

ANNUAL REPORT 2014-15

FOR THE PERIOD

APRIL 2014 to MARCH 2015

ICAR – KRISHI VIGYAN KENDRA

Tuticorin District, Tamilnadu

PART I - GENERAL INFORMATION ABOUT THE KVK

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

KVK Address	Telephone		E mail	Web Address
	Office	Fax		
ICAR KVK Hosted by SCAD, Vagaikulam, Mudivaithanendal Post, Tuticorin	0461-2269306	0461-2269306	pscadvkv@gmail.com	www.scadvkv.org

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Social Change and Development (SCAD) 105A1, North Bye pass road, Vannarpettai, Tirunelveli - 3	0462-2501008	0462-2501007	scb_scad@yahoo.com	www.scad.org

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. G. Alagukannan	-	9942978627	gakannan@rediffmail.com

1.4. Year of sanction: 1995

1.5. Staff Position (as 31st March 2015)

Sl. No	Sanctioned post	Name of the incumbent	Designation	M /F	Discipline	Highest Qualification	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr.G.Alagukannan	PC	M	Horti	M.Sc (Hort).., Ph.D	37400 – 67000 +9000	38800	1.8.2013	P	OBC
2	SMS	Dr.V.Srinivasan	SMS	M	Animal science	M.V.Sc., (Vet. medicine)	15600-39100 +5400	25090	8.7.1999	P	Others
3	SMS	S. Sumathi	SMS	F	Home science	M.Sc., (H.Sc.Ext.,)	15600-39100 +5400	24440	1.12.2000	P	OBC
4	SMS	P.Velmurugan	SMS	M	Horticulture	M.Sc., (Horticulture)	15600-39100 +5400	22910	30.1.2001	P	SC
5	SMS	M.Ashok Kumar	SMS	M	Plant protection	M.Sc.,(Ag) (Entomology)	15600-39100 +5400	18950	17.8.2009	P	OBC
6	SMS	A.Murugan	SMS	M	Agronomy	M.Sc., (Ag) (Agronomy)	15600-39100 +5400	17550	18.07.2011	P	SC
7	SMS	vacant	SMS	M	Fisheries		15600-39100 +5400	0			
8	Programme Assistant	I. Jeyakumar	Lab technicien	M	Lab Assistant	M.Sc (Microbiology)	9300-34800 +4200	9710	12.07.2013	P	Others
9	Programme Assistant	J.Jove	Computer	M	Computer science	M.C.A	9300-34800 +4200	11580	01.04.2011	P	OBC
10	Programme Assistant	K.Damodaran	Farm Manager	M	Agriculture	B.Sc.,(Agri)	9300-34800 +4200	12550	31.8.2009	P	OBC
11	Assistant	S.S. Ganesan	accountant	M	-	M.Com	9300-34800 +4200	19170	1.6.1996	P	Others
12	Stenographer	A. Vimala	Steno	F	-	SSLC	5200-20200 +2000	10020	1.6.1996	P	OBC

13	Driver 1	Dominic James	Driver	M	-	SSLC	5200-20200+2000	10020	1.6.1996	P	OBC
14	Driver 2	Gulam Rasul Babu	Driver	M	-	SSLC	5200-20200+2000	9710	1.7.96	P	OBC
15	Supporting staff 1	Rajesh	Farm assistant	M	-	BA	5200-20200+1800	8260	1.12.96	P	SC
16	Supporting staff 2	Xavier	watchman	M		M.Com	5200-20200+1800	7790	12.11.01	P	OBC

1.6. Total land with KVK (in ha) : 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	2.0
2.	Under Demonstration Units	0.8
3.	Under Crops	1.2
4.	Orchard/Agro-forestry	6.0
5.	Others	10.0

1.7 Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2001	1100	42 Lakhs			
2.	Farmers Hostel	ICAR	02.03.2011	305	35 Lakhs			
3.	Staff Quarters	ICAR	2007	650	24 Lakhs			
4.	Demonstration Units	ICAR	2006	200	1.89 Lakhs			
	1. Poultry shed							
	2. Vermicompost unit							
5	Storage Godown	ICAR	2.3.2012	45	3 Lakhs			
6	Vehicle cum Implement shed	ICAR	2.3.2012	60	3 Lakhs			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tempo cruiser	3/30/2004	4.96	146791	To be condemned
Bajaj boxer CT 100 delux	4/18/2005	0.39	7326	Road worthy
Hero Honda Splendor	4/13/2009	0.45	69760	Road worthy

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
OHP	1996	18315	ok
Slide projector	1996	14265	not in use
Electronic type writer	1996	19200	Not in use
Mf tractor and trailer	1999	362400	condemned
Photo copier	2005	82840	Not in use to be condemned
Computer with printer and accessories	2005	68800	Under repair and spares not available : to be condemned
Digital photo camera	2005	19990	Under repair : to be condemned
LCD projector screen and laptop computer	2007	98600	Under repair and spares not available : To be condemned
Fax machine	2009	15000	OK
Power tiller	2010	150000	OK
Generator	2011	150000	OK
AV aid	2011	15000	OK
EPABX	2011	15000	OK
LCD Projector (Infocus)			OK

1.8. Details SAC meeting conducted in 2014 – 15

Sl.No.	Date	Salient Recommendations	Action taken

Note: The SAC Meeting could not be conducted due to financial restriction as per the advice of ZPD unit

PART II – DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1	Dry farming – single crop in a year using NE monsoon, Major crops- chillies, pearl millet, maize, onion, fodder sorghum, sorghum, black gram , green gram, gingelly, sunflower, groundnut, castor, redgram, cotton, tomato, ,brinjal, cluster bean. Major livestock – goat, sheep, backyard poultry, Cross breed cattle, Non descript cattle.
2	Garden land farming – two or three crops in a year using open or tube well irrigation. Major crops- vegetables, banana, groundnut, flowers, chillies, drum stick, and cotton Major livestock- cross bred cattle, goat, backyard poultry
3	Tank fed/ river command area farming – one or two crops in a year. Major crops – Banana and paddy. Major livestock – cross bred cattle, goat, sheep, backy ard poultry
4.	Coastal region – Marine fishing, goat rearing, salt pan work

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

S. No	Agro-climatic Zone	Characteristics
01	Southern zone	The topography of the zone is undulating. This zone lies on the rain shadow area of the Western Ghats. The mean annual rainfall is 650mm with a contribution about 470mm from North East monsoon. The soil of this region falls under major groups viz., black, red, alluvial and lateritic. saline coastal alluvial soils are also present in the coastal belt. In black soil only one crop, either cotton or sorghum is raised. Direct seeded rice is cultivated under rain fed condition. On red soil, groundnut crop is raised. Under garden land conditions, Bajra and chillies form the major crops.

S. No	Agro ecological situation	Characteristics
01.	Hot semiarid eco region (H ₁ D ₂)	Hot and dry summers and mild winters with a mean annual rainfall of 600 to 1000mm and a length of growing period of 90-150 days in a year. Soil type- red loamy soil, Rain fed cultivation is the traditional practice with crops like millets, pulses, and oilseeds under irrigated conditions cotton, sugarcane and rice are the major crops . Severity of the soil erosion and drought due to poor moisture holding capacity of soil are the major constraints.
	Hot subhumid to semiarid eco region with coastal alluvium derived soil (S ₇ CD _{2.5})	Crop growth period 90-210 + days, coastal alluvium soil type

2.3 Soil types

S. No	Soil type	Characteristics
01	Red loam	The red colour is due to the presence of various oxides of iron. They are poor in fertility, low baseexchange capacity, and deficient in organic matter. The clay mineral is mainly kaolinite. The texture of the soil varies from loam to silt clay and clay loam. The pH is around neutral or slightly acidic. Some soils, due to lime bearing feldspar may have a higher pH range of 8.0.
02	Lateritic soil	Yellowish-red colour soils derived from laterites which contain a large proportion of primary kaolinite clay minerals. They exhibit plasticity, cohesion, shrinkage, and expansion and base saturation qualities to a small extent. They have poor water retention. The soils have a fairly high organic matter content but low level of lime and magnesia and are generally deficient in phosphorus and potassium. The pH of laterite soils is on the acidic side due to lack of lime and magnesia.
03	Black soil	They have a characteristic dark colour, varying from dark brown to deep black. They are formed by the weathering of trap rocks. These soils have a clay percentage ranging from 40-60%. The composition of clay is chiefly of the montmorillonite group and thus shows swelling

		and shrinking. The pH varies from 7.5 – 8.5.
04	Sandy coastal alluvial	These are sandy and deep but lack in profile development. Salinity is no problem due to the water table being low and thus having free drainage. These sandy stretches are put under coconut and cashew plantations.
05	Red sandy soil	These are derived from granites, graniloid, gneisses, quartzites and sand stones. The colours are due to red haematite and yellow limonite. Characteristic clay minerals are mainly kaolinitic and illitic types, with smaller amounts of montmorillonite, Base Exchange capacity is from 5 to 25 meq per 100 gm of soil and pH generally on the acidic side, ranging from p ^H 4.5-6.5

2.4 Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (Metric tons)	Productivity (kg /ha)	% to the total area sown
1.	A. FOOD GRAINS:				
	a) CEREALS & MILLETS				
	Paddy	20278	29814	4520	11.35
	Sorghum	8327	18871	2106	4.6
	Cumbu	11888	16473	1754	6.6
	b) PULSES				
	Black gram	32177	6540	172	18.01
	Green gram	29373	6269	177	16.44
2	B. FIBRE				
	Cotton	4879	6440	1.32	2.6
3.	C. OIL SEEDS				
	Ground nut	1183	1151	2227	0.6
	Sesame	1905	307	274	1.06
	Sun flower	1470	614	490	0.82
4.	D. OTHER CROPS				
	Chilli	14774	2058	176	8.27
	Banana	9578	287340	30000	
	Drumstick	950	19000	20000	
	Coriander (Grains)	3248	1023	315	
	Onion	1508	18096	12000	
	Other vegetables	2306	36896	16000	

* Source: Joint Director of Agriculture, Thoothukudi District (Year 2014 – 15)

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
June – 2014	---	35.7	28.3	82	43
July	---	35.2	27.9	80	48
August	56.8	34.7	28.1	81	54
September	30.6	34.5	27.8	80	54
October	260.8	32.8	26.8	82	64
November	235.8	29.8	25.4	91	79
December	40.4	29.5	25.1	89	76
January – 2015	---	29.8	24.4	89	73
February	---	30.6	25.0	90	72
March	14	32.7	27.2	87	71

Source: 1. scientific officer, Meteorological Observatory, Tuticorin post trust (Temperature and Humidity)

2. Dept.of Eco.and Statistics , Chennai -6 (for rainfall)

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

Category	Population
Cattle	136798
Buffalo	16125
Sheep	540744
Goats	318399
Pigs	34338
Rabbits	49
Poultry	1928988

Ducks	1682
Turkey	690
Donkey	678
Horse	1072
Pone	224
Dog	45901

Source: 18th livestock census

Category	Area	Production	Productivity
Fish			
<i>Marine</i>	163.5 km	41050 tonnes	-
<i>Inland</i>			
Prawn	NA	NA	NA
Scampi	NA	NA	NA
Shrimp	NA	NA	NA

Source: Assistant Director of Fisheries, Thoothukudi

2.7 District profile has been Updated for 2014 – 15 Yes/No: No

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Block	groups of villages	How long the village is covered under operationa l area of the KVK (specify the years)	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
1	Srivai gund am	Srivaigunda m	Perunkul am	1	Paddy	Labor Shortage and high cost of manual cultivation practices results in reduction of area of paddy cultivation Susceptible to drought in terminal stages because of water shortage in the dam (10000 ha) Lack of awareness of short duration varieties low yield from the Existing ruling Variety (ASD-16)	Mechanization and ICM
					Coconut	Lack of IPM practice More pest and disease attack Low yield	IPM practices
2	Srivai gund am	Karungula m	Poovani	2	Green gram	Low yield in green gram due to poor plant population in drought affected area Poor quality of Seed and lack of awareness on short duration varieties Improper weed management Low yield potential of ruling CO-6 variety (yield - 900kg/ha, duration 65 -70 days) Lack awareness of IPM technology	Awareness creation on drought mitigation and promotion of appropriate agronomic techniques , Promotion of ICM practices for major crops like pulses
3	Vilath hikul am	Vilathikul a m	Vilathikul ulam	3	Maize	Lack of awareness on high yielding short duration hybrid maize Dry land maize crop wilted during the terminal drought situation in 15000 ha in	Varietal introduction and ICM practices

						Thoothukudi	
					Blackgram	Low yield due to YMV attack and usage of Poor quality of Seed of VBN (Bg)-3 (40% yield loss) , yield loss upto 60% due to drought situation (30000 ha area) Improper weed management Non availability of latest high yielding varieties	Awareness creation on drought mitigation and promotion of appropriate agronomic techniques, Promotion of ICM practices for major crops like pulses
					Coriander	Lack of Drought tolerant varieties Lack of Short duration varieties Low yield ,lack of high yield varieties and technology	Varietal introduction and ICM practices
					Chilli	Chilli –fruit dropping, Damping off disease, Sucking pests	Promotion of ICM practices
					Dairy cows	Low milk yield in cows due to poor feeding practices	Scientific feeding and disease management practices for dairy cows
					Back yard poultry rearing	Mortality in birds due to ranikhet disease, Poor performance in birds due to intestinal worm infection, Lack of interest in poultry rearing due to predator problem	Training on the economic importance of backyard poultry Vaccination and deworming for the backyard poultry Introduction of safe country housing models
					Fish rearing	Non utilization of seasonal ponds for fish rearing Non availability of fingerlings at Nov and Dec months for stocking Shorter period of water storage in rainfed tanks leads to low body weight gain in fish Lack of knowledge in backyard ornamental fish rearing	Composite fish cultivation in village ponds
4	Srivai gundam	karungulam	Manakka rai	1	Banana	Lack of IPM practice More pest and disease attack Low yield and lack of aware on value addition	Promotion of ICM practices
			sekarakudi	1	Dairy cows	Low milk yield in cows due to poor feeding practices	Feed preservation and scientific feeding methods
					Fish rearing	Non utilization of seasonal ponds for fish rearing Non availability of fingerlings	Composite fish culture in fresh water ponds

						at Nov and Dec months for stocking Shorter period of water storage in rainfed tanks leads to low body weight gain in fish Lack of knowledge in backyard ornamental fish rearing	
5	Ottapidaram	Ottapidaram	Kuppanapuram	3	Groundnut	Water shortage in critical crop growth stage (50%) low yield of Existing Variety TMV -7	Varietal evaluation and ICM practices
					Drumstick	Low yield ,lack of high yield ,off season varieties and technology	Varietal evaluation and ICM practices
6	Vilathikulam	Pudur	Vedapatti	1	Dairy cows	Low milk yield in cows due to poor feeding practices	Low cost feed supplements to augment the milk yield
7	Thoothukudi	Thoothukudi	K.P.Thalavaipuram	5	Barnyard millet	Lack of Drought tolerant, high yield short duration varieties Lack of weed management and crop management practice. Low yield and value addition for minor millets	Promotion of ICM practices for minor millets
					Goat	Contagious diseases like Anthrax, HS,, pox ,and PPR leads to animal death. Reduction of Animal weight due to ecto and endo parasitism	Comprehensive disease control against infectious diseases and ecto and endo parasites
8			Kootampuli	5	Groundnut	Low yield and lack of awareness on drought resistant varieties	Varietal introduction
					Paddy	Low yield in paddy varieties	Varietal introduction
					Guava		High density planting
9			Kutudankadu	2	IFS	Low returns from the crop alone	Promotion of IFS

2.9 Priority thrust areas

S. No	Thrust area
1.	Promotion of soil test based nutrient management
2.	Improvement of soil fertility through sustainable practices
3.	Introduction of high yielding , improved crop varieties in agriculture and horticulture
4.	Promotion of ICM practices for major crops like Paddy, Banana, Chilli, Maize, Blackgram, Green gram, Tomato, Onion and Cotton
5.	Promotion of ecological pest control measures and organic farming techniques
6.	Promotion of Bio fertilizers and Vermicompost usage
7.	Promoting Tree planting in wastelands and in the backyards
8.	Ensuring nutritional security of farm women through Kitchen gardening, storage and healthy cooking habits
9.	Promotion of value added product preparation from prosopis juliflora , milk ,fishes ,banana ,and minor millets
10.	Promotion of IFS model farming system
11.	Promotion of drought mitigation measure
12.	Promotion of alternative poultry farming , improved backyard poultry breeds, and artificial incubation of eggs.
13.	Awareness creation on drought mitigation and promotion of appropriate agronomic techniques
14.	Comprehensive disease control measures in livestock
15.	Feeding and breeding management in cattle and goats
16.	Promotion of inland freshwater fish cultivation in village ponds

PART III – TECHNICAL ACHIEVEMENTS

3A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	5	25	25	16	16	165	165

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
74	74	1662	1662	578	578	33733	33733

Seed Production (Qtl)		Planting materials (Nos)	
5		6	
Target	Achievement	Target	Achievement
15	15	7580	7580

Livestock, poultry strains and fingerlings (No)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
7000	7862	10000	13908

3B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in Sl.No.2.7

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions									
				Title of OFT if any	Title of FLD if any	Number of Training (farmers)	Number of Training (Youths)	Number of Training (extension personnel)	Extension activities (No)	Supply of seeds (Qtl)	Supply of planting materials (No)	Supply of livestock (No)	Supply of bio products (Kg)
1	Promotion of soil test based nutrient management	All crop	Blanket or excessive application of fertilizers leads to poor yield in crops	-	-	-	-	-	Soil testing - 605	-	-	-	-
2	Improvement of soil fertility through sustainable practices	All crop	Blanket or excessive application of inorganic fertilizers alone leads to poor yield in crops	-	-	-	-	-	-	-	-	-	9.2
3	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Paddy	Low level of aware on improved high yielding varieties Lack of aware of short duration varieties	Assessing the Suitability of high yielding and short duration paddy varieties for river command area	Demonstration on Total Mechanization in paddy	1	1		1	4.07	-	-	-
4	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Ground nut	Continuous usage of local seeds Low level of awareness on improve, high yielding varieties	Assessing the suitability of high yielding short duration ground nut varieties	-	-	-	-	-	0.85	-	-	10
5	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Coriander	Non availability of suitable, leaf varieties to the growers Low Production and productivity of coriander	Assessment Of Coriander Varieties For High Yield	-	2	-	-	-	0.33	-	-	-

6	Introduction of high yielding, improved crop varieties with ICMP in agriculture and horticulture	Drum stick	Continuos usage of local varieties, low production and productivity	Assessment of high yielding Drumstick varieties	-	2	-	-	-	0.002	-	-	-
7	Introduction of high yielding, improved crop varieties with ICMP in agriculture and horticulture	Green gram	Poor quality of Seed and lack of awareness on short duration varieties Improper weed management and IPM Low yield potential of ruling CO-6 variety (yield -900kg/ha duration 65 -70 days)		Demonstrati on on integrated crop management and mechanizatio n in Green gram Co (Gg) 7	1	-	-	-	0.80	-	-	10
8	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Maize	Lack of awareness high yielding short duration hybrid maize Crop loss due to terminal drought situation with the long duration existing commercial hybrids		Demonstrati on on short duration Maize hybrid Co (MH) – 6	1	-	-	-	0.8	-	-	10
9	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Barnyard millet	•Lack of awareness on short duration barnyard millet varieties		Demonstration of ICMP on barnyard millet	1	-	-	-	0.3	-	-	20

10	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Blackgram	Low yield due to YMV attack and usage of Poor quality of Seed VBN (Bg)-3 (40% yield loss) , yield loss upto 60% due to drought situation (30000 ha area) Improper nutrient and weed management, Non availability of latest high yielding varieties		Demonstration of Black gram[VBN (Bg) – 6] Variety	2	-	-	-	0.8	-	-	10
11	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Banana	General decline stunting premature defoliation and small bunches leading to yield reduction up to 20% Low yield in banana variety (Nadu) Lack of awareness on this kind of hidden problems Nematode infestation leading to wilt complex		Demonstration of strategies to contain Nematode menace in Banana	2	-	-	1	-	-	-	100

12	Introduction of high yielding , improved crop varieties with ICMP in agriculture and horticulture	Lablab	No alternate crop for income generation during the off season Lower yield and income to the farmers from the existing tomato, brinjal, bhendi crops in winter season		Demonstration on Lab lab [Co (GB)14] as an alternative crop in Lean Season	1	-	-	1	0.4	-	-	-
13	Promotion of ecological pest control measures and organic farming techniques	coconut	Low yield due to incidence of Red Palm Weevil and Rhinoceros beetle Lack awareness of IPM practices		Demonstration on integrated pest management in Coconut	4	2	-	-	-	-	-	-
14	Promotion of Bio fertilizers and Vermicompost usage	All crops	High cost of chemical fertilizers Soil degradation	-	-	2	2	-	-	-	-	-	9.2
15	Promoting Tree planting in wastelands and in the backyards	Tree plantation	Crop cultivation alone fetches less returns and in drought periods/water shortage no cropping was possible	-	-	1		1	6		2500	-	-
16	Ensuring nutritional security of farm women through Kitchen gardening, storage and healthy cooking habits	Nutrition garden	Nutritional deficiency problems in women and children due to poor eating habits and lack of knowledge in vegetable consumption			2	1	1	-	2.5	-	-	-

17	Promotion of value added product preparation from Prosopis juliflora , milk,fishes,ban ana and minor millets	Value addition	Spread of Prosopis in cultivabe lands Lack of knowledge on value addition			3		1	1	-	-	-	-
18	Promotion of IFS model farming system	IFS	Single component crop/animal production is not sustainable		1	1							
19	Promotion of drought mitigation measure	Chilli	Drought Low level of awareness on drought mitigation Lower net income to the growers		Demonstration On Drought Resistance Technologies In Dry Land Chilli	1	-	-	-	-	-	-	20
20	Promotion of drought mitigation measure	Brinjal	Less availability of irrigation water Low productivity Lesser awareness on drought Mitigation measures		Demonstration of Water Conservation through Mulching in Brinjal	1	-	-	-	-	-	-	-
21	Promotion of alternative poultry farming , improved backyard poultry breeds, and artificial incubation of eggs.	Poultry	Predator manace, Lack of knowledge on scientific backyard poultry practices, Inadequate supply of improved chicks			6	1					1250	

22	Comprehensive disease control measures in livestock	Livestock	Poor awareness on disease control and prevention leads to heavy mortality in livestock and poultry		-	1	-	1	29	-	-	-	-
23	Feeding and breeding management in cattle and goats	Dairy cow	Only gruel feeding – no concentrate - less returns Mineral deficiencies - Increased inter calving period		Demonstration on Feed Supplements for improvement of production performances in Low Yielding Dairy cows	3	-	1	-	-	-	-	-
24	Promotion of inland freshwater fish cultivation in village ponds	Fish	Underutilization of waterbodies Unawareness of intensive fish production system Not able to harvest the fish when the pond is full of water in seasonal ponds Low income from fish enterprise	Assessing the performance of cage culture and composite fish culture	-	1	-	-	-	-	-	-	-
25	Promotion of inland freshwater fish cultivation in village ponds	Fish	Short period of water bodies Under utilization of farm ponds and village common ponds		Demonstration of composite fish culture with stunted fingerlings				1				
26	Promotion of inland freshwater fish cultivation in village ponds	Fish	Lack of awareness about the technology Less sale price for common carps		Demonstration of catfish culture				1				

27	Promotion of inland freshwater fish cultivation in village ponds	Fish	Lack of awareness about this technology Under utilization of water bodies for fish production		Demonstration of Murrel culture (<i>Channa sp.</i>)								
28	Promotion of inland freshwater fish cultivation in village ponds	Fish	Lack of awareness about polyculture		Demonstration of polyculture of Indian major carps with Grass carp and common carp								

B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/ Enterprise	No. of programmes conducted				No. Of farmers Covered															
								OFT				FLD				Training				Others			
				OFT	FL D	Trai ning	Others(S pecify)	General		SC/ST		General		SC/ST		General		SC/ST		General		SC/ST	
								M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1.	Promotion of backyard poultry rearing with improved breeds	TANUVAS	Backyard poultry			6	SMS-4									52	12	15	14	65	4	18	6
2.	strategies to contain Nematode menace in Banana	TNAU	Banana		1	2	TV program me -1					7		3		25	15	12	9				
	Value added product preparation from banana	TNAU	Banana			1										6	4						
3.	Demonstration on barnyard millet for seed production and value added product preparation var.CO-2	TNAU	Barnyard millet		1	1							8	12		15	4	4	14				
4.	Black gram[VBN (Bg) – 6] Variety	TNAU 2011	Black gram		1	2						10				15	12	12	8				
5.	Water Conservation through Mulching in Brinjal	TNAU	Brinjal		1	1						3	1	1		5	5	4	5				

6.	FMD control through vaccination	IVRI	Cattle			2	SMS-2 Vet.camp -2								25	24	12	15	15	17	12	14
7.	Mineral lick feeding to livestock	TANUVAS	Cattle and Goat			3	Pamphlet -1000 copies								38	24	12	15				
8.	Green Fodder cultivation	TANUVAS	Cattle and Goat			3									35	19	25	13				
9.	Comprehensive disease control methods in livestock and poultry	TANUVAS	Cattle, sheep and goat and poultry			2	Vet.camp -15								15	12	12	8	12 5	14 1	74	65
10.	Methylo bacterium application for drought tolerance	TNAU	Chilli			1					4	2		14	4	8	5	4				
11.	Integrated pest management in Coconut	TNAU	Coconut																			
12.	Pest and disease management in coconut	TNAU	Coconut		1	4					6		4		65		24					
13.	Coconut tree climbing with devise	TNAU	Coconut			2									32		8					
14.	Coriander varieties - CO 4	TNAU	Coriander	1		1					5				6	4	8	5				
15.	Coriander varieties- Arka Isha	IIHR	Coriander	1		1					5				6	4	8	5				

16.	Fodder preservation and feeding methods (haylage and silage)	TANUVAS	Cows				FFS-1									14	16			54	68		
17.	Treatment of mastitis with herbal preparation (aloe vera, turmeric and slaked lime paste)	TANUVAS	Cows			2										12	14	5	8				
18.	Biofertilizer soil application	TNAU	crop			6										54	25	21	14				
19.	Seed treatment with biofertilizer and biofungicides	TNAU	crop			6										54	25	21	14				
20.	Prosopis juliflora pod flour feeding to dairy cows	CAZRI, Jodhpur	Dairy cows			3	EDP									58	35	18	14	5	18		
21.	Summer management for dairy cows	TANUVAS	Dairy cows			2	SMS-1									24	15	21	8	15	17	12	14
22.	SMART Mineral mixture feeding	TANUVAS	Dairy cows		1	3					27	3				35	16	5	8				
23.	GRAND supplement	TANUVAS	Dairy cows		1	3					27	3				35	16	5	8				
24.	Assessment of high yielding Moringa	TNAU	Drum stick	1				3	1	1													

25.	Composite fish cultivation with stunted fingerlings in village common ponds	TNAU/ TNFU	Fish		1		Field day-1												8	10	4	8
26.	Demonstration of catfish culture	TNFU	Fish	1	1			3	1	1		2										
27.	Demonstration of Murrel culture (<i>Channa sp.</i>)	TNFU	Fish		1							2										
28.	Demonstration of polyculture of Indian major carps with Grass carp and common carp	TNFU	Fish		1							2										
29.	Winter management for small ruminants	TANUV AS	Goat			4	SMS -2								25	14	21	11	65	4	18	6
30.	Broiler method of male goat kid rearing	ICAR KVK, Calicut	Goat				Advisories -12												5	4	8	
31.	Integrated crop management and mechanization in Green gram Co (Gg) 7	TNAU 2010	Green gram		1	1	Field day-1					9	1						24			
32.	Varietal evaluation TMV-7,	(TNAU 1990)	Ground nut	1				5														

33.	Varietal evaluation ICGV 91114	ICRISAT 2007)	Ground nut	1				5																
34.	Varietal evaluation Kadiri 6 ,	(ANGRA U, 2006)	Ground nut	1				5																
35.	Japanese quail rearing	TANUV AS	Japanese quail				Advisories -15												15					
36.	Introduction of new Co 14. bush type lab lab beans & ICM practices for round the year cultivation	TNAU	Lab Lab		1		Field day -1					3	3	4						12	5	12	4	
37.	Medicated bath to control tick infestation	TANUV AS	Livestock			3	SMS-4 Method demonstration -8									22	18	10	19	24	12	4	72	19
38.	short duration Maize hybrid Co (MH) – 6	TNAU	Maize		1							6	4											
39.	High density planting technique	TNAU	guava		1							5												
40	Value addition in minor millets	TNAU	Minor millets			2										12	18	15	28					
41	Varietal evaluation in moringa	TNAU, UAS Bagalkot	Drumstick	1				4	1															
42	Mushroom cultivation	TNAU	Mushroom			3										18	14	7	16					
43	Total Mechanization in paddy	TNAU	Paddy		1		Field day -1						2	8						8	3	6	4	

44	Varietal evaluation ADT – 45	(TNAU 2002)	Paddy	1																		
45	Varietal evaluation Co 51	TNAU 2013)	Paddy	1																		
46	Varietal evaluation Anna 4	TNAU 2010)	Paddy	1																		
47	Pigeon rearing	TANUV AS	Pigeon			2	IFS-2							25	5	5	12	3				
48	Cross bred chicken (NDC-1) rearing for backyard poultry	TANUV AS	Poultry			6	SMS -2							45	48	28	18	24	12 4	72	19	
49	Vaccination against ranikhet disease	TANUV AS	Poultry			6	SMS-2							45	48	28	18	24	12 4	72	19	
50	Nutrition gardening	TNAU	vegetable			4								12	28	8	32					
51	Value addition with vegetables	TNAU	vegetable			2								16	14	12	8					
52	Vermicomposting	TNAU	vermicomposting			4								25	18	19	17					

4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease Management						
Value Addition						
Production and Management					1	1
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL					1	1

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises – Nil

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds						
Nutrition Management						
Disease of Management						
Value Addition						
Production and Management						
Feed and Fodder						
Small Scale income generating enterprises						
TOTAL						

4.B. Achievements on technologies Assessed and Refined

4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management					
Varietal Evaluation	Paddy	Assessing the Suitability of high yielding and short duration paddy varieties for river command area	3	5	0.4
	Groundnut	Assessing the suitability of high yielding short duration ground nut varieties	3	5	0.2
	Coriander	Assessment Of Coriander Varieties For High Yield	2	5	0.4
	Drumstick	Assessment Of high yielding Drumstick Varieties	2	5	0.4
TOTAL			10	20	1.4

4.B.2. Technologies Refined under various Crops – Nil

4.B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds				
Nutrition management				
Disease management				
Value addition				
Production and management	Fresh water Fish	Assessing the performance of cage culture and composite fish culture	2	5
Feed and fodder				
Small scale income generating enterprises				
Total			2	5

4.B.4. Technologies Refined under Livestock and other enterprises – Nil

4C1. Results of Technologies Assessed

Results of On Farm Trial

OFT No	Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed with Source	Parameters of Assessment	Unit	Data on the Parameters
1	Ground nut	Irrigated	Continuous usage of local seeds Low level of awareness on improved, high yielding varieties	Assessing the suitability of high yielding short duration ground nut varieties	5	TMV (Gn) - 7 (TNAU 1990)	Plant/ m ²	No	29
							Pod /plant	No	20
							Seed /pod	No	2
							Pod wt/plant	g	21
							Days taken to the harvest	Days	106
							Yield /ha	Kg	1356
						ICGV 91114 (ICRISAT 2007)	Plant/ m ²	No	
							Pod /plant	No	26
							Seed /pod	No	3
							Pod wt/plant	g	30
							Days taken to the harvest	Days	102
							Yield /ha	Kg	1905
						Kadiri 6 - (ANGRAU, 2006)	Plant/ m ²	No	
							Pod /plant	No	23
							Seed /pod	No	3
							Pod wt/plant	g	28
							Days taken to the harvest	Days	106
							Yield /ha	Kg	1637
Production	Result of Assessment		Farmers Feedback	Any Refinement needed	Justification for refinement	Net Return in Rs	BC Ratio		
T1 – 1356	T1	1356Kg/ha	ICGV91114 - higher yield and fetched high income with in a period of 110 days ICGV91114 performed very well even with reduced irrigation	Nil	Nil	T1 – 37740	2.2		
T2 – 1905	T2	1905Kg/ha				T2 – 64876	3.2		
T3 – 1637	T3	1637Kg/ha				T3 – 51950	2.8		

OFT No	Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed with Source	Parameters of Assessment	Unit	Data on the Parameters
2	Paddy	Irrigated	Low level of aware on improved high yielding varieties Lack of aware of short duration varieties	Assessing the Suitability of high yielding and short duration paddy varieties for river command area	5	T1 – ADT – 45 (TNAU 2002)	Hill /m ²	No	19
							Productive tiller /Hill	No	26
							Grain / panicle	No	139
							1000 grain weight	g	20
							Days taken to the harvest	Days	112
							Stem borer incidence	%	12
							Yield /ha	Kg	5685
						T2 – Co 51 (TNAU 2013)	Hill / m ²	No	20
							Productive tiller /Hill	No	35
							Grain / panicle	No	167
							1000 grain weight	g	21
							Days taken to the harvest	Days	113
							Stem borer incidence	%	10
							Yield /ha	Kg	6325
						T3 – Anna 4 (TNAU 2010)	Hill / m ²	No	20
							Productive tiller /Hill	No	29
							Grain / panicle	No	151
							1000 grain weight	g	21
							Stem borer incidence	%	14
							Days taken to the harvest	Days	100
							Yield /ha	Kg	4545
Production	Result of Assessment		Farmers Feedback	Any Refinement needed	Justification for refinement	Net Return in Rs	BC Ratio		
T1 – 5685	T1	5685Kg/ha	Good performance and increased yield over ADT45 Short duration (113 days) is useful	Nil	Nil	T1 – 32000	1.7		
T2 – 6325	T2	6325Kg/ha				T2 – 39850	1.9		
T3 – 4545	T3	4545Kg/ha				T3 – 16891	1.3		

OFT No	Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed with Source	Parameters of Assessment	Unit	Data on the Parameters
3	Coriander	Irrigated	Non availability of suitable, leaf varieties to the growers Low Production and productivity of coriander	Assessment Of Coriander Varieties For High Yield	5	Co – 4 (TNAU)	Branches / plant	No	8
							Herbage Yield	qtl/ha	59.66
						Arka Isha (IIHR)	Branches / plant	No	13
							Herbage Yield	qtl/ha	79.59
	Production	Result of Assessment		Farmers Feedback	Any Refinement needed	Justification for refinement	Net Return in Rs	BC Ratio	
	T1 - 59.66	T1	T2	Good yield in Arka Isha but there is a lack of aroma compared to Co4. The leaves of A.Isha turn into pale green in second cut – less market preference	Nil	Nil	T1 – 31442	1.89	
T2 - 79.59	5.96 ton / ha	7.95 ton/ha	T2 – 50677				2.32		

OFT No	Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed with Source	Parameters of Assessment	Unit	Data on the Parameters
4	Fish rearing	Semi intensive	Underutilization of water bodies Unaware of intensive fish production system Not able to harvest the fish when the pond is full of water in seasonal ponds Low income from fish enterprise	Assessing the performance of cage culture and composite fish culture	5	Farmer Practices	Fish weight during stocking	g	2.52
							Culture period in days	Days	120
							Fish weight during harvesting	g	125.5
							Yield per unit area (cu.m)	Kg	0.078
							Market prize during harvest	prize	150
							Gross cost per unit area	Rs	5.5
							Gross return per unit	Rs	11.76
						Composite Fish Culture	Fish weight during stocking	g	2.52

						Culture period in days	Days	120
						Fish weight during harvesting	g	179.6
						Yield per unit area (cu.m)	Kg	14.37
						Market prize during harvest	prize	150
						Gross cost per unit area	Rs	16.50
						Gross return per unit	Rs	21.55
	Production	Result of Assessment	Farmers Feedback	Any Refinement needed	Justification for refinement	Net Return in Rs	BC Ratio	
	T1 – 0.078	Cage culture technology is Very much suitable for fresh water water bodies in seasonal rainfed tanks provided with watch and ward	Cages are very much easy to make and of less cost, suitable for rearing in common water bodies	Nil	Nil	T1 - 6.26/cu.m	2.14	
	T2 – 14.37					T2 - 505/cu.m	1.31	

4.C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

	OFT no.	1			
1	Title of Technology Assessed	Assessing the suitability of high yielding short duration ground nut varieties			
2	Problem Definition	<ul style="list-style-type: none"> • Low level of awareness on improved, high yielding varieties • Continuous usage of local seeds • Poor cultivation practices • Lack of aware of short duration varieties • Lack of aware of drought resistance varieties 			
3	Details of technologies selected for assessment	TMV (Gn) – 7	ICGV 91114	Kadiri 6	
4	Source of technology	TNAU 1990	ICRISAT 2007	ANGRAU, 2006	
5	Production system and thematic area	Garden land, Varitel Evaluation			
6	Performance of the Technology with performance indicators	Parameters	T1	T2	T3
		Plant/ m ²	29	30	30
		Pod /plant	20	26	23
		Seed /pod	2	3	3
		Pod wt/plant	21	30	28
		Days taken to the harvest	106	102	106
	Yield /ha (Kg)	1356	1905	1637	
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	<p>ICGV91114 -higher yield and fetched high income with in a period of 110 days</p> <p>ICGV91114 performed very well even with reduced irrigation</p>			
8	Final recommendation for micro level situation	ICGV91114 was adjusted as suitable variety for Tuticorin district			
9	Constraints identified and feedback for research	Availability of seed in time, seed production may be initiated locally for ICGV 91114 and Kadiri – 6			
10	Process of farmers participation and their reaction	Bold kernels of ICGV91114 and thereby good market and high returns, Seed production may be strengthened			

	OFT No	2			
1	Title of Technology Assessed	Assessing the Suitability of high yielding and short duration paddy varieties for river command area			
2	Problem Definition	<ul style="list-style-type: none"> • Low level of aware on improved high yielding varieties • Lack of aware of short duration varieties • Lack of aware of drought tolerant varieties • low yield from the Existing ruling Variety (ASD-16) 			
3	Details of technologies selected for assessment	ADT – 45	Co 51	Anna 4	
4	Source of technology	TNAU 2002	TNAU 2013	TNAU 2010	
5	Production system and thematic area	Wet land system, Varietal Evaluation			
6	Performance of the Technology with performance indicators	Parameters	T1	T2	T3
		Hill / m ²	19	20	20
		Productive tiller /Hill	26	35	29
		Grain / panicle	139	167	151
		1000 grain weight (g)	20	21	21
		Days taken to the harvest	112	113	100
		Stem borer incidence (%)	12	10	14
	Yield /ha (kg)	5685	6325	4545	
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Good performance and increased yield over ADT45 Short duration (113 days) is useful			
8	Final recommendation for micro level situation	Co – 51 paddy variety is recommended for river command area of Tuticorin district			
9	Constraints identified and feedback for research	Nil			
10	Process of farmers participation and their reaction	Farmer participation was very good starting from sowing to marketing			

	OFT-3	3		
1	Title of Technology Assessed	Assessment Of Coriander Varieties For High Yield		
2	Problem Definition	<ul style="list-style-type: none"> • Non availability of suitable, leaf varieties to the growers • Lesser awareness among growers on leaf coriander • Continuous usage of local seeds • Low Production and productivity of coriander • Poor cultivation practices 		
3	Details of technologies selected for assessment	Cultivation of Co-4 coriander for herbage yield	Cultivation of Arka Isha coriander for herbage yield	
4	Source of technology	TNAU 2002	IIHR, 2011	
5	Production system and thematic area	Increasing production and productivity, Varietal Evaluation		
6	Performance of the Technology with performance indicators	Parameters	Co – 4	Arka Isha
		Branches / plant	8	13
		Herbage Yield qtl /ha	59.66	79.59
		G.Cost (Rs)	35300	38350
		G.Return(Rs)	66742	89026
		N.Return(Rs)	31442	50677
	BCR	1.89	2.32	
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Though the yield of Arka isha is higher than Co-4 the colour and aroma of Co – 4 is lacking due to pale green leaves in the second cut crops.		
8	Final recommendation for micro level situation	Eventhough the yield and BCR is the highest in Arka Isha, farmers prefer Co4 for its market preference. Hence, Co4 is ideal for Tuticorin Dt.		
9	Constraints identified and feedback for research	A variety of good aroma and multicut type should be evolved to increase the yielded and income to the farmers		
10	Process of farmers participation and their reaction	Farmers were impressed by the market preference of Co – 4 due to its color and aroma		

	OFT-4	4		
1	Title of Technology Assessed	Assessing the performance of cage culture and composite fish culture		
2	Problem Definition	Underutilization of water bodies Unawareness of intensive fish production system Not able to harvest the fish when the pond is full of water in seasonal ponds Low income from fish enterprise		
3	Details of technologies selected for assessment	T 1 – Composite fish culture in open pond (carp fingerlings- stocking @ 2-3 no.s/sq.m) stocking @ 8000-10000 fries / acre	T 2 – Cage culture = 200-300 no.of fries/cu.m (one cage of 1 cu.m size made of bamboo frame, plastic floats and rope is used to culture around 200-300 fish for a period of 4-6 months and able to produce 20-30 kg of fish. All cages have a top cover	
4	Source of technology	(TNAU, 1985)	TANUVAS, 2010	
5	Production system and thematic area	Semi intensive system of fish rearing / fresh water aquaculture		
6	Performance of the Technology with performance indicators	Results	T1	T2
		Fish weight during stocking in g	2.52	2.52
		Culture period in days	120	120
		Fish weight during harvesting in g	125.5	179.6
		Yield per unit area (cu.m) in kg	0.078	14.37
		Market prize during harvest	150	150
		Gross cost per unit area in Rs.	5.5	1650
		Gross return per unit area in Rs.	11.76	2155
		BCR	2.14	1.31
		Labour requirement in man days per cu.m area	0.017	3.0
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Cages are very much easy to make and of less cost , suitable for rearing in common water bodies		
8	Final recommendation for micro level situation	Cage culture technology is Very much suitable for fresh water water bodies in seasonal rainfed tanks provided with watch and ward		
9	Constraints identified and feedback for research	The availability of materials for cage making is difficult		
10	Process of farmers participation and their reaction	The farmers involvement was low at the initial stage but later they realized its usefulness.		

4. D1. Results of Technologies Refined - Nil

4.D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the following details: - Nil

PART V - FRONTLINE DEMONSTRATIONS

5. A. Summary of FLDs implemented during 2014 – 15

Sl. No	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
									Proposed	Actual	SC/ST	Others	Total	
1	Pulses	Rain fed	Rabi – 2014	Black gram	VBN – (Bg) – 6	---	Varietal Evaluation	Seed – VBN(Bg) – 6 (TNAU,2011) (crop duration 65 days, Potential yield- 850kg/ha) Line sowing /sowing with seed cum fertilizer drill Pulse wonder spray	4	4	0	10	10	Nil
2	Pulses	Rain fed	Rabi – 2014	Green gram	Co (Gg) 7	---	Varietal Evaluation	Seed – CO(Gg) – 7 (TNAU,2010) (Synchronized Maturity, Y-975 kg/ha , duration 60-65 days) Line sowing with seed cum fertilizer drill , weeding with tractor drawn weeder PPFM foliar spray	4	4	0	10	10	Nil
3	Cereals	Irrigated	Rabi – 2014	Paddy	ASD – 16	---	Total Mechanization	Rotavator for puddling Paddy Transplanter, Cono weeder , Combined harvester, Power sprayer	4	4	8	2	10	Nil
4	Millets	Irrigated	Rabi – 2014	Maize	---	Co – MH – 6	ICMP	CO (MH) 6 (duration 110 days, yield in RF 5t/ha, High shelling % 81%) Soil test based NPK application, Bio fertilizers seed	4	4	0	10	10	Nil

								treatment and soil application						
5	Millets	Rain fed	Rabi – 2014	Barnyard millets	Co – 2	---	Varietal Evolution	barnyard millets variety CO -2)(95 d , High tillering, compact panicles, 2650kg/ha in RF Soil test based NPK application, Azophos application	8	8	12	8	20	Nil
6	Vegetables	Rain fed	Rabi – 2014	Chilli	VKM – Mundu	---	Drought Management	Seed treatment with PPFM 20g/kg + foliar spray (2%) Foliar application of 0.5% IHR vegetable special	4	4	14	6	20	Nil
7	Vegetables	Irrigated	Karif – 2014	Brinjal	KKM – 1	---	Drought Management	plastic sheet mulch Erection of Fertigation system (in convergence with NMMI+ Farmer contribution)	2	2	1	4	5	Nil
8	Vegetables	Irrigated	Karif – 2014	Lab Lab	Co – 14	---	Varietal Evaluation	Introduction of New CO-14 bush type lab lab (TNAU, 2010) (yield – 8-10 t/ha) ICM practices for round the year cultivation	4	4	4	6	10	Nil
9	Fruit	Irrigated	Rabi – 2014	Banana	Nadu	---	Nematode Management	Application of 250g neem cake per plant at planting and 500g per plant after 4 months Paring with fibronil @ 30g / sucker Inter cropping Mary Gold Application of Paecilomyces	4	4	3	7	10	Nil

								lilacinus @ 20g per plant at the time of planting and at 3 rd month						
10	Plantation	Irrigated	Rabi 2014	Coconut	T X D	---	IPM	Incorporating the entomopathogen (fungus – <i>Metarhizium anisopliae</i>) in manure pits Clean the crown of tree at every harvest and hook out and kill the adult Applying 3nos of naphthalene balls per tree Setting traps in mud pots containing Jaggery 2½kg+ pineapple waste + yeast 5g Red palm weevil pheramone trap 5 No.s per acre Root feeding of Coconut tonic	4	4	6	14	20	Nil
11	Dairy	Semi intensive system of rearing	2014-15	Cross bred cows			Increasing the production and productivity in dairy cows	GRAND supplement at a dose of 10ml twice daily for 180days in early and mid lactation cows.(TANUVAS, 2012) SMART MM supplement at the rate of 50g daily for 180 days for early and mid lactation cows. (TANUVAS, 2010)			5	25	30	Nil

12	Common carps	Extensive system of rearing in village common ponds	2014-15		Catla,Rohu, Mrigal, CC		Fish production in fresh water bodies	Composite fish culturing with stunted fingerlings	2.0	2.0	2	1	3	Nil
	Common carps	Extensive system of rearing in village common ponds	2014-15		Catla,Rohu, Mrigal, CC		Fish production in fresh water bodies	Polyculture with catla, rohu, mrigal, Common carp, grass carp	1.2	1.2	0	2	2	Nil
13	Catfish	Semi intensive system of rearing	2014-15		Pangasionodon hypothalamus		Fish production in fresh water bodies	Catfish culture	1.0	1.0	1	2	3	Nil
14	Murrel	Semi intensive system	2014-15		Channa spp.		Fish production in fresh water bodies	Murrel culture	360 sq.m	360 sq.m		2	2	Nil

5A. 1. Soil fertility status of FLDs plots during 2014 – 15

Sl. No	Category	Farming Situation	Season and Year	Crop	Variety/breed	Hybrid	Thematic area	Technology Demonstrated	Status of soil			Previous crop grown
									N	P	K	
1	Pulses	Rain fed	Rabi – 2014	Black gram	VBN – (Bg) – 6	---	Varietal Evolution	Seed – VBN(Bg) – 6 (TNAU,2011) (crop duration 65 days, Potential yield- 850kg/ha) Line sowing/sowing with seed cum fertilizer drill Pulse wonder spray	175	10.4	305	Green gram
2	Pulses	Rain fed	Rabi – 2014	Green gram	Co (Gg) 7	---	Varietal Evolution	Seed – CO(Gg) – 7 (TNAU,2010) (Synchronized Maturity, Y-975 kg/ha , duration 60-65 days) Line sowing with seed cum fertilizer drill , weeding with tractor drawn weeder PPFM foliar spray	202	11.2	340.1	Black gram
3	Cereals	Irrigated	Rabi – 2014	Paddy	ASD – 16	---	Total Mechanization	Rotavator for puddling Paddy Transplanter , Cono weeder , Combined harvester, Power sprayer	190	14	212	Paddy
4	Millets	Irrigated	Rabi – 2014	Maize	---	Co – MH – 6	ICMP	CO (MH) 6 (duration 110 days, yield in RF 5t/ha, High shelling % 81%) Soil test based NPK application, Bio fertilizers seed treatment and soil application	192	10.2	360	Sorghum
5	Millets	Rain fed	Rabi – 2014	Barnyard millet	Co – 2	---	Varietal Evolution	barnyard millets variety CO -2)(95 d, High tillering, compact panicles, 2650kg/ha in RF Soil test based NPK application, Azophos application	180	13	280.2	Black gram
6	Vegetables	Rain fed	Rabi – 2014	Chilli	VK M – Mundu	---	Drought Management	Seed treatment with PPFM 20g/kg + foliar spray (2%) Foliar application of 0.5% IIHR vegetable special	201	14	290.1	Black gram
7	Vegetables	Irrigated	Karif –	Brinjal	KK M –	---	Drought Management	plastic sheet mulch Erection of	189	10.5	302	Chilli

	bles		2014		1		ment	Fertigation system (in convergence with NMMI + Farmer contribution)				
8	Vegetables	Irrigated	Karif – 2014	Lab Lab	Co – 14	---	Varietal Evaluation	Introduction of New CO-14 bush type lab lab (TNAU, 2010) (yield – 8-10 t/ha) ICM practices for round the year cultivation	212	12.2	285	Brinjal
9	Fruit	Irrigated	Rabi – 2014	Banana	Nadu	---	Nematode Management	Application of 250g neem cake per plant at planting and 500g per plant after 4 months Paring with fibronil @ 30g / sucker Inter cropping with Mari Gold Application of Paecilomyces lilacinus @ 20g per plant at the time of planting and at 3 rd month	220	10	240	Banana
10	Plantation	Irrigated	Rabi 2014	Coconut	T X D	---	IPM	Incorporating the entomopathogen (fungus – <i>Metarhizium anisopliae</i>) in manure pits Clean the crown of tree at every harvest and hook out and kill the adult Applying 3nos of naphthalene balls per tree Setting traps in mud pots containing Jaggery 2½kg+ pineapple waste + yeast 5g Red palm weevil pheromone trap 5 No.s per acre Root feeding of Coconut tonic	230	8	390	Coconut

5.B. Results of Frontline Demonstrations

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of Demo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Black gram	Demonstration of high yielding Black gram variety VBN – 6	VBN – (Bg) – 6	---	Rabi – 2014	10	4	622	580	601.2	500	20.24	23430	36072	12642	1.6	20345	28320	7975	1.4
Green gram	Demonstration on integrated crop management and Mechanization in Green gram Co (Gg) – 7	Co (Gg) 7	---	Rabi – 2014	10	4	639	479	559	478	16.95	11171	36242	25071	3.2	13072	30333	17261	2.32
Paddy	Demonstration on Total Mechanization in paddy	ASD – 16	---	Rabi – 2014	10	4	6507	6125	6316	5115	23.48	42387	82877	40497	1.9	46156	66501	20345	1.4
Maize	Demonstration on short duration Maize hybrid Co (MH) – 6	---	Co – MH – 6	Rabi – 2014	10	4	4900	4497	4698	3810	23.31	35271	60382	25111	1.7	32520	50700	18180	1.5
Barnyard millets	Demonstration of ICMP on barnyard millets	Co – 2	---	Rabi – 2014	20	8	1750	1450	1600	1181	35.48	19552	39732	20180	2.0	19530	29560	10380	1.5
Chilli	Demonstration on drought resistance technologies in dry land chilli	VKM – Mundu	---	Rabi – 2014	20	4	6.61	4.62	6.15	5.38	14.31	16312	47952	31826	2.93	15455	42030	26575	2.71

Brinjal	Demonstration of water conservation through mulching in brinjal	KKM – 1	---	Kari f – 2014	5	2	20.84	17.92	19.38	15.70	23.44	69610	196102	131774	2.81	59944	160180	100216	2.67
Lab Lab	Demonstration on lab lab bush beans as an alternative crop for off season	Co – 14	---	Kari f – 2014	10	4	84.2	70.25	77.27	0	32.09	45315	197912	15297	4.15	42218	135455	94081	3.05
Banana	Demonstration of strategies to contain nematode menace in banana	Nadu	---	Rabi – 2014	10	4	28.67	22.95	25.84	21.41	20.69	35800	126820	91020	3.54	34300	107050	72750	3.12
Coconut	Demonstration on integrated pest management in coconut	T X D	---	Rabi 2014	10	4	19150	16420	17785	17630	On going								

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H – Highest Yield, L – Lowest Yield A – Average Yield

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Milk Yield (lit/day)				% Increase	*Economics of demonstration thousand Rs./unit)				*Economics of check (thousand Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy	GRAND supplement at a dose of 10ml twice daily for 180days in early and mid lactation cows.(TANUVAS, 2012) SMART MM supplement at the rate of 50g daily for 180 days for early and mid lactation cows. (TANUVAS, 2010)	Cross bred cows	30	30	13.56	3.02	6.7	6.32	6.01	34.81	50.27	15.46	1.44	34.02	47.40	13.38	1.39

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check if any
Avg.no.of days required for oestrus sign appearance after the initiation of SMART MM feeding	35.47	326
No. Of AI required for conception	1.57	3.5
Dung consistency	Semisolid	Diarrheic
Avg. body weight gain in 90 days of observation period after initiation of SMART MM and GRAND feeding	14.93 kg	Data not available

5.B.3. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration Rs./ha				*Economics of check Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps	Composite fish culture with stunted fingerlings	Catla, Rohu, Mrigal, Common Carp	3	0.6	15.92	15.27	15.71	9.84	159.65	85000	235625	150625	2.77	30300	53875	23575	1.77
	Polyculture	Catla, Rohu, Mrigal, Common Carp and Grass carp	2	1.2	10	9.69	9.84			55000	98437.5	43437.5	1.79	NA			
Cat fish	Catfish culture	<i>Pangasionodon hypophthalmus</i>	3	0.35	4.59	4.35	4.44			41250	87753	47603	2.15	NA			
Murrel	Murrel culture	Channa spp.	2	1800 sq.m	16.2	15.7	15.99			122100	479936	357836	3.93	NA			

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average: NA – Not applicable as there was no check

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated			
Parameter with unit		Demo	Check if any
Common carp rearing with stunted yearlings	Age and size of the fish stocked in village pond	12.9 cm length , one year old stunted carp	5cm length, two month old advanced fries
	Fish weight during stocking	15.7g	2.2g
	Fish weight during harvest (4.5 months)	235 g	122.5g
Polyculture	Age and size of the fish stocked in village pond	5cm	
	Fish weight during stocking	0.8 g	
	Fish weight during harvest (4.5 months)	157.5 g	
<i>Pangasionodon hypophthalmus</i>	Age and size of the fish stocked in village pond	11.2cm length, 2month old fingerling	
	Fish weight during stocking	15.5g	
	Fish weight during harvest (4.5 months)	241.67g	

5.B.4. Other enterprises – Nil

5.B.5. Farm implements and machinery – Nil

5.B.6. Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	8	256	Conducted two desiminate technology to wider section
2	Farmers Training	26	425	
3	Media coverage	4	Mass	
4	Training for extension functionaries	4	125	
5	Others (Please specify)			

5.B.7. Results of Integrated Farming system Demonstrations

S l. n o.	Name of the farmer and village	Farming situation	Existing or newly added	Crop /enterprise	Area in ha	unit size	Economics of IFS model				Remarks
							Gross expenditure in Rs.	Gross income in Rs.	Net return in Rs.	BCR	
1	Kingsly, Kutudank adu-Mangalagiri	Irrigated garden land	E	Goat		20	90000	135000	45000	1.5	
			E	cows		10	475000	800000	325000	1.7	
			E	coconut		20	4000	5000	1000	1.25	
			E	banana		200	12000	24000	12000	2	
			E	co (CN)-2	0.5 ac						
			E	subabul	0.25ac						
			A	Co(FS)-29	0.25ac						
			A	vermicompost	900 sq.ft		8000	16000	8000	2	
			E	cow dung			2600	5000	2400	1.92	
			A	cross bred chicken eggs		20 hen	7685	23200	15515	3.0	
			A	cross bred chicks			15000	30000	15000	2	
				Total			614285	1038200	423915	1.7	
2	Muthusam	Dry land	E	cows		4	216000	300000	84000	1.4	

	y, Kutudank adu- Mangalagi ri	farming with minimal irrigation									
			E	goat		2	12000	18000	6000	1.5	
			E	Backyard poultry with improved desi birds - eggs		10	4050	12150	8100	3	
			E	Backyard poultry with improved desi birds –chicks			10000	20000	10000	2	
			E	co(FS)29		0.75 ac					
			E	bio gas		1cu.m	2000	4500	2500	2.25	
			A	pigeon rearing		5 pairs	160	2000	12000	1.0	
				Total			246050	366650	120600	1.49	
3	Madasam y, Vilathikul am	Dryland farming with irrigation	E	maize	1 acre		7500	14000	6500	1.87	
			E	clusterbean	1 acre		17600	46000	28400	2.61	
			E	coconut	30 no.		9000	18000	9000	2	
			A	Honey bee	2		100	1000	900	10	
			A	Vermicompost	10 sq.m		2500	5500	3000	2.2	
				Total			29200	70500	41300	2.41	

Summary of IFS implemented during 2014 - 15

Sl.no	Name of the farmer and village	Farming situation	Crop /enterprise	Area in ha	Economics of IFS model			
					Gross expenditure in Rs.	Gross income in Rs.	Net return in Rs.	BCR
1	Kingsly, Kutudankadu- Mangalagiri	Irrigated garden land	Goat+cow+backyard poultry+fodder+banana +coconut+vermicomposting	1.2	614285	1038200	423915	1.69
2	Muthusamy, Kutudankadu- Mangalagiri	Dry land farming with minimal irrigation	Fodder crop/cow+goat+Backyard poultry+pigeon+bio gas	0.6	246050	366650	120600	1.49
3	Madasamy, Vilathikulam	Dryland farming with irrigation	Maize+Cluster bean/coconut/honey bee+ vermicomposting	0.9	29200	70500	41300	2.41

Others (pl.specify)																	
Total																	
Cucumber																	
Tomato																	
Brinjal																	
Okra																	
Onion																	
Potato																	
Field bean																	
Others (pl.specify)																	
Total																	
Commercial crops																	
Sugarcane																	
Coconut																	
Others (pl.specify)																	
Total																	
Fodder crops																	
Maize (Fodder)																	
Sorghum (Fodder)																	
Others (pl.specify)																	
Total																	

H-High L-Low, A-Average

PART VII. TRAINING

7.A.. Training of Farmers and Farm Women including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Crop Production										
Micro Irrigation/Irrigation	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	4	30	20	50	22	36	58	52	56	108
Horticulture	0	0	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	2	42	12	54	0	0	0	42	12	54
b) Fruits	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	1	8	0	8	9	0	9	17	0	17
Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	5	56	7	63	36	3	39	92	10	102
Integrated farming system	1	0	0	0	8	12	20	8	12	20
Home Science/Women empowerment	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Value addition	3	12	16	28	2	11	13	14	27	41
Others (Farmer producer organization formation and its role in the lives of farmers)	1	18	0	18	12	0	12	30	0	30
Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	2	17	0	17	7	0	7	24	0	24
Organic bio input production	2	19	21	40	2	6	8	21	27	48
Others (Oyster Mushroom cultivation)	1	2	7	9	1	5	6	3	12	15
Fisheries	0	0	0	0	0	0	0	0	0	0
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
TOTAL	22	204	83	287	99	73	172	303	156	459

7.B Training of Farmers and Farm Women including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Crop Production	0	0	0	0	0	0	0	0	0	0
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	1	0	12	12	0	8	8	0	20	20
Integrated Crop Management	6	57	24	81	22	10	32	79	34	113
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Horticulture	0	0	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low value and high volume crop	0	0	0	0	0	0	0	0	0	0
Drought mitigation methods for horticulture crops	2	22	9	31	2	13	15	24	22	46
Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	2	41	17	58	24	0	24	65	17	82
Animal Disease Management	0	0	0	0	0	0	0	0	0	0
Feed and Fodder technology	0	0	0	0	0	0	0	0	0	0
Role of livestock in integrated farming	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment	0	0	0	0	0	0	0	0	0	0
Household food security by kitchen gardening and nutrition gardening	1	0	15	15	0	0	0	0	15	15
Designing and development for high nutrient efficiency diet	2	0	19	19	0	24	24	0	43	43
Gender mainstreaming through SHGs	1	0	28	28	0	23	23	0	51	51
Value addition	4	16	41	57	0	27	27	16	68	84
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery production	0	0	0	0	0	0	0	0	0	0
Rural Crafts	2	0	18	18	0	40	40	0	58	58
Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	11	218	30	248	34	5	39	252	35	287
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Demonstration of genetically improved farmed Tilapia	0	0	0	0	0	0	0	0	0	0
Murrel culture	0	0	0	0	0	0	0	0	0	0

Agro-forestry	0	0	0	0	0	0	0	0	0	0
Tree planting programme in waste land development	0	0	0	0	0	0	0	0	0	0
TOTAL	32	354	213	567	82	150	232	436	363	799

7.C. Training for Rural Youths including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Integrated farming	0	0	0	0	0	0	0	0	0	0
soil testing and fertilizer management	1	0	9	9	0	7	7	0	16	16
vegetable and fruit cultivation	1	11	0	11	0	0	0	11	0	11
Value addition	3	17	17	34	9	8	17	26	25	51
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	1	15	3	18	1	0	1	16	3	19
Poultry production	3	24	0	24	6	0	6	30	0	30
Pest management in coconut	0	0	0	0	0	0	0	0	0	0
Maternal and child health	1	0	10	10	0	16	16	0	26	26
TOTAL	10	67	39	106	16	31	47	83	70	153

7.D. Training for Rural Youths including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Pest and disease management	1	0	20	20	0	3	3	0	23	23
Value addition	1	0	9	9	0	14	14	0	23	23
Low cost and nutrient efficient diet designing	1	0	15	15	0	0	0	0	15	15
TOTAL	3	0	44	44	0	17	17	0	61	61

7.E. Training programmes for Extension Personnel including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Nematode management in banana	1	16	0	16	0	0	0	16	0	16
Training on important viral diseases affecting livestock and poultry	1	19	5	24	9	0	9	28	5	33
Innovative extension strategies	1	17	9	26	7	8	15	24	17	41
Training on Precision farming and Integrated farming system	1	11	0	11	0	0	0	11	0	11
Child psychology and Over all Child development	1	5	31	36	4	9	13	9	40	49
Importance of nutrition kitchen and Herbal garden	1	4	5	9	3	2	5	7	7	14
Total	6	72	50	122	23	19	42	95	69	164

7.F. Training programmes for Extension Personnel including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Gender sensitization training for extension officials	1	0	21	21	0	5	5	0	26	26
Total	1	0	21	21	0	5	5	0	26	26

7.G. Sponsored training programmes conducted

S.No	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			M	F	Tot	M	F	Tot	M	F	Tot
1	ICMP on Groundnut	1	6	17	23	0	0	0	6	17	23
2	Quality seed selection and importance of seed treatment	1	12	5	17	15	6	21	27	11	38
3	Importance of Tree planting and its uses	1	8	9	17	12	8	20	20	17	37
4	Master training programme to Agriculture officials on chilli production and quality improvement	1	20	5	25	15	1	16	35	6	41
5	Solanaceous vegetable cultivation package of practices	1	18	5	23	8	3	11	26	8	34
6	Kitchen garden establishment and nutritious food preparation methods	2	0	17	17	0	21	21	0	38	38
7	Maternal and child health	1	24	24	48	0	0	0	24	24	48
8	Processing, Value addition and marketing of millets	3	20	52	72	2	6	8	22	58	80
9	Integrated Pest Management in agriculture and horticulture crops	5	58	0	58	22	22	44	80	22	102
10	Integrated farming system	1	20	0	20	5	0	5	25	0	25
11	Popularization of Annatto for natural edible dye in Tamil Nadu	1	76	15	91	24	21	45	100	36	136
12	Value addition on fruits and vegetables	1	0	25	25	0	10	10	0	35	35
13	Masala product preparation	1	0	18	18	0	6	6	0	24	24
14	Goat rearing as an income generation activity for rural women	1	0	6	6	0	3	3	0	9	9
15	Friends of coconut trees	1	25	0	25	15	0	15	40	0	40
16	Establishment and maintenance of nutrition garden and balanced diet	1	11	6	17	10	15	25	21	21	42
	Total	23	298	204	502	128	122	250	426	326	752

Details of sponsoring agencies involved

1. ATMA Tuticorin
2. Coconut Development Board, Chennai
3. Department of Horticulture, Animal husbandry, Marketing, ICDS of Tuticorin, SCAD

7.H. Details of Vocational Training Programmes carried out by KVKs for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			M	F	Tot	M	F	Tot	M	F	Tot
1	Crop production and management	0	0	0	0	0	0	0	0	0	0
1.a	Friends of coconut training	1	25	0	25	15	0	15	40	0	40
2	Post harvest technology and value addition	2	0	43	43	0	16	16	0	59	59
3.	Livestock and fisheries										
4.	Income generation activities	1	0	6	6	0	3	3	0	9	9
4.a.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
4.b.	Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
4.c	Tailoring, stitching, embroidery, dyeing etc.	0	0	0	0	0	0	0	0	0	0
5	Agricultural Extension	0	0	0	0	0	0	0	0	0	0
5.a.	Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
	Grand Total	4	25	49	74	15	19	34	40	68	108

PART VIII – EXTENSION ACTIVITIES
Extension Programmes (including extension activities undertaken in FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		M	F	Tot	M	F	Tot	M	F	Tot
Field Day	2	31	12	43	18	7	25	5	2	7
Exhibition	4	178	1856	2034	84	1382	1466	4	10	14
Film Show	1			Mass			Mass	2		2
Method Demonstrations	0	0	0	0	0	0	0	0	0	0
Workshop	0	0	0	0	0	0	0	0	0	0
Group meetings	8	0	76	76	0	52	52	2	5	7
Lectures delivered as resource persons	23			Mass			Mass	5	3	8
Newspaper coverage	3			Mass			Mass	0	0	0
TV talks	2			Mass			Mass	0	0	0
Popular articles	9			Mass			Mass	0	0	0
Extension Literature	7			Mass			Mass	0	0	0
Advisory Services	78	7547	3456	11003	4952	3545	8497	0	0	0
Scientific visit to farmers field	374	952	568	1520	698	936	1634	0	0	0
Farmers visit to KVK	0	654	110	764	198	262	460	0	0	0
Animal health camp	29	125	45	170	102	91	193	12	4	16
Self Help Group Conveners meetings / PLF	6	0	168	168	0	75	75	0	2	2
Celebration of important days (Women's day)	5	0	3598	3598	0	1512	1512	2	15	17
ATMA Meeting	5			Mass			Mass	0	0	0
Farm field school	11	102	3	105	18	8	26	4	2	6
Farmers meeting	9	95	15	110	65	12	77	0	0	0
PRA	2	29	6	35	9	2	11	0	0	0
Total	578	9713	9913	19626	6144	7884	14028	36	43	79

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Unit Cost Rs.	Number of farmers to whom provided
Cereals (crop wise)	Paddy	ASD 16		11.34	17102		
Vegetables	Kitchen garden seed kit			225	825	5	225
Fodder crop seeds	Fodder sorghum	Co -29		0.08	3560	400	8
	Azolla			0.008	165	20	16
	Napier hybrid		Co-4	4500	700	0.25	4
Tuber	Cassava	Sri Vijaya		120	440	3.5	4
Total				4856.428	22792		257

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Fruits	Sapota	PKM1		181	6450	124
	Amla	BSR1		22	555	12
	Lemon			6	165	5
	Moringa			260	350	224
	Pomaganate			27	1015	12
	Batham			14	535	10
	Mango	Bangalora, Neelam,		146	5210	54
	Anona			3	90	2
	Guava	L 49		202	7000	54
	Jack Fruit			13	540	6
	Seetha			3	65	1
Ornamental plants	Cleodentran			20	120	10
	Acalipa(crotans)	brown		17	139	5
	Jasmine			22	122	5
	Gun powder			46	562	21
Plantation crops	Coconut	TxD		133	3082	52
	Jack furit			40	1890	25
Speices	Curry leaf			385	3534	58
Medicinal plants	Adathoda			1	7	1
	Agave			21	410	15
Forest Species	Neem			490	4850	254
	Vagai			55	750	34
	Peepul tree(arasu)			2	14	1
	Pungam			45	775	24
	Tamirind			3	120	1
	Gauva			25	225	5
	Polyalthea			2	30	1
Total				2184	38605	1016

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity in qtl	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Azospirillum	0.82	4100	92
	Azophos	2.032	10150	165
	Phosphobacteria	0.236	1180	35
	Rhizopos	1.896	9480	161
Bio-fungicide	Pseudomonas	0.836	6688	72
	T.viridi	0.428	3424	36
	Vermicompost	5.88	5880	125
Others (specify)	Bio – char (in qtl)	0.84	336	30
	EMA (in lit)	845	50700	230
	Slurry (in lit)	248	7440	123
Total			99378	1069

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Goat	Kanni adu and Kodi adu	13	30000	2
Poultry		0	0	0
Duals (broiler and layer)	Vanaraja Namakkal-1	906	102294	65
	Egg	2963	20804	1240
Japanese Quail	J.quail, Namakkal-1	1097	31394	24
	Egg	2883	7637	1520
Total		7862	192129	2851

PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

10. A. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Impact Assessment of SCAD KVK at Tuticorin District of Tamilnadu. International J. of Scientific Research	Dr. G. Alagukannan Dr.V.Srinivasan	Mass
	Impact of intervention of SCAD KVK to improve the productivity of Banana in Tuticorin Dt. J. of Krishi Vigyan	Dr. G. Alagukannan, Mr. P.Velmurugan and M. Ashokkumar	Mass
	Optimization of spacing and organic sources of nutrients for increased yield and quality in Aloe vera.	Dr. G.Alagukannan	Mass
Technical reports			
News letters	Velan Thunaivan	All Staffs	500
Technical bulletins			
Popular articles			
	High density planting techniques in Guava	Mr. P. Velmurugan Dr. G. Alagukannan	1000
Extension literature			
	Salt lick usage in Milch animals and goat rearing	Dr. V. Srinivasan Dr. G. Alagukannan	1000
	IPM in Paddy	Mr. M. Ashok Kumar Dr. G. Alagukannan	1000

	IPM in Coconut	Mr. M. Ashok Kumar Dr. G. Alagukannan	1000
	Agriculture technologies on drought management	Mr. A. Murugan Dr. G. Alagukannan	1000
Others (Pl. specify) paper news	Baby corn cultivation and preservation technologies	Mrs. S. Sumathi Dr. G. Alagukannan	
	Impact of SCAD KVK interventions on knowledge and adoption of improved technologies in Banana cultivation.	Dr. G. Alagukannan Mr.P.Velmurugan Mr. M. Ashokkumar	
TOTAL	11		

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1	DVD	Paddy cultivation and integrated pest and diseases management	100
2		Banana Integrated pest management	100
3		Mushroom Cultivation	100
4		Vermicompost	50
5		Panchakavya and Poochivirati	200
6		Integrated Farming System	100
7		Organic farming	100

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

10. C.1 Co14 Dolichos Bean – A boon to farmers of Tuticorin District

Background

The farmers of Vilathikulam region in Tuticcorin district are heavily relying on monsoon rainfall for their farming practices. Even the farmers having bore wells to support their crops in the field are seldom raise long duration crops. Water scarcity during peak flowering and fruit setting period often resulted in poor yield which reduces the income from the crops. So farmers were looking for an alternate short duration vegetable crops for quick return.



Intervention

Under the guidance of Dr. Cletus Babu, Chairman of SCAD Institutions and the advice of Dr.Sreenath Dixit, Zonal Project Director, Bangalore Subject Matter Specialists of the ICAR supported SCAD Krishi Vigyan Kendra located at Vagaikulam village, Tuticorin region collected the problems of Vilathikulam farmers through PRA exercise and introduced the CO 14 Dolichos bean as a short duration vegetable crop to the farmers. During 2013-14, it introduced this crop to five farmers through an On Farm Trial programme at Iyan Pommaiahpuram Village. Since the results obtained from the farmers were very encouraging, SCAD KVK again introduced the crop in ten farmers' field through Front Line Demonstration Programme during 2014-15. Along with 4kg of seeds to raise in one acre area, 1kg of vegetable special also given as inputs to the farmers.

Impact

Mr. Dharmaraj(52) of Kuruvarpaati village who got seeds from SCAD KVK sowed the seeds in 45x30cm spacing after treating the seeds with Rhizobium solution. He noticed the first flowering in 38th days after sowing and the flowering completed in 45 days. As instructed by the KVK experts, he sprayed 3% effective

microorganism (EM) solution on 45th, 60th and 75th day to boost the flower and fruit production. He also sprayed 0.3% vegetable special on 40th, 55th and 70th day. To control the fruit borer and jassids he sprayed 2% neem oil with soap solution. He did the first harvest on 52nd day and from 11 harvests, he could harvest 36.2 quintals of green pod from his one acre land.

Economic gains

The green pods fetched the maximum of Rs.38 and minimum of Rs.22 per kg of fruits from the Vilathikulam market. For the production, he spent Rs.17,800 and sold the green pods to Rs.1,08,000. He earned Rs.90,000 as net return within a short period of 96days. For his outstanding achievement, he was appreciated by Dr. Chandra Gowda, Senior Scientist of Zonal Directorate Office, Bangalore during his field visit. Mr. Madasamy of Iyan pommaiahpuram village also earned Rs.80,000 as net return from the sale of CO-14 Dolichos bean.

Being a photo insensitive crop, it can be cultivated throughout the season. After seeing the very encouraging result, SCAD KVK is now focusing on seed production of CO 14 Dolichos bean as the demand for the crop is increasing among the farmers of Vilathikulam region.

10.C.2 IFS Makes the farmer Happy – Combination of Technologies

Background

Mr. R.Ilango living in sawyerpuram village near Thoothukudi, a botany graduate created a model for others in integrated farming system. He cultivates crop like **banana, paddy, vegetables, baby corn** and **green fodder** in 3 acre land completely under organic method using **drip and fertigation** method.

Twelve years before, he was an inorganic fertilizer trader who won awards for his efforts from the fertilizer companies. But because of the continuous loss from his farm he discontinued the usage of inorganic and turned into partial organic farmer after the advice from the KVK and within 2 years he boldly converted his farm into completely organic, once his integration of animals set in

Intervention process

Ilango is an active participant of monthly farmers meeting conducted at KVK where in the the possible solutions are given for the existing problems of the farmers through training and demonstrations, field visits, exposure tour etc..,

Intervention technology

Ilango participated in several training programmes conducted by KVK like, Organic input production and usage, Integrated farming system, rabbit rearing, poultry rearing, goat rearing, dairy farming, Banana cultivation, Paddy cultivation, bio fertilizer production and usage, vaccinating the poultry birds, milking machine usage, honey bee rearing, biogas production and usage, vermicomposting, baby corn cultivation, vegetable cultivation, chilli cultivation, use of drum seeder for paddy cultivation, SRI method of paddy cultivation, drip and fertigation, precision farming, etc..

Impact Horizontal spread

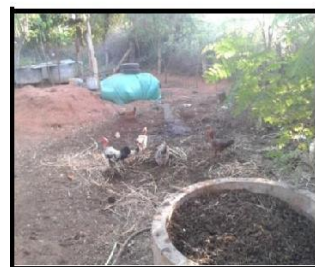
From his successful farm model several fellow farmers visit his farm every day and adopt the practices what he uses like Vermicomposting (25), Panchakavya preparation(18), milking machine usage(3), in situ mulching(55), drum seeder usage for



paddy cultivation(15), vaccinating the backyard poultry birds (75), integrated farming system model (25), drip and fertigation for banana (125)

Impact on economic gains

He cultivates crop like **banana, paddy, vegetables, baby corn and green fodder** in **3 acre land** completely under organic method using **drip and fertigation** method. One can have the feeling of walking on the meadow in his fields and also find plenty of earthworms in any part of his field. Such a rich organic content built up in soil made it possible because of continuous addition of crop residues and cow dung. He never agrees to take even a waste leaf out of his farm, all the **crop residues were mulch in situ** and composted in situ by his army of earthworms. He never forgets to add **Panchakavya** once in ten days that is prepared on his farm premises using the cow dung, urine, ghee, fruit waste, palm jaggery, and sprouted pulse. He maintains 10 **cattle** out of which six are in milking at anytime and sells milk at his door step at the rate of Rs.45 a liter directly to his customers when others are selling at Rs.25 a liter. His farm milk is having such a good flavor and taste, customers find it difficult to taste the milk from other vendors or producers all because of feeding organic fodder (cumbu napier hybrid, subabul, hedge Lucerne) paddy straw, and minimal concentrate feeding. He converts the cow dung into **biogas** using a portable balloon model and cooks food every day for his family with that. With this biogas unit he could save the purchase of 9 LPG cylinders in the last one year. He converts the cow dung into **vermi compost** and fined it easier for transport to the farm and application to the field. He also maintain 10 **goats**, 50 **backyard poultry**, 2 **bee hives**, 6 **rabbits**, 2 **geese**, and a small **fruit orchard**. He says that his banana crop matures early, evenly and makes him possible to have two ratoon crops in two years while his counterpart who use inorganic fertilizers alone can have only one ratoon crop in 2 years as their banana bunches are not maturing uniformly and takes 12 months for one crop.



He has proved that his banana yield is almost the double from his neighbors. His crop remains healthy and gives good yield though at some time faces the problem of pest and diseases his healthy plants were able to overcome these and never fails him. **Is it not good news for others to emulate rather than seeking government subsidies for the crop cultivation and loss.** He could earn the net return of Rs. 3.9 lakhs/annum with the benefit cost ratio of 1.83 from his 3acres of IFS model. With this income he could provide best education for his children at district head quarters. He feels confident in agriculture and takes pride in saying that he is a farmer.

Impact on employment generation

Two members of his family are continuously engaged round the year in the farm besides he employs one labour round the year and 120 labourers for intercultivation operations. By this IFS model 1215 men days of employment is generated in the rural village.

10.C.3. Several mangoes in one stone – Prosopis pod flour as the cattle feed

Background

Prosopis juliflora commonly known as Mesquite tree, is a predominant waste land weed tree found abundantly in dry lands of Thoothukudi district coastal area. This tree is considered as a menace by the common peasants whereas it is a multipurpose utility tree for the charcoal producers, livestock growers and poor house hold women who uses it for the production of charcoal, fire wood utilize pod as feed to livestock. People of this region become masters in utilizing this tree for the production of charcoal and for fuel wood. Majority of land less poor and marginal dry land farmers depend on charcoal production occupation during the off seasons. Not only for the employment but useful for the livestock also during the dry off seasons. The livestock especially the goat, sheep and cow feed on the pods during the dry summer months when no other feed is available. Though the fallen pods are directly eaten by the livestock during grazing, still a large quantum of the pod are remained un eaten and left to decay in situ..

Rational

These unutilized pods if properly collected and processed can be stored for several months and used as livestock and poultry feed as a cheap alternative for the costliest grains and bran like pearl millet and wheat bran. Besides milling the pods into fine flour results in crushing of seeds and there by effectively prevents the further spread into the cultivable land through livestock manure.

Intervention Process

Considering this situation ICAR KVK (Hosted by SCAD) had a discussion with the people of this region and started promoting the use of ground pods as livestock feed from the year 2010-11. To start with the elder people who cannot do any hard labour work were motivated to collect the pods at the cost of Rs.3/Kg and the same were taken to the KVK where the pods were dried for 10-15 days to reduce the moisture level and then again shifted to the grinding mill for grinding the same. The grinding mill is situated in Thoothukudi which is 75km away from Vilathikulam area. With this background a meeting was conducted by calling on the potential entrepreneurs at Vilathikulam and they were trained on the *Prosopis* pod flour as animal feed.

Intervention Technology

The ground pod flour was then given to the livestock growers especially Cattle owners for trial purpose. After getting their encouraging positive feedback, it was decided to promote an enterprising mill at Vilathikulam itself by collaborating the pod collectors, entrepreneurs, livestock owners and traders. With the help of motivated entrepreneurs and pod collectors about 8 tonnes of pod were procured and one grinding mill was established at Vilathikulam itself during the month of September 2014. Mr. Sundarraaj came forward to establish the mill with his capital investment and technical guidance of KVK, Tuticorin. There were a great struggle in fabricating the machine and finally with the intensive expertise of KVK it was portable to come with the suitable machine. The unit was inaugurated by the renowned professor and Dean of Veterinary College and Research Institute Dr. S. Pradhaban in a grand function held at the mill premises.



(Dr. S. Pradhaban, Dean, Veterinary College and Research Institute, Tirunelveli visiting the mill on its inaugural function)

Within a month all the ground flour of 8 tonnes was sold out by collaborating with traders and cattle owners which shows the opportunity existing in promoting this enterprise.

Impact – Employment generation

The pod was collected during the month of April and May by the landless laborers and elderly people. During this time each one of them were able to collect on an average 30Kg of pods within 2-3 hours of work. For this they got Rs.150 (Rs 5 / Kg of seed collected) as wages. By starting this venture it created an additional employment of 40 – 60 days for these pod collectors in a year. Besides during the processing it provided additional employment opportunities for the mills workers for about 240 men days.

To put together this venture resulted in creation of 240 men days of work at mill and 267 men days of work for the pod collectors during this year 2014 just by collection and processing of 8 tonnes of pods.

We expect that in the coming year we can procure about 50 tonnes of pod and create an additional employment opportunity of 3166 men days of work to the people of this region.

Impact – Income generation

By feeding on Prosopis pod flour as a cheap replacement for pearl millet / wheat bran the livestock owners could save up to Rs.5/Kg (cost of the pod flour in Rs.16 where as the cost of wheat bran / pearl millet in Rs.21/kg) thus add up the profit margin for the livestock farmers. The entire process becomes possible because of the base work done by the SCAD Rural development wing at the ground level by mobilizing the community support base through SHGs and volunteers.

By this way of making Prosopis pod flour give multiple benefits – several mangos in the stone.

1. Reduction of spread of Prosopis by open grazing by goats.
2. The Protein nourishment of cattle is ensured.
3. Ensures the availability of low cost feed – a boon to cattle owners.
4. Rural entrepreneurship generates income and employment to the rural poor.

10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

In collaboration with Reliance Foundation Thoothukudi, Informations recording crop land holdings income, marketing issues etc, were collected as a bench mark survey of nearly 630 farmers of Tuticorin district and advisory services on package of practices is being delivered to the 630 farmres through SMS on regular basis.

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Drumstick	Installation of Bird perches @ 40 /acre to attract birds to eat away the larva of leaf eating caterpillar. To attract the birds initially they place some rice in the bowl made up of coconut shell. Later they stop filling the bowls with rice and inturn the birds diverted to search larvae present on the plants	To control leaf eating caterpillar and pod fly
2	Black gram	The farmers are saving their own seeds especially the pulses. They have to store their seeds from January to next season ie., Oct. They fill the bags with seeds half the way and then they place dry chillies (2kg) and again they fill the bag. In between the bags they place neem leaf. By this way they could save their seeds absolutely devoid of any damage made of pulse beetle in storage. They have their own practice of assessing the moisture content of grains by sound and biting before storage.	To control pulse beetle damage in seeds at storage
3	All crops amenable to damage by peacock	Fencing all around the field with iron string at the height of one feet to avoid the entry of peacock into the field. This is being well practiced by Vilathikulam farmers	To ward-off peacock and its damage to crops
4	Kitchen garden	To control aphids in kitchen garden plants they sprinkle ash on the plants	To control aphids and other small sucking pests.
5	Red gram	Storage techniques	Red earth mixed with seeds

10.F. Indicate the specific training need analysis tools/methodology followed for

- **Identification of courses for farmers/farm women**
Farmers/ Farm women group meeting
Individual discussion
Village survey
SAC meetings
- **Rural Youth**
Individual discussion
Village survey (PRA)
SAC meetings
- **In service personnel**
Discussion with line dept. officials
SAC meetings

10. G. Field activities

- | | | |
|------|-------------------------------|-------|
| i. | Number of villages adopted | - 18 |
| ii. | No. of farm families selected | - 680 |
| iii. | No. of survey/PRA conducted | - 8 |

10. H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Functioning well

1. Year of establishment : 2005
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	pH meter	1	9850
2	Ec meter	1	9950
3	Spectrophotometer	1	59500
4	Flame photo meter	1	48000
5	Precision balance	1	99500
6	Top pan balance	1	98000
7	Water distillation unit	2	98000
8	Shaker	2	49000
9	Hot air Owen	1	14000
10	Hot plate with stirrer	1	22000
11	Kjeldhal digestion and distillation unit	2	59000
12	Nitrogen auto analyzer with Digestion block	1	202932
13	Willie mill	1	26000
Total		16	795732

Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1921	1463	531	96050
Water Samples	638	634	318	30550
Plant samples	14	14	14	14000
Manure samples	0	0	0	0
Others (specify)	96	96	33	5100
Total	2639	2207	896	145700

Details of samples analyzed during 2014 - 15

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	542	301	152	27100
Water Samples	63	63	22	1800
Plant samples	0	0	0	0
Manure samples	0	0	0	0
Others (specify)	0	0	0	0
Total	605	364	174	28900

10.I. Technology Week celebration during 2014-15 : No

10. J. Interventions on drought mitigation (if the KVK included in this special programme)

Not included in this special programme

PART XI. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Impact Before	Impact After
Cattle feed preparation from Prosopis Juliflora pods	16	35	P.juliflora pods were eaten directly under the trees by the grazing animals and most bulk of the pods were allowed to rotten under the trees as such. Direct consumption also resulted in fast spread of the weed in manure applied fields. High cost of concentrate feed ingredients like wheat bran resulted in reduced profitability in dairy farming	8 tones of pods were collected during the year 2014-15 and milled to coarse powder form and sold as alternative concentrate feed ingredient to replace wheat bran to 35 farmers. This unit also resulted in providing employment to about 24 pod collectors and 6 processing assistants to about 60 days during hot summer when no agriculture work was available to them.
Biofertilizer usage in crop production	860	75	Farmers were not aware of the Biofertilizer, their application method, their advantages and the place to purchase	Farmers are well aware of bio fertilizer and regularly applying in the fields. Since the price is very cheap farmers using the Biofertilizer for seed treatment, soil application and seedling dipping
Total Mechanization in Paddy cultivation	NA	55	They were suffered to get laboureres for transplanting, weeding, harvesting operations etc. The major portion of income goes for labour wage. They were not able to start paddy cultivation in time	The farmers familiarized in using machineries for all operations so that they could start and complete the paddy cultivation in time with difficulty of labourers.
Use of new hybrids in improving the yield in Maize	332	80	The farmers of this area were using private hybrids and the seeds are very costly. So the farmers preferred to go for low income yielding crops like pulses	Co MH 6 was promising than private hybrids and the seed cost is also low comparatively. Now the farmers are happy in getting higher income than pulses by growing maize
Use of certified seed in improving the yield in black gram and Greengram	650	65	The farmers used their own seeds continuously thereby they were not able to reap the full potential of yield	Now the farmers are interested in using certified seeds and they discontinued the practice of using their own seeds so that they realize the good yields
Pulses wonder - Foliar application technology	NA	70	Previously they were unaware of Pulse wonder and even they know about DAP spray, they were not practiced	Now the farmers of this area realized the utility of pulse wonder in improving yield.
ICMP in Co7 Green gram	560	65	The green gram growing is regular phenomenon in vast area during rabi season and the farmers were use low yielding and earlier series of varities like co4, co5 and their own seeds. So their yield was low and sometimes they could reap only the expenditure. The pod borers were the major yield limiting factor.	After importing training and conducting FLD on ICMP in newly released variety like co7 farmers could harvest about 6qtl/ha. They also adopted the IPM practices like application of Neem soap use of pheromone trap and spray of NPV. By these practices they heavily curtailed the cost of pesticides and there by the net income per ha increased considerably. They also preferred the earliness of co7 variety (60 days) and in bold grains
ICMP including mechanization in greengram	NA	65	Earlier the farmers were using the old varities like Co4, Co5. Lack of adoption of improved cultivation practices resulted in	Now the farmers are using Co6, Co7 series of varities and they are high yielders. Besides mechanization facilitated them to

			less income. Labour shortage was also acute and they were not in the position to carry out the field operations in time	harvest in time. Even then there is some grain loss in mechanical harvesting they are happy in doing machine harvest. The incidence of pests is also lowered by the adoption of IPM measures
Soil Moisture conservation of crop residues Mulching	30	40	Farmers burnt the waste insitu in the field. Some of the farmers ploughed the waste in the field	The collected waste was spread around the crops as mulch to conserve the moisture. Reduced the habit of burning the waste in the field.
Moringa organic pest control methods	57	110	The farmers were resorting series of sprays (one spray /week) to control leaf eating caterpillar and fruitfly. There was heavy incidence and there by severe yield loss (upto 30 %)	By adoption of practices like placing bird perches, neem spray, fruitfly traps (Fermented Grapes) resulted in lesser pest incidence and damage to pods
Disease management in Banana	5026	65	The Banana farmers are less aware of deadly disease like Panama wilt, Sigatoka leaf spot, bunchy top etc. In severe cases the farmers faced more than 60 yield loss due to Panama wilt	Now the farmers are able to identify the diseases and prepared to take prophylactic measures like application of Pseudomonas, removal of affected trees etc. They are using Paecilomyces to manage the nematodes as it act as predisposing factor.
Usage of Banana bunch cover	18	35	The farmers were unaware of bunch cover to protect the bunches to get higher quality	The farmers are aware of its importance and showing interest in covering the bunches as those bunches get attractive price
Demonstration of high yielding Drumstick varieties	60	80	The farmers were not aware of high yielding varieties. Cultivated local varieties and experienced less productivity	PKM1 is being grown in wider scale for its green pod and seeds. Ratooning is also very common in moringa cultivation.
Drip and fertigation technologies in Banana	120	70	Farmers irrigated the crop through surface irrigation and often faced the problem of water shortage during the critical period of crop growth. Harvested low yield than the expected level and incurred addition production cost for weeding,drench and channel formation	Farmers were able to water to 35-40% and minimized the cost incurred for channel, basin formation, weeding and labour. Increased the yield by 20-25% due to fertigation.
Measures to contain nematode in banana	10	60	The farmers are unaware of nematode management practices concept application of ---. The farmers faced Upto 35% yield loss in banana due to nematode problem	The farmers of this area familiarized in complete management practices to control nematodes. The practices included incorporation of sun hemp as green manure crop, corm treatment with carobofuron application paecilomyces along with FYM , raising marigold as intercrop and proper upkeep of banana garden. The framers realize the usefulness of these technologies in nematode control and now they are approaching us to facilitate the availability of Paecilomyces.
Co - 14 lab lab cultivation techniques	40	65	The farmers were unaware of short duration high yielding varieties. The long duration vegetables could not yield the expected level due to water shortage during summer.	10 farmers cultivated Co14 lab lab and registered 3.5-3.8 tonnes of green pod /acre in 85-90 days duration. They were able to fetch 75000to 80000 as net income from the cultivation

High density planting in guava	5	50	Farmers were adopted the conventional spacing of 6x6m spacing which accommodated 111 plants per acre. They were not aware of systematic pruning to keep the tree canopy under desired height and shape.	By adopting the closure spacing of 3x2m, the farmers accommodated 666 plants per acre. They were able to maintain the tree canopy under desired height. They used the space, water and soil judiciously.
Mulching techniques in brinjal using plastic sheets	5	25	Farmers were not aware of plastic sheet mulching technique. Weed growth was abundant and farmers incurred 10-12% of total production cost for weeding. Due water loss due to wind and hot weather was high	This technique effectively controlled the weed growth and saved 10% of production cost. They were able to reduce 3-4 irrigation. Because of radiant heat, the sucking pest menace was also less.
Tree farming in waste lands	320	65	The farmers left the land as fallow due to labour scarcity and water shortage, They were not able to purchase the quality timber value trees and fruit saplings	Farmers have planted fruit seedlings like guava, Sapota, mango, lemon and timber value trees like Teak, Neem, melia dubia, casuarinas with little care and maintenance. Getting 25-30000/ac as additional income from tree farming
Vaccinating the backyard poultry against Ranikhet disease	60	65	95 % mortality in desi birds due to Ranikhet disease was the predominant problem as stated by the poultry growers in this village	After the training on Vaccination methods to one farmer he started doing vaccination to his neighbors and taught the technology to rural youth (8 numbers) in nearby area and it has spread to the entire village and sent percent coverage was achieved by this model and resulted in no outbreak of Ranikhet disease in this village for the past 5 years
Rearing desi/cross bred chickens	120	78	Out of the 112 trainees who underwent the poultry training only 26 % of them were already adopted the desi bird rearing practice.	Out of the 112 trainees who underwent the poultry training in KVK 70 % of trainees adopted the backyard poultry rearing practices as an entrepreneurial activity during the year 2014-15
Desi Chick production using homestead incubators and sales of chicks	4	12	No small scale hatchery was available prior to 2012-13 in these villages. So they were not able to get the chicks in time	Out of the 255 trainees who underwent the poultry training at KVK 31 trainees started producing the chicken either by the help of brooding desi chicken or by homestead incubators in this region resulting the availability of about 2000 chicks every year
Use of mineral lick feeding to goat	65	25	No mineral lick feeding so the deficiencies related ill thrift and infertility problems were the common phenomenon.	Those who adopted reported that it resulted in better growth performance of the kids and reduced mortality among them
Goat kid rearing and protection measures against chill and damp weather	240	65	No proper protection measures against chill and damp weather resulted in heavy mortality in kids upto 50 percent	Those who adopted reported that it resulted in better growth performance of the kids and reduced mortality among them
Regular Vaccination and Deworming to the goat	NA	85	No proper protection measures against diseases and endo and ecto parasites resulted in heavy mortality in goats upto 45%	Proper and regular preventive practices resulted in better survival rate of the goats
Fodder seed production (CN hybrid , Fodder	47	35	No fodder seed producer in these villages prior to KVK intervention	1250 kg of fodder sorghum seed produced

sorghum)				
Green Fodder cultivation	130	65	No green fodder was cultivated prior to KVK intervention in this village	Out of the 20 farmers trained 13 farmers have adopted green fodder cultivation and continue to grow till date to feed their cattle and goat
Mineral mixture feeding to dairy cows	43	85	Mineral mixture feeding is not known to these 36 dairy farmers	Out of the training and demonstration by KVK 30 farmers started adopting the practice of mineral mixture feeding to their dairy cows which resulted in better fertility and production from their cows
Value addition on millets	20	35	Lack of awareness about the consumption and preparation of millet products	Out of training and demonstration by KVK 35% of the farm women started consuming millet products (nutri mix, laddoo, dosa mix etc) and they started preparing millet products in a small scale
Kitchen garden	530 (WSHG)	85	Under utilization of backyard. Poor consumption of fresh vegetables.	Those who adopted reported that they were able to access for fresh vegetables and greens. Able to save money instead of buying vegetables for huge price.

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

11.B. Cases of large scale adoption (Please furnish detailed information for each case)

(Note: OFT – O, FLD – F, Training – T, Extension Activities – E)

Discipline	Name of the technology	Source of the technology	How the technology transferred	Spread in Area (acre)	No of farmers
Agronomy	Demonstration on mechanization in Green gram with ICMP (sowing, spraying, harvesting, Thrashing, winnowing etc..)	TNAU	F,T,E	830	635
Agronomy	Seed production in Green gram improved varieties (Co7)	TNAU	F, T, E	350	160
Agronomy	Seed production in Blackgram improved varieties (VBN 5)	TNAU	F, T, E	320	156
Agronomy	Biofertilizer usage technique	TNAU	T,E	980	625
Horticulture	ICM In Banana	TNAU	F,T, E	680	385
Horticulture	Introduction of new Co 1 4. bush type lablab & ICM practices for round the year cultivation	TNAU	O, T, E	42	37
Plant Protection	Organic farming inputs preparation	TNAU	T,E	120	64
Plant Protection	IPM in Green Gram	TNAU	T,E	830	635
Soil Science	Soil sampling, testing	TNAU	T,E	536	530
Home Science	Kitchen gardening with improved vegetable varieties	TNAU	T,E	-	2013
Animal Science	Improved desi birds in cage rearing system	TANUVAS	F,T	-	401
Animal Science	Promotion of backyard poultry rearing with improved breeds	TANUVAS	F,T,E	-	463
Animal Science	Improved back yard poultry breed – Vanaraja,	TANUVAS	E, T	-	511
Animal Science	Cage system of backyard poultry rearing under semi intensive system	TANUVAS	F,T,E	-	485
Animal	Prosopis pod flour as an alternative	CAZRI,	O,T,F, E	-	596

Science	concentrate feed ingredient	Jodhpur			
Animal Science	Comprehensive disease control in goats	TANUVAS	F,T,E	-	1238
Animal Science	Green fodder- CN hybrid CO-4	TNAU	F,T,E		368
Animal Science	Improved Japanese quail breed – Nandanam III	TANUVAS	T,E		463
Animal Science	Ranikhet disease vaccine- RDVK/R2B	TANUVAS	T,E		269
Fisheries	Composite fish culture in village ponds using stunted fingerlings	TANUVAS	F,T,E	67 ponds	67 village
Agro forestry	Tree planting in wastelands	TNAU	T,E	164	128

11.C. Details of impact analysis of KVK activities carried out during the reporting period

Tuticorin ranks first in Banana productivity among the districts of Tamilnadu with the area of 11,020 ha scattered in four blocks. Tuticorin KVK conducted series of interventions by training, OFT's, FLD's and several method demonstration on recent technologies to improve the productivity in all varieties of banana.

The study was conducted to ascertain the knowledge gain and adoption level of thirteen specific technologies demonstrated through various interventions during earlier years by the KVK. Tiruchendur and Alwarthirunagari blocks of Tuticorin District were taken for study and the respondents were randomly selected at the rate of 50 beneficiary farmers per block. The data were collected through personal contacts (interview) with well designed questionnaire. The data revealed that the gain in knowledge was more than 50 per cent for technologies viz., foliar application of Banana special (73%), use of bunch cover (63%), drip irrigation (62%) and application of *Pseudomonas* (54%). Similarly, foliar application of Banana special and soil application of neem cake and Furadon recorded the highest extent of adoption, 66 and 53 per cent, respectively. This could be due to the easiness and effectiveness of technologies in field application and yield enhancement. Though the acquisition of knowledge for the technologies like drip irrigation (85%), use of tissue culture plants (52%) and high density planting (42%) was high, the number of farmers adopting these technologies were very low i.e. 18, 11 and 5%, respectively due to the various reasons.

This study was published in Journal of Krishi Vigyan. Impact of Intervention on knowledge and adoption of Improved Technologies in Banana cultivation 2015, Vol 3, Issue 2, Page: 54 – 58.

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Type of institute	Name of organization	Nature of linkage
VCRI	Veterinary College and Research Institute, Tirunelveli	Receiving technologies and technological inputs. The scientists serves as resource persons for KVK trainings and demos
TNAU	Horticulture College and Research Institute, Periyakulam	Received technological inputs viz., Annatto seedlings, drip irrigation accessories to establish a demo unit in one ha and also to impart training on Natural dyes and Annatto cultivation under NADP scheme
TNAU	AC & RI, Killikulam	Deputed experts for conducting training to extension functionaries and farmers. Serves as technology providers
TANUVAS	FCRI, Tuticorin	Deputed experts for conducting training to extension functionaries and farmers. Serves as technology providers
CDB	FoCT, Chennai	Imparted trainings on coconut cultivation and coconut tree climbing using climbing device
ATMA	JDA, Thoothukudi	Conducted one FFS for Integrated pest management in SRI Paddy
ATMA	JDA, Thoothukudi	Training on value addition in minor millets and exposure to KVK demo units

NGO	Reliance Foundation	Reliance Foundation Facilitates trainings at fields, technology debate on Banana Cultivation Techniques, live TV programmes on Banana and paddy.
NGO	CFA, Tirunelveli	Facilitated vocational training on value addition on fruits and vegetables and masala powder preparation
Dept of Marketing,	AGMARK, Tuticorin	Mobilizing people for entrepreneurial development program, skill up gradation training on value addition
Dept of Agri	INSIMP, Tuticorin	Facilitated training on Value addition on minor millets
Dept of Agri	ATMA, Thoothukudi	Cultivation technology of oil seeds at different villages
Dept of Hort	ATMA, Thoothukudi	Waste land development using fruit crops, value addition on banana, training methodologies
ICDS	ICDS, Tuticorin	Maternal and child health care
Spice Board	Spice Board, Cochin	Master training programme organized to agricultural officials on chilli production and quality improvement
Dept of Forestry	Dept of Social Forestry, Tuticorin	Conduct of trainings on Promotion of Tree planting in individual lands

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, and participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

12.B. List Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Role of KVK	Date/ Month of initiation	Funding agency	Amount (Rs.)
INSIMP	Training and Input supply	10/02/2012	TNAU	674000
FFS for Integrated pest management in SRI Paddy	Conducted one FFS	10/07/2014	ATMA	29450
FoCT	Imparting trainings on coconut tree climbing device	22/12/2014	Coconut Development Board	113000

12.C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/ ~~No~~

If yes, role of KVK in preparation of SREP of the district?

KVK, Tuticorin is maintaining group linkage with ATMA especially in SREP preparation for the district and conduct the activities as per SREP. The Programme Coordinator and SMS are regularly attending the ATMA meetings conducted for various purposes. KVK – Tuticorin participated and gave valid inputs in the SREP preparation for the year 2014 - 15 held at Courtallam (24 – 26 March 2014) and Ooty (5 – 6 March 2015) for the year 2015 – 16

Coordination activities between KVK and ATMA during 2014 – 15

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	SREP Preparative meeting	1	---	---
02	Research projects				
03	Training programmes	Solanaceous vegetable cultivation package of practices	6	1	
		Processing, Value addition and marketing of millets	6	1	
		Value addition on minor millets and its cultivation	6	1	

		Value addition on minor millets and its cultivation	6	1	
		integrated pest management for banana	6	1	
		Ipm and idm in coconut	6	1	
		Pest & disease Management in vegetable crop	6	1	
04	Demonstrations	Processing, Value addition and marketing of millets	6		
		Value addition on minor millets and its cultivation	6		
		Value addition on minor millets and its cultivation	6		
		Ipm and idm in coconut	6		
05	Extension Programmes				
	Kisan Mela	Ulavar Peruvala	1		
	Technology Week				
	Exposure visit				
	Exhibition	Mushroom and its products	1		
	Soil health camps				
	Animal Health Campaigns				
	Others (Pl. specify)				
06	Publications				
	Video Films	Paddy cultivation and integrated pest and diseases management	---	---	750 DVD's were prepared and submitted to ATMA
		Banana Integrated pest management	---	---	
		Mushroom Cultivation	---	---	
		Vermicompost	---	---	
		Panchakavya and Poochivirati	---	---	
		Integrated Farming System	---	---	
	Books				
	Extension Literature				
	Pamphlets				
	Others (Pl. specify)				
07	Other Activities (Pl. specify)				
	Watershed approach				
	Integrated Farm Development				
	Agri-preneurs development				

12.D. Give details of programmes implemented under National Horticultural Mission – Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any

12.E. Nature of linkage with National Fisheries Development Board – Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

12.F. Details of linkage with RKVY – Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

12. G Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2014	3	758	
May	4	1505	
June	2	656	
July	0	0	
August	4	1413	
September	12	3046	
October	8	1823	
November	6	880	
December	8	1879	
January 2015	12	1643	
February 2015	11	2461	
March 2015	8	1933	
Total for the year 2014 – 15	78	17997	

12.H. Farmers Field School**Title: Farmers field school on Fodder Preservation and Feeding livestock**

Village: Sekkarakkudi

No.of participants: 30

Season: 2014-15

Prioritized problem:

- Majority of livestock growing farmers are dry land farmers (90%)
- Poor quality of forages
- Lack of knowledge in fodder preservation

Technologies taught (TANUVAS 2011)

- Growing mixed fodder crops
- poly bag methods of Silage making
- Haylage making
- Feeding the silage/haylage

Parameters

- Silage/haylage quality - excellent

- Acceptability to cows – highly palatable
- Preservation cost per kg,
 - (Haylage -Rs. 16/100kg),
 - (Silage -Rs.157/100kg)



PART XIII – PERFORMANCE OF INFRASTRUCTURE IN KVK

13.A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Poultry unit	2010	160sq.m	Namakkal-1	Chicks	906	75621	102294	
					Egg	2963		20804	
				J.quail, Namakkal-1	Quails	1097	21540	31394	
				Egg	2883		7637		
2	Vermicompost	2006	20sq.m	compost		588		5880	
3	Mushroom	2011	20sq.m	mushroom		84 kg	7800	12600	

13.B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty in ton	Cost of inputs	Gross income	
Cereals									
Paddy	18.10.14	15.02.15	1	ASD 16	TFL	2.1	8000	12000	
Pulses									
Oilseeds									
Coconut									

Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Mango									
Sapota									
Tree Seedlings									
Vegetables									
Cluster Bean	03.04.15	06.04.15	0.2	VKM – Local	Pods	1.1	12800	---	On going
Bhendi	26.05.15		0.1	Arka Anamika	Pods				On going
Others (specify)									
Fodder	26.05.15		0.1	CO (FS) – 29	Seeds				On going

13.C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)

Sl. No.	Name of the Product	Qty in qtl	Amount (Rs.)		Remarks
			Cost of inputs /Kg	Gross income / Kg	
1	Azospirillam	0.82	46	4	To promote organic agriculture practices
2	Azophos	2.032	46	4	To promote organic agriculture practices
3	Phospo bacteria	0.236	46	4	To promote organic agriculture practices
4	Rhizophos	1.896	46	4	To promote organic agriculture practices
5	Pseudomonas	0.836	72	8	To promote organic agriculture practices
6	T. Viridi	0.428	72	8	To promote organic agriculture practices
7	Vermicompost	5.88	6	4	To promote organic agriculture practices
8	Mushroom	0.94	120	40	To promote organic agriculture practices
9	Bio – char	0.84	3	1	To promote organic agriculture practices
10	EMA	845	52	8	To promote organic agriculture practices
11	Slurry	248	23	7	To promote organic agriculture practices

13.D. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Goat	Kodi adu and Pallai adu cross	Goat	110kg	20100	30000	
2	Sheep	Vembur	Mutton	315 kg	58500	72500	

13.E. Utilization of hostel facilities Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Nov 2014	19	3	Hostel is yet to be furnished
Dec 2014	19	5	
Dec 2014	19	3	
Dec 2014	20	5	
Dec 2014	18	3	
Dec 2014	42	6	

13.F. Database management

S. No	Database target	Database created
1	Training data base	Created for the year of 2011-12
2	Trainees data base	Created for the year of 2012-13
3	FLD&OFT Data base	Created for the year of 2012-13

13.G. Details on Rain Water Harvesting Structure and micro-irrigation system – Nil

Amount sanction (Rs.)	Expend iture (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		

PART XIV - FINANCIAL PERFORMANCE

14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	Central Bank of India	Tirunelveli Junction	280924	Main Account	3117090470	627016002	CBIN0280924
	South Indian Bank Ltd	Tirunelveli Junction	0254	Revolving Fund	025405300004536	627059002	SIBL0000254

14.B. Utilization of KVK funds during the year 2014-15 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	89,82,000	90,43,360	89,82,240
2	Traveling allowances	85,000	85,000	96,776
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,00,000	1,00,000	2,46,989
B	POL, repair of vehicles, tractor and equipments	50,000	50,000	1,63,827
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	20,000	20,000	55,320
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	20,000	20,000	45,516
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2,72,000	2,72,000	2,83,540
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	38,000	38,000	37,852
G	Training of extension functionaries	10,000	10,000	18,215
H	Maintenance of buildings	10,000	10,000	25,000
I	Farmers field School	10,000	10,000	14,834
J	Library	10,000	10,000	35,604
K	Extension activities	10,000	10,000	35,604
L	IFS	10,000	10,000	25,480
	TOTAL (A)	96,17,000	96,78,360	1,00,34,423
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
	TOTAL (B)			
C. REVOLVING FUND				
	GRAND TOTAL (A+B+C)	96,17,000	96,78,360	1,00,34,423

14.C. Status of revolving fund (Rs. in lakh) for the three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2012 to March 2013	5.23	2.47	5.13	2.58
April 2013 to March 2014	2.58	9.6	8.9	3.2
April 2014 to March 2015	3.20	5.34	5.58	3.43

15. Details of HRD activities attended by KVK staff during 2014 – 15

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates	
				From	To
Mrs. S. Sumathi	SMS - HS	Value addition on millets	Thiruchuli	12-Apr-14	12-Apr-14
Dr. G. Alagukannan	Programme Coordinator	Farmer producer organization and promoting partnership	ACRI, Madurai	25-Jul-14	25-Jul-14
Dr. V. Srinivasan	SMS – AS	Farmer producer organization and promoting partnership	ACRI, Madurai	25-Jul-14	25-Jul-14
Mrs. S. Sumathi	SMS - HS	Farmer producer organization and promoting partnership	ACRI, Madurai	25-Jul-14	25-Jul-14
Mr. P. Velmurugan	SMS – Hort	Farmer producer organization and promoting partnership	ACRI, Madurai	25-Jul-14	25-Jul-14
Mr. M. Ashok Kumar	SMS – PP	Farmer producer organization and promoting partnership	ACRI, Madurai	25-Jul-14	25-Jul-14
Mr. A. Murugan	SMS - AG	Farmer producer organization and promoting partnership	ACRI, Madurai	25-Jul-14	25-Jul-14
Mrs. S. Sumathi	SMS - HS	Gender Sensitization	VISTHAR, Bangalore	15-Sep-14	18-Sep-14
Mrs. S. Sumathi	SMS – HS	Frontier Home Science Technologies for Knowledge and Economic Empowerment	UAS, Dharwad, Karnataka	28-Oct-14	30-Oct-14
Mr. A. Murugan	SMS – AG	Integrated Farming System	TNAU, Coimbatore	27-Oct-14	28-Oct-14
Dr. V. Srinivasan	SMS - AS	Winter School on live stock based livelihood option current situation and Future Prospects	TANUVAS, Namakkal	5-Nov-14	25-Nov-14
Mr. J. Jove	Programme Assistant (Computer)	OLRS - Capacity building Training for Programming Assistant (Computer)	ICAR KVK, Pathanamthitta	11-Nov-14	14-Nov-14
Dr. G. Alagukannan	Programme Coordinator	Management Development programme to Newly Joined PCs of KVKs - I Phase	NAARM, Hyderabad	10-Nov-14	24-Nov-14
Mr. M. Ashok Kumar	SMS – PP	HRD Training on Farmers Field School	TNAU, Coimbatore	20-Nov-14	21-Nov-14
Dr. G. Alagukannan	Programme Coordinator	II Phase Training for New PC's - Best KVK	KVK Karnal, Haryana	27-Nov-14	6-Dec-14
Dr. G. Alagukannan	Programme Coordinator	III Phase Training for New PC's - Best KVK	ZPD, Bangalore, Karnataka	15-Dec-14	19-Dec-14
Dr. G. Alagukannan	Programme Coordinator	National Seminar on Eco friendly farming practices for sustainable Agriculture	Gandhigram Rural University, Dindigul	12-Mar-15	13-Mar-15
Dr. G. Alagukannan	Programme Coordinator	Psychology of Vision	Social Change And Development	9-Apr-15	10-Apr-15
Mrs. S. Sumathi	SMS - HS	Psychology of Vision	Social Change And Development	9-Apr-15	9-Apr-15

SUMMARY FOR 2014 – 15

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management			
Varietal Evaluation	Ground nut	Assessing the suitability of high yielding short duration ground nut varieties	5
	Paddy	Assessing the suitability of high yielding and short duration paddy varieties for river command area	5
	Corriander	Assessment of coriander varieties for high yield	5
	Moringa	Assessment of high yielding drumstick varieties	5
Integrated Pest Management			
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Cropping system and crop intensification			
Total			20

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)	Fish	Assessing the performance of cage culture	3
Total			

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
Integrated Nutrient Management			
Varietal Evaluation			
Integrated Pest Management			
Integrated Crop Management			
Integrated Disease Management			
Small Scale Income Generation Enterprises			
Weed Management			
Resource Conservation Technology			
Farm Machineries			
Integrated Farming System			
Seed / Plant production			
Value addition			
Drudgery Reduction			
Storage Technique			
Others (Pl. specify)			
Total			

Summary of technologies assessed under refinement of various livestock

Thematic areas	Name of the livestock enterprise	Name of the technology refined	No. of trials
Disease Management			
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)			
Total			

Summary of technologies refined under various enterprises

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

Summary of technologies refined under home science

Thematic areas	Enterprise	Name of the technology assessed	No. of trials

5.B.1. Crops

Crop	Name of the technology demonstrated	Variety	Hybrid	Farming situation	No. of De mo.	Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
							Demo			Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
							H	L	A										
Black gram	Demonstration of high yielding Black gram variety VBN – 6	VBN – (Bg) – 6	---	Rabi – 2014	10	4	622	580	601.2	500	20.24	23430	36072	12642	1.6	20345	28320	7975	1.4
Green gram	Demonstration on integrated crop management and Mechanization in Green gram Co (Gg) – 7	Co (Gg) 7	---	Rabi – 2014	10	4	639	479	559	478	16.95	11171	36242	25071	3.2	13072	30333	17261	2.32
Paddy	Demonstration on Total Mechanization in paddy	ASD – 16	---	Rabi – 2014	10	4	6507	6125	6316	5115	23.48	42387	82877	40497	1.9	46156	66501	20345	1.4
Maize	Demonstration on short duration Maize hybrid Co (MH) – 6	---	Co – MH – 6	Rabi – 2014	10	4	4900	4497	4698	3810	23.31	35271	60382	25111	1.7	32520	50700	18180	1.5
Barnyard millets	Demonstration of ICMP on barnyard millets	Co – 2	---	Rabi – 2014	20	8	1750	1450	1600	1181	35.48	19552	39732	20180	2.0	19530	29560	10380	1.5
Chilli	Demonstration on drought resistance technologies in dry land chilli	VKM – Mundu	---	Rabi – 2014	20	4	6.61	4.62	5.61	5.38	14.31	16312	47952	31826	2.93	15455	42030	26575	2.71
Brinjal	Demonstration of water conservation through mulching in brinjal	KKM – 1	---	Karif – 2014	5	2	20.84	17.92	19.38	15.70	23.44	69610	196102	131774	2.81	59944	160180	100216	2.67

Lab Lab	Demonstration on lab lab bush beans as an alternative crop for off season	Co – 14	---	Kari f – 2014	10	4	84.2	70.25	77.27	58.5	32.09	45315	197912	15297	4.15	42218	135455	94081	3.05
Banana	Demonstration of strategies to contain nematode menace in banana	Nadu	---	Rabi – 2014	10	4	28.67	22.95	25.84	21.41	20.69	35800	126820	91020	3.54	34300	107050	72750	3.12
Coconut	Demonstration on integrated pest management in coconut	T X D	---	Rabi 2014	10	4	19150	16420	17785	17630	0.88								

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H – Highest Yield, L – Lowest Yield A – Average Yield

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Milk Yield (lit/day)				% Increase	*Economics of demonstration thousand Rs./unit)				*Economics of check (thousand Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy	GRAND supplement at a dose of 10ml twice daily for 180days in early and mid lactation cows.(TANUVAS, 2012) SMART MM supplement at the rate of 50g daily for 180 days for early and mid lactation cows. (TANUVAS, 2010)	Cross bred cows	30	30	13.56	3.02	6.7	6.32	6.01	34.81	50.27	15.46	1.44	34.02	47.40	13.38	1.39

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	Demo	Check if any
Avg.no.of days required for oestrus sign appearance after the initiation of SMART MM feeding	35.47	326
No. Of AI required for conception	1.57	3.5
Dung consistency	Semisolid	Diarrheic
Avg. body weight gain in 90 days of observation period after initiation of SMART MM and GRAND feeding	14.93 kg	DNA

5.B.3. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units / Area (ha)	Yield (q/ha)				% Increase	*Economics of demonstration Rs./ha				*Economics of check Rs./unit) or (Rs./m2)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps	Composite fish culture with stunted fingerlings	Catla, Rohu, Mrigal, Common Carp	3	0.6	15.92	15.27	15.71	9.84	159.65	85000	235625	150625	2.77	30300	53875	23575	1.77
	Polyculture	Catla, Rohu, Mrigal, Common Carp and Grass carp	2	1.2	10	9.69	9.84			55000	98437.5	43437.5	1.79				
Cat fish	Catfish culture	Pangasionodonhypophthalmus	3	0.35	4.59	4.35	4.44			41250	87753	47603	2.15				
Murrel	Murrel culture	Channa spp.	2	1800 sq.m	16.2	15.7	15.99			122100	479936	357836	3.93				

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

** BCR= GROSS RETURN/GROSS COST

H-High L-Low, A-Average

Data on additional parameters other than yield (viz., reduction of percentage diseases, effective use of land etc.)

Data on other parameters in relation to technology demonstrated			
Parameter with unit		Demo	Check if any
Common carp rearing with stunted yearlings			
2014-15	Age and size of the fish stocked in village pond	12.9 cm length , one year old stunted carp	5cm length, two month old advanced fries
	Fish weight during stocking	15.7g	2.2g
	Fish weight during harvest (4.5 months)	235 g	122.5g
Polyculture	Age and size of the fish stocked in village pond	5cm	
	Fish weight during stocking	0.8 g	
	Fish weight during harvest (4.5 months)	157.5 g	
Pangasionodonhypophthalmus	Age and size of the fish stocked in village pond	11.2cm length, 2month old fingerling	
	Fish weight during stocking	15.5g	
	Fish weight during harvest (4.5 months)	241.67g	

Bottle gourd																			
Capsicum																			
Others (pl. specify)																			
Total																			
Cucumber																			
Tomato																			
Brinjal																			
Okra																			
Onion																			
Potato																			
Field bean																			
Others (pl. specify)																			
Total																			
Commercial crops																			
Sugarcane																			
Coconut																			
Others (pl. specify)																			
Total																			
Fodder crops																			
Maize (Fodder)																			
Sorghum (Fodder)																			
Others (pl. specify)																			
Total																			

H-High L-Low, A-Average

*Please ensure that the name of the hybrid is correct pertaining to the crop specified

Summary of IFS implemented during 2014 – 15

Sl.no.	Name of the farmer and village	Farming situation	Crop /enterprise	Area in ha	Economics of IFS model			
					Gross expenditure in Rs.	Gross income in Rs.	Net return in Rs.	BCR
1	Kingsly, Kutudan kadu-Mangalagiri	Irrigated garden land	Goat+cow+backyard poultry+fodder+banana +coconut+vermicomposting	1.2	614285	1038200	423915	1.69
2	Muthusamy, Kutudan	Dry land farming with minimal irrigation	Fodder crop/cow+goat+Backyard poultry+pigeon+bio gas	0.6	246050	366650	120600	1.49

	kadu-Mangalagiri							
3	Madasa my, Vilathikulam	Dryland farming with irrigation	Maize+Cluster bean/coconut/honey bee+vermicomposting	0.9	29200	70500	41300	2.41

IV. Training Programme

Training for Farmers and Farm Women including sponsored training programmes (On campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Crop Production										
Micro Irrigation/Irrigation	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	4	30	20	50	22	36	58	52	56	108
Horticulture	0	0	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	2	42	12	54	0	0	0	42	12	54
b) Fruits	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	1	8	0	8	9	0	9	17	0	17
Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	5	56	7	63	36	3	39	92	10	102
Integrated farming system	1	0	0	0	8	12	20	8	12	20
Home Science/Women empowerment	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Value addition	3	12	16	28	2	11	13	14	27	41
Others (Farmer producer organization formation and its role in the lives of farmers)	1	18	0	18	12	0	12	30	0	30
Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	2	17	0	17	7	0	7	24	0	24
Organic bio input production	2	19	21	40	2	6	8	21	27	48
Others (Oyster Mushroom cultivation)	1	2	7	9	1	5	6	3	12	15
Fisheries	0	0	0	0	0	0	0	0	0	0
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
TOTAL	22	204	83	287	99	73	172	303	156	459

Training for Farmers and Farm Women including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Crop Production	0	0	0	0	0	0	0	0	0	0
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	1	0	12	12	0	8	8	0	20	20
Integrated Crop Management	6	57	24	81	22	10	32	79	34	113
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Horticulture	0	0	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low value and high volume crop	0	0	0	0	0	0	0	0	0	0
Drought mitigation methods for horticulture crops	2	22	9	31	2	13	15	24	22	46
Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	2	41	17	58	24	0	24	65	17	82
Animal Disease Management	0	0	0	0	0	0	0	0	0	0
Feed and Fodder technology	0	0	0	0	0	0	0	0	0	0
Role of livestock in integrated farming	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment	0	0	0	0	0	0	0	0	0	0
Household food security by kitchen gardening and nutrition gardening	1	0	15	15	0	0	0	0	15	15
Designing and development for high nutrient efficiency diet	2	0	19	19	0	24	24	0	43	43
Gender mainstreaming through SHGs	1	0	28	28	0	23	23	0	51	51
Value addition	4	16	41	57	0	27	27	16	68	84
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery production	0	0	0	0	0	0	0	0	0	0
Rural Crafts	2	0	18	18	0	40	40	0	58	58
Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	11	218	30	248	34	5	39	252	35	287
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Demonstration of genetically improved farmed Tilapia	0	0	0	0	0	0	0	0	0	0
Murrel culture	0	0	0	0	0	0	0	0	0	0
Agro-forestry	0	0	0	0	0	0	0	0	0	0
Tree planting programme in waste land development	0	0	0	0	0	0	0	0	0	0

TOTAL	32	354	213	567	82	150	232	436	363	799
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Training for Rural Youths including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Integrated farming	0	0	0	0	0	0	0	0	0	0
soil testing and fertilizer management	1	0	9	9	0	7	7	0	16	16
vegetable and fruit cultivation	1	11	0	11	0	0	0	11	0	11
Value addition	3	17	17	34	9	8	17	26	25	51
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	1	15	3	18	1	0	1	16	3	19
Poultry production	3	24	0	24	6	0	6	30	0	30
Pest management in coconut	0	0	0	0	0	0	0	0	0	0
Maternal and child health	1	0	10	10	0	16	16	0	26	26
TOTAL	10	67	39	106	16	31	47	83	70	153

Training for Rural Youths including sponsored training programmes (off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Pest and disease management	1	0	20	20	0	3	3	0	23	23
Value addition	1	0	9	9	0	14	14	0	23	23
Low cost and nutrient efficient diet designing	1	0	15	15	0	0	0	0	15	15
TOTAL	3	0	44	44	0	17	17	0	61	61

Training programmes for Extension Personnel including sponsored training programmes (on campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Nematode management in banana	1	16	0	16	0	0	0	16	0	16
Training on important viral diseases affecting livestock and poultry	1	19	5	24	9	0	9	28	5	33
Innovative extension strategies	1	17	9	26	7	8	15	24	17	41
Training on Precision farming and Integrated farming system	1	11	0	11	0	0	0	11	0	11
Child psychology and Over all Child development	1	5	31	36	4	9	13	9	40	49
Importance of nutrition kitchen and Herbal garden	1	4	5	9	3	2	5	7	7	14
Total	6	72	50	122	23	19	42	95	69	164

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	Tot	M	F	Tot	M	F	Tot
Gender sensitization training for extension officials	1	0	21	21	0	5	5	0	26	26
Total	1	0	21	21	0	5	5	0	26	26

Sponsored training programmes

S.No	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			M	F	Tot	M	F	Tot	M	F	Tot
1	ICMP on Groundnut	1	6	17	23	0	0	0	6	17	23
2	Quality seed selection and importance of seed treatment	1	12	5	17	15	6	21	27	11	38
3	Importance of Tree planting and its uses	1	8	9	17	12	8	20	20	17	37
4	Master training programme to Agriculture officials on chilli production and quality improvement	1	20	5	25	15	1	16	35	6	41
5	Solanaceous vegetable cultivation package of practices	1	18	5	23	8	3	11	26	8	34
6	Kitchen garden establishment and nutritious food preparation methods	2	0	17	17	0	21	21	0	38	38
7	Maternal and child health	1	24	24	48	0	0	0	24	24	48
8	Processing, Value addition and marketing of millets	3	20	52	72	2	6	8	22	58	80
9	Integrated Pest Management in agriculture and horticulture crops	5	58	0	58	22	22	44	80	22	102
10	Integrated farming system	1	20	0	20	5	0	5	25	0	25
11	Popularization of Annatto for natural edible dye in Tamil Nadu	1	76	15	91	24	21	45	100	36	136
12	Value addition on fruits and vegetables	1	0	25	25	0	10	10	0	35	35
13	Masala product preparation	1	0	18	18	0	6	6	0	24	24
14	Goat rearing as an income generation activity for rural women	1	0	6	6	0	3	3	0	9	9
15	Friends of coconut trees	1	25	0	25	15	0	15	40	0	40
16	Establishment and maintenance of nutrition garden and balanced diet	1	11	6	17	10	15	25	21	21	42
	Total	23	298	204	502	128	122	250	426	326	752

Details of Vocational Training Programmes carried out for rural youth

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			M	F	Tot	M	F	Tot	M	F	Tot
1	Crop production and management	0	0	0	0	0	0	0	0	0	0
1.a	Friends of coconut training	1	25	0	25	15	0	15	40	0	40
2	Post harvest technology and value addition	2	0	43	43	0	16	16	0	59	59
3.	Livestock and fisheries										
4.	Income generation activities	1	0	6	6	0	3	3	0	9	9
4.a.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
4.b.	Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
4.c	Tailoring, stitching, embroidery, dyeing etc.	0	0	0	0	0	0	0	0	0	0
5	Agricultural Extension	0	0	0	0	0	0	0	0	0	0
5.a.	Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
	Grand Total	4	25	49	74	15	19	34	40	68	108

V. Extension Programmes

Nature of Extension Programme	No. of Program mes	No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel		
		M	F	Tot	M	F	Tot	M	F	Tot
Field Day	2	31	12	43	18	7	25	5	2	7
Exhibition	4	178	1856	2034	84	1382	1466	4	10	14
Film Show	1			Mass			Mass	2		2
Method Demonstrations	0	0	0	0	0	0	0	0	0	0
Workshop	0	0	0	0	0	0	0	0	0	0
Group meetings	8	0	76	76	0	52	52	2	5	7
Lectures delivered as resource persons	23			Mass			Mass	5	3	8
Newspaper coverage	3			Mass			Mass	0	0	0
TV talks	2			Mass			Mass	0	0	0
Popular articles	9			Mass			Mass	0	0	0
Extension Literature	7			Mass			Mass	0	0	0
Advisory Services	78	7547	3456	11003	4952	3545	8497	0	0	0
Scientific visit to farmers field	374	952	568	1520	698	936	1634	0	0	0
Farmers visit to KVK	0	654	110	764	198	262	460	0	0	0
Animal health camp	29	125	45	170	102	91	193	12	4	16
Self Help Group Conveners meetings / PLF	6	0	168	168	0	75	75	0	2	2
Celebration of important days (Women's day)	5	0	3598	3598	0	1512	1512	2	15	17
ATMA Meeting	5			Mass			Mass	0	0	0
Farm field school	11	102	3	105	18	8	26	4	2	6
Farmers meeting	9	95	15	110	65	12	77	0	0	0
PRA	2	29	6	35	9	2	11	0	0	0
Total	578	9713	9913	19626	6144	7884	14028	36	43	79

VI. PRODUCTION OF SEED/PLANTING MATERIAL

9.A. Production of seeds by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Unit Cost Rs.	Number of farmers to whom provided
Cereals (crop wise)	Paddy	ASD 16		11.34	17102		
Vegetables	Kitchen garden seed kit			225	825	5	225
Fodder crop seeds	Fodder sorghum	Co -29		0.08	3560	400	8
	Azolla			0.008	165	20	16
	Napier hybrid		Co-4	4500	700	0.25	4
Tuber	Cassava	Sri Vijaya		120	440	3.5	4
Total				4856.428	22792		257

9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Fruits	Sapota	PKM1		181	6450	124
	Amla	BSR1		22	555	12
	Lemon			6	165	5
	Moringa			260	350	224
	Pomaganate			27	1015	12
	Batham			14	535	10
	Mango	Bangalora, Neelam,		146	5210	54

	Anona			3	90	2
	Guava	L 49		202	7000	54
	Jack Fruit			13	540	6
	Seetha			3	65	1
Ornamental plants	Cleodentran			20	120	10
	Acalipa(crotans)	brown		17	139	5
	Jasmine			22	122	5
	Gun powder			46	562	21
Plantation crops	Coconut	TxD		133	3082	52
	Jack furit			40	1890	25
Speices	Curry leaf			385	3534	58
Medicinal plants	Adathoda			1	7	1
	Agave			21	410	15
Forest Species	Neem			490	4850	254
	Vagai			55	750	34
	Peepul tree(arasu)			2	14	1
	Pungam			45	775	24
	Tamirind			3	120	1
	Gauva			25	225	5
	asoka			2	30	1
Total				2184	38605	1016

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity in qtl	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	Azospirillum	0.82	4100	16
	Azophos	2.032	10150	31
	Phosphobacteria	0.236	1180	4
	Rhizopos	1.896	9480	13
Bio-fungicide	Pseudomonas	0.836	6688	36
	T.viridi	0.428	3424	14
	Vermicompost	5.88	5880	55
Others (specify)	Mushroom (in qtl)	0.94	15040	62
	Bio – char (in qtl)	0.84	336	3
	EMA (in lit)	845	50700	76
	Slurry (in lit)	248	7440	4
Total			114418	314

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Goat	Kanni adu and Kodi adu	13	30000	2
Poultry		0	0	0
Duals (broiler and layer)	Vanaraja	906	102294	65
	Namakkal-1			
	Egg	2963	20804	1240
Japanese Quail	J.quail, Namakkal-1	1097	31394	24
	Egg	2883	7637	1520
Total		7862	192129	2851

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2013-14

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	1379	1162	379	68950
Water Samples	575	571	296	28750
Plant samples	14	14	14	14000
Others (specify)	96	96	33	5100
Total	2034	1843	722	1,16,800

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
Nil

IX. NEWSLETTER

Number of issues of newsletter published
One

X. RESEARCH PAPER PUBLISHED

Number of research paper published
Three

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

Activities conducted				
No. of Training programmes	No. of Demonstration's	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)

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ICAR KVK Tuticorin (Hosted by SCAD) make NEWS...

TIRUNELVELI

THE NEW INDIAN EXPRESS
MADURAI TUESDAY 7 OCTOBER 2014

UN Ambassador Visits KVK Centre at Thoothukudi

Express News Service

Thoothukudi: Angelo Antonio Toriello, the Special Envoy to the Permanent Mission of São Tomé and Príncipe to the United Nations, visited Krishi Vigyan Kendra (KVK) centre of the Indian Council of Agricultural Research (ICAR) at Vagaikulam in the district recently.

He visited the different demonstration units at KVK instructional farm like biofertilizer unit, vermicompost, ornamental fish culture, Azolla, mushroom production units, puerary, dairy, goat and poultry units and interacted with the subject specialists of different streams.

Following that, he visited the veterinary camp organised by KVK at Muthukumarapuram, village common pond renovated by SCAD Group of Institutions and interacted with women self-help group (SHG) members of Pudiyamputhur village, who are involved in readymade garment manufacturing.

After seeing the integrated rural development initiatives, he appreciated the KVK authorities and asked them to continue their good work. Alagukannan, programme coordinator, narrated the activities to Toriello which are carried out by KVK for the betterment of farming community.



Angelo Antonio Toriello, Special Envoy to the Permanent Mission of São Tomé and Príncipe to UN, during his visit to KVK Centre at Vagaikulam | EXPRESS

SCIENCE & TECHNOLOGY / AGRICULTURE 17

FARMER'S NOTEBOOK

Thuthukudi farmers grow beans to overcome water shortage

About Rs. 85,000 to Rs. 90,000 as net income is generated in 100 days

M.J. PRABU

Thoothukudi district of Tamil Nadu is largely a semi-arid region. The climate is semi-arid, with high temperatures and low rainfall. The water shortage is a major problem for the farmers in the region. The farmers are growing beans to overcome the water shortage. Beans are a drought-tolerant crop and can be grown in semi-arid conditions. The farmers are growing beans in the district. Beans are a drought-tolerant crop and can be grown in semi-arid conditions. The farmers are growing beans in the district.



TRIAL SAYS: The variety is capable of producing 8-10 tonnes of green pod per acre.

Preferred crops
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THE HINDU TIRUNELVELI

THE NEW INDIAN EXPRESS
MADURAI FRIDAY 12 SEPTEMBER 2014

Organic baby corn yield fruitful for this farmer

"Since less water is required, farmers need not rely wholly on rains"

Dharmaraj Paul Joseph

Thoothukudi: Cultivation of organic baby corn (capsicum) has become a profitable venture for a farmer at Puthiyamputhur in Tuticorin district. The farmer has been growing baby corn for the past few years. The farmer has been growing baby corn for the past few years. The farmer has been growing baby corn for the past few years. The farmer has been growing baby corn for the past few years.



SWEET SAYS: Baby corn crop raised at Puthiyamputhur in Tuticorin district on Sunday. PHOTO: M. RAJESH

SWEET SAYS: Baby corn crop raised at Puthiyamputhur in Tuticorin district on Sunday. The farmer has been growing baby corn for the past few years. The farmer has been growing baby corn for the past few years. The farmer has been growing baby corn for the past few years.

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Prosopis Pod Feed Production Unit Inaugurated

Express News Service

Thoothukudi: A feed production unit using prosopis pod (Seemai Karuvelam) was inaugurated by S Pradhaban, Dean, Veterinary College and Research Institute, Tirunelveli, at Subramaniyapuram, near Vilathikulam, on Wednesday.

Under the guidelines and technological support of SCAD Krishi Vigyan Kendra, a farmer, Sundar Raj, named MSB Foster Production Mill, to exclusively produce nutritious and less cost fodder from prosopis pods.

The inaugural function was presided over by Amali Cletus Babu, Vice-Chairperson, SCAD Group of Institutions and Senate Member of Tamil Nadu Veterinary university, Chennai.



S Pradhaban, Dean, Veterinary College and Research Institute, Tirunelveli, addressing the farmers at Subramaniyapuram near Vilathikulam on Thursday | EXPRESS

Delivering the inaugural address, Pradhaban stressed the importance of making use of the non-traditional livestock feed like prosopis in bringing down the feed cost. He claimed that steady shrinkage of natural pastures and common grazing land, shortage of green and dry fodders and escalation of livestock feed costs have put the livestock owners under great pressure. The fodder shortage often results in lesser milk yield and productivity and this severely cuts down the profit ratio of the livestock owners, claimed Pradhaban. Feed alone accounts to 60-70 percent of the production cost of milk and meat and though several initiatives were taken to alleviate the fodder shortage by the fodder research stations, the benefits of those initiatives have not been percolated to the rural livestock owners, claimed Pradhaban.

Prosopis is a drought tolerant tree often considered as a notorious invasive tree, has the potential to bring down the livestock feed cost as the fruits of prosopis tree are high in sugar and protein, which can be used as a good source of livestock feed, claimed Pradhaban. Though the villagers feed their animals, no concerted effort has been made to collect and prepare livestock feed using prosopis fruits and the feed production unit would bridge the gap, added Pradhaban. The livestock owners have been asked to make use of prosopis pod to bring down the cost as the wheat bran and other commercial feed costs about ₹25 per kg while prosopis pod feed costs only ₹16 per kg. The women self help group (SHGs) members and rural youth have also been asked to collect the prosopis pods to earn a considerable income by the sale of the pods to the livestock feed production mill.

SCIENCE & TECHNOLOGY / AGRICULTURE 15

FARM QUERY

Vegetables in dryland

Is there a possibility of growing vegetables in my three acre dryland near Ramanathapuram, Tamil Nadu?

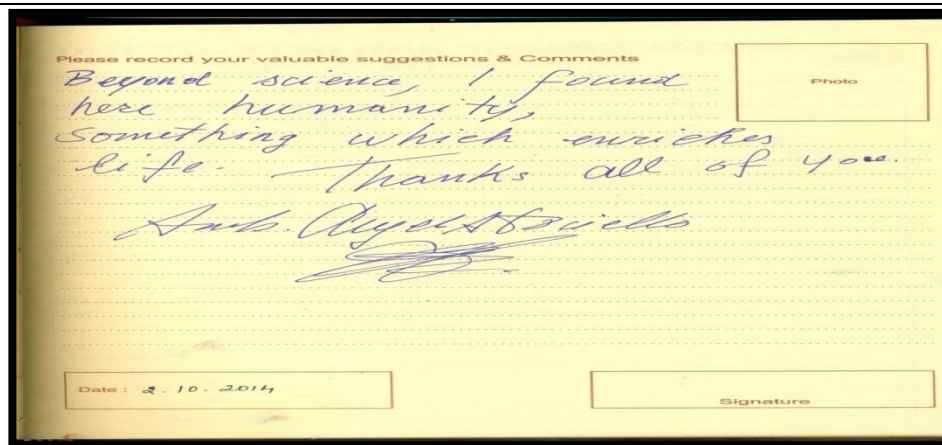
A. SALAM
Chennai

You can contact Dr. G Alagukannan Programme coordinator at 09942978627, SCAD (social change and development) Krishi Vigyan Kendra, Muvaiathanendal Post, Vagaikulam, Tuticorin 628102 email: pescadkvk@gmail.com Phone: 0461-2269306, Fax: 0461-2269306 and web site address: www.scadkvk.org for details regarding growing vegetables in dryland. The Kendra has been successfully demonstrating growing lab lab beans in Tirunelveli dry areas.

Readers are invited to send their queries with full postal address to 'Farm Queries', The Hindu, Kasturi Buildings, 859/860, Anna Salai, Chennai 600002 or email to farmqueries@thehindu.co.in

AR KVK, Tuticorin in Experts View

Mr. Angelo Antonio Toriello.,
UN Ambassador



Dr. M. J. Chandre Gowda.,
Principal Scientist(Agri. Extension)

Dr.Rashmi Agrawal.,
Director IAMR

Concluding remarks:

KVK team is working hard and has good rapport with the villages and farmers. They need guidance and exposure to latest developments. They must keep in touch with other KVKs, visit if required, to learn and improve the activities carried out by them. Knowledge and resource centre role of KVK needs to be emphasized.

It was indeed a pleasure visiting KVK, Tuticorin. You planned the work during our visit **excellently**.

Our visit to various villages indicated visibility of KVK activities in the rural areas which is **appreciable**. The range of its technology transfer activities and the manner in which KVK is organizing these are **impressive**. It was **nice to see the eagerness** with which our suggestions for more effective implementation of the mandated and other functions of the KVK were received by you and other members of the team. We are impressed by your and Team members' **dedication** and especially liked the '**Humane approach**' in delivering services. We wish all the very best.

