



**TAMIL NADU DR. J.JAYALALITHAA FISHERIES UNIVERSITY**



**ANNUAL REPORT 2018-19**  
(FOR THE PERIOD FROM APRIL 2018 TO MARCH 2019)



**ICAR-KRISHI VIGYAN KENDRA  
SIKKAL-611 108  
NAGAPATTINAM DT.**

## PROFORMA FOR PREPARATION OF ANNUAL REPORT (April 2018-March 2019)

### APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

#### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	56	2157	1495	3652
Rural youths	1	49	6	55
Extension functionaries	8	251	71	322
Sponsored Training	3	389	231	620
Vocational Training	2	-	65	65
<b>Total</b>	<b>70</b>	<b>2846</b>	<b>1868</b>	<b>4714</b>

#### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	-	-	-
Pulses including CFLD	110	44.0	-
Cereals	20	8.0	-
Vegetables	-	-	-
Other crops	10	4.0	-
<b>Total</b>	<b>140</b>	<b>56.0</b>	-
Livestock & Fisheries	5	-	300 quail
Other enterprises	-	-	-
<b>Total</b>	<b>5</b>	<b>-</b>	<b>300</b>
<b>Grand Total</b>	<b>145</b>	<b>56.0</b>	<b>300</b>

#### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	3	9	9
Livestock(Cow and Poultry)	2	6	15
Various enterprises( Fishery)	1	3	3
<b>Total</b>	<b>6</b>	<b>18</b>	<b>27</b>
<b>Technology Refined</b>			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>6</b>	<b>18</b>	<b>27</b>

#### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	313	7783
Other extension activities	55	-
<b>Total</b>		

## 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
KVK-Nagapattinam	Text only	74	-	6	8	4	3	95
	Voice only	5	-	-	-	-	-	5
	Voice & Text both	-	-	-	-	-	-	-
	<b>Total Messages</b>	<b>79</b>	<b>-</b>	<b>6</b>	<b>8</b>	<b>4</b>	<b>3</b>	<b>100</b>
	<b>Total farmers Benefitted</b>							<b>4094</b>

## 6. Seed &amp; Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	15	45000
Planting material (No.)	6219	259580
Bio-Products (kg)	5712	98350
Livestock Production (No.)	-	-
Fishery production (Kg.)	471	18840

## 7. Soil, water &amp; plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	192	2500
Water	25	1350
Plant	-	-
<b>Total</b>	<b>217</b>	<b>3850</b>

## 8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	3
2	Conferences	2
3	Meetings	-
4	Trainings for KVK officials	-
5	Visits of KVK officials	12
6	Book published	3
7	Training Manual	3
8	Book chapters	-
9	Research papers	-
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	5
13	Proceedings	1
14	Award & recognition	5
15	Ongoing research projects	-

## DETAIL REPORT OF ANNUAL PROGRESS REPORT 2018-19

### 1. GENERAL INFORMATION ABOUT THE KVK

#### 1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
ICAR-Krishi Vigyan Kendra Tamil Nadu Dr.J.Jayalalithaa Fisheries University Sikkal-611 108 Nagapattinam District.	04365-246266	04365-2462 66	kvksikkal@tnfu.ac.in

#### 1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Tamil Nadu Dr.J.Jayalalithaa Fisheries University Vettar River View Campus, Nagapattinam-611 002, Tamilnadu.	04365-256244	04365-256433	vc@tnfu.ac.in

#### 1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr.A.Gopalakannan	-	8838882451	gopalakannan@tnfu.ac.in

#### 1.4. Year of sanction: 2004

#### 1.5. Staff Position (as on 31<sup>th</sup> March, 2019)

Sl. No	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr. A. Gopalakannan	Programme Coordinator	Fisheries Biotechnology	37400+ 67000+ 9000	46400	04.03.19	Permanent	OBC
2	Subject Matter Specialist	Mr. E. Hino Fernando	SMS	Fisheries Extension	56100- 177500	56100	03.12.18	Permanent	OBC
3	Subject Matter Specialist	Dr. K. Chandrasekar	SMS	Agriculture Entomology	56100- 177500	56100	06.12.18	Permanent	OBC
4	Subject Matter Specialist	Dr. S. Muthukumar	SMS	Veterinary Science	56100- 177500	56100	28.12.18	Permanent	OBC
5	Subject Matter Specialist	Recruitment is in progress							
6	Subject Matter Specialist								
7	Subject Matter Specialist								
8	Programme Assistant	Mr. V. Gnanabharathi	Programme Assistant (Technical)	Agriculture	35900- 113500	55800	05.06.07	Permanent	SC
9	Computer Programmer	Ms. G. Ramya	Programme Assistant (Computer)	Computer Application	35400- 112400	35400	07.12.18	Permanent	SC
10	Farm Manager	Mr. R. Vedharethinam	Farm Manager	Agronomy	35900- 113500	55800	04.06.07	Permanent	OBC

11	Accountant / Superintendent	Mr. S. Tamilselvan	Assistant	Chemistry	20600-65500	26100	05.06.18	Permanent	SC
12	Stenographer	Vacant							
13	Driver	Mr. S. Prasanth	Driver	-	18500-58600	18500	07.12.18	Permanent	SC
14	Driver	Mr. J. Sathishkumar	Driver	-	18500-58600	58600	07.12.18	Permanent	OBC
15	Supporting staff	Vacant							
16	Supporting staff	Vacant							

1.6.Total land with KVK (in ha): **22.67**

S. No.	Item	Area (ha)
1	Under Buildings	2.40
2.	Under Demonstration Units	3.17
3.	Under Crops	15.90
4.	Orchard/Agro-forestry	1.20
5.	Others (specify)	0.00

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction (Completed/ in progress/ to be initiated)
1.	Administrative Building	ICAR	02/03/2009	548	41.65	-	-	-
2.	Farmers Hostel	ICAR	09.03.2009	300	26.38	-	-	-
3.	Staff Quarters (No.)	ICAR	19.03.2009	400	33.30	-	-	-
4.	Demonstration Units –Quail rearing	ICAR	24.03.2019	-	-	-	-	-
5	Poultry Rearing	ICAR	24.03.2019	-	-	-	-	-
6	Fodder Bank	ICAR	24.03.2019	-	-	-	-	-
7	IFS unit	ICAR	24.03.2019	-	-	-	-	-
8	Aquaponics Units	NFDB	16.04.2019	200	-	-	-	-
9	Fencing	ICAR	16.04.2013	470 m	5.00	-	-	-
10	Rain Water harvesting system	State Govt.	16.03.2007	2400	0.80	-	-	-
11	Threshing floor	ICAR	21.01.2014	213	3.00	-	-	-
12	Farm godown	-	-	-	-	-	-	-
13	Shed (Farm equipment)	ICAR	16.04.2013	37.20	3.00	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Four Wheeler Bolero Jeep	2017	8,34,445	9775	Good Condition
Two Wheeler (TVS – Star city)	2006	39,641	88928	Good condition
Two Wheeler (Suzuki Access 125)	2009	49,651	61375	Good condition
Tractor	2005	345607	2745.0 hr	Good condition

## C) Equipments &amp; AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
HCL Computer with printer	2011	37600	Good Condition
Data processing system (one desktop, HP Colour printer)	2012	90000	Good Condition
COMPAQ-Laptop	2007	49400	Good Condition
Hp laser printer-1010	2007	8800	Good Condition
Printer -HP- Colour Inkjet printer 3920	2006	2600	Repaired Condition
SAMSUNG SCX4521-F fax cum printer	2009	14400	Good Condition
Printer -HP-Laser jet 1020 plus	2012	6450	Good Condition
LCD projector SANYO- PLC XW 55	2007	53500	Repaired Condition
LCD projector SANYO- PLC XW 55	2007	53500	Good Condition
Scanner -UMAX ASTRA 4100	2005	7150	Repaired Condition
Mini lab- Soil Testing Kit	2016	75000	Good Condition
SLR Digital camera	2016	40000	Good Condition
Office Automation-Equipment	2017	300000	Good Condition

**1.8. A). Details SAC meeting\* conducted in the year****Proceedings of the 7<sup>th</sup> Scientific Advisory Committee meeting of KVK, Sikkal, Nagapattinam**

Seventh Scientific Advisory committee meeting of the KVK, Sikkal was conducted on 25.3.2019 at the KVK, Sikkal, Nagapattinam. The meeting started with prayer. The Member Secretary of SAC and Programme Coordinator of KVK Dr. A. Gopalakannan, welcomed the participants. Dr. R. Jayaraman, Director of Extension Education in-charge, Tamilnadu Dr. J. Jayalithaa Fisheries University (TNJFU), Nagapattinam presented the concept note. The meeting was conducted under the chairmanship Prof. S. Felix, Vice Chancellor, Tamil Nadu Dr. J. Jayalithaa Fisheries University, Nagapattinam. In his presidential address, he expressed his happiness in bringing this KVK under the administrative control of Tamil Nadu Dr. J. Jayalithaa Fisheries University, Nagapattinam with effect from 1.4.2018. Earlier it was functioning under the administrative control of the Tamil Nadu Agricultural University, Coimbatore from 2004 onwards.

Prof. S. Felix, Chairman, Scientific Advisory Committee (SAC) stated that, it is necessary to develop farm specific/location specific technologies through scientific approach for the farming community. He observed that the KVK is located in a coastal district and hence fisheries and fish production and fish product preparation technologies need to be transferred to the farmers as part of Integrated Farming System. However, the Annual Action Plan of the KVK will address all the necessary Crops, Animal husbandry and other allied sectors followed in the district. He said that the University is taking necessary steps in making this KVK as model KVK in the State.

Dr. V. Ambedgar, Director, Tamil Nadu Rice Research Institute, Tamil Nadu Agricultural University, Aduthurai was the chief guest of the SAC. He briefed the farmers on the various agricultural activities being carried out in the delta region and suitable methods for improving the income of the farmers. Dr. M. Nagarajan, Principal Scientist and Officer-in-charge, Rice Breeding and Genetics Research Centre (IARI), Aduthurai suggested some district specific saline tolerant rice varieties for cultivation in salt affected areas. The Programme Coordinator presented the action taken report on the recommendations of the last SAC meeting. Subject Matter Specialists Dr. K. Chandrasekar (Agricultural Entomology), Dr. S. Muthukumar (Animal Husbandry) and E. Hino Fernando, (Fisheries Extension) presented their salient technical achievements on OFTs, FLDs and Extension activities of current year and Annual Action Plan report for forthcoming year 2019-20. Members of the scientific advisory committee from various line departments and non official farmer members participated, they identified the problems in Agriculture and allied activities and gave their suggestions for including them in the action plan. The meeting ended with a vote of thanks by Dr. K. Chandrasekar, SMS (Agri. Entomology).

**List of Participants attended in the 7<sup>th</sup> SAC:**

1.	Prof.S.Felix, Vice Chancellor, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam.	Chairman
2	Dr.A.Gopalakannan, Programme Coordinator, ICAR-Krishi Vigyan Kendra, Sikkal, Nagapattinam Dt.	Member Secretary
3	Dr.V.Ambethgar, Director, Tamil Nadu Rice Research Institute, Aduthurai.	Member
4.	Dr. R. Jayaraman, Director of Extension Education i/c, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam	Member
5.	Dr.M.Nagarajan, Principal Scientist and Officer in charge, Rice Breeding and Genetics Research Centre of Indian Agricultural Research Institute, Aduthurai	Member
6.	Mr.K.Sivakumar, Deputy Director of Agriculture, Nagapattinam Dt.	Member
7.	Mr.V.Krishnamoorthy, Department of Agricultural Marketing and Agri. Business, Nagapattinam Dt.	Member
8.	Dr.C.Suresh, Asst. Professor and Head, Veterinary University Training and Research Centre, Nagapattinam Dt.	Member
9.	Dr.M.Sampath, Deputy Director, Department of Animal Husbandry, Nagapattinam Dt.	Member
10.	Mr.B.Prabaharan, District Development Manager, NABARAD, Nagapattinam	Member
11.	Mr.P.Damodaran, General Manager, District Industries Centre, Nagapattinam	Member
12.	Mr.M.Balasubramaniyan, Forest Ranger, Forest Department, Nagapattinam.	Member
13.	Mr.R.Venkateshwaran, Farm Radio Officer, All India Radio, Karaikkal	Member
14.	Mr.A.Alavudeen, Junior Engineer, Agricultural Engineering Department, Nagapattinam	Member
15.	Mrs.S.Shanthi, Asst. Inspector, Sericulture Department, Nagapattinam.	Member

16.	Mr.G.Jeevanatham, Nangudi, Agarakadambanur-Post, Kilvelur-Tk, Nagapattinam Dt-611 104	Non Official member
17.	Mr.P.Packirisamy (Small farmer), S/O. Pethan, TheppaMudhaliyar Street, Sikkavalam, Puliur	Non Official member
18.	Mrs.M.TajeeNisha, (Women farmer) 6/103, Pallivasal Street, Manjakkollai, Nagapattinam	Non Official member
19.	Mrs.A.Ramya, 1/319, PerumalKoil Street, Villanagar, Arupathi, Sembanarkoil Block	Non Official member
20.	Mr. K.Mariyappan (Agri Entrepreneur) Manmathankoil Street, Koilpathu East, Vedharanyam Taluk, Nagapattinam Dt.	Non Official member
21	Mr.G.Mohanraj, Sangamangalam, Sikkal-Post. Nagapattinam Dt.	Other Invitee
22	Dr.M.Raju, Associate Professor, Tamil Nadu Rice Research Institute, Aduthurai	Special Invitee
23	Mr.Arunagiri Vellapallam Thalainayar Block, Vetharanyam- Taluk	Other invitee
24	Mr.N.Senguttuvan , Vellapallam Thalainayar Block, Vetharanyam- Taluk	Other invitee
25	Mrs.S.SarithaSenthilkumar No.529, Mahalakshmi Nagar, Nagappattinam	Other invitee

**Recommendations of the 7<sup>th</sup> SAC meeting:**

Sl. No.	Recommendations	Proposed by
1.	All Cropping pattern following in Nagapattinam district needs to be cultivated in KVK farm	Dr.S.Felix, Vice Chancellor, TamilNadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam.
2.	Allocation of lands in KVK farm for Coconut nursery development needs to be done with the help of Department of Agriculture/Coconut Development Board	
3.	Weekly once technologies should be broadcasted through AIR, Karaikkal.	
4.	Awareness on Excavation of farm Ponds for rain water harvesting and the water from farm pond may be utilized last 2 irrigations for paddy cultivation needs to be given	Dr.V.Ambethgar, Director, Tamil Nadu Rice Research Institute, Aduthurai.



5.	Suitable Saline tolerant rice variety needs to be assessed	Dr.M.Nagarajan, Principal Scientist and Officer in charge, Rice Breeding and Genetics Research Centre(IARI), Aduthurai.
6.	Poly House and Green House technologies for protective cultivation of vegetables needs to be popularized	Dr.M.Nagarajan, Principal Scientist and Officer in charge, RBGRC-IARI, Aduthurai
7.	Based on district specific, Multi Cropping technologies like Bhendi-Maize-Black gram needs to be popularized	Dr.M.Raju, Associate Professor, Tamil Nadu Rice Research Institute, Aduthurai
8.	On Farm Testing on Saline tolerant rice variety with use of CR1009, TRY 3 and Nunish 9 needs to be conducted	
9.	Newly released Short duration Rice variety ADT 53 needs to be demonstrated	
10.	Newly released Pulses variety -Black Gram ADT 6 under rice fallow as well as irrigated condition needs to be demonstrated	
11	Every Wednesday technologies to be broadcasted through AIR, Karaikal needs to be followed	Mr.R.Venkateshwaran, Farm Radio Officer, All India Radio, Karaikkal.
11.	Incubator for hatchery of poultry needs to be set up in KVK	Mr.G.Jeevanatham, (Big farmer), Nangudi, Agarakadambanur-Post, Kilvelur-Tk, Nagapattinam Dt-611 104
12.	Demonstration of small Onion cultivation at coastal area needs to be popularized	Mr.Arunagiri Vellapallam Thalainayar Block, Vetharanyam- Taluk
13.	More numbers of IFS unit at farmers field needs to be demonstrated.	Mr.N.Senguttuvan , Vellapallam Thalainayar Block, Vetharanyam- Taluk

## **2. DETAILS OF DISTRICT (2018-19)**

2.0. Operational jurisdiction of KVKs (Andhra Pradesh & Telangana only) / Give names of districts & Tehsils: Nil

2.1. Major farming systems/enterprises (based on the analysis made by the KVK)

<b>S. No</b>	<b>Farming system/enterprises</b>
1.	Rice – Rice – Rice fallow Pulses
2.	Rice – Rice fallow Pulses/Cotton
3.	Rice – Rice – Groundnut / Sesame
4.	Rice – Rice – Sugarcane (3 years rotation)
5.	Rice – vegetables / flower crops
6	Livestock
7	Poultry
8	Fisheries

## 2.2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Cauvery Delta Zone	Nagapattinam is a coastal district of Tamil Nadu, lies between 100 80' and 110 28' in North Latitude and 760 34' and 750 53' in East Longitude. It is bounded on the North by Cuddalore, South by Palk Strait, West by Tiruvarur and on the East by Bay of Bengal
S. No	Agro ecological situation	Characteristics
1	Coastal Eco system	Nagapattinam is categorized as agro-ecological region 18, representing the Coastal eco-system-Eastern coastal plain, hot sub-humid to semi-arid eco-system with a growing period of 90 to 210 days

## 2.3 Soil types

S. No	Soil type	Characteristics	Area in ha
1.	Clay loam	High WHC	98,000
2.	Clay sandy loam	Medium WHC	55,000
3.	Sandy soil	Low WHC	35,000
<b>Total</b>			<b>1, 88,000</b>

## 2.4. Area, Production and Productivity of major crops cultivated in the district for 2018-19

Crop	Area (ha)	Production (MT)	Productivity (Kg/ha)
Rice	164436	506353	4031
Black gram	43030	0.2395	549
Green Gram	44299	0.2347	538
Sugarcane	2712	2.02	75000
Ground Nut	1479	0.04349	3000
Sesame	37	0.000188	500
Coconut	4001	6.01 Lakh nuts	150 Nuts/tree/year

## Horticulture crops:

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Vegetables	510.21	8943.98	17530
2	Cashew	1738	547.47	315
3	Mango	3165	2532	800
4	Banana	535	21400	40000
5	Flowers	353	2824	8000

## 2.5. Weather data :

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2018	69.6	-	-	-
May 2018	-	-	-	-
June 2018	5.8	-	-	-
July 2018	0.2	-	-	-
August 2018	49.5	-	-	-
September 2018	40.1	-	-	-
October 2018	249.6	-	-	-
November 2018	649.3	-	-	-
December 2018	66.0	-	-	-
January 2019	-	-	-	-

February 2019	1.0	-	-	-
March 2019	3.5	-	-	-
<b>Total</b>	<b>1134.6</b>	-	-	-

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district:

Category	Population (Numbers)	Production (Numbers)	Productivity
Cow -Crossbred	233346	-	-
Cow- Indigenous	60621	-	-
Buffalo-Crossbred	7217	-	-
Sheep- Indigenous	9133	-	-
Goats- Crossbred	12450	-	-
Goats- Indigenous	451264	-	-
Pigs-Crossbred	1153	-	-
Pigs - Indigenous	1236	-	-
Poultry-Hens- Desi Egg	279817	-	-
Poultry-Hens- Desi- Meat	8837	-	-
Poultry -Hens- Ducks Eggs	4568	-	-
Turkey and others	458	-	-

Fisheries	Area	Production (Kg.)	Productivity
Fish-Marine	-	-	-
Fish -Inland	230.02	1012.37	-
Prawn	1541.84	7955.83	-

2.7 Details of Adopted Villages (2018-19)

Sl.No.	Taluk/ mandal	Name of the block	Name of the village	Year of adoption	Major crops & enterprises	Major problem identified	Identified Thrust Areas
<b>KVK adopted villages</b>							
1	Vetharanyam	Thalainayar	Marachery	2017-18	Rice, Pulses and Tree crops	Yield reduction due to saline problem(EC - more than 2 dS/m). Use of Saline water for irrigation.	Increasing the productivity of Rice Maximizing the yield in vegetable crops INM and IPDM for Rice, Vegetables and Coconut. Crop diversification. Production enhancement in coconut. Value addition in Vegetables and Fruits
2	Nagapattinam	Nagapattinam	Sangamangalam	2017-18	Rice, Pulses and Cattle	Lack of eco friendly IPDM practices for rice Non adoption of traditional rice varieties.	Increasing the productivity of Rice and Pulses. INM and IPDM for Rice. Crop diversification Ecological Pest

						High demand for organically grown traditional rice variety. Unaware of Gift Tilapia fish culture. Low milk yield for local breed.	management in rice. Animal husbandry and Fish production
3	Vetharanyam	Thalainayar	Vellappallam	2017-18	Vegetables, Coconut, Ground Nut and Flowers	Lack of knowledge on improved vegetable cultivation. Yield reduction due to existing local variety. Yield reduction due to Pest problem in vegetables.	Maximizing the yield in vegetable and Groundnut crops. INM and IPDM for Vegetables and Coconut. Crop diversification. Production enhancement in coconut. IPDM in Flowers.
4	Kilvelur	Kilvelur	Agarakadambanur	2006-07	Rice, Pulses, Vegetable, Fisheries, goat and poultry	Non adoption of traditional rice varieties. High demand for organically grown traditional rice variety. Lack of fish production technologies	Eco friendly ICM and IPDM in rice. Inland composite fish production.
5	Tranquebar	Sembanarkoil	Arupathi	2018-19	Rice, Pulses and cotton	Lack of eco friendly IPDM for cotton.	ICM and IPDM for Cotton
<b>DFI villages</b>							
1	Kilvelur	Kilvelur	Agarakadambanur	2018-19	Rice, Pulses, Vegetable, Fisheries, goat and poultry	Non adoption of traditional rice varieties. High demand for organically grown traditional rice variety. Lack of fish production technologies	Eco friendly ICM and IPDM in rice. Inland composite fish production.

## 2.8 Priority/thrust areas

S. No	Crop/Enterprise	Thrust Area
1.	Rice, Pulses	INM and IPDM for Rice, Increasing the productivity of Rice and Pulses. Ecological Pest management in rice
2.	Vegetable crops	INM and IPDM for vegetable crops and yield maximization
3.	Mango and Coconut	INM and IPDM for Mango and Coconut
4.	Cotton	ICM and IPDM for yield maximization
5	Agro-forestry	Agro Forestry system
6	Fisheries	Fish culture



<b>Farmers</b>	-	2	-	100	-	2	-	100
<b>Rural youth</b>	-	-	-	-	-	-	-	-
<b>Extn. Functionaries</b>	-	-	-	-	-	-	-	-

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
400	15.0	10	15900	1219	80

### 3.B. TECHNOLOGY ASSESSMENT

#### Summary of technologies assessed under various CROPS by KVKs

Thematic areas	Crop	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers
Integrated Nutrient Management	-	-	-	-	-
Varietal Evaluation	Ground nut	Assessment of drought tolerant groundnut varieties under rain fed condition	TNAU 2010 and ANGRAU 2012	5	5
	Vegetable	Assessment of Dolichos Bean varieties (Bush Type) suitable for Nagapattinam district.	TNAU 2007 and IIHR 2007	5	5
Integrated Pest Management	Vegetable	Assessment of suitable pest tolerant Tomato hybrids for Nagapattinam Dt.	TNAU 2013 and IIHR 2012	5	5
<b>Total</b>				<b>15</b>	<b>15</b>

#### Summary of technologies assessed under livestock by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers
Disease Management	-	-	-	-	-
Evaluation of Breeds	Poultry	Production Performance of different poultry breed under Back yard	DOPR 2012	3	3
Feed and Fodder management	-	-	-	--	-
Nutrition Management	-	-	-	--	-
Production and Management	Cattle	Role of Ovisynch and TANUVAS mineral mixture on fertility management	TANUVAS	3	12
Others (Pl. specify)	-	-	-	-	-
<b>Total</b>				<b>6</b>	<b>15</b>

#### Summary of technologies assessed under various enterprises by KVKs :

Thematic areas	Enterprise	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers
Production and Management	Fisheries	Assessment of GIFT Tilapia culture in farm ponds	TNJFU	3	3
<b>Total</b>				<b>3</b>	<b>3</b>

### 3.C. TECHNOLOGY ASSESSMENT IN DETAIL

#### OFT 1: Assessment of drought tolerant groundnut varieties under rainfed condition.

1. Thematic area: Integrated Crop Management
2. Title: Assessment of drought tolerant groundnut varieties under rainfed condition
3. Scientists involved: Dr.K. Chandrasekar

4. Details of farming situation: Describe the farming situation including Season, Farming situation (RF/Irrigated), Soil type, fertility Status, Seasonal rainfall (mm) No. of rainy days etc (about 500 words)

**5. Problem definition / discription: (one paragraph)**

Low yield of existing ground nut variety under rainfed condition

**6. Technology Assessed: (give full details of technology as well as farmers practice)**

TO 1- Farmer's practice

TO 2 – CO 7

TO3- Kadiri 9

**7. Critical inputs given: (along with quantity as well as value)**

Seeds- CO7-Rs. 9100/-

Seeds- Kadhiri 9- Rs 16297/-

**8. Results:**

Crop is Flowering stage-Trial is under progress

Performance of the technology

<i>Technology Option</i>	<i>No.of trials</i>	<i>Yield (t/ha)</i>	<i>Net Returns (Rs. in lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
<i>Farmers Practice</i>	5				
<i>Technology 1(Mention details)</i>					
<i>Technology 2(Mention details)</i>					
<i>Technology 3(Mention details)</i>					

Description of the results: (one page) in addition you can use graphs also

Constraints faced:

9. Feed back of the farmers involved: Trial is under progress

10. Feed back to the scientist who developed the technology: Trial is under progress

**OFT 2: Assessment of Dolichos Bean varieties (Bush Type) suitable for Nagapattinam district**

1. Thematic area: Integrated Crop Management

2. Title: Assessment of Dolichos Bean varieties (Bush Type) suitable for Nagapattinam district

3. Scientists involved: Dr. Chandrasekar

4. Details of farming situation: Describe the farming situation including Season, Farming situation (RF/Irrigated), Soil type, fertility Status, Seasonal rainfall (mm) No. of rainy days etc (about 500 words)

**5. Problem definition / discription: (one paragraph)**

- Higher cost of construction of bower for the cultivation of pandal type.
- Unawareness on cultivating bush type varieties.

**6. Technology Assessed: (give full details of technology as well as farmers practice)**

TO1 – Famers Practice-

TO2- COGB-14

TO3 - Arka Jay

**7. Critical inputs given: (along with quantity as well as value)**

Seeds- CO(GB) 14 Rs 4230/-

Seed Arka Jay- Rs. 3300/-

### 8. Results: Vegetative stage-Trail is under progress

Performance of the technology

<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (t/ha)</i>	<i>Net Returns (Rs. in lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
Farmers Practice	2.0				
Technology 1(Mention details)					
Technology 2(Mention details)					
Technology 3(Mention details)					

Description of the results: (one page) in addition you can use graphs also

Constraints faced:

9. Feed back of the farmers involved:

10. Feed back to the scientist who developed the technology:

#### OFT 3: Assessment of suitable pest tolerant tomato hybrids for Nagapattinam Dt.

1. Thematic area: Integrated Crop Management

2. Title: Assessment of suitable pest tolerant tomato hybrids for Nagapattinam Dt.

3. Scientists involved Mrs. D. Indhumathi, SMS (Agri. Entomology)

4. Details of farming situation: Describe the farming situation including Season, Farming situation (RF/Irrigated), Soil type, fertility Status, Seasonal rainfall (mm) No. of rainy days etc (about 500 words)

#### 5. Problem definition / discription: (one paragraph)

- Low yield of pulp content in existing variety
- Lack of technical knowledge in preparation of tomato products

#### 6. Technology Assessed: (give full details of technology as well as farmers practice)

- TO1:Farmers Practice
- TO2:COTH 3 -
- TO3- Arka Rakshak-

#### 7. Critical inputs given: (along with quantity as well as value)

TO2: COTH 3

TO3- Arka Rakshak- Rs 1500

#### 8. Results: Trail affected due to Gaja Cyclone

Table : Performance of the technology

<i>Technology Option</i>	<i>No.of trials</i>	<i>Yield (t/ha)</i>	<i>Net Returns (Rs. in lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
Farmers Practice	5				<b>Trails are fully affected due to Gaja Cyclone during November 2018</b>
Technology 1(Mention details)					
Technology 2(Mention details)					
Technology 3(Mention details)					

Description of the results: (one page) in addition you can use graphs also

Constraints faced: nil

9. Feed back of the farmers involved:

10. Feed back to the scientist who developed the technology:

#### OFT4: Assessment of Production Performance of different poultry breed under Back yard

1. **Thematic area:** livestock Enterprises

2. **Title:** Assessment of Production Performance of different poultry breed under Back yard system

3. **Scientists involved:** Dr. S. Muthukumar



**4. Details of farming situation: Nil****5. Problem definition / description: (one paragraph)**

- Low weight gain of bird
- Lack of awareness of Desi bird rearing.
- Low income of rural youth entrepreneurs.

**6. Technology Assessed: (give full details of technology as well as farmers practice)**

Technology 1: Native chicken

Technology 2: Vanaraja breed

Technology : Giriraja breed

**7. Critical inputs given: (along with quantity as well as value)**

- Cost day old chicks (60 nos.) : Rs. 3600/-
- Cost of vaccine : Rs. 200/-
- Cost of Feed (60 X 4kg X Rs.30) : Rs.7200/-
- Cost of Feeder & Drinker : Rs. 400/-
- Cost of Brooder : Rs.3000/-

**Cost of Trial: Rs. 14,400****8. Results:**

As on today Vanaraja breed were heavier than Giriraja and Native chicks in their respective weekly body weight. Both the breeds were at its egg laying stage but Giriraja starts laying eggs little earlier.

Table : Performance of the technology

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs. in lakh./ha)	B:C ratio	Data on Other performance indicators*
Technology 1(Native chicken)	3	-	-	-	-
Technology 2( Vanaraja breed)					
Technology 3(Giriraja breed)					

**9. Feed back of the farmers involved:**

10.Feed back to the scientist who developed the technology: Nil

**OFT 5: Role of mineral mixture and Ovsynch protocol for infertility management.****1. Thematic area:** Animal Production and Management**2. Title:** Role of mineral mixture and Ovsynch protocol for infertility management**3. Scientists involved:** Dr. S. Muthukumar**4. Details of farming situation: Nil****5. Problem definition / description: (one paragraph)**

In dairy farm profitability getting calf per year is very important thumb rule. Since it is having high level of economic importance on farm profitability farmer must get it on time. In reality many animals are not at their periodic estrus cycle and successful conception which affects the profitability of the farm to great extent.

**6. Technology Assessed: (give full details of technology as well as farmers practice)**

Technology 1 (TANUVAS mineral mixture)

Technology 2 (TANUVAS MM+ Ovisynch protocol)

Technology 3 (Ovisynch)

**7. Critical inputs given: (along with quantity as well as value)**

- Deworming of 30 dairy animals @ Rs.100 : Rs.3000/-
- Cost of Hormones (GnRH & PGF<sub>2</sub>α) : Rs.15000/-
- Cost of Mineral Mixture – 2 kg X 30 X Rs.55: Rs. 3300/-
- Cost of AI Straws : Rs.1500/-
- Cost of Cotton , Syringes and Gloves,etc : Rs.4700/-

Cost/animal: Rs. 950/-

**8. Results:**

Animals under TO2 (TANUVAS MM+ Ovisynch) category shown better conception rate followed by animals under TO1-TANUVAS mineral mixture at last comes the TO3 (only Ovisynch)

**Table:** Performance of the technology

<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (t/ha)</i>	<i>Net Returns (Rs. in lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
Technology 1 (TANUVAS mineral mixture)	30 cows (10 cows/each technology)	-	-	-	
Technology 2 (TANUVAS MM+ Ovisynch)		-	-	-	<i>Faster and better conception rate</i>
Technology 3 (Ovisynch)		-	-	-	

\* *Other performance indicators: such as pest intensity, weed population, test weight, duration etc*

### **Description of the results:**

#### **TO2:**

Animals under this group conceived faster than other two groups. Estrus cycle was prominent and visible clearly. Clear vaginal discharge was observed in all the animals of this group. 80 % of the animals in this group were conceived on the first insemination itself. Whereas other animals in this group conceived in their second insemination. No genital tract infections were observed. Cyclical corpus luteum was noticed.

#### **TO1:**

Animals under this group conceived at good rate than the animals under **Ovisynch** group. Around 40 % of the animals in this group were conceived on its first insemination. Rest of 30% and 30% animals conceived at third and fourth inseminations respectively. In this group some of the animals shown weak estrus signs. This might be due to negative energy balance and hormonal imbalances.

#### **TO3:**

Animals under this group conceived at slower rate than the other two groups. This might be due to loss of nutrients through milk. Only 15% of the animals in this group conceived after first insemination. Whereas 27%, 23% & 35% of animals conceived at their second, third and fourth insemination respectively.

### **9. Feed back of the farmers involved:**

Farmers are very happy about the combined technology of TANUVAS mineral mixture and Ovisynch protocol on infertility management of their cattle. Majority of their animals conceived in the first insemination itself.

### **10. Feed back to the scientist who developed the technology: NIL**

#### **OFT 6:** Assessment of GIFT Tilapia culture in Farm ponds

1. Thematic area: Culture and Production Management
2. Title: Assessment of GIFT Tilapia culture in Farm ponds
3. Scientists involved: Mr. E. Hino Fernando
4. Details of farming situation: Farm Ponds
5. Problem definition / description: (one paragraph)
  - Short duration of water availability
  - Lack of awareness about GIFT Tilapia culture
  - Long duration of crop for IMC culture
6. Technology Assessed: (give full details of technology as well as farmers practice)
  - Technology Option 1: Farmers practice
  - Technology Option 2: GIFT culture
7. Critical inputs given: (along with quantity as well as value)
  - Fish Seed- 1500 Nos@ Rs. 5/Seed- Rs. 7500
  - Fish feed- 250 kg @ Rs. 36/kg - Rs. 9000
8. Results:

It is observed that the growth of GIFT tilapia fishes cultured in the farm ponds showed good growth rate and survival compared to Indian major carps. Also the disease resistance is also found to be high as there was no disease occurrence recorded during the culture period.

Table : Performance of the technology

<i>Technology Option</i>	<i>No. of trials</i>	<i>Yield (t/ha)</i>	<i>Net Returns (Rs. in lakh./ha)</i>	<i>B:C ratio</i>	<i>Data on Other performance indicators*</i>
Technology 1(Farmer practice)	3	1.10	23,100	1.26	Short term growth of Average Body weight is around 230g
Technology 2(GIFT Tilapia)		1.61	56,700	1.54	

9. Feed back of the farmers involved:

- Very high growth rate compared to IMC
- Short term culture period
- High resistance to disease
- It Can adapt in any kind of water

10. Feed back to the scientist who developed the technology:

### 3.d. FRONTLINE DEMONSTRATION

a. Follow-up of FLDs implemented during previous years: **Nil**

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
				<b>Nil</b>			

\* *Thematic areas as given in Table 3.1 (A1 and A2)*

b. Details of FLDs implemented during the current year (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

#### FLD 1: Demonstration of Saline Tolerant Rice variety for Nagapattinam Dt.

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Source of funds	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
1	Black Gram	ICM	Demonstration of ICM in Black gram VBN 8 in Nagapattinam dt.	Rice fallow 2019	ICAR	4.0	4.0	3	7	10	--
2	Paddy	ICM	Demonstration of Traditional rice variety with Eco friendly management.	Rabi 2018	ICAR	4.0	2.0	1	4	5	High seed cost
3	Paddy	Varietal introduction	Demonstration of Saline Tolerant Rice variety for Nagapattinam Dt.	Rabi 2018	ICAR	4.0	4.0	2	8	10	-
4	Cotton	IPM	Demonstration on Eco friendly IPM strategies for major pests in cotton	Rice fallow 2019	ICAR	4.0	2.0	1	4	5	-
5	Mango	IPM	Demonstration of IPDM strategies for Mango fruit flies	February 2019	ICAR	4.0	2.0	-	5	5	Mango plantations are severely affected by Gaja Cyclone

## Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Black Gram	Rabi	Rice fallow	Clay loam	L	M	H	Paddy	30.01.19	16.04.19	--	---
Paddy	Rabi	Irrigated	Clay loam	L	M	H	Black gram	09.09.18	24.01.19	1133.7	--
Paddy	Varietal introduction	Irrigated	Clay loam	L	M	H	Black gram	20.09.18	10.03.19	1133.7	--
Cotton	Rice Fallow	Irrigated	Clay loam	L	M	H	Paddy	06.03.19	Crop is at Flowering stage - Demo is under progress	--	--
Mango	February	Irrigated	Sandy loam	L	M	H	Perennial	Perennial	Crop is at marble satge –Demo is under progress	--	--

**FLD: Demonstration of ICM in Black gram VBN 8 in Nagapattinam dt.****Technical Feedback on the demonstrated technologies**

S. No	Feed Back
1	Resistant to powdery mildew compared to check variety
2	No of pods is more than 15/plant

**Farmers' reactions on specific technologies**

S. No	Feed Back
1	Low incidence of sucking pest due to seed treatment with Imidachloprid
2	Low incidence in Pest and disease

**Extension and Training activities under FLD**

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	-	-	-	--
2	Farmers Training	-	-	-	-
3	Media coverage	-	-	-	-
4	Training for extension functionaries	-	-	-	-

**FLD: Demonstration of Traditional rice variety with Eco friendly management. Traditional paddy**

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	-
2	-

Farmers' reactions on specific technologies

S. No	Feed Back
1	-
2	-

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	1	24.01.2019	15	--
2	Farmers Training	-	-	-	-
3	Media coverage	1	28.01.2019	-	-
4	Training for extension functionaries	-	-	-	-

**FLD: Demonstration of Saline Tolerant Rice variety for Nagapattinam Dt.**

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	CSR 36 variety are performed in saline soil condition more than EC value of 2.5 and CSR 36 better by producing higher yield than farmers practice (BPT 5204)
2	CSR 36 is tolerate the saline soil condition and CSR 36 is fine rice compared to BPT 5204

Farmers' reactions on specific technologies

S. No	Feed Back
1	Less incidence of Pest and Disease were noticed
2	

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	-		-	-
2	Farmers Training	1	11.1.2019	25	-
3	Media coverage	-		-	-
4	Training for extension functionaries	1		35	-

**FLD: Demonstration on Eco friendly IPM strategies for major pests in cotton**

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Demo is under progress
2	

Farmers' reactions on specific technologies

S. No	Feed Back
1	Demo is under progress
2	

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	Demo is under progress			
2	Farmers Training				
3	Media coverage				
4	Training for extension functionaries				

**FLD: Demonstration of IPDM strategies for Mango fruit flies**

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Demo is under progress
2	

Farmers' reactions on specific technologies

S. No	Feed Back
1	Demo is under progress
2	

Extension and Training activities under FLD

S.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	Demo is under progress			
2	Farmers Training				
3	Media coverage				
4	Training for extension functionaries				

## Performance of Frontline demonstrations

### Frontline demonstrations on crops

Crop	Thematic Area	Technology demonstrated	Name of the Variety/ Hybrid		No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
			Domo	Check			Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
							High	Low	Average											
Pulses	Integrated Crop Management	Demonstration of ICM in Black gram VBN 8 in Nagapattinam dt.	VBN 8	ADT 3	10	4	7.5	5.5	6.5	5.0	23.0	20325	42000	21675	2.06	20325	28000	2325	1.37	
Oilseeds			NIL																	
Cereals	ICM	Demonstration of Traditional rice variety with Eco friendly management.	Seergasamba and Mappilai Samba	CR1009	10	4	22.50	17.50	20.0	45.00	-	15150	56000	41100	3.69	38750	67500	28750	1.74	
	Paddy	Demonstration of Saline Tolerant Rice variety for Nagapattinam Dt.	CSR 36	BPT 5204	10	4.0	51.0	46.0	48.5	42.5	6.18	38000	72750	34750	1.91	38000	63750	29800	1.67	
Commercial crops	Integrated Pest Management	Demonstration on Eco friendly IPM strategies for major pests in cotton	RCH 2		5	2.0	Crop is at Flowering stage -Demo is under progress													
Millets			NIL																	
Vegetables			NIL																	
Fruits	Integrated Pest Management	Demonstration of IPDM strategies for Mango fruit flies	5		5	2.0	Crop is at marble stage- Demo is under Progress													
Plantation crops			NIL																	
Spices and condiments			NIL																	
Flowers			NIL																	



### FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)				
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)	
Cattle	Nil																	
Buffalo	Nil																	
Dairy	Nil																	
Poultry/Quail	EDP	Demonstration of Japanese quail rearing under EDP	3	100 each	220g/4 wk body wt.	-	-	3% Mortality	-	2300	4000	1700	1.73	-	-	-	-	
Sheep	Nil																	
Goat	Nil																	

### FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Fisheries	Production management	Feed based fish culture in farm ponds	2	2	150 g Three months period	120 g Three months period	30	-	-	10800	15250	4450	1.41	9700	12340	1540	1.2

### FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit					
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)		
Mushroom	Nil																	
Apiculture	Nil																	
Maize Sheller	Nil																	
Value Addition	Nil																	
Vermi Compost	Nil																	

### FLD on Women Empowerment: Nil

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
			Nil		



**FLD on Fisheries: NIL**

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
NIL																	

**FLD on Other enterprises: Nil**

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Nil																

**FLD on Women Empowerment: Nil**

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Nil					

**FLD on Farm Implements and Machinery: Nil**

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total
Nil																

## Special Programmes 2018-19:

### Farmer's Field School (FFS):

#### Integrated Crop Management in Brinjal:

Thematic area	:	Brinjal
Title of the FFS	:	Integrated Crop Management in Brinjal
Budget proposed in Rs	:	30,000
Season and Period	:	June to December 2018
Periodicity of the session	:	14 weekly classes
Name of the village	:	Vellapallam (Thalainayar Block)
Number of participants	:	30
Name of the Facilitators	:	KVK staff & Agricultural Department Officials
Area of the FFS field	:	Integrated crop Management in Brinjal

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

- Lack of knowledge in ICM
- Poor practices of INM
- Non adoption of IPDM practices

#### Objectives of the FFS

- To create awareness on ICM in Brinjal
- To reduce the cost of cultivation.
- To enhance the yield

#### Following Lectures were delivered:

1.	Importance of soil sampling and soil sampling methods
2.	Season, Varieties and Seed treatment
3.	Nursery Management and pro tray nursery technology
4.	Land preparation (Ploughing, levelling, Ridges and furrows formation)
5.	Brinjal Grafting Technology
6.	Irrigation Management in Brinjal
7.	Integrated Nutrient Management and Foliar Spraying of nutrients

**Results: Demonstrations on ICM in Brinjal were taken up at 30 farmers field. The crop was fully damaged due to Gaja Cyclone hit during November 2018.**

#### Integrated Farming System 2018-19:

Name of the farmer	Mr.G.Jeevanantham
Address	Nangudi, Agarakadambanur, Kilvelu Taluk, Nagapattinam Dt.
Farm Land	40 ha
Existing IFS components	Cow: 6 nos. Goat: 20 nos. Poultry: 100 nos. Fish farming: 0.2 ha
IFS components provided by KVK	Poultry: 100 nos. Quail; 100 Nos. Fish : 500 fingerlings Fodder seed: 1.5 kg CO(FS) 31.

Income under Conventional practices	Rs. 80000/Year
Income under IFS technologies intervention	Rs. 1,50,000/Year
Significant achievement through KVK intervention	Demonstration is Under progress

## 4.Training Programmes

### Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Cropping Systems	4	110	90	200	55	44	99	165	134	299
Integrated Farming	1	60	24	84	28	18	46	88	42	130
<b>Total</b>	<b>5</b>	<b>170</b>	<b>114</b>	<b>284</b>	<b>83</b>	<b>62</b>	<b>145</b>	<b>253</b>	<b>176</b>	<b>429</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Grading and standardization	1	13	8	21	9	10	19	22	18	40
<b>Total (a)</b>	<b>1</b>	<b>13</b>	<b>8</b>	<b>21</b>	<b>9</b>	<b>10</b>	<b>19</b>	<b>22</b>	<b>18</b>	<b>40</b>
<b>V Home Science/Women empowerment</b>										
Value addition	1	-	12	12	-	18	18	12	18	30
<b>Total</b>	<b>1</b>	<b>-</b>	<b>12</b>	<b>12</b>	<b>-</b>	<b>18</b>	<b>18</b>	<b>12</b>	<b>18</b>	<b>30</b>
<b>VI Agril. Engineering</b>										
Use of solar power	1	12	8	20	10	10	20	22	18	40
<b>Total</b>	<b>1</b>	<b>12</b>	<b>8</b>	<b>20</b>	<b>10</b>	<b>10</b>	<b>20</b>	<b>22</b>	<b>18</b>	<b>40</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	2	60	40	100	32	38	70	92	78	170
<b>Total</b>	<b>2</b>	<b>60</b>	<b>40</b>	<b>100</b>	<b>32</b>	<b>38</b>	<b>70</b>	<b>92</b>	<b>78</b>	<b>170</b>
<b>VIII Fisheries</b>										
Integrated fish farming	3	80	40	120	37	28	65	117	68	185
<b>Total</b>	<b>3</b>	<b>80</b>	<b>40</b>	<b>120</b>	<b>37</b>	<b>28</b>	<b>65</b>	<b>117</b>	<b>68</b>	<b>185</b>
<b>IX Production of Inputs at site</b>										
Vermi-compost production	1	8	8	16	4	10	14	12	18	30
Organic manures production	1	12	8	20	10	10	20	22	18	40
Apiculture	1	20	5	25	12	3	15	32	8	40
<b>Total</b>	<b>3</b>	<b>40</b>	<b>21</b>	<b>61</b>	<b>26</b>	<b>23</b>	<b>49</b>	<b>66</b>	<b>44</b>	<b>110</b>
<b>XI Agro-forestry</b>										
Production technologies	2	18	20	38	16	16	32	44	36	80
<b>Total</b>	<b>2</b>	<b>18</b>	<b>20</b>	<b>38</b>	<b>16</b>	<b>16</b>	<b>32</b>	<b>44</b>	<b>36</b>	<b>80</b>
<b>GRAND TOTAL</b>	<b>38</b>	<b>393</b>	<b>263</b>	<b>656</b>	<b>213</b>	<b>205</b>	<b>418</b>	<b>606</b>	<b>468</b>	<b>1074</b>

### Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Integrated Farming	4	40	40	80	28	32	60	68	72	140
Seed production										
Integrated Crop Management	16	462	260	722	193	200	393	655	460	1115
Integrated nutrient management	2	18	20	38	12	22	34	30	42	72
<b>Total</b>	<b>22</b>	<b>520</b>	<b>320</b>	<b>840</b>	<b>233</b>	<b>254</b>	<b>487</b>	<b>753</b>	<b>574</b>	<b>1327</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value	2	46	-	46	10	-	10	56	-	56



Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Plants</b>										
Production and management technology	1	10	10	20	8	12	20	18	22	40
<b>Total (g)</b>	<b>1</b>	<b>10</b>	<b>10</b>	<b>20</b>	<b>8</b>	<b>12</b>	<b>20</b>	<b>18</b>	<b>22</b>	<b>40</b>
<b>GT (a-g)</b>	<b>5</b>	<b>75</b>	<b>25</b>	<b>100</b>	<b>31</b>	<b>30</b>	<b>61</b>	<b>106</b>	<b>55</b>	<b>161</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	1	200	95	295	145	100	245	345	195	550
<b>Total</b>	<b>1</b>	<b>200</b>	<b>95</b>	<b>295</b>	<b>145</b>	<b>100</b>	<b>245</b>	<b>345</b>	<b>195</b>	<b>550</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	2	10	34	44	8	28	36	18	62	80
Value addition	1	-	12	12	-	18	18	12	18	30
<b>Total</b>	<b>3</b>	<b>10</b>	<b>46</b>	<b>56</b>	<b>8</b>	<b>46</b>	<b>54</b>	<b>30</b>	<b>80</b>	<b>110</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	2	20	20	40	16	24	40	36	44	80
Solar power in Agriculture	2	22	18	40	18	22	40	40	40	80
<b>Total</b>	<b>4</b>	<b>42</b>	<b>38</b>	<b>80</b>	<b>34</b>	<b>46</b>	<b>80</b>	<b>76</b>	<b>84</b>	<b>160</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	6	249	69	318	82	60	142	331	129	460
<b>Total</b>										
<b>VIII Fisheries</b>										
Integrated fish farming	4	90	50	140	45	40	85	135	90	225
<b>Total</b>	<b>4</b>	<b>90</b>	<b>50</b>	<b>140</b>	<b>45</b>	<b>40</b>	<b>85</b>	<b>135</b>	<b>90</b>	<b>225</b>
<b>IX Production of Inputs at site</b>										
Vermi-compost production	1	8	8	16	4	10	14	12	18	30
Organic manures production	1	12	8	30	10	10	20	22	18	40
Apiculture	1	20	5	25	12	3	15	32	8	40
<b>Total</b>	<b>3</b>	<b>40</b>	<b>21</b>	<b>71</b>	<b>26</b>	<b>23</b>	<b>49</b>	<b>66</b>	<b>44</b>	<b>110</b>
<b>XI Agro-forestry</b>										
Production technologies	3	28	30	58	24	28	52	62	58	120
<b>Total</b>	<b>3</b>	<b>28</b>	<b>30</b>	<b>58</b>	<b>24</b>	<b>28</b>	<b>52</b>	<b>62</b>	<b>58</b>	<b>120</b>
<b>GRAND TOTAL</b>	<b>56</b>	<b>1424</b>	<b>808</b>	<b>2242</b>	<b>711</b>	<b>689</b>	<b>1400</b>	<b>2161</b>	<b>1487</b>	<b>3048</b>

#### Training for Rural Youths including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	1	34	4	38	15	2	17	49	6	55
<b>TOTAL</b>	<b>1</b>	<b>34</b>	<b>4</b>	<b>38</b>	<b>15</b>	<b>2</b>	<b>17</b>	<b>49</b>	<b>6</b>	<b>55</b>

#### Training for Rural Youth including sponsored training programmes (Off campus): Nil

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Any other (pl.specify)										
<b>TOTAL</b>		Nil								

#### Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	1	34	4	38	15	2	17	49	6	55
<b>TOTAL</b>	<b>1</b>	<b>34</b>	<b>4</b>	<b>38</b>	<b>15</b>	<b>2</b>	<b>17</b>	<b>49</b>	<b>6</b>	<b>55</b>

**Training programmes for Extension Personnel including sponsored training programmes (On campus)**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	31	15	46	-	-	-	31	15	46
Integrated Pest Management	6	189	41	230	-	-	-	189	41	230
Capacity building for ICT application	1	31	15	46	-	-	-	31	15	46
<b>TOTAL</b>	<b>8</b>	<b>251</b>	<b>71</b>	<b>322</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>251</b>	<b>71</b>	<b>322</b>

**Training programmes for Extension Personnel including sponsored training programmes (off campus): Nil**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>TOTAL</b>										

**Training programmes for Extension Personnel including sponsored training programmes – CONSOLIDATED (On + Off campus)**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	31	15	46	-	-	-	31	15	46
Integrated Pest Management	6	189	41	230	-	-	-	189	41	230
Invigorating Extension through ICT tools	1	31	15	46	-	-	-	31	15	46
<b>TOTAL</b>	<b>8</b>	<b>251</b>	<b>71</b>	<b>322</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>251</b>	<b>71</b>	<b>322</b>

**Table. Sponsored training programmes**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop production and management</b>										
Increasing production and productivity of crops	1	200	95	295	145	100	245	345	195	550
<b>Total</b>	<b>1</b>	<b>200</b>	<b>95</b>	<b>295</b>	<b>145</b>	<b>100</b>	<b>245</b>	<b>345</b>	<b>195</b>	<b>550</b>
<b>Livestock and fisheries</b>										
Livestock production and management	2	20	16	44	24	20	36	44	36	80
<b>Total</b>	<b>2</b>	<b>20</b>	<b>16</b>	<b>44</b>	<b>24</b>	<b>20</b>	<b>36</b>	<b>44</b>	<b>36</b>	<b>80</b>
<b>GRAND TOTAL</b>	<b>3</b>	<b>220</b>	<b>111</b>	<b>239</b>	<b>169</b>	<b>120</b>	<b>281</b>	<b>389</b>	<b>231</b>	<b>620</b>

Name of sponsoring agencies involved: ICAR, NADP

**Details of vocational training programmes carried out by KVKs for rural youth**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Livestock and fisheries</b>										
Composite fish culture	1	-	20	20	-	10	10	-	30	30
Value Addition in Fish	1	-	20	20	--	15	15	-	35	35
<b>Total</b>	<b>2</b>	<b>-</b>	<b>40</b>	<b>40</b>	<b>-</b>	<b>25</b>	<b>25</b>	<b>-</b>	<b>65</b>	<b>65</b>





Voice & Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Messages</b>	3	4000	-	-	-	-	-	-	1	4000	-	-	4	4000
<b>Total farmers Benefitted</b>	-	4000	-	-	-	-	-	-	-	4000	-	-	-	4000

### MOBILE ADVISORY SERVICES THROUGH OTHERS

No of registered farmers: 94 nos.

Types of Messages	Type of messages													
	Crop		Livestock		Weather		Marketing		Awareness		Other enterprise		Total	
	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers	No of messages	No of farmers
Text only	71	94	-	-	6	94	8	94	3	94	3	94	91	94
Voice only	5	94												
Voice & Text both	-	-												
<b>Total Messages</b>	76	94			6	94	8	94	3	94	3	94	91	94
<b>Total farmers Benefitted</b>		94	-	-	-	94	-	94	-	94	-	94	91	94

## 6. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Gosthies			Nil
Lectures organised			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Distribution of Literature (No.)			
Distribution of Seed (q)			
Distribution of Planting materials (No.)			
Bio Product distribution (Kg)			
Bio Fertilizers (q)			
Distribution of fingerlings			
Distribution of Livestock specimen (No.)			
Total number of farmers visited the technology week			

## 7.PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of **seeds** by the KVKs (seed in quintals only)

Enterprise	Name of crop	Variety	Seed produced		Seed supplied to farmers						Seed supplied to other agencies	
			Quantity (q)	Value (Rs)	Free seed			Priced seed			Quantity (q)	Value (Rs)
					Quantity (q)	No of farmers	Value (Rs)	Quantity (q)	No of farmers	Value (Rs)		

<b>CEREALS</b>	Paddy	TKM 13	15	45000	-	-	-	-	-	-	-	-
	<b>Total Cereals</b>	TKM 13	15	45000	-	-	-	-	-	-	-	-

### Production of planting materials by the KVKs (seedlings, cuttings. Slips in numbers)

Enterprise	Name of crop	Variety	Planting material produced		Planting material supplied to farmers						Planting material supplied to other agencies		
			Quantity (Nos)	Value (Rs)	Free supply			Priced			Quantity (Nos)	Value (Rs)	
					Qty (Nos)	No of farmers	Value (Rs)	Quantity (Nos)	No of farmers	Value (Rs)			
<b>PLANTATION CROPS</b>													
	Coconut	ECT	5000	250000	-	-	-	-	-	-	-	-	-
	Neem	Local	2	20	-	-	-	2	1	20	-	-	-
	Teak	Local	264	2640	-	-	-	264	19	2640	-	-	-
	Vengai	Local	648	6480	-	-	-	648	50	6480	-	-	-
	Pungam	Local	15	150	-	-	-	15	3	150	-	-	-
	<b>Total forest and plantation crops</b>		<b>929</b>	<b>9290</b>	-	-	-	<b>929</b>	<b>73</b>	<b>9290</b>	-	-	-
<b>FODDER slips</b>	Cumbu Napier grass (Co 3, Co 4, Co 5 etc)	CO3	290 slips	290	-	-	-	290	7	290	-	-	-
	<b>Total Fodder crops</b>		<b>290 slips</b>	<b>290</b>	-	-	-	<b>290</b>	<b>7</b>	<b>290</b>	-	-	-

### Production of Bio-Products

Category	Name of the product	Comm ercial name (if any)	Bio-products produced		Bio-products supplied to farmers						bio-products supplied to other agencies		
			Quantity (kg)	Value (Rs)	Free distribution			Priced			Quantity (kgs)	Value (Rs)	
					Quantity (kgs)	No of farmers	Value (Rs)	Quantity (kgs)	No of farmers	Value (Rs)			
<b>Bio-fertilizers</b>	Azolla	-	40	400	-	-	-	40	30	400	-	-	-
	<b>Total bio-fertilizers</b>		<b>40</b>	<b>400</b>	-	-	-	<b>40</b>	<b>30</b>	<b>400</b>	-	-	-
<b>Bio-inputs</b>	Panchakavya	-	121	12100	-	-	-	121	25	12100	-	-	-
	Vermi compost	-	1899	18990	-	-	-	1899	117	18990	-	-	-
	Coco Peat	-	3292	30860	-	-	-	3292	53	30860	-	-	-
	<b>Total bio-inputs</b>		<b>5312</b>	<b>61950</b>	-	-	-	<b>5312</b>	<b>195</b>	<b>61950</b>	-	-	-
<b>Bio-Pesticides</b>	<i>Pseudomonas</i>	-	360	36000	-	-	-	360	91	36000	-	-	-
	<b>Total bio-pesticides</b>		<b>360</b>	<b>36000</b>	-	-	-	<b>360</b>	<b>91</b>	<b>36000</b>	-	-	-
	<b>Total bio-products</b>		<b>5712</b>	<b>98350</b>	-	-	-	<b>5712</b>	<b>316</b>	<b>98350</b>	-	-	-

### Production of livestock materials

Category	Name of the livestock/fish/feed	Variety/im proved species name/Com mercial name (if any)	Production		Supplied to farmers						Supplied to other agencies		
			Quantity (No)	Value (Rs)	Free distribution			Priced			Quantity (No)	Value (Rs)	
					Quantity (No)	No of farmers	Value (Rs)	Quantity (No)	No of farmers	Value (Rs)			
<b>FISHERY</b>	Fish meat (kg)	Gift	471	18840	-	-	-	471	187	18840	-	-	-
	<b>Total Fishery</b>		<b>471</b>	<b>18840</b>	-	-	-	<b>471</b>	<b>187</b>	<b>18840</b>	-	-	-
	<b>Grand Total Livestock and fishery</b>		<b>471</b>	<b>18840</b>	-	-	-	<b>471</b>	<b>187</b>	<b>18840</b>	-	-	-

## 8. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples/ SHC	No. of Samples		No. of Farmers	No. of Villages	Amount realized (Rs.)
	Using Mini Soil Testing Lab	Through Traditional Lab			
Soil samples	205	-	192	192	2500
Soil Health Cards (SHC)	205	-	192	192	-

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Water	27	25	25	1350
Plant	-	-	-	-
Manure	-	-	-	-
Others (pl.specify)	-	-	-	-
<b>Total</b>	<b>27</b>	<b>25</b>	<b>25</b>	<b>1350</b>

## 9. SCIENTIFIC ADVISORY COMMITTEE

Date of SAC meeting	Number of members attended
25.03.2019	25

### Proceedings of the 7<sup>th</sup> Scientific Advisory Committee meeting of KVK, Sikkal, Nagapattinam

Seventh Scientific Advisory committee meeting of the KVK, Sikkal was conducted on 25.3.2019 at the KVK, Sikkal, Nagapattinam. The meeting was started with prayer. The member secretary of SAC and Programme Coordinator of KVK Dr. A. Gopalakannan, welcome the participants. Dr. R. Jayaraman, Director of Extension Education in-charge, Tamilnadu Dr.J.Jayalalithaa Fisheries University (TNJFU), Nagapattinam presented the concept note. The meeting was conducted under the chairmanship of the Hon'ble Vice Chancellor, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam Prof. S.Felix, Ph.D, In his presidential address, he expressed his happiness in bringing this KVK under the administrative control of Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam with effect from 1.4.2018. . Earlier it was functioning under the administrative control of the Tamil Nadu Agricultural University, Coimbatore from 2004 onwards.

Dr.S.Felix stated that it is necessary to develop farm specific/location specific technologies through scientific approach for the farming community. He observed that the KVK is located in a coastal district and hence fisheries and fish production and Fish product preparation technologies need to be transferred to the farmers as part of Integrated Farming System. However, the Annual Action Plan of the KVK will address all the necessary Crops, Animal husbandry and other allied sectors followed in the district. He said that the University is taking necessary steps in making this KVK a model KVK in the State.

Dr.V.Ambedgar, Director, Tamil Nadu Rice Research Institute, Aduthurai in his technical speech briefed the farmers on the various agricultural activities being carried out in the delta region and suitable methods for improving the income of the farmers. Dr. M.Nagarajan, Principal Scientist and Officer-in-charge, Rice Breeding and Genetics Research Centre (IARI), Aduthurai suggested some district specific saline tolerant rice varieties for cultivation in salt affected areas. The Programme Coordinator presented the action taken report on the recommendations of the last SAC meeting. Subject Matter Specialists Dr. Chandrasekar (Agricultural Entomology), Dr. S. Muthukumar (Animal Husbandry) and E. Hino Fernando, (Fisheries Extension) presented their Salient technical achievements on OFTs, FLDs and Extension activities of current year and Annual Action Plan report for forthcoming year 2019-20. Members of the scientific advisory committee from various line departments and nn official farmer members participated and addressed their problem identified in Agriculture and allied activities and gave their and suggestions for including them in the action plan. The meeting ended with vote of thanks by Dr. R. Chandrasekar, SMS(Agri. Entomology).

**List of Participants attended in the 7<sup>th</sup> SAC:**

1.	Dr.S.Felix, Vice Chancellor, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam.	Chairman
2	Dr.A.Gopalakkannan, Programme Coordinator, ICAR-Krishi Vigyan Kendra, Sikkal, Nagapattinam Dt.	Member Secretary
3	Dr.V.Ambethgar, Director, Tamil Nadu Rice Research Institute, Aduthurai.	Member
4.	Dr. R. Jayaraman, Director of Extension Education in-charge, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam	Member
5.	Dr.M.Nagarajan, Principal Scientist and Officer in charge, RBGRC-IARI, Aduthurai	Member
6.	Mr.K.Sivakumar, Deputy Director of Agriculture Nagapattinam Dt.	Member
7.	Mr.V.Krishnamoorthy, Department of Agricultural Marketing and Agri. Business, Nagapattinam Dt.	Member
8.	Dr.C.Suresh, Asst. Professor and Head, Veterinary University Training and Research Centre, Nagapattinam Dt.	Member
9.	Dr.M.Sampath, Deputy Director, Department of Animal Husbandry, Nagapattinam Dt.	Member
10.	Mr.B.Prabaharan, District Development Manager, NABARAD, Nagapattinam	Member
11.	Mr.P.Damodaran, General Manager, District Industries Centre, Nagapattinam	Member
12.	Mr.M.Balasubramaniam, Forest Ranger, Forest Department, Nagapattinam.	Member
13.	Mr.Venkateshwaran, Farm Radio Officer, All India Radio, Karaikkal	Member
14.	Mr.A.Alavudeen, Junior Engineer, Agricultural Engineering Department, Nagapattinam	Member
15.	Mrs.S.Shanthi, Asst. Inspector, Sericulture Department, Nagapattinam.	Member
16.	Mr.G.Jeevanatham, Nangudi, Agarakadambanur-Post, Kilvelur-Tk,	Non Official member

	Nagapattinam Dt-611 104	
17.	Mr.P.Packirisamy (Small farmer), S/O. Pethan, Theppa Mudhaliyar Street, Sikkavalam, Puliur	Non Official member
18.	Mrs.M.Tajee Nisha, (Women farmer) 6/103, Pallivasal Street, Manjakkollai, Nagapattinam	Non Official member
19.	Mrs.A.Ramya, 1/319, Perumal Koil Street, Villanagar, Arupathi, Sembanarkoil Block	Non Official member
20.	Mr. K.Mariyappan (Agri Entrepreneur) Manmathankoil Street, Koilpathu East, Vedharanyam Taluk, Nagapattinam Dt.	Non Official member
21	Mr.G.Mohanraj, Sangamangalam, Sikkal-Post. Nagapattinam Dt.	Other Invitee
22	Dr.M.Raju, Associate Professor, TRRI, Aduthurai	Special Invitee
23	Mr.Arunagiri Vellapallam Thalainayar Block, Vetharanyam- Taluk	Other invitee
24	Mr.N.Senguttuvan , Vellapallam Thalainayar Block, Vetharanyam- Taluk	Other invitee
25	Mrs.Saritha Senthilkumar No.529, Mahalakshmi Nagar, Nagapattinam	Other invitee

**Recommendations of the 7<sup>th</sup> SAC meeting:**

Sl. No.	Recommendations	Proposed by
1.	All Cropping pattern following in Nagapattinam district needs to be cultivated in KVK farm	Dr.S.Felix, Vice Chancellor, Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam.
2.	Allocation of lands in KVK farm for Coconut nursery development needs to be done with the help of Department of Agriculture/Coconut Development Board	
3.	Weekly once technologies should be broadcasted through AIR, Karaikkal.	
4.	Awareness on Excavation of farm Ponds for rain water harvesting and the water from farm pond may be utilized last 2 irrigations for paddy cultivation needs to be given	Dr.V.Ambethgar, Director, Tamil Nadu Rice Research Institute, Aduthurai.
5.	Suitable Saline tolerant rice variety needs to be assessed	Dr.M.Nagarajan, Principal Scientist and Officer in charge, Rice Breeding and Genetics Research Centre(IARI), Aduthurai.
6.	Poly House and Green House technologies for protective cultivation of vegetables needs to be popularized	Dr.M.Nagarajan, Principal Scientist and Officer in

		charge, RBGRC-IARI, Aduthurai
7.	Based on district specific, Multi Cropping technologies like Bhendi-Maize-Black gram needs to be popularized	Dr.M.Raju, Associate Professor, TRRI, Aduthurai
8.	On Farm Testing on Saline tolerant rice variety with use of CR1009, TRY 3 and Nunish 9 needs to be conducted	
9.	Newly released Short duration Rice variety ADT 53 needs to be demonstrated	
10.	Newly released Pulses variety -Black Gram ADT 6 under rice fallow as well as irrigated condition needs to be demonstrated	
11	Every Wednesday technologies to be broadcasted through AIR, Karaikal needs to be followed	Mr.Venkateshwaran, Farm Radio Officer, All India Radio, Karaikkal.
12.	Incubator for hatchery of poultry needs to be set up in KVK	Mr.G.Jeevanatham (Big farmer), Nangudi, Agarakadambanur-Post, Kilvelur-Tk, Nagapattinam Dt-611 104
13.	Demonstration of small Onion cultivation at coastal area needs to be popularized	Mr.Arunagiri Vellapallam Thalainayar Block, Vetharanyam- Taluk
14.	More numbers of IFS unit at farmers field needs to be demonstrated.	Mr.N.Senguttuvan , Vellapallam Thalainayar Block, Vetharanyam- Taluk

## 10. PUBLICATIONS

### Publications in journals: Nil

S. No	Authors	Year	Title	Journal
	Nil			

### Other publications

S.No	Item	Year	Authors	Title	Publisher
1	Books	2018	Dr.M.Nagoor Meeran, Dr.R.Santhakumar and Mr. .Santhoshkumar	Fish Culture in Farm Ponds	DoEE, TNJFU
		2018	Mrs. D.Inthumathi, SMS(Agri Ento)	Integrated crop management in Brinjal under FFS	KVK, Nagapattinam
		2019	Dr.R.Santhakumar, Mr.N.Sampathkumar, Dr.K.Chandrasekar, Mr.E.Hino Fernando, Dr.S.Muthukumar, Mr.V.Gnanabharathi and Mr.R.Vedharethinam	Agricultural Technologies on Rabi Crops	KVK, Nagapattinam
2	Book chapters / manuals	--	--	--	--

3	Training manuals	2018	--	IFS technologies suitable to Nagapattinam District.--	KVK, Nagapattinam
		2019	--	Guidelines on PM-KISAN Samman Nidhi Yojana	KVK, Nagapattinam
		2019	--	Importance of Soil Testing and Sampling procedure	KVK, Nagapattinam
4	Conference, proceeding papers, popular articles, Bulletins, Short communications	--	--	--	--
5	Technical bulletin/ Folders	2018	--	IPDM technologies for Rice	KVK, Nagapattinam
		2018	--	Management Technologies on Fall Army Worm	KVK, Nagapattinam
6	Reports	2018	--	Annual Action Plan 2018-19	KVK, Nagapattinam
		2018	--	Annual Progress Report 2017-18	KVK, Nagapattinam
		2019	--	Report on 7 <sup>th</sup> SAC meeting	KVK, Nagapattinam
7	others	2019	-	Proceedings on 7 <sup>th</sup> SAC meeting	KVK, Nagapattinam

### Newsletter/Magazine

Name of News letter/Magazine	Frequency	No. of Copies printed for distribution
TNJFU News Letter	Monthly	Released from DoEE, TNJFU, Nagapattinam

### Training/workshops/seminars etc. details attended by KVK staff

Trainings attended in the relevant field of specialization (Mention Title, duration, Institution, location etc.)

Name of the staff	Title	Dates	Duration	Organized by
Dr.R.Santhakumar, Mr.N.Sampathkumar, Mr.V.Gnanabharathi and Mr.R.Vedharethinam	Pre Season Agriculture Seminar	29.05.2018	One day	KVK, Nagapattinam
Dr.R.Santhakumar,	Action Plan Workshop 2018-19	20.04.2018, 21.04.2018	Two days	DEE, TNAU, Coimbatore and ATARI, Hyderabad
Dr.R.Santhakumar,	Annual Review Workshop 2017-18	20.09.2018 to 22.09.2018	Three days	ATARI, Hyderabad
Dr.R.Santhakumar, Mr.N.Sampathkumar, Dr.K.Chandrasekar, Mr.E.Hino Fernando, Dr.S.Muthukumar, Mr.V.Gnanabharathi and Mr.R.Vedharethinam	Pre Rabi Campaign –One day Awareness and World Soil Day programme	11.01.2019	One day	KVK, Nagapattinam



Mr.E.Hino Fernando	International Conference on Brackish Water Aqua Culture	22.01.2019	One day	CIBA, Chennai
Mr.N.Sampathkumar, Dr.K.Chandrasekar, Mr.E.Hino Fernando, Dr.S.Muthukumar,	District Level Agriculture Mela 2018-19	27.02.2019	One day	Department of Agriculture, Nagapattinam
Dr.A.Gopalakannan Dr.K.Chandrasekar, Mr.E.Hino Fernando, Dr.S.Muthukumar,	Pre Action Plan Meeting 2019-20	22.03.2019	One Day	DoEE, TNAU, Coimbatore

## 11. DETAILS ON RAIN WATER HARVESTING STRUCTURE AND MICRO-IRRIGATION SYSTEM

Activities conducted				
No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)
2	-	-	100	12

## 12. INTERVENTIONS ON DISASTER MANAGEMENT/UNSEASONAL RAINFALL/HAILSTORM/COLD WAVES ETC

Introduction of alternate crops/varieties

Crops/cultivars	Area (ha)	Extent of damage	Recovery of damage through KVK initiatives if any
Nil			

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Nil		

Farmers-scientists interaction on livestock management

Livestock components	Number of interactions	No. of participants
Cattle	1	5
Piggery	1	2
IFS unit	1	85
IFS unit	1	2
IFS unit	1	3
IFS unit	1	2
<b>Total</b>	<b>6</b>	<b>99</b>

Animal health camps organized

Number of camps	No. of animals	No. of farmers
Nil		

Seed distribution in drought hit states

Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Nil			

Large scale adoption of resource conservation technologies

Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
Nil		

## Awareness campaign

	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
	1	40	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1</b>	<b>40</b>	-	-	-	-	-	-	-	-	-	-

### 13. Awards/rewards by KVK and staff

Recognitions & Awards/Special attainments and Achievements of Practical Importance					
Recognitions & Awards (Team Award/individual)					
Item of Recognition		Year	Awarding Organization National / International / Professional; Society		Individual/ collaborative
<b>Best Worker award for outstanding performance</b> Mr.V.Gnanabharathi, Programme Asst. Technical, KVK, Nagapattinam		2018	Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam		Individual
Special Attainments & Achievements of Practical Importance (patents, technologies, varieties, products, concepts, methodologies etc.)					
Category	Title		Year	Individual/ Collaborative	Additional Details/Information
Nil					

### 14. Details of sponsored projects/programmes implemented by KVK

S.No	Title of the programme / project	Sponsoring agency	Objectives	Duration	Amount (Rs)
1	Establishment of Aquaponics-Demo Unit	NFDB	Training and Demonstration to fish farmers		Rs. 10.66 lakh

#### Detailed report of each project/programme:

Establishment of Aquaponics Unit for Training and Demonstration to fish farmers at KVK, Sikkal, Nagapattinam was completed on 16.04.2019. Culturing of fish and crops is under progress.

1.	Name of the Project	Establishment of Aquaponics Unit for Training and Demonstration to fish farmers at KVK, Sikkal, Nagapattinam.
2.	Location	ICAR-Krishi Vigyan Kendra, Sikkal
3.	Name of the Scientists in charge of the Project	Dr.A.Gopalakannan, Programme Coordinator, Mr.E.Hino Fernando, SMS(Fisheries Extn.), ICAR-KVK, Sikkal
4.	Term of reference	NFDB/Tech/TNJFU/INNOVATIVE PROJECT (Azolla-Aquaponics-Biofloc-Aqua One) RAS/2017-18 dt. 22.03.2018.
5.	Objectives /programme of Work	To establish 200 m <sup>2</sup> area Aquaponics unit for Training and Demonstration of Aquaponics technology to fish farmers
6.	Operation of Fund	Programme Coordinator, ICAR-Krishi Vigyan Kendra, Sikkal
7.	Duration of the Project	Creation of Aquaponics unit(200 m <sup>2</sup> )
8.	Funding Agency	National Fisheries Development Board, Hyderabad-500 052
9.	Budget	Rs.10.66 lakh
10.	Administration	The Director of Research, TNJFU, Nagapattinam
11.	Evaluation procedure	As per the norms of the University as well as NFDB

## 15. Success stories

### Title: Demonstration of Traditional rice variety with Eco friendly management

#### Introduction:

Since the beginning of Green Revolution in the 1960s, increasing the yield of paddy was the main objective. Hence, we started adopting high yielding rice varieties by forgetting our traditional rice varieties. Nowadays, throughout Tamil Nadu more than 100 high yielding rice varieties are being cultivated. However, the incidence of pest and disease increased which resulted in higher application of pesticides eventually affecting the environment. This has hiked the production cost of high yielding varieties compared to the traditional ones. The traditional variety seeds and grains costs are almost two to three times higher than our normal ones. Currently, people are looking for organic products which created a demand for the traditional varieties. The traditional varieties are rarely affected by pest and diseases and hence there is less need of pesticide application. The management practices are also cheap.

#### Problem identified

- Lacking adoption of traditional rice varieties
- More pesticide application in normal rice varieties
- More demand for traditional rice variety seeds

#### KVK interventions

- Traditional rice variety seeds are given to farmers
- Periodical visit to farmer's field

#### Output and Income:

Sl. No.	Traditional rice variety	Yield Kg/Ha	Cost of cultivation	In case of grain	In case of seed
1.	Jeeragasamba	2500	Rs.15000	Rs 40/ per kg 2500x 40 = 1,00,000	Rs 60/ per kg 2500x 60 = 1,50,000
2.	Mappillaisamba	4,500	Rs.15000	Rs 40/ per kg 4500x 40 = 1,80,000	Rs 60/ per kg 4500x 60 = 2,70,000
3	Ruling Variety	6,000	Rs. 37,000	Rs 18/ per kg 6000x 40 = 1,08,000	Rs 28/ per kg 6000 x 28 = 1,68,000

#### Farmer Details:

Mr. G.Jeevanantham, Nangudi, Agarakadambanur post, Kilvelur – TK, Nagapattinam – 611 104.

Contact Number: 9443375262





## **Title: Demonstration of Scientific Rearing of Japanese quail under EDP**

### **Introduction:**

Poultry rearing has important role in rural economy. Rural women empowerment lies on free flowing of money in their hand, which makes them to stand on their leg independently. Among poultry, Japanese quail which gives money to the farmer on monthly basis. Japanese quails are reared for only 4 to 5 weeks of time after which they ready for marketing. Maintenance of Japanese quail is easier than any other livestock rearing. Mortality rate also comparatively minimal. The demand for quail meat and egg is huge in our area. In quail farming no vaccination and deworming is required for Quail unlike other livestock.

### **Problem identified:**

- Lack of awareness of Quail culture
- Problems identified during the course of rearing are 3% chick mortality.
- Low income of the rural women.

### **KVK intervention:**

#### **1. Brooding intervention:**

#### **2. Therapeutic intervention:**

There was chick mortality of about 5% after which we intervened and suggested antimicrobial therapy.

#### **3. Marketing intervention:**

Forward integration was made by linking with one entrepreneur having small scale hatchery.

#### **4. Expansion intervention:**

### **Output & Outcome:**

- Fourth week recorded body weight was 240g.
- Average egg weight is around 12-13 g.
- Price at which birds were sold: Rs.: 40/bird
- Price at which eggs were sold: Rs.: 2 /Egg.

### **Gross cost:**

### **Outcome:**

Japanese quail rearing is getting popular among the farmers of that village and now people are familiar to the taste of meat and egg. Many young entrepreneur from that village started inquiring about the business viability and opportunity.

**Future Plan for that village:** Forward integration of the enterprise.

### **Farmer details:**

- Name: Mrs. S. Chanthra
- W/O: Mr. Sasikumar
- Village: Maracherry
- Block: Thirukkuvalai
- Occupation: Farming and Daily cooli
- Community : SC
- Economic status: BBL

- Annual Income: 32000
- Phone Number: 8300213515



### 1. Title: GIFT Tilapia production in farm ponds

#### 2. Introduction

Venukalidoss is a fish farmer from Marachery village doing fish culture for the past 10 years. He has 1 acre pond where he used to culture carps using the river water. He has little knowledge about fish culture and was doing this as an allied farming activity in addition to paddy culture. Usually the ponds were stocked with fingerlings of IMC purchased from local fish farms without carrying out any prestocking management measures. The fishes were fed with farm made feeds including boiled rice based on the feed intake of fishes. After a culture period of 8–9 months due to the shortage of water supply fishes are harvested and marketed in Thanjavur and Mannarkudi areas.

#### 3. Problem identified

- Fertilization of pond is not done properly.
- Lack of awareness about GIFT tilapia culture in the village
- Lack of awareness about importance of feeding in fish culture
- Short duration of water availability in the village
- Long duration of culture for carps
- Prolific breeding behaviour of wild Tilapia fishes
- Water quality parameters are not taken into consideration/not tested before stocking fishes for culture.
- High stocking density of fishes

#### 4. KVKs intervention

- Fish farmer was identified first for implementing GIFT tilapia culture technology in the village
- Fish pond was identified for stocking GIFT tilapia fishes
- Water quality parameters tested for suitability of water for culture
- Bunds were not constructed properly and suggestions were given to make it clear
- Advised to clear unwanted bushes and plants in the pond area
- Advised to add fertilizer (cow dung) for natural phytoplankton production
- GIFT tilapia of 1500 Nos were stocked in the area of 500m<sup>2</sup> pond

- Fishes were fed with commercial pellet feeds at 5% body weight for 3 months
- After 3 months it has reached an average body weight of 314g
- The fishes reached the market size within three months

### 5. Output and outcome

- An yield of around 376 kg were harvested from the culture
- Fishes were marketed as live at the rate of Rs.100/kg
- Gross income of Rs.37,680/- was achieved from the culture
- High resistance to diseases compared to carps
- Fish farmer is motivated to take up GIFT tilapia as next crop as this technology earns money in a short period of time with limited water availability
- He also commented on the palatability of GIFT tilapia as this has good consumer preference
- He also advised other fish farmers to take this technology as this has a suitability for our district



### 15. B. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

-NIL-

### 15. C. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

## 16. IMPACT

### 16.A. Impact of KVK activities (Not to be restricted for reporting period).

Crops	No. of OFT carried during the last five years	Cultivable Area under Crop (in Hectare)		Productivity of the Crop (Per Hectare)	
		Before Dissemination of technology	After Dissemination of technology	Before Adoption of new technology	After Adoption of new technology
Rice	7	144055	164436	3653	3850
Black gram	3	31391	43030	563	750
Green Gram	1	23999	44299	580	725
Sugarcane	1	2685	2712	55000	68000
Ground Nut	1	1913	2673	2800	2900
Cotton	2	321	2633	205	230
Coconut	2	3401	4001	25200 Nuts	26900 Nuts
Vegetables (Brinjal)	1	537	603	18560	19450
Mango	1	1845	3160	6835	12000
Type of Non – Crop Activities	No. of OFT carried during the last five years	Productivity/Yield		Change in Income due to intervention of OFT	
		Before Adoption of new technology	After Adoption of new technology	Before Adoption of new technology	After Adoption of new technology
Farm machinery	1	3653	3800	16088	25918
Animal feed to increase milk production	1	150 liters	195 liters	2,325	3,420

### Impact of FLD carried out by the KVK in the district.

Crops	No. of FLD carried during the last five years	Cultivable Area under Crop (in Hectare)		Productivity/Yield of the Crop (Per Hectare)	
		Before Dissemination of technology	After Dissemination of technology	Before Adoption of new technology	After Adoption of new technology
Rice	24	144055	164436	3653	4031
Black gram	7	31391	43030	563	870
Green Gram	2	23999	44299	580	875
Sugarcane	1	2685	2712	55000	75000
Ground Nut	3	1913	2673	2800	3000
Cotton	1	321	2633	205	250
Coconut	3	3401	4001	25200 Nuts	28000 Nuts
Vegetables	14	537	603	18560	21600
Mango	2	1845	3160	6835	16000

Maize	3	27	50	5520	6000
Non-Crop Activities					
Type of Non – Crop Activities	No. of FLD carried during the last five years	Productivity/Yield		Change in Income due to intervention of FLD	
		Before Adoption of new technology	After Adoption of new technology	Before Adoption of new technology	After Adoption of new technology
DSR under Tractor Drawn Seed drill	2	3653	4031	16088	25918
Integrated Farming System	2	-	-	1,25,000	2,79,000
Fisheries	2	613 gm( wt gain)	948 gm (wt gain)	25,289	29,565
Animal feed supplements to increase milk production	2	150 liters	195 liters	2,325	3,420

**16. B. Cases of large scale adoption: NIL**

**16.C. Details of impact analysis of KVK activities carried out during the reporting period; Nil**

**17. LINKAGES**

**17.A. Functional linkage with different organizations**

Name of organization	Nature of linkage
State Dept. of Agriculture	<ul style="list-style-type: none"> <li>• Jointly organized training, extension programmes</li> <li>• Giving technical support and infrastructural support during monthly zonal workshop.</li> <li>• Jointly organized field diagnostic survey for pest and disease management</li> <li>• Organizing Pre Kharif and Pre Rabi programmes</li> <li>• World Soil Day programme</li> <li>• Flood / Drought assessment</li> <li>• Yield performance assessment</li> </ul>
Dept. of Horticulture	<ul style="list-style-type: none"> <li>• Jointly organized training programmes</li> <li>• Offering need based technical guidance to the extension functionaries.</li> <li>• Field diagnostic visit</li> <li>• Organizing Pre Kharif and Pre Rabi programmes</li> <li>• Flood / Drought assessment</li> <li>• Yield performance assessment</li> <li>• Third party Inspection on Drip irrigation unit at farmers field</li> </ul>
NABARD	Organizing Farm Science Club and exposure visits.
Local NGOs SWEET, DHANYA, and CCD,	Organizing on/off campus training Programmes and exposure visits, offering need based technical guidance
TNJFU, TNAU, TANUVAS,	Technical consultancy and exchange of SMS during training programmes.



K VK-Thiruvarur,	
All India Radion, Karaikal,	<ul style="list-style-type: none"> <li>• Offering radio programmes on latest crop production technologies and periodical announcements of technologies on critical crop stage.</li> <li>• Offering Live TV programme on latest crop production technologies</li> </ul>
District Collectorate.	Farmers grievance day meeting, Organizing need based training programme and promoting agricultural entrepreneurship, ATMA and PMFBY programmes.

**17.B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies**

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Nil			

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