ANNUAL REPORT 2010-11

(FOR THE PERIOD APRIL 2010 TO MARCH 2011)

KRISHI VIGYAN KENDRA, KANYAKUMARI

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		
Krishi Vigyan Kendra, Tamil Nadu Agricultural University, Pechiparai – 629 161, Kanyakumari District Tamil Nadu	04651-281759	04651-281759	kvkppi@tnau.ac.in	www.tnau.ac.in

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

Address	Telephone		E mail	Web Address
	Office	Fax		
Tamil Nadu Agricultural University, Coimbatore-641 003	0422-2431222	0422-2431672	vc@tnau.ac.in registrar@tnau.ac.in dee@tnau.ac.in	www.tnau.ac.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. K.Eraivan Arutkani Aiyanathan	-	09442947203	eraivan@rediffmail.com

1.4. Year of sanction:

1.5. Staff Position (as 31st March 2011)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	M/F	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale	Basic pay	Date of joining KVK	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. K.Eraivan Arutkani Aiyanathan	Professor and Head	M	Plant Pathology	Ph. D	37400-67000	57290	16.05.2007	Permanent	BC
2	SMS	Dr.T. Thangaselvabai	Associate Professor	F	Horticulture	Ph. D	37400-67000	47800	01.04.2004	Permanent	BC
3	SMS	Dr.S. Suresh	Associate Professor	M	Soil Science	Ph. D	37400-67000	46400	01.06.2006	Permanent	BC
4	SMS	Dr. S. Irulandi	Assistant Professor	M	Agrl. Entomology	Ph. D	15600 – 39100	24850	04.01.2010	Permanent (Probationer)	SC
5	SMS	Dr. S. Srivara Buddhi Bhuvaneswari	Assistant Professor	F	Agrl. Extension	Ph. D	15600 – 39100	24850	05.01.2010	Permanent (Probationer)	BC
6	SMS	Dr. T. Selvakumar	Assistant Professor	M	Agronomy	Ph. D	15600 – 39100	24850	14.08.2010	Permanent (Probationer)	BC
7	SMS	Dr. R. Balakumbahan	Assistant Professor	M	Horticulture	Ph. D	15600 – 39100	24850	10.02.2011	Permanent (Probationer)	BC
8	Programme Assistant (Lab Tech.)/T-4	Mrs. K.R.Sudha	Programme Assistant (Technical)	F	Agrl. Extension	M.Sc. (Agri.)	9300-34800	11130 / 4400	04.06.2007	Permanent	BC
9	Programme Assistant (Computer)/ T-4	Mr.V.Sivaraman	Programme Assistant (Computer)	M	Computer Science	B.Sc (Computer Science)	9300-34800	10230 / 4400	08.12.2008	Permanent	BC
10	Programme Assistant/ Farm Manager	Mrs.K. Gayathiri Devi	Farm Manager	F	Agricultural Science	B.Sc (Agri.)	9300-34800	14100 / 4800	28.02.2011	Permanent (Probationer)	SC
11	Assistant	Mr. M.Venugopal	Superintendent	M	-	-	9300-34800	14100 / 4800	20.09.2006	Permanent	OC

12	Jr. Stenographer	Mrs. N. Mariaselvi	Assistant	F	-	-	5200-20200	11630 / 2600	09.05.2006	Permanent	BC
13	Driver	Mr. G. Jeyasekharan	Driver	M	-	-	5200-20200	9030 / 2400	01.05.2004	Permanent	SC
14	Driver	Mr.J.Appu	Driver	M	-	-	5200-20200	9030 / 2000	30.09.10	Permanent	BC
15	Supporting staff	Tmt. K. Sarasam	PUSM	F	-	-	4800-10000	6860 / 1300	01.03.2010	Permanent	BC
16	Supporting staff	Mrs. M.Baby	PUSM	F	-	-	4800-10000	6380 / 1300	13.04.2009	Permanent	BC

1.6. Total land with KVK (in ha) : 17.28 ha

S. No.	Item	**Area (ha)**
1	Under Buildings	-
2.	Under Demonstration Units	1.0
3.	Under Crops	7.29
4.	Orchard/Agro-forestry	10.41
5.	Others	-

1.7. Infrastructural Development:

A) Buildings : Nil

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 **	-	-	-	-	-	-	-
2.	Farmers Hostel	-	-	-	-	-	-	-
3.	Staff Quarters	-	-	-	-	-	-	-
	1	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-
4.	Demonstration Units	-	-	-	-	-	-	-
	1	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	-	-	-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9		-	-	-	-	-	-	-
10		-	-	-	-	-	-	-

** The present administrative building of Krishi Vigyan Kendra is the trainees hostel of Horticultural Research Station, Tamil Nadu Agricultural University, Pechiparai constructed under NARP Phase II during 1992.

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Mahindra - Bolero LX/2WD	2004	4,97,141	112776	Good
Two wheeler - Hero Honda splendor	2009	46,193	13704	Good
Two wheeler - Honda activa	2009	47,875	8050	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Fax machine	2009	15,000.00	Good
LCD Projector with Stabilizer	2006	61,230.00	Good
Laptop	2006	38,700.00	Good
Drum seeder	2006	4,700.00	Good
Coconut climber	2006	2,500.00	Good
Cono weeder	2006	2,360.00	Good
Star- weeder	2006	510.00	Good
Digital camera	2006	18,500.00	Good
Spectrophotometer	2004	75,072.00	Good
Flame photometer	2004	36,720.00	Good
Physical balance	2004	1,15,000.00	Good
Water distillation Still	2004	26,118.00	Good
Kjeldahl digestion and distillation	2004	24,589.00	Good
Shaker	2004	44,077.00	Good
Refrigerator	2004	15,750.00	Good
Grinder	2004	11,582.00	Good
Khelplus	2004	1,48,086.00	Good
UPS	2004	10,250.00	Good
Soil storage cabin	2004	37,496.00	Good
Digital Video camera	2003	56,550.00	Good
Furniture	2003	1,99,982.00	Good
Overhead projector	2003	19,500.00	Good
Cordless mike Studio master	2003	5,860.00	Good
Pepper thresher	2002	11,500.00	Good
Tractor Ferguson	2002	3,80,739	Good
Computer	2000	76,117.00	Good

1.8. Details SAC meeting conducted in 2010-11

Sl. No.	Date	Number of Participants	No. of absentees	Salient Recommendations	Action taken
1. .	20.09.2010	30	NIL	Purchase one premier power operated weeder and demonstrate it to the farmers, commodity based groups etc.	❖ Steps initiated for the purchase of the power operated weeder ❖ Conducted one training on the power operated weeder in paddy ❖ FLD on mechanization of paddy is going to be conducted for this year (2011-12)
				Make arrangement to demonstrate rice transplanter and train the rural unemployed youth to operate rice transplanter.	❖ Conducted demonstration on "Paddy transplanter" and transplanting was made at Therur ❖ Conducted off campus training on "Mechanisation in Paddy cultivation" ❖ Conducted demonstration cum training on Paddy transplanter in collaboration with State Department of Agricultural Engineering and ARS, Thirupathisaram
				Submit proposal to ICAR for the purchase of farm implements for "Farm Mechanization" during action plan meeting.	❖ Proposal for farm implements requirements were included in the XII five year plan proposal
				Conduct a survey on utility / benefits / advantages of Navara rice	❖ Navara rice is not cultivated in larger scale. Because it is not used for consumption. It is being used for different kinds of medical treatments. ❖ Though it gives half of the yield when compared with existing varieties, it fetches two fold market prices than existing varieties. ❖ Aromatic and Medicinal Plants Research Station, Odakkali, Earnakulam is requested for the information on Navara rice such as physiological, nutritional and medicinal properties.
				Awareness on coconut tonic is to be made at large scale	❖ Coconut tonic awareness programme (Training & demonstrations) to farmers and village youths were conducted in five villages *viz.* Valukkamparai, Pechiparai, Colachel, Thuvarankadu and Esanthimangalam ❖ Training to extension functionaries was also organized
				Establish banana growers association based on the area under this crop.	❖ Farmers were identified in Melpuram and Rajakkamangalam blocks ❖ Formation of Banana Growers Association has been already

					initiated
				Banana fiber production enterprise needs to be revolutionized. Banana fiber extracting machineries may be demonstrated. Trainings are to be arranged for handicrafts making out of banana by products.	❖ Conducted one vocational training and one on campus training on "Banana fibre extraction and processing" for farm women. ❖ Steps initiated for the purchase of Banana fibre extraction unit
				Collect elite germplasm of Tapioca and conserve it in the instructional farm for demonstration purpose.	❖ Five tapioca types were collected from CTCRI and Kanyakumari local and planted in nursery
				KVK should take effort to popularize different crop boosters through trainings/ demonstrations and mass media effectively.	❖ Conducted off campus training on Root feeding of Coconut tonic ❖ FLD on ICM on Balck gram is going to be conducted for this year (2011-12) and pulses booster is going to be demonstrated in the same
				Popularize the fodder variety Co4 in large scale and create awareness among the extension officials of line departments especially Agriculture and Animal Husbandry during monthly zonal workshops. Publish pamphlets about the importance and production technology of this fodder variety in vernacular language and distribute to the farmers for awareness.	❖ FLD programme on Popularization of fodder variety CO 4 will be conducted during 2011-2012. ❖ Preparation of pamphlets on CNH Co-4 is in progress. ❖ Importance of fodder crop cumbu napier Co-4 was explained in Zonal meeting
				Develop a model fodder bank in the KVK farm with all types of fodder crops.	❖ Purchased the seeds of COFS 29, fodder cowpea and Hedge Lucerne. ❖ Planting taken up in KVK farm
				KVK should establish demonstration plot for Co4 fodder	❖ Established demonstration plot for CO 4 fodder variety
				Involve all the officials of line departments related to Agriculture and allied fields in KVK activities.	❖ State Department of Agriculture, Horticulture, Animal husbandry and Agricultural engineering were involved in all the KVK activities like OFT, FLD, trainings, demonstrations and extension activities

				KVK should involve Department of Animal Husbandry and UTRC, TANUVAS, Parakkai wherever possible	❖ Associate Professor and Head, UTRC, TANUVAS, Parakkai and Assistant Veterinary Surgeon, Office of Assistant Director of Animal husbandry, Parakkai was involved on implementation of OFT on control of ranikhet disease in desi birds with oral pellet RDVK vaccine and also for the distribution of slips of Guinea grass CO(GG) 3 to the beneficiaries of parakkai village.
				Coconut farmers should be organized into groups and CIG on coconut may be formed for their empowerment in all dimensions.	❖ CIG groups for coconut were formed in Melakrishnanpudur and Puthalam villages
				KVK should arrange for an exposure visit to research stations and university campuses to acquire first hand knowledge.	❖ 15 progressive farmers and farm women of Kanyakumari District were taken to KVK, TANUVAS, Namakkal to get first hand knowledge on Animal Husbandry and poultry aspects. ❖ 100 Farmers were taken on exposure visit to TNAU and Agri Fair at CODDISIA, Coimbatore
				Conduct a feasibility study on growing mulberry as an intercrop in rubber garden by establishing a demo unit on rubber intercropping with any one of the mulberry variety in rubber plantation.	❖ Arrangements were made for the collection of planting materials ❖ On initiation of monsoon planting will be initiated
				More number of rural youth has to be trained on usage of coconut climbers.	❖ Training and demonstrations were organized in Thuvarankadu, Valukkamparai and Esanthimangalam villages for the rural youth on the usage of coconut climber. New youth coconut group was formed for mechanical coconut harvesting.
				Take initiative to create awareness on value addition of coconut and it's by products.	❖ Initiated arrangements to empower with skills on value addition of coconut and also made arrangements for extraction and utilization of coconut fiber
				A newly released black gram variety VBN – 4 has to be introduced as rice fallow pulse	❖ FLD on ICM on Balck gram is approved and will be conducted in 2011-12. The Black gram variety VBN – 4 will be popularized as rice fallow pulse in the ensuing season
				Popularize acid soil management technologies through trainings and	❖ In the FLD programme on Acid Soil Management ten field demonstrations were conducted ❖ Three off- campus trainings were organized at Thuvarankadu,

				demonstrations.	Esanthimangalam and Trirupathisaram villages. Two on campus training programmes were organized
				Popularize the utilization of neem coated fertilizers and neem based pesticides.	❖ Five trainings and demonstrations were organized to farmers in Thuvatankadu, Pechiparai, Esantrhimangalam, Arasankuli and Thirupathisaram villages to popularize the utilization of neem coated fertilizers and neem based pesticides
				Popularize soil fertility status enchancement technologies like application of organic manures and soil test based fertilizer.	❖ Vocational training on vermicomposting was organized for the rural youths ❖ Training and demonstration on *in-situ* green manuring for coconut was organized ❖ Demonstration on I*n-situ* green manuring after the harvest of second season rice was carried out in 10 farmers holding at Thuvarankadu, Esanthimangalam and Arasankuli villages. ❖ The fertilizer recommendation is given based on STCR-IPNS approach using DSSIFER software.
				Create awareness on mealy bug management in crops to farmers and Extension officials	❖ Conducted survey on papaya mealy bug in crops ❖ Conducted one off campus, three on campus and one Extension functionary training on “Papaya mealy bug and its management”

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.	Coconut based integrated farming system
2.	Paddy based integrated farming system
3.	Horticultural crops based mixed cropping system

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

S. No	Agro-climatic Zone	Characteristics
1.	West coast plains and Ghat region (High rainfall Zone)	Krishi Vigyan Kendra, Kanyakumari is lies 8°26' N latitude, 77° 19'E langitude, Altitude 76MSL. Average Maximum, Minimum temperature is 31.2 and 22.3° C respectively. Average rainfall ranges about 2186mm, RH 83%.

S. No	Agro-ecological situation	Characteristics
1.	The uplands	Comprising of hills and hill bases suitable for growing crops like Rubber, Cloves, Nutmeg, Pepper, Pineapple etc.
2.	The Middle	Comprising of plains and valleys fit for growing crops like Paddy, Tapioca, Banana, Coconut etc.
3.	The low lands	Comprising the coastal belt ideal for growing Coconut, Cashew etc.

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Lateritic soil	Reddish brown sandy clay loam	20,033
2.	Red soils	• Red, yellowish red and yellowish brown sandy clay loam • Brown, dark gray and grayish brown sandy clay • Brown and dark brown sandy clay loam • Yellowish red sandy loam • Dark yellowish brown sandy clay loam and sandy loam • Yellowish red gravelly sandy loam	65,608
3.	Coastal alluvium	Very pale brown sand	3,830
4.	Alluvium	Brown sandy clay loam	1,590

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

S. No	Crop	Area (ha)	Production (000' tons)	Productivity (kg /ha)
1.	Paddy	17710	81611	4608
2.	Pulses (Blackgram)	986	296.8	301
3	Coconut	24864	2725 lakh nuts	10960 Nuts/ha
4.	Banana	5633	134685	23910
5.	Tapioca	7817	199427	25512
6.	Cashew	1938	1573.6	812
7.	Mango	1735	4925.6	2839
8.	Jack	773	10232.9	13238
9.	Pepper	134	20.1	150

10.	Rubber	23357	12847	550
11.	Arecanut	532	818.2	1538
12.	Cloves & Cinnamon	596	525.6	882
13.	Ginger	131	2620	20,000
14.	Pineapple	33	1220.7	36,993
15.	Cucumber	258	1806	7000
16	Jasmine	117	-	-

Source: Office of Joint Director of Agriculture, Nagercoil, Kanyakumari and Hortistat, 2009 published by Department of Agriculture, Chennai

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
April 2010	123	34	21	73
May'10	418	31	22	80
June'09	187	30	23	90
July'10	192	29	21	84
August'10	213	30	21	82
September'10	71	30	21	83
October'10	347	30	20	89
November'10	595	29	17	12
December'10	148	27	17	81
January '2011	6	32	18	89
February'11	119	33	18	76
March'11	76	34	18	80

* Source: Meteorology data, Horticultural Research Station, Pechiparai

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

Category	Population	Production	Productivity
Cattle			
Crossbred	99934	15012101	
Indigenous	5645	-	
Buffalo	17215	-	
Sheep	1196	-	
Crossbred	1548	-	
Indigenous	-	-	
Goats	57115	-	
Pigs	1266	-	
Crossbred	-	-	
Indigenous	-	-	
Rabbits	2103	-	
Poultry	463824	-	
Hens	253287	-	
Desi	-	-	
Improved	-	-	
Ducks	1674	-	
Turkey and others	-	-	

Category	Area	Production	Productivity
Fish	-	-	-
Marine	42 villages	39628 tonnes	
Inland	4158 ha	4058 tonnes	
Prawn			
Scampi			
Shrimp			

Source: District Statistical Handbook, 2009 published by Office of Assistant Director of Statistics, Department of Economics and Statistics, Kanyakumari

2.7 District profile has been prepared and submitted Yes / No: **Yes**

2.8 Details of Operational area / Villages

Sl. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK (specify the years)	Major crops & enterprises being practiced	Major problems identified	Identified thrust areas
1.	Thovalai	Thovalai	Thalakudi, Boothapandi, Thirupathisaram, Chenbagaraman puthur, Kozhikottupothai Thuvarankadu	7 years	Paddy	Labour scarcity for transplanting, weeding and harvesting.	System of Rice Intensification
				8 years		Imbalance and excess application of fertilizers with low organics	Integrated Plant Nutrient System
			Thovalai	5 years	Banana	Nutritional disorders due to soil acidity and excess application of N,P & K	Integrated Nutrient Management
			Thovalai	5 years	Tapioca	Imbalance and excess application of fertilizers	Optimum fertilization schedule
			Thuvarankadu	2 years	Cucumber	Susceptibility of local cultivars to pest and diseases and poor yield	Improving the yield through introducing higher yielder and adoption of advanced production technologies
			Thazhagudi Shenbagaraman pudur	2 years	Dairy farming	Low quantity and quality of milk production due to shortage of green fodder	Popularization of mixed green fodder crops
			Thuvarankadu Therisanamkoppu	2 years	Backyard poultry	Low level of income and nutrition among the rural women	Empowering rural women financially and nutritionally through backyard poultry
						Occurrence of ranikhet disease in desi chicken	Oral pellet vaccine to control ranikhet disease
			Thovalai	5 years	Jasmine	Irregular flowering & poor yield in off season	Induction of off season flowering
			Thovalai	4 years	Marigold	Cultivation of local cultivars and low production	Introduction of F1 hybrid and resource management
2..	Agastheeswaram	Agastees waram	Therur, Agastheeswaram	7 years	Rice fallow pulses	Low yield and susceptible to YMV	Black gram (Vamban 5)
		Rajakka mangala m	Rajakamangalam, Puthalam	8 years	Coconut	Coastal soil salinity Button shedding	Green manuring and root feeding of TNAU tonic

		Agastees waram	Agasteeswaram Punnarkulam Erumbukadu Kattuvilai	7years	Banana	Improper planting and manuring techniques, Pest and disease incidence, Low yield, low quality and profit	Hi tech production techniques in banana cultivation Planting techniques (High density planting) Split application of nutrients, IPM, bunch covering
			Periya vilai Azhagappapuram Pottalkulam	4 years	Tapioca	Improper sett treatment, nutrient management, Occurrence of mosaic disease, incidence of scale insect, Poor yield and profit	Single bud nursery production, sett treatment, INM and IPM
		Rajakka mangala m	Puthalam	2 years	Dairy farming	Low quantity and quality of milk production due to shortage of green fodder	Popularization of mixed green fodder crops
3.	Kallkulam	Melpuram	Thiruvattar Thiruparappu Ponmanai Kaliyal	7 years	Pepper	Improper nutrient management, Incidence of quick wilt, Slow wilt (due to nematode), Low yield and profit	Management of quick wilt and slow wilt, INM, and IPM
4.	Kalkulam & Vilavancod e	Melpuram	Arumanai Muttaikadu Kolvel Anducodu	4 years	Ginger	Low yield due to the cultivation of local cultivars, soft rot and weevil incidence	Introduction of high yielding variety and IPM,

2.9 **Priority thrust areas**

S. No	Thrust area
1	System of rice intensification
2	Integrated plant nutrient system for rice
3	Introduction of new high yielding black gram variety and resource management
4	Integrated resource management in coconut
5	Coastal soil salinity management for coconut
6	*In situ* green manuring and root feeding of coconut tonic
7	Integrated resource management in banana
8	Integrated nutrient management for nutritional disorders in banana
9	Fertilization schedule assessment for tapioca
10	Introduction of high yielding cucumber variety for banana based intercropping system
11	Nutrient, pest and disease management and processing techniques for pepper and tree pices
12	Introduction of high yielding varieties in Ginger, pest and disease management
13	Introduction of high yielding varieties in marigold and resource management
14	Off season flower induction, INM,IPM in jasmine
15	Single bud nursery production technique, sett treatment, INM and IPM in tapioca
16	e-marketing
17	By product utilization in banana and coconut

18	Composting and recycling of organic wastes
19	Enhancing production & productivity in pulses
20	Introduction of new high yielding varieties of fodder
21	Higher productivity of green fodder
22	Enhancing milk quality and quantity
23	Nutrition security and income generation through backyard poultry
24	Market extension

PART III - TECHNICAL ACHIEVEMENTS

3.A. 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
7	7	40	40	9	9	90	90

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
105	109	2840	2699	407	409	--	5769

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
		Egg fruit seedlings	270
--	--	Pineapple suckers	3000
		Pepper rooted cuttings	1560
		Cumbu Napier stem cuttings	500

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
		Pseudomonas	67.25 kg.
--	--	Micro nutrient mixture	350 kg.
		Coconut tonic	765 nos.

3.B1. 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	
1	Varietal evaluation	Paddy	Low productivity	Assessment of suitable paddy variety for Kanyakumari District	-	-	-	1	1	50 kg			No. -	Kg -
2	IPM in banana	Banana	Occurrence of pseudostem weevil in banana	Management of pseudostem weevil in banana	-	1	-	-	-	-	-	-	-	-
3	IPM in rose	Rose	Low yield due to the sucking pests	Management of sucking pest in rose	-	1	-	-	1	-	-	-	-	-
4	Reducing the fruit drop and improving the yield	Pepper	Improper resource management, incidence of quick and slow wilt, low yield and profit	Foliar Nutrition for the management of berry drop in pepper	-	3	-	1	1	-	-	-	-	-
5	Higher production and long shelf life	Rose	Low production and poor shelf life	Evaluation of performance of rose variety *Gladiator*	-	2	-	-	1	-	1000	-	-	-
6	INM	Banana	Nutritional disorder	Management of micronutrient disorders in banana	-	3	1	1	1	-	-	-	Azophos	4
7	Oral pellet vaccine to control ranikhet disease	Poultry	Occurrence of ranikhet disease in desi chicken	Control of Ranikhet disease in desi birds	-	1	-	-	-	-	-	-	Oral pellet vaccine: 500 nos Lasota vaccine : 2 vials	-
8	SRI	Paddy	Low productivity	-	Popularization of SRI	7	-	1	1	50kg	-	-	-	
9	Popularization of hybrid	Paddy	Low productivity	-	Popularization of CORH3 rice	3	-	-	1	50kg	-	-	-	
10	IPNS	Paddy	Imbalance and excess application of inorganic fertilizers	-	Integrated plant nutrient supply system in paddy	6	1	1	2	-	-	-	Azophos	4Kg

11	IPM	Paddy	Low yield due to stem borer	-	Integrated pest management for yellow stem borer in paddy	3	-	1	1	-	-	-	-	-
12	Resource management / higher production	Banana	Incidence of pseudostem weevil, wilt and leaf spot disease low yield, quality and profit	-	Hi tech production protocol for Nendran banana	7	-	-	1	-	-	-	-	50kg *Pseudomonas*
13	ICM in Marigold	Marigold	Low yield due to cultivation of local cultivar	-	Integrated crop management in marigold	3	-	-	1	-	-	-	-	-
14	IPM in Ginger	Ginger	Occurrence of rhizome weevil and soft rot in ginger	-	Management of rhizome weevil and soft rot in ginger	2	-	-	-	-	-	-	-	-
15	Popularization of mixed green fodder crops	Dairy farming	Low quantity and quality of milk production due to shortage of green fodder	-	Popularizing mixed fodder crops for increasing milk quantity and quality	2	-	-	-	*Desmanthus* : 5 Kgs	Guinea grass CO (GG) 3 : 10000 rooted slips	-	-	
16	Empowering rural women financially and nutritionally through backyard poultry	Poultry	Low level of income and nutrition among the rural women	-	Backyard poultry rearing	1	-	-	1	-	-	One month old chicks of Kaveri breed : 125 Nos with feed (275 Kgs)	-	-

3.B2. Details of technology used during reporting period

S.No	Title of Technology	Source of technology	Crop/enterprise	No.of programmes conducted			
				OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Assessment of suitable paddy variety for Kanyakumari District	TNAU	Paddy	5	-	1	1 (Field day)
2	Management of pseudostem weevil in banana	TNAU & NRCB	Banana	5	-	1	-
3	Management of sucking pest in rose	IIHR	Rose	5	-	1	1 (Field day)
4	Foliar Nutrition for the management of berry drop in pepper	TNAU & IISR	Pepper	5	-	4	1 (Field day)
5	Evaluation of performance of rose variety *Gladiator*	TNAU & IARI	Rose	5	-	2	
6	Management of micronutrient disorders in banana	TNAU	Banana	5	-	4	1 Field Day
7	Control of Ranikhet disease in desi birds	TANUVAS	Poultry	10	-	1	-
8	Popularization of SRI	TNAU	Paddy	-	10	8	1 (Field day)
9	Popularization of CORH3 rice	TNAU	Paddy	-	10	3	1 (Field day)
10	Integrated plant nutrient supply system in paddy	TNAU	Paddy	-	10	7	1Field Day
11	Integrated pest management for yellow stem borer in paddy	TNAU	Paddy	-	10	3	1 (Field day)
12	Hi tech production protocol for Nendran banana	TNAU	Banana	-	10	7	
13	Integrated crop management in marigold	TNAU	Marogold	-	10	3	
14	Management of rhizome weevil and soft rot in ginger	TNAU	Ginger	-	10	2	-
15	Popularizing mixed fodder crops for increasing milk quantity and quality	TNAU	Fodder	-	10	2	1 (Exposure visit)
16	Backyard poultry rearing	TANUVAS	Poultry	-	10	1	1 (Exposure visit)

3.B2 contd..

No. of farmers covered															
OFT				FLD				Training				Others (Specify)			
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
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
4	1	-	-	-	-	-	-	25	9	1	0	12	15	2	1
5	-	-	-	-	-	-	-	3	51	-	-	-	-	-	-
	1	3	1	-	-	-	-	8	0	14	9	7	1	10	11
4	1	-	-	-	-	-	-	23	29	11	16	24	6	2	0
4	-	1	-	-	-	-	-	14	31	-	-	4	16	-	
4	1	-	-	-	-	-	-	94	20	9	2	26	16	3	2
-	8		2	-	-	-	-	1	7	0	2	-	-	-	-
-	-	-	-	5	1	4	-	60	80	7	1	18	1	1	0
	-	-	-	9	-	1	-	30	14	8	2	2	11	2	2
-	-	-	-	7	1	2	-	123	46	14	11	20	10	**3**	**2**
-	-	-	-	5	-	4	1	48	10	23	16	19	25	5	16
-	-	-	-	10	-	-	-	93	53	9	5	-	-	-	-
-	-	-	-	9	-	1	-	19	28	-	-	-	-	-	-
-	-	-	-	9	-	1	-	35	1	1	0				
-	-	-	-	7	2	1	-	34	6	0	0	11	2	-	1
-	-	-	-	1	7	-	2	1	7	0	2	11	2	-	1

PART IV - On Farm Trial

4.A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	-	-	-	-	-	-	-	1	-	1
Varietal Evaluation	1	-	-	-	-	-	1	-	-	2
Integrated Pest Management	-	-	-	-	-	1	1	-	-	2
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	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Total	1	-	-	-	-	1	2	1	-	5

4.A2. Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management						1				1
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										
Mushroom cultivation										
Total						**1**				**1**

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 of Management	-	1	-	-	-	1
Value Addition						
Production and Management						
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

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
Integrated Nutrient Management					
	Pepper	Foliar Nutrition for the management of berry drop in pepper	1	5	3
Varietal Evaluation	Paddy	Assessment of suitable paddy variety for Kanyakumari District	1	5	3
	Rose	Evaluation of performance of rose variety *Gladiator*	1	5	3
Integrated Pest Management	Banana	Management of pseudostem weevil in banana	1	5	3
	Rose	Management of sucking pest in rose	1	5	3
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					
Mushroom cultivation					
Total			5	25	15

4.B.2. Technologies **Refined** under various **Crops**

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Integrated Nutrient Management	Banana	Management of micronutrient disorders in banana	1	5	3
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					
Mushroom cultivation					
Total			**1**	**5**	**3**

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	Poultry – Desi birds	Oral pellet RDVK vaccine	1	10
Value addition				
Production and management				
Feed and fodder				
Small scale income generating enterprises				
Total			1	10

4.B.4. Technologies Refined 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				
Feed and fodder				
Small scale income generating enterprises				
Total				

4.C1. Results of Technologies Assessed
Results of On Farm Trial -1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Rice	Wetland	Low yield	Assessment of suitable paddy variety for Kanyakumari District	5	Co(R)-50	Plant height	104cm	Recorded the increased yield over the existing recommended variety TPS – 3 (5.15 %)	Increased yield Farmers faced problem in marketing since it is medium slender in size The price also low as compared to bold type TPS -3	Nil	Nil
						Productive tillers per hill	15				
						No. of filled grains per panicle	117				
						1000 grain weight	22.7g				
						Average yield	6.12 t/ha				
Banana	Irrigated	Occurrence of pseudostem weevil in banana	Management of pseudostem weevil in banana	5	Injection of monocrotophos 36 WSC @ 4ml (54 ml ofmonocrotophos with 350 ml of water)at two heights viz.,45 & 150cm in the pseudostem at monthly interval from 5th to 8th months.	1.Infestation (%)	6.37	Injection of monocrotophos 36 WSC @ 4ml (54 ml of monocrotophos with 350 ml of water) at two heights viz.,45 & 150cm in the pseudostem at monthly interval from 5th to 8th months recorded the results in good control efficiency and also increased the yield	Pseudo stem injection with monocrotophos effectively controlled the pseudostem weevil.	-	-
						2.Control efficacy (%)	85.84				
						3.Yield (qtl/ha)	458.34				
					Injecting Azadirachtin 10000 ppm (1:4 ratio) @ 2ml/plant at heights viz., 45cm & 150 cm in the pseudostem at monthly interval from 5th to 8th months	1.Infestation (%)	8.91				
						2.Control efficacy (%)	78.75				
						3.Yield (qtl/ha)	443.19				
					Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana (Pseudostem trap @ 100/ha) and placing in the ground soil.	1.Infestation (%)	7.53				
						2.Control efficacy (%)	81.86				
						3.Yield (qtl/ha)	449.68				
Pepper	Rainfed	Poor fruit set and berry drop	Foliar Nutrition for the management of berry drop in Pepper	5	Foliar application of KNo3 (1%)+ NAA 25ppm	Fruit set %	83	Foliar application of nutrients produced 28% higher yield than the farmers	As the technology resulted in higher yield and profit it is highly acceptable and adoptable	-	-
						No.of spikes/ vine	122				

						No. of days for maturity	210	practice			
						Yield/vine Wet (Kg)	5.46				
						Dry (Kg)	1.63				
Rose	Irrigated	Petal shedding and poor shelf life in commercial rose cultivars	Performance evaluation of rose var. *Gladiator*	5	Rose var. *Gladiator*	No. of shoots	21.4	Rose cv. *Gladiator* produced large size flowers with long stalks and more shelf life without petal shedding	Though the variety produced large sized flowers with good quality and shelf life under wet land conditions its establishment is very slow	Recommended for Garden land	-
						Flower/plant	18.4				
						Single Flower wt (g)	8.6				
						Petals/flower	17.5				
						Shelf life	4days				
						Total yield	120 q/ha				
Rose	Irrigated	Low yield due to the sucking pests	Management of sucking pest in rose	5	Spray Acephate 1.5 g/lit.	1.Thrips population/flower	8.40	Thiomethoxam recorded highest (96.38%) reduction of thrips population. The mean population of thrips/flower was 1.16 as compared with farmer practices was 23.22.	Thrips in rose was effectively managed by Thiomethoxam.	-	-
						2. Population reduction (%)	73.69				
						3.Yield (qtl/ha)	109.10				
					Spraying of Imidacloprid 200SL @ 0.005% (0.3ml/lit)	1.Thrips population/flower	1.73				
						2. Population reduction (%)	94.59				
						3.Yield (qtl/ha)	115.70				
					Spraying of Thiomethoxam 25 WG @ 25g/100lit.	1.Thrips population/flower	1.16				
						2. Population reduction (%)	96.38				
						3.Yield (qtl/ha)	117.95				
Poultry	-	Occurrence of ranikhet disease in desi chicken	Control of Ranikhet disease in desi birds	10	Oral pellet RDVK vaccine	Mortality rate (percentage)	0.0 %	Vaccination with oral pellet vaccine resulted in no mortality of chicks.	As it is in a pellet form, vaccinating birds at home level is easy. It does not require any skill to do so.	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Assessment of suitable paddy variety for Kanyakumari District					
CR 1009	-	5.26	t/ha	19,500	1.65
TPS – 3	TNAU	5.82	t/ha	25,830	1.96
Co(R)-50	TNAU	6.12	t/ha	25,020	1.93
Management of pseudostem weevil in banana					
Monocrotophos spray	-	414.68 qtl/ha	Qtl/ha	3,31,280	2.97
Injection of monocrotophos 36 WSC @ 4ml (54 ml ofmonocrotophos with 350 ml of water)at two heights viz.,45 & 150cm in the pseudostem at monthly interval from 5^{th} to 8^{th} month	TNAU	458.34 qtl/ha	Qtl/ha	3,84,840	3.33
Injecting Azadirachtin 10000 ppm (1:4 ratio) @ 2ml/plant at heights viz., 45cm & 150 cm in the pseudostem at monthly interval from 5^{th} to 8^{th} months	TNAU	443.19qtl/ha	Qtl/ha	3,61,000	3.12
Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana (Pseudostem trap @ 100/ha) and placing in the ground soil.	NRCB, Trichy	449.68/ha	Qtl/ha	3,74,280	3.27
Foliar Nutrition for the management of berry drop in Pepper					
No spray	-	1.17	Kg/Vine	67,830	2.4
DAP 1.5% at berry set and fruit development stage (2Sprays)	TNAU	1.42	Kg/Vine	99,510	3.0
KNo3 (1%)+ NAA 25ppm at berry set and fruit development stage (2Sprays)	IISR	1.63	Kg/Vine	1,13,370	3.4
Performance evaluation of rose var. *Gladiator*					
Andra Red rose	-	75	q/ha	82,000	1.80
Edward rose	TNAU	82	q/ha	94,000	1.86
Rose var. Gladiator	IARI	120	q/ha	1,12,000	1.94
Management of sucking pest in rose					
Monocrotophos spray	-	86.37 qtl/ha	Qtl/ha	26,330	1.44
Spray Acephate 1.5 g/lit.	TNAU	109.10 qtl/ha	Qtl/ha	49,100	1.82
Spraying of Imidacloprid 200SL @ 0.005% (0.3ml/lit)	IIHR	115.70 qtl/ha	Qtl/ha	54,500	1.91
Spraying of Thiomethoxam 25 WG @ 25g/100lit	IIHR	117.95 qtl/ha	Qtl/ha	57,950	1.96

Control of Ranikhet disease in desi birds					
No Vaccine	-	135	Kg / 120 birds	20250	3.38
1. Lasota or F.1. vaccine intranasal or intraocular on 7 th day 2. R2B vaccine subcutaneous or intramuscular on 8 th week 3. RDVK vaccine intramuscular on 16 th week	TANUVAS	150	Kg / 120 birds	22500	3.65
1. To feed oral pellet vaccine on the 10 th to 12th day after hatching 2.To feed oral pellet vaccine on the 8 th week 3. RDVK vaccine intramuscular on 16 th week	TANUVAS	150	Kg / 120 birds	22500	3.65

4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

OFT - 1

1 Title of Technology Assessed : **Assessment of suitable paddy variety for Kanyakumari District**

2 Problem Definition : Low yield

3 Details of technologies selected for assessment :

Technology option	Technology
Technology option 1 (Farmer's practice)	CR 1009
Technology option 2	TPS – 3
Technology option 3	Co(R)-50

4 Source of technology : TNAU. Coimbatore

5 Production system and thematic area : Paddy-Paddy
Assessment of high yielding variety for low land rice.

6 Performance of the Technology with performance indicators :

S.No.	Name & Village	Technology option 1			Technology option 2			Technology option 3		
		Productive tillers per hill	No. of filled grains per panicle	Yield (t/ha)	Productive tillers per hill	No. of filled grains per panicle	Yield (t/ha)	Productive tillers per hill	No. of filled grains per panicle	Yield (t/ha)
1	A. Shanmugampillai Azhagu, Theroor Post	13	96	5.3	14	105	5.8	15	119	6.1
2	A. Killari, Ramapuram,	12	95	5.7	15	111	6.3	16	125	6.6
3	V. Arumuganadar, Mahathana puram	13	98	5.2	14	108	5.9	15	118	6.1
4	P. Saraswathi, Kurunthangodu	12	90	4.7	16	109	5.2	14	110	5.8
5	K. Rajaiyyan Irachakulam	15	92	5.4	15	108	5.9	15	113	6
	Average	**13**	**94.2**	**5.26**	**14.8**	**108.2**	**5.82**	**15**	**117**	**6.12**

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Increased yield
Farmers faced problem in marketing since it is medium slender in size
The price also low as compared to bold type TPS -3

8 Final recommendation for micro level situation : Since Co(R)-50 is medium slender marketing is difficult and it can be cultivated under contract faming based on the local requirement

9 Constraints identified and feedback for research : Nil

10 Process of farmers participation and their reaction : Farmers actively participated in farmers meeting, training and field assessment
Farmers realized increase in yield due to new variety

OFT – 2

1 Title of Technology Assessed : **Management of pseudostem weevil in banana**

2 Problem Definition : Occurrence of pseudostem weevil in banana

3 Details of technologies selected for assessment :

S.No	Technology options	Details of Technology
1	Technology option 1 (Farmer's practice)	Monocrotophos spray
2	Technology option 2	Injection of monocrotophos 36 WSC @ 4ml (54 ml ofmonocrotophos with 350 ml of water)at two heights viz.,45 & 150cm in the pseudostem at monthly interval from 5th to 8th month
3	Technology option 3	Injecting Azadirachtin 10000 ppm (1:4 ratio) @ 2ml/plant at heights viz., 45cm & 150 cm in the pseudostem at monthly interval from 5th to 8th months
4	Technology option 4	Application of *Beauveria bassiana* 25 gm in the pseudostem of the banana (Pseudostem trap @ 100/ha) and placing in the ground soil.

4 Source of technology : NRCB, Trichy and TNAU

5 Production system and thematic area : Banana - pest management

6 Performance of the Technology with performance indicators

S. No	Name of the farmer & village	Data on the performance indicators of the Technology assessed Pest / Disease Intensity (%)											
		Technology option 1			Technology option 2			Technology option 3			Technology option 4		
		% of incidence at different level	% control efficiency	Yield (qtl/ha)	% of incidence at different level	% control efficiency	Yield (qtl/ha)	% of incidence at different level	% control efficiency	Yield (qtl/ha)	% of incidence at different level	% control efficiency	Yield (qtl/ha)
1	Ramesh, Chenkodi	12.82	71.51	426.30	6.50	85.56	456.0	9.70	76.90	439.0	7.25	83.52	445.6
2	Rajesh, Chenkodi	11.80	73.78	423.60	5.75	87.22	460.5	9.20	78.09	441.5	7.90	79.74	450.3
3	A.Ringle kumar, Chenkodi	13.95	69.00	413.00	6.30	86.00	453.0	8.75	80.56	444.0	8.20	81.36	452.0
4	A.vettice, Thiruvattor	12.50	72.22	412.50	7.10	84.22	463.2	8.10	79.17	445.3	7.80	81.50	449.5
5	D.Mercyboy, Kolvel	14.60	67.56	398.00	6.20	86.22	459.0	**8.80**	79.05	446.2	7.40	83.18	451.0
Mean		**13.13**	**70.81**	**414.68**	**6.37**	**85.84**	**458.3**	**8.91**	**78.75**	**443.2**	**7.53**	**81.86**	**449.7**

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : --

8 Final recommendation for micro level situation : Injection of monocrotophos @4ml (at 45 & 150 cm height) effectively checked the population of pseudostem weevil. It can be popularized to create the importance among the farming community.

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction : Technology is accepted by the farmers and they were actively participated in the trial programme to know the technology for pseudostem weevil management.

OFT - 3

1 Title of Technology Assessed : **Foliar Nutrition for the management of berry drop in Pepper**

2 Problem Definition : Poor fruit set and berry drop

3 Details of technologies selected for assessment

Technology option 1	(Farmer's practice)
Technology option 2	DAP 1.5% at Berry set and fruit development stage (2 Sprays)
Technology option 3	KNo3 (1%)+ NAA 25ppm at Berry set and fruit development stage (2Sprays)

4 Source of technology : TNAU & IISR

5 Production system and thematic area : Spice based mixed cropping, improve fruit set and to reduce berry drop for higher production and profit

6 Performance of the Technology with performance indicators

Farmer No.	Name of the farmer& village	Data on the performance indicators of the technology assessed											
		Technology Option 1				Technology Option 2				Technology Option 3			
		Fruit set %	No.of spikes/ vine	Yield/ Kg/vine Dry	No.days for maturity	Fruit set %	No.of spikes/ vine	Yield/ Kg/vine Dry	No.days for maturity	Fruit set %	No.of spikes/ vine	Yield/ Kg/vine Dry	No.days for maturity
1.	J.Joshua, Thiruvattar.	69.0	101	1.18	225	70.0	107.0	142	229	86	128	1.62	210
2.	P. Hentry, Kottur,	66.4	97	1.16	225	71.2	111.0	1.49	215	82	131	1.59	212
3.	Raman kani, Orunooramvayal	67.0	90	1.17	221	73.5	106.0	1.43	210	84	114	1.60	214
4.	G.Murugan, Enchavili,	65.3	94	1.18	223	70.0	110.0	1.45	216	83	118	1.64	212
5.	M.Valarmathi, Chemparuthivilai,	67.3	88	1.16	226	75.3	111.0	1.41	220	80	119	1.7	202
		67	**94**	**1.17**	**224**	**72**	**109**	**1.44**	**218**	**83**	**122**	**1.63**	**210**

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : --

8 Final recommendation for micro level situation : Since the technology resulted in higher yield and profit it is recommended for adoption

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction : Farmers actively participated and accepted the technology

OFT - 4

1. Title of Technology Assessed : **Performance evaluation of rose var. *Gladiator***
2. Problem Definition : Petal shedding and poor shelf life in commercial rose cultivars
3. Details of technologies selected for assessment

Technology option 1	Andhra red rose
Technology option 2	Edward rose
Technology option 3	Rose var.*Gladiator*

4 Source of technology : TNAU & IARI

5 Production system and thematic area : Irrigated wetland Paddy-Banana –Flower based cropping, Higher production and shelf life without petal shedding

6 Performance of the Technology with performance indicators

Farmer No.	Name of the farmer& village	Data on the performance indicators of the technology assessed											
		Technology Option 1				Technology Option 2				Technology Option 3			
		No. of shoots	No. of Flower/plant	Single Flower wt (g)	Shelf life	No. shoots	Flower/plant	Single Flower wt (g)	Shelf life	No. shoots	Flower/plant	Single Flower wt (g)	Shelf life Days)
1.	V.George Karnan, Azhagappapuram	34.8	25.0	2.2	2	25.2	23.0	2.2	2	22.0	19.3	8.6	4
2.	M.Anthoni, Rajavoor	36.2	26.0	2.5	2	24.3	22.4	2.0	2	17.9	15.8	9.3	4
3.	M.Chandran, Rajavoor	38.4	24.3	2.8	2	20.6	20.0	2.8	2	22.0	18.0	7.6	4
4.	Murugan,Koozhikottupothai,	32.5	15.6	2.0	2	22.2	22.0	2.5	2	22.0	17.4	8.4	4
5.	K. Suresh, Thovalai	40.1	20.6	2.0	2	25.7	25.6	3.5	2	23.1	21.5	9.1	4
		36.4	**22.3**	**2.3**	**2**	**23.6**	**22.6**	**2.6**	**2**	**21.41**	**18.4**	**8.6**	**4**

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : Though the variety produced large sized flowers with good quality and shelf life under wet land conditions its establishment is very slow

8 Final recommendation for micro level situation : Since the variety resulted in higher yield and profit it is recommended for adoption in garden land situation

9 Constraints identified and feedback for research : The initial establishment is very difficult in wetland conditions due to poor drainage and aeration. Recommended for garden land conditions or the physical properties of the soil is to be improved to facilitate drainage and aeration

10 Process of farmers participation and their reaction : Farmers actively participated and accepted the technology

OFT - 5

1 Title of Technology Assessed : **Management of sucking pest in rose**

2 Problem Definition : Low yield due to sucking pest in rose

3 Details of technologies selected for assessment :

S.No	Technology options	Details of Technology
1	Technology option 1 (Farmer's practice)	Monocrotophos spray
2	Technology option 2	Spraying Acephate 1.5 g/lit.
3	Technology option 3	Spraying of Imidacloprid 200SL @ 0.005% (0.3ml/lit)
4	Technology option 4	Spraying of Thiomethoxam 25 WG @ 25g/100lit

4 Source of technology : IIHR

5 Production system and thematic area : Rose - pest management

6 Performance of the Technology with performance indicators

S. No	Name of the farmer & village	Data on the performance indicators of the Technology assessed											
		Technology option 1			Technology option 2			Technology option 3			Technology option 4		
		Thrips poplation/ flower	Popualtion reduction (%)	Yield (qtl/ha)	Thrips poplation/ flower	Popualtion reduction (%)	Yield (qtl/ha)	Thrips poplation/ flower	Popualtion reduction (%)	Yield (qtl/ha)	Thrips poplation/ flower	Popualtion reduction (%)	Yield (qtl/ha)
1	S. Murugan Kozhikottupothai	21.0	34.38	80.20	10.00	68.75	105.0	1.50	95.31	117.5	1.20	96.25	119.0
2	Thangam Kozhikottupothai	22.50	29.69	85.00	9.50	70.03	107.0	1.25	96.09	116.5	0.90	97.19	118.5
3	AMery Densely Rajavur	24.12	24.63	89.50	8.50	73.43	110.0	1.80	94.38	114.5	1.00	96.88	116.75
4	A.Devi kanjana Kozhikottupothai	23.50	26.56	90.00	8.00	75.00	112.5	2.10	93.44	115.5	1.20	96.25	117.5
5	T.Kasi Kozhikottupothai	25.00	21.88	87.15	6.00	81.25	111.0	2.00	93.75	115.0	1.50	95.31	118.0
	Mean	**23.22**	**27.43**	**86.37**	**8.40**	**73.69**	**109.1**	**1.73**	**94.59**	**115.7**	**1.16**	**96.38**	**117.95**

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : --

8 Final recommendation for micro level situation : Spraying of Thiometoxam effectively reduced the thrips population in rose.

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction : Technology is accepted by the farmers and willing to follow the technology.

OFT - 6

1. Title of Technology Assessed : **Control of Ranikhet disease in desi birds**
2. Problem Definition : Occurrence of ranikhet disease in desi chicken
3. Details of technologies selected for assessment:

S.No	Technology options	Details of Technology
1	Technology option 1 (Farmer's practice)	No Vaccine
2	Technology option 2	1. Lasota or F.1. vaccine intranasal or intraocular on 7 th day 2. R2B vaccine subcutaneous or intramuscular on 8 th week 3. RDVK vaccine intramuscular on 16 th week
3	Technology option 3	1. To feed oral pellet vaccine on the 10 th to 12th day after hatching 2.To feed oral pellet vaccine on the 8 th week 3. RDVK vaccine intramuscular on 16 th week

4. Source of technology : TANUVAS, Chennai
5. Production system and thematic area : Disease management
6. Performance of the Technology with performance indicators :
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

Technology parameters	Technological option I	Technological option II		Technological option III	
		+ ve attitude	- ve attitude	+ ve attitude	- ve attitude
Mortality rate	10 %	X X X X X X X X X X (10)	0	X X X X X X X X X X (10)	0
Availability of inputs	-	X X X X X (5)	X X X X X (5)	0	0
Skill required to adopt (Complexity)	-	XX (2)	X X X X X X X X (8)	X X X X X X X X X X (10)	0
Trialability	-	XX (2)	X X X X X X X X (8)	X X X X X X X X X X (10)	0
Adoptability	-	XX (2)	X X X X X X X X (8)	X X X X X X X X X X (10)	0
Scoring	-	+ 21	- 29	+ 40	0
Total scoring	-	- 8		**+ 40**	

8 Final recommendation for micro level situation : Oral pellet RDVK vaccine is effective in controlling ranikhet disease in desi birds and it does not require any skill to administer the vaccine. Hence this vaccine should be commercialized and made available at block or taluk level for further adoption

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction : Sensitized and diagnosed the problem. Also sensitized the effectiveness or results of different treatments tested.

4.D1. Results of Technologies Refined

Results of On Farm Trial

Crop/ enterprise	Farming situation	**Problem definition**	Title of OFT	No. of trials	Technology refined	Parameters of refined	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11
Banana	Irrigated	Soil acidity along with the indiscriminate application of fertilizers and micronutrient disorder	Management of micronutrient disorder in banana	5	Application of Dolomite (50g) at time of pit filling. Fertilization with Urea 150 kg/acre., and muriate of potash - 250 kg/acre and soil application of micronutrient mixture 75 kg/acre at 3rd, 5^{th} and 7^{th} month after planting and SSP - 200 kg/acre at 3^{rd} month. Azospirillum and phosphobacteria each @ 100 pkts/acre at planting and 5^{th} month	Bunch weight No. of hands/bunch No. of fruits/bunch	9.5kg 5.1 40.5	The technology resulted in increased yield of 11.8%.	The reclamation of soil acidity with balanced fertilization with micronutrients managed the disorder and thereby yield is sustained.	Application of Dolomite (50g) at time of pit filling with balanced fertilization and micronutrients application.

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13		14	15	16	17
Technology Option 1 Application of NPK Complex, DAP, Urea and muriate potash each at 50 to 100g at monthly interval	-	25.10	t/ha	1,61,820	2.16
Technology Option 2 Application of Urea – 150 kg/acre, and muriate of potash – 250 kg/acre and foliar spray of $ZnSO_4$ (0.5%), $FeSO_4$(0.2%), $CuSO_4$(0.2%), and H_3BO_3(0.1%) at 3rd, 5^{th} and 7^{th} month after planting and SSP 200 kg/acre at 3^{rd} month. Azospirillum and phosphobacteria each @ 100 pkts/acre at planting and 5^{th} month	TNAU	29.45	t/ha,	2,36,850	2.62
Technology Option 3 Application of Dolomite (50g) at time of pit filling. Fertilization with Urea 150 kg/acre., and muriate of potash - 250 kg/acre and soil application of micronutrient mixture 75 kg/acre at 3rd, 5^{th} and 7^{th} month after planting and SSP - 200 kg/acre at 3^{rd} month. Azospirillum and phosphobacteria each @ 100 pkts/acre at planting and 5^{th} month	TNAU	26.35	t/ha,	1,92,550	2.28

4.D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the proforma below

1 Title of Technology refined : Management of micronutrient disorders in banana

2 Problem Definition : The soil acidity along with the indiscriminate application of straight fertilizers without micronutrients fertilizer, organic and bio-fertilizer has led to the nutrient disorders and yield loss.

3 Details of technologies selected for refinement :

S.No	Technology options	Details of Technology
1	Technology option 1 (Farmer's practice)	Application of NPK Complex, DAP, Urea and muriate potash each at 50 to 100g at monthly interval
2	Technology option 2	Application of Urea – 150 kg/acre, and muriate of potash – 250 kg/acre and foliar spray of $ZnSO_4$ (0.5%), $FeSO_4$(0.2%), $CuSO_4$(0.2%), and H_3BO_3(0.1%) at 3rd, 5th and 7th month after planting and SSP 200 kg/acre at 3rd month. Azospirillum and phosphobacteria each @ 100 pkts/acre at planting and 5th month
3	Technology option 3	Application of Dolomite (50g) at time of pit filling. Fertilization with Urea 150 kg/acre., and muriate of potash - 250 kg/acre and soil application of micronutrient mixture 75 kg/acre at 3rd, 5th and 7th month after planting and SSP - 200 kg/acre at 3rd month. Azospirillum and phosphobacteria each @ 100 pkts/acre at planting and 5th month

4 Source of technology **:** TNAU

5 Production system and thematic area **:** Banana - Banana

6 Performance of the Technology with performance indicators **:**

Sl. No.	Name of farmer & village	Data on the Performance indicator of the Technology assessed														
		Technology option 1					Technology option 2					Technology option 3				
		Bunch Wt. (kg)	No. of hands/ bunch	No. of fruits/ Bunch	Yield (kg/ha)	BCR	Bunch Wt. (kg)	No. of hands/ bunch	No. of fruits/ Bunch	Yield (kg/ha)	BCR	Bunch Wt. (kg)	No. of hands/ bunch	No. of fruits/ Bunch	Yield (kg/ha)	BCR
1	P. Ganesan Veeravanallur	8.0	4.1	34.1	24,800	2.13	9.7	5.3	39.1	30,070	2.68	8.3	4.3	36.2	25,730	2.23
2	Neelakanda Pillai Veeravanallur	7.9	4.6	36.2	24,890	2.11	9.4	5.1	42.1	29,140	2.59	8.6	4.7	38.3	26,660	2.31
3	Nesaiyan Veeravanallur	8.2	4.5	35.0	25,420	2.19	9.6	5.0	40.0	29,760	2.65	8.4	4.5	37.6	26,040	2.26
4	Narayanivadivu Veeravanallur	8.1	4.5	36.1	25,110	2.16	9.5	4.9	41.8	29,450	2.62	8.5	4.8	39.0	26,350	2.28
5	Ayyappan Veeravanallur	8.3	4.3	34.4	25,730	2.21	9.3	5.2	39.5	28,830	2.57	8.7	4.7	34.4	26,970	2.34
	Mean	8.1	4.4	35.1	25,100	2.16	9.5	5.1	40.5	29,450	2.62	8.5	4.6	37.1	26,350	2.28

7 Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : The feedback from the farmers in terms of technical viability, economical feasibility in adopting the foliar application of micronutrients were collected. All the farmers of the village got convinced and satisfied with the technology assessed

8 Final recommendation for micro level situation : Application of Dolomite (50g) at time of pit filling. Fertilization with Urea 150 kg/acre and muriate of potash - 250 kg/acre and soil application of micronutrient mixture 75 kg/acre at 3rd, 5th and 7th month after planting and SSP - 200 kg/acre at 3rd month. Azospirillum and phosphobacteria each @ 100 pkts/acre at planting and 5th month

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction : The Trial was conducted in participatory approach. The farmers were participated in all stages of treatment incorporations. They themselves involved in recording observations and yield of banana. The farmers were impressed and started adopting the technology in the current season. More number of farmers participated in the field day.

PART V - FRONTLINE DEMONSTRATIONS

5.A. Summary of FLDs implemented during 2010-11

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	
	Oilseeds													
	Pulses													
	Cereals													
	Paddy	Wetland	*Kharif*, 2010	Paddy	ASD16	-	Production technology	Popularization of SRI	4	4	1	9	10	Nil
	Paddy	Wetland	*Kharif*, 2010	Paddy	-	Co(R) H- 3	Production technology	Popularization of CORH-3 Rice	4	4	4	6	10	Nil
	Paddy	Wet land	Kharif & Rabi 2010	Paddy	ASD16 & TPS 3	-	INM	Integrated Plant Nutrient Supply System	4	4	1	9	10	Nil
	Paddy	Wet land	Rabi-2010-11	Paddy	TPS 3	-	IPM	IPM for yellow stem borer : Release of the parasitoid *Trichogramma japanicum* @ 5cc/ha for 3 times (30 days after transplanting at 15 days intervals) + ETL based spraying of Profenophos @ 2 ml/lit. (7 days after release of the parasitoid)	5	5	5	5	10	-
	Millets													
	Vegetables													
	Flowers	Irrigated	Rabi 2010	Marigold		Arrowgold F1Hybrid	Higher production and profit	Integrated crop management in marigold	4	4	1	9	10	-
	Ornamental													
	Fruit	Irrigated	Rabi 2010	Banana	Nendran		Higher production and profit	Hitech production protocol for Banana	5	5		10	10	-

	Spices and condiments	Ginger (Irrigated)	Kharif 2010-11	Ginger	Varadha	-	IPM	Management of rhizome weevil & soft rot in ginger : Drenching with 2.5 g/lit. copper oxy chloride + Carbaryl 2 g/lit. + application of P*seudomonas* 10kg/ha and neem cake 75 kg/ha	4	4	1	9	10	-
	Commercial													
	Medicinal and aromatic													
	Fodder	Garden land	Yearly	Guinea grass *Desmanthus*	CO(GG) 3	-	Feed and fodder	Introduction of mixed green fodder crops to increase milk yield and quality in dairy animals	2	2	1	9	10	-
	Plantation													
	Fibre													
	Dairy													
	Poultry	-	-	--	Kaveri	-	-	Back yard poultry rearing	-	-	2	8	10	-
	Rabbitry													
	Pigerry													
	Sheep and goat													
	Duckery													
	Common carps													

	Mussels													
	Ornamental fishes													
	Oyster mushroom													
	Button mushroom													
	Vermicompost													
	Sericulture													
	Apiculture													
	Implements													
	Others (specify)													

5.A. 1. Soil fertility status of FLDs plots during 2010-11

Sl. No.	Category	Farming Situation	Season and Year	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Season and year	Status of soil (Kg/ha)			Previous crop grown
										N	P	K	
	Oilseeds												
	Pulses												
	Cereals												
	Paddy	Wetland	*Kharif*, 2010	Paddy	ASD 16	-	Production technology	Popularization of SRI	*Kharif*, 2010	205-241	7-10	89-118	Paddy
	Paddy	Wetland	*Kharif*, 2010	Paddy	-	Co(R) H-3	Production technology	Popularization of CORH-3 Rice	*Kharif*, 2010	202-238	6-9	87-115	Paddy
	Paddy	Wetland	Kharif, 2010	Paddy	ASD 16		INM	Integrated Plant Nutrient Supply System	Kharif, 2010	128-249	6-9	45-330	Paddy
			Rabi, 2010-2011		TPS 3				Rabi, 2010-2011	130-233	6-7	44-325	
	Paddy	Wetland	Rabi-2010-11	Paddy	TPS 3	-	IPM	IPM for yellow stem borer in paddy	Rabi-2010-11	200-225	8-11	90-130	Paddy
	Millets												
	Vegetables												
	Flowers	Irrigated	Rabi 2010	Marigold		Arrowgold F1 hybrid	Higher production and profit	Integrated crop resource management	Rabi	180-210	8-11.5	100-155	Paddy
	Ornamental												
	Fruit	Irrigated	Rabi 2010	Banana	Nendran	-	Higher production and profit	Hitech production protocol for Nendran banana		129-185	7-9	73-107	Paddy
	Spices and	Ginger (Irrigated)	Kharif 2010-11	Ginger	Varadha	-	IPM	Management of rhizome weevil &	Kharif 2010-11	189-228	10.3-15.4	169-211	Ginger

	condiments							soft rot in ginger					
	Commercial												
	Medicinal and aromatic												
	Fodder	Garden land	Yearly	Guinea grass *Desmanthus*	CO(GG) 3	-	Feed and fodder	Mixed fodder crops to increase milk yield and quality	Through out the year	84-116	6-7	72-110	Fallow land
	Plantation												
	Fibre												

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										
Oilseeds																			
Pulses																			
Cereals																			
Paddy	Popularization of SRI	ASD16		Wetland	10	4	72.2	68.3	69.1	52.6	31.36	37,400	69,100	31,700	1.84	34,970	52,600	17,630	1.50
Paddy	Popularization of CO(R)H-3 Rice	-	CO(R)H-3	Wetland	10	4	82.3	76.2	78.1	68.7	13.68	38,100	78,100	40,000	2.04	36,900	68,700	31,800	1.85
	IPM for yellow stem borer in paddy	TPS 3	-	Wetland	10	5	74.35	66.80	69.6	60.6	14.85	36,985	69,600	32,615	1.88	34,250	60,600	26,350	1.76
Paddy	Integrated Plant Nutrient Supply System	ASD 16	-	Wetland	10	4	75.1	69.0	72.4	56.1	29.1	38,750	72400	33650	1.89	36250	56,100	19,850	1.55
		TPS 3	-	Wetland	10	4	74.5	71.0	73.1	58.1	25.8	38,500	73,100	34,600	1.90	37,500	58,100	20,600	1.55
Millets																			
Vegetables																			
Flowers	Integrated crop resource management in Marigold		Arrowgold F1 hybrid	Irrigated	10	4	22.2	19.4	20.8	14	32.6	105,740	3,12,000	2,06,260	2.95	54,000	126,000	72,000	2.33
Ornamental																			

Fruit	Hitech production protocol in banana	Nendran	-	Irrigated	10	5	32.2	29.6	31.0	23.9	22.9	90,000	2,79,000	189,000	3.31	1,06,200	1,91,200	85,000	2.24
Spices and condiments	Management of rhizome weevil and soft rot in ginger	Varadha	-	Irrigated	10	4	152.0	137.0	145.0	103.0	40.78	79,500	2,17,500	1,38,000	2.74	69,750	1,42,800	7,3,050	1.95
Commercial																			
Medicinal and aromatic																			
Fodder	Mixed fodder crops for increasing milk yield and Quality	CO (GG) 3	-	Garden land	10	2	1850	1400	1625	1362	19.26	35,000	1,21,875	86,875	3.48	32,500	1,02,187	69,687	3.14
		Desmanthus	-	-			540	388	464	385	20.50	16850	69,600	52,750	4.13	14,500	57,750	43,250	3.98
Plantation																			
Fibre																			
Others (pl.specify)																			

* 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

Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Check**
IPM for yellow stem borer in paddy		
Parasitism (%)	16.25	2.3
Dead heart (%)	2.50	29.75
White ears (%)	1.05	3.50
Management of rhizome weevil and soft rot in ginger		
Dead heart (%)	3.25	25.90
Reduction of dead heart symptom (%)	87.5	-
Disease Intensity (Rhizome rot)	3.7	20.55

5.B.2. Livestock and related enterprises

Type of livestock	Name of the technology demonstrated	Breed	No. of Demo	No. of Units	Yield (Kg/ unit)				% Increase	*Economics of demonstration Rs./unit)				*Economics of check (Rs./unit)			
					Demo			Check if any		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					H	L	A										
Dairy																	
Poultry	Backyard poultry rearing	Kaveri	10	10	12.5	9.7	11.1	10.2	8.8	700	1875	1175	2.68	600	1530	930	2.55
Rabbitry																	
Pigerry																	
Sheep and goat																	
Duckery																	
Others (pl.specify)																	

* 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**

5.B.3. Fisheries

Type of Breed	Name of the technology demonstrated	Breed	No. of Demo	Units/ Area (m^2)	Yield (q/ha)				% Increase	*Economics of demonstration Rs./unit) or (Rs./m2)				*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
					H	L	A										
Common carps																	
Mussels																	
Ornamental fishes																	
Others (pl.specify)																	

* 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**

5.B.4. Other enterprises

Enterprise	Name of the technology demonstrated	Variety/ species	No. of Demo	Units/ Area {m^2}	Yield (q/ha)				% Increase	*Economics of demonstration (Rs./unit) or (Rs./m2)				*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
					H	L	A										
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	

* 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., additional income realized, employment generation, quantum of farm resources recycled etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**

5.B.5. Farm implements and machinery

Name of the implement	Cost of the implement in Rs.	Name of the technology demonstrated	No. of Demo	Area covered under demo in ha	Labour requirement in Mandays		% save	Savings in labour (Rs./ha)	*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

* 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 labour saved (viz., reduction in drudgery, time etc.)

Data on other parameters in relation to technology demonstrated		
Parameter with unit	**Demo**	**Local**

5.B.6. Cotton

5.B.6.1.Summary of demonstrations conducted under FLD cotton

Sl. No.	Category	Technology Demonstrated	Variety	Hybrid	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
						Proposed	Actual	SC/ST	Others	Total	
	Production Technology										
	IPM										
	Farm Implements										

5.B.6.2 Production technology demonstrations

Performance of demonstrations

Farming situation	Technology Demonstrated	Area (ha)	No.of demo.	Variety	Hybrid	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
						Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

Performance of Bt hybrids, Desi hybrids, non-Bt hybrids and Varieties in Front Line Demonstrations in cotton during 2010-11

Category	Farming situation	Technology Demonstrated	Area (ha)	No.of demo.	Variety	Hybrid	Yield (q/ha)		% Increase	Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
							Demo	Local		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Bt hybrids																	
Desi hybrids (AXA)																	
HXB Hybrids																	
HXH Hybrids																	
Herbaciu m Varieties																	
Hirsutum Varieties																	
Arboreu m Varieties																	

5.B.6.3 Integrated pest management demonstrations

Farming situation	Variety	Hybrid	No. of blocks	Total No. of Demo.	Area (ha)	Incidence of pest and diseases (%)			Seed Cotton Yield (q/ha)			Economics of demonstration (Rs./ha)				Economics of local check (Rs./ha)			
						IPM	Non IPM	% Change	IPM	Non IPM	% Change	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR

5.B.6.4 Demonstrations on farm implements

Name of the implement	Area (Ha)	No. of Demo.	Name of the technology demonstrated	Labour requirement for operation (Rs./ha)		
				Demo	Local check	% change
Total						

5.B.6.5 Extension Programmes organized in Cotton Demonstration Plots

Extension activity	No. of Programmes	Participants			SC/ST		
		Male	Female	Total	Male	Female	Total
Consultancy							
Conventions							
Demonstrations							
Diagnostic surveys							
Exhibition							
Farmer study tours							
Farmers Field school							
Field Days							
Field visits							
Gram sabha							
Group discussions							
Kisan Gosthi							
Kisan Mela							
Training for Extension Functionaries							
Training for farmers							
Viedo show							
Newspaper coverage							
Popular articles							
Publication							
Radio talks							
T.V. Programme							
Others (Pl.specify)							
TOTAL							

5.B.6.6 Technical Feedback on the demonstrated technologies on all crops / enterprise

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Popularization of SRI	The technology resulted in higher yield of 7.81 t/ha with a BC ratio of 1.84 acceptable and adoptable
2	Paddy	Popularization of CORH-3	COR(H)-3 recorded increased yield (13.68%) over existing variety and its highly acceptable and adoptable
3	Paddy	Integrated pest management for yellow stem borer in paddy	Integrated approach by the release of *Trochogramma japanicum* and ETL based spraying of Profenophos which were reduced the incidence of yellow stem borer and also increased the yield.
4	Paddy	Integrated Plant utrient Supply System	Increased the yield of grain and grain size and colour improvement in grain.
5	Marigold	Integrated crop resource management in Marigold	The technology resulted in higher yield of 20.8t/ha with a BC ratio of 2.95
6	Banana	Integrated crop resource management in banana	The technology resulted in higher yield of 31t/ha with a BC ratio of 3.31 acceptable and adoptable
7	Ginger	Management of rhizome weevil and soft rot in ginger	The application of drenching with 2.5g/lit. copper oxy chloride + Carbaryl 2g/lit. + application of Pseudomonas 10kg/ha and neem cake 75kg/ha on ginger reduced the incidence of rhizome weevil and soft rot in ginger.
8	Fodder	Popularising mixed fodder crops for increasing milk quantity and quality	The fodder crop COGG- 3 and Desmanthus resulted in higher yield of 1625 Q/ha and 464 Q/ha with the BCR of 3.48 and 4.13 respectively.
9	Poultry	Back yard poultry rearing	The poultry breed, Kaveri attained higher weight gain at the rate of 4.6- 7.0 gram per day

5.B.6.7 Farmers' reactions on specific technologies

S. No	Crop / Enterprise	Name of the technology demonstrated	Feed Back
1	Paddy	Popularization of SRI	Since the technology yielded a net profit of Rs.31,700 /ha it is highly acceptable and adoptable
2	Paddy	Popularization of CORH-3	CORH3 recorded increased yield (13.68%) over existing variety with net income of Rs. 40,000 / ha and its highly acceptable and adoptable
3	Paddy	Integrated pest management for yellow stem borer in paddy	The farmers were satisfied by releasing the parasitoid and ETL based spraying of Profenophos since they realized reduced incidences of yellow stem borer in paddy. They also expressed their experience to the others farmers during field day
4	Paddy	Integrated Plant nutrient Supply System	The *in situ* green manuring is becoming viable technology after the harvest of the rabi rice. This has improved the soil fertility and increased the vigour of the rice crop with net profit of Rs.34,600 /ha
5	Marigold	Integrated crop resource management in Marigold	Since the technology yielded a net profit of Rs.2,06,260/ha it is highly acceptable and adoptable
6	Banana	Integrated crop resource management in banana	The demonstrated technology yielded a net profit of Rs. 1,89,000/ha it is highly acceptable and adoptable

7	Ginger	Management of rhizome weevil and soft rot in ginger	The farmers appreciated the performance of integrated approach for the management of rhizome weevil and soft rot in ginger
8	Fodder	Popularising mixed fodder crops for increasing milk quantity and quality	Farmers realized the importance and use of green fodder to milch animals.
9	Poultry	Back yard poultry rearing	Increase in body weight was observed and farmers satisfied with the breed, Kaveri

5.B.6.8 Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Number of participants	Remarks
1	Field days	4	102	-
2	Farmers Training	36	787	-
3	Media coverage	-	-	-
4	Training for extension functionaries	2	65	-

PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids

Type of Breed	Name of the technology demonstrated	Name of the hybrid	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										
Cereals																	
Bajra																	
Maize																	
Paddy	Popularization of CO(R)H-3 Rice (FLD)	CO(R)H-3	10	4	82.3	76.2	78.1	68.7	13.68	38,100	78,100	40,000	2.04	36,900	68,700	31,800	1.85
Sorghum																	
Wheat																	
Others (pl.specify)																	
Total																	
Oilseeds																	
Castor																	
Mustard																	
Safflower																	
Sesame																	
Sunflower																	
Groundnut																	
Soybean																	
Others (pl.specify)																	
Total																	
Pulses																	
Greengram																	
Blackgram																	
Bengalgram																	
Redgram																	
Others (pl.specify)																	
Total																	
Vegetable crops																	
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

PART VII. TRAININGS

7.A.. Farmers' Training 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
Crop Production										
Weed Management	1	18	1	19	1	0	1	19	1	20
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	1	10	2	12	12	3	15	22	5	27
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/Irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	1	1	11	12	2	2	4	3	13	16
Nursery management	1	3	4	7	0	0	0	3	4	7
Integrated Crop Management	1	20	10	30	6	4	10	26	14	40
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	25	15	40	0	0	0	25	15	40
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	1	19	21	40	0	0	0	19	21	40
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	1	19	2	21	0	0	0	19	2	21
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	1	7	14	21	0	0	0	7	14	21
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	1	8	0	8	14	9	23	22	9	31

Export potential of ornamental plants	1	11	14	25	0	0	0	11	14	25
Propagation techniques of Ornamental Plants	1	8	12	20	0	0	0	8	12	20
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	2	25	8	33	0	0	0	25	8	33
Processing and value addition	1	34	9	43	9	5	14	43	14	57
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	1	4	27	31	0	0	0	4	27	31
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	1	0	0	0	11	16	27	11	16	27
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Soil Health and Fertility Management										
Soil fertility management	1	23	3	26	2	4	6	25	7	32
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	1	30	3	33	2	0	2	32	33	35
Management of Problematic soils	1	29	0	29	4	0	4	33	0	33
Micro nutrient deficiency in crops	1	2	28	30	0	0	0	2	28	30
Nutrient use efficiency	1	48	0	48	2	0	2	50	0	50
Balanced use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and water testing	1	20	7	27	5	2	7	25	9	34
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
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
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0

Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	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
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agril. Engineering										
Farm machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Plant Protection										
Integrated Pest Management	3	43	5	48	17	12	29	60	17	77
Integrated Disease Management	1	11	10	21	4	0	4	15	10	25
Bio-control of pests and diseases	1	32	19	51	6	0	6	38	19	57
Production of bio control agents and bio pesticides	1	17	0	17	5	0	5	22	0	22
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	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
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	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

Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	1	13	15	28	0	3	3	13	18	31
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (Pl. specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**30**	**480**	**240**	**720**	**102**	**60**	**162**	**582**	**300**	**882**

7.B.. Farmers' Training including sponsored training programmes (Off campus)

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Crop Production										
Weed Management	1	0	24	24	0	1	1	0	25	25
Resource Conservation Technologies	2	14	13	27	6	0	6	20	13	33
Cropping Systems	1	1	14	15	0	0	0	1	14	15
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/Irrigation	0	0	0	0	0	0	0	0	0	0

Seed production	1	6	17	23	1	0	1	7	17	24
Nursery management	1	9	1	10	1	0	1	10	1	11
Integrated Crop Management	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	1	19	1	20	1	2	3	20	3	23
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	13	6	19	2	2	4	15	8	23
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
b) Fruits										
Training and Pruning	1	0	20	20	0	0	0	0	20	20
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	1	11	7	18	0	0	0	11	7	18
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	1	0	25	25	0	0	0	0	25	25
Propagation techniques of Ornamental Plants	1	0	9	9	0	0	0	0	9	9
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	1	15	0	15	0	0	0	15	0	15
Processing and value addition	1	10	0	10	0	0	0	10	0	10
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	7	105	35	140	0	0	0	105	35	140
Processing and value addition	3	45	15	60	0	0	0	45	15	60

Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	1	47	17	64	0	0	0	47	17	64
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	2	28	11	39	0	23	23	28	34	62
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	1	5	17	22	2	2	4	7	19	26
Micro nutrient deficiency in crops	1	10	11	21	2	0	2	12	11	23
Nutrient use efficiency	1	13	1	14	1	0	1	14	1	15
Balanced use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and water testing	1	28	6	34	2	0	2	30	6	36
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	1	1	7	8	0	2	2	1	9	10
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	1	15	0	15	0	0	0	15	0	15
Animal Disease Management	0	0	0	0	0	0	0	0	0	0
Feed and Fodder technology	1	19	6	25	0	0	0	19	6	25
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	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
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	1	0	28	28	0	0	0	0	28	28
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0

Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agril. Engineering										
Farm machinery and its maintenance	1	19	1	20	1	0	1	20	1	21
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	1	10	4	14	5	2	7	15	6	21
Repair and maintenance of farm machinery and implements	1	13	8	21	1	0	1	14	8	22
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Plant Protection										
Integrated Pest Management	2	20	51	71	0	0	0	20	51	71
Integrated Disease Management	1	12	0	12	0	0	0	12	0	12
Bio-control of pests and diseases	1	23	1	24	2	1	3	25	2	27
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	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
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	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
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0

Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	1	9	11	20	0	0	0	9	11	20
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	1	20	0	20	0	0	0	20	0	20
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (Pl. specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**44**	**540**	**367**	**907**	**27**	**35**	**62**	**567**	**402**	**969**

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	1	3	8	11	0	0	0	3	8	11
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	1	2	22	24	0	0	0	2	22	24
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	19	2	21	0	0	0	19	2	21
Post Harvest Technology	1	3	17	20	0	0	0	3	17	20
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	10	10	0	0	0	0	10	10
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**5**	**27**	**59**	**86**	**0**	**0**	**0**	**27**	**59**	**86**

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	1	19	8	27	2	0	2	21	8	29
Value addition	3	0	75	75	0	0	0	0	75	75
Small scale processing	1	0	25	25	0	0	0	0	25	25
Post Harvest Technology	1	0	24	24	0	0	0	0	24	24
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**6**	**19**	**132**	**151**	**2**	**0**	**2**	**21**	**132**	**153**

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	2	44	17	61	4	0	4	48	17	65
Integrated Pest Management	1	16	18	34	1	0	1	17	18	35
Integrated Nutrient management	1	26	12	38	2	0	2	28	12	40
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	2	45	13	58	6	2	8	51	15	66
Production and use of organic inputs	1	28	11	39	2	0	2	30	11	41
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	11	8	19	2	0	2	13	8	21
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
Total	**8**	**170**	**79**	**249**	**17**	**2**	**19**	**187**	**81**	**268**

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	15	18	33	1	0	1	16	18	34
Integrated Pest Management	1	14	7	21	2	1	3	16	8	24
Integrated Nutrient management	1	26	12	38	2	0	2	28	12	40
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	1	11	8	19	2	0	2	13	8	21
Production and use of organic inputs	1	15	7	22	2	1	3	17	8	25
Care and maintenance of farm machinery and implements	1	13	7	20	3	1	4	16	8	24
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	19	5	24	2	1	3	21	6	27
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
Total	**7**	**113**	**64**	**177**	**14**	**4**	**18**	**127**	**68**	**195**

7.G. Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	0	0	0	0	0	0	0	0	0	0
1.b.	Commercial production of vegetables	0	0	0	0	0	0	0	0	0	0
2	**Production and value addition**										
2.a.	Fruit Plants	0	0	0	0	0	0	0	0	0	0
2.b.	Ornamental plants	0	0	0	0	0	0	0	0	0	0
2.c.	Spices crops	0	0	0	0	0	0	0	0	0	0
3.	**Soil health and fertility management**	0	0	0	0	0	0	0	0	0	0
4	**Production of Inputs at site**	0	0	0	0	0	0	0	0	0	0
5	**Methods of protective cultivation**	0	0	0	0	0	0	0	0	0	0
6	**Others (pl.specify)**	0	0	0	0	0	0	0	0	0	0
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition	3	0	75	75	0	0	0	0	75	75
7.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements	0	0	0	0	0	0	0	0	0	0
8.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
9.	**Livestock and fisheries**	0	0	0	0	0	0	0	0	0	0
10	**Livestock production and management**										
10.a.	Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
10.b.	Animal Disease Management	0	0	0	0	0	0	0	0	0	0
10.c	Fisheries Nutrition	0	0	0	0	0	0	0	0	0	0
10.d	Fisheries Management	0	0	0	0	0	0	0	0	0	0
10.e.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
11.	**Home Science**										
11.a.	Household nutritional security	0	0	0	0	0	0	0	0	0	0
11.b.	Economic empowerment of women	0	0	0	0	0	0	0	0	0	0
11.c.	Drudgery reduction of women	0	0	0	0	0	0	0	0	0	0
11.d.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
12.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
	Total	**3**	**0**	**75**	**75**	**0**	**0**	**0**	**0**	**75**	**75**

Details of sponsoring agencies involved

1. GOI- Directorate of Cashewnut and Cocoa Development

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		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture	1	0	10	10	0	0	0	0	10	10
1.b.	Commercial fruit production	0	0	0	0	0	0	0	0	0	0
1.c.	Commercial vegetable production	0	0	0	0	0	0	0	0	0	0
1.d.	Integrated crop management	0	0	0	0	0	0	0	0	0	0
1.e.	Organic farming	0	0	0	0	0	0	0	0	0	0
1.f.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
2	**Post harvest technology and value addition**										
2.a.	Value addition	0	0	0	0	0	0	0	0	0	0
2.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
3.	**Livestock and fisheries**										
3.a.	Dairy farming	0	0	0	0	0	0	0	0	0	0
3.b.	Composite fish culture	0	0	0	0	0	0	0	0	0	0
3.c.	Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
3.d.	Piggery	0	0	0	0	0	0	0	0	0	0
3.e.	Poultry farming	0	0	0	0	0	0	0	0	0	0
3.f.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
4.	**Income generation activities**										
4.a.	Vermi-composting	1	8	10	18	0	0	0	8	10	18
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
4.c.	Repair and maintenance of farm machinery and implements	1	12	0	12	1	0	1	13	0	13
4.d.	Rural Crafts	1	0	10	10	0	0	0	0	10	10
4.e.	Seed production	0	0	0	0	0	0	0	0	0	0
4.f.	Sericulture	0	0	0	0	0	0	0	0	0	0
4.g.	Mushroom cultivation	1	7	2	9	1	0	1	8	2	10
4.h.	Nursery, grafting etc.	1	3	7	10	0	0	0	3	7	10
4.i.	Tailoring, stitching, embroidery, dying etc.	0	0	0	0	0	0	0	0	0	0
4.j.	Agril. para-workers, para-vet training	0	0	0	0	0	0	0	0	0	0
4.k.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
5.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
	Grand Total	**6**	**30**	**39**	**69**	**2**	**0**	**2**	**32**	**39**	**71**

PART VIII – EXTENSION ACTIVITIES

Extension Programmes (including activities of FLD programmes)

Nature of Extension Programme	No. of Programmes	No. of Participants (General)			No. of Participants SC / ST			No.of extension personnel		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	10	106	64	170	32	33	65	2	2	4
Kisan Mela	2	45	38	83	21	18	39	14	2	16
Kisan Ghosthi	--	--	--	--	--	--	--	--	--	--
Exhibition	4	111	51	162	17	21	38	11	3	14
Film Show	34	413	225	638	51	40	91	113	38	151
Method Demonstrations	45	268	164	432	38	10	48	46	11	57
Farmers Seminar	--	--	--	--	--	--	--	--	--	--
Workshop	--	--	--	--	--	--	--	--	--	--
Group meetings	12	118	72	190	26	21	47	0	0	0
Lectures delivered as resource persons	16	134	176	310	22	9	31	178	72	250
Newspaper coverage	7	--	--	--	--	--	--	--	--	--
Radio talks	--	--	--	--	--	--	--	--	--	--
TV talks	2	--	--	--	--	--	--	--	--	--
Popular articles	5	--	--	--	--	--	--	--	--	--
Extension Literature	--	--	--	--	--	--	--	--	--	--
Advisory Services	74	206	81	287	40	19	59	4	1	5
Scientific visit to farmers field	66	301	87	388	25	9	34	1	2	3
Farmers visit to KVK	68	676	422	1098	101	87	188	0	0	0
Diagnostic visits	39	151	59	210	21	7	28	8	0	8
Exposure visits	9	142	50	192	11	3	14	28	12	40
Ex-trainees Sammelan	3	76	13	89	5	7	12	0	0	0
Soil health Camp	2	52	3	55	6	4	10	0	0	0
Animal Health Camp	--	--	--	--	--	--	--	--	--	--
Agri mobile clinic	--	--	--	--	--	--	--	--	--	--
Soil test campaigns	2	23	30	53	5	2	7	2	2	4
Farm Science Club Conveners meet	6	49	27	76	8	7	15	0	0	0
Self Help Group Conveners meetings	--	--	--	--	--	--	--	--	--	--
Mahila Mandals Conveners meetings	--	--	--	--	--	--	--	--	--	--
Celebration of important days (specify)	--	--	--	--	--	--	--	--	--	--
Any Other -PRA	3	32	14	46	6	3	9	2	1	3
Total	**409**	**2903**	**1576**	**4479**	**435**	**300**	**735**	**409**	**146**	**555**

PART IX – PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

9.A. Production of seeds by the KVKs - Nil

Crop category	Name of the crop	Variety	Hybrid	Quantity of seed (qtl)	Value (Rs)	Number of farmers to whom provided
Cereals (crop wise)						
Oilseeds						
Pulses						
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others (specify)						
Total						

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
Commercial						
Vegetable seedlings						
Fruits	Egg Fruit Seedlings Pine apple suckers	- Kew	- -	270 3000	1350 10,500	12 15
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices	Pepper rooted cuttings	Panniyur-1	-	1560	3180	7
Tuber						
Fodder crop saplings	Cumbu Napier	Co-4	-	500	250	2
Forest Species						
Others(specify)	Mushroom bed spawn	MDU-1	-	130	1300	11
Total					**16,580**	**47**

9.C. Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	Number of farmers to whom provided
Bio Fertilizers	-	-	-	-
Bio-pesticide	-	-	-	-
Bio-fungicide	*Pseudomonas* talc formulation	67.25	5043.75	9
Bio Agents				
Others (specify)	Micro Nutrient Mixture Coconut tonic	350 765	14,000 3825	18 32
Total			**22868.75**	

9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

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.)

i. Date of start : April, 2004
ii. Periodicity : Quarterly
iii. Number of copies distributed : 100

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Micropropagation of Screw pine	T.Thangaselvabai, B.K. Jayachandran, and K.Rajmohan	*South Indian Hort*., **58**:191-193
	Farm yard manure and neem cake on feeding preference, oviposotional preference and developmental period of coffee berry borer, *Hypothenemus hampei*	S.Irulandi,, A.Ravikumar, C.Chinniah, R.Rajendran and P.K.Vinod Kumar	Journal of Bio-pesticides, 3 (3) : 534-539
	Economic viability of Tree Spices based cropping system under forest eco system of Kanyakumari district	T.Thangaselvabai and T.Selvakumar	*Asian J. Environ. Sci.* . 5(2): 140-143
Technical reports	--	--	--
News letters	Newsletter,Vol.7(Issues 1&2)	--	100 nos.
	Newsletter,Vol.7(Issues 3&4)	--	100 nos.
Technical bulletins	Jack production techniques (Tamil)	T.Thangaselvabai, T.Selvakumar, R.Balakumbahan and K. Eraivan	100 nos.
	Mango production techniques (Tamil)	T.Thangaselvabai., T.Selvakumar, K.R.Sudha and K.Eraivan	100 nos.
	Coconut production techniques (Tamil)	S.Suresh and K.Eraivan	100 nos.
	Azolla (Tamil)	T Selvakumar, T.Thangaselvabai/ R.Balakumbahan and K. Eraivan	100 nos.
	Integrated pest and disease management in Banana (Tamil)	S Irulandi, K. Eraivan and K.R. Sudha	100 nos.
Popular articles	Production and processing of Davana.	R.Balakumbahan, R.Richard Kennedy, T. Selvakumar and J.Prem Joshua	*Indian J. of Arecanut, Spices & Medicinal Plants.* 12(2):28-31
	Cane juice for good health.	M.Vignesh., T.Selvakumar, P.S.Shanmugavadivel and M. Prabha	*Rashtriya Krishi*, Hind Agri-Horticultural Society, Muzaffarnagar, 5(1): 100
	Sugarcane management in	M.Vignesh,	*Rashtriya Krishi*, Hind

	saline soils.	T.Selvakumar, P.S.Shanmugavadivel and M. Prabha.	Agri-Horticultural Society, Muzaffarnagar, 5(1): 86-87.
	Disease management in Ginger. (Tamil)	K.Eraivan	Thozhil Nutpa Thottakalai. 12(9): 29&30
	Banana leaf spot disease management. (Tamil)	K.Eraivan	Thozhil Nutpa Thottakalai. 12(9): 30
Extension literature	--	--	--
Others - Book chapters	Clove- Production techniques (Tamil)	R. Balakumbahan	Tree Spices-Production techniques. HRS, Pechiparai. ISBN No. 978-81-908079-8-2 (pp:12-23)
	Garcinia and Kokam-Production techniques (Tamil)	T. Thangaselvabai	Tree Spices-Production techniques. HRS, Pechiparai. ISBN No. 978-81-908079-8-2 (pp:72-80)
	Integrated Nutrient Managementin Tree spices (Tamil)	S. Suresh	Tree Spices-Production techniques. HRS, Pechiparai. ISBN No. 978-81-908079-8-2 (pp:93-105)
	Integrated Water Managementin Tree spices (Tamil)	T. Selvakumar	Tree Spices-Production techniques. HRS, Pechiparai. ISBN No. 978-81-908079-8-2 (pp:106-123)
	Disease Management in Tree spices (Tamil)	K. Eraivan	Tree Spices-Production techniques. HRS, Pechiparai. ISBN No. 978-81-908079-8-2 (pp:155-165)
Others - Seminar Papers	Foliar nutrition for off season flower induction in Jasmine.	T.Thangaselvabai, R.Richard Kennedy, S. Suresh and K.Eraivan	*Proc.Nat.Sem.* on Floriculture on 26-28.11.2010 held at TNAU, Coimbatore
	A ToT model for cotton development	S.S.B.Bhuvaneswari, K.A.Ponnusamy, S.Pirabukumar and K.Eraivan	*Proc. Nat.Sem.*on Extension Management Reforms – Initiatives and impact. Organised by Society of Extension Education, TNAU, Coimbatore on 11 th & 12th December, 2010.
	Agriculture and rural extension worldwide	S.S.B Bhuvaneswari, K.Eraivan and K.R.Sudha	*Proc. Nat.Sem.*on Extension Management Reforms – Initiatives and impact. Organised by Society of Extension Education, TNAU, Coimbatore on 11 th & 12th December, 2010.
	DRIS concept in predicting nutrient status of off season	Suresh,S.	*Proc. Nat. workshop* on Off season Mango.26th

	Mango.		Feb.2011, Vivekanandha Kendra, organised by NHB & HRS, Pechiparai.
	Off season Mango- A nature's gift in the world.	R.Richard Kennedy, C.Swaminathan, M.Kumar,T. Thangaselvabai, R.Balakumbahan, J.D.Nirmalatha and J.Prem Joshua.	*Proc. Nat. workshop* on Off season Mango.26th Feb.2011, Vivekanandha Kendra, organised by NHB & HRS, Pechiparai.
	Post harvest factors affecting post harvest quality of Off season Mangoes.	J. Prem Joshua, R. Balakumbahan, J.D.Nirmalatha, T. Thangaselvabai, and R.Richard Kennedy.	*Proc. Nat. workshop* on Off season Mango.26th Feb.2011, Vivekanandha Kendra, organised by NHB & HRS, Pechiparai.
	Effect of fertilization on yield of coconut and soil fertility.	S. Suresh and K.Eraivan.	*Proc.Nat. sem.* on Soil Health improvement for enhancing crop productivity.18th &19th March.2011, TNAU, Coimbatore
Others - Poster Papers	Intercropping in coconut for higher production and profit	T.Thangaselvabai, R.Richard Kennedy, S. Suresh and K.Eraivan	*Proc. Intl. Conference* on Coconut Biodiversity for prosperity,25.10.2010-28.10.2010, CPCRI, Kaseragod,Kerala
	Sustainable coconut farming in Kanyakumari district –a case study.	T .Thangaselvabai, K.R.Sudha, S.S.B..Bhuvaneswari and K.Eraivan	*Proc. Intl. Conference* on Coconut Biodiversity for prosperity, 25 -28.10.2010, CPCRI, Kaseragod,Kerala
	Role of tribal women in Agrobiodiversity Conservation	S.S.B Bhuvaneswari, P.Athimuthu, K.A.Ponnusamy, N.Raveendran and T.Thangaselvabai.	*Proc. Intl. Conference* on Coconut Biodiversity for Prosperity. 25 -28.10.2010, CPCRI, Kaseragod,Kerala.
	A Constructive Model for Agrobiodiversity Conservation.	S.S.B Bhuvaneswari, P.Athimuthu, K.A.Ponnusamy and N.Raveendran	*Proc. Intl. Conference* on Coconut Biodiversity for Prosperity. 25 -28.10.2010, CPCRI, Kaseragod,Kerala.
TOTAL	**31**		

10.B. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
1.	CD	Coconut Climber	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).

Success story :

1. Title: Nursery and cut flower production -a profitable venture for unemployed Rural Youth

Background

Nursery production is an attractive farm enterprise provides much scope for self employment of rural youth and women. The enterprise requires little area and least initial investment. But technical knowledge and access to the produce (Planting material) are important to start the enterprise. With changing life styles and increased urban affluence, floriculture has assumed a definite commercial status in recent times. Appreciation of the potential of commercial floriculture has resulted in the blossoming of this field into a viable agri-business option. Availability of natural resources like diverse agro-climatic conditions permit production of some of the temperate and tropical flowers, almost all through out the year in some part of the Kanyakumari District . The commercial activity of production and marketing of horticulture products is also a source of gainful and quality employment to scores of people.

Interventions

Process

Considering the demand for production of quality planting material and cut flowers and the need for creation of employment in the field of horticulture, vocational trainings and demonstrations on nursery and cut flower production techniques were conducted for the duration of 21/10 days to the women Self Help Groups and rural youth of Kanyakumari District since from 2004. Exposure visits were also made to well established nurseries and cut flower units

Technology

Nursery production

The technology and skills involved in nursery production was disseminated through trainings and demonstrations

- Selection of site, planning and layout of nursery
- Media and containers for propagation of nursery plants
- Nursery bed preparation and Pro tray nursery raising
- Seed treatment and sowing
- Maintenance of seedlings
- Propagation through cuttings and Layering
- Grafting and budding
- Micropropagation

Cut flower production

Orchid, Anthurium, Heliconia, Gladiolus, and Tube rose are the most important cut flower crops which performs very well either under open or shade net conditions in the District. Production and post harvest technology based technological backup on Selection of planting material and seed treatment

- Planting techniques
- Nutrition
- Weed, water and shade management
- Plant protection
- Harvest, post harvest handling and packing techniques were provided through training and demonstrations

Impact

Horizontal Spread

The vocation training on nursery and cut flower production has motivated the Self Help Groups and the rural youths those who have attended the training. As a result of this,two self help groups and four individuals were started their own production units at their respective places. In case of SHG the work and profits were shared among them.

Economic gains

Being equipped with the nursery skills by the training programmes the SHG (**Agastiar Sanjeevi vana muligai group**) started a nursery unit in an area of 40 cent with the buyback arrangement of their produce during 2005-06. They are concentrating mainly on the production of medicinal plants viz., Kacholam, Vilvam, *Plumbago, Ravolfia*, Neelamari, Stevia, *Aloe vera*, *Alpinia* and Vettiver, and forest tree species like teak, Jatropha, *Calophyllum* and Albizia. They are producing the nursery plants on order basis and getting approximately a monthly income of Rs.2200/-. Apart from producing nursery plants they are maintaining more than 120 high value medicinal and ornamental plants.

Similarly **Surya Self Help Group** of Pechiparai is also started during 2006-07 rubber nursery in an area of 16 cents and earning Rs. 16, 000 per year. After attending 21 days training programme during 2005-06 **Mr. Sasikumar**, Sarode, Thuckalay has started a nursery unit for the production of ornamental plants, Casuraina, Jasmine and cut flowers like heliconia and orchids. Apart from nursery plants he is also producing cut flowers like heliconia, orchids and anthuriums and earning an average of Rs. 4500/ month. **Mr. V. M. Kumarasamy** of Vairakudiruppu is maintaining a coconut nursery and selling seed nuts and earning more than Rs. 25, 000 per year. After attending 15 days training programme during 2006-07 **Mr. C. Sugumaran**, a tribe from Orunooranvayal village has started a nursery unit for the production of rubber and medicinal plants. He is earning an average of Rs. 18,000/ -22,000/Year. After attending 10 days

training programme during 2009-10, **Thirumathi. L.S. Little flower**, Puthukadai has started a nursery cum cut flower unit in an area of 75 cents at Karakonam with some choice varieties of heliconia, orchids and anthuriums which are preferred mainly for export market.

Employment Generation

Apart from engaging those in the nursery cum cut flower production venture all the beneficiaries are providing employment opportunities to some labourers throughout the year

2. Title: Intercropping in coconut –a viable option for livelihood security

Background

In Kanyakumari district coconut occupies an area of 25,000 ha in which more than 75 per cent of the holdings are below one ha and the average yield realized is only 50-60 nuts/ha. The income derived from such small holdings is quite insufficient to sustain even the small families. With little scope for further expansion of area under coconut as well as a lower per capita land holding size, crop intensification and diversification are viable options to promote the agrarian economy. Integrating fruits, vegetables, spices and medicinal plants can substantially enhance the food production and profitability in the existing coconut based cropping systems, since the crops are adapted to the same ecological conditions as plantation crops especially coconut. Therefore, a companion intercropping demonstration in coconut was conducted by the Krishi Vigyan Kendra.

Interventions

Process

Considering the need for income generation and sustaining coconut farming location specific coconut based cropping system models on the companion intercropping (banana, tuber crops, thippili, kasthuri turmeric and mango ginger) and mixed cropping (cocoa and spices) were demonstrated at Kollai, Erumbukadu, Perumselvavilai, Vembanur, Agasteeswaram and Azhagappapuam villages since from 2004. Apart from the demonstrations, trainings on coconut based cropping system were also conducted in all the blocks of the district

Technology

Successful and profitable intercropping models tested through OFT such as,

- Coconut + banana+ elephant foot yam
- Coconut+ banana+ thippili
- Coconut+ banana+ cocoa were demonstrated in large areas as FLD.

Impact

Horizontal Spread

The technology on coconut based intercropping system involving the crop combination of banana+ elephant foot yam spread over to 20 – 23% and banana +thippili 18% of the total coconut cropped

area. Similarly the mixed cropping system integrating banana+ cocoa in coconut garden gained popularity and occupied 30-32% of coconut area.

Economic gains

Yield of coconut

Due to the impact of intercropping, nutrient recycling and resource utilization efficiency of the palm, the nut yield of coconut was increased and on an average of 128 nuts/palm/ year were produced and it was 15.6% higher than the initial nut yield.

Yield of intercrops

All the inter crops performed well under coconut shade and enhanced the overall productivity of the cropping system. Though banana is a sun loving crop, the cultivar Robusta Matti and Redbanana produced satisfactory yield with all crop combinations.

Economics of cropping systems

The benefit cost ratio and the net profit were influenced by the cropping systems The cropping system model with the integration of crops like banana, elephant foot yam produced a net returns of Rs. 92,550/ha. and BC ratio of 1.95.The cropping system model with banana and thippili in coconut recorded the net return of Rs.72,605/ha and BC ratio of 1.42. The coconut, cocoa and banana crop combination yielded an additional income of Rs-40,000 to 60,000/ha.

Employment Generation

The production potential and the income consideration due to intercropping in coconut was realized and tapped by majority of the coconut growers of the District It provides additional employment opportunities to the laborers those who were engaged in this profession.

3. Title : *Insitu* green manuring in Paddy

Background

Paddy is one among the major crop cultivated in Kanyakumari District. It occupies a total area of 17,500 hectares during both the Kharif & Rabi seasons. In recent years, farmers are practicing excess application of inorganic fertilizers without organics due to its non- availability. Although the SRI is introduced the farmers are not attaining the targeted yield (7.5 – 8.5 t/ha) due to the deterioration of soil fertility status. The average yield in the farmers holding is only 4.5 -5.5 t/ha in these soil. The soil is also acidic and therefore mitigating the ill effects by adding suitable organic/inorganic amendment is also not practiced by the farmers.

Interventions

Soil test based balanced application of fertilizers. Mitigation of excess availability of Fe and Mn by dolomite application (Dolomite is a source of Ca and Mg which are deficient in these soils). *In situ* growing of green manure (*Kolinchi*) after the harvest of the second season rice and incorporation in soil. Application of biofertilizers improve the soil fertility status

Process

In situ green manuring with Kolinchi (*Tephrosia spp*.) @ 20 kg/ha after the harvest of the second season paddy coinciding with the summer showers and incorporation. Application of dolomite @ 500 kg/ha at the time of last ploughing. The balanced application of inorganic fertilizers based on soil test. Bio-nutrient fertilizers are applied as per the recommended practice.

Technology

The *in situ* green manure application by sowing the Kolinchi seed @ 20 kg/ha coinciding with summer showers after the harvest of second season paddy was demonstrated in 2 ha of 10 farmers holding in Thuvarankadu and Arasankuli villages. Immediately staring of flowering the crop was incorporated in to the soil. At the time of last ploughing 500 kg/ha of dolomite was applied. The deficient micronutrient Zn was applied @ 25kg/ha basally at the time of transplanting. The bio-fertilizers viz Azophos was applied as seed treatment, seedling dip and main field application as per the recommendation. The inorganic fertilizers were applied based on soil test and applied in different critical stages of crop growth.

Result and Intervention

The yield of wet biomass ranged from 4.5 to 5.25 ton/ha. The mean N: P: K content on air dry basis was 1.9, 0.6 and 1.0 % respectively. The N, P & K added to soil through this green manure ranged from 86 to 100, 27 to 32 and 45 to 45 to 53 kg/ha respectively. This envisaged the increase in the soil organic carbon content from 0.41 to 0.45 per cent. The available status of N, P & K was marginally increased. The *instu* incorporation of Kolinchi (*Tephrosia spp*) improved the vigour of the rice crop due to the presence of the alkaloid tephrosin which played significant role in inducing pest and disease resistance of the crop. This has sustained the soil fertility status and increased the yield of rice from 11.5 to 15.6 per cent. The mean yield was 7.75 t/ha.

Impact

The technology impressed the farmers. The extension functionaries of the district understood the viability of the technology demonstrated. The farmers demanded to supply the seeds on subsidy to the Govt. officials. They started purchasing the seeds and the technology has spread to 1000 to 1500 hectares in the district in this current year. The benefit cost ratio ranged from 2.03 to 2.09.

Case Study

Title: Banana farming in Kanyakumari District

Background

The cropping system adopted in Kanyakumari District, the high rainfall zone of Tamilnadu is multi species cropping and banana is one among the major crops in this system .It occupies an area of 8500 ha as pure crop as well as intercrop /mixed crop in coconut /rubber/spice based cropping systems. More than 75 percent of the holdings are below one ha and the production, profit and employment derived from such small holdings are quite insufficient to sustain the dependant families. The low production and profitability is mainly due to poor upkeep, inefficient farming practices, nutritional imbalances and rampant pest and disease problems. With little/ no scope to further expand the land area and lower per capita land holding size, crop intensification through transfer of advanced production techniques is the only mean to enhance the production and profit. Thus the Krishi Vigyan Kendra made a detailed study to analyse the constraints in banana farming and provided recommended needs to make banana cultivation as a remunerative venture.

Constraint analysis

A survey was conducted in all the 9 blocks of the district and the information about the constraints in banana farming were collected from the farmers (180 Nos.), extension officials (10 Nos.) and banana traders (10 Nos.) through pre-tested questionnaires. The problems were categorized as crop management, protection and socio-economic problems. The criteria followed for problem identification and prioritization are based on the extent, severity, importance and frequency of the problems prevailed in the existing farming conditions. The problems identified are as follows.

Crop management

Cultivation of traditional cultivars

About 70% of the farmers are cultivating only traditional cultivars like Nendran and Red Banana. Continuous cultivation of traditional/ local banana cultivars over a long period in the same field with out any crop rotation leads to nutrient depletion and susceptibility to pest and diseases. The quality of the planting material is also inferior since it is collected from the same field continuously. More over the farmers has to depend on of the local market for disposal of their produce at lower price.

Utilization of poor quality planting material

The quality of the planting material is one of the vital factors to decide the crop yield. Farmers usually use suckers as planting material. Suckers may be infected by some pathogen and

nematodes. Similarly due to the variation in age and size of sucker crop is not uniform, harvesting is prolonged and management becomes difficult.

Low population density/unit area

Under intensive cropping programme effective utilization of available land by accommodating maximum plant population/ unit area is essential for higher production

Imbalanced nutrient application

More than 80% of the banana growers are not adopting proper nutrient management practices. Indiscriminate use of nitrogenous fertilizers with very low quantity of P,K and micronutrients resulted in deficiency disorders, susceptibility to pest and diseases and ultimately reduction in yield (18-22%)

Indiscriminate use of water

Even though banana requires large quantity water when compared to other fruit crops excess irrigation affects growth and development of the crop. This region is a high rainfall zone and water availability is not a limiting factor excess irrigation and water stagnation was noticed in (15-26%) of the banana area, which seriously affect the growth and development of the crop. Susceptibility to pest and diseases are more under such situation.

Pest and diseases

Fusarium wilt and *Cercospora l*eaf spot and bunchy top disease are the most destructive disease in Kanyakumari district. The average intensity of the disease is about 30-32% leading to a yield loss of 18-22% .Among the pest nematode and stem weevil are the most important and accounts for yield reduction of 10-15%. The intensity of these pests are about 20-25%.

Utilization of Banana Fibre

The disposal of Pseudostem after the harvest of banana is a labour and cost intensive. The demand for the natural fibre at national and international level is high. Nowadays the banana fibre is one of the alternatives for natural fibre for making high quality textiles, currency and handicrafts. The fibre is generally extracted by hand stripping but hand stripping involve drudgery and outcome is very less and not a profitable enterprise.

Socio economic problems

- Labour scarcity and high labour cost
- High cost of inputs and cultivation
- Marketing constraints

Intervention

- Introduction of high yielding Grand naine TC banana High density planting for accommodating maximum plant population /unit area
- Integrated nutrient management
- Drip and fertigation
- Integrated pest and disease management
- Bunch spray with growth regulators and minerals salts
- Utilization of banana fibre
- Bunch covering with poly sleeves

The first line transfer of technology involves training programmes and demonstration for farmers, rural youth and extension personnel on sucker treatment, planting techniques, nutrition, irrigation and pest management and by product (fibre) utilization. Subsequently On Farm trails and Front line Demonstrations were also conducted on introduction export potential TC banana cv. Grand naine, high density planting, integrated nutrient management, drip and fertigation, pest and disease management and quality improvement of fibre.

Technology

Introduction and popularization of high yielding export potential Grand naine TC banana

Grand naine (TC) banana was introduced in Erumbukadu and Nainaputhur villages during 2007-08 as On Farm Trail

High density planting

High density planting of 3 suckers / pit at a spacing of 1.8 x 3.6m (4,600 plants/ha.) for Cavendish varieties and 2 x 3m for Nendran (5000 plants /ha) was demonstrated as On Farm Trail during 2007-08 in Kattuvilai and Ramanathichanputhur villages.

Integrated nutrient management

Red banana

Application of 270:35:450 g NPK / plant in five splits along with basal application FYM of 10 kg, Azosphos 50 g, *Pseudomonas* 20g and neem cake 250 g

Nendran

250:35:450 g NPK /plant in 4 splits along with basal application of 5 kg of FYM, Azosphos 50 g, *Pseudomonas* 20g and neem cake 250 g.

Other varieties

200:35:450 g NPK /plant in 3 splits along with basal application of 5 kg of FYM, Azosphos 50 g, *Pseudomonas* 20g and neem cake 250 g. Nutrient management trails were

conducted as OFT during 2006-07 and as FLD during 2007-08 in Perumselvavilai, Punnarkulam and konam villages.

Micronutrients

Combined foliar application of ZnSo4 (0.5%), FeSo4 (0.2%), CuSo4 (0.2%), H_3 BO_3 (0.1%) applied at 3, 5 and 7 months after planting or soil application of banana micronutrient mixture @ 50 g/plant in two splits at 3 rd and 5 th months after planting. The banana micronutrient mixture was prepared by KVK based on the soil status and diagnostic symptoms in the crop.

Drip and fertigation

The demonstration on drip and fertigation was implemented in Drip irrigation @15 l/plant/day from planting to 4 th month, 20 l/plant/day from 5 th month till shooting stage and 25 l / plant / day from shooting till 15 days prior to harvest.

Fertigation schedule

(200:35:400 g NPK/plant, Cavendish group)

Sl.No.	Growth stage	Duration (weeks)	WSF	Qty kg/ha
1	Establishment	9-18	19:19:19 13:0:45 Urea	423.00 294.00 50.00
2	Vegetative	19-30	12:61:0 13:0:45 Urea	846.00 450.00 50.00
3	Shooting	31-42	19:19:19 13:0:45 Urea	275.00 609.00 50.00
4	Harvesting	43-45	19:19:19 13:0:45	150.00 50.00

The technology was demonstrated in Agasteeswaram, Kattuvilai, Nainaputhur and Ramanathichanputhur villages during 2007-08 under part II Plam scheme.

Pest and Disease Management

The Nematode and Stem weevil management technology involves treatment of suckers with furadon @ 40 g/sucker and neemcake250g/pit at the time of planting. Then at 5, 7 and 8 month after planting monocrotophos was given as stem injection at 2 ml each at 45 and 150 cm height. The solution of monocrotophos is prepared by diluting 54ml of the commercially available monocrotophos in 350 ml of water. The injection has to be given at opposite direction to the first injection.

The fusarial wilt disease was managed by Pseudo stem injection of 2 ml of Carbendazim (2%) and soil application of talc powder formulation of *Pseudomonas fluorescens*. Tridemorph (0.07%) spray was employed for the management of sigatoka leaf spot disease.

Pest and disease management trails were conducted as OFT and FLD during 2005-06,2006-07 and 2007-08 in Perumselvavilai, Villukury and Mecode villages

Bunch Spray and Covering

NPK 19:19:19 WSF 0.2% (2g/liter of water) bunch spray. 150 gauge thickness perforated polysleeves with 4% ventilation. The technology was disseminated as OFT during 2007-08 as OFT in Kattuvilai village and demonstrated as FLD in Anjukandarai village as FLD during 2008-09.

Utilization and Quality improvement of banana fibre

To utilize the banana fibre being wasted and make use of it for the preparation of handicrafts trainings and demonstrations were conducted in collaboration with Kadhi and Village industries. For the improvement of the quality of the fibre OFT on retting by means of chemical –

NaOH @10% at 60 ^{0} C water for two days was demonstrated in Kolvel village during 2009. Trainings were given to100 farm women regarding extraction of fibre, processing, knitting and making different handicafts.

Impact

Production

The Grand naine TC banana recorded an average yield of 72.63t/ha. as against the potential yield of 40.26t/ha in the traditional cultivars.

High density planting in Grand naine TC banana accommodates 4600 no. of plants/ha and recorded an yield of 85.56t/ha as against 72.63t/ha in the farmers practice ie, the single plant/pit.

The demonstrated nutrient management technology in red banana produced an yield of 42.13t/ha

Drip and fertigation technology produced 32-38% increased yield

Bunch spray with 19:19:9 WSF recorded 12.4% increased yield over the check

Economic gains

Grand naine TC banana registered a net profit of Rs. 4,15,130/ha with a BCR of 3.29

High density planting in banana produced a net profit of Rs.4,22,000/ha with a BCR of 3.36

Nutrient management in red banana recorded yield increase of 15.6 % with a net profit of Rs.2,88,000/ha.Effective response in terms of recovery of nutrient disorders apart from yield increase was observed

Drip and fertigation technology recorded a net profit of Rs 4,28,000/ha

Application of carbofuran for the control of nematodes and stem injection with monocrotophos controlled the pests effectively which in turn reflected in the yield increase of 24.01%.

By the preparation of handicrafts from banana fibre the women SHG are earning nearly 50,000-75,000/year

Horizontal Spread

The integrated nutrient management in red banana recorded 18 to 22 % adoption.

A total of 12 tonnes of micronutrient mixture was sold to the farmers @ Rs.30/kg. The technology recorded 38% adoption in this district.

Drip and fertigation technology recorded 19% adoption and spread to an extent of 120ha in the district

This technology on Stem weevil management has now catches up to an extent of 2550 ha in Kanyakumari district and is being recommended by the district extension functionaries.

Employment Generation

A self help group located at Perumselvavilai headed by Thiru. D. Narayanadoss has taken initiative to adopt the technology for income generation to the SHG. The group is charging Rs. 1.0 / plant for pseudostem injection using monocrotophos and earning a net profit of Rs. 1200/ha. The group members also have taken this as a part time venture and doing the job in early hours and evenings.

The farm women who were trained for the preparation of handicrafts were divided themselves into 5 groups and preparing different products and selling it through Khadi and village industries. A trained beneficiary namely Thirumathi Dada Mary is doing this venture successfully and giving employment for 10 ladies every day and she is earning nearlyRs.50,000-80,000/ year. Recently she has been received an award of Rs,1,00,000 from City foundation, Mumbai as an incentive for her contribution in developing this as a cottage industry.

Among the different crop management technologies disseminated through trainings and demonstrations the nutrient, pest management technologies and banana fibre utilization picked up to a notable extent.

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

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
Nil			

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

Based on the suggestion from the State Department of Agriculture and Horticulture as well as from the farm science clubs, on – campus and off – campus trainings were organized considering the crop being cultivated.

The pre-season kharif and rabi trainings were given in collaboration with by the State Department of Agriculture and Horticulture to the farmers. The requests of the NGO's of the local area were also taken for organizing training programmes.

Rural Youth

The trainings of the rural youth were formulated mainly by the need assessed during the participatory rural appraisal. Emphasis has been given on mushroom production, vermi-composting, root feeding of coconut tonic, coconut climber and seed production of agricultural and horticultural crops. Banana fiber production techniques, value addition of products, post harvest processing of fruits and vegetables were also given.

In-service personnel

The extension functionaries were invited for the various demonstrations and programmes apart from the discussion during the zonal meeting of the district. Discussion was usually made at the end of the meeting with the Assistant Director of Agriculture, Agricultural Officers and Assistant Agricultural Officers. The crop based groups were formed among themselves and allowed for discussion and made to come out with the crop specific problems in which trainings and demonstrations were required for the district extension functionaries

10.G. Field activities

i. Number of villages adopted : Nil
ii. No. of farm families selected : Nil
iii. No. of survey/PRA conducted : 3

10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab **:** Yes

If Yes

1. Date of establishment **:** 08.07.2005

2. List of equipments purchased with amount **:**

Sl. No.	Name of the Equipment	Qty.	Cost
1.	Spectrophotometer	1	75,072.00
2.	Flame photometer	1	36,720.00
3.	pH meter	1	7,344.00
4.	Conductivity bridge	1	7,344.00
5.	Physical balance	1	1,15,000.00
6.	Chemical balance	1	4,600.00
7.	Water distillation Still	1	26,118.00
8.	Hot plate	1	1,875.00
9.	Kjeldahl digestion and distillation	1 set	24,589.00
10.	Shaker	2	44,077.00
11.	Oven	1	8,862.00
12.	Refrigerator	1	15,750.00
13.	Grinder	1	11,582.00
14.	Khelplus	1	1,48,086.00
15.	UPS	1	10,250.00
16.	Lab Set up		
17.	Chemical Storage Cabin ($6^{1/2'}$ x 3' x 1')	6	10,800.00
18.	Solution preparation stand ($5'$ x $2^{1/2'}$)	10	31,000.00
19.	Chemical Storage Cabin ($6^{1/2'}$ x 4' x $1^{1/4'}$)	3	6,900.00
20.	Chemical Storage Cabin ($6^{1/2'}$ x 3') front door with 6mm glass thickness 18 gauge lock godrej	6	36,600.00
21.	Glassware storage cabin ($4^{1/2'}$ x 3') front door with 6mm glass thickness 18 gauge lock godrej	7	22,400.00
22.	Acid keeping holder ($1^{1/2'}$ x$1^{1/2'}$ x $1^{1/2'}$)	7	2,975.00
23.	Acid keeping holder ($6^{1/2'}$ x$1^{1/2'}$ x $1^{1/2'}$)	7	7,980.00
24.	Solution storage bin	6	7,050.00
25.	Acid storage bin	1	1,650.00
26.	Glassware holder	1	1,175.00
27.	Solution storage holder	8	9,400.00
28.	Acid proof holder	16	18,800.00
29.	Acid proof holder (big size)	1	2,850.00
30.	Glassware storage cabin ($6^{1/2'}$ x 4')	1	5,850.00
31.	Acid proof holder (small size)	1	1,175.00
32.	Lab modification	-	75,000.00
33.	Soil sample digestion burner	4	3,700.00

34.	Electrical fittings and exhaust fan		13,661
35.	Soil storage cabin	1	37,496.00
36.	Willey mill and water bath	4	25,100.00
	RECURRING CONTINGENCY		
1.	Chemicals and glass wares		2,49,909.00
2.	Petty items such as pestle and mortar, cloth bag, plastic jar, tray, gas connection for flame photometer and other use, test tube holder. Soil sampling auger etc.		19,986.00
3.	Soil and plant sample processing and storage facility		
4.	Seed storage cabin	1	1,960.00
5.	Multi materials holder	1	1,975.00
6.	Stored item cabin	1	1,955.00
7.	Multi storied cabin	1	3,945.00
8.	Multi book holder	1	4,900.00
9.	Storage container	1	8,8920.00
10.	Core sampler	1	4,000.00
11.	Core cutter	1	4,600.00
12.	Infiltration rings	1	6,950.00
13.	Pipette	1	8,939.00
14.	Electrodes	1	934.00
15.	Reagents holder	5	550.00
Total			**11,78,326.00**

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	1093	635	206	27,325
Water Samples	429	176	57	4,290
Plant samples	540	191	58	13,500
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	**2062**	**1002**	**321**	**45,115**

Details of samples analyzed during the 2010-11 :

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	212	110	64	5300
Water Samples	67	18	12	670
Plant samples	48	13	7	1200
Manure samples	-	-	-	-
Others (specify)	-	-	-	-
Total	**327**	**141**	**83**	**7170**

10.I. Technology Week celebration : Nil

Period of observing Technology Week: From to
Total number of farmers visited :
Total number of agencies involved :
Number of demonstrations visited by the farmers within KVK campus :

Other Details

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

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

A. Introduction of alternate crops/varieties : Nil

State	Crops/cultivars	Area (ha)	Number of beneficiaries

B. Major area coverage under alternate crops/varieties : Nil

Crops	Area (ha)	Number of beneficiaries
Oilseeds		
Pulses		
Cereals		
Vegetable crops		
Tuber crops		
Total		

C. Farmers-scientists interaction on livestock management : Nil

State	Livestock components	Number of interactions	No.of participants
Total			

D. Animal health camps organized : Nil

State	Number of camps	No.of animals	No.of farmers
Total			

E. Seed distribution in drought hit states: Nil

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
Total				

F. Large scale adoption of resource conservation technologies : Nil

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

G. Awareness campaign : Nil

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers	No.	No.of farmers
Total												

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	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Coconut tonic root feeding	2180	25	19000 to 21000 /ha	35000 to 41000 /ha
System Rice Intensification	2618	46	19000 to 24100	36500 to 48000
Cultivation by drum seeder in paddy	750	25	28495-40493	34020-47400
Mechanical transplanting in paddy	283	10	18000 to 25400	26570 to 32850
Coconut climber	2522	52	1250 to 1950	2200 to 3100
Mushroom cultivation	201	13	-	13500 to 16000
Use of leaf colour chart	650	31	16560 to 23730	23550 to 26750
Flower induction in jasmine	279	32	113000 to 110000	145000 to 170500/year
Ginger cultivation	97	46	77000 to 88000	146000 to 160000
Marigold	172	32	125000 to 135000	225000 to 235000
Banana cultivation	680	58	158000 to 162000	185000 to 232000
Honey production	162	53	4100 to 8600	13000 to 23500/year
Pineapple flower induction	118	56	19500 to 31700	47200 to 61800/year

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

1. System of Rice Intensification

Paddy is one of the major food crops in Kanyakumari District and cultivated in an area of 20349 ha in both kharif & rabi seasons. Farmers are normally practicing random transplanting by using aged seedlings (25days).The nursery preparations, water management and fertilizer application are being adopted as conventional methods. The annual mean yield is 4434 kg/ha. The conventional practice leads to high investment with minimum productivity. Hence, the SRI was introduced to increase the productivity with low cost without affecting the ecosystem.

Intervention

SRI training and demonstration were conducted for the last three years in Agastheswaram and Thovalai Taluk of Kanyakumari District to obtain maximum productivity.

Details of technology

Single young seedling of 14 days old was selected and planted in a square pattern with wider spacing (22.5 cm x 22.5 cm) was adopted. The mat nursery area of 2.5 cents was prepared with 7.5 kg/ha of seed. Rotary weeder / cono weeder was used for 3-4 times at weekly interval from 15 days after transplanting. Irrigation was made at a depth of 2.5 cm after formation of small hair line cracks. Phosphorus and potassium was applied as basal. Nitrogen was applied based on leaf colour chart reading.

Result and feedback

The demonstration recorded an average yield of 72.8 q/ha with BCR value of 3.40 .The system of rice intensification recorded 32% increased yield over farmer practice. The farmers expressed that

maximum productivity was obtained with low investment. The farmers were realized that SRI requires less labour, water and nitrogen fertilizer. Most of the farmers' opinioned that effective weed management is possible through cono /rotary weeder without affecting eco system. The farmers expressed their drawback as difficulty in timely planting as well as perfect land leveling.

Impact

In recent years, SRI has gained momentum in Kanyakumari District due to more advantages. It has been taken up and practiced in all rice growing areas of the District in both the seasons. The technology has been spread to an area of 8250 ha with 41%. The income of the farmers has been increased to the tune of Rs. 25000 to 30,000 per hectare.

2. Coconut tonic – root feeding

In Kanyakumari District, coconut occupies the major area of 24,000 ha. The degradation of soil fertility due to improper manuring and fertilization resulted in decline in yield. The quality and size of nuts are reduced, besides button shedding, pre mature nut fall and formation of barren nuts. The remediation of soil fertility is a long process. The present mean yield of nut per tree is 64 besides the highest yield potential of 150 to 180 nuts/tree/year.

Interventions

For improving the soil fertility status and yield of coconuts training and demonstration were conducted on manuring and fertilizer application technologies were conducted besides root feeding of coconut tonic as a short term measure. The FLD programme was conducted at Puthalam village of Rajakkamangalam block on root feeding of TNAU coconut tonic.

Details of technology

A healthy feeder root with pencil thickness was selected 50 cm away from the trunk without any damage to the root. A slanting cut was given with a sharp knife (or) a blade and the root was inserted into the polythene sachet containing the tonic(200 ml). The sachet and the root at the point of insertion were tied with a thread.

Experimentation

The root feeding technology of TNAU coconut tonic was demonstrated as FLD in 2 ha. of 10 farm holdings of Puthalam village during 2008-09 to prove its efficiency in increasing the yield and quality of nuts. During 2006-07 and 2007-08 also FLD programmes were conducted in 2 ha. each year. The reduction in button shedding and yield of nuts/palm was recorded.

Results and farmers feed back

The farmers realized the need of root feeding of coconut tonic as a short term measure to increase the yield and quality of coconuts. They themselves visualized the reduction in the button shedding rate.

The results of the study showed the reduction in the button shedding to a tune of 6.5 to 10.2 per cent during 2006-07, 11.8 to 29 per cent during 2007-08 and 17.1 to 55.4 per cent during 2008-09. The mean yield increase was 94.4, 50.7, 109.3 nuts/tree/year and in the local check it was 80.2, 42.3, 85.9 nuts/tree/year respectively for the three years.

Spread of the technology

The technology on root feeding of coconut tonic has spread to 87 villages with an area of more than 750 ha.

3. Coconut harvesting device

Coconut is one of the major crop of Kanyakumari District occupying an area of 24000 ha. The harvesting of matured nuts is a major problem due to labour scarcity and so the timely harvest is affected which resulted in loss of income by the farmers. The technology on the mechanical harvester of matured coconut nut was demonstrated by the KVK for the past 4 years in more than 35 locations. The extension functionaries of the state Department of Agriculture were also involved in this demonstration. More number of farmers participated and responded. The farmers purchased the device and at present more than 350 devices are in use by the coconut farmers. The trained unemployed youths have formed groups and are harvesting coconuts in different villages. They are charging Rs.10 to 12 per palm and are earning Rs.1000 to 1500 per day.

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

Banana Pseudostem Weevil

Banana is one of the major crop of Kanyakumari district occupies an area of around 8000 ha. Incidence of pseudo stem weevil and nematode are the major threats in banana cultivation and at severe conditions it resulted in an yield reduction of 50 per cent. Hence, there is an urgent need to cater the needs to this problem.

A technology which has already been developed by the Horticultural Research Station, Pechiparai of Tamil Nadu Agricultural University was demonstrated by the KVK, Pechiparai for the past three years (2008-11) at different locations of Kanyakumari district. The extension functionaries of the State Department of Agriculture and Horticulture were also involved in this demonstration. The demonstration yielded huge response from the farmers of this district as it was effective in managing the pest problem.

Technology demonstrated

The technology involves treatment stem injection of monocrotophos at 5, 7 and 8 month after planting @ 2 ml at 45 and 150 cm height. The solution of monocrotophos is prepared by diluting 54ml of the commercially available monocrotophos in 350 ml of water. The injection has been given at opposite direction to the first injection. This technology has now spread over an area of more than 820 ha. in this district and is being recommended by the District extension functionaries.

Impact

After attending the training programmes and demonstrations some of the self help group, rural youth and farmers have taken initiative to adopt the technology for income generation. They are charging Rs.2 per plant for pseudostem injection using monocrotophos and earning a net profit of Rs.1500-2000/ha. as a part time venture

PART XII - LINKAGES

12.A. Functional linkage with different organizations

Name of organization	Nature of linkage
Dept. of Agriculture, Govt. of Tamilnadu	Pre rabi / Kharif season training, monthly zonal and mid monthly meeting, extension functionaries training, trainings on Tsunami affected areas, joint diagnostic survey, demonstration of latest crop production technology, campaign and exhibition. ATMA related trainings.
Dept. of Horticulture, Govt. of Tamilnadu	Joint diagnostic survey, co-implementation of training programmes and demonstrations
All India Radio, Nagercoil	Farm school and radio talks on different agricultural technologies, weather based crop advisory services and announcement of training programmes
Directorate of Cocoa and Arecanut	Demonstration of pruning technology and cultivation aspects
Cashew Board	Training on value addition of cashew
NGO YMCA, Marthandam	Conducting training programmes on bee keeping, mushroom spawn production, medicinal plant cultivation, kitchen garden, banana fibre extraction etc
NABARD	Farmers club formation and Farmers training
UTRC	Farmers training Technical support

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

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Pilot Demonstration for Popularisation and Utilization of Cashew Apple.	March 2011	Directorate of Cashew and Cocoa development board, Govt. of India	37,500.00

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?

i) Identification of Agro-Ecological situations in the district
ii) Organization of participatory appraises in AES
iii) Data collection through participatory appraisal
iv) Review and sharing of the collected informations
v) Preparation of plan for various activities based on SREP
vi) Analysis of data collected under SREP and drafting of SREP

Coordination activities between KVK and ATMA during 2010-11

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	Governing Body Committee Meeting Farmers - Scientists Interaction	One Two	-	-
02	**Research projects**	-	-	-	-
03	**Training programmes**	-	-	-	-
04	**Demonstrations**	-	-	-	-
05	**Extension Programmes**				
	Kisan Mela	-	-	-	-
	Technology Week	-	-	-	-
	Exposure visit	Visit to KVK, Pechiparai	8	-	-
	Exhibition	-	-	-	-
	Soil health camps	-	-	-	-
	Animal Health Campaigns	-	-	-	-
	Others (Pl. specify)	-	-	-	-
06	**Publications**				
	Video Films	-	-	-	-
	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 2010			
May			
June			
July			
August			
September			
October			
November			
December			
January 2011			
February			
March	2	194	3

PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	

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.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Pepper				Panniyur-1	rooted cuttings	1560		3180	
Floriculture									
Fruits Egg Fruit Pine apple				 - Kew	 Seedlings Suckers	 270 3000		 1350 10,500	
Vegetables									
Others (specify)									
Cumbu Napier				Co-4	Stem cuttings	500		250	
Mushroom				MDU-1	bed spawn	130		1300	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
	Pseudomonas talc formulation	67.25		5043.75	
	Micro Nutrient Mixture Coconut tonic	350 765		14,000 3825	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	

13.E. Utilization of hostel facilities : Nil

Accommodation available (No. of beds)

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2008			
November 2008			
December 2008			
January 2009			
February 2009			
March 2009			
April 2009			
May 2009			
June 2009			
July 2009			
August 2009			
September 2009			

13.F. Database management : Nil

S. No	Database target	Database created

13.G. Details on Rain Water Harvesting structure and micro-irrigation system

Amount sanction (Rs.)	Expenditure (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 Demonstrations	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	State bank of India	Kuzhithurai	00867	Saving	11014054121	-	-
With KVK	State bank of India	Kuzhithurai	00867	Saving	11014054132	-	-

14.B. Utilization of funds under FLD on Cotton *(Rs. in Lakh)*

S. No	Items / Head	Opening balance if any	Remittance by ZPD VIII Bangalore	Actual expenditure dubitable to Council A/C	Closing balance if any	Remarks
1	**Production Technology – 50 ha**					
	a. Essential inputs					
	b. POL, hiring vehicle, Kisan melas, printed materials, reports, demonstration boards					
	Total					
2.	**Farm Implements – 75 ha**					
	a. New equipments					
	b. Contingencies					
	Total					

14.C. Utilization of KVK funds during the year 2010-11 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	45,00,000		64,11,185
2	**Traveling allowances**	1,00,000		1,00,000
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,80,000		1,79,997
B	POL, repair of vehicles, tractor and equipments	1,40,000		1,39,956
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	75,000		74,985
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	35,000		35,000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1,75,000		1,74,997
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	80,000		79,983
G	Training of extension functionaries	25,000		24,998
H	Maintenance of buildings	30,000		29,996
I	Establishment of Soil, Plant & Water Testing Laboratory	--		
J	Library	5,000		4,985
K	Extension Activities	30,000		29,995
L	Farmers Field School	25,000		24,983
	TOTAL (A)	**54,00,000**		**73,11,060**
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)	10,000		9,896
TOTAL (B)		**10,000**		**10,000**
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**54,10,000**	**54,09,189**	**73,20,956**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2008 to March 2009	13,03,051	2,18,146	1,27,528	13,83,669
April 2009 to March 2010	13,83,669	1,33,777	5,87,080	9,30,366
April 2010 to March 2011	9,30,366	3,55,994	51,216	12,35,144

15. Details of HRD activities attended by KVK staff during 2010-11

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.S.Srivara Buddhi Bhuvaneswari	SMS (Agrl. Extn.)	Alternative poultry farming as a livelihood option for farming community	KVK, Namakkal	24 - 26.11.2010
Dr.T. Selvakumar	SMS (Agron.)	Protection of Plant Varieties & Farmers' Rights	AC&RI, Killikulam	22.02.2011
Dr. S. Suresh	SMS (SS&AC)	Advances in Soil health and fertility management	TNAU, Coimbatore	21 - 23.03.2011
Dr. S. Irulandi	SMS (Agrl.Ento.)	IPDM in high value crops	TNAU, Coimbatore	24 & 25.03.2011
Dr.S.Srivara Buddhi Bhuvaneswari	SMS (Agrl.Extn.)	New initiatives in transfer of technologies	TNAU, Coimbatore	24 & 25.03.2011
Dr. T. Thangaselvabai	SMS (Hort.)	Protected cultivation of Horticultural crops	TNAU, Coimbatore	28 & 29.03.2011
Mr. V. Sivaraman	Prog. Asst. (Comp.)	Database management, Web content and Web hosting development	TNAU, Coimbatore	29 - 31.03.2011
Dr.T. Selvakumar	SMS (Agron.)	Weather based Advisory Services	TNAU, Coimbatore	30 & 31.03.2011

16. Please include any other important and relevant information which has not been reflected above (write in detail) -: Nil

SUMMARY FOR 2010-11

I. TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops

Thematic areas	Crop	Name of the technology assessed	No. of trials
Integrated Nutrient Management			
	Pepper	Foliar Nutrition for the management of berry drop in pepper	1
Varietal Evaluation	Paddy	Assessment of suitable paddy variety for Kanyakumari District	1
	Rose	Evaluation of performance of rose variety *Gladiator*	1
Integrated Pest Management	Banana	Management of pseudostem weevil in banana	1
	Rose	Management of sucking pest in rose	1
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			**5**

Summary of technologies assessed under livestock

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials
Disease Management	Poultry	Oral pellet RDVK vaccine	1
Evaluation of Breeds			
Feed and Fodder management			
Nutrition Management			
Production and Management			
Others (Pl. specify)			
Total			**1**

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Summary of technologies assessed under various enterprises

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

Summary of technologies assessed under home science

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

II. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops

Thematic areas	Crop	Name of the technology refined	No. of trials
Integrated Nutrient Management	Banana	Management of micro nutrient disorders in banana	1
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			**1**

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

III. FRONTLINE DEMONSTRATION

Cotton

Frontline demonstration on cotton

Crop	Thematic Area	Name of the technology demonstrated	No. of KVKs	No. of Farmers	Area (ha)	Yield (q/ha)		% Increase	*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Total																

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other crops

Crop	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Yield (q/ha)		% change in yield	Other parameters		*Economics of demonstration (Rs./ha)				*Economics of check (Rs./ha)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Cereals Paddy	Production technology	Popularization of SRI		10	4	69.1	52.6	31.36	Productive tillers/ hill – 18.6 No. grains / tiller – 121.7	Productive tillers/ hill – 14.7 No. grains / tiller – 112	37400	69100	31700	1.84	34970	52600	17630	1.5
Paddy	Production technology	Popularization of CORH-3 Rice		10	4	78.1	68.7	13.68	Productive tillers/ hill – 19.6 No. grains / tiller – 126	Productive tillers/ hill – 18.7 No. grains / tiller – 122	38100	78100	40000	2.04	36900	68700	31800	1.85
Paddy	IPM	IPM for yellow stem borer in paddy		10	4	69.6	60.6	14.85	Parasitism (%) - 16.25 Dead Heart (%) -2. 50 White Ear (%) – 1. 05	Parasitism (%) - 2.30 Dead Heart (%) -29.75 White Ear (%) – 3.50	36985	69600	32615	1.88	34250	60600	26350	1.76

Paddy	INM	Integrated Plant Nutrient Supply System ASD-16		10	4	72.4	56.1	29.1	No. of Tillers / hill – 33.4	No. of Tillers / hill – 26.2	38750	72400	33650	1.89	36250	56100	19850	1.55
		TPS-3				73.1	58.1	25.8	No. of Tillers / hill – 34.3	No. of Tillers / hill – 28.4	38500	73100	34600	1.90	37500	58100	20600	1.55
Millets																		
Oilseeds																		
Pulses																		
Vegetables																		
Flowers	Higher production & profit	Integrated crop resource management in marigold		10	4	20.8	14.0	32.6	Pl. height – 86.4 No of laterals – 18.4 Flower Wt. – 9.3 g	Pl. height – 82.0 No of laterals – 15.1 Flower Wt. – 7.2	105740	312000	206260	2.95	54000	**126000**	**72000**	**2.33**
Ornamental																		
Fruit	Higher production & profit	Hitech production protocol for Nendran Banana		10	4	31.0	23.9	22.9	Peudostem ht. – 2.1 mt. Girth – 60.3 cm Bunch Wt. -13.7 Kg	Peudostem ht. – 1.9 mt. Girth – 57 cm Bunch Wt. – 10.57 Kg	90000	279000	189000	3.31	106200	**191200**	**85000**	**2.24**
Spices and condiments	IPM	Management of rhizome weevil & soft rot in ginger		10	4	145	103	40.78	Dead heart (%) – 3.25 Disease Int. (%) - 3.7	Dead heart (%) – 25.9 Disease Int. (%) – 20.6	79500	217500	138000	2.74	69750	142800	73050	**1.95**
Commercial																		
Medicinal and aromatic																		

Fodder	Feed &Fodder	Popularizing mixed fodder crops for increasing milk quantity and quality CO(GG)3		**10**	**2**	**1625**	**1362**	**19.26**	**Plant ht.- 214 cm No. of tillers/hill - 20**	**Plant ht.- 175 cm No. of tillers/hill - 15**	**35000**	**121875**	**86875**	**3.48**	**32500**	**102187**	**69687**	**3.14**
		Desmanthus				**464**	**385**	**20.5**			**16850**	**69600**	**52750**	**4.13**	**14500**	**57750**	**43250**	**3.98**
Plantation																		
Fibre																		
Others (pl.specify)																		
	Total																	

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

** BCR= GROSS RETURN/GROSS COST

Livestock

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Dairy																		
Poultry	Nutrition security and income generation to rural womwn	Back yard poultry rearing		10	10	11.1 kg	10.2 kg	8.8	Weight gain – 4.6 to 7 gms./day	Weight gain – 4.2 to 6.5gms./day	700	1875	1175	2.68	600	1530	930	2.55
Rabbitry																		
Pigerry																		
Sheep and goat																		
Duckery																		
Others (pl.specify)																		
	Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.)				*Economics of check (Rs.)			
						Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Common carps																		
Mussels																		
Ornamental fishes																		
Others (pl.specify)																		
	Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Category	Name of the technology demonstrated	No. of KVKs	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		*Economics of demonstration (Rs.) or Rs./unit				*Economics of check (Rs.) or Rs./unit			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
Oyster mushroom																	
Button mushroom																	
Vermicompost																	
Sericulture																	
Apiculture																	
Others (pl.specify)																	
Total																	

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Women empowerment

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
Women						
Pregnant women						
Adolescent Girl						
Other women						
Children						
Neonats						
Infants						
Children						

Farm implements and machinery

Name of the implement	Crop	Name of the technology demonstrated	No. of KVKs	No. of Farmer	Area (ha)	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit ect.)			
						Demonstration	Check									

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

Other enterprises

Demonstration details on crop hybrids

Crop	Name of the Hybrid	No. of farmers	Area (ha)	Yield (kg/ha) / major parameter			Economics (Rs./ha)			
				Demonst-ration	Local check	% change	Gross Cost	Gross Return	Net Return	BCR
Cereals										
Bajra										
Maize										
Rice	CO(R)H-3	10	4	7810	6870	13.68	38,100	78,100	40,000	2.04
Sorghum										
Wheat										
Others (pl.specify)										
Total										
Oilseeds										
Castor										
Mustard										
Safflower										
Sesame										
Sunflower										
Groundnut										
Soybean										
Others (pl.specify)										
Total										
Pulses										
Greengram										
Blackgram										
Bengalgram										
Redgram										
Others (pl.specify)										
Total										
Vegetable crops										
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										

IV. Training Programme

Farmers' Training 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
Crop Production										
Weed Management	1	18	1	19	1	0	1	19	1	20
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	1	10	2	12	12	3	15	22	5	27
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/Irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	1	1	11	12	2	2	4	3	13	16
Nursery management	1	3	4	7	0	0	0	3	4	7
Integrated Crop Management	1	20	10	30	6	4	10	26	14	40
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	1	25	15	40	0	0	0	25	15	40
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	1	19	21	40	0	0	0	19	21	40
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	1	19	2	21	0	0	0	19	2	21
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	1	7	14	21	0	0	0	7	14	21
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0

Management of potted plants	1	8	0	8	14	9	23	22	9	31
Export potential of ornamental plants	1	11	14	25	0	0	0	11	14	25
Propagation techniques of Ornamental Plants	1	8	12	20	0	0	0	8	12	20
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	2	25	8	33	0	0	0	25	8	33
Processing and value addition	1	34	9	43	9	5	14	43	14	57
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	1	4	27	31	0	0	0	4	27	31
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	1	0	0	0	11	16	27	11	16	27
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Soil Health and Fertility Management										
Soil fertility management	1	23	3	26	2	4	6	25	7	32
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	1	30	3	33	2	0	2	32	33	35
Management of Problematic soils	1	29	0	29	4	0	4	33	0	33
Micro nutrient deficiency in crops	1	2	28	30	0	0	0	2	28	30
Nutrient use efficiency	1	48	0	48	2	0	2	50	0	50
Balanced use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and water testing	1	20	7	27	5	2	7	25	9	34
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0

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
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	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
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agril. Engineering										
Farm machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Plant Protection										
Integrated Pest Management	3	43	5	48	17	12	29	60	17	77
Integrated Disease Management	1	11	10	21	4	0	4	15	10	25
Bio-control of pests and diseases	1	32	19	51	6	0	6	38	19	57
Production of bio control agents and bio pesticides	1	17	0	17	5	0	5	22	0	22
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0

Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	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
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	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
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	1	13	15	28	0	3	3	13	18	31
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (Pl. specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**30**	**480**	**240**	**720**	**102**	**60**	**162**	**582**	**300**	**882**

Farmers' Training including sponsored training programmes (Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Production										
Weed Management	1	0	24	24	0	1	1	0	25	25
Resource Conservation Technologies	2	14	13	27	6	0	6	20	13	33
Cropping Systems	1	1	14	15	0	0	0	1	14	15
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/Irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	1	6	17	23	1	0	1	7	17	24
Nursery management	1	9	1	10	1	0	1	10	1	11
Integrated Crop Management	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	1	19	1	20	1	2	3	20	3	23
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Horticulture										
a) Vegetable Crops										
Production of low value and high volume crop	1	13	6	19	2	2	4	15	8	23
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
b) Fruits										
Training and Pruning	1	0	20	20	0	0	0	0	20	20
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	1	11	7	18	0	0	0	11	7	18
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	1	0	25	25	0	0	0	0	25	25

Propagation techniques of Ornamental Plants	1	0	9	9	0	0	0	0	9	9
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	1	15	0	15	0	0	0	15	0	15
Processing and value addition	1	10	0	10	0	0	0	10	0	10
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	7	105	35	140	0	0	0	105	35	140
Processing and value addition	3	45	15	60	0	0	0	45	15	60
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	1	47	17	64	0	0	0	47	17	64
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	2	28	11	39	0	23	23	28	34	62
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	1	5	17	22	2	2	4	7	19	26
Micro nutrient deficiency in crops	1	10	11	21	2	0	2	12	11	23
Nutrient use efficiency	1	13	1	14	1	0	1	14	1	15
Balanced use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and water testing	1	28	6	34	2	0	2	30	6	36
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	1	1	7	8	0	2	2	1	9	10
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	1	15	0	15	0	0	0	15	0	15
Animal Disease Management	0	0	0	0	0	0	0	0	0	0
Feed and Fodder technology	1	19	6	25	0	0	0	19	6	25

Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	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
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	1	0	28	28	0	0	0	0	28	28
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agril. Engineering										
Farm machinery and its maintenance	1	19	1	20	1	0	1	20	1	21
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	1	10	4	14	5	2	7	15	6	21
Repair and maintenance of farm machinery and implements	1	13	8	21	1	0	1	14	8	22
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Plant Protection										
Integrated Pest Management	2	20	51	71	0	0	0	20	51	71
Integrated Disease Management	1	12	0	12	0	0	0	12	0	12
Bio-control of pests and diseases	1	23	1	24	2	1	3	25	2	27
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of	0	0	0	0	0	0	0	0	0	0

freshwater prawn										
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	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
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	1	9	11	20	0	0	0	9	11	20
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	1	20	0	20	0	0	0	20	0	20
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (Pl. specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**44**	**540**	**367**	**907**	**27**	**35**	**62**	**567**	**402**	**969**

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
Nursery Management of Horticulture crops	1	3	8	11	0	0	0	3	8	11
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	1	2	22	24	0	0	0	2	22	24
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	19	2	21	0	0	0	19	2	21
Post Harvest Technology	1	3	17	20	0	0	0	3	17	20
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	10	10	0	0	0	0	10	10
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**5**	**27**	**59**	**86**	**0**	**0**	**0**	**27**	**59**	**86**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	1	19	8	27	2	0	2	21	8	29
Value addition	3	0	75	75	0	0	0	0	75	75
Small scale processing	1	0	25	25	0	0	0	0	25	25
Post Harvest Technology	1	0	24	24	0	0	0	0	24	24
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**6**	**19**	**132**	**151**	**2**	**0**	**2**	**21**	**132**	**153**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	2	44	17	61	4	0	4	48	17	65
Integrated Pest Management	1	16	18	34	1	0	1	17	18	35
Integrated Nutrient management	1	26	12	38	2	0	2	28	12	40
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	2	45	13	58	6	2	8	51	15	66
Production and use of organic inputs	1	28	11	39	2	0	2	30	11	41
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	11	8	19	2	0	2	13	8	21
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
Total	**8**	**170**	**79**	**249**	**17**	**2**	**19**	**187**	**81**	**268**

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		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	15	18	33	1	0	1	16	18	34
Integrated Pest Management	1	14	7	21	2	1	3	16	8	24
Integrated Nutrient management	1	26	12	38	2	0	2	28	12	40
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	1	11	8	19	2	0	2	13	8	21
Production and use of organic inputs	1	15	7	22	2	1	3	17	8	25
Care and maintenance of farm machinery and implements	1	13	7	20	3	1	4	16	8	24
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	19	5	24	2	1	3	21	6	27
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
Total	**7**	**113**	**64**	**177**	**14**	**4**	**18**	**127**	**68**	**195**

Sponsored training programmes

S.No.	Area of training	No. of Courses	No. of Participants								
			General			SC/ST			Grand Total		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Increasing production and productivity of crops	0	0	0	0	0	0	0	0	0	0
1.b.	Commercial production of vegetables	0	0	0	0	0	0	0	0	0	0
2	**Production and value addition**										
2.a.	Fruit Plants	0	0	0	0	0	0	0	0	0	0
2.b.	Ornamental plants	0	0	0	0	0	0	0	0	0	0
2.c.	Spices crops	0	0	0	0	0	0	0	0	0	0
3.	**Soil health and fertility management**	0	0	0	0	0	0	0	0	0	0
4	**Production of Inputs at site**	0	0	0	0	0	0	0	0	0	0
5	**Methods of protective cultivation**	0	0	0	0	0	0	0	0	0	0
6	**Others (pl.specify)**	0	0	0	0	0	0	0	0	0	0
7	**Post harvest technology and value addition**										
7.a.	Processing and value addition	3	0	75	75	0	0	0	0	75	75
7.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
8	**Farm machinery**										
8.a.	Farm machinery, tools and implements	0	0	0	0	0	0	0	0	0	0
8.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
9.	**Livestock and fisheries**	0	0	0	0	0	0	0	0	0	0
10	**Livestock production and management**										
10.a.	Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
10.b.	Animal Disease Management	0	0	0	0	0	0	0	0	0	0
10.c	Fisheries Nutrition	0	0	0	0	0	0	0	0	0	0
10.d	Fisheries Management	0	0	0	0	0	0	0	0	0	0
10.e.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
11.	**Home Science**										
11.a.	Household nutritional security	0	0	0	0	0	0	0	0	0	0
11.b.	Economic empowerment of women	0	0	0	0	0	0	0	0	0	0
11.c.	Drudgery reduction of women	0	0	0	0	0	0	0	0	0	0
11.d.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
12	**Agricultural Extension**										
12.a.	Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
12.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
	Total	**3**	**0**	**75**	**75**	**0**	**0**	**0**	**0**	**75**	**75**

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		
			Male	Female	Total	Male	Female	Total	Male	Female	Total
1	**Crop production and management**										
1.a.	Commercial floriculture	1	0	10	10	0	0	0	0	10	10
1.b.	Commercial fruit production	0	0	0	0	0	0	0	0	0	0
1.c.	Commercial vegetable production	0	0	0	0	0	0	0	0	0	0
1.d.	Integrated crop management	0	0	0	0	0	0	0	0	0	0
1.e.	Organic farming	0	0	0	0	0	0	0	0	0	0
1.f.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
2	**Post harvest technology and value addition**										
2.a.	Value addition	0	0	0	0	0	0	0	0	0	0
2.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
3.	**Livestock and fisheries**										
3.a.	Dairy farming	0	0	0	0	0	0	0	0	0	0
3.b.	Composite fish culture	0	0	0	0	0	0	0	0	0	0
3.c.	Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
3.d.	Piggery	0	0	0	0	0	0	0	0	0	0
3.e.	Poultry farming	0	0	0	0	0	0	0	0	0	0
3.f.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
4.	**Income generation activities**										
4.a.	Vermi-composting	1	8	10	18	0	0	0	8	10	18
4.b.	Production of bio-agents, bio-pesticides, bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
4.c.	Repair and maintenance of farm machinery and implements	1	12	0	12	1	0	1	13	0	13
4.d.	Rural Crafts	1	0	10	10	0	0	0	0	10	10
4.e.	Seed production	0	0	0	0	0	0	0	0	0	0
4.f.	Sericulture	0	0	0	0	0	0	0	0	0	0
4.g.	Mushroom cultivation	1	7	2	9	1	0	1	8	2	10
4.h.	Nursery, grafting etc.	1	3	7	10	0	0	0	3	7	10
4.i.	Tailoring, stitching, embroidery, dying etc.	0	0	0	0	0	0	0	0	0	0
4.j.	Agril. para-workers, para-vet training	0	0	0	0	0	0	0	0	0	0
4.k.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
5	**Agricultural Extension**										
5.a.	Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
5.b.	Others (pl.specify)	0	0	0	0	0	0	0	0	0	0
	Grand Total	**6**	**30**	**39**	**69**	**2**	**0**	**2**	**32**	**39**	**71**

V. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	74	346	5	351
Diagnostic visits	39	238	8	246
Field Day	10	235	4	239
Group discussions	12	237	0	237
Kisan Ghosthi	0	0	0	0
Film Show	34	729	151	880
Self -help groups	0	0	0	0
Kisan Mela	2	122	16	138
Exhibition	4	200	14	214
Scientists' visit to farmers field	66	422	3	425
Plant/animal health camps	4	125	4	129
Farm Science Club	6	91	0	91
Ex-trainees Sammelan	3	101	0	101
Farmers' seminar/workshop	0	0	0	0
Method Demonstrations	45	480	57	537
Celebration of important days	0	0	0	0
Special day celebration	0	0	0	0
Exposure visits	9	206	40	246
Others -PRA	3	55	3	58
Total	**311**	**3587**	**305**	**3892**

Details of other extension programmes

Particulars	Number
Electronic Media	1
Extension Literature	0
News Letter	2
News paper coverage	7
Technical Articles	5
Technical Bulletins	5
Technical Reports	0
Radio Talks	0
TV Talks	2
Animal health camps (Number of animals treated)	0
Others (pl.specify)	0
Total	**22**

VI. PRODUCTION OF SEED/PLANTING MATERIAL

Production of seeds by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals					
Oilseeds					
Pulses					
Commercial crops					
Vegetables					
Flower crops					
Spices					
Fodder crop seeds					
Fiber crops					
Forest Species					
Others					
Total					

Production of planting materials by the KVKs

Crop category	Name of the crop	Name of the variety (if hybrid pl. specify)	Number	Value (Rs.)	Number of farmers
Commercial					
Vegetable seedlings					
Fruits	Egg fruit seedlings Pineapple suckers	Local Kew	270 3000	1350 10500	12 15
Ornamental plants					
Medicinal and Aromatic					
Plantation					
Spices	Pepper rooted cuttings	Panniyur-1	1560	3180	7
Tuber					
Fodder crop saplings	Cumbu Napier	Co-4	500	250	2
Forest Species					
Others	Mushroom bed spawn	MDU-1	130	1300	11
Total				**16580**	**47**

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers				
Bio-pesticide				
Bio-fungicide	*Pseudomonas* talc formulation	67.25	5043.75	9
Bio Agents				
Others	Micro nutrient Mixture Coconut Tonic	350 765	14000 3825	18 32
Total			**22868.75**	**59**

Production of livestock and related enterprise materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows				
Buffaloes				
Calves				
Others (Pl. specify)				
Poultry				
Broilers				
Layers				
Duals (broiler and layer)				
Japanese Quail				
Turkey				
Emu				
Ducks				
Others (Pl. specify)				
Piggery				
Piglet				
Others (Pl.specify)				
Fisheries				
Fingerlings				
Others (Pl. specify)				
Total				

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS 2010-11

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)
Soil	212	110	64	5300
Water	67	18	12	670
Plant	48	13	7	1200
Manure	-	-	-	-
Others (pl.specify)	-	-	-	-
Total	**327**	**141**	**83**	**7170**

VIII. SCIENTIFIC ADVISORY COMMITTEE

Number of SACs conducted
1

IX. NEWSLETTER

Number of issues of newsletter published
2

X. RESEARCH PAPER PUBLISHED

Number of research paper published
3

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

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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