QRT REPORT 2011-2019

FOR THE PERIOD

APRIL 2011 TO MARCH 2019

ICAR KRISHI VIGYAN KENDRA

(Host: Sri Avinashilingam Educational Institutions)

COIMBATORE DISTRICT

Index

FORMAT FOR
QRT REPORT FOR THE PERIOD FROM 2011-12 TO 2018-19
(As per the terms of reference of the QRT Committee)
(To be filled in by each KVK of ICAR-ATARI-Hyderabad)

1. GENERAL INFORMATION ABOUT THE KVK

i	**Name of the KVK**	**ICAR – KRISHI VIGYAN KENDRA, COIMBATORE**
	District and State	Coimbatore and Tamil Nadu
ii	**Address of the KVK**	**ICAR - KrishiVigyan Kendra** Vivekanandapuram Post,Seeliyur (Via), Karamadai Block, Coimbatore District, TamilNadu – 641 113
iii	**Name of the Programme Coordinator and official contact phone number(s)**	**Dr.P.Kumaravadivelu** 09842441500
iv	**No. of Blocks/Mandal/Taluks**	Block : 13 Taluk : 6
iv	**Mandate of the KVK**	❖ Technology Assessment and Demonstration for its Application and Capacity Development.
v	**Phone number, fax, number and e-mail ID**	Telephone: (04254) 284223, 294325 Fax: (04254) 284820 EMail: kvkcbe.icar@gov.insakvk.cbe@rediffmail.com avinashilingamkvk@gmail.com Web Address: www.avinashilingamkvk.org
	Host Institute	**Sri Avinashilingam Educational Institutions** Saradalaya, Bharathi Park Road, Coimbatore – 641 043 Telephone:(0422) 2440140, 2448154, 2450380 Fax: (0422) 2443620, 2438786 E Mail: saeti_trustoff@yahoo.com
vii	**Date or establishment (dd/mm/yyyy)**	16/04/1979 No. F. 22 (5)/79/Edu.II, Dated 16th April, 1979 of ICAR, New Delhi.

2. ESTABLISHMENT

2.1 Vision, Mission, Mandate and activities of the KVK

(i) Vision

Science and Technology – led growth leading to enhanced Productivity, Profitability and Sustainability of Agriculture

(ii) Mission

Farmer – centric growth in agriculture and allied sectors through application of appropriate technologies in specific agro – ecosystem perspective.

(iii) Mandate

Technology Assessment and Demonstration for its Application and Capacity Development

(iv) Activities

To implement the mandate effectively, the following activities are envisaged for each KVK

1. On-farm testing to assess the location specificity of agricultural technologies under various farming systems.
2. Frontline demonstrations to establish production potential of technologies on the farmers' fields.
3. Capacity development of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies.
4. To work as Knowledge and Resource Centre of agricultural technologies for supporting initiatives of public, private and voluntary sector in improving the agricultural economy of the district.
5. Provide farm advisories using ICT and other media means on varied subjects of interest to farmers

In addition, KVKs produce quality technological products (seed, planting material, bio-agents, livestock) and make it available to farmers, organize frontline extension activities, identify and document selected farm innovations and converge with ongoing schemes and programs within the mandate of KVK.

Terms of reference (a)

3. TO REVIEW THE KVK PROGRAMMES/ACTIVITIES AND THEIR RELEVANCE, KEEPING IN VIEW THE IDENTIFIED AND PRIORITIZED FARMERS NEEDS OF THE AREA (THRUST/THEMATIC AREAS)

3.1 Technology Assessment and Refinement

3.1.1 Technology assessment under crops during 2011-12 to 2018-19

Details	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		Total	
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
No. of crop technologies assessed during QRT period	15	25	12	20	10	19	14	30	6	10	7	10	9	25	24	40	**97**	**179**
T : No. of technologies; F: No. of farmers																		

3.1.2 Technology refinement under crops during 2011-12 to 2018-19

Details	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		Total	
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
No. of crop technologies refined during QRT period	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	**3**	**5**
T : No. of technologies; F: No. of farmers																		

3.1.3 Thematic area wise technology assessment under crops during 2011-12 to 2018-19

Farmers needs/ Thematic areas	No. of crop technologies assessed during QRT period																Total	
	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19			
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
Varietal evaluation	9	10	9	15	7	14	6	10	3	5	3	5	3	5	9	15	**46**	**79**
ICM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
INM	6	10	0	0	0	0	2	5	3	5	0	0	0	0	3	5	**14**	**25**
IDM	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	**5**
IPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
IFS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Resource Conservation	0	0	3	5	0	0	3	5	0	0	4	5	3	10	3	5	**16**	**30**
Weed management	0	0	0	0	3	5	0	0	0	0	0	0	3	10	0	0	**6**	**15**
Farm mechanization	0	0	0	0	0	0	3	10	0	0	0	0	0	0	3	5	**6**	**15**
EDP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	10	**6**	**10**
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Total	**18**	**25**	**12**	**20**	**10**	**19**	**14**	**30**	**6**	**10**	**7**	**10**	**9**	**25**	**24**	**40**	**97**	**179**

Note: ICM: Integrated Crop Management; INM: Integrated Nutrient Management; IDM: Integrated Disease management; IPM: Integrated Pest management; IFS: Integrated Farming System; EDP: Entrepreneurial Development Programmes and

T : No. of technologies; F: No. of farmers

3.1.4 Thematic area wise technology refinement under crops during 2011-12 to 2018-19

Farmers needs/ Thematic areas	No. of crop technologies refined during QRT period																Total	
	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19			
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
Varietal evaluation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
ICP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
INM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
IDM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
IPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
IFS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Resource Conservation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Weed management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Farm mechanization	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	**3**	**5**
EDP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**

Note: ICM: Integrated Crop Management; INM: Integrated Nutrient Management; IDM: Integrated Disease management; IPM: Integrated Pest management; IFS: Integrated Farming System; EDP: Entrepreneurial Development Programmes and

T : No. of technologies; F: No. of farmers

3.1.5 Technology assessment under livestock during 2011-12 to 2018-19

Details	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		Total	
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
No. of livestock technologies assessed during QRT period	3	12	0	0	0	0	3	10	0	0	3	5	0	0	0	0	**9**	**27**

T : No. of technologies; F: No. of farmers

3.1.6 Technology refinement under livestock during 2011-12 to 2018-19

Details	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		Total	
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
No. of livestock technologies refined during QRT period	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**

T : No. of technologies; F: No. of farmers

3.1.7Thematic area wise technology assessment under livestock during 2011-12 to 2018-19

Farmers needs/ Thematic areas	No. of livestock technologies assessed during QRT period																Total	
	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19			
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
Evaluation of breeds	3	12	0	0	0	0	0	0	0	0	3	5	0	0	0	0	**6**	**17**
Production management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Disease management	0	0	0	0	0	0	3	10	0	0	0	0	0	0	0	0	**3**	**10**
Nutrition management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Feed and fodder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Total	**3**	**12**	**0**	**0**	**0**	**0**	**3**	**10**	**0**	**0**	**3**	**5**	**0**	**0**	**0**	**0**	**9**	**27**

T : No. of technologies; F: No. of farmers

3.1.8Thematic area wise technology refinement under livestock during 2011-12 to 2018-19

Farmers needs/ Thematic areas	No. of livestock technologies refined during QRT period																Total	
	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19			
	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F	T	F
Evaluation of breeds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Production management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Disease management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Nutrition management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
T : No. of technologies; F: No. of farmers																		

3.2 Frontline Demonstrations (FLDs)

3.2.1 Frontline demonstrations during 2011-12 to 2018-19

Details	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19		Total	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A
No. of FLDs conducted during QRT period	130	55	77	40	160	93	133	76	115	61	212	80	193	82	190	76	**1210**	**563**
D : No. of demonstrations; A: Area in ha.																		

3.2.2 Thematic area/category wise front line demonstrations during 2011-12 to 2018-19

Thematic areas/ Category	No. of FLDs conducted during QRT period																Total	
	2011-12		2012-13		2013-14		2014-15		2015-16		2016-17		2017-18		2018-19			
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A
Cereals & millets	35	6	22	9	10	4	20	8	10	4	0	0	10	4	0	0	**107**	**35**
Pulses	0	0	10	4	10	4	10	4	10	4	85	34	0	0	60	24	**185**	**74**
Oilseeds	25	10	10	4	0	0	0	0	0	0	47	19	0	0	50	20	**132**	**53**
Fibre crops	0	0	0	0	0	0	10	4	20	8	0	0	0	0	0	0	**30**	**12**
Horticultural crops	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Fruit crops	0	0	10	4	10	4	0	0	20	8	0	0	10	4	0	0	**50**	**20**
Flower crops	0	0	0	0	0	0	0	0	0	0	0	0	10	4	0	0	**10**	**4**
Vegetable crops	30	12	10	4	30	12	10	2	20	8	10	4	20	8	10	4	**140**	**54**
Plantation crops	0	0	0	0	0	0	0	0	0	0	0	0	20	8	0	0	**20**	**8**
Spices & condiments	0	0	0	0	5	2	10	2	0	0	0	0	30	9	0	0	**45**	**13**
Medicinal & aromatic plants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Fodder crops	0	0	0	0	0	0	0	0	0	0	10	4	10	1	20	2	**40**	**7**
Farm mechanization	20	7	0	0	10	4	0	0	10	4	30	9	30	18	20	8	**120**	**50**
Livestock	20	0	0	0	55	0	38	0	10	0	0	0	30	0	0	0	**153**	**0**
Enterprises/EDP	0	0	15	0	15	0	25	0	15	0	10	0	23	0	10	0	**113**	**0**
Crop hybrids	0	0	0	0	15	15	10	2	0	0	20	8	0	0	20	8	**65**	**33**
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
Total	**130**	**35**	**77**	**25**	**160**	**45**	**133**	**22**	**115**	**36**	**212**	**78**	**193**	**56**	**190**	**66**	**1210**	**363**

D : No. of demonstrations; A: Area in ha.

Terms of reference (b)

4. TO ASSESS THE SUPERIORITY OF THE TECHNOLOGY/PRODUCTS DEMONSTRATED ON THE FARMERS FIELDS THROUGH ON FARM TRIALS AND FRONTLINE DEMONSTRATIONS

4.1 Performance of varieties/technologies/products through OFTs during 2011-12 to 2018-19

S.No	Crop / Enterprise	Title of OFT	Technology emerged/ Best Technology Option	Trials/ farmers (No.)	Yield (q/ha)		
					Best Technology Option	Farmers Practice	Increase (%)
2011-12							
1	Blackgram	Assessing the foliar application of Methylobactrium for drought tolerance in Black gram (CO 6)	Seed treatment with methylobactrium @ 20 g /kg+*P.fluorscence* @ 10 g/kg+*T.viride* @ 4g/kg – ST and Foliar spray 2 times during pre and post flowering stage @ 500ml/ha	5	7.36	7.18	2.51
2	Bengalgram	Assessing the performance of Bengalgram variety in Rain fed condition with ICM practice.	Variety: Dharwad A-1 Local variety : CO 4	5	12.00	11.80	1.69
3	Maize	Assessing the performance of Maize variety in irrigated condition with ICM practice.	Variety: Arjun Local variety : CO 6	5	77.5	71.2	8.85
4	Turmeric	Assessing the management practices of rhizome rot and foliar disease of Turmeric	Rhizome treatment with Metalaxyl @2 g/lit + Psedomonas fluorescens@10g/lit. soil drenching with 0.2% Metalaxyl(90DAP) foliar spray with	5	57	48	18.75

S.No	Crop / Enterprise	Title of OFT	Technology emerged/ Best Technology Option	Trials/ farmers (No.)	Yield (q/ha)		
					Best Technology Option	Farmers Practice	Increase (%)
			Mancozeb+Carbendazin @2g/lit (120DAP) foliar spray with Tebuconazole @ 0.1 % on 150 DAP				
5	Banana	Assessing the performance of micronutrient mixtures in Banana	Foliar application of Arka banana special	5	405	330	22.73
6	Poultry	Assessing the performance of desi chicken in Coimbatore district	Improved breed of desi chicken	12	1.5 kg	0.9 kg	66.67
2012-13							
1	Bengal gram	Assessing the performance of Bengal gram variety in Rain fed condition with ICM practice	Variety: GBS 963 Local variety : CO4	5	11.42	8.91	28.17
2	Groundnut	Assessing the performance of groundnut varieties in Rain fed condition	Variety: GG 7 Local variety : TMV 7	5	15.91	13.82	15.12
3	Groundnut	Assessing the efficiency of sulphur oxidizing bacterial inoculants in groundnut	RD of fertilizer + seed treatment– Rhizobium1 kg/ha+1 kg of SOB and soil application of SOB @ 5 kg/ha on 45 DAS	5	13.83	11.49	20.37
4	Tomato	Assessing the performance of Tomato hybrids	Hybrid: COTH3	5	421.64	362.78	16.22
2013-14							
1	Groundnut	Assessment of Groundnut varieties	Variety: GPBD 4 Local variety : CO4	5	16.16	14.81	9.12
2	Coriander	Assessing the performance of Coriander varieties	Variety: Arkaisha	9	43.52	31.14	39.76
3	Coconut	Assessing the Performance	Guinea grass	5	31.72	28.41	11.65

S.No	Crop / Enterprise	Title of OFT	Technology emerged/ Best Technology Option	Trials/ farmers (No.)	Yield (q/ha)		
					Best Technology Option	Farmers Practice	Increase (%)
		of different fodder grass under coconut garden					
2014-15							
1	Groundnut	Assessing the performance of Groundnut varieties	Variety: Co 7 Local variety : TMV 7	5	17.51	14.91	17.44
2	Maize	Assessing the performance of maize nutri seed bag in irrigated condition	Sowing with maize nutria seed pack	5	86.6	81.7	6.00
3	Banana	Assessing the performance of different intercrops in Banana	Vegetable cowpea	5	317.1	283.9	11.69
4	Tuberose	Assessing the performance of Tuberose varieties	variety : Arka Niranthra	5	10.24	7.05	45.25
5	Groundnut	Assessing the performance of various groundnut Tractor Drawn harvesters	PAU Model	10	19.58	18.05	8.48
6	Dairy animals	Assessment of Ethno Veterinary Herbal medicine for treatment of FMD in dairy cattle	Administration of Ethno veterinary Herbal medicine mixture	10	3.98 Milk yield (Lts/day)	3.23 Milk yield (Lts/day)	23.21
2015-16							
1	Groundnut	Assessing the performance of Groundnut varieties	Variety Co 6	5	18.40	17.27	6.54
2	Curry leaf	Assessing the different fertilizer schedules for Curry leaf	fertilizer schedules FROM NIPHM, Hyderabad	5	195.69	155.82	25.59
3	Groundnut	Refinement in groundnut Decorticator (manually operated) for easy adjustment	ICAR-KVK Coimbatore Groundnut Decorticator (manually operated)	5	16.63 3.17 (M.Hr/Ha)	16.12 132.6 (M.Hr/Ha)	3.16

S.No	Crop / Enterprise	Title of OFT	Technology emerged/ Best Technology Option	Trials/ farmers (No.)	Yield (q/ha)		
					Best Technology Option	Farmers Practice	Increase (%)
2016-17							
1	Ragi	Assessing the performance of Ragi variety in Rain fed condition with ICM practice	Variety: Co 15	5	11.9	9.4	26.60
2	Onion	Assessment of different drought mitigation technologies for small Onion	Foliar spray of PPFM@ 0.1%	5	116.2	89.2	30.27
3	Poultry	Assessing the Performance of improved desi hybrids in Coimbatore region	Gramapriya chick	5	1.69 (kg/bird)	1.32 (kg/bird)	28.03
2017-18							
1	Bengal gram	Assessment of Bengal gram varieties	Variety: JAKKI 9218	5	11.85	10.72	10.54
2	Paddy	Assessment of glycemic response of traditional paddy varieties	Variety: Kullakara	10	93.0 (Glycemic index)	94.9 (Glycemic index)	-
3	Paddy	Assessment for drudgery reduction in weeding through weeders in paddy	Single row manually operated Modified cono weeder	10	61.99	53.14	16.65
2018-19							
1	Turmeric	Assessing the performance of different micronutrient mixtures in Turmeric	IISR Turmeric mixture	5	207.56	192.43	7.86
2	Groundnut	Assessment of Groundnut varieties	variety :Dharani	5	18.5	16.83	9.92
3	Banana	Assessment of different varieties of banana flour for cost and quality of bakery products	variety : Mories	5	550.11 Energy (Kcal/100g)	509.36 Energy (Kcal/100g)	8.01
4	Bhendi	Assessing the performance of Bhendi hybrids for yield	Hybrid :Arka Nikita	5	192.44	170.66	12.76

S.No	Crop / Enterprise	Title of OFT	Technology emerged/ Best Technology Option	Trials/ farmers (No.)	Yield (q/ha)		
					Best Technology Option	Farmers Practice	Increase (%)
		and quality					
5	Vegetable Cowpea	Assessing the performance of high yielding Vegetable Cowpea for yield and quality	variety : Kanagamony	5	75.38	57.34	31.46
6	Paddy	Assessment of Unpolished rice cookies and Millet cookies for human health	Unpolished rice cookies	5	526.53 Energy (Kcal/100g)	487.86 Energy (Kcal/100g)	7.97
7	Groundnut seed drill	Assessing the performance of Various TD seed Drill (Groundnut)	ANGRAU model TD seed drill (9 rows)	5	19.31	15.13	27.63
8	Banana	Assessing the performance of different composting technologies in banana waste	Composting of banana wastages with NCOF "Waste decomposer"	5	8.14	7.82	4.09

4.2 Performance of varieties/technologies/products through FLDs during 2011-12 to 2018-19

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
2011-12											
Sesamum	Integrated Crop management	TMV-7	6	15	6.2	4.4	41	12996	6670	1.77:1	1.46:1
Groundnut	Integrated Crop management	Co-6	4	10	16.15	13.6	18.7	12996	6670	1.77:1	1.46:1
Paddy	Integrated Crop management	ADT-36	5	15	47.6	42.3	12.5	27088	19259	2.01:1	1.67:1
Sorghum	Integrated Crop management	Co-30	1	20	33.9	26.40	28.0	18656	12056	2.12:1	1.78:1
Brinjal	Integrated Crop management	COBH2	4	10	20.4	16.3	25.1	50436	31730	1.98:1	1.35:1
Chillies	Integrated Crop management	CO(ch)1	4	10	25.6	21.	22.0	41850	22400	2.19:1	1.59:1
Onion	Integrated Crop management	CO4	4	10	141	102	38.2	52200	35100	2.12:1	1.96:1
Ground nut (Groundnut harvester)	Farm mechanization	Co-6	6	10	2	38	2500 (Savings in labour (Rs./ha)	34250	31730	2.6:1	2.3:1
Fodder Chaff cutter	Farm mechanization	Co-5	1	10	1	5	400 (Savings in labour (Rs./ha)	26800	22400	1.74:1	1.55:1
Sheep and goat	Popularization salt lick to sheep and goat kids	Local available breed ND	20 nos	20	0.25 kg/kid	0.02kg/kid	5	50	27	1.5:1	1.1:1
2012-13											
Paddy	Integrated Crop management	ADT-43	5	12	79.46	75.50	5.2	29074	23512	2.24:1	1.95:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Maize	Integrated Crop management	COMH 6	4	10	71.19	63.00	13	74740	64700	3.8:1	3.6:1
Sesamum	Integrated Crop management	TMV-7	4	10	5.7	4.3	32	13529	7300	1.85:1	1.31:1
Blackgram	Integrated Crop management	VBN 6	4	10	8.3	6.9	20.29	30789	13853	1.98:1	1.44:1
Bittergourd	Integrated Crop management	Amman shri	4	10	38.66	30.57	26.46	128828	67088	2.25:1	1.57:1
Banana	Integrated Crop management	Nendiran	4	10	314.9	271.2	16.11	612492	572719	5.9:1	4.3:1
2013-14											
Bengalgram	Integrated Crop management	Co 4	4	10	10.71	9.22	16.2	30789	13853	1.98:1	1.44:1
Maize	Integrated Crop management	CoMH 6	4	10	72.15	62.95	14.25	75109	62479	3.71:1	3.29:1
Tomato	Integrated Crop management	5005	4	10	144	119	21	90200	47660	2.1:1	1.6:1
Bhendi	Integrated Crop management	Mych 10	4	10	932.5	812.6	14.7	105341	56287	2.8:1	1.8:1
Onion	Integrated Pest and Disease management	Co-5	4	10	148.3	121.0	22.5	69872	41195	2.33:1	1.70:1
Banana	Integrated Crop management	Nendrian	4	10	330.9	295.2	12.2	663625	585125	6.2:1	5.3:1
Turmeric	Integrated Crop management	BSR-1	2	5	66.3	58.7	12.9	234045	146725	2.09:1	1.58:1
Mixed fodder	Feed and fodder management	Co-4 COFS-29 Desmanthus	8	20	1015.48	850.58	16.2	53420	17011	2.28:1	1.42:1
Dairy	Integrated disease management	Local available breed ND	20	20	443.4 lit	395.3 lit	12.05	4748	3401	1.81:1	1.55:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Dairy	Labour management	Local available breed ND	5	5	7.48	6.73	11.1	83.5	63.0	1.87:1	1.64:1
Goat	Integrated nutrient management	Local available breed ND	10	10	5.362	4.956	8.1	88.50	789	1.94:1	1.75:1
Ground nut	Farm mechanization	TMV 7	4	10	2.5	48	94.7	28500	13000	1.93:1	1.33:1
Tomato	Processing and value addition	5005	4	15	932.5	812.6	14.7	105341	56287	2.8:1	1.8:1
2014-15											
Bengalgram	Integrated Crop management	Co 4	4	10	11.09	9.54	16.24	31564	55346	1.96:1	1.54:1
Cotton	Integrated Crop management	Suraj	4	10	20.72	16.85	22.96	46300	67430	2.26:1	1.86:1
Brinjal	Integrated Crop management	Karamadai varikkai	2	10	298.7	245.5	21.7	277830	380525	2.5:1	1.9:1
Tomato	Integrated nutrient management	5005	0.6	6	880.91	711.45	23.8	295959	183049	2.56:1	1.88:1
Bhendi	Integrated nutrient management	Mycho 10	0.4	4	194.85	172.9	12.7	218359	162589	2.65:1	2.10:1
Turmeric	Integrated Crop management	Co-2	2	10	55.48	46.08	20.39	346344	235258	3.11 :1	2.24:1
Fodder sorghum	Feed and fodder management	Co 31	1	10	1695	1542	9.9	138423	122060	2.88:1	2.65 :1
Dairy	Integrated Nutrient management	HF cross	10	10	4.55	4.02	13.18	3902	2751	1.58:1	1.41:1
Chick	Integrated dieses management	Country chick	10	10	0.283	6.53	3	1019	526	1.94:1	1.86:1
Chick	Small scale income generation activities	Country chick	8	8	0.340	0.260	30.77	1032	212.4	4.3:1	3.3:1
Turmeric	Entrepreneurs development	Co 2	10	10	57.69	54.23	6.38	7000	3150	3.5:1	3.1:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Banana	Processing and value addition	Nendrian	15	15	314.9	308.2	2.17	6052.5	1872	1.61:1	1.13:1
Paddy	Farm mechanization	ADT-43	4	10	1.34	30.2	95.5	45812	38776	1.94:1	1.75:1
2015-16											
Bengalgram	Integrated Crop management	Co 4	4	10	11.45	9.780	17.10	25235	10773	1.55:1	1.21:1
Maize	Integrated Crop management	CoMH 6	4	10	68.5	67.48	1.50	42151.	39993	1.91:1	1.86:1
Cotton	Integrated Crop management	Suraj	4	10	20.93	15.67	33.6	43408	21282	2.02:1	1.50:1
Mulberry	Integrated Crop management	VI	4	10	91.85	85.17	7.84	10196	7430	1.41:1	1.31:1
Bhendi	Integrated Crop management	Mycho-10	2	10	163.9	147.1	11.3	60660	45763	2.12:1	1.80:1
Tomato	Integrated Crop management	5005	2	10	931.3	851.85	9.32	105165	77870	2.29:1	1.84:1
Banana	Integrated Crop management	Nendiran	4	10	342.5	296.13	15.6	280315	212521	3.1:1	2.5:1
Banana	Integrated Crop management	G9	4	10	885.78	799.8	10.7	474255	408273	4.3:1	3.7:1
Brinjal	Integrated Crop management	Varikkai	2	10	231.3	289.8	25.2	480579	289567	3.58:1	2.47:1
Vegetable cowpea	Integrated Crop management	Swetha	2	10	46.3	52.4	6.31	71771	45236	2.2:1	1.73:1
Cotton	Farm mechanization	Suraj	4	10	2.42	91.75	97.4	27657	7691	1.59:1	1.3:1
Groundnut	Farm mechanization	Tmv-7	4	10	4.35	23.75	81.7	23122	15527	1.43:1	1.28:1
Area specific mineral mixture	Integrated Nutrient management	Tanuvas	10	10	7.32	5.9	16.2	14294	4305	1.7:1	1.41:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Fodder grass	Integrated Crop management	Co 5	10	10	1904	1842.6	3.37	112896	105406	2.46:1	2.33:1
Fodder sorghum	Integrated Crop management	Co 31	10	10	456	418.15	9.27	7157	1092	1.08:1	1.01:1
Nutrition garden in schools	Nutritional security	Traditional varieties	5	5	-	-	-	1886	-	2.47:1	-
Breeding of poultry birds	Nutritional security	Namakkal 1 Vanaraja Gramapriya	10	10	-	-	-	29477	-	0.36:1	-
2016-17											
Blackgram	Integrated Crop management	VBN 6	4	10	7.28	6.32	15.2	49226	35200	2.29:1	1.86:1
Greengram	Integrated Crop management	Co(gg) 6 &8	20	50	7.436	6.184	20.24	30387	21660	2.68:1	2.17:1
Bengalgram	Integrated Crop management	Co 4	10	25	11.14	10.30	8.16	32900	24386	1.53:1	1.38:1
Groundnut	Integrated Crop management	Co 6	19	47	12.56	10.52	19.39	51477	30869	2.70:1	1.80:1
Chillies	Integrated Crop management	Aadhimadayanur (Traditional)	4	10	25.1	21.6	15.8	280576	191395	2.6:1	1.9:1
Bitter gourd	Integrated Crop management	Palli	4	10	226.23	175.91	28.60	54635	23042	1.68:1	1.28:1
Cauliflower	Integrated Crop management	Snow white	4	10	153.10	138.53	10.52	73393	52995	2.39:1	1.92:1
Fodder	Fodder management	Co-31	4	10	1016	958.5	6.0	18855	13234	2.28:1	1.16:1
Sorghum	Farm Mechanization	Local	8	20	0.6	36.8	36.5	37384	21470	2.75:1	1.69:1
Tamarind	Farm Mechanization	Local	1	10	1.21	10.32	9.11	2001	687	2.05:1	1.23:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Banana	Waste recycling	Nendiran	2	10	10	4	25	1952	152	2.37:1	1.52:1
2017-18											
Paddy	Integrated crop management	CO- 51	4	10	49.1	36.2	35.6	40856	24050	2.87:1	2.08:1
Curry leaf	organic farming	Local	4	10	199.42	182.7	9.1	146960	137466	2.72:1	2.54:1
Jasmine	Integrated nutrient management	Co-2	4	10	95.68	87.1	9.8	486943	323989	1.74:1	1.44:1
Coriander	Integrated crop management	Co-4	4	10	64.77	57.1	13.3	51239	36189	2.12:1	1.73:1
Banana	Integrated Pest and diseases management	Nendiran	4	10	330.87	295.1	12.2	358213	285828	2.33:1	1.70:1
Snakegourd	Integrated Pest and diseases management	Local	4	10	156.23	135.9	14.95	28234	9808	1.37:1	1.12 :1
Onion	Integrated Pest and diseases management	Co-5	4	10	132.3	121.6	8.7	69872	41195	2.33:1	1.70:1
Turmeric	Integrated crop management	Pragathi	1	10	277.48	230	20.39	346344	235258	3.11:1	2.24:1
Coconut	Soil fertility management	Tall	8	20	67.84	61.71	9.9	161881	138635	3.93:1	3.35:1
Fodder sorghum	Fodder technology	Co-31	1	10	1016.9	958.5	17.64	18855	13234	1.23:1	1.16:1
Milch animal	Fertility management	HF cross	10 nos	10	Estrus induction9	Estrus induction4	125	17185	8000	1.81:1	1.36:1
Milch animal	Clean milk production	HF cross	10 nos	10	Incidence of mastitis (%)10	Incidence of mastitis (%)30	66	28475	13823	2.06:1	1.48:1
Milch animal	Clean milk production	HF cross	10 nos	10	Milk yield (Lts/day)4.55	Milk yield (Lts/day)4.02	13.18	3902	2751	1.58:1	1.41:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Groundnut	Farm Mechanization	Co-6	4	10	19.49 3.08 (Ha/man.hr)	17.75 3.08 (Ha/man.hr)	9.8 81.7	23122	15527	1.43:1	1.28:1
Bengalgram	Farm Mechanization	Co-4	4	10	11.21 3.08 (Ha/man.hr)	10.14 13.53 (Ha/man.hr)	10.5 -	-	-	-	-
Tamarind	Farm Mechanization	Local	10 nos	10	2.0 (Operational cost/ Rs/ qtl)	0.44 (Operational cost/ Rs/ qtl)	78	2834	957	2.38:1	1.26:1
Moringa	Processing and Value addition	Local	10 nos	10	Shelf life 6 months	Shelf life 2 days	-	2600	400	2.6:1	1.3:1
Milk	Value addition	-	10 nos	10	Shelf life 7 days	Shelf life 12 days	-	6850	3440	2.9:1	2.0:1
Beekeeping	Income generation	*Apis Cerana*	3 nos	3	-	-	-	4250	-	1.17:1	-
2018-19											
Cow pea	Integrated crop management	Co-7	4	10	15.12	12.36	22.97	22017	10581	1.71:1	1.31:1
Bengal gram	Integrated crop management	Jakki 9218	20	50	11.35	10.25	10.73	3952	26650	1.72:1	1.45:1
Groundnut	Integrated crop management	Dharani	20	50	18.31	16.75	9.25	47848	34680	1.82:1	1.55:1
Chillies	Integrated crop management	Sierra	4	10	26.5	21.68	15.82	281576	171503	2.8:1	1.4:1
Brinjal	Integrated crop management	Traditional	4	10	298.7	245.5	21.6	277830	184245	2.5:1	1.9:1
Tomato	Integrated pest and disease management	COTH3	4	10	680.91	611.45	11.35	186261	105165	2.29:1	1.34:1

Crop	Thematic area	Variety	Demo area (ha)	Farmers (No.)	Yield (q/ha)			Net returns (Rs./ha)		BCR	
					Demo	Check	Increase (%)	Demo	Check	Demo	Check
Fodder	Fodder technology	Co-5	1	10	1616.9	1460.3	10.71	22025	17462	1.52:1	1.43:1
Fodder	Fodder technology	Tree fodder	1	10	2175	2042	6.5	19145	16255	1.28:1	1.24:1
Sorghum	Farm Mechanization	Traditional	4	10	0.6	36.8	36.5	37384	21470	2.75:1	1.69:1
Groundnut	Farm Mechanization	Co-6	4	10	4.35	23.75	81.7	23122	15527	1.43:1	1.28:1
Millets	Value addition	Thinai and Varagu	5 nos	5	Keeping quality 120 days Output after milling(1kg) 750 gms	Keeping quality 45 days Output after milling (1kg) 620 gms	-	8250	4250	5.7:1	3.2:1
Pulses	Drudgery reduction	Green gram, cowpea	5 nos	5	Winno wing (Kgs) 1140 kgs per day	Winnowing (Kgs) 65 Kgs only (Per person per day)	-	2350	1250	2.4:1	1.6:1

Terms of reference (c)

5. TO ASSESS THE EFFORTS MADE IN TRANSFER OF TECHNOLOGY THROUGH TRAINING OF FARMERS AND EXTENSION PERSONNEL, EXTENSION ACTIVITIES, AND PRODUCTION OF SEEDS AND PLANTING MATERIALS AND OTHER TECHNOLOGY INPUTS

5.1Training (Capacity building)

5.1.1 Training for farmers/farm women during 2011-12 to 2018-19

Year	No. of Training Courses	Number of Farmers		
		Male	Female	Total
(a) On-campus				
2011-12	47	735	428	1163
2012-13	52	864	669	1533
2013-14	41	588	751	1339
2014-15	34	916	852	1768
2015-16	32	238	385	623
2016-17	25	566	381	947
2017-18	21	224	218	442
2018-19	22	361	216	577
Total	**274**	**4492**	**3900**	**8392**
(b) Off-campus				
2011-12	118	1474	733	2207
2012-13	98	837	888	1725
2013-14	53	588	567	1155
2014-15	42	256	258	514
2015-16	93	618	1129	1747
2016-17	99	1352	910	2262
2017-18	84	747	700	1447
2018-19	37	571	235	806
TOTAL	**624**	**6443**	**5420**	**11863**
GRAND TOTAL (A +B)	**898**	**10935**	**9320**	**20255**

5.1.2 Training for Rural youth during 2011-12 to 2018-19

Year	No. of Training Courses	No. of Youth		
		Male	Female	Total
(a) On-campus				
2011-12	14	198	326	524
2012-13	13	110	166	276
2013-14	10	74	143	217
2014-15	5	68	70	138
2015-16	5	12	61	73
2016-17	2	7	42	49
2017-18	10	128	181	309
2018-19	29	311	350	661
Total	**88**	**908**	**1339**	**2247**
(b) Off-campus				
2011-12	18	167	604	771
2012-13	15	3	349	352
2013-14	9	62	154	216
2014-15	10	88	238	326
2015-16	3	73	26	99
2016-17	11	133	91	224
2017-18	8	16	121	137
2018-19	2	6	54	60
Total	**76**	**548**	**1637**	**2185**
Grand total (a +b)	**164**	**1456**	**2976**	**4432**

5.1.3 Training for Extension Functionaries during 2011-12 to 2018-19

Year	N. of Trainings	No. of Personnel		
		Male	Female	Total
(a) On-campus				
2011-12	6	99	102	201
2012-13	7	145	138	283
2013-14	6	149	67	216
2014-15	2	24	12	36
2015-16	2	31	19	50
2016-17	9	45	231	276
2017-18	2	35	24	59
2018-19	5	69	87	156
Total	**39**	**597**	**680**	**1277**
(b) Off-campus				
2011-12	2	0	58	58
2012-13	1	0	23	23
2013-14	2	2	56	58
2014-15	3	22	59	81
2015-16	4	60	42	102
2016-17	2	29	20	49
2017-18	6	89	109	198
2018-19	2	28	43	71
Total	**22**	**230**	**410**	**640**
Grand total (a +b)	**61**	**827**	**1090**	**1997**

5.1.4 Sponsored training courses during 2011-12 to 2018-19

Year	No. of Courses	No. of Participants		
		Male	Female	Total
2011-12	46	734	1153	**1887**
2012-13	23	421	291	**712**
2013-14	24	400	455	**855**
2014-15	45	503	458	**961**
2015-16	12	116	339	**455**
2016-17	26	591	529	**1120**
2017-18	8	208	43	**251**
2018-19	19	338	358	**696**
Total	**203**	**3311**	**3626**	**6937**

5.1.5 Vocational training courses during 2011-12 to 2018-19

Years	No. of Courses	No. of Participants		
		Male	Female	Total
2011-12	1	0	21	**21**
2012-13	2	12	33	**45**
2013-14	5	15	87	**102**
2014-15	13	493	22	**515**
2015-16	2	26	20	**46**
2016-17	13	170	205	**375**
2017-18	7	36	32	**68**
2018-19	6	22	90	**112**
Total	**49**	**774**	**510**	**1284**

5.1.6 Thematic area wise training for farmers/farm women during 2011-12 to 2018-19

Sl.No.	Thematic area	Participant farmers/farm women (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
	2011-2012												
1	Crop Production	7	83	99	182	11	185	39	224	**17**	**268**	**138**	**406**
2	Horticulture	12	268	93	361	7	95	5	100	**19**	**363**	**98**	**461**
3	Soil Health and Fertility Management	4	58	16	74	9	121	64	185	**13**	**179**	**80**	**259**
4	Livestock Production and Management	6	101	76	177	18	180	127	307	**24**	**281**	**203**	**484**
5	Home Science/Women empowerment	9	60	83	143	23	100	341	441	**32**	**160**	**424**	**584**
6	Agril. Engineering	1	10	0	10	36	675	105	780	**37**	**685**	**105**	**790**
7	Plant Protection	5	88	26	114	12	83	44	127	**17**	**171**	**70**	**241**
8	Production of Inputs at site	3	67	35	102	2	35	8	43	**5**	**102**	**43**	**145**
	TOTAL	**47**	**735**	**428**	**1163**	**118**	**1474**	**733**	**2207**	**165**	**2209**	**1161**	**3370**
	2012-13												
1	Crop Production	2	36	15	51	9	114	64	178	**11**	**150**	**79**	**229**
2	Horticulture	13	325	151	476	4	30	2	32	**17**	**355**	**153**	**508**
3	Soil Health and Fertility Management	5	21	126	147	16	153	197	350	**21**	**174**	**323**	**497**
4	Livestock Production and Management	10	206	103	309	17	158	143	301	**27**	**364**	**246**	**610**
5	Home Science/Women empowerment	6	65	102	167	26	15	438	453	**32**	**80**	**540**	**620**
6	Agril. Engineering	14	158	105	263	26	367	44	412	**40**	**525**	**149**	**674**
7	Plant protection	2	53	67	120	0	0	0	0	**2**	**53**	**67**	**120**
	Total	**52**	**864**	**669**	**1533**	**98**	**837**	**888**	**1725**	**150**	**1701**	**1557**	**3258**
	2013-14												
1	Crop Production	7	148	125	273	6	105	72	177	**13**	**253**	**197**	**450**
2	Horticulture	6	69	117	186	4	47	25	72	**10**	**116**	**142**	**258**
3	Soil Health and Fertility Management	5	80	29	109	8	68	116	184	**13**	**148**	**145**	**293**
4	Livestock Production and	7	87	155	242	6	91	29	120	**13**	**178**	**184**	**362**

	Management												
5	Home Science/Women empowerment	6	40	155	195	12	95	230	325	**18**	**135**	**385**	**520**
6	Agril. Engineering	8	99	108	207	14	146	66	212	**22**	**245**	**174**	**419**
7	Plant Protection	2	65	62	127	3	36	29	65	**5**	**101**	**91**	**192**
	Total	**41**	**588**	**751**	**1339**	**53**	**588**	**567**	**1155**	**94**	**1176**	**1318**	**2494**
	2014-15												
1	Crop Production	2	36	15	51	7	56	42	98	**9**	**92**	**57**	**149**
2	Horticulture	10	325	197	522	4	30	2	32	**14**	**355**	**199**	**554**
3	Soil Health and Fertility Management	2	38	126	164	6	58	25	83	**8**	**96**	**151**	**247**
4	Livestock Production and Management	6	206	103	309	6	54	28	82	**12**	**260**	**131**	**391**
5	Home Science/Women empowerment	6	65	102	167	14	21	136	157	**20**	**86**	**238**	**324**
6	Agril. Engineering	3	116	121	237	3	21	14	35	**6**	**137**	**135**	**272**
7	Plant Protection	3	52	66	118	2	16	11	27	**5**	**68**	**77**	**145**
8	Production of Inputs at site	2	78	122	200	0	0	0	0	**2**	**78**	**122**	**200**
	TOTAL	**34**	**916**	**852**	**1768**	**42**	**256**	**258**	**514**	**76**	**1172**	**1110**	**2282**
	2015-16												
1	Crop Production	3	17	63	80	3	22	41	63	**6**	**39**	**104**	**143**
2	Horticulture	10	83	100	183	26	121	340	461	**36**	**204**	**440**	**644**
3	Soil Health and Fertility Management	4	26	51	77	23	238	221	459	**27**	**264**	**272**	**536**
4	Livestock Production and Management	3	17	63	80	5	63	58	121	**8**	**80**	**121**	**201**
5	Home Science/Women empowerment	6	52	65	117	7	26	56	82	**13**	**78**	**121**	**199**
6	Agril. Engineering	4	31	24	55	8	56	87	143	**12**	**87**	**111**	**198**
7	Plant Protection	0	0	0	0	11	27	213	240	**11**	**27**	**213**	**240**
8	Production of Inputs at site	2	12	19	31	10	65	113	178	**12**	**77**	**132**	**209**
	Total	**32**	**238**	**385**	**623**	**93**	**618**	**1129**	**1747**	**125**	**856**	**1514**	**2370**
	2016-17												
1	Crop Production	2	67	20	87	11	297	51	348	**13**	**364**	**71**	**435**
2	Horticulture	2	87	37	124	14	268	92	360	**16**	**355**	**129**	**484**

3	Soil Health and Fertility Management	5	165	56	221	15	257	152	409	**20**	**422**	**208**	**630**
4	Livestock Production and Management	5	58	141	199	13	148	126	274	**18**	**206**	**267**	**483**
5	Home Science/Women empowerment	8	63	125	188	29	160	420	580	**37**	**223**	**545**	**768**
6	Agril. Engineering	3	126	2	128	15	206	55	261	**18**	**332**	**57**	**389**
7	Plant Protection	0	0	0	0	2	16	14	30	**2**	**16**	**14**	**30**
	Total	**25**	**566**	**381**	**947**	**99**	**1352**	**910**	**2262**	**124**	**1918**	**1291**	**3209**
	2017-18												
1	Crop Production	3	94	9	103	5	81	22	103	**8**	**175**	**31**	**206**
2	Horticulture	3	47	13	60	17	201	138	339	**20**	**248**	**151**	**399**
3	Soil Health and Fertility Management	0	0	0	0	13	115	169	284	**13**	**115**	**169**	**284**
4	Livestock Production and Management	0	0	0	0	4	49	17	66	**4**	**49**	**17**	**66**
5	Home Science/Women empowerment	7	11	125	136	14	26	243	269	**21**	**37**	**368**	**405**
6	Agril. Engineering	0	0	0	0	27	255	76	331	**27**	**255**	**76**	**331**
7	Plant Protection	4	39	5	44	4	20	35	55	**8**	**59**	**40**	**99**
8	Production of Inputs at site	4	33	66	99	0	0	0	0	**4**	**33**	**66**	**99**
	Total	**21**	**224**	**218**	**442**	**84**	**747**	**700**	**1447**	**105**	**971**	**918**	**1889**
	2018-19												
1	Crop Production	5	72	63	135	2	53	18	71	**7**	**125**	**81**	**206**
2	Horticulture	5	90	55	145	2	1	26	27	**7**	**91**	**81**	**172**
3	Soil Health and Fertility Management	4	132	2	134	3	71	4	75	**7**	**203**	**6**	**209**
4	Livestock	1	12	7	19	0	0	0	0	**1**	**12**	**7**	**19**
5	Home Science/Women empowerment	4	34	74	108	7	169	77	245	**11**	**203**	**151**	**353**
6	Agri. Engineering	2	12	10	22	23	277	110	387	**25**	**289**	**120**	**409**
7	Plant Protection	1	9	5	14	0	0	0	0	**1**	**9**	**5**	**14**
	TOTAL	**22**	**361**	**216**	**577**	**37**	**571**	**235**	**806**	**59**	**932**	**451**	**1383**
	GRAND TOTAL	**274**	**4492**	**3900**	**8392**	**624**	**6443**	**5420**	**11863**	**898**	**10935**	**9320**	**20255**

TC : No. of training courses; M : Male participants; F: Female participants; T : Total participants

5.1.7 Subject matter/Thematic area wise training for Rural Youth during 2011-12 to 2018-19

Sl.No.	Subject matter/ Thematic area	Participant rural youth (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
	2011-2012												
1	Crop Production	3	4	90	94	0	0	0	0	**3**	**4**	**90**	**94**
2	Horticulture	1	53	21	74	2	0	59	59	**3**	**53**	**80**	**133**
3	Soil Health and Fertility Management	2	35	28	63	0	0	0	0	**2**	**35**	**28**	**63**
4	Livestock Production and Management	0	0	0	0	1	1	10	11	**1**	**1**	**10**	**11**
5	Home Science/Women empowerment	3	35	127	162	12	0	535	535	**15**	**35**	**662**	**697**
6	Agri. Engineering	2	12	30	42	3	166	0	166	**5**	**178**	**30**	**208**
7	Plant Protection	3	59	30	89	0	0	0	0	**3**	**59**	**30**	**89**
	Total	**14**	**198**	**326**	**524**	**18**	**167**	**604**	**771**	**32**	**365**	**930**	**1295**
	2012-13												
1	Crop Production	2	24	33	57	0	0	0	0	**2**	**24**	**33**	**57**
2	Horticulture	2	16	14	30	0	0	0	0	**2**	**16**	**14**	**30**
3	Soil Health and Fertility Management	2	0	46	46	2	1	27	28	**4**	**1**	**73**	**74**
4	Livestock Production and Management	3	62	8	70	0	0	0	0	**3**	**62**	**8**	**70**
5	Home Science/Women empowerment	1	0	13	13	9	2	195	197	**10**	**2**	**208**	**210**
6	Agri. Engineering	3	8	52	60	3	0	87	87	**6**	**8**	**139**	**147**
7	Plant Protection	0	0	0	0	1	0	40	40	**1**	**0**	**40**	**40**
	Total	**13**	**110**	**166**	**276**	**15**	**3**	**349**	**352**	**28**	**113**	**515**	**628**
	2013-14												
1	Crop Production	3	23	43	66	0	0	0	0	**3**	**23**	**43**	**66**
2	Horticulture	1	10	0	10	1	13	0	13	**2**	**23**	**0**	**23**
3	Soil Health and Fertility Management	5	40	49	89	0	0	0	0	**5**	**40**	**49**	**89**

Sl.No.	Subject matter/ Thematic area	Participant rural youth (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
4	Livestock Production and Management	0	0	0	0	1	33	3	36	**1**	**33**	**3**	**36**
5	Home Science/Women empowerment	0	0	0	0	5	7	119	126	**5**	**7**	**119**	**126**
6	Agri. Engineering	0	0	0	0	2	9	32	41	**2**	**9**	**32**	**41**
7	Plant Protection	1	1	51	52	0	0	0	0	**1**	**1**	**51**	**52**
	Total	**10**	**74**	**143**	**217**	**9**	**62**	**154**	**216**	**19**	**136**	**297**	**433**
	2014-15												
1	Crop Production	1	17	9	26	0	0	0	0	**1**	**17**	**9**	**26**
2	Horticulture	1	14	0	14	0	0	0	0	**1**	**14**	**0**	**14**
3	Soil Health and Fertility Management	0	0	0	0	4	15	96	111	**4**	**15**	**96**	**111**
4	Livestock Production and Management	0	0	0	0	3	55	30	85	**3**	**55**	**30**	**85**
5	Home Science/Women empowerment	1	0	52	52	3	18	112	130	**4**	**18**	**164**	**182**
6	Agri. Engineering	1	12	9	21	0	0	0	0	**1**	**12**	**9**	**21**
7	Plant Protection	1	25	0	25	0	0	0	0	**1**	**25**	**0**	**25**
	Total	**5**	**68**	**70**	**138**	**10**	**88**	**238**	**326**	**15**	**156**	**308**	**464**
	2015-16												
1	Crop Production	0	0	0	0	1	12	9	21	**1**	**12**	**9**	**21**
2	Horticulture	2	4	14	18	0	0	0	0	**2**	**4**	**14**	**18**
3	Soil Health and Fertility Management	1	2	11	13	0	0	0	0	**1**	**2**	**11**	**13**
4	Livestock Production and Management	0	0	0	0	1	25	1	26	**1**	**25**	**1**	**26**
5	Home Science/Women empowerment	2	6	36	42	0	0	0	0	**2**	**6**	**36**	**42**
6	Agri. Engineering	0	0	0	0	1	36	16	52	**1**	**36**	**16**	**52**
	Total	**5**	**12**	**61**	**73**	**3**	**73**	**26**	**99**	**8**	**85**	**87**	**172**
	2016-17												
1	Crop Production	1	7	20	27	1	22	2	24	**2**	**29**	**22**	**51**

Sl.No.	Subject matter/ Thematic area	Participant rural youth (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
2	Horticulture	0	0	0	0	2	16	8	24	**2**	**16**	**8**	**24**
3	Soil Health and Fertility Management	1	0	22	22	0	0	0	0	**1**	**0**	**22**	**22**
4	Livestock Production and Management	0	0	0	0	2	41	11	52	**2**	**41**	**11**	**52**
5	Home Science/Women empowerment	0	0	0	0	4	8	66	74	**4**	**8**	**66**	**74**
6	Agri. Engineering	0	0	0	0	1	21	1	22	**1**	**21**	**1**	**22**
7	Plant Protection	0	0	0	0	1	25	3	28	**1**	**25**	**3**	**28**
	Total	**2**	**7**	**42**	**49**	**11**	**133**	**91**	**224**	**13**	**140**	**133**	**273**
	2017-18												
1	Crop Production	1	27	20	47	1	7	3	10	**2**	**34**	**23**	**57**
2	Horticulture	2	68	5	73	0	0	0	0	**2**	**68**	**5**	**73**
3	Soil Health and Fertility Management	1	5	0	5	1	3	7	10	**2**	**8**	**7**	**15**
4	Livestock Production and Management	1	15	16	31	0	0	0	0	**1**	**15**	**16**	**31**
5	Home Science/Women empowerment	3	0	114	114	4	6	74	80	**7**	**6**	**188**	**194**
6	Agri. Engineering	1	6	7	13	2	0	37	37	**3**	**6**	**44**	**50**
7	Plant Protection	1	7	19	26	0	0	0	0	**1**	**7**	**19**	**26**
	Total	**10**	**128**	**181**	**309**	**8**	**16**	**121**	**137**	**18**	**144**	**302**	**446**
	2018-19												
1	Crop Production	2	2	78	80	0	0	0	0	2	**2**	**78**	**80**
2	Horticulture	3	78	39	117	0	0	0	0	3	**78**	**39**	**117**
3	Soil Health and Fertility Management	12	121	25	146	0	0	0	0	12	**121**	**25**	**146**
4	Livestock Production and Management	1	5	5	10	0	0	0	0	1	**5**	**5**	**10**
5	Home Science/Women empowerment	7	81	160	241	2	6	54	60	9	**87**	**214**	**301**
6	Agri. Engineering	3	24	10	34	0	0	0	0	3	**24**	**10**	**34**

Sl.No.	Subject matter/ Thematic area	Participant rural youth (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
7	Plant Protection	1	0	33	33	0	0	0	0	**1**	**0**	**33**	**33**
	TOTAL	**29**	**311**	**350**	**661**	**2**	**6**	**54**	**60**	**31**	**317**	**404**	**721**
	GRAND TOTAL	**88**	**908**	**1339**	**2247**	**76**	**548**	**1637**	**2185**	**164**	**1456**	**2976**	**4432**
TC : No. of training courses; M : Male participants; F: Female participants; T : Total participants													

5.1.8 Subject matter/Thematic area wise training for Extension Personnel during 2011-12 to 2018-19

Sl.No.	Subject matter/ Thematic area	Participant extension personnel (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
	2011-2012												
1	Crop Production	1	20	22	42	0	0	0	0	**1**	**20**	**22**	**42**
2	Horticulture	1	30	10	40	0	0	0	0	**1**	**30**	**10**	**40**
3	Soil Health and Fertility Management	1	17	26	43	0	0	0	0	**1**	**17**	**26**	**43**
4	Livestock Production and Management	1	14	0	14	0	0	0	0	**1**	**14**	**0**	**14**
5	Home Science/Women empowerment	1	0	40	40	1	0	32	32	**2**	**0**	**72**	**72**
6	Agri. Engineering	0	0	0	0	1	0	26	26	**1**	**0**	**26**	**26**
7	Plant Protection	1	18	4	22	0	0	0	0	**1**	**18**	**4**	**22**
	TOTAL	**6**	**99**	**102**	**201**	**2**	**0**	**58**	**58**	**8**	**99**	**160**	**259**
	2012-13												
1	Crop Production	1	5	52	57	0	0	0	0	**1**	**5**	**52**	**57**
2	Horticulture	1	20	18	38	0	0	0	0	**1**	**20**	**18**	**38**
3	Soil Health and Fertility Management	1	42	8	50	0	0	0	0	**1**	**42**	**8**	**50**
4	Livestock Production and Management	1	32	6	38	0	0	0	0	**1**	**32**	**6**	**38**
5	Home Science/Women empowerment	1	2	30	32	1	0	23	23	**2**	**2**	**53**	**55**
6	Agri. Engineering	1	34	24	58	0	0	0	0	**1**	**34**	**24**	**58**

Sl.No.	Subject matter/ Thematic area	Participant extension personnel (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
7	Plant Protection	1	10	0	10	0	0	0	0	**1**	**10**	**0**	**10**
	Total	**7**	**145**	**138**	**283**	**1**	**0**	**23**	**23**	**8**	**145**	**161**	**306**
	2013-14												
1	Crop Production	1	18	11	29	0	0	0	0	**1**	**18**	**11**	**29**
2	Horticulture	1	16	6	22	0	0	0	0	**1**	**16**	**6**	**22**
3	Soil Health and Fertility Management	1	61	11	72	0	0	0	0	**1**	**61**	**11**	**72**
4	Livestock Production and Management	1	10	17	27	0	0	0	0	**1**	**10**	**17**	**27**
5	Home Science/Women empowerment	0	0	0	0	2	2	56	58	**2**	**2**	**56**	**58**
6	Agri. Engineering	1	12	13	25	0	0	0	0	**1**	**12**	**13**	**25**
7	Plant Protection	1	32	9	41	0	0	0	0	**1**	**32**	**9**	**41**
	TOTAL	**6**	**149**	**67**	**216**	**2**	**2**	**56**	**58**	**8**	**151**	**123**	**274**
	2014-15												
1	Crop Production	1	13	9	22	0	0	0	0	**1**	**13**	**9**	**22**
2	Horticulture	1	11	3	14	0	0	0	0	**1**	**11**	**3**	**14**
3	Soil Health and Fertility Management	0	0	0	0	1	1	24	25	**1**	**1**	**24**	**25**
4	Livestock Production and Management	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
5	Home Science/Women empowerment	0	0	0	0	1	3	29	32	**1**	**3**	**29**	**32**
6	Agri. Engineering	0	0	0	0	1	18	6	24	**1**	**18**	**6**	**24**
7	Plant Protection	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
	Total	**2**	**24**	**12**	**36**	**3**	**22**	**59**	**81**	**5**	**46**	**71**	**117**
	2015-16												
1	Crop Production	1	13	8	21	0	0	0	0	**1**	**13**	**8**	**21**
2	Horticulture	0	0	0	0	1	21	7	28	**1**	**21**	**7**	**28**
3	Soil Health and Fertility Management	1	18	11	29	0	0	0	0	**1**	**18**	**11**	**29**
4	Livestock Production and	0	0	0	0	1	15	3	18	**1**	**15**	**3**	**18**

Sl.No.	Subject matter/ Thematic area	Participant extension personnel (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
	Management												
5	Home Science/Women empowerment	0	0	0	0	1	0	26	26	**1**	**0**	**26**	**26**
6	Agri. Engineering	0	0	0	0	1	24	6	30	**1**	**24**	**6**	**30**
7	Plant Protection	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
	Total	**2**	**31**	**19**	**50**	**4**	**60**	**42**	**102**	**6**	**91**	**61**	**152**
	2016-17												
1	Crop Production	6	18	193	211	0	0	0	0	**6**	**18**	**193**	**211**
2	Horticulture	1	10	2	12	0	0	0	0	**1**	**10**	**2**	**12**
3	Soil Health and Fertility Management	1	17	14	31	0	0	0	0	**1**	**17**	**14**	**31**
4	Livestock Production and Management	0	0	0	0	1	14	10	24	**1**	**14**	**10**	**24**
5	Home Science/Women empowerment	0	0	0	0	1	15	10	25	**1**	**15**	**10**	**25**
6	Agri. Engineering	1	0	22	22	0	0	0	0	**1**	**0**	**22**	**22**
7	Plant Protection	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
	Total	**9**	**45**	**231**	**276**	**2**	**29**	**20**	**49**	**11**	**74**	**251**	**325**
	2017-18												
1	Crop Production	1	20	16	36	0	0	0	0	**1**	**20**	**16**	**36**
2	Horticulture	0	0	0	0	2	31	29	60	**2**	**31**	**29**	**60**
3	Soil Health and Fertility Management	1	15	8	23	0	0	0	0	**1**	**15**	**8**	**23**
4	Livestock Production and Management	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
5	Home Science/Women empowerment	0	0	0	0	3	58	46	104	**3**	**58**	**46**	**104**
6	Agri. Engineering	0	0	0	0	1	0	34	34	**1**	**0**	**34**	**34**
7	Plant Protection	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
	Total	**2**	**35**	**24**	**59**	**6**	**89**	**109**	**198**	**8**	**124**	**133**	**257**
	2018-19												
1	Crop Production	1	18	11	29	0	0	0	0	**1**	**18**	**11**	**29**

Sl.No.	Subject matter/ Thematic area	Participant extension personnel (No.)											
		On-campus (No.)				Off-campus (No.)				Total (No.)			
		TC	M	F	T	TC	M	F	T	TC	M	F	T
2	Horticulture	1	21	6	27	0	0	0	0	**1**	**21**	**6**	**27**
3	Soil Health and Fertility Management	1	24	16	40	0	0	0	0	**1**	**24**	**16**	**40**
4	Livestock Production and Management	0	0	0	0	0	0	0	0	**0**	**0**	**0**	**0**
5	Home Science/Women empowerment	2	6	54	60	0	0	0	0	**2**	**6**	**54**	**60**
6	Agri. Engineering	0	0	0	0	1	24	6	30	**1**	**24**	**6**	**30**
7	Plant Protection	0	0	0	0	1	4	37	41	**1**	**4**	**37**	**41**
	Total	**5**	**69**	**87**	**156**	**2**	**28**	**43**	**71**	**7**	**97**	**130**	**227**
	Grand total	**39**	**597**	**680**	**1277**	**22**	**230**	**410**	**640**	**61**	**827**	**1090**	**1917**
TC : No. of training courses; M : Male participants; F: Female participants; T : Total participants													

5.1.9 Subject matter/Thematic area wise Sponsored Training courses during 2011-12 to 2018-19

Sl. No.	Subject matter/Thematic area	No. of training courses	No. of participants (sponsored training)		
			Male	Female	Total
	2011-2012				
1	Crop Production	7	69	86	**155**
2	Horticulture	6	130	112	**242**
3	Soil Health and Fertility Management	3	4	94	**98**
4	Livestock Production and Management	2	0	59	**59**
5	Home Science/Women empowerment	11	456	162	**618**
6	Agri. Engineering	16	56	620	**676**
7	Plant Protection	1	19	20	**39**
	Total	**46**	**734**	**1153**	**1887**
	2012-13				
1	Crop Production	1	16	4	**20**
2	Horticulture	13	231	80	**311**
3	Soil Health and Fertility Management	1	0	40	**40**
4	Livestock Production and Management	3	71	36	**107**

Sl. No.	Subject matter/Thematic area	No. of training courses	No. of participants (sponsored training)		
			Male	Female	Total
5	Home Science/Women empowerment	3	0	95	**95**
6	Agri. Engineering	2	103	36	**139**
7	Plant Protection	0	0	0	**0**
	Total	**23**	**421**	**291**	**712**
	2013-14				
1	Crop Production	1	61	49	**110**
2	Horticulture	7	181	71	**252**
3	Soil Health and Fertility Management	3	55	77	**132**
4	Livestock Production and Management	2	45	16	**61**
5	Home Science/Women empowerment	7	23	182	**205**
6	Agri. Engineering	3	35	20	**55**
7	Plant Protection	1	0	40	**40**
	Total	**24**	**400**	**455**	**855**
	2014-15				
1	Crop Production	7	90	89	**179**
2	Horticulture	2	116	6	**122**
3	Soil Health and Fertility Management	5	54	56	**110**
4	Livestock Production and Management	5	44	45	**89**
5	Home Science/Women empowerment	14	160	26	**186**
6	Agri. Engineering	8	4	176	**180**
7	Plant Protection	4	35	60	**95**
	Total	**45**	**503**	**458**	**961**
	2015-16				
1	Crop Production	2	11	50	**61**
2	Horticulture	2	24	47	**71**
3	Soil Health and Fertility Management	2	19	37	**56**
4	Livestock Production and Management	1	12	7	**19**
5	Home Science/Women empowerment	2	27	113	**140**
6	Agri. Engineering	2	15	71	**86**
7	Plant Protection	1	8	14	**22**
	Total	**12**	**116**	**339**	**455**

Sl. No.	Subject matter/Thematic area	No. of training courses	No. of participants (sponsored training)		
			Male	Female	Total
	2016-17				
1	Crop Production	3	123	41	**164**
2	Horticulture	11	282	156	**438**
3	Soil Health and Fertility Management	2	61	19	**80**
4	Livestock Production and Management	4	35	141	**176**
5	Home Science/Women empowerment	3	44	135	**179**
6	Agri. Engineering	2	28	33	**61**
7	Plant Protection	1	18	4	**22**
	Total	**26**	**591**	**529**	**1120**
	2017-18				
1	Crop Production	2	103	9	**112**
2	Horticulture	1	15	8	**23**
3	Soil Health and Fertility Management	2	65	0	**65**
4	Livestock Production and Management	0	0	0	**0**
5	Home Science/Women empowerment	1	0	17	**17**
6	Agri. Engineering	1	7	5	**12**
7	Plant Protection	1	18	4	**22**
	Total	**8**	**208**	**43**	**251**
	2018-19				
1	Crop Production	3	49	50	**99**
2	Horticulture	4	98	47	**145**
3	Soil Health and Fertility Management	3	75	27	**102**
4	Livestock Production and Management	1	12	7	**19**
5	Home Science/Women empowerment	4	59	125	**184**
6	Agri. Engineering	2	15	88	**103**
7	Plant Protection	2	30	14	**44**
	Total	**19**	**338**	**358**	**696**
	Grand total	**203**	**3311**	**3626**	**6937**
TC : No. of training courses; M : Male participants; F: Female participants; T : Total participants					

5.1.10 Subject matter/Thematic area wise Vocational Training courses during 2011-12 to 2018-19

Sl. No.	Subject matter/Thematic area	No. of training courses	No. of participants (vocational training)		
			Male	Female	Total
	2011-2012				
1	Home Science/Women empowerment	1	0	21	**21**
	Total	**1**	**0**	**21**	**21**
	2012-13				
2	Agri. Engineering	1	12	0	**12**
3	Home Science/Women empowerment	1	0	33	**33**
	Total	**2**	**12**	**33**	**45**
	2013-14				
4	Horticulture	1	3	19	**22**
5	Crop Production	1	8	22	**30**
6	Value addition	1	0	13	**13**
7	Livestock Production and Management	1	0	19	**19**
8	Agri. Engineering	1	4	14	**18**
	Total	**5**	**15**	**87**	**102**
	2014-15				
10	Horticulture	12	491	8	**499**
11	Soil Health and Fertility Management	1	2	14	**16**
	Total	**13**	**493**	**22**	**515**
	2015-16				
12	Home Science/Women empowerment	2	26	20	**46**
	Total	**2**	**26**	**20**	**46**
	2016-17				
13	Horticulture	1	38	17	**55**
14	Soil Health and Fertility Management	4	105	48	**153**
15	Home Science/Women empowerment	5	8	131	**139**
16	Livestock Production and Management	1	6	9	**15**
17	Agri. Engineering	2	13	0	**13**
	Total	**13**	**170**	**205**	**375**
	2017-18				
18	Crop Production	4	24	0	**24**

Sl. No.	Subject matter/Thematic area	No. of training courses	No. of participants (vocational training)		
			Male	Female	Total
19	Home Science/Women empowerment	3	12	32	**44**
	Total	**7**	**36**	**32**	**68**
	2018-19				
20	Crop Production	1	1	21	**22**
21	Horticulture	1	0	16	**16**
22	Bee keeping	1	2	11	**13**
23	Soil Health and Fertility Management	1	12	5	**17**
24	Home Science/Women empowerment	1	7	23	**30**
25	Agri. Engineering	1	0	14	**14**
	Total	**6**	**22**	**90**	**112**
	Grand total	**49**	**774**	**510**	**1284**
TC : No. of training courses; M : Male participants; F: Female participants; T : Total participants					

5.2. Extension Programmes/activities/services

5.2.1 Extension programmes for farmers and extension personnel during 2011-12 to 2018-19

State/year	Extension Programmes (No.)	Farmers (No.)			Extension Personnel (No.)		
		Male	Female	Total	Male	Female	Total
2011-12	361	3903	2892	**6795**	292	336	**628**
2012-13	361	3903	2892	**6795**	292	336	**628**
2013-14	450	7793	4777	**12570**	38	42	**80**
2014-15	399	5669	2926	**8595**	123	103	**226**
2015-16	575	5959	3414	**9373**	588	414	**992**
2016-17	731	9012	3687	**17189**	1505	1205	**2710**
2017-18	818	16607	8886	**25493**	1505	1205	**2710**
2018-19	999	9964	4982	**14946**	986	290	**1276**
Total	**4694**	**62810**	**34456**	**101756**	**5329**	**3931**	**9250**

5.2.2 Activity wise Extension Programmes during 2011-12 to 2018-19

Activity	Extension Programmes (No.)	Participants (No.)					
		Farmers			Extension Personnel		
		Male	Female	Total	Male	Female	Total
2011-2012							
Advisory services	87	223	88	**311**	13	12	**25**
Animal/plant health camps	2	27	3	**30**	0	0	**0**
Celebration of important days	2	5	129	**134**	0	24	**24**
Diagnostic visits	32	81	47	**128**	10	5	**15**
Exposure visits	4	96	75	**171**	3	8	**11**
Exhibitions	7	470	293	**763**	11	12	**23**
Extension literature	42	374	271	**645**	3	17	**20**
Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	132	931	403	**1334**	116	87	**203**
Film shows	5	220	27	**247**	18	0	**18**
Field days	8	136	81	**217**	13	7	**20**
Farmers seminars	3	89	141	**230**	0	0	**0**
Farm Science club conveners meeting	14	484	71	**555**	18	3	**21**
Group meetings/discussions	11	23	59	**82**	11	5	**16**
Kisanghosthies	0	0	0	**0**	0	0	**0**
Kisanmelas	0	0	0	**0**	0	0	**0**
Method demonstrations	36	332	629	**961**	36	67	**103**
Scientists visit to farmers fields	86	366	171	**537**	35	39	**74**
Scientists as resource persons	12	82	48	**130**	8	6	**14**
SHG conveners meetings	22	0	320	**320**	5	50	**55**
Soil health/test campaigns	3	46	84	**130**	8	12	**20**
Workshops	0	0	0	**0**	0	0	**0**
Total	**508**	**3985**	**2940**	**6925**	**308**	**354**	**662**
2012-13							
Advisory services	186	224	55	**279**	0	0	**0**
Animal/plant health camps	10	1870	0	**1870**	0	0	**0**
Celebration of important days	3	0	137	**137**	4	10	**14**
Diagnostic visits	37	99	166	**265**	0	0	**0**

Exposure visits	4	61	140	**201**	0	0	**0**
Exhibitions	11	1826	1052	**2878**	26	15	**41**
Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	214	1320	1492	**2812**	182	17	**199**
Film shows	3	16	84	**100**	32	0	**32**
Field days	3	90	32	**122**	8	2	**10**
Farmers seminars	0	0	0	**0**	0	0	**0**
Farm Science club conveners meeting	5	159	15	**174**	5	0	**5**
Group meetings/discussions	15	0	342	**342**	0	0	**0**
Kisan ghosthies	0	0	0	**0**	0	0	**0**
Kisan melas	12	829	704	**1533**	36	13	**49**
Method demonstrations	29	203	382	**585**	0	0	**0**
Scientists visit to farmers fields	7	30	102	**132**	7	0	**7**
Scientists as resource persons	4	146	205	**351**	0	0	**0**
SHG conveners meetings	15	0	342	**342**	0	0	**0**
Soil health/test campaigns	6	312	187	**499**	37	49	**86**
Workshops	0	0	0	**0**	0	0	**0**
Total	**564**	**7185**	**5437**	**12622**	**337**	**106**	**443**
2013-14							
Advisory services	184	154	92	**246**	0	0	**0**
Animal/plant health camps	1	600	0	**600**	0	0	**0**
Celebration of important days	3	69	226	**295**	4	10	**14**
Diagnostic visits	87	211	91	**302**	0	0	**0**
Exposure visits	7	137	55	**192**	0	0	**0**
Exhibitions	11	4140	2290	**6430**	17	9	**26**
Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	226	1334	1199	**2533**	0	0	**0**
Film shows	0	0	0	**0**	0	0	**0**
Field days	1	29	26	**55**	1	1	**2**
Farmers seminars	0	0	0	**0**	0	0	**0**
Farm Science club conveners meeting	2	360	0	**360**	0	0	**0**
Group meetings/discussions	5	60	72	**132**	6	8	**14**
Kisan ghosthies	0	0	0	**0**	0	0	**0**
Kisan melas	0	0	0	**0**	0	0	**0**
Method demonstrations	23	272	144	**416**	3	4	**7**

Scientists visit to farmers fields	21	108	39	**147**	0	0	**0**
Scientists as resource persons	12	40	38	**78**	13	18	**31**
SHG conveners meetings	14	0	349	**349**	0	0	**0**
Soil health/test campaigns	8	356	241	**597**	46	21	**67**
Workshops	1	23	25	**48**	0	0	**0**
Total	**606**	**7893**	**4887**	**12780**	**90**	**71**	**161**
2014-15							
Advisory services	57	49	8	**57**	0	0	**0**
Animal/plant health camps	1	264	36	**300**	9	2	**11**
Celebration of important days	0	0	0	**0**	0	0	**0**
Diagnostic visits	75	280	130	**410**	2	23	**25**
Exposure visits	1	107	33	**140**	2	1	**3**
Exhibitions	16	1438	1112	**2550**	37	49	**86**
Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	117	1894	892	**2786**	12	7	**19**
Film shows	0	0	0	**0**	0	0	**0**
Field days	76	476	168	**644**	0	0	**0**
Farmers seminars	0	0	0	**0**	0	0	**0**
Farm Science club conveners meeting	0	0	0	**0**	0	0	**0**
Group meetings/discussions	9	12	166	**178**	12	16	**28**
Kisan ghosthies	0	0	0	**0**	0	0	**0**
Kisan melas	0	0	0	**0**	0	0	**0**
Method demonstrations	124	360	220	**580**	62	36	**98**
Scientists visit to farmers fields	9	616	122	**738**	1	1	**2**
Scientists as resource persons	31	189	89	**278**	1	1	**2**
SHG conveners meetings	4	-	49	**49**	0	0	**0**
Soil health/test campaigns	12	356	287	**643**	59	19	**78**
Total	**532**	**6041**	**3312**	**9353**	**197**	**155**	**352**
2015-16							
Advisory services	17	308	96	**404**	13	12	**25**
Animal/plant health camps	1	89	28	**117**	23	19	**42**
Celebration of important days	1	95	70	**165**	13	11	**24**
Diagnostic visits	58	127	92	**219**	14	7	**21**
Exposure visits	26	117	92	**209**	18	8	**26**
Exhibitions	26	1400	1065	**2465**	88	33	**121**

Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	178	1815	818	**2633**	148	111	**259**
Film shows	83	240	96	**336**	17	15	**32**
Field days	1	9	8	**17**	0	0	**0**
Farmers seminars	5	568	152	**720**	37	15	**52**
Farm Science club conveners meeting	0	0	0	**0**	0	0	**0**
Group meetings/discussions	2	38	28	**66**	18	10	**28**
Kisan ghosthies	1	38	27	**65**	1	0	**1**
Kisan melas	0	0	0	**0**	0	0	**0**
Method demonstrations	51	430	332	**762**	38	27	**65**
Scientists visit to farmers fields	73	148	155	**303**	32	27	**59**
Scientists as resource persons	12	134	162	**296**	18	12	**30**
SHG conveners meetings	37	211	103	**314**	0	0	**0**
Soil health/test campaigns	10	51	25	**76**	0	1	**1**
Workshops	5	275	227	**402**	128	118	**246**
Total	**587**	**6093**	**3576**	**9669**	**606**	**426**	**1032**
2016-17							
Advisory services	204	1869	729	**2598**	259	162	**421**
Animal/plant health camps	0	0	0	**0**	0	0	**0**
Celebration of important days	8	83	44	**127**	6	8	**14**
Diagnostic visits	86	437	144	**581**	91	85	**176**
Exposure visits	5	24	171	**195**	1	43	**44**
Exhibitions	15	2715	781	**3496**	239	174	**413**
Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	247	1869	729	**2598**	259	162	**421**
Film shows	13	14	147	**161**	3	0	**3**
Field days	4	47	36	**83**	16	15	**31**
Farmers seminars	0	0	0	**0**	0	0	**0**
Farm Science club conveners meeting	1	10	3	**13**	122	84	**206**
Group meetings/discussions	8	12	182	**194**	6	12	**18**
Kisan ghosthies	0	0	0	**0**	0	0	**0**
Kisan melas	1	379	176	**555**	126	101	**227**
Method demonstrations	31	413	181	**594**	84	83	**167**
Scientists visit to farmers fields	103	613	292	**905**	128	169	**297**
Scientists as resource persons	2	1	0	**1**	3	3	**6**

SHG conveners meetings	8	6	128	**134**	8	14	**22**
Soil health/test campaigns	5	332	226	**558**	140	105	**245**
Workshops	1	0	0	**0**	15	6	**21**
Others	3	106	28	**134**	13	5	**18**
Total	**745**	**8930**	**3997**	**12927**	**1519**	**1231**	**2750**
2017-18							
Advisory services	217	540	347	**887**	75	34	**109**
Animal/plant health camps	4	202	110	**312**	8	12	**20**
Celebration of important days	2	1025	545	**1570**	98	59	**157**
Diagnostic visits	91	260	239	**499**	68	49	**117**
Exposure visits	12	179	107	**286**	8	4	**12**
Exhibitions	12	7432	4611	**12043**	386	279	**665**
Ex-trainees sammelan	0	0	0	**0**	0	0	**0**
Farmers visit to KVKs	231	1741	629	**2370**	249	152	**401**
Film shows	10	570	180	**750**	68	26	**94**
Field days	1	20	6	**26**	3	2	**5**
Farmers seminars	1	18	4	**22**	8	5	**13**
Farm Science club conveners meeting	3	40	19	**59**	7	3	**10**
Group meetings/discussions	8	148	235	**383**	6	22	**28**
Kisan ghosthies	0	0	0	**0**	0	0	**0**
Kisan melas	1	1005	705	**1710**	65	25	**90**
Method demonstrations	63	810	214	**1024**	218	110	**328**
Scientists visit to farmers fields	67	679	98	**777**	58	23	**81**
Scientists as resource persons	12	165	288	**453**	18	11	**29**
SHG conveners meetings	13	148	65	**213**	5	2	**7**
Soil health/test campaigns	6	312	120	**432**	38	37	**75**
Workshops	1	8	4	**12**	9	14	**23**
Others	317	3561	1622	**5183**	391	533	**924**
Total	**1072**	**18863**	**10148**	**29011**	**1786**	**1402**	**3188**
2018-19							
Advisory services	442	625	251	**876**	43	19	**62**
Animal/plant health camps	2	46	64	**110**	12	23	**35**
Celebration of important days	23	708	356	**1064**	63	27	**90**
Diagnostic visits	216	210	102	**312**	15	12	**27**
Exposure visits	18	250	113	**363**	6	2	**8**

Exhibitions	9	1806	821	**2627**	632	56	**688**
Ex-trainees sammelan	1	20	11	**31**	0	0	**0**
Farmers visit to KVKs	150	1752	126	**1878**	23	11	**34**
Film shows	4	186	66	**252**	6	2	**8**
Field days	12	106	81	**187**	21	11	**32**
Farmers seminars	3	569	589	**1158**	5	3	**8**
Farm Science club conveners meeting	6	586	412	**998**	7	2	**9**
Group meetings/discussions	16	183	89	**272**	11	6	**17**
Kisan ghosthies	0	0	0	**0**	0	0	**0**
Kisan melas	1	1823	788	**2611**	61	29	**90**
Method demonstrations	54	980	472	**1452**	17	45	**62**
Scientists visit to farmers fields	47	280	97	**377**	19	9	**28**
SHG conveners meetings	10	0	165	**165**	0	12	**12**
Soil health/test campaigns	6	249	189	**438**	28	31	**59**
Workshops	7	58	23	**81**	6	2	**8**
Others	74	571	231	**802**	23	11	**34**
Total	**1101**	**11008**	**5046**	**16054**	**998**	**313**	**1311**
Grand total	**5615**	**69998**	**39343**	**109341**	**5841**	**4058**	**9899**

5.2.3 Other Extension Programmes for mass contact during 2011-12 to 2018-19

Activity/media type	Activities organized (No.)
2011-12	
Newspaper coverage	8
Popular articles	2
Radio-talks/programmes	5
TV talks/programmes	1
Exhibitions	7
Total	**23**
2012-13	
Newspaper coverage	4
Popular articles	2
Extension literature	6
Radio-talks/programmes	5

TV talks/programmes	1
Kisanmelas	12
Others	4
Total	**34**
2013-14	
Newspaper coverage	5
Popular articles	3
Extension literature	10
Radio-talks/programmes	4
TV talks/programmes	3
Exhibitions	11
Kisan melas	6
Others	3
Total	**45**
2014-15	
Newspaper coverage	2
Popular articles	4
Research papers	2
Extension literature	6
Radio-talks/programmes	4
TV talks/programmes	3
Exhibitions	16
Kisan melas	2
Others	4
Total	**43**
2015-16	
Newspaper coverage	9
Popular articles	4
Research papers	1
Extension literature	6
Radio-talks/programmes	5
TV talks/programmes	10
Exhibitions	6
Kisan melas	3
Others	2

Total	**46**
2016-17	
Newspaper coverage	10
Popular articles	6
Research papers	1
Extension literature	12
Radio-talks/programmes	2
TV talks/programmes	5
Exhibitions	4
Kisan melas	47
Others	6
Total	**93**
2017-18	
Newspaper coverage	11
Popular articles	3
Research papers	2
Extension literature	18
Radio-talks/programmes	2
TV talks/programmes	10
Exhibitions	0
Kisan melas	0
Others	3
Total	**49**
2018-19	
Newspaper coverage	7
Popular articles	2
Extension literature	12
Radio-talks/programmes	18
TV talks/programmes	24
Exhibitions	9
Kisan melas	1
Others	12
Total	**85**
Grand total	**418**

5.3 Production of seeds

5.3.1 Production and supply of seeds during 2011-12 to 2018-19

Year	Quantity (q)	Value (Rs.)	No. of farmers benefited (Nos.)
2011-12	5.3	65937	190
2012-13	4	33025	47
2013-14	0.6102	9690	43
2014-15	0.39	14200	27
2015-16	1.8575	15500	374
2016-17	0.115	2625	5
2017-18	0.3	8000	20
2018-19	6.775	41100	22
Total	**19.3477**	**190077**	**728**

5.3.2 Crop category wise production of seeds during 2011-12 to 2018-19

Crop category	Production of seeds (q)														
	2011-12			2012-13			2013-14			2014-15			2015-16		
	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)
Cereals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Millets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pulses	4.1	35487	42	3.81	32550	41	-	-	-	-	-	-	-	-	-
Oilseeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fodder	0.7	28000	106	-	-	-	0.55	8800	26	0.37	13200	26	0.0575	6500	14
Spices	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tubers/marigold	-	-	-	-	-	-	0.0002	830	10	-	-	-	-	-	-
Green manure Azolla	0.5	2450	42	0.19	475	6	0.06	60	7	-	-	-	1.8	9000	360
Leucern										0.02	1000	1			
Total	**5.3**	**65937**	**190**	**4**	**33025**	**47**	**0.6102**	**9690**	**43**	**0.39**	**14200**	**1.8575**	**15500**	**374**	**1.857**

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Crop category	Production of seeds (q)											
	2016-17			2017-18			2018-19			Total		
	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)
Cereals	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Millets	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Vegetables	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Pulses	-	-	-	-	-	-	-	-	-	**7.91**	**68037**	**83**
Oilseeds	-	-	-	-	-	-	6.5975	34000	12	**6.5975**	**34000**	**12**
Fodder	0.035	1625	4	0.3	8000	20	0.1775	7100	10	**2.19**	**73225**	**206**
Spices	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Tubers	-	-	-	-	-	-	-	-	-	**0.0002**	**830**	**10**
Green manure azolla	-	-	-	-	-	-	-	-	-	**2.55**	**11985**	**415**
Leurcen	0.08	1000	1							**0.1**	**2000**	**2**
Total	**0.115**	**2625**	**5**	**0.3**	**8000**	**20**	**6.775**	**41100**	**22**	**19.3477**	**190077**	**728**

5.4 Production of planting materials

5.4.1 Production of planting materials during 2011-12 to 2018-19

Year	Quantity (Nos)	Value (Rs.)	No. of farmers benefited (Nos.)
2011-12	565000	176083	1241
2012-13	473942	235324	242
2013-14	93157	285535	260
2014-15	498942	262765	192
2015-16	101626	166970	125
2016-17	223709	186450	132
2017-18	77000	159750	120
2018-19	198,932	196,335	132
Total	**2232308**	**1669212**	**2444**

5.4.2 Crop category wise production of planting materials during 2011-12 to 2018-19

Crop category	Production of planting materials														
	2011-12			2012-13			2013-14			2014-15			2015-16		
	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)
Fruits	-	-	-	-	-	-	11300	19375	12	4500	11385	1	-	-	-
Flowers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plantation	5000	73561	365	2623	78690	86	2427	72810	76	342	10260	25	2526	1,02,370	80
Fodder	540000	84361	796	470650	144290	149	68400	171290		461050	181770	128	84400	35,200	27
Vegetables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices	-	-	-	419	12019	4	-	-	138	-	-	-	-	-	-
Forest species	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ornamental	-	-	-	-	-	-	-	-	-	6750	6750	10	-	-	-
Medicinal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mulberry	20000	18161	80	250	325	3	11030	22060	34	26300	52600	28	14700	29400	18
Total	**565000**	**176083**	**1241**	**473942**	**235324**	**242**	**93157**	**285535**	**260**	**498942**	**262765**	**192**	**101626**	**166970**	**125**

Contd…..

Crop category	Production of planting materials											
	2016-17			2017-18			2018-19			Total		
	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)
Fruits	-	-	-	-	-	-	9,794	45,185	11	**25,594**	**75,945**	**24**
Flowers	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Plantation	1,879	96,850	75	3,000	1,40,650	91	1,488	73,400	76	**19,285**	**6,48,591**	**874**
Fodder	2,21,280	88,500	55	65,000	12,800	23	1,86,500	74,600	42	**20,97,280**	**7,92,811**	**1,220**
Vegetables	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Spices	-	-	-	-	-	-	-	-	-	**419**	**12,019**	**142**
Forest species	-	-	-	-	-	-	-	-	-	**0**	**0**	**0**
Ornamental	-	-	-	-	-	-	-	-	-	**6,750**	**6,750**	**10**
Medicinal	-	-	-	5,000	1,200	4	1150	3,150	3	**6,150**	**4,350**	**7**
Mulberry	550	1,100	2	4,000	5100	2	-	-	-	**76,830**	**128,746**	**167**
Total	**2,23,709**	**1,86,450**	**132**	**77,000**	**1,59,750**	**120**	**1,98,932**	**1,96,335**	**132**	**22,32,308**	**16,69,212**	**2,444**

5.4.3 Production of planting materials of hybrids during 2011-12 to 2018-19

-Nil -

5.4.4 Crop category wise production of planting materials of hybrids during 2011-12 to 2018-19

-Nil -

5.5 Production of bio-products

5.5.1 Production of bio-products during 2011-12 to 2018-19

Year	Quantity (q)	Value (Rs.)	No. of farmers benefited (Nos.)
2011-12	23.50	119968	615
2012-13	11.63	121860	150
2013-14	22.37	108405	199
2014-15	25.04	238245	247
2015-16	48.77	206106	193
2016-17	20.46	143850	120
2017-18	141.03	237820	482
2018-19	41.88	122040	119
Total	**334.6825**	**1298294**	**2125**

5.5.2Category wise production of bio-products during 2011-12 to 2018-19

Category	Production of bio-products (q)														
	2011-12			2012-13			2013-14			2014-15			2015-16		
	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)
Bio-fertilizers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bio-fungicides	-	-	-	-	-	-	-	-	-	0.41	3575	10	0.40	3200	20
Bio-pesticides	0.50	9450	74	0.365	5650	9	0.63	14700	18	0.07	2500	12	0.71	3500	20
Organic manures	12	17578	75	0.30	120	2	13.84	11185	31	0.20	200	4	25.58	23471	23
Micro-nutrient mixtures	11	92940	466	10.96	116090	139	7.90	82520	150	16.31	195720	207	7.58	121080	118
Mushroom spawn	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bio-agents	-	-	-	-	-	-	-	-	-	8.05	36250	14	14.50	54855	12
If any	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**23.50**	**119968**	**615**	**11.63**	**121860**	**150**	**22.37**	**108405**	**199**	**25.04**	**238245**	**247**	**48.77**	**206106**	**193**

Contd…..

Category	Production of bio-products (q)											
	2016-17			2017-18			2018-19			Total		
	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)	Qty (q)	Worth (Rs.)	Farmers (No.)
Bio-fertilizers	-	-	-	-	-	-	-	-	-	-	0	-
Bio-fungicides	-	-	-	-	-	-	-	-	-	**0.81**	**6775**	**30**
Bio-pesticides	0.20	10000	2	11.0	43400	82	0.0175	700	2	**13.49**	**89900**	**219**
Organic manures	10.50	10500	7	40.0	34530	47	20.67	8870	6	**123.09**	**106454**	**195**
Micro-nutrient mixtures	7.38	115950	103	80.0	118890	258	6.27	100520	94	**147.4**	**943710**	**1535**
Mushroom spawn	-	-	-	-	-	-	-	-	-	-	**0**	-
Bio-agents	2.38	7400	8	10.00	39600	92	14.8	6650	8	**49.73**	**144755**	**134**
Earthworm	-	-	-	0.03	1400	3	0.13	5300	9	**0.16**	**6700**	**12**
Total	**20.46**	**1,43,850**	**120**	**141.03**	**2,37,820**	**482**	**41.887**	**1,22,040**	**119**	**334.68**	**12,98,294**	**2,125**

5.6 Production of livestock

5.6.1 Production of livestock during 2011-12 to 2018-19

Year	Quantity (Nos)	Value (Rs.)	No. of farmers benefited (Nos.)
2011-12	39	167200	17
2012-13	81	157420	28
2013-14	29	163530	6
2014-15	29	171250	22
2015-16	32	253250	12
2016-17	1622	225971	84
2017-18	141	263260	40
2018-19	2	4000	2
Total	**1,975**	**14,05,881**	**211**

5.6.2 Category wise production of livestock during 2011-12 to 2018-19

Category	Production of livestock (No.)														
	2011-12			2012-13			2013-14			2014-15			2015-16		
	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)
Dairy animals	-	-	-	7	79500	4	2	40000	2	3	60000	2	4	109500	4
Sheep & Goat	38	143200	16	74	77920	24	27	123530	4	26	111250	20	28	143750	8
Piggery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rabitary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poultry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poultry eggs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fish fingerlings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bull	1	24000	1	-	-	-	-	-	-	-	-	-	-	-	-
Total	**39**	**167200**	**17**	**81**	**157420**	**28**	**29**	**163530**	**6**	**29**	**171250**	**22**	**32**	**253250**	**12**

Contd…..

Category	Production of livestock (No.)											
	2016-17			2017-18			2018-19			Total		
	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)	Qty (No.)	Worth (Rs.)	Farmers (No.)
Dairy animals	2	65500	2	13	127000	4				**31**	**4,81,500**	**18**
Sheep & Goat	87	104500	14	100	132450	27	2	4000	2	**382**	**8,40,600**	**115**
Piggery	-	-	-	-	-	-	-	-	-	**-**	**-**	**-**
Rabitary	-	-	-	-	-	-	-	-	-	**-**	**-**	**-**
Poultry	736	50364	48	28	3810	9	-	-	-	**764**	**54,174**	**57**
Poultry eggs	797	5607	20	-	-	-	-	-	-	**797**	**5,607**	**20**
Fish fingerlings	-	-	-	-	-	-	-	-	-	**-**	**-**	**-**
Bull	-	-	-	-	-	-	-	-	-	**1**	**24,000**	**1**
Total	**1,622**	**2,25,971**	**84**	**141**	**2,63,260**	**40**	**2**	**4,000**	**2**	**1,975**	**14,05,881**	**211**

Terms of reference (d)

6. TO EVALUATE THE INNOVATIVE EXTENSION METHODOLOGY DEVELOPED AND THE PROCEDURES ADOPTED BY THE KVKS TO PRIORITIZE, MONITOR AND ASSESS THE IMPACT OF PROGRAMMES

6.1 Innovative extension methodology developed/procedure adopted

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
2011-2012	***Self Help Groups (SHGs)***	KVK started to establish SHGs of women from the year 2006-2007. At present KVK has established 146 functional SHGs in the operational areas and in each SHG 15-20 women are the members.	Besides technology transfer, credit mobilization is also the main objective as they were in need of credit for adoption of technologies or to undertake agribusiness. All SHGs are linked with nationalized or co-operative banks.	Rural women	Group meetings Trainings	Entrepreneurship development Self-confidence and empowerment Independent in finance handling

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
2011-2012	Commodity Interest Groups	KVK focus on group approach for dissemination of technology among the farming community. During the year 2011-12, KVK has taken steps to form groups of farmers based on groups of different commodities in the district.	.This concept helped the KVK to refine technologies for various commodities like curry leaf, grapes, banana etc., Also technologies confirmed to be good by these farmers along with scientists were found to be very useful for a horizontal spread among the non-member farmers. Technology spread has thus become possible.	Farmers and Rural youth	Training ,Exposure visits .	The Kendra has merged different commodity based interest groups in to farmers produce organizations in different blocks.
2012-2013	Agri Business School for Women Entrepreneurs	From the year 1979-2012 our Kendra has organized a total of 14 long duration training sessions and 381 participants including SC/STs were trained in various women entrepreneurship programmes in and around Coimbatore district. This skill training includes jute bag making, food preservation, tailoring, rural bakery and agri based income generation activities. Based on the outcome and	To create awareness and motivate rural people towards technology innovation and adoption To develop entrepreneurship and skill development for self-employment To undertake capacity building programmes for empowering farmers, SHGs and others to	Rural women ,Unemployed rural youth and Entrepreneurs	Vocational training, Long-term course,	.As a outcome of ABS nearly 20 entrepreneurs and 18 brands were developed and technical guidance were given on processing, packaging, labelling, and marketing of agri products.

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
		also the need of the district agricultural segment the Kendra has made a new initiative - Agri Business School for Women Entrepreneurs in the year 2012-13 with the support of ICAR. Our KVK is conducting entrepreneurs'development training and motivational programmes to select suitable income generating activities for rural youth and entrepreneurs depending on their resources and background. As a result of training, nearly 15 entrepreneurs were developed and technical guidance were given on processing, packaging, labelling, and marketing of agri products.	take up agribusiness activities To provide single window systems for all agribusiness related activities within KVK; commercialization, consultancy and related services are components To provide market linkages to growers, processors, domestic distributors, exporters and importers			
2013-2014	Farmers clubs	Faster dissemination of technology at village level has been a difficult task. To overcome this difficulty, KVK has adopted the concept of formation of Farmers Club during 2007-08. A village level group of farmers from different enterprises was brought together under the name of Farmers Club. At present about 18 Farmers	The Krishi Vigyan Kendra has recently launched the concept of Agri clinics which aims at solving farmers' problem instantaneously as and when the farmers groups or clusters are coming across any field level problems in the initial stage	Farmers and Rural youth	Training ,Exposure visits .	ITC based social communication is being used to receive and send information from the farmers and to the farmers. Arrangements made also do the supply of inputs for the farmers and to collect sell their farm produce.

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
		Clubs are functioning in the operational area. Each club consists of 20-25 members including farmwomen and rural youth from various enterprises like agriculture, horticulture, dairying and animal husbandry. These clubs were started with financial support of NABARD and linked with other line departments. .	itself. Further advice on crop management aspects are given based on specific local situation by scientists of the Kendra.			
2014-2015	Coimbatore district KVK Farmers club federation	A district level federation has also been registered under societies act and have taken up few enterprises such as agri input manufacturing, distribution, processing of primary agriculture produces and technical support services. Youth play a vital and lead role in this venture. Leading farmers clubs of ICAR Krishi Vigyan Kendra, Coimbatore have been federated in this programme which is a registered body.	This federation is addressing the problems of farmers on daily basis and their service are available at one roof which is being totally supported by the KVK. Use of ICT in this programme is appreciable level with the support of the KVK.	Farmers and Rural youth	Training, Group meetings, Exposure visits	Established Input shop at Karamadai town and appointed field staff to address the field level problems and supplying quality inputs to the farmers.
2015-16	Farmers producer organizations	In order to reach the farmers to extend support with technological	This is highly helpful for undertaking various	Farmers and Rural youth	Training, Group meetings,	The KrishiVigyan Kendra is motivating the farmers on modern

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
		intervention and other services and also to provide them appropriate livelihood security through improving their farm productivity besides opportunities to undertake secondary and specialty agriculture, various farmers/farm women organizations are formed in various parts of the district.	mandated activity based on the identified thrust areas.		Exposure visits	scientific production technologies such as INM, IPM and ICM .This helps the farmers to increase their productivity and improve their profitability. The Kendra has taking more effort on the field diagnostic visits and solutions for the problems in the field itself. The KVK has launched Face book and Whatsapp benefitting the farmers of the district. Through these farmers can directly post /send their deficiency symptoms /Pest problems to the Kendra and get the appropriate solutions to solve their problems.
2016-17	Strengthening producer consumer relation for gaining confidence on farmers produces among consumers	The Kendra established a marketing channel that secures a long-term sustainability of the producer consumer relation. Therefore, the marketing model initiated a process	The supply chain is enhances highly consumer sensitive and supplies only those vegetables that are in demand during a particular	Farmers and consumers	Group meetings, consumer mela, direct interaction	Consumers are highly satisfied with direct supply of fresh vegetables and fruits by the farmers. Producers are getting good market price and

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
		wherein fresh produce from the farmers could reach Kerala state and Coimbatore town, thereby retaining both the nutritional and the market value of the vegetables.	season. The producer company is organized to monitor and supervise the entire chain very closely and efficiently. It can estimate the daily demand of a particular vegetable and can increase/decrease its supply within 2 to 3 days.			recognition to their produces.
2017-18	Group dynamic approaches for ensuring quality of Agricultural commodities- For tribes	Forest produces have been identified as resources to empower tribal women belongs to the areas of Bhagawathi Amman kovil, Salaivembu,Senkuttai and Irularpathi and the final product is branded as 'tribal treasure'. This has about 18 tribal product ranges. The production of which have been standardized by the Agribusiness school of our Kendra. Finer herbs are collected from above natural forest areas in Coimbatore. These herbs	To provide regular employment to the tribal women population Effective utilization of locally available resources.	Tribal women	Training and method demonstration	A part of this programme food processing unit also is established with help of department of forest and district, MahalirThittam contribution were also made from the urban women consumers This unit is thus established as a training cum practicing centre at village level to give business and employment opportunity to rural poor more particularly tribes.

Year	*Title of Innovative extension methodology developed /procedure adopted*	*Concept in brief*	*Objective (s)*	*Usefulness/ used for*	*Mode of operation*	*Outcome/result*
		are identified and confirmed scientifically for its taxonomical position, shade dried and further processed without affecting any quality parameters in traditional methods. This was done by tribes themselves under supervision of scientists concerned from the Kendra. Tribal women were made in groups and involved in all above process.				

6.2 Impact of programmes/case studies/success stories

Year	*Title*	*Success story in brief*
2011-12	**Adoption of Farm Mechanization through group approach**	**Background** Farmers of the Karamadai and Annur blocks are being affected with severe labour problem. The performance of the current available labours are so poor, inadequate and also uncertainty. It results in delayed and inefficient farm production activities. The labour cost is high which results less in economic returns. In this juncture they are searching for better technologies to solve their labour problem in their farm production system. **Intervention** We organized off campus training programmes on 'Adoption of farm implements' in crop production. Because ❖ It solves the labour problem. ❖ It ensures better option instead of uncertainty of labour resource. ❖ It ensures effective field operation. ❖ It also minimize the operational cost. ❖ It ensures the timely operation. ❖ It results better economic returns. Brought farmers to Agri. Intex, Farmers day celebration and Agri. Expo, Exhibition Coimbatore Arranged exposure visit to farm machinery – TNAU, Coimbatore. **Process :** During our diagnostic visits we found that the labour problem is one of the main constraints in their crop production activity. We discuss their labour problem seriously and recommended them to adopt suitable farm machineries for solving their labour problems, instead of unavailable human resources in crop production. Some equipment are costlier so that we motivated them to adopt 'group approach' to solve their labour problems. We help them to form the farmers club with the help of NABARD and some Nationalised Banks, with this group approach they bought mini tractors, power weeder, battery operated sprayers – high tech sprayers, earth hole digger under 50% subsidy in NADP. They adopts the mentioned farm equipments in their crop production system in effective manner. The State Department of Agricultural Engineering, Coimbatore and some Nationalized Banks rendered their help for getting of the equipments under subsidy schemes. They got a tractor from the state department of agricultural engineering and utilized for their field preparation activities nearly 200 working hours with lower rental basis and saves 50% of the operational cost. **Impact :** The Farmers Club members who have adopted the farm machineries are feel comfortably because of its high performance and also solve their labour problems in considerable rate. **Horizontal spread :** The village farmers especially those who are member in the farmers club are emphasized with our group approach motivation and come forward and have taken necessary efforts through their farmers club on collective approach. **Economic gain :** When we compared to conventional labour oriented farm activity the adoption of farm mechanization system help them to save more than 50% of the labour cost in their field activity and also ensures the timely operation which

Year	Title	Success story in brief
		results better economic returns. The adoption of farm mechanization system also provides self-employment opportunity in the rural youth population.
2011-12	**Adoption of motorized earth auger in Banana cultivation**	**Background** The farming community in Annur block is severely hit by the labour shortage as well as heavy wind blow. The high rate of daily wages and attractive benefits offered by the newly established textiles ,hosiery units and other industries causes the this labour shortage in agriculture activities. The rural working community people are also migrating to the nearby towns of like Tiruppur and Coimbatore for more and attractive income. Nearly 65 percent of the farmers are being cultivating Banana at Akkaraisengapalli village of Annur block. The major hurdles faced by the Banana growers in their crop production activities are : ❖ Non-availability ❖ Uncertainity of farm labourers in peak season. ❖ Inefficient output and high wage rate of the farm labourers. ❖ In addition to that the banana growers are severely affected by severe wind blow especially in bunch emerging stage which leads to heavy loss in their economic return. **Intervention** Sri.T. Sadhasivam, S/o Thulasimani gounder, aged 41, who resides at Akkaraisengapalli village of Annur block having 7 acres of cultivable land which is irrigated with the open and tube well. He is one the active member in "Mullai" farmers club. We organized off campus training programme along with field demonstration on 'Adoption of motorized earth auger in banana production and also arranged for exposure visits to Agri. Intex , Agri expo. at Coimbatore. We motivated the banana growers to adopt motorized earth augar in banana production under NADP subsidy programme to solve the labour problem during pit making process. **Technology** Adoption of motorized earth auger in banana cultivation. **Process** During the field diagnostic visits we found labour shortage and heavy wind blow loss are the major problems of the banana growers at Akkaraisengapalli. We analyzed the problems seriously and recommended them to adopt effective pit making technology by using motorized earth auger for solving these problems. Before the intervention Mr.T. Sadasivam and his farmers club members were practicing only the conventional method of pit making method. This was done with human resources which is insufficient. We motivated him and the farmers of the Mullai farmers club for utilizing motorized earth augar in their banana production system under 50% subsidy scheme of NADP. We contacted the State Department of Agricultural Engineering during for the same and arranged the financial assistance from UCO Bank – Annur. **Impact** Sri.T. Sadasiavam came forward to purchase the motorized earth augar under NADP subsidy programme from the Agricultural Engineering Department, Coimbatore. He is utilizing this motorized earth auger effectively for pit making in banana and tree crops. **Horizontal spread** Nearby village farmers and farmers club members are coming forward to

Year	Title	Success story in brief
		utilize the motorized earth auger on hiring basis. We hope that in future more number of farmers will adopt this technology in banana cultivation. **Economic gain** The following benefits were attained by practicing motorized earth auger when compared to the conventional method of pit making is given below: ❖ Reduced the cost of operation/labour saving. ❖ Uniform growth ❖ Uniform maturity ❖ 1 month early harvesting Yield increased @ average of 2 kgs / plant in G 9 Banner which increased the economic returns upto 36000/ha. and also avoided the wind blow damage.
2011-12	**IIHR Banana Special – A Real Boost for Banana Growers**	**Background** Mr. Ravichandran, is a young farmer of Pazhathottam village of Karamadai block is cultivating Banana every year. He is having 4 acres of garden land with fertigation system. **Interventions** During our field visit we identified this farmer and invited him to participate in our KVK training programmes. He actively participated in Banana Seminar and other training programmes. During the seminar, he and his neighbors expressed their interest on quality production of banana. So we decided to test verify the micronutrient mixtures from three different institutes viz., IIHR, NRCB and TNAU. **Process** We organized one day training programme on foliar application of micronutrients and its importance at Pazhathottam village of Karamadai block. Nearly 30 farmers were participated and 5 of them were selected for conducting on farm testing. After we have provided the following technologies. ❖ Soil application of bio-fertilizers ❖ Foliar application of TNAU, NRCB and IIHR micro-nutrient mixtures. ❖ Pest and disease management practices. **Impact** After the first spray he came to KVK and purchased 5 more kgs of IIHR mixture for other fields also. Within one month period he purchased nearly 62 kgs of IIHR Banana mixture and distributed to nearby farmers. **Horizontal spread** At the end of crop period we compared these three technologies with the following parameters like fruit size, quality, appearance and bunch weight. Foliar application of IIHR micro-nutrient significantly increased the fruit size and bunch weight. The appearances of the fruits are also found better when compared to other mixtures. By one year period nearly 262 farmers were benefited by adopting this foliar application of IIHR mixture. **Economic gain** He obtained 20% yield increase for each tree when compared to his normal practice. Now many of the farmers from nearby villages are coming forward to follow foliar application of micro-nutrients to their banana.
2012-13	**Income generation through secondary agriculture**	**Background** Mrs. C. Parameswari, W/o Nataraj aged 40 is a progressive woman of Karadamad1 village of Karamadai block. She is educated up to 10^{th} standard and is having one child. She is the secretary of women federation of Chikkathasampalayam panchayat. **Intervention** Our Krishi Vigyan Kendra organized on and off campus training on Entrepreneurship development programme, value addition of fruits and vegetables

Year	*Title*	*Success story in brief*
		and value added products from millets etc. Motivation of our KVK she underwent training on post-harvest management and value added products from fruits and vegetables at TNAU during the year 2012. **Process** Mrs. Parameswari is a very active woman. After attending the post-harvest management training she was interested to take up some income generating activities to substantiate her family income. She was decided value addition of fruits and vegetable was a suitable income generating activities. She is purchasing fruits and vegetables from uzhavarshandai and nearby local farmers. She is preparing mixed fruit jam, onion amla pickle, amla mouth freshner ,bajra and jowar based nutritious mix, so the quality of the prepared product is good. **Horizontal spread** As the quality of the prepared product is good.People having widely accepted it. At present she has regular customers including SHGs, NGOs and PLF members. **Impact** Hereafter through her NGO contacts she was taking regular class on value addition in fruits and vegetables at different district such as Tirunelveli and Kanyakumai. Based on her performance our KVK developed brand name as Suvai prodcts and marketing facilities were created during our KVK programmes. Through our Kvk motivation Mrs. Parameswari was attend INSIMP training programme for Entrepreneurs beneficiaries at Directorate of Sorghum Research, Hyderabad for two days. **Economic gain** She is preparing 15 kg of fruits and vegetables products every month. Every month she is getting Rs. 500 to 1000 /- as additional income.
2012-13	**Adoption of cultivation of Co 4– Fodder**	Milk production is a major activity in Coimbatore District . The following constraints were identified through group discussions, field diagnostic visits and training programmes. ❖ Lack of knowledge about importance of green fodder ❖ Non availability of green fodder which leads to infertility and poor milk yield ❖ Inadequate source of fodder crops To overcome these problems KVK popularized the cultivation practice of Co.4 through FLD in the year 2007-08. After the use of Co 4, as fodder the farmers expressed that the milk yield and quality was good. KVK also gave training on Importance of Co 4as a fodder to the farmers and extension workers. The Co 4 cuttings was exhibited at Agri. Intex, CODDISSIA in Coimbatore and ATMA exhibition and veterinary. Large number of farmers visited the stall organized by our KVK at all of these places. The cultivation practice of this fodder can be easily adopted. The fodder grows within a period of 90 days and can be harvested first at 90^{th} day and subsequently at an interval of 45 days. Most of the farmers expressed their interest to follow this technology. Nearly 2000 farmers contacted KVK and showed their interest to purchase Co 4setts and they have cultivated the crop in 125 acres of land covering various villages of Coimbatore District. Because of demand for Co.4 setts,18 farmers of Karamadai block started producing the setts and marketed them through KVK and Animal Husbandry departments. As a result of our KVK activities this technology has been horizontally spread over to nearly2500 farmers of Coimbatore ,Erode ,The Nilgris ,Kanyakumari of Tamilnadu and neighboring states of Karnataka and Kerala.

Year	*Title*	*Success story in brief*
2013-14	**Adoption of Farm Mechanization in Banana Production through Farmers Club**	The Farmers of the Kanuvakkarai village in Annur block cultivate banana, vegetables, and fodder sorghum in their fields. The farmers mostly like to produce banana in an area of 700-750 Ha/season. They generally select Nendiran variety in their village, because of its better selling price and market activity. During our field visits we found that labour shortage is the main constraint in their banana production system. The Kendra has organized off campus training programmes and demonstrations on adoption of farm mechanization in banana production to solve their labour problem and also to ensure timely field operation for better yield. Farmers were trained and motivated to use mini tractor, motorized earth augur, power -weeder and battery sprayers. As mini tractor, motorized earth augur, power weeder are expensive, the Kendra has motivated them to adopt a group approach to solve their labour problem and to do their field activities in an effective manner with lesser operational cost. A farmers club with the help of NABARD and Indian Bank, Pasur branch, was started with the name of "Pasumai Farmers Club". With the help of Agricultural engineering department, NADP and Indian Bank, a mini tractor, motorized earth augur, power weeder and 10 battery sprayers were organized and are being utilized for effective mechanization in their banana production system. The farmers club members were satisfied due to the high performance of their machineries. The 20 farmers in the club emphasized the group approach. They initially utilized the above machinery in their banana field in an area of 18 Ha/season for 3 seasons. They also rendered the machines to other banana farmers and hence the technology was spread to another 25 Ha /season. Totally about 60 - 70 Ha/ season, this operation was carried out. When compared to the conventional labour oriented banana production system, adoption of mechanized operation has reduced the cost of cultivation to the tune of about 50%. Banana production system has thus become efficient and due to timely operation the production value has increased to the extent of Rs.131000/Ha when there is 20% yield increase. Almost 70 Ha of the banana area was covered under mechanization in banana production. This has ultimately helped the group of farmers to earn an additional income of Rs. 26,20,000/season
	Increase in body weight of goats through concentrate feed	**Success story 2 :** A Tribal village called Colony pudur is located at Karamadai block of Mettupalayam Taluk and it has high potential for goat rearing. Our Krishi Vigyan Kendra selected this village for conducting Front Line Demonstration on Nutrition Management of Goats. ***Intervention*** The Kendra has organized three 'off' campus training programmes on importance of concentrate feed in increasing the body weight of goats, deworming and vaccinating them. ***Process*** During the field diagnostic visit and PRA survey it was found that improper nutritional management of goats was a major problem in tribal areas. Training was given to the tribal farmers a on concentrate feed preparation, deworming and vaccination. ***Technology*** The non-descript, male goats between 4 months to 1 ½ years of age were fed with concentrate @ 0.175 kg/animal/day apart from its regular complete grazing. The initial weight was recorded for the total number of 39 male goats selected from 8 farmers in the village. ***Impact:*** ***Horizontal spread***

<table>
<tr><th>Year</th><th>Title</th><th>Success story in brief</th></tr>
<tr><td></td><td></td><td>After recording the first weights of the animals, they were fed with concentrate feed on the day of weighing itself. Then the second and third weights were recorded on 34 days and 66 days respectively. The total initial weights of 39 goats were 580 kg and the final weight gain after 66 days was 739 kgs with an overall weight gain of 157 kgs in 66 days. The average weight gain in 66 days was 4.03 kg/ animal. The total quantity of concentrate fed was 450.45 kg sfor 39 goats for a total period of 66 days @ 0.175 kgs/animal/day. The total cost of feed was Rs.4, 730.00 @ Rs.10.50 per kgs of feed.
Economic gains
The cost of one kg of live weight of goat is Rs.120/kg and the total cost of weight gain of 157 kgs is Rs.18840/-. Hence there is a deficit overall profit margin of Rs.14100/- during the trial. This practice is being practised every year and thus has decreased the mortality rate and increased the body weight. Presently the group now has an income of Rs.2500 every year after the intervention of KVK and the follow up.</td></tr>
<tr><td>2014-15</td><td>Innovative approach through Agribusiness School</td><td>Background
In our Krishi Vigyan Kendra, the Agri. Business School was established with the support of ICAR during 2013-2014. This unit was consist of Millet Processing Unit, Areca Plate making unit and Home care product preparation unit and one training hall with a capacity of 100 members is being utilized for conducting training for entrepreneurs.
Intervention Process:
Our Krishi
Vigyan Kendra is conducting entrepreneur’s development training and motivational programme to selected suitable income generating activities for rural youth and entrepreneurs depending on their resource background.
Intervention technology:
Skill training programmes were conducted for farmers, farm women and unemployed youth in agriculture and allied activities. Totally 23 training programmes were conducted with duration of 1-3 days during the period of 2014-15. Need based training was conducted for farmers both ‘on’ as well as ‘off’ campus.
Intervention technology conducted through Agribusiness School – 2014-15

<table>
<tr><th>S.No.</th><th>Thrust area</th><th>No. of Courses</th><th>Training conducted</th><th>Number of participants</th></tr>
<tr><td>1</td><td>Women empowerment</td><td>10</td><td>EDP Training to rural women</td><td>238</td></tr>
<tr><td>2</td><td>Designing and development of low cost nutritious diet</td><td>6</td><td>Value added products from millets</td><td>157</td></tr>
<tr><td>3</td><td>Value addition</td><td>7</td><td>Value added products from fruits</td><td>162</td></tr>
<tr><td></td><td>Total</td><td>23</td><td></td><td>557</td></tr>
</table>

Totally 557 participants were benefited. As a result of training nearly 5 entrepreneurs were developed and technical guidance were given on Processing, Packing, Labeling and Marketing of processed products.</td></tr>
</table>

<table>
<tr><th>Year</th><th>Title</th><th>Success story in brief</th></tr>
<tr><td></td><td></td><td>
Human health nutrition:
For human health the quality and essentials nutrients was needed. Keeping this concept in mind our Kendra concentrated quality and incorporated millet based products preparation such as a nutritious mix and Adai mix etc.
Human health nutrition products produced through Agribusiness School
<table>
<tr><th>S.No.</th><th>Product produced</th><th>Quantity (Kgs.)</th><th>Amount generated(Rs)</th></tr>
<tr><td>1</td><td>Ragi flour</td><td>884</td><td>30,940.00</td></tr>
<tr><td>2</td><td>Bengal gram flour</td><td>298</td><td>16,390.00</td></tr>
<tr><td>3</td><td>Turmeric powder</td><td>11</td><td>2,200.00</td></tr>
<tr><td>4</td><td>Nutritious mix</td><td>49</td><td>4,900.00</td></tr>
<tr><td>5</td><td>Adai Mix</td><td>26</td><td>2,600.00</td></tr>
<tr><td>6</td><td>Curry leaf powder</td><td>5</td><td>1,000.00</td></tr>
<tr><td>7</td><td>Chilli powder</td><td>4</td><td>720.00</td></tr>
<tr><td>8</td><td>Coriander powder</td><td>3</td><td>540.00</td></tr>
<tr><td>9</td><td>Pickle</td><td>13</td><td>2,600.00</td></tr>
<tr><td>10</td><td>Coconut oil</td><td>10</td><td>1750.00</td></tr>
<tr><td>11</td><td>Millet rice</td><td>8</td><td>640.00</td></tr>
<tr><td></td><td>Total</td><td>1311</td><td>64280.00</td></tr>
</table>
Through our Agri.Business School, totally 1311 kgs of Ragiflour, Bengal gram flour, Turmeric powder, Nutritious/Adai mix and Pickles were prepared. The processed products was marketed in Gurupooja celebration at Ramakrishna mission vidayalaya, NABARD exhibitions, Farmers day celebration at TNAU, Agri index at codissia ,Outside visitors and nearby farmers and self-help groups and farmers club members etc.
Plant health nutrition:
Needy inputs like bio fertilizers, micronutrients and enriched organic products are essential for crop growth. The Kendra has identified some need based plant health products to support the farmers to get quality agriculture produces.
Plant health nutrition products produced through Agribusiness School
Through plant health nutrition 4568 kgs of products were produced and distributed in local farmers, Precession farming, Department of Agriculture and Horticulture and other Krishi Vigyan Kendra’s of Tamil Nadu and Kerala.
Impact of Economic gains:
Through our Agribusiness school the partners were generated Rs.413890 and every month they get additional income of Rs. 3000 to 4000/- .
Impact of Employment Generation:
Through our Agri. Business school five entrepreneurs get regular employment throughout the year.
</td></tr>
<tr><td>2015-16</td><td>Adoption Of Drip Irrigation System In Banana</td><td>
Farmers of Avinashi block especially the Sangampalayam hamlet of Uppilipalayam village are severely affected with water scarcity and labour shortage. The high rate of wages and other attractive benefits offered by the newly built textiles/ hosiery industries cause shortage in agricultural labour. The rural working people are also migrating to the nearby towns like Avinashi, Tiruppur and Coimbatore.
A farmer by name Sri.V.Swaminathan, s/o. VelusamyGounder aged 35 resides in this village. He 12 acres of cultivable land which is being irrigated with open and tube wells. The main constraints faced by him and the other farmers of the area are :
❖ Uncertainty of rainfall / inadequate groundwater
</td></tr>
</table>

Year	Title	Success story in brief
		❖ Scarcity of agricultural labour Which result in reduction of cropping area and yield. ***Intervention*** The KVK organized 'off' campus training programme on the advantage of drip irrigation and arranged exposure visit to precision farming project area, Krishnagiri and Dharmapuri, and also to Jain Irrigation System Limited, Udumalpet. He was also given appropriate training and exposure. ***Technology*** Drip irrigation system in banana ***Process*** Having got totally trained and motivated by the Kendra, Mr.V. Swaminathan has installed drip irrigation in his field under the 50 % subsidy Scheme of National Horticultural Mission, Government of India, to solve his major problems in irrigation. As a first phase in Sangampalayam, 10 farmers having 6 hectares of area were facilitated to come under the drip irrigation system under the subsidy scheme. They installed drip irrigation system in their fields with the help of our Krishi Vigyan Kendra. ***Impact*** Sri.V. Swaminathan and the group of farmers have installed drip irrigation system and have been successfully harvesting quality banana. The irrigation of all the banana plants by using this drip irrigation has been effectively done and are free from severe moisture stress. ***Horizontal spread*** The village farmers found the outcome of this programme to be successful and with the Kendra's timely motivation, more farmers of the village came forward to install drip irrigation under 50 % subsidy scheme The area under drip irrigation system is likely to increase by seeing this success story. ***Economic gain*** When compared to conventional practice, drip irrigation system helped to save Rs.1,31,000/- per hectare (Nendiran variety @ 12 kg/plant.) through minimizing the labour, water requirement, weed control operations and by increasing the yield. Farmers observed the increase in bunch weight and yield upto 20 % when compared to the conventional irrigational practices. Overall gain of these farmers was Rs.26.20 lakhs in an area of 20 Ha. This area belongs to 25 farmers.
2015-16	**Adoption of Farm Mechanization in Banana Production through Farmers Club**	**Adoption of Farm Mechanization in Banana Production through Farmers Club** The Farmers of the Kanuvakkarai village in Annur block cultivate banana, vegetables, and fodder sorghum in their fields. The farmers mostly like to produce banana in an area of 700-750 Ha/season. They generally select Nendiran variety in their village, because of its better selling price and market activity. During our field visits we found that labour shortage is the main constraint in their banana production system. The Kendra has organized off campus training programmes and demonstrations on adoption of farm mechanization in banana production to solve their labour problem and also to ensure timely field operation for better yield. Farmers were trained and motivated to use mini tractor, motorized earth augur, power -weeder and battery sprayers. As mini tractor, motorized earth augur, power weeder are expensive, the Kendra has motivated them to adopt a group approach to solve their labour problem and to do their field activities in an effective manner with lesser operational cost. A farmers club with the help of NABARD and Indian Bank, Pasur branch, was started with the name of "Pasumai Farmers Club". With the help of Agricultural engineering department, NADP and Indian Bank, a mini tractor, motorized earth augur, power weeder and 10 battery

Year	*Title*	*Success story in brief*
		sprayers were organized and are being utilized for effective mechanization in their banana production system. The farmers club members were satisfied due to the high performance of their machineries. The 20 farmers in the club emphasized the group approach. They initially utilized the above machinery in their banana field in an area of 18 Ha/season for 3 seasons. They also rendered the machines to other banana farmers and hence the technology was spread to another 25 Ha /season. Totally about 60 - 70 Ha/ season, this operation was carried out. When compared to the conventional labour oriented banana production system, adoption of mechanized operation has reduced the cost of cultivation to the tune of about 50%. Banana production system has thus become efficient and due to timely operation the production value has increased to the extent of Rs.131000/Ha when there is 20% yield increase. Almost 70 Ha of the banana area was covered under mechanization in banana production. This has ultimately helped the group of farmers to earn an additional income of Rs. 26,20,000/season
2016-17	**Cluster approach through secondary agriculture**	**Background:** ICAR KVK Coimbatore is concentrating the primary, secondary/ specialist agriculture to double the yield level in primary agriculture and triple the income by the way of processing the primary agriculture produces. The Kendra is working through self help groups and similar working groups in our different operational areas. Which includes supporting the group formed by the other line departments also besides our own groups. Mrs.Lalitha a women entrepreneur from Amma pannai mahalir group from Iddikarai is one among who have been developed to lead farm women. She along with her group member were tried among processing of agri commodities. Farmer of Iddikarai area were motivated to under ecofriendly agriculture to have quality, primary agriculture produces like Bengal gram, other pulses and spices. **Intervention process:** Mrs.Lalitha and her group members where identified by our KVK to be a model group for various far women. Skill development programme were implemented to upgrade their knowledge and skill which has made them to get involved in income generation like processing and value addition. Through our EDP programme they would reach the consumers and understand the consumer expectation **Intervention technology:** The farm women group lead by the lalitha has been close association with our partner farmer who were undertaking cluster frontline demonstration on Bengal gram. In the same village belongs to S.S.Kulamblock. ICAR KVK Coimbatore has not only ensure the quality production of pulses but also intervened on the processing/ value addition, packing and marketing process. Mrs.Lalitha was involved along with the Kendra for our special programme on producer consumer linkages which is aimed at familiarizing farmers, produces among the consumer while insisting/ motivating farmers to be sure of the quality production. In addition our Kendra guided and supported to obtaining bank loan also. **Impact Horizontal spread:** With the guidance and support of the Kendra she is started small food processing unit at her village. With the help of her members she is selling products among the friends and localities. Due to the increased response of the products she is decided to upscale to a cottage industry level and once again sought the guidance of the Kendra, where she is obtained help in acquiring food safety licence, branding and labeling and marketing technique. She is sold her product through apartment's, KVK exhibitions, Departmental stores and towns of the district. Based on the consumer preference the Pannai mahalir are introduced millet and

Year	*Title*	*Success story in brief*
		Bengal gram based snacks items such as Murukku, Laddu, Thattuvadai etc .In addition masala based products like Iddlipodi, Sambarpodi ,Rasapodi, Corrianderpodi, Chilliepodi are produced. **Impact Economic gains:** Every month the she is produce 90 kgs of masala powder, 25 kgs of millet products, 100 kgs of Bengal gram flour, 25 kg murrku .The selling cost is @ Rs.35/170 gms biscuits, Rs.50/200 gms of murrkku, Rs. 30/200 gms of masala items. Every month Mrs.Lalitha earned Rs. 15000 and selling her products in the brand name of Annai foods. **Impact of employment generation:** In addition 5 to 8 women are get regular employment
2017-18	**ICM in chillies and Value addition**	**Success story 2** **Name of the farmer:Mr.R. Kandasamy** **Situation analysis:** Chilly is the most important spice crop of India. It occupies an important place among the spice crops in Coimbatore district. Adhimathayanur is an old village is very famous for growing chillies traditionally by using their traditional seeds. During our field visits and training programmes we came to know the following problems like Improper nutrient management, micronutrient deficiency, pest and disease incidences and poor market price which has caused more economic loss to the farmers. Hence the Kendra has decided to implement the demonstration on ICM in chillies and value addition in that particular cluster village. **Plan, Implement and Support:** Mr. Kandasamy Aged 60 is a progressive farmer, used to grow chillies every year, is selected as a lead farmer to act as a role model to other farmers. The yield of chillies (dry) which is realized by him has ranged from 23.5 – 25.4 q/ha is the highest record among the farms nearby. But the potential yield of the particular variety is 27q/ha during his father's cultivation period. He approached the Kendra for the problems faced by the cultivation of chillies. After meeting and interacted with KVK Scientists, he came forward to accept and adopt the practice of integrated crop management technologies in his farm through demonstration. In his village 10 farmers including him were selected for KVK intervention on ICM in chillies and value addition. The following technologies like Soil test based fertilizer recommendation, Micronutrients application, Integrated pest management practices, value addition were taught to farmers. Then he started practicing these technologies and he was constantly educated by KVK scientists, during follow up visit. He has been provided with all the need based knowledge & skill, which included soil test based fertilizer recommendation, Foliar application of micronutrients, Integrated pest management practices etc.,. **Output:** After seeing the result of the ICM technologies he has taken up production technologies in the current year and popularized to neighboring farmers also. He is now using vegetable special regularly as he has noticed that the fruit quality, diseases resistance of the plant is improved. It also helps in retaining more number of flowers, thus increase in the fruit set leading to higher yield. He was also found to actively guide other farmers in adoption of new technologies. With his intervention other farmers have started practicing ICM practices in the village and as a result they are realizing better yield and price in the market. **Outcome:**

Year	*Title*	*Success story in brief*
		Among these technologies, soil test based fertilizer recommendation along with integrated nutrient management increased production and profitability of the produce. Foliar application of micronutrients showed significant influence on the quality of the produce. The average yield recorded in plots is 25.1 q /Ha which is 15.8% higher than the conventional practices. The total cost of cultivation Rs.171403/- and gross and net returns are Rs. 451980/- and Rs. 280576/- respectively. The BC ratio recorded was 2.6. After the demonstration nearly 62 % of the farmers adopted micronutrient application, 48 % of the farmers adopted biological pest and disease management practices, and 36% of the farmers adopted soil test based fertilizer recommendation. **Impact of employment generation:** Farmers are become confident among the technologies they are able to disseminate the technologies to other farmers also. The produce produced by the farmers is confidently purchased by SHGs our Kendra and branding is carried out. The final produce is being sold to consumers directly. The feedback of the consumers also is highly satisfied.
2017-18	**Integrated Farming System: An approach to sustainable Agriculture and Profitable Agri business Development in the District facilitated by ICAR – Krishi Vigyan Kendra, Coimbatore**	ICAR Krishi Vigyan Kendra, Coimbatore hosted by Sri Avinashilingam Education Trust Institutions has been pioneer in training and development of rural partners undertaking an integrated and sustainable agriculture in their operational areas. Having started in the year 1974, by the Indian Council of Agricultural Research, the ICAR – KVK, Coimbatore, has so far contributed greatly on the quality production of Agri commodities. Assessment of different technological outcomes of research institutions, demonstration of location specific / appropriate technologies, skill development programmes and activities in convergence with all line departments have greatly helped the agriculture development more particularly on the milk productivity which has been enhanced from 8 to 10 litres per animal per day during 2008 to 15 to 17 litres per animal in 2015; the reason could be attributed to the diversification of crops from cereals to fodder crops. Mixed fodder bank promoted by the ICAR – KVK, Coimbatore, has been in supportive to the Animal Husbandry development in almost all parts of the district. Enterprises like Sericulture and Secondary Agriculture promotion involving rural women are also noteworthy and have helped improving the livelihood security of farm families. In recent past, the district has faced lot of constraints in the Agriculture Production System more particularly the drought, due to climate change; decrease in water table is also noticed from 800 to 1100 ft which is about 100 – 300 ft down below the earlier table, about ten years ago. Issues related to production agriculture in the district can be attributed first due to uncertainty of monsoon or low rainfall besides lowering of water table. Farmers use to loose at times the whole crop due to failure in monsoon more particularly in crop like banana. Even coconuts, total area has come down from 101541 ha to 97462 ha due to death of palms without withstanding the drought in Pollachi, a traditional coconut belt. Technology related to conservation of moisture and also ensuring the plant capacity to withstand drought has been the challenging task which is being addressed by the farmers, with the support given by the Kendra by way of demonstration, which facilitates integrating technologies. Another major problem faced by the framer is non-availability of labours particularly skilled work force. To overcome these problems the Kendra identified the supporting and collaborating agency District Rural Development Agency (DRDA), Coimbatore to make a sincere attempt to solve the Agricultural labour scarcity issues in the

Year	Title	Success story in brief
		district. Integration of Agriculture and allied enterprises and vertical growth in the productivity per unit area has thus been achieved due to the intervention of the Kendra (ICAR – KVK, Coimbatore). The Kendra's innovative approach has helped overcoming the problems such as water scarcity, labour shortage and resource wastage. A promising reason for the success could be attributed to the convergence of the Kendra with all other State and line departments to integrate technologies, enterprises and resources. District Rural Development Agency (DRDA) is operating the Mahatma Gandhi National Rural Employment Guarantee Assurance Scheme (MGNREGAS) with the support of Ministry of Rural Development which supports livelihood security of households in rural area by providing 100 day guaranteed employment opportunity every year (preferably the number of days have been increased to 150 days). The ICAR - KVK, Coimbatore, has taken initiative to associate with DRDA, Coimbatore, during the year 2013-14 for sensitizing, monitoring and involving them in agricultural development works. While the district was facing issues related to non-availability of farm workers, the initiative has given a definite model which is expected to support the small farmers development in a promising way, wherein the laborers (MGNREGAS partners) were trained as skilled laborers to execute farm works with required scientific skills. The scheme has thus ensured employment opportunity for the rural poor / landless labourers besides making them to learn the skillful agricultural assignments. The KVK has thus been in close association with District Rural Development Agency (DRDA), Coimbatore, was concentrating on these labourers handling farm infrastructure development and agricultural production activities. Rural poor were trained with the concept of "learning by doing"; they were under a definite skill development programme with close monitoring and supervision which has lead them to undertake specific activities in groups, like. Establishment and maintenance of Integrated Farming System which includes, Desilting and reconstruction of supply channel, Planting of Agro forestry trees, Formation of earthen roads etc., Model Integrated Farming System units were established using MNREGS partners in which agriculture crop, horticulture crop, agro-forestry, poultry, dairy unit, vermi compost and farm pond are components. The programme was carried out by the Kendra in different parts of the district, acted as model to establish similar structures in other parts by training and involving MGNREGAS partners. Various farmers from different panchayats have visited the established farms to learn and obtain first-hand information on how to utilize these partners effectively for farming system management. **<u>Integrated Farming System development through MGNREGS</u>** Integrated farming system is an important area of specialty agriculture done by integrating various agricultural enterprises, *viz*., cropping, animal husbandry, fishery, forestry etc., will help sustainable farm development and has a great potential role in the agricultural economy. These enterprises not only supplement the income of the farmers but also to help increasing the family labour employment. The model unit Established during the year 2013 in different farmers fields. It consists of calf rearing unit, goat rearing unit, farm pond, grazing and cropping areas. It is a live model for small and marginal farmers. The KVK in association with the support of DRDA has selected small and marginal farmers to establishing similar models in the district, Coimbatore in nine blocks. 9 farmers were short listed with a land holding of 1.85 to 5.0 acres and executed the project Integrated Farming System with all possible agriculture and allied components including Poultry, Fisheries and Sericulture to ensure sustainability

Year	Title	Success story in brief

in farming.

A technical and management training was given to all above farmers and technical staffs of all blocks in DRDA regarding establishment and management of IFS using NREGS. Farmers were educated to improve their farming pattern by integrating above viable enterprises.

Five farmers such as Mr. M. Krishnamurthy, Pannimadai, Mr.A.R.Kaliappan, Allapalayam, Mr. T. Thiruvengadam, Perumpathy, Mr. Sadasivam, Ponnavaram, Mr. Dhandapani, Varapathy are presently designated as farmer trainers who can further trained other farmers of the district on handling Integrated Farming System.

Mr. M. Krishnamurthy aged 60 belongs to Pannimadai village of Perianaickenpalaym block was cultivating only banana and arecanut. After the intervention, he has changed the cropping pattern and increased the cropping intensity by cultivating coconut, bhendi and mixed fodder bank besides introduction of goatery, dairy, rabbitary, poultry and fisheries. Establishment of mini farm pond in his farm has helped supporting growing of fishes in the water medium which is adequately nourished with dropping of poultry bird. The enriched water has thus been a good fertigation source for his crops. Soil and water conservation activities undertaken in his farm has really helped utilization of all water resources including the rain water and the soil fertility management. The benefit cost ratio HAS thus become 6.2 as against 1.9 which was earlier to the introduction of this model. He could achieve this benefit cost ratio in about four years of period after initiation.

Enterprises of the farmer before and after intervention:

S.No.	Crop / Enterprises			
	Before Intervention	Area / unit	After Intervention	Area / unit
1.	Banana	2 acres	Banana	2 acres
2	Arecanut	1acre	Bhendi	40 cents
3	Farm pond	10 cent	Arecanut	1 acre
4	Fallow land	1 acre	Coconut	50 cents
			Farm pond with fisheries	10 cent
			Vermicompostin g unit	1 no
			Goatery	4 nos.
			Pigeon unit	1 no
			Dairy	2 nos.
			Mini poultry unit	50 nos.
			Rabbit unit	12 nos.

Economics (Worked out while the project is in progress)

Crop / Enterprises	Before Intervention				After Int	
	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return
Bhendi	-	-	-	-	83600	173800
Banana	135875	721000	586125	5.3:1	129375	793000
Poultry unit					12650	23400
Dairy unit					88600	135000

Year	*Title*	*Success story in brief*

Mr.A.R. Kaliappan aged 45 belongs to Allapalayam village of Annur block has been participating in all our training and development programmes and as a member of our Vidial Farmers Club has also established successful model in his farm. Since 2009 he was adding up enterprises such as backyard poultry and turkey rearing, stall fed goatery and vermicompost unit. His IFS unit is now with more than ten enterprises such as banana, bhendi, vegetable cow-pea, mulberry, bio-gas, goatery, poultry, rabbitary, fisheries and vermicompost etc., The benefit cost ratio achieved by Mr.A.R.Kaliappan is worked out to be to 4.01 as against his benefit cost ratio of 1.0 over a period of three years.

Enterprises of the farmer before and after intervention:

Before Intervention			**After interver**
Sl.no	**Crop/Enterprises**	**Area/Unit**	**Crop/Enterprises**
1	Cotton	70 cent	Banana
2	Banana(IC in cotton)	70 cent	Bhendi
3	Cowpea	30 cent	Mulberry as inter crop
4	Biogas plant	1 no	Biogas plant
5	Goat	4 nos	Goat
6	Bore well	1 no	Bore well
7	Open well	1 no	Open well
			Cow pea as inter crop
			Poultry(Namakkal 1)
			Rabbit
			Rabbit kit
			Vermi compost (30X3

Economics (Worked out while the project is in progress)

	Crop/Component	**Gross return**	**Cost of cultivation**
Before intervention	Cotton, Banana, Cow pea and Goat	52,500	48,170
After intervention	Banana, Bhendi, Mulberry, cowpea, Goat, Poultry, Rabbit, Diary and Vermi compost	1,19,980	57,730

Integrated farming system (IFS) is a promising enterprise for the marginal and small farmers particularly who has less farm holdings. From this intervention, the IFS provide progressive economic growth, employment opportunities, family nutritional requirements, effective utilization of resources of the farming enterprises Conserving the soil and water resources, etc. And also the successfully established integrated farming system models are acting as model farms for other farmers to improve their standard of living and income. The success of this project has been thus attributed to the convergence main departments such as DRDA and State Department of Agriculture with ICAR – Krishi Vigyan Kendra, Coimbatore. All other line departments including horticulture, agricultural engineering, animal husbandry, sericulture etc., has also been linked with this Krishi Vigyan Kendra to ensure positive impact in these areas.

Year	*Title*	*Success story in brief*
2018-19	**Value addition in Moringa based products**	**Name of the farmer** : Mrs.Rajeswari (Amma Pannimahalir group) **Situation analysis:** ICAR KVK Coimbatore is concentrating on the primary, secondary/ speciality agriculture to double the yield level in primary agriculture and triple the income by the way of processing the primary agriculture produces. The Kendra is working through our self-help groups and similar working groups in our different operational areas, including the those groups which are formed by different departments. Mrs.Rajeswari, a women entrepreneur from Ammapannaimahalir group from pannimadai village is one among who have been developed as lead farm woman. She was trained a processing of different agri commodities. Her farm is located in Pannimadai village of Perianaickenpalayam block and cultivating Banana, Coconut, vegetables and greens. The Kendra has motivated and guided her to get organic certification from the department. Now the farm produces are directly sold to the consumers nearby. Along with their integrated farming, they came forward to value add greens from their farm. Then the Kendra had implemented the intervention (FLD) on Value addition in Moringa based products. **Plan, Implement and Support:** The front line demonstration on Demonstration of Production of dehydrated moringa and their products as entrepreneurial activity was conducted at Pannimadai village of Periyanackiyanpalayam block of Coimbatore district. During this programme Training and method demonstration of Moringa based products were being done. Solar based drying was also demonstrated for uniform drying and quality production of Moringa powder. Packing, labelling, Branding, marketing were also been supported by the Kendra **Output:** With the guidance and support of the Kendra she started home scale level food processing unit at her farm. With the help of her family members she is selling more than 10 products among families of their local area. Due to the increased response, she has decided to produce Moringa based four products such as Moringa soup powder, Moringaidli powder, Moringathokku and Dried drumsticks. Among the four, two products were picked up and preferred by many consumers. She further sought the guidance of the Kendra to obtain help in acquiring food safety license, branding labelling and marketing techniques. She sold her products through her sale in gated communities, KVK exhibitions, Departmental stores and nearby towns of the district. She also uses mass media like Pothigai TV and AIR to popularise her products and promote sales. **Outcome:** At present monthly 8 to 10 kgs are produced regularly and marketed through organic stores. Every month Mrs. Rajeswari earned Rs. 12000 and selling her products in the brand name of Sri Saifoods. Many farmers and extension officials from Coimbatore district are regularly visiting this farm to know about the organic integrated farming system. During the visit, they are explaining about the value added products and its medicinal benefits. The final produce is being sold to consumers directly. The feedback of the consumers also is highly satisfied. **Impact of employment generation:** She is now able to earn and additional income of Rs.12000 per month besides guiding neighboring farm women. Totally about 12 number of families an able to undertake similar activities and supporting their families.

Terms of reference (e)

7. SUGGESTED ROAD MAP FOR KVKS TO WORK AS SINGLE WINDOW KNOWLEDGE, RESOURCE AND CAPACITY DEVELOPMENT CENTRE IN THE DISTRICT

Sl. No.	Category	Generation, acquisition and sharing	Suggestions for strengthening
i	Knowledge	Scientific knowledge/information through conducting OFTs and FLDs	Financial support. ➢ For organizing extension activities like method demonstrations, field days and exposure visits. ➢ For recognizing farm experts related to technological intervention
		Technology backstopping through respective Directorate of Extension in the jurisdiction	➢ Frequency of visit of representative experts will be appreciated ➢ Feedback system of outcome of mandatory activities (Front line extension activities may be highlighted during SWC) ➢ Timely availability of technical inputs more particularly seeds ensured for further demonstration at field level.
		HRD and higher education for KVK scientists	➢ It can be followed / implemented as per/on par with ICAR GUIDELINES to the NGO and Deemed university KVKs.
		KVK scientists as resource personnel	➢ Location specific technologies can be provided only by the KVK system and hence KVK scientists can be given first preference to act as resource persons in all programmes. But advance planning must be done based on mutually convenient basis both by the organizations and KVKS.
		Data base on technology inventory, weather etc. for the respective district of the KVK	➢ Technology inventory can be provided from all concerned universities and research system may be provided to the KVKs of the zone for immediate reference.
		Imparting technical-know-how and do-how through training	➢ All Scientific staff can be provided with portable projectors for effective organizing of training programmes at field levels
		Farm advisory services through KIMAS	Present system is satisfactory
ii	Resources	Instructional farm with technology demonstration units	Financial assistance is required for the following activities. ➢ Complete solar fencing for KVK instructional farm for prevention of wild animal menace.

Sl. No.	Category	Generation, acquisition and sharing	Suggestions for strengthening
			➢ Rainwater harvesting and water storage structures can be provided. ➢ Financial support for creating Knowledge and resource center at KVK farm in self explanatory mode. ➢ Existing animal rearing unit can be strengthening with trevis. ➢ Food processing unit can be Provided
		Qualified manpower with multi-disciplinary team of scientists	➢ Two more scientists can be recruited to support of marketing and Post Harvest Management ➢ One programme assistant technical and office assistant can be provided for effective functioning.
		Equipped with need based laboratories like SWPTL, Plant Health Clinic, e-learning centre etc.	➢ Present system is satisfactory.
		Established necessary physical infrastructure like administrative building, training, hall, farmers hostel, staff quarters, green houses, threshing yards, etc.	The following infrastructures are essential at our Kendra. ➢ New administrative building (since our KVK crossed 40 years of period). ➢ Staff quarters and farmers hostel can be renovated. ➢ Two numbers of training/seminar halls can be provided. ➢ Storage godown, threshing yard, permanent exhibition hall, vehicle shed can be provided. ➢ Fully automatic green house can be provided. ➢ One vehicle (with 16 people capacity) can be provided for transporting trainees and other inputs.
		Equipped with need based equipments and implements including farm machineries.	➢ Farm implements like farm shredder, laser leveler, earth augers , rocker sprayer, sprinkler system and rain gun can be provided.
		Custom hiring of equipment's and machineries	➢ One custom hiring centre consisting of equipments and implements based on the cropping system in the district will be highly useful and supportive for the system.
		Production and supply of technological inputs like seeds, planting materials, bio-products, livestock, fish fingerlings etc.	➢ One small biofertilizer and bioagent production unit maybe established.
		Others	

Sl. No.	Category	Generation, acquisition and sharing	Suggestions for strengthening
iii	Capacity development	Dealing with different types of participants as well as stakeholders	➢ Present system is satisfactory
		Following participatory approach for providing partnership	➢ Financial assistance may be provided for organizing workshops and other related activities.
		Adopting cluster village approach for implementing the activities/programmes to make area intensive	➢ Present system is satisfactory
		Prone to convergence	➢ KVK should be given enough power to converge/decide district level agricultural activities
		Active cooperation and coordination	➢ Present system is satisfactory
		Possess transparent financial management	➢ Present system is satisfactory

Terms of reference (f)

8. ASSESSESMENT OF EXISTING PROVISION FOR MANPOWER AND INFRASTRUCTURE IN KVKS AND ATARIS IN VIEW OF THEIR ROLES AND RESPONSIBILITIES; REVIEW THE MONITORING, COORDINATION, OVERSEEING, LIASIONING, REPORTING, BUDGETING, TECHNOLOGY FLOW AND BACKSTOPPING MECHANISMS

8.1 Manpower

8.1.1Staff strength of KVK

Sl.No.	Staff category	Sanctioned (Nos.)	Filled (Nos.)	Vacant (Nos.)
i	Senior Scientist & Heads (PC)	1	1	Nil
ii	Scientist (SMSs)	6	6	Nil
iii	Programme Assistants	3	3	Nil
iv	Administrative staff	2	2	Nil
v	Drivers	2	2	Nil
vi	Supporting staffs	2	2	Nil
	Total	**16**	**16**	

8.2 Infrastructure

8.2.1Infrastructure at the Campus of KVK

8.2.1.1 Infrastructure provided to KVKs till date

Sl. No.	Infrastructure	Nos.
i	Administrative Buildings	1
ii	Farmers Hostels	1
iii	Staff Quarters	4
iv	Demo Units	2
v	SWPTL	1
vi	Mini soil testing labs	2
vii	Rain Water Harvesting Units	0

viii	Jeeps	1
ix	Two Wheelers	2
x	Tractor with Trailer	1
xi	Cultivator	1
xii	Power Tiller	1
	Total	**17**

8.2.1.2 Infrastructure provided during QRT period from 2011-12 to 2018-19

Sl.No.	Name of infrastructure	Source of funding	Year of procurement	Expenditure (Rs.)	Present status
1	Renovation & Repair work-Old Mess Building	ICAR	2011-2012	10,00,000.00	Good Condition
2	Renovation & Repair work-Administrative Building(Flooring work)	ICAR	2016-2017	3,00,000.00	Good Condition
3	Fencing & Farm Development (KVK Campus)	ICAR	2018-2019	1,48,512.00	Good Condition
	Total			**14,48,512.00**	

8.2.2.4 Equipment and implements provided during QRT period from 2011-12 to 2018-19

Sl.No.	Name of equipment and implement	Year of procurement	Expenditure (Rs.)	Present status
1	Executive Revolving Chair -1	2016-17	10,000.00	Good Condition
2	Chair -8 Nos.	2016-17	36,585.00	Good Condition
3	Plastic Chair -25 Nos.	2016-17	23,750.00	Good Condition
4	Computer Table – 5 Nos.	2016-17	12,450.00	Good Condition
5	Computer Steel Chair – 4 Nos.	2016-17	11,960.00	Good Condition
6	Revolving Chair -1	2016-17	3,240.00	Good Condition
7	Steel rack -1 no.	2016-17	1,728.00	Good Condition
8	Desktop Computer 2 nos. printer 2 nos.	2016-17	90,150.00	Good Condition
9	Digital Camera Nikon -1 no.	2016-17	15,900.00	Good Condition
10	CCTV Camera with monitor -1 Unit	2016-17	26,600.00	Good Condition
11	Water Doctor (Purifier) -1 no.	2016-17	25,000.00	Good Condition
12	Net working System -1 unit	2016-17	6,050.00	Good Condition
13	ESSL Biometric Time Attendance	2016-17	8,900.00	Good Condition
14	UPS 1 no. with With Battery 2 nos(	2016-17	44,800.00	Good Condition
14	Smart LED TV -1 no.	2016-17	60,640.00	Good Condition
15	Intercom Unit -1 no.	2016-17	19,500.00	Good Condition
16	Cordless Phone – 1 no.	2016-17	2,350.00	Good Condition
17	Laptop (Computer) -1 no.	2018-19	35,000.00	Good Condition
18	Multimedia Projector -1 no.	2018-19	35,500.00	Good Condition

19	Xerox Machine – 1 no.	2018-19	76,000.00	Good Condition
	Total		5,46,103.00	

8.2Budget

Year and Budget Head	Sanctioned (Rs.)	Expenditure
2011-12		
(A) Recurring		
Pay and allowances	58,00,000.00	57,85,375.00
TA	1,50,000.00	1,49,995.00
HRD	-	-
Contingencies	10,00,000.00	9,90,261.00
If any add		
Total	69,50,000.00	69,25,631.00
(B) Non-recurring		
Works	10,00,000.00	10,00,000.00
Furniture and equipment	-	-
Vehicles	-	-
Library	-	-
If any add	-	-
Total	**10,00,000.00**	**10,00,000.00**
Grand total (A + B)	**79,50,000.00**	**79,25,631.00**
2012-13		
(A) Recurring		
Pay and allowances	69,30,000.00	69,29,458.00
TA	1,75,000.00	1,74,954.00
HRD	-	-
Contingencies	11,20,000.00	11,19,625.00
If any add		
Total	82,25,000.00	82,24,037.00
(B) Non-recurring		
Works	-	-
Furniture and equipment	-	-
Vehicles	-	-
Library	-	-
If any add	-	-
Total	-	-
Grand total (A + B)	**82,25,000.00**	**82,24,037.00**
2013-14		
(A) Recurring		
Pay and allowances	82,90,000.00	82,87,908.00
TA	1,75,000.00	1,74,969.00
HRD	-	-
Contingencies	13,25,000.00	13,24,443.00
If any add	-	-
Total	**97,90,000.00**	**97,87,320.00**
(B) Non-recurring		

Year and Budget Head	Sanctioned (Rs.)	Expenditure
Works	-	-
Furniture and equipment	-	-
Vehicles	-	-
Library	-	-
If any add	-	-
Total	-	-
Grand total (A + B)	**97,90,000.00**	**97,87,320.00**
2014-15		
(A) Recurring		
Pay and allowances	93,50,000.00	93,41,039.00
TA	1,03,000.00	1,03,000.00
HRD	-	-
Contingencies	5,50,000.00	5,49,250.00
If any add	-	-
Total	1,00,03,000.00	99,93,289.00
(B) Non-recurring		
Works	-	-
Furniture and equipment	-	-
Vehicles	-	-
Library	-	-
If any add	-	-
Total	-	-
Grand total (A + B)	**1,00,03,000.00**	**99,93,289.00**
2015-16		
(A) Recurring		
Pay and allowances	1,00,86,000.00	1,00,86,000.00
TA	1,00,000.00	99,958.00
HRD		
Contingencies	7,00,000.00	6,95,817.00
If any add		
Total	**1,08,86,000.00**	**1,08,81,775.00**
(B) Non-recurring		
Works	-	-
Furniture and equipment	-	-
Vehicles	8,00,000.00	7,99,966.00
Library	-	-
If any add	-	-
Total	8,00,000.00	7,99,966.00
Grand total (A + B)	**1,16,86,000.00**	**1,16,81,741.00**
2016-17		
(A) Recurring		
Pay and allowances	1,09,63,000.00	1,09,62,846.00
TA	1,50,000.00	1,49,861.00
HRD		
Contingencies	11,65,000.00	11,60,812.00
If any add	-	-

Year and Budget Head	Sanctioned (Rs.)	Expenditure
Total	**1,22,78,000.00**	**1,22,73,519.00**
(B) Non-recurring		
Works	3,00,000.00	3,00,000.00
Furniture and equipment	4,00,000.00	3,99,603.00
Vehicles	-	-
Library	-	-
If any add	-	-
Total	**7,00,000.00**	**6,99,603.00**
Grand total (A + B)	**1,29,78,000.00**	**1,29,73,122.00**
2017-18		
(A) Recurring		
Pay and allowances	1,17,01,000.00	1,16,61,049.00
TA	1,45,000.00	1,44,563.00
HRD		
Contingencies	14,99,000.00	14,90,238.00
If any add		
Total	**1,33,45,000.00**	**1,32,95,850.00**
(B) Non-recurring	-	-
Works	-	-
Furniture and equipment	-	-
Vehicles	-	-
Library	-	-
If any add	-	-
Total	-	-
Grand total (A + B)	**1,33,45,000.00**	**1,32,95,850.00**
2018-19		
(A) Recurring		
Pay and allowances	1,18,77,000.00	1,16,97,415.00
TA	1,38,000.00	1,36,783.00
HRD		
Contingencies	11,74,000.00	11,67,693.00
If any add		
Total	**131,89,000.00**	**1,30,01,891.00**
(B) Non-recurring		
Works	1,50,000.00	1,48,512.00
Furniture and equipment		
Vehicles		
Library		
SCSP Component	1,47,000.00	1,46,500.00
Total	**2,97,000.00**	**2,95,012.00**
Grand total (A + B)	**1,34,86,000.00**	**1,32,96,903.00**
Total during QRT period	**8,74,63,000.00**	**8,71,77,893.00**

Terms of reference (g)

9. SUGGESTED MEASURES FOR ORGANIZATIONAL AND ADMINISTRATIVE CHANGES FOR STRENGTHENING AND OVERALL IMPROVING THE VISIBILITY AND EFFICIENCY OF KVK

9.1 Organizational visibility and efficiency

Type of Organization	Suggestions for strengthening
ICAR Institutes	Present rapport and service is good
SAUs	Present rapport and service is good
Deemed Universities (DUs)	Technologies and Methodologies of the Deemed university with regards to Home science/women development aspects(or any other relevant specialization from respective deemed university) can be given due importance when proposed to be adopted by those KVKs attached with that.
Central Agricultural University (CAU)	Present rapport and service is good
Central University (CU)	Present rapport and service is good
Non-government Organizations (NGOs)	Technologies from specialized Research institutes (Example Tea technology from UPASI)may be drawn for further front line extension by the KVKs attached with that.
Public Sector Undertaking (PSU)	Present rapport and service is good
State Governments (Department of Agriculture)	Present rapport and convergence is good
Other Educational Institutions	Present situation is satisfactory

9.2 Administrative visibility and efficiency

Area of administration	Existing procedure	Suggestions for strengthening
Sanction/establishment of KVK		Present system is good
Staff strength and their disciplines as well as designations	Total staff -16 Disciplines – Agronomy, Horticulture, Animal Science, Home Science, Soil Science, Agricultural Engineering	➢ Staff strength may be increased ➢ Two more scientists can be recruited to support for marketing. ➢ One programme assistant technical and Junior assistant can be provided for effective functioning of the system
Recruitment of staff	As per ICAR Guidelines	Present system is good
Career advancement	No Career advancement for NGO and DU KVK employees	➢ Study leave for pursuing higher studies ➢ Career Advancement and promotion policies should be formed uniformly and executed for the KVK staff present in the system **Staff promotion policies should**

		be framed uniformly and executed to NGOs and deemed university KVKs
Pay and Allowances	Timely release of funds as per 6th pay commission	Implementation of seventh pay commission with arrears can be done. ➢ Children Education allowance , Medical allowances for KVK employees, ➢ Gratuity for KVK Employees
Recognitions	Regular notification of awards and recognitions for KVKs ,Scientist, farmers	Present system is good
Purchase procedure	As per ICAR Guidelines	Present system is good
Execution of works	As per ICAR Norms	Present system is good
Vehicles management	As per ICAR Guidelines	Present system is good
Budget release and expenditure	Timely sanction and release of budget by the ATARI	Present system is good
Operational contingency	Operational Contingency is not sufficient for Travelling Allowance and POL	TA and DA for staff and POL contingencies may be increased for effective functioning. Building maintenance may be increased for proper maintenance of the buildings
Audit Utilization Certificates	As per ATARI Guidelines followed	Present system is good
Delegation of powers to Head of KVK	Sufficient recognition and powers are provided by the ATARI and Host Organization	Present system is good

Annexures

Annexure-I: Activity wise photos at a glance (please cover all activities mentioned in the format/report). Title should be self-explanatory reflecting the name of KVK, activity (OFT/FLD/Training etc.) date or year details of the activity etc.

- Enclosed separate file

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