer	2	-	60,400
15	Demonstration of improved Aseel performance under back yard system	5	-	50,950
16	Demonstration of seed production technology of Gold Fish in cement tanks.	2	-	14,000
	Total	161	59	4,08350

S. No.	Activities	Target (Number)
1	On- farm trials	
a	No. of technologies	5
b	No of Trials	22
2	Frontline Demonstrations	
a	No. of technologies	16
b	No of Demonstrations	161
3	Training of Farmers	
a	No of Courses	46
b	No of Participants	1510
4	Training of Rural Youth	
a	No of Courses	25
b	No of Participants	625
5	Training of Extension Personnel	
a	No of Courses	16
b	No of Participants	410
6	Vocational Training	5
a	No of Courses	150
b	No of Participants	
7	Sponsored Training	
a	No of Courses	18
b	No of Participants	900
8	Paid Training	
a	No of Courses	-
b	No of Participants	-
9	Extension activities	
a	No of Programs	657
b	No of Participants	7150
10	Technology Products : Seed – (Kgs)	40000
11	Technology Products : Planting material – (Nos)	15400
12	Technology Products : Bio-products	
a	Kgs	18000
b	Nos	-
13	Technology Products : Live-stock strains(Animals) - (Nos)	-
14	Technology Products : Live-stock strains (Poultry) - (Nos)	1000
15	Technology Products : Live-stock strains (Fish fingerlings) - (Nos)	5000
16	Kisan Mobile Advisory (KMAS)	
a	No of Messages	50
b	No of farmers	4000
17	Soil and Water Testing Laboratory (No of samples)	800
18	Expected Closing Balance of Revolving Fund on 31.3.2019–(Rs.)	15,320

## Targets of mandated activities for the Year 2019-20

#### ---XXXXXXXXXXXXXX