PROFORMA FOR PREPARATION OF ANNUAL REPORT 2019-20 (April 2019-March 2020)

APR SUMMARY

Name of the KVK:ICAR-KVK, TNJFU, Nagapattinam Dt.

1. Technology Assessment

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers	
Technology Assessed				
Crops	4	20	20	
Livestock	2	7	7	
Various enterprises	-	-	-	
Total	6	27	27	
Technology Refined				
Crops	-	-	-	
Livestock	-	-	-	
Various enterprises	-	-	-	
Total	-	-	-	
Grand Total	6	27	27	

2. Frontline demonstrations

Details	No. of Farmers/Locations	Area (ha)	Units/Animals
Oilseeds	-	-	-
Pulses	10	4.0	
Cereals	57	22.8	
Vegetables			
Other crops	30	12.0	
Total	97	35.2	
Livestock & Fisheries	15	-	200 Nos(Quail)
Other enterprises	-	-	-
Total	15	-	200
Grand Total	112	35.2	200

3. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	52	1096	808	1904
Rural youths	10	195	270	465
Extension functionaries	8	174	107	281
Sponsored Training	9	245	147	401
Vocational Training	1	10	25	35
Total	80	1696	1351	3047

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1035	20487
Other extension activities	1121	-
Total	2156	20487

5. Mobile Advisory Services

Message Type	Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Text only	1	6	-	-	5	4	16
Voice only							
Voice & Text							
Total	1	6	-	-	5	4	16

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	155.82	57738
Planting material (No.)	4491	134585
Bio-Products (kg)	2531.5	131088
Livestock Production (No.)	83	12160
Fishery production (No.)	347	36884

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	277	26700
Water	48	2400
Plant	-	-
Total	325	29100

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	3
2	Conferences	2
3	Meetings	3
4	Trainings for KVK officials	4
5	Visits of KVK officials	
6	Book published	5
7	Training Manual	2
8	Book chapters	6
9	Research papers	8
10	Lead papers	-
11	Seminar papers	-
12	Extension folder	28
13	Proceedings	1
14	Award & recognition	5
15	Ongoing research projects	-
	DETAILED PROGRESS RE	PORT 2019-20

<u>1. GENERAL INFORMATION ABOUT THE KVK</u>

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

a) Name of the KVK	:	KVK-Nagapattinam Dt.
b) Address	:	Sikkal-611 108
c) Landline Phone No.	:	04365-246266
d) Fax No.	:	-
e) Official Mobile No.	:	-
f) email ID	:	kvksikkal@tnfu.ac.in

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

a) Name of the Host Organization	:	Tamil Nadu Dr.J.Jayalalithaa Fisheries University
b) Address	:	Vettar River View Campus,
		Nagapattinam-611 002, Tamilnadu.
c) Landline Phone No.	:	04365-256244
d) Fax No.	:	04365-256433
e) Official mobile No.	:	
f) email ID	:	vc@tnfu.ac.in

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

a) Name	•••	Dr.A.Gopalakannan, Ph.D
b) Phone - residence	:	-
c) Mobile	:	8838882451
d) email ID	•••	gopalakannan@tnfu.ac.in

1.4. Year of sanction: 2004

1.5. Staff Position (as on 31th March, 2020)

SI. N o.	Sanctioned post	Name of the incumbent	Designation(eg.S MS)	Discipline (eg.Agrono my)	Edn. Qualificatio n (eg.M.Sc.(A gri)	Specializat ion (if applicable) eg.Agrono my	Pay Scale (Rs.)	Prese nt basic (Rs.)	Date of joining	Permanent/Temp orary	Category (SC/ST/O BC/ Others)
1	Programme Coordinator	Dr. A. Gopalakannan	PC	Fish Bio Technology	Ph.D	Fish Bio Technology	1,31,40 0- 2,17,10 0	1,35,3 00	04.03.20 19	Permanent	OBC
2	Subject Matter Specialist	Mr. E. Hino Fernando	SMS	Extension	M.FSc.,	Fisheries Extension	56,100- 1,77,50 0	57800	03.12.20 18	Permanent	OBC
3	Subject Matter Specialist	Dr. K. Chandrasekar	SMS	Plant Protection	Ph.D	Agriculture Entomolog y	56,100- 1,77,50 0	57800	06.12.20 18	Permanent	OBC
4	Subject Matter Specialist	Dr. S. Muthukumar	SMS	Veterinary Science	M.VSc.,	Veterinary Science	56,100- 1,77,50 0	57800	28.12.20 18	Permanent	OBC
5	Subject Matter Specialist	Dr.V.Kannan	SMS	Agronomy	Ph.D	Agronomy	56,100- 1,77,50 0	56100	13.06.20 19	Permanent	SC
6	Subject Matter Specialist	Dr.A.Mathiva nan	SMS	Home Science	Ph.D	Fish Processing Technology	56,100- 1,77,50 0	56100	14.06.20 19	Permanent	OBC
7	Subject Matter Specialist	Mr. K.Ragu	SMS	Horticulture	M.Sc., (Horticulture)	Vegetables	56,100- 1,77,50 0	56100	17.07.20 19	Permanent	SC
8	Programme Assistant	Mr. V. Gnanabharathi	Programme Assistant (Tech.)	Agriculture	B.Sc., (Agriculture)	-	35,900- 1,13,50 0	57500	05.06.20 07	Permanent	SC
9	Computer Programme r	Ms. G. Ramya	Programme Assistant (Computer)	Computer Science	B.Sc.,(Comp . Science)	-	35,400- 1,12,40 0	36,50 0	07.12.20 18	Permanent	SC

10	Farm Manager	Mr. R. Vedharathinam	Farm Manager	Agronomy	M.Sc.,(Agri)	Agronomy	35,900-	57500	04.06.20	Permanent	OBC
	ivianager	veullareumani					0		07		
11	Accountant	Mr. S.	Assistant	Chemistry	B.Sc.,	-	20,600-	26100	05.06.20	Permanent	SC
	/	Tamilselvan					65500		18		
	Superintend										
	ent										
12	Stenograph		Vacant								
	er										
13	Driver	Mr. S. Prasanth	Driver	-	-	-	18500-	19100	07.12.20	Permanent	SC
							58600		18		
14	Driver	Mr. J.	Driver	-	-	-	18500-	19100	07.12.20	Permanent	OBC
		Sathishkumar					58600		18		
15	Supporting					Vacant			•		
	staff										
16	Supporting										
	staff										

S. INO.	Item	Alea (lla)
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	Stag			ge		
		funding		Complete	e		Incomp	lete
			CompletionDa	Plinth	Expenditure	Starting	Plinth	Status of
			te	area	(Rs.)	Date	area(Sq.	construction
				(Sq.m)			m)	(Completed/ in
								progress/ to be
1	Administrativa	ICAD	02/02/2000	519	41.65			Initiated)
1.	Building	ICAK	02/03/2009	548	41.05	-	-	Completeu
2.	Farmers Hostel	ICAR	09.03.2009	300	26.38	-	-	Completed
3.	Staff Ouarters	ICAR	19.03.2009	400	22.20	-	-	Completed
	(No.)	-			33.30			- I
4.	Demonstration					-	-	Completed
	Units							
	Seed	ICAR		2.0 ha	-	-	-	Completed
	Production-							
	Paddy							
	Fodder	ICAR	24.03.2019	0.4 ha	-	-	-	Completed
	Production							
	Nursery	ICAR	2011	300 m ²	-	-	-	Completed
	production							
	Coconut	ICAR	2011	-	-	-	-	Completed
	seedling							-
	production							
	Tree seedling	ICAR	2009	200 m^2	_	-	_	Completed
	production	101111	2007	200 111				Compiered
	Psoudomono	ICAR	2014				_	Completed
	r seudomona	107 IIX	2014					Completed
	S production	ICAD	2010	2 200				Completed
	Bee nives	ICAR	2019	2 1108.	-	-	-	Completed
	Panchakavya	ICAK	2019	-	-	-	-	Completed
	production	IGAD	2000	2				
	Vermicompo	ICAR	2009	3 nos.	-	-	-	Completed
	st							~
	Coirpith	ICAR	2009	-	-	-	-	Completed
	Compost							
	Poultry Rearing	ICAR	24.03.2019	-	-	-	-	Completed
	Quail Unit	ICAR	24.03.2019	-	-	-	-	Completed
	Dairy unit	TNJFU	2019	-		-	-	Completed
	Goat rearing	TNJFU	2019	-		-	-	Completed
	unit							
	IFS Unit	ICAR	24.03.2019	-	-	-	-	Completed
	Azolla		2009	-		-	-	Completed

	Fish farm	TNJFU	2018		10,00,000	-	-	Completed
	pond unit							
	Aqua	NFDB-	16.04.2019	200 m ²	10,66,000	-	-	Completed
	phonics	TNJFU						
	Fish/Prawn	TNJFU	2019	-	-	-	-	Completed
	Pickle							
	production							
	unit							
	Fish Amino	ICAR	2019	-	-	-	-	Completed
	Acid							
	production							
5	Fencing	ICAR	16.04.2013	470 m	5.00	-	-	Completed
6	Rain Water	State	16.03.2007	2400	0.80	-	-	Completed
	harvesting	Govt.						
7	system	ICAD	01.01.0014	010	2.00			
1	Threshing floor	ICAR	21.01.2014	213	3.00	-	-	Completed
8	Farm godown	ICAR				-	-	Completed
9	Shed (Farm	ICAR	16.04.2013	37.20	3.00	-	-	Completed
	equipment)	1						

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total km. Run	Present status
Four Wheeler Bolero Jeep	2017	8,34,445	19652	Good Condition
Two Wheeler (TVS – Star city)	2006	39,641	7415	Good condition
Two Wheeler (Suziki Access 125)	2009	49,651	795	Good condition
Tractor	2005	345607	77.8 hrs	Good condition

C) Equipment & 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
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	Good Condition
Mini lab- Soil Testing Kit	2016	75000	Good Condition
Mini lab- Soil Testing Kit -Additional	2017	100000	Good Condition
SLR Digital camera	2016	40000	Good Condition
Office Automation-Equipment	2017	300000	Good Condition

1.8. A). Details SAC meeting(s) conducted in the year: NIL

2. DETAILS OF DISTRICT (2019-20)

2.0. Operational jurisdiction of KVKs:

Name Tehsils	Name of Block	No. of Villages
(0 1105.)	(11 1108.)	(434 1108.)
	Nagapattinam	29
Nagapattinam	Thirumarugal	39
Vatharanyam	Vetharanyam	36
venlaranyani	Thalainayar	24
Thirukuvalai	Keelaiyur	27
Kilvelur	Kilvelur	38
Tranqubar	Sembanarkoil	57
Mayiladuthurai	Mayiladuthurai	54
Kuthalam	Kuthalam	51
Sirkazhi	Sirkazhi	37
	Kollidam	42

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

S. No	Farming system/enterprises
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 in the jurisdiction

S. No	Soil type	Characteristics	Area (ha)
1.	Clay loam	High WHC	98,000
2.	Clay sandy loam	Medium WHC	55,000
3.	Sandy soil	Low WHC	35,000
		Total	1, 88,000

2.4. Area, Production and Productivity of major crops cultivated in the jurisdiction for 2019-20 *Kharif*

S. No	Crops	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Paddy	37259	1389.9	37.30
2	Groundnut	2623	-	-
3	Gingelly	1405	-	-
4	Cotton	5354	-	-
5	Millets	37	1.8	50.00
6	Sugarcane			

Rabi

S. No	Crops	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Paddy	132055	4327.8	32.77
2	Black gram	31953	161.5	5.05
	Green Gram	37990	183.6	4.83

Summer

S. No	Crops	Area (ha)	Production (Qtl)	Productivity
				(Qtl /ha)
1	Paddy	387	0.01454	37.41

Sl.No	Сгор	Area (Ha)	Production (M.T)	Productivity (M.T/Ha)
FRUITS	1			
1	Mango	2293.70	20643.30	18
2	Banana	629.80	20153.60	64
3	Lemon	43.85	833.15	38
4	Narthai	8.70	165.30	38
5	Sathukudi	1.00	15.00	15.00
6	Guava	12.90	232.20	36
7	Sapota	2.20	26.40	24
8	Jack	8.70	156.60	36
9	Amla	8.10	153.90	38
10	Jamun	3.90	11.70	6
11	Pomegranate	0.82	6.56	8
12	Water-Melon	159.50	4466.00	56.00
VEGET	ABLES	·	·	
1	Brinjal	151.90	3797.50	50
2	Bhendi	103.60	2072.00	40
3	Cluster beans	37.80	151.20	8
4	Snake Gourd	59.00	944.00	32
5	Bitter Gourd	49.40	691.60	28
6	Drum Stick	6.10	213.50	70
7	Ridge Gourd	26.74	374.36	14
8	Ash Gourd	1.30	22.10	17
9	Bottle Gourd	4.33	51.96	12
10	Cucumber	46.65	373.20	8
11	Greens	86.60	86.60	2
12	Lab Lab	1.30	7.80	12
13	Yam	1.00	4.00	4
14	Tapioca	44.00	1408.00	32
FLOWE	CRS			
1	Mullai	224.60	2246.00	20.00
2	Malligai	15.06	120.48	8.00
3	Rose	11.90	38.08	3.20
4	Marigold	3.00	90.00	30.00
4.SPEC	ES	·	·	
1	Chillies	6.20	111.60	36
2	Tamarind	274.30	2743.00	20
5.PLAN	TATION CROPS		. I	
1	Cashew	1380.00	3450.00	5
2	Palmyrah	302.00	0.00	0.00
3	Bamboo	262.10	0.00	0.00
4	Cocoa	3.00	36.00	12.00
5	Coconut	3076.50	30765.00	20

6	OilPalm	33.50	603.00	18
7	Areacanut	2.10	1.58	1.5

2.5. Weather data (April 2019 to March 2020)

Month	Rainfall (mm)	Temperature°C		Relative Humidity
		Maximum	Minimum	
April – 2019	0	-	-	-
May - 2019	0	-	-	-
June – 2019	0	-	-	-
July – 2019	57.3	-	-	-
Aug – 2019	171.2	-	-	-
Sep – 2019	110.9	-	-	-
Oct - 2019	356.2	-	-	-
Nov - 2019	353.7	-	-	-
Dec - 2019	376.1	-	-	-
Jan – 2020	11.5	-	-	-
Feb – 2020	0.3	-	-	-
Mar - 2020	0	-	-	-
Total	1437.2	-	-	-

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district (2019-20)

Category	Population	Production	Productivity
Cattle			
Crossbred	-	-	-
Indigenous	251634	-	-
Buffalo	7093	-	-
Sheep			
Crossbred	32554	-	-
Indigenous			
Goats	486509	-	-
Pigs			
Crossbred	426	-	-
Indigenous	-	-	-
Rabbits	-	-	-
Poultry			
Hens	-	-	-
Desi	-	-	-
Improved	-	-	-
Ducks	-	-	-
Turkey and others	-	-	-

Category	Area	Production	Productivity
Fish			
Marine	-	85860 tons	
Inland	1951 ha	18648 tons	
Prawn	-	-	-
Scampi	-	-	-
Shrimp	1565 ha	17428 tons	

Sl.No	Taluk/ mandal	Name of the block	Name of the village	Year of adoptio n	Major crops & enterprise s	Major problem identified	Identified Thrust Areas
KVK a	dopted village	5					
1	Vetharanya m	Thalainayar	Marachery	2017-18	Rice, Pulses and Tree crops	Yield reduction due to saline problem(E C - 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 diversificatio n. Production enhancement in coconut. Value addition in Vegetables and Fruits
2	Kilvelur	Kilvelur	Agarakadamban ur	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 technologie s	Eco friendly ICM and IPDM in rice. Inland composite fish production.
DFI vi	llages						
1	Kilvelur	Kilvelur	Agarakadamban ur	2018- 19	Rice, Pulses, Vegetable , Fisheries, goat and poultry	Non adoption of traditional rice varieties High demand for organically grown traditional	Eco friendly ICM and IPDM in rice. Inland composite fish production.

2.7. Details of Adopted Villages (2019-20)

						rice variety. Lack of fish production technologie s	
2	Nagapattina m	Nagapattina m	Ponveli	2018- 19	Rice, Pulses, Forestry, livestock and fish	Lack of knowledge and non utilization of new high yielding Green gram varieties. Low yielding existing varieties. High J. quail chicks mortality Increased demand for J. quail meat. Retarded growth rate. Kid mortality.	ICM in Rice, ICM in Pulses, IFS, Fisheries and Value addition in Fish

2.8. Priority/thrust areas

S.	Crop/Enterprise	Thrust Area
No		
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	IFS	Livestock production under IFS and Livelihood management
6	Fisheries	Fish culture
8	Fish, Milk, Vegetable and Fruits	Value addition

2.9. Salient Achievements of (April 2019-March, 2020) (Mandated activities/ Projects)

S.No	Activity	Target	Achievement
1.	Technologies Assessed (No.)	11	9
2.	On-farm trials conducted (No.)	29	27
3.	Frontline demonstrations conducted (No.)	16	13
4.	Farmers trained (in Lakh)	0.01385	0.02775

5.	Extension Personnel trained (No.)	0.00360	0.00193
6.	Participants in extension activities (in Lakh)	0.08000	0.20487
7.	Production of Seed (in Quintal)	400	155.82
8.	Planting material produced (in Lakh)	0.15400	0.04491
9.	Live-stock strains and fingerlings produced (in Lakh)	0.06000	429.53
10.	Soil, Water, plant, manures samples tested (in Lakh)	0.00800	0.00325
11.	Mobile agro-advisory provided to farmers (in Lakh)	0.00050	0.00016
12.	No.of Soil Health Cards issued by Mini Soil Testing Kits (No.)	0.00800	0.00325
13.	No.of Soil Health Cards issued by Traditional Laboratory (No.)	-	-

2.10. Salient Achievements by KVK during 2019-20 (bullet points)

- Jal SkthiAbhiyan-KisanMela programmes(3nos.) conducted.
- Conducted Exhibition on State level AgriIntex at CODISSIA complex, Coimbatore.
- Conducted District level Exhibition on Inauguration of Medical College by Honourable CM, Tamilnadu.
- CAT Training programme on Dairy Cattle Management
- NADCP awareness programme conducted
- Launching of NADCP for FMD & Brucellosis and Artificial insemination programme by Honourable Prime Minister
- Tree plantation drive conducted.
- World Environmental Day conducted.
- International Potato conference and Webcasting of Hon'ble PMs speech:
- Fertilizers application Awareness Programme Conducted.
- Skill Training of Rural Youth (STRY) on Integrated Development of small Ruminants and Rabbits
- Inauguration of Aquaphonics demo unit.
- Started Dairy unit.
- Started Goat rearing unit

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2019-20

i) OFT (Technology Assessment)						
Number of technologies Total no. of Trials						
Targets	Achievement	Targets Achievement				
11	9	29	27			

ii) FLD (crop/enterprise/CFLDs)

No of Do	No of Demonstrations		Area in ha		r of Farmers
Targets	Achievement	Targets	ts Achievement Targets Achieve		Achievement
18	15	93	75.2	246	206

iii) Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)

Number of Courses			Number of Participants		
Clientele	Targets	Achievement	Targets	Achievement	
Farmers	-	2	-	100	
Rural youth	-				
Extn.	-	-	-	-	
Functionaries					

iv) Extension Activities

Numbe	r of activities	Number of participants		
Targets	Achievement	Targets	Achievement	
657	1035	8000	20487	

v) Seed Production (q)

Target	Achievement	Distributed to no. of farmers
400	155.82	47

vi) Planting material (Nos.)

Target	Achievement	Distributed to no. of farmers
15400	4491	165

v) Livestock (Nos.)

Target	Achievement	Distributed to no. of farmers			
6000	429.53	292			
vii) Bio i	vii) Bio inputs (Kg)				
Target	Achievement	Distributed to no. of farmers			
18000	2531.5	108			

3.B. TECHNOLOGY ASSESSMENT

i) Summary of technologies assessed under various **Crops** by KVKs (Add rows wherever required)

Thematic areas	Сгор	Name of the technology assessed	Source of technology with year	No. of trials	No. of farmers
Integrated Nutrient	-	-	-	-	-
Management	-	-	-	-	-
	Groundnut	Assessment of drought tolerant groundnut varieties under rainfed condition	IIOR & TNAU	5	5
Varietal Evaluation	Bhendi	Assessment of Performance of Bhendi hybrids in Nagapattinam district	(TNAU, 2016) & (IIHR, 2017)	5	5
Integrated Pest	Maize	IPM of Fall Army Worm (Spodopterafugiperda) on Maize	ICAR 2018	5	5
Management	Coconut	Assessment of management modules against Rugose Whitefly in Coconut	ICAR	5	5
Integrated Crop	-	-	-	-	-
Management	-	-	-	-	-
Integrated Disease	-	-	-	-	-
Management	-	-	-	-	-
Small Scale Income	-	-	-	-	-
Generation Enterprises	-	-	-	-	-
Wood Monogoment	-	-	-	-	-
weed Management	-	-	-	-	-

Total				22	22
	-	-	-	-	-
Fisheries	OIF I IISII	Tilapia and GIFT Tilapia in farm ponds	INJFU	2	2
storage reemique	- CIET fish	-	-	-	-
Storage Technique	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
	-	-	-	-	-
Post Harvest Technology / Value addition	-	-	-	-	-
	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
System	-	-	-	-	-
Integrated Farming	-	-	-	-	-
Farm Machineries	-	-	-	-	-
	-	-	-	-	-
Technology	-	_	-	-	-
Resource Conservation	-	-	-	-	-

ii) Summary of technologies assessed under **livestock** by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management	-	-	-	-
Evaluation of Breeds	-	-	-	-
Feed and Fodder management	Dairy	Assessment of Effect on Mixed Fodder bank on livestock productivity	5	5
Nutrition Management	-	-	-	-
Production and Management	-	-	-	-
Others (Pl. specify)	-	-	-	-
Total				

iii) 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
Fisheries	GIFT Fish	Evaluation of growth performance of Red Tilapia	TNJFU	2	2
		and GIFT Tilapia in farm ponds			
		Total		2	2

3.C. TECHNOLOGY ASSESSMENT IN DETAIL

OFT1 : Assessment of drought tolerant groundnut varieties under rainfed condition

1. Thematic area:Varietal evaluation

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2. Title: Assessment of drought tolerant groundnut varieties under rainfed condition
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3. Scientists involved: Dr. V. Kannan, SMS Agronomy and Dr. A. Gopalakannan,

4. Details of farming situation:

Programme

coordinator, Nagapattinam

Groundnut (*Arachishypogaea* L.) is an important crop of Nagapattinam district grown widely in the Coastal blocks of the district. Thaipattam (January) is the main season for cultivation. Farmers cultivating Groundnut are facing yield decline due to intermittent dry spells. Hence the OFT was formulated to find suitable drought tolerant varieties for the district. OFT's were implemented at Kovilpathu village of Vedharanyam Block. Soil type is Sandy loam in texture. The fertility status of soil is N:220, P: 15, K: 265 kg/ha. The amount of rainfall received is 375 mm with rainy days during crop season.

5. Problem definition / description:

In Nagapattinam, due to erratic rainfall and frequent drought during the crop growth period, groundnut yields are generally low and unstable under rainfed conditions.

6. Technology Assessed:

TO 1 - Farmer's practice

TO 2 - TMV 14

TO3- Kadiri 9

7. Critical inputs given:

S.No	Critical input	Quantity	Rate (Rs)
1	Seeds -TMV 14	40 kg	5200
2	Seeds – Kadiri 9	40 kg	4000
		Total	9200

8. Results:

Table: Performance of the technology

Technology Option	No.of trials	Yield (t/ha)	Net Returns	B:C ratio	No. of Pods/ Plant
Farmers Practice (Western 44)		14.7	48675	2.04	18
Technology 1(TMV 14)	5	18.3	71450	2.5	23
Technology 2(Kadiri 9		16.18	57670	2.21	21

From the accessed groundnut varieties, TMV 14 was performed well and recorded higher yield 18.3 q/ha in the drought condition with 23 number of pods/plant, whereas Kadri 9 and Farmers practice western 44 variety recorded lower yield.

Constraints faced: Nil

9. Feedback of the farmers involved:

- TMV 14 was observed with fully filled up matured kernels than K9 and Western 44.
- Performance of K9 and TMV14 was similar in terms of drought tolerance.

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

- TMV 14 matures early in 103days, which is earlier than K9 and Western 44.
- TMV 14 was shown resistance to pests and disease.

OFT 2: Assessment of new high yielding Bhendi hybrids in Nagapattinam District

- 1. Thematic area : Varietal evaluation
- 2. Title : Assessment of new high yielding Bhendi hybrids in Nagapattinam District.
- 3. Scientists involved: SMS (Horticulture) & Programme Coordinator

4. Details of farming situation:

Bhendi cultivated in Naluvedhapathy village of Vedharanyam Block. The soil type is sandy loam with low nitrogen (198 kg/ha), low Phosphorous (8.4 kg/ha) and medium Potassium (164 kg/ha). The private hybrid of bhendi was recorded high pest and disease incidence, low yield among 150 famers in an area of 60 ha. Cropping scheme of this village Brinjal – Bhendi – Groundnut – Chilli and Panthal vegetables. The main crop cultivation season is kharif. Total area under bhendi is 85 ha with average production of 150 q/ha of fresh fruit. The village received annual rainfall of 1437.2 mm.

5. Problem definition / description:

The private hybrid (Mahyco-10) gives low yield due to high pests such as, YVMV, mites and powdery mildew disease. Farmers are unaware of high yielding bhendi hybrids that give better yield and also have moderate disease resistance. Farmers are getting low market price for fruits/pods. So, the farmers prefer to go for high yielding bhendi hybrids. The trail area also have low water potential this also results in higher YVMV incidence.

6. Technology Assessed: TO1 :Farmer Practice Mahyco-10

TO2: Alternate practice1

Bhendi Hybrid CO 4 TNAU 2016, Duration : 110 days ,Yield 25.60 t/ha All the districts of Tamil Nadu except hilly regions. Medium size fruits; 25-29 fruits/plant; 22 harvests in 110 days. Resistant to bhendi YVMV disease

TO3: Recommended Practice

IIHR-Arka Nikita, IIHR2017.Produces dark green, medium, smooth and tender fruits. Excellent cooking quality, nutritionally rich in antioxidant activity, high mucilage content(1.08 % (FW) and high edible fiber content (8.85 % (DW). Rich in iodine content (33.31µ g/kg). Yields 21-24 t/ha in 125 -130 days duration.

ulai/lia Cost per ulai (Ks.)
Kg/ac 2000
Kg/ac 2000
1 kg 160
1 nos 400
-

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

8. Results:

Table : Performance of the technology

Technology Option	No.of trials	Fresh fruit Yield (q/ha)	Net Returns (Rs./ha)	B:C ratio
TO 1 (Mahyco-10)	5	228.0	221000	1.94
TO 2 (Co 4)		276.0	381700	2.69
TO 3 (Arka Nikita)		264.0	299500	2.31

Technology Option	No of fruits yield per plant	Percentage of pest and disease incidence (%)
TO 1 (Mahyco-10)	20	24
TO 2 (Co 4)	29	15
TO 3 (Arka Nikita)	25	21

The results of the assessment of two new high yielding hybrids of Bhendi in Nagapattinam district indicated that out of the private hybrid viz., (mahyco-10).Co 4 recorded significantly higher fresh fruit yield of 276q/ha followed by Arka Nikita with 264 q/ha and the lowest fresh fruit yield of 228 q/ha was recorded in private hybrid (Mahyco-10). The highest number of fruits per plant of 29 was recorded in CO-4 followed by Arka Nikita (25). The lowest number of fresh fruits per plant of 20 was recorded in private hybrid. In the case of net returns, CO-4 was recorded significantly higher net return of Rs. 381700/ha followed by Arka Nikita (Rs. 299500/ha) and the least net returns was recorded in private hybrid (Mahyco-10) (Rs. 221000/ha). During flowering stage of crops farmers faced YVMV incidence problem in private hybrids. The CO4 Bhendi was recorded higher fresh fruit yield and farmers could get good quality of fruits.

Constraints faced:

Most of the farmers were cultivated private hybrid of bhendi. Due to high pest and disease incidence of private variety leads to low yield and low market price. Co-4 has moderately resistant to YVMV incidence. Cultivation of Co-4 were recorded higher yield than other private hybrids in Nagapattinam district.

9. Feed back of the farmers involved:

Farmers informed that the new hybrids CO-4 and Arka Nikita hybrids had less incidence of pest and diseases. After the assessment farmers wanted to cultivate the same hybrid seeds for every season and requested the KVK to make arrangements to procure the same.

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

Private Hybrid (Mahyco-10): Cylindrical sized fruits is fetching better price in the market but this variety recorded low yield.

TNAU Hybrid Bhendi CO 4: No of harvest was more in CO 4 Bhendi hybrid.Higher market price during February month helped to get more profit.Moderately resistant to YVMV.

IIHR-Arka Nikita: Spineless fruits reduced the itching during harvest. Medium sized fruits is fetching better price in the market but this variety recorded high yield when comparing private hybrid.

OFT 3: Effect of Mixed Fodder bank on livestock productivity

1. Thematic area:	Livestock Nutrition
2. Title:	Effect of Mixed Fodder bank on livestock productivity

3. Scientists involved: Dr. S. Muthukumar

4. Details of farming situation:

This trial was conducted at 50 cent area in each field. Totally 1 hectare area was taken for study. Input materials were given to farmers of Nagapattinam, Kuthalam and Vedharanyam blocks. 5. Problem definition / description:

- Inferior quality fodders for grazing
- Poor milk production

6. Technology Assessed:

Farmer Practice: In this animals are fed with either inferior grasses or Cumbu Napier grass-4. **TO1:** Effect of mixed fodder on the produce and performance viz, Milk production, health and others.

7. Critical inputs given: CoFS 31 seed- 0.125 Kg, Co (BN) 5 cuttings, 1200 Nos, Hedge lucerne (CO 1) - 0.6 Kg, Agathi- 0.075 Kg and Subabul- 0.075 Kg.

8. Results:

Performance of the technology

Technology Option	No. of trials	Yield (T/ha)	Net Return (Rs. in /ha)	B:C ratio	Data on Other performance indicators*
Farmers Practice Technology 1(Mention details)	5		Trial is in	progress	

OFT4: Evaluation of Growth performance of Red Tilapia & GIFT Tilapia in farm ponds

- 1. Thematic area: Fisheries
- 2. Title: Evaluation of Growth performance of Red Tilapia & GIFT Tilapia in farm ponds
- 3. Scientists involved:Mr.E.Hino Fernando &Dr.A.Gopalakannan

4. Details of farming situation: GIFT and Red Tilapia can breed throughout the year. They can grow well in earthen pond system with clayey loam soil

5. Problem definition / description: Fish farmers doing carp culture need minimum 10 months to attain marketable size of 750g. In a water scarce district like Nagapattinam pond water gets dried up within 6 months and the farmers are forced to harvest the fishes within that period. In a replacement for this species, GIFT tilapia, a resistant fish variety which can attain marketable size in 4 -5 month period. Farmers in this district are less aware about this species. Hence this trial can be taken up and trial can be carried out to check the feasibility of this species in the district.

6. Technology Assessed: This technology assessed the growth performance of GIFT Tilapia and Red Tilapia cultured in a earthen pond system. Farmers usually collect seeds from wild source and stock their ponds. Tilapia attains sexual maturity within 3 months and starts breeding. Due to this breeding behaviour number of fishes in the pond increases which result in competition for space. Therefore, GIFT tilapia seed fills the gap by making all male population to stop breeding during culture.

7. Critical inputs given:

GIFT Tilapia Seed-1000 Nos Red Tilapia Seed – 1000 Nos Fish Feed -

8. Results:

Performance of the technology

Technology Option	No. of trials	Yield (t/ha)	Net Returns (Rs. in a)	B:C ratio	Data on Other performance indicators*
Farmers Practice		0.7/ha	3200	1.06	
Technology 1(Mention		1.01/ha	11500	1.12	
details)	2				
Technology 2(Mention		1.80/ha	89000	1.89	
details)					

Description of the results:

Constraints faced:

GIFT (Genetically Improved Farmed Tilapia) is a short term crop which can be cultured within 4-5 months. Since Nagapattinam is a water scarce district, Tilapia culture is best suited for this district. Pre-stocking measures like pond construction, pond preparation, sundrying of pond bottom was carried out. GIFT Tilapia seeds were purchased from the Tilapia seed farm, State Fisheries Department, Krishnagiri. Seeds were stocked in the earthern ponds after fertilization with cowdung. GIFT and Red Tilapia seeds of 1.5 inch size were stocked at 1000 Nos/Sqm. Feeding trial started from the next day of stocking the seed. Water test was conducted before stocking and once in a month. Samplings were also done

once in 20 days. Length and weight of fishes were recorded. Final weight of fishes were recorded during harvest. Feeding is given at the rate of 5% body weight for 5 months and 3% body weight for 5 months. Monthly sampling was carried out during the culture period. After a culture period of 10 months average body weight of GIFT Tilapia fishes recorded was 550g and length recorded was 30cm. GIFT Tilapia showed better growth rate compared to Red tilapia in earthen pond system.

9. Feedback of the farmers involved:

- Fish attains faster growth in shorter period
- Can withstand any climatic conditions
- Omnivorous feeding habit
- Fetches a good market price
- Can sell the fishes live
- Less availability of seeds

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

OFT 5: IPM of Fall Army Worm (Spodopterafugiperda) on Maize - Trail is in progress

OFT 6: IPM of Rugose Spiraling Whitefly in Coconut- Trail is in progress

3.D. FRONTLINE DEMONSTRATION

a. Follow-up of FLDs implemented during previous years

S.	Crop/Enterprise	Thematic	Technology	Details of	Horiz	Horizontal spread of	
No		Area	demonstrated	popularization methods	te	technology	
				suggested to the No. of No. of		No. of	Area
				Extension system	villages	farmers	in ha
	-	-	-	-	_	-	_

b. Details of FLDs (Information is to be furnished in the following tables category wise i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

S 1. N o	Crop	Them atic area	Technology Demonstrated	Seas on and year	Sour ce of fund s	Area Pro pos ed	a (ha) Actu al	farm SC/ ST	No. or ers/dem on Othe rs	f onstrati Total	Reasons for shortfall in achievement
1	Rice	Va rie ty	Demonstration of Newly released rice variety VGD 1 in Nagapattinam District	R ab i 20 19	IC A R	8	6. 8			17	Non availabilit y of seeds
2	Rice	Va rie ty	Demonstration of Saline tolerant rice varieties for	R ab i	IC A R	4	4	4	6	10	-

			Nagapattinam District	20 19						
3	Blac k gram	IC M	Demonstration of ICM in Black gram VBN 8 in Nagapattinam Dt.	R ab i 20 19	IC A R	4	4		10	-

Sl. No	Crop	Themati c area	Technology Demonstrated	Seaso n and	Seaso Sourc Area (ha) n and e of		farmer	No. of s/demonst	ration	Reasons for	
				year	funds	Propose d	Actua l	SC/S T	Other s	Tota l	shortfall in achieveme nt
1	Paddy	New variety	Newly released rice variety ADT 53	Rabi 2019	ICA R	8ha	4 ha	2	8	10	Fund
2	Paddy	IPDM	Eco friendly pest and disease management in Thaladi (Rabi) paddy	Rabi 2019	ICA R	4 ha	4 ha	3	7	10	-
3	Paddy	IDM	IDM strategies for False smut in Rice	Rabi 2019	ICA R	4 ha	4 ha	3	7	10	-
4	Cotton	IPM	Eco friendly IPM strategies for major Sucking pests in cotton	Rabi 2019	ICA R	4 ha	4 ha	3	7	10	-
5	Coconu t	IPM	Eco friendly IPM strategies for major pests in Coconut	Rabi 2019	ICA R	4 ha	4 ha	3	7	10	-
6	Jasmin e	IPM	Demonstratio n on Eco friendly IPM strategies for major pests in Jasmine	Rabi 2019	ICA R	4 ha	4 ha	3	7	10	-

Details of farming situation

Crop	Seas	Farming situation (RF/Irriga ted)	Soil type	Status of soil			Previo us	Sowing	Harves t date	Seaso nal rainfa	No . of rai nv
				N	Р	K	crop			ll (mm)	da ys

Ric	Ra	Irrigate	Cl	L	М	Н	Rice			
e	bi	d	ay							
	20		lo							
	19		a							
			m							
Ric	Ra	Irrigate	Cl	L	М	Н	Rice			
e	bi	d	ay							
	20		lo							
	19		a							
			m							
Bla	Ra	Irrigate	Cl	L	М	Н	Rice	29.01.	07.04	
ck	bi	d	ay					2020	.2020	
gra	20		lo							
m	19		a							
			m							

Crop	Seaso	Farming	Soil	St	tatus	of	Previous	Sowing	Harvest	Seasona	No.
	n	situation	type		soil		crop	date	date	1	of
		(RF/Irrigated		Ν	Р	Κ				rainfall	rain
)								(mm)	У
											days
Paddy	Rabi	Irrigated	Alluvial	L	Μ	Η	Black	16.5.19	5.9.19	-	-
	2019						gram				
Paddy	Rabi	Irrigated	Alluvial	L	Μ	Η	Blackgra	27.11.1	23.03.1	-	-
	2019						m	9	9		
Paddy	Rabi	Irrigated	Alluvial	L	Μ	Η	Blackgra	10.09.1	3.2.202	-	-
	2019						m	9	0		
Cotton	Rabi	Irrigated	Alluvial	L	Μ	Η	Paddy	0n	-	-	-
	2019							going			
Coconu	Rabi	Irrigated	Coastal	L	Μ	Η	Coconut	0n	-	-	-
t	2019	-	alluviu					going			
			m								
Jasmine	Rabi	Irrigated	Coastal	L	Μ	Η	Jasmine	0n	-	-	-
	2019		alluviu					going			
			m								

FLD 1: Demonstration of Newly released rice variety VGD 1 in Nagapattinam District

Technical Feedback on the demonstrated technologies

S.	Feed Back
No	
1	Performed well around the district with non-lodging in nature
2	Stem borer incidence was more in this variety.

Farmers reactions on specific technologies

S. No	Feed Back
1	Grain size similar to seeraga samba, looks very bright colored
2	Seed shattering was seen in this variety, when it crosses its duration 130 Days.

Extension and Training activities under FLD

S.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	1	03.02.2020	18	
2	Farmers Training	-			
3	Media coverage	-			
4	Training for extension	1	08.09.2019	43	In Zonal

		A 1 1 1
functionaries		Agricultural
		officers meeting
		lecture was given
		on this saline
		tolerant variety,

FLD 2: Demonstration of Saline Tolerant Rice variety for Nagapattinam Dt.

Technical Feedback on the demonstrated technologies

S.	Feed Back
No	
1	CSR 36 was performed well in saline condition (EC 4.0)
2	Long slender type not prepared locally around farmers community.

Farmers' reactions on specific technologies

S. No	Feed Back
1	Less incidence of Pest and disease were noticed
2	Merchants preference was less for this variety

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	1	21.02.2020	15	CSR 36 variety performance was discussed
2	Farmers Training	1	19.09.2019	18	Off campus training and seed distribution was held at Thalainayar ADA office.
3	Media coverage	1	25.02.2020	-	Field day was covered in media,
4	Training for extension functionaries	1	08.09.2019	43	In Zonal Agricultural officers meeting lecture was given on this saline tolerant variety,

FLD 3: Demonstration of ICM in Black gram VBN 8 in Nagapattinam dt.

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Number of pods is more than 25/plant
2	Performed well with short duration of 65 days

Farmers' reactions on specific technologies

S.	Feed Back
No	
1	Good yielding compared all other locally sown varities
2	Low incidence in Pest and disease

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities	Date	Number of participants	Remarks
--------	----------	----------------------	------	---------------------------	---------

		organized			
1	Field days	-	-	-	
2	Farmers Training	1	31.01.2020	16	Seed was distributed and Crop production techniques were discussed among FLD farmers
3	Media coverage	-	-	-	-
4	Training for extension functionaries	-	-	-	-

d. Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Coconut Rhinoceros beetle Eradication Programme – Good
2	-

e. Farmers' reactions on specific technologies

S. No	Feed Back
1	-
2	-

f. Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days				
2	Farmers Training	4	Cotton (16.05.2019)	30	-
			Maize (20.09.2019)	150	
			Paddy (31.10.2019,	140	
			05.11.2019 and		
			11.02.2020)	30	
			Fruit crops (22.08.2019)	55	
			Coconut (12.01.2019)		
3	Media coverage	3	Maize (20.09.2019)	-	-
			Paddy 11.02.2020		
			Coconut (12.01.2019)		
4	Training for	10 Zonal	Zonal meet	-	-
	extension	Meeting			
	functionaries				

g. Performance of Frontline demonstrations

i) Frontline demonstrations on crops

	Thematic	technology	Nam Variety	e of the / Hybrid	No. of	Area		Yi	eld (q/ha)		%	Econ	omics of do (Rs./l	emonstrat 1a)	tion	1	Economics (Rs./l	of check na)	
Crop	Area	demonstrated	Domo	Check	Farmers	(ha)		Den	10	Check	Increase in vield	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
							High	Low	Average			Cost	Return	Return	(R /C)	Cost	Return	Return	(R /C)
Pulses	ICM	ICM in Black gram VBN 8	VBN 8	ADT 3	10	4	6.5	5.3	5.9	5.1	16	20825	47200	26375	2.27	20825	40800	19975	1.96
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cereals	ICM	Newly released rice variety ADT 53	ADT 53	ADT 43	10	4.0	54.5	50.7	52.6	46.4	13	35500	99940	64440	2.82	37500	88160	50660	2.35
	ICM	Demonstration of Newly released rice variety VGD 1	VGD 1	BPT 5204	17	6.8	48	45	46.5	43.5	7	37500	116250	78750	3.1	37500	91350	53850	2.44
	ICM	Saline tolerant rice varieties CSR 36	CSR 36	BPT 5204	10	4.0	45	42	43.5	37	18	37500	82650	45150	2.2	37500	70300	32800	1.81
	IPM	Eco friendly pest and disease management in Thaladi (Rabi) paddy	BPT 5204	-	10	4.0	47	44.8	45.7	44.2	3	35500	102050	66550	2.87	36800	103100	66300	2.8
	IDM	IDM strategies for False smut in Rice	BPT 5204	-	10	4.0	45	43.4	44.2	30.8	44	33800	80600	46800	2.38	38700	72900	34200	1.88
Commercial crops	IPM	Eco friendly IPM strategies for major Sucking pests in cotton	RCH Boll guard	-	10	4.0							Ongoing						
Millets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruits	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plantation crops		Eco friendly IPM strategies for major pests in Coconut	ECT	-	10	4.0							Ongoing						
Spices and condiments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

_	Thematic	technology	Name Variety	e of the / Hybrid	No. of	Area		Yie	ld (q/ha)		%	Econ	omics of de (Rs./h	emonstrat 1a)	ion	E	conomics ((Rs./h	of check 1a)	
Crop	Area	demonstrated	Domo	Check	Farmers	(ha)		Dem	0	Check	Increase in vield	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
							High	Low	Average	CHECK	in yielu	Cost	Return	Return	(R /C)	Cost	Return	Return	(R /C)
		Demonstration																	
		on Eco friendly																	
Flowers	IPM	IPM strategies	-	-	10	4.0							Ongoing						
		for major pests																	
		in Jasmine																	

ii) Frontline demonstrations on Livestock 3020

Cotogomy	Thematic	Name of the	No. of	No.of Units (Animal/	Major pa	arameters	% change	Other pa Surviv	rameter ability	Econom	ics of dem	onstratio	n (Rs.)	F	conomics (Rs	of check	
Category	area	demonstrated	Farmer	Poultry/ Birds, etc)	Demo Growth	Check Growth	in major parameter	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle		Hydroponics fodder cultivation technology to	5	-						Ongoing							
D 66 1		rural farmer					1	[[T	I	I					
Buffalo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dairy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poultry		Improved Aseel performance under back yard system	5	30					Onį	going							
Sheep	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J.quail		Scientific Rearing of Japanese Quail among rural farmers	5	200	220 g	160 g	137.5	94%	90%	4500	7520	3020	1.5	4250	5400	1150	1.27

iii) Frontline demonstrations on Fisheries

		Nome of the			Major n	romotore	% abanga	Other no	romotor	Fcono	mics of dom	nonstratio	n (Pe)]	Economic	s of check	
Cotogomy	Thematic	technology	No. of	No.of	Major pa		70 Change	Other pa	Tameter	ECOHO	incs of uch	1011511 4110	II (IX5.)		(R	ls.)	
Category	area	domonstrated	Farmer	units	Demons	Chash	noromotor	Demons	Cheele	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
		uemonsti ateu			ration	Спеск	parameter	ration	Спеск	Cost	Return	Return	(R /C)	Cost	Return	Return	(R / C)

Demonstration of		
Seed production		
technology of Gold fish in	2	Ongoing
cement tanks		

iv) Frontline demonstrations on Other enterprises

Category	Name of the technology	No. of Farmer	No.of units	Major pa	rameters	% change in major	Other pa	arameter	Econom	ics of dem Rs./	onstration unit	(Rs.) or		Economic (Rs.) or	s of check Rs./unit	
	demonstrated			Demo	Check	parameter	Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Mushroom												-				
Apiculture																
Maize Sheller								Nil								
Value Addition																
Vermi Compost																

v) Frontline demonstrationson Women Empowerment

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

vi) Frontline demonstrations on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed obs (output/m	Filed observation (output/man hour) Demo Check		Labo	r reduction	n (man day	vs)	(Rs.	Cost redu /ha or Rs.	uction ./Unit etc.	.)
						Demo	Check	parameter	Land preparation	Sowing	Weedin g	Total	Land preparati on	Labour	Irrigati on	Total
							Nil									

vii) Frontline demonstrations on Other Enterprise: Kitchen Gardening

Category and	Thematic	Name of the	No. of	No. of	Yield (Kg)	%	Other p	arameters	Eco	nomics of d	lemonstrat	tion		Economics	of check	
Crop	area	technology	Farme	Units		change				(Rs./	'ha)			(Rs./ł	na)	
_		demonstrated	r		Demons Check	in yield	Demo	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
					ration				Cost	Return	Return	(R /C)	Cost	Return	Return	(R /C)
					•••••••••••••••••••••••••••••••••••••••		Nil						•	•		

viii) Frontline demonstrations on crop hybrids (Details of Hybrid FLDs implemented during 2018-19)

						Yield (q/ł	na)			Econo	mics of demo	onstration (Rs.	/ha)
Сгор	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)		Demo			% Increase	Gross	Gross	NARA	BCR
	ucinonstrateu	variety	Failueis	(114)	High	Low	Average	Check	in yielu	Cost	Return	Net Return	(R /C)
Oilseed crop			±			•		•				Å	
Pulse crop													
Cereal crop													
Vegetable crop						Nil							
Fruit crop													
Other (specify)													

h) FLDs conducted with the FUNDING OF OTHER SOURCES including CFLD/ATMA/NABARD/other ICAR institutes etc

i) Other Source funded FLDS in CROPS

~	Source of fund	Thematic	technology	Name Variety	e of the / Hybrid	No. of	Area		Yie	eld (q/ha)		%	Econo	omics of d (Rs./	lemonstra ha)	tion	E	conomics (Rs./	of check ha)	ĩ
Сгор		Area	demonstrated	Domo	Check	Farmers	(ha)	High	Dem Low	o Average	Check	Increase in yield	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Black gram	NFSM	ICM	Integrated Crop Management in Black gram	VBN 8	ADT3	58	20	5.9	3.9	5.1	4.3	15.68	16350	40800	24450	2.5	18825	34400	15575	1.83
Greeen Gram	NFSM	ICM	Integrated Crop Management in Green gram	CO8	ADT 3	36	20	5.8	3.1	4.71	4.1	12.95	17100	42390	25290	2.48	19225	36900	17675	1.92

ii) Other Source funded FLDS in Livestock

Category	Thematic area	Name of the technology	No. of Farmer	No.of Units (Animal/	Major pa	rameters	% change	Other pa	rameter	Econom	ics of dem	onstratio	n (Rs.)	F	Economics (Rs	of check .)	
		demonstrated		Poultry/	Demo	Check	in major	Demo	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
				Birds, etc)			parameter			Cost	Return	Return	(R / C)	Cost	Return	Return	(R / C)
Cattle																	
Buffalo																	
Dairy							N7'1										
Poultry							Nil										
Sheep																	
Goat																	

iii) Other Source funded FLDS in Fisheries

Catagory	Thematic	Name of the	No. of	No.of	Major pa	arameters	% change	Other pa	rameter	Econo	mics of der	nonstratio	n (Rs.)		Economic (R	s of check s.)	
Category	area	demonstrated	Farmer	units	Demons ration	Check	parameter	Demons ration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
							Nil										

iv) Other Source funded FLDS in Other enterprises

Category	Name of the technology	No. of Farmer	No.of units	Major pai	rameters	% change in major	Other pa	rameter	Econom	ics of dem Rs./	onstration unit	(Rs.) or		Economic (Rs.) or	s of check Rs./unit	
	demonstrated			Demo	Check	parameter	Demo	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
									Cost	Return	Return	(R /C)	Cost	Return	Return	(R /C)
							Nil					-				

v) Other Source funded FLDS in Women Empowerment

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

vi) Other Source funded FLDS in Farm Implements and Machinery

Name of the implement	Сгор	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed obs (output/m	ervation an hour)	% change in major	Labo	r reduction	n (man day	s)	(Rs	Cost red /ha or Rs	uction ./Unit etc.	.)
						Demo	Check	parameter	Land preparation	Sowing	Weedin g	Total	Land preparati	Labour	Irrigati on	Total
	<u> </u>	<u> </u>				<u> </u>	Nil				<u> </u>	<u> </u>	on	<u> </u>		

4.TRAINING PROGRAMMES

4.1. Farmers' Training including sponsored training programmes (on campus)

Thematic area	No of				1	Particinant	s			
Thematic area	courses		Others		'	SC/ST		(Frand Tota	al
	0001505	Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production		inture	Temure	1000	muie	I cilluic	1000	intuit	I cilluic	Totui
Weed Management										
Resource Conservation										
Technologies	1	24	6	30		-	-	24	6	30
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation	1	27	3	30	_	_	_	27	3	30
Seed production				20						20
Nursery management										
Integrated Crop										
Management	2	58	13	71	11	3	14	69	16	85
Soil & water conservation										
Integrated nutrient										
management										
Production of organic										
inputs										
Others (pl specify)										
Total	4	109	22	131	11	3	14	120	25	145
II Horticulture										
a) Vegetable Crops										
Production of low value										
and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and										
standardization										
Protective cultivation										
IPM in Vegtables	2	13	6	10	12	47	50	25	52	70
Total (a)	2	10	6	19	12	47	59	25	55	70
	Ζ	13	0	19	12	47	59	25	53	78
b) Fruits										
Training and Pruning										
Layout and Management of										
Orchards										
Cultivation of Fruit										
Management of young										
plants/orchards										
Rejuvenation of old										
Export potential fruits										
Minute Section Section										
Micro irrigation systems of										
Dient propagation										
techniques										
IPM in fruits	1		40	40		2	2	40	2	12
	1	-	40	40	-	3	3	40	3	43
10tal (D)	1	-	40	40	-	3	3	40	3	43
c) Ornamental Plants										
Nursery Management										
nuanagement of potted										
Furgert notartial a C										
Export potential of										
Dropagation to the function										
Comparental Plants										
Ornamental Plants										
Others (pr specify)										

Thematic area	No. of					Participant	ts			
	courses		Others			SC/ST		(Grand Tot	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Total (c)	-	-	-	-	-	-	-	-	-	-
Production and										
Management technology	1	46	2	48	24	-	24	46	26	72
Processing and value										
Others (pl specify)										
Total (d)	1	46	2	48	24	-	24	46	26	72
e) Tuber crops			-							
Production and										
Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices										
Production and										
Management technology										
Processing and value										
Others (pl specify)										
Total (f)		_	_	-	_	-		-	-	
g) Medicinal and			_	_	_	_	_	_	_	_
Aromatic Plants										
Nursery management										
Production and										
management technology										
Post harvest technology and										
Value addition										
Total (g)			_	_	_	_	_	_	_	_
GT (a-g)	1	50	/18	107	36	50	86	111	82	102
III Soil Health and		35	70	107	50	50	00	111	02	155
Fertility Management										
Soil fertility management										
Integrated water										
management										
Integrated Nutrient										
Management										
organic inputs										
Management of										
Problematic soils										
Micro nutrient deficiency in										
crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Total	_		_	_	_	_	_	_	_	_
IV Livestock Production	-	-	-	-	-	-	-	-	-	-
and Management										
Profitable Dairy Farming	1	22	8	30	24	15	39	46	23	69
Goat Rearing	2	23	5	28	7	19	26	30	23	54
Dairy Farming	1	30	5	35	_		_	30	5	35
Sheep and Desi bird rearing	2	76	24	100	-	-	-	76	24	100
Desibird and Quail rearing	2	49	21	70	-	-	_	49	21	70
Skill Training- Integrated										
development of small	1	24	6	30	-	-	-	24	6	30

Thematic area	No. of					Participant	ts			
	courses		Others			SC/ST	1	(Grand Tot	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
ruminants and Rabbits										
Vaccination and disease										
management & AI	1	96	24	120	-	-	-	96	24	120
Total	10	320	93	413	31	34	65	351	127	478
V Home Science/Women										
empowerment										474
Household food security by										
kitchen gardening and	~		40	50		4.4	10	-	07	
nutrition gardening	2	4	46	50	1	41	42	5	87	92
low/minimum cost diet										
Designing and development										
for high nutrient efficiency										
diet										
Minimization of nutrient										
loss in processing										
Processing and cooking										
Gender mainstreaming										
through SHGs										
Storage loss minimization										
Velue edition										
Woman ampowerment										
Location specific drudgery										
reduction technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	2	4	46	50	1	41	42	5	87	92
VI Agril. Engineering										
Farm Machinary and its										
maintenance										
Installation and										
maintenance of micro										
Irrigation systems										
Dise of Plastics in farming										
Production of small tools										
and implements										
Repair and maintenance of										
farm machinery and										
implements										
Small scale processing and										
value addition										
Post Harvest Technology										
Others (pl specify)										
1 otal	-	-	-	-	-	-	-	-	-	-
VII Plant Protection										
Management	2	35	10	45	3	_	3	38	10	48
Integrated Disease		00	10	10	5		5	50	10	10
Management										
Bio-control of pests and										
diseases										
Production of bio control										
agents and bio pesticides										
Others (pl specify)		_								
Total	2	35	10	45	3	-	3	38	10	48
VIII Fisheries	-		-							
Integrated fish farming	2	26	2	28	29	1	30	55	3	58
Carp breeding and hatchery										
management										
Carp iry and fingerling										

Thematic area	No. of]	Participant	ts			
	courses		Others			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
rearing										
Composite fish culture										
Hatchery management and										
culture of freshwater prawn										
Breeding and culture of										
ornamental fishes										
Portable plastic carp										
Dan oulture of fish and										
prawn										
Shrimp farming										
Edible ovster farming										
Pearl culture										
Fish processing and value										
addition	1	1	31	32	7	0	7	8	31	39
Others (pl specify)										
Total	3	27	33	60	36	1	37	63	34	97
IX Production of Inputs										
at site										
Seed Production										
Planting material										
production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures										
production										
fingerlings										
Production of Bee-colonies										
and way sheets										
Small tools and implements										
Production of livestock feed										
and fodder										
Production of Fish feed										
Mushroom Production	2	17	5	22	10	28	38	27	33	60
Apiculture	3	45	12	57	7	28	35	52	40	92
Others (pl specify)										
Total	5	62	17	79	17	56	73	79	73	152
X CanacityBuilding and									,,,,	
Group Dynamics										
Leadership development										
Group dynamics										
Formation and										
Management of SHGs										
Mobilization of social										
capital										
Entrepreneurial										
development of										
farmers/youths										
WTO and IPR issues										
Others (pl specify)										
1 otal	-	-	-	-	-	-	-	-	-	-
AI Agro-forestry										
Nursery menagement										
Integrated Farming Systems										
Others (nl specify)										
Total		_	_	_	_		_	_	_	_
GRAND TOTAL	20	616	260		125	10	220	767	- //20	1205
	50	010	203	000	100	102	520	,0,	430	1203

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

Thematic area	No. of	Participants								
	courses	Others SC/ST Grand Total							al	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation			_	_	0	0.5				
Technologies	1	-	5	5	0	25	25	-	30	30
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Nursery menagement										
Integrated Crop										
Management	4	90	13							
Soil & water conservation	1	30	10	40	20	4	24	50	14	64
Integrated nutrient			10	40	20		24	50	14	04
management										
Production of organic										
inputs										
Others (pl specify)										
Total	6	120	28	45	20	29	49	50	44	94
II Horticulture	-									
a) Vegetable Crops										
Production of low value and										
high valume crops	1	22	25	47	-	-		22	25	47
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	1	22	25	47	-	-		22	25	47
b) Fruits										
Training and Pruning										
Layout and Management of										
Orchards										
Cultivation of Fruit	3	101	4	105	-	-	-	101	4	105
Management of young										
plants/orchards										
Rejuvenation of old										
Export potential fruits										
Micro irrigation systems of										
orchards										
Plant propagation										
techniques										
Others (pl specify)										
Total (b)	3	101	4	105	_	_	_	101	4	105
c) Ornamental Plants	-								-	
Nursery Management										
Management of potted										
plants										
Export potential of										
ornamental plants										
Propagation techniques of										
Ornamental Plants										
ICM in flowers crops	1	18	5	23		-	-	18	5	23
Total (c)	1	18	5	23		-	-	18	5	23
d) Plantation crops										
Production and										
Management technology										
Processing and value										

Thematic area	No. of	Participants								
	courses	Others SC/ST Grand Tot							al	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
addition										
Others (pl specify)										
Total (d)	-	-	-	-	-	-	-	-	-	-
e) Tuber crops										
Production and										
Management technology										
Processing and value										
addition										
Others (pl specify)										
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices										
Production and										
Management technology										
Processing and value										
addition										
Others (pl specify)										
	-	-	-	-	-	-	-	-	-	-
g) Medicinal and										
Aromatic Plants										
Droduction and										
Production and										
Dogt homiget technology										
value addition										
Others (pl specify)										
Total (g)										
$\frac{10 \tan \left(g \right)}{CT \left(a, g \right)}$	-	-	-	175	-	-	-	-		175
	5	141	34	175	0	0	0	141	34	1/5
III Soil Health and										
Fertility Management										
Soil fertility management										
Integrated water										
Interprete d Netwinet										
Management										
Broduction and use of										
organic inputs										
Management of										
Problematic soils										
Micro nutrient deficiency in										
crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
IV Livestock Production										
and Management										
Dairy Management – 3davs	2	37	28	65	9	3	12	46	31	77
Goat Management	-	01		00	Ű	Ű	12	10	51	
Hygienic milk production										
Milk and milk products										
NABARD- LEDP-7days										
On Livestock farming										
Disease Management										
Feed & fodder technology		1			1		1			1
Production of quality										
animal products	1	10	2	12	20	14	34	30	16	46
Others (pl specify)										
Total	3	47	30	77	29	17	46	76	47	123
V Home Science/Women				,,		<u> </u>				
emnowerment										
Household food security by										
kitchen gardening and										
Thematic area	No. of	No. of Participants								
------------------------------	---------	---------------------	--------	-------	------	--------	-------	------	------------	-------
	courses		Others			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
nutrition gardening										
Design and development of										
low/minimum cost diet										
Designing and development										
for high nutrient efficiency										
diet										
Minimization of nutrient										
loss in processing										
Processing and cooking										
Gender mainstreaming										
through SHGs										
Storage loss minimization										
Value addition										
women empowerment										
reduction technologies										
Purel Crefts										
Women and shild some										
Others (pl specify)										
Total										
10tal	-	-	-	-	-	-	-	-	-	-
VI Agrii. Eligineering										
Failin Machinary and its										
Installation and										
maintenance of micro										
irrigation systems										
Use of Plastics in farming										
practices										
Production of small tools										
and implements										
Repair and maintenance of										
farm machinery and										
implements										
Small scale processing and										
value addition										
Post Harvest Technology										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
VII Plant Protection										
Integrated Pest										
Management										
Integrated Disease										
Management										
Bio-control of pests and										
diseases	6	144	29	173	24	3	27	168	32	200
Production of bio control										
agents and bio pesticides										
Others (pl specify)										
Total	6	144	29	173	24	3	27	168	32	200
VIII Fisheries										
Integrated fish farming	7	-	117	117	91	114	205	91	231	322
Carp breeding and hatchery										
management										
Carp fry and fingerling										
rearing										
Composite fish culture										
Hatchery management and										
culture of freshwater prawn										
Breeding and culture of										
ornamental fishes										
Portable plastic carp										
hatchery										
Pen culture of fish and										

Thematic area	No. of	No. of Participants Ourses Others SC/ST Grand Total								
	courses		Others			SC/ST		(Frand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value										
addition										
Others (pl specify)										
Total	7	-	117	117	91	114	205	91	231	322
IX Production of Inputs at										
site										
Seed Production										
Planting material										
production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures										
production										
Production of fry and										
fingerlings										
Production of Bee-colonies										
and wax sheets										
Small tools and implements										
Production of livestock feed										
and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
	-	-	-	-	-	-	-	-	-	-
A Capacity Building and										
Group Dynamics										
Croup dynamics										
Group dynamics										
of SHGs										
Mobilization of social										
capital										
Entrepreneurial										
development of										
farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total	-	-		-	-		-	_		-
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (p] specify)										
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	27	452	238	587	164	163	327	526	388	914

Thematic area	No. of	Participants								
	courses		Others			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation										

Thematic area	No. of	o. of Participants								
	courses		Others			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop										
Soil & water concernation										
Jatagrated putrient										
management										
Production of organic										
inputs										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
II Horticulture										
a) Vegetable Crops										
Production of low value and										
high valume crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	-	-	-	-	-	-	-	-	-	-
b) Fruits										
Training and Pruning										
Layout and Management of										
Orchards										
Cultivation of Fruit										
Management of young										
Daiwyanation of old										
orchards										
Export potential fruits										
Micro irrigation systems of										
orchards										
Plant propagation										
techniques										
Others (pl specify)										
Total (b)	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants										
Nursery Management										
Management of potted										
plants										
Export potential of										
ornamental plants										
Propagation techniques of										
Ornamental Plants										
Others (pl specify)										
Total (c)	-	-	-	-	-	-	-	-	-	-
a) Plantation crops										
Production and Management technology										
Processing and value										
addition										
Others (nl specify)										
Total (d)		_	_	_	_		_	_	_	_
e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and										
	1									

Thematic area	No. of). of Participants								
	courses		Others			SC/ST		(Frand Tota	ıl 👘 👘
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Processing and value										
addition										
Others (pl specify)										
Total (e)	-	-	-	-	-	-	-	-	-	-
f) Spices										
Production and										
Management technology										
Processing and value										
Addition										
Total (f)	_	_	_		_	_	_	_		_
g) Medicinal and			_			_				_
Aromatic Plants										
Nursery management										
Production and										
management technology										
Post harvest technology and										
value addition										
Others (pl specify)										
$\frac{10 \tan \left(g \right)}{CT}$	-	-	-	-	-	-	-	-	-	-
G1 (a-g) III Soil Health and	-	-	-	-	-	-	-	-	-	-
Fertility Management										
Soil fertility management										
Integrated water										
management										
Integrated Nutrient										
Management										
Production and use of										
organic inputs										
Management of										
Micro putrient deficiency in										
crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
IV Livestock Production										
and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Animal Nutrition										
Management										
Disease Management										
Feed & fodder technology										
Production of quality										
animal products										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
V Home Science/Women										
empowerment										
household food security by										
nutrition gardening										
Design and development of										
low/minimum cost diet										
Designing and development										
for high nutrient efficiency										
diet										

Thematic area	No. of	lo. of Participants								
	courses		Others			SC/ST		(Frand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Minimization of nutrient										
loss in processing										
Processing and cooking										
Gender mainstreaming										
through SHGs										
Storage loss minimization										
techniques										
Value addition										
Women empowerment										
Location specific drudgery										
reduction technologies										
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
VI Agril. Engineering										
Farm Machinary and its										
maintenance										
Installation and										
maintenance of micro										
irrigation systems										
Use of Plastics in farming										
practices										
Production of small tools										
and implements										
Repair and maintenance of										
farm machinery and										
implements										
Small scale processing and										
Post Harvest Technology										
Others (pl specify)	-									
Total	-	-	-	-	-	-	-	-	-	-
VII Plant Protection	-									
Integrated Pest										
Integrated Disease										
Managament										
Dia control of posts and										
disansas										
Broduction of his control										
agents and bio pesticides										
Others (pl specify)										
Total										
10tal VIII Fisherios	-	-	-	-	-	-	-	-	•	-
Integrated fish farming										
Carp breeding and batchery										
management										
Carp fry and fingerling										
rearing										
Composite fish culture										
Hatchery management and										
culture of freshwater prawn										
Breeding and culture of										
ornamental fishes										
Portable plastic carp										
hatchery										
Pen culture of fish and										
prawn										
Shrimp farming										
Edible ovster farming										
Pearl culture	1								-	
Fish processing and value										
addition										

Thematic area	No. of	. of Participants								
	courses		Others			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
IX Production of Inputs at										
site										
Seed Production										
Planting material										
production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures										
production										
Production of fry and										
fingerlings										
Production of Bee-colonies										
and wax sheets										
Small tools and implements										
Production of livestock feed										
and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total	-	-	-	-	-	-	-	-	-	-
X CapacityBuilding and										
Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management										
of SHGs										
Mobilization of social										
capital										
Entrepreneurial										
development of										
farmers/youths										
WTO and IPR issues										
Others (pl specify)										ļ
Total	-	-	-	-	-	-	-	-	-	-
XI Agro-forestry										
Production technologies										ļ
Nursery management										ļ
Integrated Farming Systems										ļ
Others (pl specify)										ļ
Total	-	-	-	-	-	-	-	-	-	
GRAND TOTAL	-	-	-	-	-	-	-	-	-	-

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

	Nf				No. of	Participan	ts			
Area of training	INO. OI		General			SC/ST			Grand Tota	ıl
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of										
Horticulture crops										
Training and pruning of										
orchards										
Protected cultivation of										
vegetable crops										
Commercial fruit										
production										
Integrated farming										
Seed production										
Production of organic										
inputs										

Planting material										
production										
Vermi-culture										
Mushroom Production	1	-	-	-	10	28	38	10	28	38
Bee-keeping		-	-	-	7	28	35	7	28	35
Sericulture	2	46	8	54	12	14	26	58	24	80
Repair and maintenance										
of farm machinery and										
implements										
Value addition	1	-	10	10	0	28	28	-	38	38
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality										
animal products										
Dairying	1	4	3	7	6	22	28	10	25	35
Sheep and goat rearing	2	50	30	80	9	11	20	59	41	100
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and										
processing technology										
Fry and fingerling rearing										
Livestock production mgt.	1	-	7	7	-	25	25	-	32	32
TOTAL	7	100	58	158	27	100	127	127	160	285

4.5 Training for Rural Youth including sponsored training programmes (Off campus)

	No. of				No. of	Participan	ts			
Area of training	Courses		General			SC/ST			Grand Tota	ત્રી
	courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of										
Horticulture crops										
Training and pruning of										
orchards										
Protected cultivation of										
vegetable crops										
Commercial fruit										
production										
Integrated farming										
Seed production										
Production of organic										
inputs										
Planting material										
production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance										
of farm machinery and										
implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality										

animal products										
Dairying	2	28	5	33	11	20	31	39	25	64
Sheep and goat rearing	1	10	28	38	2	3	5	12	31	43
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and										
processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	3	38	33	71	13	23	36	51	56	107

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

	No. of Courses General SC/ST Grand Total Mole Excel Mole Excel Mole									
Area of training	Courses		General			SC/ST			Grand Tota	ત્રી
	courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of										
Horticulture crops										
Training and pruning of										
orchards										
Protected cultivation of										
vegetable crops										
Commercial fruit										
production										
Integrated farming										
Seed production										
Production of organic										
inputs										
Planting material										
production										
Vermi-culture										
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance										
of farm machinery and										
implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality										
animal products										
Dairving										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Shringer framing										
Shrimp farming										
Caldenator 6 1										
Cold water fisheries					 					
Fish harvest and										
processing technology										

Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	-	-	-	-	-	-	-	-	-	-

4.7	Training	programmes	for	Extension	Personnel	including	sponsored	training	programmes	(On
cam	ipus)									

	No. of				No. o	f Partici	ipants			
Area of training	Cours		General		SC/ST			G	rand To	tal
	es	Ma	Fema	Tot	Ma	Fema	Tot	Ma	Fema	Tot
		le	le	al	le	le	al	le	le	al
Productivity enhancement in field crops	1	27	14	31	-	-	-	27	14	31
Integrated Pest Management	2	22	25	47	-	-	-	22	25	47
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery										
and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet										
designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production	2	37	18	55	-	-	-	37	18	55
Household food security										
Any other (pl.specify)										
TOTAL	5	86	57	133	0	0	0	86	57	133

4.8 Training programmes for Extension Personnel including sponsored training programmes (off campus)

	No. of	of No. of Participants								
Area of training	Cours	-	General			SC/ST		G	rand To	tal
	es	Ma	Fema	Tot	Ma	Fema	Tot	Ma	Fema	Tot
		le	le	al	le	le	al	le	le	al
Productivity enhancement in field crops	1	30	16	46	-	-	-	30	16	46
Integrated Pest Management	1	24	12	36	-	-	-	24	12	36
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and										
implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals	1	34	22	56	-	-	-	34	22	56
Poultry Post mortem Techniques and PM										
identification-ASCAD										
Household food security										
Any other (pl.specify)										
TOTAL	3	88	50	138	0	0	0	88	50	138

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

Area of training	No. of	No. of Participants									
Area or training	es		General			SC/ST		G	rand Tot	al	
		Mal	Fema le	Tot al	Mal	Fema le	Tot al	Mal	Fema le	Tot al	
Productivity enhancement in field crops		c			č		ui	č			
Integrated Pest Management											
Integrated Nutrient management											
Rejuvenation of old orchards											
Protected cultivation technology											
Production and use of organic inputs											
Care and maintenance of farm machinery and											
implements											
Gender mainstreaming through SHGs											
Formation and Management of SHGs											
Women and Child care											
Low cost and nutrient efficient diet designing											
Group Dynamics and farmers organization											
Information networking among farmers											
Capacity building for ICT application											
Management in farm animals											
Livestock feed and fodder production											
Household food security											
Any other (pl.specify)											
TOTAL	-	-	-	-	-	-	-	-	-	-	

4.10 Sponsored training programmes

	No. of Courses				No.	of Particip	ants			
Area of training	courses		General			SC/ST		(Grand Tota	al
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	2	58	14	72	11	0	11	69	14	83
Commercial production of vegetables										
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total	2	58	14	72	11	0	11	69	14	83
Post harvest technology and value addition										
Processing and value addition										
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries										
Livestock production and management	2	17	21	38	13	33	46	30	54	84
Animal Nutrition Management	1	67	0	67	10	0	10	77	0	77
Animal Disease Management	1	14	27	41	6	18	24	20	45	65
Fisheries Nutrition	1	3	16	19	11	2	13	14	18	32
Fisheries Management										
Bee keeping	1	17	5	22	5	3	8	22	8	30

									47	
Total	6	118	69	187	45	56	101	163	125	288
Home Science										
Mushroom	1	17	5	22	5	3	8	22	8	30
Economic empowerment of women										
Drudgery reduction of women										
Others (pl. specify)										
Total	1	17	5	22	5	3	8	22	8	30
Agricultural Extension										
CapacityBuilding and Group Dynamics										
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	9	193	88	281	61	59	120	254	147	401

4.11 Name of sponsoring agencies involved:

- ATMA,
- NABARD,
- IOB,

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

	No. of	No. of Participants								
Area of training	Cours		General			SC/ST			Grand Tot	al
	es	Male	Female	Total	Male	Femal e	Total	Male	Female	Total
Crop production and										
management										
Commercial floriculture										
Commercial fruit production										
Commercial vegetable										
production										
Integrated crop management										
Organic farming										
Others (pl. specify)										
Total										
Post harvest technology and										
value addition										
Value addition										
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries										
Dairy farming	1	4	3	7	6	22	28	10	25	35
Composite fish culture										
Sheep and goat rearing										
Piggery										
Poultry farming										
Integrated development of										
Small Ruminants and Rabbits										
Total	1	4	3	7	6	22	28	10	25	35
Income generation activities										
Vermicomposting										
Production of bio-agents, bio-										
pesticides,										
bio-fertilizers etc.										
Repair and maintenance of farm										
machinery										
and implements										
Rural Crafts										
Seed production										
Sericulture										
Mushroom cultivation										
Nursery, grafting etc.										
Tailoring, stitching,										
embroidery, dying etc.										
Agril. para-workers, para-vet										
training										
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-

Agricultural Extension										
Capacity building and group										
dynamics										
Others (pl. specify)										
Total	-	-	-	-	-	-	-	-	-	-
Grand Total	1	4	3	7	6	22	28	10	25	35

5. EXTENSION PROGRAMMES

5.1 Extension programmes conducted

			No. of	TOTAL
Activities	No. of programmes	No. of farmers	Extension	
			Personnel	
Advisory Services	799	7454	0	7454
Diagnostic visits	34	81	53	134
Field Day	3	35	7	42
Group discussions	2	85	20	105
Kisan Ghosthi	0	0	0	0
Film Show	4	200	15	215
Self -help groups	1	30	2	32
Kisan Mela	5	3800	85	3885
Exhibition	8	3500	45	3545
Scientists' visit to farmers field	127	254	30	284
Plant/ Animal Health Camps	5	132	25	157
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	0	0	0	0
Method Demonstrations	16	634	14	648
Celebration of important days	5	2500	3	2503
Special day celebration	12	1320	8	1328
Exposure visits	14	155	0	155
Others (pl. specify)				
Total	1035	20180	307	20487

5.2 Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	-
	22
Extension Literature	
News paper coverage	40
	24
Popular articles	
	62
Radio Talks	
	14
TV Talks	
Animal health camps (Number of animals treated)	5
	8
Research Articles	
	2
Success Stories	
News Letter	4

	86
Lectures delivered as resource person	
	840
Farmers visit to KVK	
Total	1121

6. MOBILE ADVISORY SERVICES

6.1. No of registered farmers on m-kisan portal: 4245 nos.

6.2 Details of messages sent through m-kisan portal

Types of Messages	C	crop	Live	stock	Weat	her	Mark	eting	Av	vareness	en en	Other terprise	9 7	Fotal
	No of messages	No of farmers	No of messages	No of farmers										
Text only	2	4245	6	4245	-	-	-	-	4	4245	4	4245	16	4245
Voice only	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Voice &														
Text	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2	4245	6	4245	-	-	-	-	4	4245	4	4245	16	4245

6.3 MOBILE ADVISORY SERVICES THROUGH OTHERS

No of registered farmers: 115 nos.

Types of Messages	Cre	ор	Lives	tock	Wea	ther	Mark	eting	Awar	eness	Oth enter	er prise	Tot	tal
	No of messages	No of farmers												
Text only	4	115	1	130	-	-	-	-	-	-	-	-	5	245
Voice only	-	-	1	400	-	-	-	-	-	-	-	-	1	400
Voice &														
Text	-	-	-	-	-	-	-	-	-	-	-	-		
Total	4	115	2	630	-	-	-	-	-	-	-	-	6	645

7. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
Gosthies			
Lectures organised			
Exhibition			
Film show			
Fair			Nil
Farm Visit			
Diagnostic Practicals			
Distribution of Literature (No.)			
Distribution of Seed (q)			

8. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

8.1 Production of **Seeds** by the KVKs (quintal)

			Seed p	roduced		Se	eed suppl	ied to far	mers			
Enterpris	N. C.	Variet	Quan			Free seed			Priced see	d	Seed sup other a	oplied to gencies
e	Name of crop	У	tity	Value (Rs)	Quan	No of forme	Valua	Quan	No of former	Value	Quanti	Valua
			(q)	~ /	(q)	rs	(Rs)	(q)	s	(Rs)	ty (q)	(Rs)
CEREAL	Wheat											
5	Wilcat	TKM										
	Paddy	13 ADT	9.5	29470	-	-	-	9.5	6	29470	-	-
		53	3.5	10850				3.5	1	10850	-	-
	Maize											
	Sorghum (Jowar/Cholam/Jon											
	Pearl Millet											
	(Bajra/Cumbu/Sajja)											
	Finger millet (Ragi)											
	Foxtail Millet											
	Barnyard Millet											
	(Kuthiraivali/Udalu, Kodisama)											
	Kodo Millet (Varagu/Arikelu)											
	Little Millet											
	(Samai/Samalu) Proso Millet											
	(PaniVaragu/variga)											
	Barley											
	Brown top millet											
	Total Cereals		13	40320	-	-	-	13	7	40320	-	-
-OIL SEEDS	Groundnut											
	Sunflower											
	Safflower											
	Sesame											
	Castor											
	Niger											
	Rapeseed & Mustard											
	Linseed											
	Soybean											
	Total Oil Seds	-	-	-	-	-	-	-	-	-	-	-
PULSES	Pigeon pea (Red Gram)											
	Chick pea (Bengal gram)											
	Green gram	CO8	0.11	960	-	-	-	0.11	2	960	-	-
	Black gram	VBN	1.71	15048	-	-	-	1.71	24	15048	-	-

											5	1
		8										
	Cowpea											
	Horse gram											
	Lentil											
	Rajma											
	Field pea											
	Total Pulses		1.82	16008	-	-	-	1.82	26	16008	-	-
VEGAT ABLES	Bhendi (Okra/Ladies finger)											
seeds	French bean											
	Radish											
	Onion											
	Chilli (Seeds)											
	Tomato (Seeds)											
	Brinjal (Seeds)											
	Gourds (snake, bottle, bitter, ribbed etc)											
	Pumpkin											
	Vegetable Pea											
	Total Vegetables	-	-	-	-	-	-	-	-	-	-	-
FRUITS												
seeds												
	Total Fruits	-	-	-	-	-	-	-	-	-	-	-
FLOWE RS												
seeds												
	Total Flowers	-	-	-	-	-	-	-	-	-	-	-
SPICES	Turmeric rhizome											
seeds	Coriander											
	Garlic											
	Fenugreek											
	Total Spices	-	-	-	-	-	-	-	-	-	-	-
FODDER	Fodder Sorghum											
seeds	Fodder Cowpea											

	Grand Total of Seeds		14.82	56328	0	0	0	14.82	33	56328	0	0
	Total Commercial Crops	-	-	-	-	-	-	-	-	-	-	-
seeds	Crop seeds											
	Other Commercial											
CROPS	Crop seeds											
RCIAL	Cotton Other Commercial											
COMME	~											
	Total Green Menure seeds	-	-	-	-	-	-	-	-	-	-	-
	Other Green manure seeds											
seeds	Sunnhemp											
MANUR E	Sesbania		<u> </u>									
GREEN	Dhaincha											
	Total special planting materials	-	-	-	-	-	-	-	-	-	-	-
(Quintals)	Sugarcane setts (if sold by weight)											
Materials	Small onion bulb											
Special Planting	Potato											
	Total Fodder	-	-	-	-	-	-	-	-	-	-	-
	Berseem											
	Alfalfa											
	Stylo											
	Lucerne											
	Desmanthus/Hedge lucerne											

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

Enterp		Va	Plan mate produ	ting rial uced	I	Planting m	naterial s	supplied to) farmers		Plan mate	ting rial
Enterp rise	Name of crop	rie	Quant	Valu	F	ree supply	,		Priced		other ag	eu to gencies
1.50		ty	ity (Nos)	e (Rs)	Quant ity (Nos)	No of farme rs	Valu e (Rs)	Quant ity (Nos)	No of farme rs	Valu e (Rs)	Quant ity (Nos)	Valu e (Rs)
VEGA TABLE S	Moringa Seedlings	PK M 1	141	1410	-	-	-	141	14	1410	-	-
	Chilli seedlings											
	Tomato seedlings											
	Cabbage seedlings											
	Cauliflower seedlings											
	Broccoli seedlings											
	Capsicum seedlings											
	Onion seedlings											
	Onion bulb (aggregatum)											
	Cucumber seedlings											
	Bottle gourd seedlings											
	Bitter gourd seedlings											
	Sponge gourd seedlings											
	Pumpkin seedlings											
	Knolkhole seedlings											

52

	Summer Squash											
	seedings											
	Total Vegetable		1.41	1410				1.41	14	1410		
FRIIIT	planting materials		141	1410	-	-	-	141	14	1410	-	-
S	Aonla											
grafts	Litchi											
seedling s and	Mango											
cuttings	Papaya seedlings											
	Guava											
	Jack fruit											
	Beal											
	Citrus											
	Lemon											
	Mausammi											
	Karonda											
	Pomegranate											
	Custard apple											
	Apple											
	Ber											
	Jamun											
	Pear											
	Peach											
	Kiwi											
	Apricot											
	Walnut											
	Banana succers											
	Banana seedlings											
	Total Fruit planting materials		_	_	_	_	-	_	_	_	-	-
FLOW												
ERS AND	Marigold											
ORNA MENT	Tube Pose											
AL	(Rajnigandha)											
PLANT S	Chrysanthmum											
seedling s and	Rose											
cuttings	Hibiscus (Gudhal)											
	Crotan plant											
	Calandula (Pot marigold)											
	Vervina											
	Pendula	1										
	Baugainvillia								_			
	Durenta Golden											
	Gladiolus											
	Harshingar											
	Glardia											
	Ficusbenajamina											
	Red erration											

												54
	Рорру											
	Sweet William											
	Chirayata											
	Ashok											
	Total Flowers and Ornamental planting materials		-	-	-	-	-	-	-	-	-	-
MEDI CINAL	Lemon Grass											
AND	Aswagandha											
AROM ATIC	Satawar											
PLANT S	Magohani											
seedling s and	Turmeric											
cuttings												
	Total medicinal and aromatic		-	-	-	-	-	-	-	-	-	-
FORES TRY	Poplar											
AND	Ariun											
PLANT	Siris											
CROPS	Catechu											
seedling s and	Chironji											
cuttings	Vengai	Lo cal	239	2390	-	-	-	239	22	2390	-	-
	Karanj											
	Neem	Lo cal	10	100	_	_	-	10	1	100	-	-
	Teak											
	Eucalyptus											
	Saguan											
	Samel											
	Casuarina											
	Coconut seedlings	E CT	2167	1300 20	-	-	-	2167	107	1300 20	-	-
	Arecanut seedlings											
	Total forest and plantation crops		2416	1325 10	0	0	0	2416	130	1325 10	0	0
FODD ER	Napier grass	CO 3	2075	2075	-	-	-	2075	35	2075	-	-
slips	Para grass											
	Super Napier grass											
	Sudax Chery											
	Cumbu Napier grass (Co 3, Co 4, Co 5 etc)											
	Other fodder plants (Specify)											
	Total Fodder crops		2075	2075	-	-	-	2075	35	2075	-	-
SPICE S	Turmeric											
	Coriander											
	Garlic	1										
	Fenugreek											
	Other Fibre Crops (Specify - seed only)											
	Total Spices		-	-	-	-	-	-	-	-	-	-

	Fodder Sorghum										
	Fodder Cowpea										
	Desmanthus/Hedge lucerne										
	Lucerne										
	Stylo										
	Alfalfa										
	Berseem										
	Other Fodder Seeds										
	Total Fodder			-	-	-	-	-	-	-	-
GREE N	Dhaincha										
MANU	Diancia										
RE	Sesbania		_								
	Sunnhemp										
	Other Green manure seeds										
	Total Green Menure seeds			-	-	-	-	-	-	-	-
Special Planting	Mushroom spawn										
Material s	Sugarcane setts (If sold by Numbers)										
sold by number s	Other seed materials (sold by numbers)										
	Total special planting materials			-	-	-	-	-	-	-	-
Any other	Paddy seedlings										
plantin	Any other (specify)										
g materia 1											
sold by number s											
	Total Commercial										
	Crops	4632	1359	- 0	- 0	- 0	- 4632	- 179	1359	- 0	- 0
	Grand Total of Seeds		95		-				95		

8.3 Production of Bio-Products

		Comme	Bio-pro produ	ducts iced		Bio-pro	ducts suj	oplied to fa	rmers		bio-pro	ducts
Catego	Name of the	rcial		Valu	Free	distributi	ion		Priced		supplie other ag	ed to gencies
ry	product	name (if any)	Quanti ty (kg)	e (Rs)	Quanti ty (kgs)	No of farme rs	Valu e (Rs)	Quanti ty (kgs)	No of farme rs	Valu e (Rs)	Quanti ty (kgs)	Valu e (Rs)
Bio- fortiliz												
ers	Rhyzobium											
	Azotobacter											
	Acetobacter											
	Azospirillum											
	BGA											
	Azolla	Azolla	229	231 0	-	-	-	229	107	231 0	-	-
	VAM											
	Phosphate solubilizers											
	Potassium Solubilizers											

	Sulphur											
	Solubilizers											
	Waste											
	Bio compositing											
	culture											
	Other Effective	Fish										
	Micro	Amino										
	Organisms-	Acid	1.5 lit	150	-	-	-	1.5	1	150	-	-
	Total bio-		229 kg									
	fertilizers		/1.5 lit	2460	-	-	-	230.5	108	2460	-	-
Bio-			01.1%	0100				01	20	0100		
inputs	Panchakavya	-	91 lit.	9100	-	-	-	91	20	9100	-	-
			1524	1534				1524	00	1534		
	Vermicompost	-	1554	0		-	-	1554	88	0	-	-
	Earthworms for											
	vermicompost											
	Coir pith	-	67.6	6760	-	-	-	676	33	6760	-	-
	Compost											
	Other bio-inputs											
	(specify)		2210									
	Total bio-		$\frac{2210}{ka / 01}$	3120						3120		
	inputs		lif	0	-		-	2301	141	0	-	
Bio-	Beauveriabassia		III	v				2001		•		
Pestici	na											
des												
for	Trichoderma											
insect	viridi											
pests												
Fungal	Metarrhiziuman											
disease	isoplae											
S	D 1			1107						1107		
Nemat	Psueaomonas	-	1127	68	-	-	-	1127	218	68	-	-
oues	FDN			08						08		
	Trichogramma											
	(Unit)											
	Botanicals											
	(Specify)											
	Total bio-		1127	1127	-	-	-	1127	218	1127	-	-
	pesticides		25((68						68		
	Total bio-		3300 kg/02 5	1182						1182		
	products		ng/92.5	48	-	_	-	3658.5	467	48	_	
	producto	1		0				000000		0		

8.4 Production of livestock materials

	Name of the livestock/fish/fee d Name of the livestock/fish/fee d Name/C al name (if any)	Variety/i mprove	Produ	ction	Supplied to farmers					Supplied to		
Catego		d species	Orrent	Volu	Free	Free distribution Priced				other agencies		
ry		name/C ommerci al name (if any)	ity (No)	e (Rs)	Quant ity (No)	No of farme rs	Valu e (Rs)	Quant ity (No)	No of farme rs	Valu e (Rs)	Quant ity (No)	Valu e (Rs)
Dairy												
cattle	Cow	-	-	-	-	-	-	-	-	-	-	-
	Cow	-	-	-	-	-	-	-	-	-	-	-
	Cow Calf	-	-	-	-	-	-	-	-	-	-	_
	Cow Calf	-	-	-	-	-	-	-	-	-	-	-
	Bufallo	-	-	-	-	-	-	-	-	-	-	_
	Bufallo	-	-	-	-	-	-	-	-	-	-	-
	Bufallo calf	-	-	-	-	-	-	-	-	-	-	-
	Bufallo calf	-	-	-	-	-	-	-	-	-	-	-
	Other diary cattle (Specify)	-	-	-	-	-	-	-	-	-	_	-
	Total Dairy Cattle	-	-	-	-	-	-	-	-	-	-	-
Goat and	Goat	-	-	-	-	-	-	-	-	-	-	-

Sheep												
	Goat	-	-	-	-	-	-	-	-	-	-	-
	Goat	-	-	-	-	-	-	-	-	_	-	-
	Sheep	-	-	-	-	-	-	-	-	-	-	-
	Sheep	-	-	-	-	-	-	-	-	-	-	-
	Sheep	-	-	-	-	-	-	-	-	-	-	-
	Lamb	-	-	-	-	-	-	-	-	-	-	-
	Lamb	-	-	-	-	-	-	-	-	-	-	-
	Other goat/sheep (Specify)	-	_	-	-	_	-	_	-	-	_	-
	Total goat and sheep	-	-	_	-	-	_	-	-	_	-	_
Poultry	Desi bird	Nandha nam	34	9490	-	-	-	34	27	940	-	-
	Desi bird	-	-	-	-	-	-	-	-	-	-	-
	Desi bird chicks	-	-	-	-	-	-	-	-	-	-	-
	Desi bird chicks	-	-	-	-	-	-	-	-	-	-	-
	Broiler	-	-	-	-	-	-	-	-	-	-	-
	Layer	-	-	-	-	-	-	-	-	-	-	-
	Dual purpose birds	_	_	-	-	_	_	-	-	_	-	_
	Japanese Quail	Nandhan am	83	3203	-	-	-	83	28	3203	-	-
	Turkey											
	Emu											
	Ducks											
	Desi bird egg	Nandhan am	26	260	-	-	-	26	6	260		
	Broiler hybrid egg	-	-	-	-	-	-	-	-	-	-	-
	Layer egg (breeding)	_	_	_	_	_	_	_	_	_	_	_
	Egg											
	Quail egg	- Nandhan	-	- 241	-	-	-	-	-	- 241	-	-
	(breeding) Quail egg	am	1205	0	-	-	-	1205	62	0	-	-
	(commercial)	-	-	-	-	-	-	-	-	-	-	-
	others under poultry (specify)	-	-	-	-	-	-	-	-	-	-	-
	Total poultry		1348	1536	_		. I	1348	123	6813	_	. I
PIGGE	Pigs adults		1010					1010	120	0010		
RY	Piglets	-	-	-	-	-	-	-	-	-	-	-
	Pork	-	-	-	-	-	-	-	-	-	-	-
	Others related to	-	-	-	-	-	-	-	-	-	-	-
	piggery)	-	-	-	-	-	-	-	-	-	-	-
	Total Piggery Fingerlings of	-	-	-	-	-	-	-	-	-	-	-
FISHE RV	Fish type (specify)	_	_	_	_	_	_	_	_	_	_	
	Fish meat (kg)	GIFT	340.23	3342 4	-	-	-	340.23	196	3342 4	-	-
	Total Fisherv	_	_	-	_	_	-	_	_	-	-	_
	Grand Total Livestock and fishery		1688.2 3	4878 7	0	0	0	1688.2 3	319	4023 7	1688.2 3	4878 7

9. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples/ SHC	No. of S	amples	No. of Farmers	No. of Villages	Amount realized (Rs.)
	Using Mini Soil Testing Lab	Through Traditional Lab			
Soil samples	277	-	277	277	26700
Soil Health Cards (SHC)	277	-	277	277	

Samples	No.of Samples	No.of Farmers	No.of Villages	Amount realized (Rs.)
Water	48	48	48	2400
Plant	-	-	-	
Manure	-	-	-	-
Total	48	48	48	2400

10. SCIENTIFIC ADVISORY COMMITTEE

Date of SAC meeting	Number of members attended
	Nil
NT / N / N / N	

Note: please attach the proceedings of sac meeting along with the list of participants

11. PUBLICATIONS

Publications in journals

S. No	Authors	Year	Title	Journal
			Nil	

Other publications

S.No	Item	Year	Authors	Title	Publisher
1	Books	2020	Dr. S. Muthukumar	Scientific Cattle Rearing	Aruna
2		2019		Spirulina cultivation	
3		2019		Vannamei shrimp cultivation techniques	
4		2019		Vannami shrimp cultivation in low fertile water pond	
5	Booklet	2019		Scientific Goat rearing	
6	Book chapters / manuals				
7	Training manuals	2020	Dr. S. Muthukumar	Desi bird and Japanese quail rearing	

8		2020	Dr. S.	Scientific Goat rearing	
9		2019	Dr. S.	Profitable Dairy farming	
			Muthukumar		
10		2019		GIFT Tilapia culture	
11		2019		Freshwater fish culture	
12	Conference, proceeding papers, popular articles, Bulletins, Short communications	2019-20	Dr. S. Muthukumar	 Healthy and Hygienic milk production Mastitis and its control Role of water in milk production Role of light in milk production Question and Answer – part Selection of dairy animal. Locomotion scoring in dairy animals Question and Answer – part II 	
13	Technical bulletin/ Folders/Leaflet	2019	Mathivanan, A., Hino Fernando, Gopalakannan, A., Jayaraman, R., and S. Felix	Preparation and Storage Methds of Mackerel Fish Pickle	
14		2019	Mathivanan, A., Hino Fernando, Gopalakannan, A., Jayaraman, R., and S. Felix	Preparation and Storage Methds of Prawn Pickle	
15		2019	Mathivanan, A., Hino Fernando, Gopalakannan, A., Jayaraman, R., and S. Felix	Preparation methods of Anchovies Dry Fish	
16		2019	Kannan, V., and V. Gnananbharthi	Soil Testing and its importance	
17		2019	Mathivanan, A., Hino Fernando, Gopalakannan, A., Jayaraman, R., and S. Felix	Risk involved in the Preparation of Prawn and Fish Pickle and their solutions	
18		2019	Dr. S. Muthukumar	FMD and Brucellosis were released as part of NADCP	
19		2019	Kannan, V. and K. Ragu,	Rain water harvesting methods	
20		2019	Kannan, V. and K. Ragu,	Agricultural water management	
21		2019	Kannan, V. and K. Ragu,	Importance of drip irrigation	
22		2019	Kannan, V., Chandrasekar, K, and K. Ragu,	integrated rice nutrient management practices	
23		2019	Kannan, V. Gopalakannan, A., and K. Ragu,	Drip irrigation technology	
24		2019	Kannan, V.,	Agricultural water management	

			Chandrasekar,K.	technologies	
			and K. Ragu,		
25		2019	Kannan, V. and	Rainwater harvesting	
2.5	-	2010	K. Ragu,	methodologies	
26		2019		Composite Fish culture	
27		2019	Gopalakannan, A.,	Water quality management in	
			Jayaraman, R.,	Tilapia Culture	
20	-	2020	and S. Felix		
28		2020	Kannan, V. and	Collective Farming	
20	-	2020	K. Kagu,		
29		2020	K Ragu	Nutrition Garden	
30	-	2020	Kannan V and		
50		2020	K. Ragu,	Scientific Coconut Cultivation	
31	Popular Article	2019	Mathivanan, A.,	Risk involved in the	
			Hino Fernando,	Preparation of Prawn and Fish	
			Gopalakannan, A.,	Pickle and their solutions	
			Jayaraman, R.,		
			and S. Felix		
32		2019	Dr.S.Muthukumar	Healthy and Hygienic milk	
				production	
33	-	2010	Dr S Muthukumar	Pole water in milk production	1
55		2019	DI.S.WittinuKumai	Kole water in mink production	
34		2019	Kannan, V.	Green manures for soil health	1
			Chandrasekar, K.	improvement	
			and K. Ragu,		
35		2019	K.Chandrasekar	Fall Army Worm Management	
36		2019	Dr.S.Muthukumar	Role Light in Milk production	
37	-	2010	Dr.S.Muthukumar	Cattle rearing Question answer	+
20		2017	Illing Formen de		
38			Hino Fernando,	Aquastar Magazine - A	
		2019	Joyaraman R	constructive tool for the fishing	
			and S Felix	community	
39	4		Dr.S.Muthukumar	Locomotion scoring in cow	+
40	Reports	2019	-	Annual Action Plan Report	
				2019-20	
41		2019	-	Annual Report 2018-19	
42	Others	-	-	-	-
L		1	1		J

Newsletter/Magazine

Name of News letter/Magazine	Frequency	No. of Copies printed for distribution
KVK- e News letter	Quarterly	100

Name of the staff	Title	Dates	Duration	Organized by
Dr.A.Gopalakannan, Programme Coordinator	Annual Action Plan meeting	22.04.2019 to 23.04.2019	2 days	ICAR-ATARI, Hyderabad
Dr.A.Gopalakannan, Programme Coordinator	Annual Review Workshop	23.05.2019 to 27.05.2019	5 days	ICAR-ATARI, Hyderabad
Dr.K.Chandrasekar, SMS(Agri. Entomology)	Training on Microbial Agents of Major Insect pests and Disease of crops	20.06.2019 29.06.2019	10 days	IIOR, Hyderabad.
Dr.K.Chandrasekar, SMS(Agri. Entomology)	Workshop on Fall Army Worm	22.07.2019	1 day	TNAU, Coimbatore-3
Dr.K.Chandrasekar, SMS(Agri. Entomology)	Workshop on Nematode management in Agricultural crops	23.07.2019	1 day	TNAU, Coimbatore-3
Dr.V.Kannan, SMS(Agronomy)	Training on Advanced Irrigation System	19.08.2019 21.08.2019	3 days	NIPHM, Hyderabad.
Mr.E.Hino Fernando, SMS(Fisheries Extension)	Good Practices and Innovation in Agricultural Extension	26.08.2019 30.08.2019	5 days	MANAGE, Hyderabad & TNAU, Coimbatore
Mr.V.Gnanabharathi, Programme Asst. Technical	Pay and Allowances meeting 2019-20	27.11.2019 30.11.2019	4 days	ICAR-ATARI, Hyderabad
Mr.S.Tamilselvan, Assistant.	Pay and Allowances meeting 2019-20	27.11.2019 30.11.2019	4 days	ICAR-ATARI, Hyderabad
Mr.E.Hino Fernando, SMS(Fisheries Extension)	Online course on e-Extension	Oct-2019 Nov-2019	6 weeks	IIT Kanpur & COL, Canada
Dr.A.Gopalakannan, Programme Coordinator	Training on Right To Information(RTI) Act 2005	24.01.2020	1 day	TNJFU, Nagapattinam
Dr.A.Gopalakannan, Programme Coordinator	International Convention on Perspectives to Face Contemporary Challenges in Agricultural Development.	18.02.20 & 19.02.20	2 days	BharatiyaKisanSangh& ICAR, New Delhi
Mr.E.Hino Fernando, SMS(Fisheries Extension)	International Convention on Perspectives to Face Contemporary Challenges in Agricultural Development.	18.02.2020 & 19.02.2020	2 days	BharatiyaKisanSangh& ICAR, New Delhi

12. Training/workshops/seminars etc., details attended by KVK staff

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

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

14. 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
Oilseeds		
Pulses	N	ïl
Cereals		
Vegetable crops		
Tuber crops		
Total		

Farmers-scientists interaction on livestock management

Livestock components	Number ofNo.of participantinteractions		
Ν	Til		

Animal health camps organized:

Number of camps	No.of animals	No.of farmers
2	193	55
	305	65
Total	498	120

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

Г

	1 0										
Meetin	gs	Gosthi	es	Field	l days	Farme	ers fair	Exhibiti	on	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
					Nil						

15. Awards/rewards received by KVK and staff

Recognitions & Awards/Special attainments and Achievements of Practical Importance							
Recognitions	s & Awards (Team Award/in	dividual					
Item of Recognition		Year	Awarding Organization National / International / Professional; Society		Individual/ collaborative		
Best Worker		2019	TNJFU		Individual		
Best Worker		2019	TNJFU	ſŊJFU			
Best Worker		2019	TNJFU		Individual		
Special Attai products, con	Special Attainments & Achievements of Practical Importance (patents, technologies, varieties, products, concepts, methodologies etc.)						
Category	Title	Year	Individual/ Collaborative	Additional Details/Inf	formation		
		Nil					

16. Details of sponsored projects/programmes implemented by KVK

S.No	Title of the programme / project	Sponsoring agency	Objectives	Duration	Amount (Rs)
1	Profitable Dairy farming	NABARD	Training	3 Days	39,800
2	Integrated development of Small Ruminants and Rabbits	ATMA	Training	6 Days	42,000
3	ICAR- Development Grant	ICAR-TNJFU	SCSP components	One year	4,00,000
4	University Revolving Fund Project	TNJFU	Income Generation for KVK	-	

1. Profitable Dairy Farming:

CAT Training programme on Dairy Cattle Management- Newer Scientific Technological Intervention Report(Grant under farm sector promotion fund)

Venue: Keelaiyur, Training period: 19/08/19 to 21/08/19.

Training programe was inaugurated by Dr. A. Gopalakannan, Programme coordinator, Krishi Vigyan Kendra, Sikkal. Mr. Sankaran (lead bank manager) delivered Special address, in his speech he insisted the importance of maintaining healthy credit score for availing bank loans and further he stressed the farm women to get rid off highly charged micro finance. Mr. Selvamani, Director, Rural Self employment Training Institute (RSETI) explained about the role of RSETI in farm sector and their mandate. Dr. S. Muthukumar welcomed the gathering and latter Dr. K. Chandrasekar delivered the vote of thanks. 30 Farmers from Keelaiyur village participated in the entire 3 days training programme.

The following technical information were shared on the first day *viz*, Introduction to dairy farming, Indigenous and Exotic Cattle Breeds, Dentition, selection of dairy animal, Infertility and management, Housing management, Breeding management, Dry period management. Clean milk production, milking methods, Mastitis and Ethno veterinary formulation for mastitis, watering of animal and role of water in milk production. Breeding policies of Tamil Nadu, artificial insemination and productivity improvement. Under each and every topic important areas were covered based on nature of suitability of the technique to local area.

The second day season was started with the quick recap of previous day chapters. During the second day the following topics were covered viz, Calf a year program, Calf to Cow – 2years, Body condition scoring (BCS), Locomotion scoring (LS), Feeding management, Summer management of dairy animal, Disease management (Vaccination, Deworming), Per liter costing of milk, Cost reduction,Cultivation of Azolla, hydroponics, silage making. Economical impact of infertility on farm profitability, calf rearing, feed formulation vs commercial feed &azolla incorporation were covered on the second day. As a invitee trainer Dr.M. Kannan from Thiruvarur handled the feeding management session.

Last day of CAT training was fully utilized for field trip to Ammaiyar dairy farm, Lakshmi integrated farm, KVK Mathur and KVK Sikkal. Farmers were taken to the above mentioned farms and observed the following units/techniques/skills. Dr. Prince- farm vet and Dr. Gobu, Subject Matter Specialist (AH), KVK Mathur had handled the technical session, Programme coordinator, Mathur KVK gave the orientation about the KVK. The valedictory function was conducted at KVK sikkal campus; Dr. K. Chandrasekar SMS- Agricultural Entomology delivered welcome address. Mr. Prabakaran, NABARD-DDM interacted with all the trainees and collected the feedbacks of the training and usefulness of the programme. Further, he explained about the various support /assistance that are available in NABARD, finally certificates were distributed to all the participants. Mr. Ragu, SMS- Horticulture delivered vote of thanks.

S. No	Farm visited and Address	Duration	Technology/skill learned/ unit visited
1	Lakshmi integrated farm,	2 hours	Machine milking,
	Kiramathumedu		Vermicomposting, Panchakavya
2	Ammaiyar Dairy farm, Karaikkal	3 Hours	Silage unit
			Hi tech housing
			Milk parlor
			Loose housing
			Milk value addition
3	KVK, Mathur, Karaikkal	1 hour	Hydroponics unit
			Hatchery unit
			Mini Dairy unit
4	KVK, Sikkal, Nagapattinum	1 Hour	Azolla demo unit
			Vermicompost unit
			Panchakavya unit
			IFS unit
			Fodder cafeteria
			Poultry unit
			J. quail unit
			Lined fish pond

Exposure Visit

2.Skill Training of Rural Youth (STRY) on Integrated Development of Small Ruminants and Rabbits

1	Name of the Training programme	:	Skill Training of Rural Youth (STRY) on INTEGRATE DEVELOPMENT OF SMALL RUMINANTS AND RABBITS					
2	Duration and Date of the Programme	:	: 6 days, from 12/03/2020 to 17/03/2020					
3	SAMETI Sanction No.	:	: The Director ,SAMETI, Kudumianmalai Lr.No. SAMETI/167/2019, Dated 02.03.2020					
4	Name of the course Co-ordinator	:	: DR.S. MUTHUKUMAR, SMS(Veterinary Science)					
Co- Coordinator : DR. A. GOPALAKANNAN 5 DR. K. CHANDRASEKAR								
i) To and h ii) To enterp iii) To and o 6	 i) To train the rural youth in Small Ruminant and Rabbit scientific rearing practices for higher productivity and higher returns. ii) To build the capacity and confidence prospective of rural youth to start and run their own sheep and goat enterprises. iii) To improve farm productivity by means of various scientific interventions, feeding, breeding, weeding and other managemental practices to the small ruminants and rabbits. 							
	Programme		20					
	No. of Candidates dropped out of the Training	:	02					
	No. of Candidates completed the training	: 30						
6.1	Education Profile	·	·					
Educa	ational Level		No.of Trainees	Percentage to Total				
1. Up	To Class 7		-	-				

2. Class 8 to 10	10	33.33
3. Class 12 to Graduate	13	43.33
4. Post Graduate	4	13.33
5. Diploma	3	10.00

6.2 Social Profile

Social Group	No. of Trainees	Percentage to Total
1. Schedule caste(SC)	07	23.33
2. Scheduled tribe (ST)		
3. other backward class (OBC)	23	76.67
4. Minorities	-	-
5. Others	-	

6.3 Family Background

Profession of the Main Bread Winner in the	No. of Trainees	Percentage to Total
Family		
1. Labourer	-	-
2. Agriculturist	24	80.00
3. Own Business	03	10.00
4. Job in private sector	03	10.00
5. Government Job		

6.4 Age Profile

Age Group	No. of Trainees	Percentage to Total
1. 18 to 25 Years	05	16.67
2. 26 to 35 Years	07	23.33
3. Above 35 Years	18	60.00

7. Inauguration

- The "ICAR-KVK Sikkan, Nagapattinam District" organized Skill Training of Rural Youth (STRY) under SAMETI through ATMA-SSEPERS 2019-2020 training program on Integrated development of small ruminantand rabbits. The program was conducted for six days from 12/03/2020 to 17/03/202020. A total of 28 trainees from various parts of Nagapattinam District were registered and attended.
- The program was inaugurated by DR. A. Gopalakannan, Programme Coordinator, ICAR-KVK Sikkal, Nagapattinam District. In his inaugural address, He stressed the need for the scientific knowledge on Sheep and goat farming. Besides, in his speech, he detailed about the various activities on animal husbandry expert of KVK Nagapattinam district for the welfare of the Livestock farmers and he also advised the trainees to take up scientific knowledge and adopt scientific methods for rearing of Small ruminants and rabbit farming for their economic upliftment.

Dr.S.Muthukumar, Subject Matter Specialist cum Training coordinator, KVK Nagapattinaml welcomed the participants. In his inaugural address, hethanking the Director, SAMETI of Tamil Nadu for sponsoring Rs. 42,000/-for improving the entrepreneurship of rural youth through Skill training of Rural Youth on "Integrated development of small ruminant rabbits". He pointed out that the ICAR_-Krishi Vigyan Kendra, Nagapattinam keeps providing many such technical supports to rural farmers and young entrepreneurs to facilitate in development of farm operation. He also delivered vote of thanks.

8. Highlights of the Programme

The programme included lectures and demonstrations. A total of eighteen lectures were presented by the experts of the Krishi Vigyan Kendra, Sikkal, Veterinary University Training and Research Institute, Nagapattinam and Progressive farmers. Lectures on "status of small ruminant farming in India and Tamil Nadu, Different type of breeds, opportunities and challenges in small ruminant and Rabbit farming, Different Systems of Small ruminant farming- Broiler goat production, handling of small ruminants and Rabbits, preparation of concentrate mixture, cultivation of Azolla Hydroponic fodder cultivation technology, Deworming of small ruminants and rabbits, Vaccination of small ruminants, Housing, Disease management, Kid care management, Drunken kid management, feeding management , breeding management, different

66

identification methods, Infrastructure Requirement- Types of shed and their construction, Equipments, their use and maintenance, Selection of animals, Ethno veterinary practices in goat farming, biosecurity measures to be adopted in livestock farm. Demonstration of Azolla cultivation, Hydroponic cultivation, fodder chopping, silage making, Deworming, Vaccination, Homemade concentrate preparation, housing and fodder cultivation etc were done.

9. Valedictory

The valedictory function of the six days STRY training program on "Integrated development of small ruminantand rabbitswas held on 12/03/2020. Regional Joint Director Mr. Panneerselvam was specially invited and distributed the certificates to the trainees. The valedictory function was presided by Dr. A. Gopalakannan, Programme coordinator KVK, Sikkal. Dr. S.Malmarugan, Professor and Head of VUTRC, Nagapattinam also invited for guest lecture on disease management in livestock farms. Regional director on interaction collected feedback from trainees, distributed certificates and manuals. Dr. S.Muthukumar Training Coordinator finally proposed the vote of thanks.

	Particulars	Self Rating Parameters	No. of	Percentage to
S1.			Responses	Total
no.				
1.	Duration of the Programme	Most Appropriate	30	100
		Appropriate		
		Insufficient		
2.	Training Methodology	Very Good	27	90
		Good	3	10
		Not Good		
3.	Post Training Confidence Level	Increased	30	100
		No Change		
		Reduced		
4.	Future Goal	Clear	30	100
		Somewhat clear		
		Not Clear		

10. Summary of feedback Received from trainees

11. Plan for Follow-up for Settlement

We created a whats app group for these 30 participants and keeps monitoring their livestock farming activities. If any assistance required on managemental or other bio security aspects will be discussed. On necessary basis farm visit will be made in priority.

17. SUCCESS STORIES

Success Story on GIFT Tilapia culture in Farm Ponds: Situation analysis/Problem statement:

Fish rearing plays an important role in rural economy. It can empower unemployment of youths in the village to become an entrepreneur. Apart from Carp culture, Genetically Improved Variety (GIFT) of Tilapia is becoming popular nowadays among freshwater fish farmers. GIF Tilapia can grow reach the marketable size within a short period of 4 months. It is highly resistant to disease and can tolerate and survive under any water conditions. Palatability of cultures Tilapia is also good compared to Indian major carp. Market demand for Tilapia is also high.

Problem identified:

Longer duration of CarpCulture Lack of IMC seed during off season Low income of the unemployed youth.

Plan, Implement and Support:

KVK Intervention:

Awareness of Tilapia culture:

Tilapia culture in HDPE sheets is promoted for water scarced Nagapattinam district Many farmers undertaking Carp culture shifted to Tilapia culture

Marketing intervention:

Forward integration was made by linking with fish marketing agents for selling **Output:**

Weight recorded after four months was 240g.

Average body weight is around 230 g.

Price at which fishes were sold: Rs.: 130/Kg.

More than 100 Queries from farmers for starting Tilapia culture contacted through phone.

Outcome:

- GIFT Tilapia culture is getting popular among the farmers of that village and now people are preferring the taste of tilapia
- Many young entrepreneur from that village started inquiring about the business viability and opportunity.
- Many farmers are ready to take up tilapia culture and enquired for seed availability

Future plan:

Forward integration of the enterprise.

Farmer details

Name: Mr. . Kumar W/O: Mr. Sasikumar Village: Thirukanangudy Block: Nagapattinam Economic status: BPL Annual Income: 60000 Phone Number: 9843192832

5. Impact: Large scale/macro level (district/state) evidences related to <u>technological</u> <u>benefits</u> (changes in area and cropping system, livestock number, use of farm machinery &tools, changes in production and productivity of the district/state), <u>economic benefits</u> (contribution to district/state GDP, district agricultural economy)<u>social benefits</u> (education of children, status in the society, house construction etc.), <u>environmental</u> <u>benefits</u> (tolerance to temperature, drought/dry spell etc.), institutional development like processing units, market system, storage structures, industries etc.), etc..

18. CASE STUDIES: Nil

19. INNOVATIVE METHODOLOGY OR TRANSFER OF TECHNOLOGY DEVELOPED AND USED DURING THE YEAR -Nil-

20. ITKs

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
		Nil	

21. IMPACT OF KVK ACTIVITIES (NOT TO BE RESTRICTED FOR REPORTING PERIOD). Impact of OFT carried out by the KVK in the district.

	No. of	Cultivable Are	Cultivable Area under Crop (in		of the Crop (Per
	OFT carried	He	ectare)	E E	lectare)
Crops	during the last five years	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	1	537	603	18560	19450
(Brinjal)					
Mango	1	1845	3160	6835	12000
Type of Non –	No. of OFT carried	Productivity/Yield Change in Ir of Change in Ir		Income due to ervention f OFT	
Crop Activities	during the last five years	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	1	150 liters	195 liters	2,325	3,420
increase milk					
production					

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

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

Adoption technologies by the farmers 2018-19

S. No.	Name of Technologies (Minimum 25 including for areas like crops, horticulture, livestock, fisheries etc.)	Name of activity through which the particular technology given to farmers	No. of Farmers provide d technolo gy	Continued adoption of technology by percentage (%) of farmers
	Assessment of drought tolerant groundnut varieties			
1	under rain fed condition	OFT	5	60
	Assessment of suitable pest tolerant Tomato hybrids			
2	for Nagapattinam Dt.	OFT	5	40
	Production Performance of different poultry breed			
3	under Back yard	OFT	3	100
	Role of Ovisynch and TANUVAS mineral mixture on			
4	fertility management	OFT	12	80
5	Assessment of GIFT Tilapia culture in farm ponds	OFT	3	60
6	Demonstration of ICM in Black gram VBN 8 in Nagapattinam dt.	FLD	10	80
7	Demonstration of Traditional rice variety with Eco	FLD	5	100

70

	friendly management.			
8	Demonstration of Saline Tolerant Rice variety for Nagapattinam Dt.	FLD	10	100
9	Demonstration on Eco friendly IPM strategies for major pests in cotton	FLD	5	100
10	Demonstration of IPDM strategies for Mango fruit flies	FLD	5	60
11	Demonstration of Japanese quail rearing under EDP	FLD	3	33
12	Feed based fish culture in farm ponds	FLD	2	50
13	Integrated Crop management for Black gram VBN 8	CFLD	50	80
14	Integrated Crop management for Green Gram CO 8	CFLD	50	80
15	Integrated Farming System	Training, Demonstration	100	80
16	IPM	Training, Demonstration	80	80
17	Vermicompost Production technology	Training, Demonstration	100	50
18	IPDm for Paddy	Training, Demonstration	100	60
19	IPM for Cotton	Training, Demonstration	50	60
20	Inland fish farming	Training, Demonstration	100	50

Details of impact analysis of KVK activities carried out during the reporting period Adoption technologies by the farmers 2019-20

S. No.	Name of Technologies (Minimum 25 including for areas like crops, horticulture, livestock, fisheries etc.)	Name of activity through which the particular technology given to farmers	No. of Farmers provided technology	Continued adoption of technology by percentage (%) of farmers
1	IPM of Fall Army Worm for Maize	OFT	5	100
2	Assessment of drought tolerant groundnut varieties under rainfed condition	OFT	5	60
3	Assessment of Performance of Bhendi hybrids in Nagapattinam district	OFT	5	90
4	Effect of Mixed fodder bank on livestock productivity (Grasses, Cereal, Pulse & Tree Fodder)	OFT	5	80
5	Evaluation of growth performance of Red Tilapia and GIFT Tilapia in farm ponds	OFT, Training	2	50
6	Demonstration of Newly released rice variety ADT 53 in Nagapattinam District	FLD	20	100
7	Demonstration of Newly released rice variety VGT 1 in Nagapattinam District	FLD	20	80
8	Demonstration of Saline tolerant rice variety CSR 36 for Nagapattinam District	FLD	10	80
9	Demonstration of Eco friendly pest and disease management in Thaladi (Rabi) paddy	FLD	10	80
10	Demonstration IDM strategies for False smut in Rice	FLD	10	100
11	Demonstration of ICM in Black gram VBN 8 in Nagapattinam Dt.	FLD	10	50
12	Demonstration on Eco friendly IPM strategies	FLD	10	100

71

	for major Sucking pests in cotton			
	Demonstration on Eco friendly IPM strategies		10	
13	for major pests in Coconut	FLD	10	30
	Demonstration on Eco friendly IPM strategies		10	
14	for major pests in Jasmine	FLD	10	100
	Demonstration of Scientific Rearing of		55	
15	Japanese Quail among rural farmers (EDP)	FLD, Training	55	40
	Demonstration of Hydroponics fodder		2	
16	cultivation technology to rural farmer	FLD	2	50
	Demonstration of improved Aseel performance		5	
17	under back yard system	FLD	5	80
	Integrated Crop management for Black gram			
18	VBN 8	CFLD	50	80
	Integrated Crop management for Green Gram			
19	CO 8	CFLD	50	80
		Training,		
20	Integrated Farming System	Demonstration	100	80
		Training,		
21	Coconut IPM for Rhynocerous beetle	Demonstration	200	30
		Training,		
22	Bee keeping	Demonstration	50	33
		Training,		
23	Mushroom production	Demonstration	50	80
		Training,		
24	IPDm for Paddy	Demonstration	100	60
		Training,		
25	IPM for Cotton	Demonstration	50	60
		Training,		
26	Inland fish farming -Carp culture	Demonstration	100	50

22. Functional linkage with different organizations Functional linkage with different organizations

Name of organization	Nature of linkage		
State Dept. of Agriculture	Jointly organized training, extension programmes		
	• Giving technical support and infrastructural support during monthly zonal workshop.		
	• Jointly organized field diagnostic survey for pest and disease management		
	Organizing Pre Kharif and Pre Rabi programmes		
	World Soil Day programme		
	• Flood / Drought assessment		
	• Yield performance assessment		
Dept. of Horticulture	Jointly organized training programmes		
	• Offering need based technical guidance to the extension functionaries.		
	• Field diagnostic visit		
	Organizing Pre Kharif and Pre Rabi programmes		
	• Flood / Drought assessment		
	Yield performance assessment		
	• Third party Inspection on Drip irrigation unit at farmers field		
Department of Animal	Jointly organized training programmes		
Husbandry	• Jointly organized animal health camps.		
	• Field diagnostic visit		
NABARD	Organizing Farm Science Club and exposure visits.		
Local NGOs SWEET,	Organizing on/off campus training Programmes and exposure visits, offering		
DHANYA, and CCD,	need based technical guidance		
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TNJFU, TNAU, TANUVAS,	Technical consultancy and exchange of SMS during training programmes.		
K VK-Thiruvarur,			
All India Radio, Karaikal,	• Offering radio programmes on latest crop production technologies and		
	periodical announcements of technologies on critical crop stage.		
	• Offering Live TV programme on latest crop production technologies		
District Collectorate.	Farmers grievance day meeting, Organizing need based training programme		
	and promoting agricultural entrepreneurship, ATMA and PMFBY		
	programmes.		

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.)
Aquaphonics Training and Demo unit	16.04.2019	NFDB	10,66,000