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ANNUAL REPORT (April-2016 to March-2017)

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	40	1376	564	1940
Rural youths	4	153	7	160
Extension functionaries	3	120	13	133
Sponsored Training	19	2750	160	2910
Vocational Training	1	0	29	29
Total	67	4399	773	5172

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	295	99.25	-
Pulses	315	108.75	-
Cereals	65	21.5	-
Vegetables	80	12.0	-
Other crops	190	67.0	-
Hybrid crops	25	10.0	-
Total	970	318.5	-
Livestock & Fisheries	105	2.0	20
Other enterprises	15	92.8	5
Total	120	94.8	25
Grand Total	1090	413.3	25

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	7	16	16
Livestock	1	18	6
Various enterprises	-	-	-
Total	8	34	22
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	8	34	22

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities		
Other extension activities		
Total		

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Market Awareness	Other enterprise		
KVK, Amreli Gujarat	Text only	29	3	-	-	-	3	35
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	29	3	-	-	-	3	35
	Total farmers Benefitted	154551	15396	-	-	-	15504	186351

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	121.672	-
Planting material (No.)	1222	1674
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	172	51600
Water	38	3040
Plant	-	-
Total	210	54640

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	0
2	Conferences	0
3	Meetings	0
4	Trainings for KVK officials	1
5	Visits of KVK officials	0
6	Book published	0
7	Training Manual	0
8	Book chapters	0
9	Research papers	
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	6
13	Proceedings	1
14	Award & recognition	0
15	On going research projects	4

DETAIL REPORT OF APR-2016-17

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Senior Scientist and Head Krishi Vigyan Kendra, Junagadh Agricultural University, Keriya Road, Model farm, Amreli (Gujarat)-365601	02792 227122	02792 227122	kvkamreli@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Junagadh Agricultural University, Agril. Campus, Motibaugh, Junagadh-362001 (Gujarat)	0285 2672080-90	0285 2672004 2672653	-----

1.3. Name of the Programme Coordinator with phone & mobile no.:

Name	Telephone / Contact		Email
	Residence	Mobile	
Dr. N. S. Joshi Ph.D, Horticulture	-	9428191963	nileshjoshi2207@gmail.com

1.4. Year of sanction: Deputy Secretary, ICAR, New Delhi, Letter No. 13-16/2003/1, Dt. 7.12.2004

1.5. Staff Position (as on 31st March, 2018):

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)	Mobile no.	Age years	Email id
1	Senior Scientist and Head	Dr. N. S. Joshi	Programme Coordinator	Horticulture	15600-39100 G.P. 9000		24/03/2015	Permanent	General	9428191963	40	nsjoshi8@rediffmail.com
2	Scientist	Dr. H. C. Chhodavadia	Subject Matter Specialist	Extension Education	15600-39100 G.P. 8000		24/08/2006	Permanent	General	9429222247	42	harshad@jau.in
3	Scientist	Er. P. S. Jayswal	Subject Matter Specialist	Agriculture Engineering	15600-39100 G.P. 6000		10/09/2012	Permanent	General	9427569468	30	priiti.jayswal@jau.in
4	Scientist	Dr. M. L. Patel	Subject Matter Specialist	Plant Protection	15600-39100 G.P. 6000		31/03/2015	Permanent	General	9427244349	37	mahesh.patel1707@gmail.com
5	Scientist	Shri P. J. Prajapati	Subject Matter Specialist	Crop Production	15600-39100 G.P. 6000		31/03/2015	Permanent	OBC	8660468032	27	pinakin255@gmail.com
6	Scientist	Vacant	Subject Matter Specialist	Animal Science	--	--	--	--	--	--	--	--
7	Scientist	Vacant	Subject Matter Specialist	Home Science	--	--	--	--	--	--	--	--
8	Programme Assistant	Vacant	Programme Assistant	-	--	--	--	--	--	--	--	--
9	Computer Programmer	Shri S .N. Joshi	Computer Programmer	-	39900-126600		01/07/10	Permanent	General	9426554803	37	snehal@jau.in
10	Farm Manager	Vaccant	Farm Manager	-	--	--	--	--	--	--	--	--
11	Accountant / Superintendent	Shri H. J. Ravaliya	Office Superintendent cum Accountant	-	39900-126600		01/12/11	Permanent	SC	9429772244	37	hjravaliya@jau.in
12	Stenographer	Shri A. H. Parmar	Stenographer	-	19,950 fix	19950	18/11/2013	Permanent	ST	9909089570	32	amit7parmar@gmail.com
13	Driver	Vaccant	Driver	-	--	--	--	--	--	--	--	--
14	Driver	Vacant	Driver	-	-	-	-	-	-	-	-	-
15	Supporting staff	Shri N. K. Dangar	Supporting staff	-	15700-50000		01/06/05	Permanent	OBC	8154842027	50	naranbhai11@yahoo.com
16	Supporting staff	Vacant	Supporting staff	-	--	--	--	--	--	--	--	--

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

S. N.	Item	Area (ha)
1	Under Buildings	3.00
2.	Under Demonstration Units	1.00
3.	Under Crops	13.47
4.	Orchard/Agro-forestry	0.50
5.	Others (WHS & Polytechnic Home Sci. building)	1.53
Total		20.00

1.7. Infrastructural Development:

A) Buildings

S. N.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	2008	500	3190000	NIL		
2	Farmers Hostel	ICAR	2008	305	2088000			
3	Staff Quarters(6)	ICAR	2008	400	3204000			
4	Farm Wall	ICAR	2008	-	-			
5	RWH system	ICAR	2008	-	960000			
6	Threshing yard	ICAR	2009	-	-			
7	Godown and processing shed	RKVY	2009	70.62	500000			
8	Poly House	RKVY	2010	320	281600			
9	Net House	RKVY	2010	150	64450			
10	Training hall	RKVY	2010	190.99	1396300			
11	Pilot scale Process plant	RKVY	2010	197.31	1536400			
12	Implement shed	RKVY	2010	77.33	286300			
13	Farm Wall	ICAR	2016	-	497475			
14	Goat Shed	ICAR	2016	14.05	69760			
15	Vermicompost unit	ICAR	2016	45	73640			
16	Administrative building(Renovation)	ICAR	2017	-	300000			

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
M&M, Bolero XL	2006	4,86,500		Working condition
Tractor	2005	3,80,000	---	Working condition
Motor Cycle	2010	42,831		Working condition
Power Tiller with implements	2011	1,42,000	---	Working condition
Mini Tractor with implements	2014	3,74,820	---	Working condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Digital camera	2008-09	11070	Working condition
Air assisted blast type sprayer	2008-09	98750	Working condition
Vacuum cleaner, RO, water cooler	2008-09	41780	Working condition
Samsung A/C, Nos.-2	2008-09	47300	Working condition
Fax machine	2008-09	17500	Working condition
LCD projector	2008-09	98799	Working condition

Winnowing fan	2008-09	8500	Working condition
Chaff cutter	2008-09	30188	Working condition
Plasma TV, Nos.-2 (21 and 52")	2008-09	139952	Working condition
Cotton stock shredder-Nos.-3	2008-09	363000	Working condition
Spiral binding machine	2008-09	9090	Working condition
Rotavator with cultivator, Nos.-2	2008-09	180000	Working condition
Inverter	2008-09	19800	Working condition
Manually operated seed dressing drum	2008-09	20930	Working condition
Exhibition display	2008-09	39974	Working condition
Decorticator groundnut machine	2008-09	98850	Working condition
Cotton shredder, Nos.-2	2008-09	242000	Working condition
Battery operated sprayer	2008-09	4940	Working condition
Aspee knapsack sprayer	2008-09	7400	Working condition
Bullock drawn pipe farm seed drill	2008-09	161000	Working condition
Zero till drill	2008-09	66725	Working condition
Bullock drawn clod breaker	2008-09	52000	Working condition
Tractor operated groundnut digger	2008-09	235500	Working condition
Multipurpose thresher (engine operated)	2008-09	114000	Working condition
Mobile seed processing unit	2008-09	1685000	Working condition
Electronic balance	2008-09	19425	Working condition
Power generated	2008-09	49500	Working condition
RO system	2008-09	24450	Working condition
Air condition Nos.-2	2008-09	51580	Working condition
Air condition, Nos.-3	2008-09	89970	Working condition
Photo copier	2008-09	124000	Working condition
LCD and accessories	2008-09	103912	Working condition
Oven and freeze	2008-09	30605	Working condition
Tractor drawn harrow cum cultivator	2008-09	75000	Working condition
Planter	2008-09	44000	Working condition
Rotavator	2008-09	96000	Working condition
Laptop	2008-09	47500	Working condition
Pipe frame blade harrow piece	2008-09	11000	Working condition
Solar equipments	2008-09	81830	Working condition
Gas connection for lab.	2009-10	9700	Working condition
Digital Sony Camera	2009-10	24750	Working condition
Post Whole Digger	2009-10	38000	Working condition
Motor, 1 Hp	2009-10	8650	Working condition
Power Generator	2009-10	45576	Working condition
Multi Crop thresher	2010-11	38000	Working condition
BOD incubator	2010-11	75863	Working condition
Compound light microscope	2010-11	90851	Working condition
Motor 7.5 Hp	2010-11	28600	Working condition
Motor 5 Hp	2010-11	17000	Working condition
Desktop Computer	2010-11	34810	Working condition
Hot air Oven	2010-11	15215	Working condition
Hot plate	2010-11	4725	Working condition
Physical Balance	2010-11	3623	Working condition
Refrigerator	2010-11	19200	Working condition
PH meter	2010-11	3990	Working condition
Conductivity bridge	2010-11	9450	Working condition

Chemical Balance	2010-11	45066	Working condition
Shaker-2 no.	2010-11	49000	Working condition
Flame Photometer	2010-11	44887	Working condition
Spectrophotometer	2010-11	39480	Working condition
Water Distillation Still	2010-11	1,57,500	Working condition
Seed Drill	2010-11	27500	Working condition
Winnower	2010-11	37000	Working condition
Disc Plow	2012-13	30400	Working condition
Disc Harrow	2012-13	37500	Working condition
Nine tine Cultivator	2012-13	19600	Working condition
PC with Accessories (2 No.)	2013-14	65970	Working condition
Printer (2 No.)	2013-14	13898	Working condition
Scanner	2013-14	4309	Working condition
PC with Accessories (2 No.)	2015-16	77590	Working condition
Printer	2015-16	11900	Working condition
Rotavator (NICRA)	2015-16	70000	Working condition
Mobile shredder(NICRA)	2015-16	146000	Working condition
Chaff cutter(NICRA)	2015-16	57000	Working condition
Multi crop thresher(NICRA)	2015-16	155000	Working condition
Rear mounted reaper (NICRA)	2015-16	95000	Working condition
Digital Camera	2016-17	14400	Working condition
Desktop Computer	2016-17	34115	Working condition
Printer	2016-17	12546	Working condition
Automatic seed cum fertilizer drill(NICRA)	2016-17	66412	Working condition
Dibbler (03 nos.)	2016-17	6000	Working condition
Seed dressing drum (5 nos.) (NICRA)	2016-17	15000	Working condition
Rotavator (NICRA)	2016-17	89040	Working condition
Bund former (NICRA)	2016-17	13650	Working condition
Air conditioner (02 nos.)	2016-17	79980	Working condition
Desktop Computer	2016-17	34115	Working condition
Photo copier	2016-17	144391	Working condition
Integrated community computer	2016-17	110644	Working condition
Multi crop thresher	2017-18		Working condition

1.8. A). Details of the SAC meeting* conducted in the year

Sr. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	05/11/2016	Dr. A. M. Parakhia, Director of Extension Education, Junagadh Agricultural University, Junagadh	1. Refine the OFT on Agril. Engineering.	Suggestion accepted
			2. Training should be organized on Arid fruits.	Suggestion accepted
			3. Training should be organized on stored grain pests, preparation of bio pesticides.	Suggestion accepted
			4. No. of Training should be increased in participation of input dealers.	Suggestion accepted
			5. No. of Training should be increased for preservation of lemon and value addition of it.	Suggestion accepted
			6. Training should be organized on goat	Suggestion

			and sheep.	accepted
			7. Training should be organized on farm mechanization before monsoon period.	Suggestion accepted
			8. Establishment of vermicompost unit at KVK.	Suggestion accepted and implemented
			9. Increase publication of articles in news paper/ magazine for wide spread of technology.	Suggestion accepted and implemented
			10. Organize cafeteria on fodder crops and Conduct survey of animals.	Suggestion accepted
			11. Arrange the training on minimize the cost of cultivation.	Suggestion accepted
			12. Emphasized to increase the training on organic farming, farm mechanization and rain water harvesting.	Suggestion accepted
2.	05/11/2016	Dr. V.P.Chovatia Director of Research, Junagadh Agricultural University, Junagadh	1. To get a feedback from benefits and durability of poly house and net house in district and training should be also organized on it.	Suggestion accepted
			2. Survey on effect of beaveriya bassiana (bio agent) on crops and target pests.	Suggestion accepted
			3. To Conduct the FLDs on Okra instead of Cluster bean.	Suggestion accepted and implemented
3.	05/11/2016	Dr.A.V.Kumbhani, Assistant Director, Animal Husbandry, Amreli	1. To conduct demonstration of bye-pass protein to increase milk productivity under NICRA project	Suggestion accepted
			2. To arrange animal camp on artificial in-semination	Suggestion accepted
4.	05/11/2016	Mrs. Bhartiben Rasikbhai Akbari - Progressive farmer	1. To organize night meeting on Pink bollworm	Suggestion accepted
			2. Exposure visit should be organized at JAU, Junagadh	Suggestion accepted

* A copy of 12th SAC proceedings along with list of participants is attached.

2. DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1	Dry Farming
2	Rainfed : Cotton, Groundnut, Sesame, Black gram, Green gram, Mango, Onion
3	Agriculture – Horticulture (Mango)
4	Agriculture – Dairy
5	Agriculture – Fisheries
6	Cotton based cropping system
7	Groundnut based cropping system
8	Sesame based cropping system
9	Enterprise: Poultry, Fishery, Dairy, Sericulture, Vermicompost

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

a) Soil type

Sr. No.	Agro-climatic Zone	Characteristics
1	North Saurashtra Agro climatic Zone VI	Medium black soil, coastal alluvial soil, rocky soil and alkaline soil The climate of the district varies from moderately hot throughout the year except in winter. The climate is humid along with the coastal belt. The temperature varies from 8.01° Celsius in January to 43.7° Celsius in May. The average rainfall of last three years is 706 mm.

b) Topography

Sr. No.	Agro-ecological Situation	Soil texture	Altitude (m)	Principal Crops grown	Special Feature	Block Covered
1	Medium black soil with 400-700 mm rainfall	Silty clay to clayey	75-150	Groundnut Cotton Pearl millet	-	Savarkundla, Rajula and part of Jafrabad
2	Shallow black soils with 600-700 mm rainfall	Clayey	75-150	Groundnut Cotton Pearl millet Wheat	-	Kunkavav, Bagasara
3	Saline - alkali (Heavy texture) soils with 500-600 mm rainfall	Clayey	75-150	Cotton Groundnut Pearl millet Sorghum	Saline ground water	Amreli, Lathi, Liliya
4	Hilly soils with 300-600 mm rainfall	Clay loam, clayey	75-300	Groundnut Cotton Pearl millet Wheat	Well drained soils	Babra, Dhari, Khambha
5	Coastal alluvial soil with medium rainfall 750-1000 mm.	Sandy loam to silty clay loam	25-75	Cotton Groundnut Sesame Pearl millet	Saline ground water	Jafrabad and part of Rajula

2.3 Soil type/s:

Sr. No.	Name of Block	Problem Soil							
		Alkaline				Soil erosion			
		Area (ha)	Extent of severity			Area (ha)	Extent of severity		
			Very Sever	Sever	Mild		Very Seve	Sever	Mild
1	Amreli	10391	0	10391	0	60000	0	27000	33000
2	Babra	51723	0	0	51723	79316	0	72000	7316
3	Bagasara	0	0	0	0	7685	0	0	7685
4	Dhari	75000	0	25000	50000	70000	0	55000	15000
5	Jafrabad	26793	0	18213	8580	35460	0	1822	33638
6	Khambha	0	0	0	0	30700	0	20700	10000
7	Kunkavav	0	0	0	0	72671	0	34526	38145
8	Lathi	15000	0	15000	0	13000	0	0	13000
9	Liliya	12000	0	12000	0	38553	0	14355	24198
10	Rajula	0	0	0	0	0	0	0	0
11	Savarkundla	21563	0	21563	0	700	0	0	700

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Pearl millet	7700	112000	14.55
2	Jowar	400	4000	10.00
3	Maize	900	16000	17.78
4	Green gram	4000	20000	5.00
5	Black gram	1900	11000	5.79
6	Tur	800	8000	10.00
7	Wheat	30900	1132000	36.63
8	Gram	2400	31000	12.92
9	Kharif Groundnut	135800	1359000	10.01
10	Summer Groundnut	4900	94000	19.18
11	Kharif Sesamum	10400	34000	3.27
12	Summer Sesamum	3500	66000	18.86
13	Castor	2100	41000	19.52
14	Irrigated Cotton (Lint)	178300	6458000	36.22
15	UnIrrigated Cotton (Lint)	137600	1526000	11.09
16	Cumin	2500	13000	5.20
17	Onion	3700	1020000	275.68
18	Garlic	1700	96000	56.47
19	Chilli	100	1000	10.00

Area and Production Horticultural crops cultivated in the district (Year 2016-17)

S. No.	Crop	Area (ha)	Production (M.T.)	S. No.	Crop	Area (ha)	Production (M.T.)
1	Mango	6965	61918.85	16	Tomato	1091	26642.22
2	Chiku	552	4692	17	Cauliflower	167	2179.35
3	Citrus	719	8016.85	18	Cluster bean	326	2624.30
4	Ber	179	1410.52	19	Cow Pea	532	5910.52
5	Banana	227	8773.55	20	Cucurbits	1193	14435.30
6	Guavava	279	2561.22	21	Cumin	900	765
7	Pomegranate	109	1509.65	22	Chilli-Dry	227	424.49
8	Papaya	46	1955.46	23	Garlic	800	6016
9	Custard Apple	35	31.010	24	Coriander	1300	1664
10	Aonla	56	560.56	25	Ginger	03	53
11	Coconut	151	1283.50	26	Turmeric	13	243.10
12	Onion	3500	87325	27	Fenugreek	108	177.12
13	Brinjal	644	12042.80	28	Ajwain	491	456.63
14	Cabbage	539	10860.85	29	Rose	23	174.80
15	Okra	486	3912.30	30	Marigold	07	58.31

Director of Horticulture, Estimate of the horticulture crops, Year 2016-17

2.5. Weather data of year 2017-18 of Amreli district

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April-2017					
May-2017					
June-2017					
July-2017					
August-2017					
September- 2017					
October- 2017					
November- 2017					
December- 2017					
January-2018					
Februray-2018					
March-2018					
Total					

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

Category	Population	Production (Tonnes)	Productivity
Cattle			
<i>Crossbred</i>	5433	8750	10.066 kg/day
<i>Indigenous</i>	597011	126030	4.595 kg/day
Buffalo	240104	187030	5.142 kg/day
Sheep			
<i>Crossbred</i>	155000	220.57 M.T.	1423 gm/sheep
<i>Indigenous</i>	---	---	---
Goats	135949	10310	0.516 kg/day
Pigs	---	---	---
Rabbits	---	---	---
Poultry			
Hens	---	---	---
<i>Desi</i>	13500	6.96 lakh	140/season/year/layer
<i>Improved</i>	---	---	---
Ducks	129	---	---
Turkey and others	194	---	---

Directorate of Animal Husbandry, 32nd Survey report on estimates of major livestock products for the year 2014-2015 Gujarat state

2.7 Details of Operational area / Villages (2017-18):

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Lathi	Amreli	Kerala (Jogani)	Cotton, Groundnut, Cumin, wheat	<ul style="list-style-type: none"> • Lack of irrigation facility • Poor quality of irrigation water • Wild animal problem • Poor fertility status of Land • Low yield of major crops 	INM, IPM, Conserve moisture Agriculture, Training on MIS

2	Lathi	Amreli	Harsupur Devaliya	Cotton, Groundnut, Green gram, wheat	<ul style="list-style-type: none"> • Lack of irrigation facility • Poor quality of irrigation water • Wild animal problem • Low yield of major crops 	INM, IPM, Conserve Moisture agriculture
3	Liliya	Amreli	Saladi	Cotton, Green gram	<ul style="list-style-type: none"> • Saline land and poor quality of irrigation water • Poor fertility status of Land 	Conserve Moisture agriculture, OFT in cotton on BBF, Training on MIS
4	Liliya	Amreli	Jatruda	Cotton, Groundnut	<ul style="list-style-type: none"> • Saline land and poor quality of irrigation water • Poor fertility status of Land • Low yield of major crops 	INM, IPM, Conserve Moisture agriculture
5	Babra	Amreli	Vandaliya	Cotton, Groundnut, Cumin, Wheat	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem • Lack of irrigation facility 	ICM, introduction of new varieties, Scientific cropping
6	Kukavav	Amreli	Lunidhaar	Cotton, Groundnut, Green gram, black gram	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem • Lack of irrigation facility 	ICM, introduction of new varieties, Scientific cropping
7	Bagasra	Amreli	Haalariya	Groundnut, cotton, Green gram, black gram	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem • Lack of irrigation facility 	ICM, introduction of new varieties, Scientific cropping
8	Dhari	Amreli	Ditla	Cotton, Groundnut, Mango	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem 	ICM, introduction of new varieties, Scientific cropping
9	Amreli	Amreli	Babapur	Cotton, Castor, Wheat	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem • Poor quality of irrigation water 	ICM, introduction of new varieties, Scientific cropping
10	Amreli	Amreli	Shedubhar	Cotton, Groundnut, Green gram, black gram	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem • Poor quality of irrigation water 	ICM, introduction of new varieties, Scientific cropping
Continue.....						

11	Amreli	Amreli	Vaankiya	Cotton, Groundnut, pigeon pea	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem • Poor quality of irrigation water 	ICM, introduction of new varieties, Scientific cropping
12	Khambha	Amreli	Lakhapadar	Cotton, Groundnut, wheat, Pigeon pea	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem 	ICM, introduction of new varieties, Scientific cropping
13	Savarkundla	Amreli	Nesdi	Cotton, Groundnut, wheat, Pigeon pea, lemon	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem 	ICM, introduction of new varieties, Scientific cropping
14	Savarkundla	Amreli	Oliya	Cotton, Groundnut, wheat, Pigeon pea, lemon	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem 	ICM, introduction of new varieties, Scientific cropping
15	Rajula	Amreli	Maandardi	Cotton, Groundnut, wheat, Pigeon pea	<ul style="list-style-type: none"> • Low yield of major crops • Wild animal problem 	ICM, introduction of new varieties, Scientific cropping

2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Cotton, Groundnut, Castor, Cumin, Wheat, vegetables, fruits, etc.	Integrated Crop Management in major crops
Farm waste	Recycling of farm waste through composting, vermicompost, green manuring, etc.
Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
Soil	Reclamation of saline & alkaline soils
Farm Women	Farm women empowerment by training in value addition, handicrafts, and small scale enterprises
Horticulture	Promotion of arid horticulture fruit crops
Improved Implements	Popularization of the mechanized technological know how

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2017-18

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Total no. of Trials		Area in ha		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
8	8	16	16	130	130	260	260
				Other sch. (NFSM, NMOOP, ATIC, NICRA)	282.5	-	830

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	41	50	2245	2387	60	43	-	12443
Rural youth	03	05	80	200	-	-	-	-
Extn. Functionaries	02	13	75	2658	-	-	-	-
Other Scheme Trainings (ATIC, NICRA, NFSM, MGMG)	-							

Seed Production (Qtl.)			Planting material (Nos.)		
5			6		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
-	121.672	-	1000	1222	

I.A TECHNOLOGY ASSESSMENT

Summary of technologies assessed under various crops by KVKs

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers
Integrated Nutrient Management	Wheat	Effect of liquid bio fertilizer	2	2
	Onion	Effect of Sulphur	2	2
Varietal Evaluation	Okra	Varietal Evaluation	2	2
Integrated Pest Management	Cotton	Management of sucking pests	2	2
Integrated Crop Management	Cotton	High Density Planting in Cotton	2	2
Integrated Disease Management	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-
Weed Management	-	-	-	-
Resource Conservation Technology	Cotton	Ridge and furrow plantation	4	4
Farm Machineries	-	-	-	-
Integrated Farming System	-	-	-	-
Seed / Plant production	-	-	-	-
Post Harvest Technology / Value addition	-	-	-	-
Drudgery Reduction	-	-	-	-
Storage Technique	-	-	-	-
Plant Protection	Chickpea	Management of Wilt in chickpea	2	2
Total			16	16

Summary of technologies assessed under livestock by KVKs

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Disease Management	-	-	-	-
Evaluation of Breeds	-	-	-	-
Feed and Fodder management	-	-	-	-
Nutrition Management	-	Mineral mixture	2	18
Production and Management	-	-	-	-
Others (Pl. specify)	-	-	-	-
Total			2	18

Summary of technologies assessed under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
NIL	-	-	-	-
	-	-	-	-

I. B. TECHNOLOGY REFINEMENT

Summary of technologies refined under various crops by KVKs

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

Summary of technologies refined under various livestock by KVKs

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

Summary of technologies refined under various enterprises by KVKs

Thematic areas	Enterprise	Name of the technology assessed	No. of trials	No. of farmers
NIL	-	-	-	-
	-	-	-	-

I.C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

INTEGRATED NUTRIENT MANAGEMENT

1) Problem definition: Farmers do not use bio fertilizer for wheat production

Technology Assessed: Bio fertilizer application in wheat

KVK, Amreli in Gujarat conducted on-farm trial to find out effect of bio fertilizer application on wheat productivity. The assessed practice of soil application of Azotobacter & PSB @ 1 lit./ha with 100 kg FYM +75% RDF was found to be better with 4.99 % increase in yield.

Table: Effect of liquid bio-fertilizer on growth and yield of wheat.

Technology Option	No.of trials	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
Use only DAP and Urea in various dose (Farmers Practice)	2	4850	--	3.33
120-60-0 NPK kg/ha (Recommended Practice)		4960	2.27	3.80
Soil application of Azotobacter & PSB @ 1 lit./ha with 100 kg FYM +75% RDF		5092	4.99	4.25

2) Problem definition: Lower productivity in onion cultivation due to imbalance application of nutrients

Technology Assessed: Nutrient management in onion

KVK, Amreli in Gujarat conducted on-farm trial to find out appropriate nutrient management practice to enhance the onion productivity. The recommended practice was found to be better with 12.70 % increase in yield and 8.15 BC ratio.

Table: Effect of sulphur application in enhancing yield of onion

Technology Option	No.of trials	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
100 kg N/ha, 50 kg P ₂ O ₅ /ha (Farmers Practice)	2	64300	--	6.50
NPK :- 75 kg N/ha, 60 P ₂ O ₅ /ha, 50 K ₂ O kg/ha and 20 kg S/ha), Top dressing of urea (37.5 kg/ha) after 30-35 DAP, 20 kg/ha Sulphur (Recommended Practice)		72500	12.7	8.15
30 kg/ha Sulphur + recommended practice		67900	5.6	7.09

VARIETAL EVALUATION

Problem definition: Lower productivity of non- descriptive local okra varieties

Technology Assessed: Varietal evaluation of okra

KVK, Amreli in Gujarat conducted on-farm trial to find out varietal effect in okra productivity. The recommended practice of cultivation of Gujarat Junagadh Okra-3 was found to be better with 160.87 % increase in yield.

Table: Effect of variety on yield of okra

Technology Option	No.of trials	Yield (kg./ha)	Increase in Yield (%)	B:C Ratio
Local variety (Farmers Practice)	2	5874	--	1:2.00
Gujarat Junagadh Okra-3 (Recommended Practice)		9450	160.87	1:3.17
Private variety (Swati-10)		7550	128.53	1:2.54

INTEGRATED PEST MANAGEMENT

Problem definition: Injudicious use of Chemical pesticides due to lack of knowledge about the use of particular pesticides

Technology Assessed: Management of sucking pests in Cotton

KVK, Amreli in Gujarat conducted on-farm trial to find out effect of injudicious use of Chemical pesticides due to lack of knowledge about the use of particular pesticides in okra productivity. The recommended practice of Three spray of Thiamethoxam 25 WG @ 25 gai/ha (2 g / 10 litre of water) at 15 day interval starting from the pest infestation was found to be better with 125 % increase in yield.

Table: Effect of IPM practices on yield of cotton crop

Technology Option	No. of trials	Yield (kg/ha)	% Increase in yield over farmer's practice
High dose and Use of conventional Chemical pesticides (Farmers Practice)	2	2160	-
Three spray of Thiamethoxam 25 WG @ 25 gai/ha (2 g / 10 litre of water) at 15 day interval starting from the pest infestation. (Recommended Practice)		2700	125

INTEGRATED CROP MANAGEMENT

Problem definition: Farmers do not adopt closer planting, there for get low cotton yield due to less soil moisture and incidence of pest and disease.

Technology Assessed: High Density Planting in Cotton

KVK, Amreli in Gujarat conducted on-farm trial to find out effect of high density planting on cotton productivity. The recommended practice of sowing cotton at 90X 30 cm (37037 plants/ha) was found to be better with 113.55 % increase in yield.

Table: High Density Planting in Cotton

Technology Option	No. of trials	Yield (kg/ha)	% Increase in yield over farmer's practice
120 X 45-60 cm (18519-13888 plants/ha) (Farmers Practice)	2	2752	-
90 X 30 cm (37037 plants/ha) (Var. GTHH-49 (bt) (Recommended Practice)		3125	113.55

RESOURCE CONSERVATION TECHNOLOGY

Problem definition: Decreasing productivity of Cotton due to water logging, soil salinization in salt-affected lands. Heavy mortality, difficulties in intercultural operation due to lodging.

Technology Assessed: Effect of method of sowing on ridges on yield of Cotton

KVK, Amreli in Gujarat conducted on-farm trial to find out effect of sowing on ridges on yield of Cotton. The assessed practice of sow the crop on ridges was found better with 25.22 q/ha higher yield and 3.17 BC ratio.

Table: Effect of plastic mulch on yield of cotton

Technology Option	No. of trials	Yield (Q/ha)	Net Returns (Rs./ha)	BC Ratio
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Traditional Sowing of Cotton on Flat bed (Farmers Practice)	4	22.10	66050	2.85
To prepare the field by ploughing followed by blade harrowing & planking and sow the crop on ridges (Recommended Practice)		25.22	79387	3.17

PLANT PROTECTION

Problem definition: Low yield in chickpea

Technology Assessed: Management of Wilt in chickpea

KVK, Amreli in Gujarat conducted on-farm trial to manage wilt in chickpea. The assessed practice of Seed treatment of cow urine/Jivamrut and Soil application of Trichoderma @ 2.5 kg /ha with Castor cake 500kg was found better with highest chickpea yield i.e. 2130 kg/ha and 85775 Rs/ha net return.

Table: Effect of seed rate on yield of chickpea.

Technology Option	No. of trials	Yield (Kg/ha)	Net Returns (Rs./ha)	BC Ratio
No use of seed treatment and Trichoderma (Farmers Practice)	2	1452	42262	2.72
Seed treatment of Carbendazim @ 3g/kg seed (Recommended Practice)		1632	54844	3.11
Seed treatment of cow urine/Jivamrut and Soil application of Trichoderma @2.5 kg /ha with Castor cake 500kg.		2130	85775	4.29

NUTRITION MANAGEMENT

Problem definition: Inadequate nutrition is a major cause of low live-weight gains, infertility and low milk yields in milch animals. The aim of the OFT is about the awareness of dairy farmers to know the nutritional management of milch animals to increase milk yield.

Technology Assessed: Effect of supplementation of concentrate and mineral mixture on milk production of local buffalo breed.

KVK, Amreli in Gujarat conducted on-farm trial find effect of supplementation of concentrate and mineral mixture on milk production of local buffalo breed. The assessed practice of Feeding of concentrate mixture (5kg/animal/day) + Mineral mixture (50 gm/animal/day) was found better with increased milk production, improvement in health status of animal and animal came in heat after 90 to 120 days after parturition.

Table: Effect of supplementation of concentrate and mineral mixture on milk production of local buffalo breed.

Technology Option	No. of trials	Yield (lit./day)	Remarks
Roughage+ concentrate (Farmers Practice)	2	7.3	Increased milk production, improvement in health status of animal and animal came in heat after 90 to 120 days after parturition.
Feeding of concentrate mixture (5kg/animal/day) + Mineral mixture (50 gm/animal/day) (Recommended Practice)		8.2	

II. FRONTLINE DEMONSTRATION

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2015-16 and recommended for large scale adoption in the district

S. N.	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area (ha)
1	Groundnut	Varietal Evaluation	Variety	Training, demonstration, field days		5	2
2	Sesame	Varietal Evaluation	Variety	Training, demonstration, field days		20	8
3	Green Gram	Varietal Evaluation	Variety	Training, demonstration		5	2
4	Chilli (Mulching)	Resource conservation technology	Plastic Mulch	Training, demonstration		2	0.4
5	Lemon (Mulching)	Resource conservation technology	Plastic Mulch	Training, demonstration		1	0.4
6	Cotton	Varietal Evaluation	Variety	Training, demonstration		10	4
7	Pigeon pea	Varietal Evaluation	Variety	Training, demonstration, field days		10	4
8	Groundnut	Varietal Evaluation	Variety	Training, demonstration		10	4
9	Green Gram	Varietal Evaluation	Variety	Demonstration		13	8
10	Castor	Varietal Evaluation	Variety	Demonstration, field days		10	4
11	Onion	Varietal Evaluation	Variety	Training, demonstration		10	4
12	Coriander	INM	Nutrient	Training, demonstration		5	2
13	Cumin	Varietal Evaluation	Variety	Training, demonstration		10	2

b. Details of FLDs implemented during 2017-18 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

S. N.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Castor	Varietal Evaluation	Variety	Kharif-17	4	4			10	-
2	Cotton	Varietal Evaluation	Variety	Kharif-17	4	4			10	-
3	Vegetable crops	Varietal Evaluation	Variety	Kharif 17	-	-			50	-
4	Wheat	Integrated Nutrient Management	INM	Rabi 17-18	4	4			10	-
5	Cumin	Integrated Pest Management	IPM	Rabi 17-18	4	4			10	-
6	Onion	Varietal Evaluation	Variety	Rabi 17-18	2	2			5	-
7	Coriander	Varietal Evaluation	Variety	Rabi 17-18	4	4			10	-
8	Sesame	Varietal Evaluation	Variety	Summer-18	4	4			10	-
9	Black Gram	Varietal Evaluation	Variety	Summer-18	4	4			10	-
10	Green Gram	Varietal Evaluation	Variety	Summer-18	2	2			5	-
11	Okra	Varietal Evaluation	Variety	Summer-18	4	4			10	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Castor	Kharif-17	Rainfed	M.Black	L	M	H		4th week of July to 2nd week of August-2017			
Cotton	Kharif-17	Rainfed	M.Black	L	M	H		3rd week of June to 1st week of July-2017	4th week of January to 2nd week of February-2018		
Vegetable crops	Kharif 17	Rainfed	M.Black	L	M	H		2nd week of June to 3rd week of July-2017			
Wheat	Rabi 17-18	Irrigated	M Black	L	M	H		2nd week to 4th week of November-2017			
Cumin	Rabi 17-18	Irrigated	M.Black	L	M	H		1st week to 2nd week of November-2017			
Onion	Rabi 17-18	Irrigated	M.Black	L	M	H		3rd week of November to 2nd week of December-2017			
Coriander	Rabi 17-18	Irrigated	M.Black	L	M	H		1st week of November -2017			
Sesame	Summer-18	Irrigated	M.Black	L	M	H		2nd to 4th week of February-2018			
Black Gram	Summer-18	Irrigated	M.Black	L	M	H		2nd to 3rd week of February-2018			
Green Gram	Summer-18	Irrigated	M.Black	L	M	H		2nd to 3rd week of February-2018			
Okra	Summer-18	Irrigated	M.Black	L	M	H		2nd to 4th week of February-2018			

Farmers' reactions on specific technologies

Crop	Variety/Input	Farmers' Feedback
Gram	GJG-3	▶ High Yield Variety ▶ Bold seeded Variety ▶ Stunt virus resistant Variety
Cumin	GC-4	▶ Research needs on cumin wilt disease ▶ Less Wilt found as compare to other Variety
Wheat	GW-366	▶ Seed provided was healthy with good germination ▶ Grain quality is good for higher market price
Green Gram	GM-4	▶ Small size seed and uniform maturity
Groundnut	GJG-9	▶ Higher production ▶ Less stem rot problems ▶ Quality of seed is good
Sesame	GT-3	▶ Bold seeded, whiteness more and higher production then other varieties ▶ Better for Summer cultivation
Cotton	INM	▶ Less reddening of leaves ▶ Higher Yield
Cotton	G.Cot-6(bt)	▶ Greening up to last stage ▶ Less Infestation of sucking pest
Castor	GCH-7	▶ Resistance to wilt ▶ Higher Yield
Cotton	Beauveria bassiana	▶ Better control of pests ▶ Economic to other chemical pesticides
Cotton	Ridge and furrow	▶ Number of flowers increased ▶ Early maturity ▶ Plants don't bent during high wind ▶ No water logging after rainfall
Groundnut	GJG-22	▶ High yielding ▶ Tolerant to Collar rot
Sesame	GT-3	▶ Bold seeded, whiteness more and higher production than other varieties
Green gram	GAM-5	▶ Highly resistant to Yellow Mosaic Virus (YMV) ▶ Bold seed size with attractive shiny grain appearance.
Gram	GJG-5	▶ Moderately Resistant to wilt ▶ Resistant to stunt
Wheat	GW-173	▶ Require less water i.e. 300mm water as compared to local and late sown variety
Black gram	GU-1	▶ Latest High yielding variety.
Pigeon pea	Vaishali	▶ Medium late Variety use for Grain purpose ▶ Tolerant to wilt ▶ Sterility mosaic virus
Groundnut	GJG-31	▶ High Yielding Variety
Sesame	GT-4	▶ White seed and alternate White seed colour, ▶ Medium capsule in size ▶ Aalternate multi bearing capsule

Extension and Training activities under FLD:

Sl.No.	Activity	No. of activities organized	Number of participants
1	Field days	15	250
2	Farmers Training	7	179
3	Media coverage	3	-
4	Training for extension functionaries	2	40

Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops:

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	Varietal Evaluation	Variety	GJG-31	5	2	17	12	14.44	12.66	15.73	24500	79420	54920	3.24	25100	72006	33046	2.32
	Varietal Evaluation	Variety	GJG-9	5	2	27.6	21.3	25.68	19.7	30.2	26252	103490.4	77238.4	3.94	24932	70132	45200	2.81
	Varietal Evaluation	Variety	GJG-22	5	2	28	24.6	26.60	21.50	24.70	28650	107278.6	78628.6	3.74	26050	76397.6	50347.6	2.93
Sesamum	Varietal Evaluation	Variety	GT-3	20	8	11	5	8.22	6.97	16.59	13500	82240	68740	5.09	13500	75402	61902	4.59

Frontline demonstration on pulse crops:

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea	Varietal Evaluation	Variety	Vaishali	10	4	26.50	16.50	21.06	17.79	18.40	23138	105280	82142	4.55	22905	88925	66020	3.93
Greengram	Varietal Evaluation	Variety	GM-4	5	2	10	8.5	9.22	7.82	18.27	16400	64540	48140	2.94	16400	54740	38340	2.34
	Varietal Evaluation	Variety	GM-4	13	5.2	9.5	8	8.75	7.4	9.30	18500	37698	19098	2.03	16200	28649	12449	1.80

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Wheat Timely sown	Varietal Evaluation	Variety	10	4	53.6	39.55	45.05	37.92	18.8	-	-	24390	96858	72467.5	3.97	24968	81528	56560	3.28
Vegetables																			
Chilli	Recourse conservation	Plastic mulch	2	0.4	48.75	47.50	48.13	42.50	13.29	-	-	26250	60156	33906	2.29	24450	53125	28675	2.17
Onion	INM	Sulphur nutrient	5	2	420	400	410.4	379	8.32	-	-	115000	164160	49160	1.43	114500	151600	37100	1.32

Coriender	Varietal Evaluation	Variety	10	4	14.2	10.2	12.99	11.16	16.76	-	-	16250	68198	51947.5	4.20	15800	58032	42232	3.67
Spices & condiments																			
Cumin	Varietal Evaluation	Variety	10	4	6.5	3.8	5.8	4.28	18.81	-	-	15130	80168	65037.5	5.37	15630	67410	51780	4.36
Horticultural crop																			
Lemon	Recourse conservation	Plastic mulch	1	0.2	Result awaited														

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Major parameters	Filed observation (output/man hour)		% change in major parameter	Labor reduction (man days)				Cost reduction (Rs./ha or Rs./Unit etc.)						
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total			
Cotton Shredder	Cotton	Bio compost	10	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Demonstration details on crop hybrids (Details of Hybrid FLDs implemented during 2016-17)

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Oilseed crop													
Castor	Varietal Evaluation	GCH-7	10	11.5	41	35	38.01	34.27	11.03	38142	169145	131003	4.4346

III. Training Programme

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management				0			0	0	0	0
Resource Conservation Technologies				0			0	0	0	0
Cropping Systems				0			0	0	0	0
Crop Diversification				0			0	0	0	0
Integrated Farming				0			0	0	0	0
Micro Irrigation/irrigation				0			0	0	0	0
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservation										
Integrated nutrient management										
Production of organic inputs	1	24	00	24	00	00	00	24	00	24
Production technology	1	19	10	29	02	02	04	21	12	33
Registration process of organic farming	1	42	0	42	06	0	6	48	0	48
Total	3	85	10	95	8	2	10	93	12	105
II Horticulture										
a) Vegetable Crops										
Production of low value and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Value addition in fruit										
Total (a)										

b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Production technology of Lime and banana	1	75	00	75	07	00	07	82	00	82
Total (b)	1	75	00	75	07	00	07	82	00	82
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology	1	37	00	37	03	00	03	40	00	40
Processing and value addition										
Others (pl specify)										

Total (f)	1	37	00	37	03	00	03	40	00	40
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	2	112	00	112	10	00	10	122	00	122
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	1	70	0	70	0	0	0	70	0	70
Others (pl specify)										
Total	1	70	0	70	0	0	0	70	0	70
IV Livestock Production and Management										
Dairy Management	2	38	4	42	5	0	5	43	4	47
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	1	08	18	26	00	04	04	08	22	30
Feed & fodder technology										
Production of quality animal products										
Others (pl specify)										
Total	3	46	22	68	5	4	9	51	26	77
V Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	1	00	32	32	00	07	07	00	39	39
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	00	25	25	00	04	04	00	29	29
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	00	23	23	00	04	04	00	27	27
Use of Solar cooker										
Total	3	0	80	80	0	15	15	0	95	95
VI Agril. Engineering										
Farm Machinery and its maintenance										
Installation and maintenance of micro irrigation systems	1	39	00	39	07	00	07	46	00	46
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition	1	05	22	27	00	12	12	05	34	39
Post Harvest Technology										
Rain water harvesting										
Total	2	44	22	66	7	12	19	51	34	85
VII Plant Protection										
Integrated Pest Management	3	290	29	319	59	6	65	349	35	384
Integrated Disease Management										
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Awareness about control of Pink bollworm to Cotton Ginners										

Total	3	290	29	319	59	6	65	349	35	384
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										

X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	2	103	0	103	26	0	26	129	0	129
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	29	2	31	12	3	15	46	05	51
WTO and IPR issues										
Update the knowledge level about summer crops	1	27	07	34	04	02	06	31	09	40
Total	4	159	9	168	42	5	47	206	14	220
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	21	806	172	978	131	44	175	942	216	1158

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										

Integrated nutrient management										
Production of organic inputs										
Production technology of onion and garlic	1	50	25	75	5	0	5	55	25	80
To minimize cost of cultivation in Kharif crops	1	121	0	121	11	0	11	132	0	132
Total	2	171	25	196	16	0	16	187	25	212
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	32	00	32	06	00	06	38	00	38
Others (pl specify)										
Total (a)	1	32	00	32	06	00	06	38	00	38
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Value addition	2	1443	00	1443	497	00	497	1940	00	1940
Post harvest technology of mango, lime & banana	2	62	42	104	04	03	07	66	45	111
Total (b)	4	1505	42	1547	501	3	504	2006	45	2051
c) Ornamental Plants										
Nursery Management										
Management of potted plants										

Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)										
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										

Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	1	128	0	128	10	0	10	138	0	138
Others (pl specify)										
Total	1	128	0	128	10	0	10	138	0	138
IV Livestock Production and Management										
Dairy Management	3	79	25	104	15	04	19	94	29	123
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management										
Feed & fodder technology	1	44	00	44	08	00	08	52	00	52
Production of quality animal products										
Care and management of sheep and goat	1	37	00	37	10	00	10	47	00	47
Total	5	160	25	185	33	4	37	193	29	222
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	02	41	43	00	04	04	02	45	47
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	2	03	73	76	00	09	09	03	82	85
Women empowerment										
Location specific drudgery reduction technologies	2	00	79	79	00	06	06	00	85	85
Rural Crafts										
Women and child care										
Others (pl specify)										

Total	5	5	193	198	0	19	19	5	212	217
VI Agril. Engineering										
Farm Machinery and its maintenance	3	71	27	98	05	05	10	76	32	108
Installation and maintenance of micro irrigation systems	2	00	47	47	00	13	13	00	60	60
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	1	00	50	50	00	00	00	00	50	50
Rain Water Harvesting	4	66	66	132	09	14	23	75	80	155
Drudgery reduction technologies in agriculture										
Total	10	137	190	327	14	32	46	151	222	373
VII Plant Protection										
Integrated Pest Management	2	84	0	84	7	0	7	91	0	91
Integrated Disease Management										
Bio-control of pests and diseases	2	63	0	63	7	0	7	70	0	70
Production of bio control agents and bio pesticides										
Management of Stored Grain Pest	1	22	05	27	00	00	00	22	05	27
Total	5	169	5	174	14	0	14	183	5	188
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										

Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										
Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs	1	60	0	60	2	0	2	62	0	62
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Income Generation through secondary agriculture	1	0	30	30	0	6	6	0	36	36
Total	2	60	30	90	2	6	8	62	36	98
XI Agro-forestry										
Production technologies										
Nursery management										

Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	35	2367	510	2877	596	64	660	2963	574	3537

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management										
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs	1	24	0	24	0	0	0	24	0	24
Production technology of onion and garlic	2	69	35	104	7	2	9	76	37	113
To minimize cost of cultivation in Kharif crops	1	121	0	121	11	0	11	132	0	132
Registration process of organic farming	1	42	0	42	6	0	6	48	0	48
Total	5	256	35	291	24	2	26	280	37	317
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables										
Export potential vegetables										

Grading and standardization										
Protective cultivation	1	32	0	32	6	0	6	38	0	38
Others (pl specify)										
Total (a)	1	32	0	32	6	0	6	38	0	38
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Value addition	2	1443	0	1443	497	0	497	1940	0	1940
Post harvest technology of mango, lime & banana	2	62	42	104	4	3	7	66	45	111
Production technology of Lime and banana	1	75	0	75	7	0	7	82	0	82
Total (b)	5	1580	42	1622	508	3	511	2088	45	2133
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)										

f) Spices										
Production and Management technology	1	37	0	37	3	0	3	40	0	40
Processing and value addition										
Others (pl specify)										
Total (f)	1	37	0	37	3	0	3	40	0	40
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)										
GT (a-g)	7	1649	42	1691	517	3	520	2166	45	2211
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing	2	198	0	198	10	0	10	208	0	208
Others (pl specify)										
Total	2	198	0	198	10	0	10	208	0	208
IV Livestock Production and Management										
Dairy Management	5	117	29	146	20	4	24	137	33	170
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management										
Disease Management	1	8	18	26	0	4	4	8	22	30
Feed & fodder technology	1	44	0	44	8	0	8	52	0	52
Production of quality animal products										

Care and management of sheep and goat	1	37	0	37	10	0	10	47	0	47
Total	8	206	47	253	38	8	46	244	55	299
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	2	41	43	0	4	4	2	45	47
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking	1	0	32	32	0	7	7	0	39	39
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	3	3	98	101	0	13	13	3	111	114
Women empowerment										
Location specific drudgery reduction technologies	2	0	79	79	0	6	6	0	85	85
Rural Crafts										
Women and child care	1	0	23	23	0	4	4	0	27	27
Others (pl specify)										
Total	8	5	273	278	0	34	34	5	307	312
VI Agril. Engineering										
Farm Machinery and its maintenance	3	71	27	98	5	5	10	76	32	108
Installation and maintenance of micro irrigation systems	3	39	47	86	7	13	20	46	60	106
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements										
Small scale processing and value addition	1	5	22	27	0	12	12	5	34	39
Post Harvest Technology	1	0	50	50	0	0	0	0	50	50
Rain water harvesting	4	66	66	132	9	14	23	75	80	155
Total	12	181	212	393	21	44	65	202	256	458
VII Plant Protection										
Integrated Pest Management	5	374	29	403	66	6	72	440	35	475
Integrated Disease Management										
Bio-control of pests and diseases	2	63	0	63	7	0	7	70	0	70
Production of bio control agents and bio pesticides										

Management of Stored Grain Pest	1	22	5	27	0	0	0	22	5	27
Total	8	459	34	493	73	6	79	532	40	572
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
Others (pl specify)										
Total										
IX Production of Inputs at site										
Seed Production										
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
Mushroom Production										
Apiculture										
Others (pl specify)										

Total										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics	2	103	0	103	26	0	26	129	0	129
Formation and Management of SHGs	1	60	0	60	2	0	2	62	0	62
Mobilization of social capital										
Entrepreneurial development of farmers/youths	1	29	2	31	12	3	15	46	5	51
WTO and IPR issues										
Income Generation through secondary agriculture	1	0	30	30	0	6	6	0	36	36
Update the knowledge level about summer crops	1	27	7	34	4	2	6	31	9	40
Total	6	219	39	258	44	11	55	268	50	318
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Others (pl specify)										
Total										
GRAND TOTAL	56	3173	682	3855	727	108	835	3905	790	4695

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0			0			0			0
Training and pruning of orchards	0			0			0			0
Protected cultivation of vegetable crops	0			0			0			0
Commercial fruit production	0			0			0			0
Integrated farming	0			0			0			0
Seed production	0			0			0			0
Production of organic inputs	0			0			0			0
Planting material production	0			0			0			0
Vermi-culture	0			0			0			0
Mushroom Production	0			0			0			0

Bee-keeping	0			0			0			0
Sericulture	0			0			0			0
Repair and maintenance of farm machinery and implements	0			0			0			0
Value addition	1	41	0	41	09	00	09	50	00	50
Small scale processing	0			0			0			0
Post Harvest Technology	0			0			0			0
Tailoring and Stitching	0			0			0			0
Rural Crafts	0			0			0			0
Production of quality animal products	0			0			0			0
Dairying	0			0			0			0
Sheep and goat rearing	0			0			0			0
Quail farming	0			0			0			0
Piggery	0			0			0			0
Rabbit farming	0			0			0			0
Poultry production	0			0			0			0
Ornamental fisheries	0			0			0			0
Composite fish culture	0			0			0			0
Freshwater prawn culture	0			0			0			0
Shrimp farming	0			0			0			0
Pearl culture	0			0			0			0
Cold water fisheries	0			0			0			0
Fish harvest and processing technology	0			0			0			0
Fry and fingerling rearing	0			0			0			0
Bank loans for field crops, crop insurance	1	30	0	30	00	00	00	30	00	30
Crop production	2	29	05	34	04	02	06	33	07	40
TOTAL	1	0	14	14	0	66	66	0	80	80

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total

Nursery Management of Horticulture crops	0									
Training and pruning of orchards	0									
Protected cultivation of vegetable crops	0									
Commercial fruit production	0									
Integrated farming	0									
Seed production	0									
Production of organic inputs	0									
Planting material production	0									
Vermi-culture	0									
Mushroom Production	0									
Bee-keeping	0									
Sericulture	0									
Repair and maintenance of farm machinery and implements	0									
Value addition	0									
Small scale processing	0									
Post Harvest Technology	0									
Tailoring and Stitching	0									
Rural Crafts	0									
Production of quality animal products	0									
Dairying	0									
Sheep and goat rearing	0									
Quail farming	0									
Piggery	0									
Rabbit farming	0									
Poultry production	0									
Ornamental fisheries	0									
Composite fish culture	0									
Freshwater prawn culture	0									
Shrimp farming	0									
Pearl culture	0									
Cold water fisheries	0									
Fish harvest and processing technology	0									
Fry and fingerling rearing	0									

Youth Development through update knowledge on major Rabi crop	1	48	02	50	00	00	00	48	02	50
Income Generation through secondary agriculture	1	25	05	30	00	00	00	25	05	30
TOTAL	0									

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0									
Training and pruning of orchards	0									
Protected cultivation of vegetable crops	0									
Commercial fruit production	0									
Integrated farming	0									
Seed production	0									
Production of organic inputs	0									
Planting material production	0									
Vermi-culture	0									
Mushroom Production	0									
Bee-keeping	0									
Sericulture	0									
Repair and maintenance of farm machinery and implements	0									
Value addition	0									
Small scale processing	0									
Post Harvest Technology	0									
Tailoring and Stitching	0									
Rural Crafts	0									
Production of quality animal products	0									
Dairying	0									
Sheep and goat rearing	0									
Quail farming	0									
Piggery	0									
Rabbit farming	0									
Poultry production	0									

Ornamental fisheries	0									
Composite fish culture	0									
Freshwater prawn culture	0									
Shrimp farming	0									
Pearl culture	0									
Cold water fisheries	0									
Fish harvest and processing technology	0									
Fry and fingerling rearing	0									
Any other (pl.specify)	1	0	14	14	0	66	66	0	80	80
TOTAL	1	0	14	14	0	66	66	0	80	80

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	2	38	11	49	08	04	12	45	15	60
Integrated Pest Management	1	23	05	28	05	00	05	28	05	33
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Pre-seasonal training on Kharif crops	1	55	0	55	14	0	14	69	0	69

Organic farming	5	102	09	111	17	03	20	119	12	131
TOTAL										

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	0									
Integrated Pest Management	1	25	03	28	03	02	05	28	05	33
Integrated Nutrient management	0									
Rejuvenation of old orchards	0									
Protected cultivation technology	0									
Production and use of organic inputs	0									
Care and maintenance of farm machinery and implements	0									
Gender mainstreaming through SHGs	0									
Formation and Management of SHGs	0									
Women and Child care	0									
Low cost and nutrient efficient diet designing	0									
Group Dynamics and farmers organization	0									
Information networking among farmers	0									
Capacity building for ICT application	0									
Management in farm animals	0									
Livestock feed and fodder production	0									
Household food security	0									
Any other (pl.specify)	0									
TOTAL	0									

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	1	42	6	48	4	0	4	46	6	52
Integrated Pest Management	1	44	0	44	0	0	0	44	0	44
Integrated Nutrient management	0			0			0	0	0	0

Rejuvenation of old orchards	0			0			0	0	0	0
Protected cultivation technology	0			0			0	0	0	0
Production and use of organic inputs	0			0			0	0	0	0
Care and maintenance of farm machinery and implements	0			0			0	0	0	0
Gender mainstreaming through SHGs	0			0			0	0	0	0
Formation and Management of SHGs	0			0			0	0	0	0
Women and Child care	0			0			0	0	0	0
Low cost and nutrient efficient diet designing	0			0			0	0	0	0
Group Dynamics and farmers organization	0			0			0	0	0	0
Information networking among farmers	0			0			0	0	0	0
Capacity building for ICT application	0			0			0	0	0	0
Management in farm animals	0			0			0	0	0	0
Livestock feed and fodder production	0			0			0	0	0	0
Household food security	0			0			0	0	0	0
Any other (pl.specify)	1	35	2	37	8	2	10	43	4	47
TOTAL	3	121	8	129	12	2	14	133	10	143

Sponsored training programmes:

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	2	97	0	97	10	0	10	107	0	107
Commercial production of vegetables				0			0	0	0	0
Production and value addition										
Fruit Plants	1	74	0	74	8	0	8	82	0	82
Ornamental plants				0			0	0	0	0
Spices crops	1	59	30	89	6	5	11	65	35	100
Soil health and fertility management	1	60	0	60	9	0	9	69	0	69
Production of Inputs at site				0			0	0	0	0
Methods of protective cultivation				0			0	0	0	0
Others (pl. specify)	11	790	0	790	168	0	168	958	0	958
Total	16	1080	30	1110	201	5	206	1281	35	1316
Post harvest technology and value addition										

Processing and value addition				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Farm machinery										
Farm machinery, tools and implements				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Livestock and fisheries										
Livestock production and management				0			0	0	0	0
Animal Nutrition Management				0			0	0	0	0
Animal Disease Management				0			0	0	0	0
Fisheries Nutrition				0			0	0	0	0
Fisheries Management				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Home Science										
Household nutritional security				0			0	0	0	0
Economic empowerment of women				0			0	0	0	0
Drudgery reduction of women				0			0	0	0	0
Others (pl. specify)				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Agricultural Extension										
Capacity Building and Group Dynamics				0			0	0	0	0
Others (pl. specify)	1	41	6	47	5	0	5	46	6	52
Total	1	41	6	47	5	0	5	46	6	52
GRAND TOTAL	17	1121	36	1157	206	5	211	1327	41	1368

Name of sponsoring agencies involved: CSPC, NGO, DISTRICT EDU. DEPT., RELIANCE FOUNDATION, ATMA, ULTRA TECH CEMENT, DAO AMRELI, ISOPOM DAO, NCCSD, GSFC, VEG RES STATION JUNAGADH, DEE JAU JUNAGADH.

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management	0									
Commercial floriculture	0									
Commercial fruit production	0									
Commercial vegetable production	0									
Integrated crop management	0									
Organic farming	0									

Others (pl. specify)	0									
Total	0									
Post harvest technology and value addition	0									
Value addition	0									
Others (pl. specify)	0									
Total	0									
Livestock and fisheries	0									
Dairy farming	0									
Composite fish culture	0									
Sheep and goat rearing	0									
Piggery	0									
Poultry farming	0									
Others (pl. specify)	0									
Total	0									
Income generation activities	0									
Vermicomposting	0									
Production of bio-agents, bio-pesticides, bio-fertilizers etc.	0									
Repair and maintenance of farm machinery and implements	0									
Rural Crafts	0									
Seed production	0									
Sericulture	0									
Mushroom cultivation	0									
Nursery, grafting etc.	0									
Tailoring, stitching, embroidery, dying etc.	0									
Agril. para-workers, para-vet training	0									
Others (pl. specify)	0									
Total	0									
Agricultural Extension	0									
Capacity building and group dynamics	0									
Others (pl. specify)	0									
Total	0									
Grand Total	0									

IV. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	0	0	0	0
Diagnostic visits	16	115	0	115
Field Day	11	205	0	205
Group discussions	0	0	0	0
Kisan Ghosthi	3	226	0	226
Film Show	3	155	0	155
Self -help groups	0	0	0	0
Kisan Mela	1	500	0	500
Exhibition	3	558	0	558
Scientists' visit to farmers field	49	304	0	304
Plant/animal health camps	0	0	0	0
Farm Science Club	0	0	0	0
Ex-trainees Sammelan	0	0	0	0
Farmers' seminar/workshop	0	0	0	0
Method Demonstrations	7	237	0	237
Celebration of important days	0	0	0	0
Special day celebration	1	120	15	135
Exposure visits	5	189	0	189
Others (pl. specify)	82	9047	0	9047
Total	181	11656	15	11671

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	2128
News paper coverage	15
Popular articles	0
Radio Talks	0
TV Talks	0
Animal health amps (Number of animals treated)	0
Others (pl. specify)	0
Total	2143

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Aware-ness	Other enter-prise	
KVK, JAU, Amreli Gujarat	Text only	29	3	-	-	-	3	35
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	29	3	-	-	-	3	35
	Total farmers Benefitted	155451	15396	-	-	-	15504	186351

V. DETAILS OF TECHNOLOGY WEEK CELEBRATIONS

Name of KVK	Types of Activities	No. of Activities	Number of Participants	Related crop/livestock technology
KVK, Amreli, Gujarat	Gosthies	2	74	Groundnut, Sesamum, Cotton
	Lectures organised	20	554	Horticultural and agricultural crops
	Exhibition	5	554	-
	Film show	3	320	-
	Fair	1	554	-
	Farm Visit	5	480	Groundnut, Sesamum
	Diagnostic Practicals	0	0	-
	Distribution of Literature (No.)	1	554	All crops
	Distribution of Seed (q)	0	0	-
	Distribution of Planting materials (No.)	1	108	Brinjal, Tomato
	Bio Product distribution (Kg)	1	75	-
	Bio Fertilizers (q)	1	5 litre	-
	Distribution of fingerlings	0	0	-
	Distribution of Livestock specimen (No.)	0	0	-
	Total number of farmers visited the technology week			554

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals						
Truthful seed	Wheat	GW-366	-	52.0	-	-
Oilseeds						
Breeder seed	Sesame	GT-1	-	4.8	-	-
Breeder seed	Sesame	GT-5	-	2.3	-	-
Foundation seed	Groundnut	GJG-22	-	35.5	-	-
Truthful seed	Groundnut	GG-20	-	40.25	-	-
Breeder seed	Groundnut	GG-20	-	29.2	-	-
Breeder seed	Sesame(ShivYog)	GT-5	-	0.6	-	-
Pulses						
Truthful seed	Green Gram	GM-4	-	7.7	-	-
Commercial crops	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	-	-	-	-	-	-
Total				172.35		

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial	-	-	-	-	-	-
Vegetable seedlings	Brinjal	GJB- 2 & 3	-	15560	7780	1037
Fruits	Papaya	Madhu bindu	-	450	2250	90
Ornamental plants	-	-	-	-	-	-
Medicinal and Aromatic	-	-	-	-	-	-
Plantation	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	Vegetable Packet	-	-	760	7600	189
Total				16770	17630	1316

Selling of Seed/Component:

Bio Products	Name of the bio-product	Quantity (Kg)	Value (Rs.)	No. of Farmers
Beauveria bassiana	17000	1450	25,50,000	-
Trichoderma	1700	240	1,19,000	-
Pheromone trap	7050	540	1,41,000	-
Gossy Lure	8500	485	1,70,000	-
Rhizobium	60 lit	80	7,200	-
Azotobactor	60 lit	75	7,200	-
PSB	60 lit	70	7,200	-

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals	-			
Poultry	-			
Piggery	-			
Fisheries	-			
Total	-			

VII. DETAILS OF SOIL, WATER AND PLANT ANALYSIS

Samples	No. of Samples	No. of Farmers	No. of Villages	Amount realized (Rs.)	No. of soil health cards distributed
Soil	930	930	52	279000	502
Water	198	198	12	15840	
Plant	-	-	-	-	
Manure	-	-	-	-	
Others (pl.specify)	-	-	-	-	
Total	1128	1128	64	294840	

VIII. SCIENTIFIC ADVISORY COMMITTEE

Name of KVK	Date of SAC Meeting	Participants
KVK, Amreli	11/05/2016	16

IX. NEWSLETTER/MAGAZINE

Name of News letter/Magazine	No. of Copies printed for distribution
KVK Amreli Newsletter	e-newsletter (Two issues)

X. PUBLICATIONS

Category	Number
Research Paper	2
Technical bulletins	0
Technical reports	1
Others (pl. specify)	0
Leaflets/ folders	2

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

Activities conducted				
No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)
1	2	-	40	5

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

Introduction of alternate crops/varieties

Crops/cultivars	Area (ha)	Extent of damage	Recovery of damage through KVK initiatives if any
Cotton	-	15 to 18%	Awareness camp, trainings, FLDs, selling of bio-agents (B.B. powder), pheromone trap
Groundnut	-	20 to 25 %	Awareness camp, trainings, FLDs, selling of bio-agents (B.B. powder & Tricodarma powder)
Total			

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	16	40
Pulses	20	50
Cereals	-	-
Vegetable crops	-	-
Tuber crops	-	-
Total	36	90

Farmers-scientists interaction on livestock management

Livestock components	Number of interactions	No. of participants
Artificial insemination	1	17
Total	1	17

Animal health camps organised

Number of camps	No. of animals	No. of farmers
2	360	174

Seed distribution in drought hit states

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

Large scale adoption of resource conservation technologies

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

Awareness campaign

	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
PPV&FRA	1	132	2	18	1	21	1	132	1	132	1	132
Cleanliness	5	128	-	-	-	-	-	-	-	-	-	-
Total	6	260	2	18	1	21	1	132	1	132	1	132

XIII. DETAILS ON HRD ACTIVITIES



A. HRD activities organized in identified areas for KVK staff by the Directorate of Extension

Name of the SAU	Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
AAU, Anand	Annual zonal workshop of KVK	1	1	-
JAU, Junagadh	Training for Trainers of Extension Institute	1	1	-
JAU, Junagadh	Maintenance of Drip Irrigation	1	1	-
Total		3	3	-

B. HRD activities organized in identified areas for KVK staff by ATARI

Title of the training programmes	No of programmes	No. of Participants	No. of KVKs involved
Sensitization workshop cum training on Pulses production	1	1	-
Skill development training	1	3	-
Mid Review Meeting-NICRA	1	1	-
Short Course	1	1	-
Total	4	6	-



XIV. CASE STUDIES

1	Name of KVK	:	Krishi Vigyan Kendra, JAU, Amreli (GUJARAT)																																				
	TITLE	:	Case Study of Control of pink bollworm in Amreli District																																				
	Introduction	:	Cotton crop is major crop in Amreli district. But the cotton crops are suffering from various insect, pest, disease, weed and Nutrient deficiency among them the pest attack create more losses throughout their production and farmers uses various pesticide for production of cotton. Last two year Pink Bollworm is became headache for farmers of Amreli district of Gujarat state.																																				
	KVK intervention	:	KVK Amreli started campaign for the control of pink bollworm in 2016-17 for the effective control of pink bollworm by various extension activities like trainings, diagnostic services, lectures pamphlets etc. Also provide bio control product to farmers such as Beauveria bassiana, pheromane trap on the basis of no profit no loss.																																				
	Output	:	<p>Scientists of KVK Amreli advised farmers for the control of pink bollworm through various extension activities such as on & off campus trainings, diagnostic services, lectures, telephonic guidance, WhatsApp messages, distribution of pamphlets etc. More than 62 villages of Amreli districts were covered.</p> <p>Table 1: Various Extension activities carried out by KVK Amreli (2016-17)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Extension Activities</th> <th style="text-align: center;">Activities (Nos.)</th> <th style="text-align: center;">Beneficiary farmers (Nos.)</th> </tr> </thead> <tbody> <tr> <td>On campus trainings</td> <td style="text-align: center;">3</td> <td style="text-align: center;">87</td> </tr> <tr> <td>Off campus trainings</td> <td style="text-align: center;">3</td> <td style="text-align: center;">164</td> </tr> <tr> <td>Sponsor training programme</td> <td style="text-align: center;">15</td> <td style="text-align: center;">1261</td> </tr> <tr> <td>Lecture delivered</td> <td style="text-align: center;">14</td> <td style="text-align: center;">1442</td> </tr> <tr> <td>distribution of pamphlets</td> <td style="text-align: center;">3950</td> <td style="text-align: center;">3950</td> </tr> <tr> <td>Telephonic guidance</td> <td style="text-align: center;">152</td> <td style="text-align: center;">152</td> </tr> <tr> <td>WhatsApp message</td> <td style="text-align: center;">138</td> <td style="text-align: center;">138</td> </tr> <tr> <td style="text-align: center;">TOTAL</td> <td style="text-align: center;">4275</td> <td style="text-align: center;">7194</td> </tr> </tbody> </table> <p>Table 2: Various bioagent made available to farmers by KVK Amreli (2016-17)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Bio agent</th> <th style="text-align: center;">quantity</th> <th style="text-align: center;">Price</th> </tr> </thead> <tbody> <tr> <td>Beauveria bassiana</td> <td style="text-align: center;">15000 kg</td> <td style="text-align: center;">150/kg</td> </tr> <tr> <td>Pheromone trap</td> <td style="text-align: center;">7050 unit</td> <td style="text-align: center;">40 /unit</td> </tr> </tbody> </table>	Extension Activities	Activities (Nos.)	Beneficiary farmers (Nos.)	On campus trainings	3	87	Off campus trainings	3	164	Sponsor training programme	15	1261	Lecture delivered	14	1442	distribution of pamphlets	3950	3950	Telephonic guidance	152	152	WhatsApp message	138	138	TOTAL	4275	7194	Bio agent	quantity	Price	Beauveria bassiana	15000 kg	150/kg	Pheromone trap	7050 unit	40 /unit
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	Out come	:	<ul style="list-style-type: none"> • Farmers were able to identify larvae and adult of pink bollworm. • Farmers are getting aware about low cost control of pink bollworm i.e. bio-control. • Farmers were starting integrated pest management (IPM) in cotton instead of using highly toxic and costly pesticides. 																																				
	Impact	:	<ul style="list-style-type: none"> • Farmers were able to identify pink bollworm and its damage. • Cost of cultivation in cotton reduced. • Usage of highly toxic pesticides reduced. • Farmers view change towards integrated pest management (IPM) 																																				
																																							
KVK visit of farmers		Diagnostic service																																					

2.	Name of the KVK	:	Krishi Vigyan Kendra, JAU, Amreli (GUJARAT)																
	TITLE	:	Case Study of Best use of cotton stalks in Amreli District																
	Introduction	:	The cotton stalks after harvest is either largely wasted (burnt) or inefficiently used (firewood). Cotton stalk remaining in the field after the harvest are removed by burning the stubble.																
	KVK intervention	:	KVK advised farmers, the stalks to be mixed with soil either directly or by mechanized chopping. KVK demonstrated the cotton shredder developed by Junagadh Agricultural University in many villages of Amreli district and advised famers; to collect the cotton stalks after harvest and mechanically chopped by cotton shredder. Farmers get organic manure after composting of shredded material. It adds organic matter to the soil and reduces the risk of soil erosion.																
	Output	:	<p>KVK demonstrated this technology in more than 100 villages of Amreli and also covered 474 hectare. More and more numbers of farmer are asking for demonstration of cotton shredder, as this helps them to improve nutrient quality of their soil.</p> <p>Table 3: Year wise use of cotton shredder by farmers and area covered.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Crop</th> <th>No. of farmers</th> <th>Area (ha)</th> </tr> </thead> <tbody> <tr> <td>2016-17</td> <td>Cotton</td> <td>10</td> <td>120</td> </tr> <tr> <td>2015-16</td> <td>Cotton</td> <td>10</td> <td>150</td> </tr> <tr> <td>2014-15</td> <td>Cotton</td> <td>10</td> <td>150</td> </tr> </tbody> </table>	Year	Crop	No. of farmers	Area (ha)	2016-17	Cotton	10	120	2015-16	Cotton	10	150	2014-15	Cotton	10	150
Year	Crop	No. of farmers	Area (ha)																
2016-17	Cotton	10	120																
2015-16	Cotton	10	150																
2014-15	Cotton	10	150																
	Out come	:	<ul style="list-style-type: none"> • Farmers have started taking care of their soil. • Burning of cotton stalk as waste removal of farm is reduced. • Farmers are getting aware about the machinery. • Farmers has started understand importance of compost. 																
	Impact	:	<ul style="list-style-type: none"> • Soil fertility improvement. • Nutrient composition improvement. • Farmers view change towards cotton stalk, waste to organic matter. 																



Demonstration on farmers' fields.

3.	Name of the KVK	: Krishi Vigyan Kendra, JAU, Amreli (GUJARAT)																																	
	TITLE	: Case Study of increasing in area and production of Groundnut in Amreli District																																	
	Introduction	: Groundnut crop is second major crop in Amreli district. But last few years area production of groundnut crop decreases due to crop is suffering from various insect, pest, disease, weed and Nutrient deficiency among them the stem rot create more losses throughout their production.																																	
	KVK intervention	: KVK Amreli started campaign for increasing production by organising 35 FLDs on new variety GJG-22. Also provide bio control product <i>Trichochooderma</i> to farmers on the basis of no profit no loss. Besides this various extension activities like trainings, diagnostic services, lectures pamphlets etc. Also provide to farmers for the increase their production.																																	
	Output	: Scientists of KVK Amreli advised farmers for the scientific cultivation of groundnut through various extension activities such as FLDs, on & off campus trainings, Kisan gosthi, diagnostic services, lectures, telephonic guidance, WhatsApp messages, distribution of pamphlets etc. More than 26 villages of Amreli districts were covered. Table 1: Various Extension activities carried out by KVK Amreli (2016-17) <table border="1" data-bbox="592 920 1485 1263"> <thead> <tr> <th>Extension Activities</th> <th>Activities(Nos.)</th> <th>Beneficiary farmers (Nos.)</th> </tr> </thead> <tbody> <tr> <td>On campus trainings</td> <td>2</td> <td>148</td> </tr> <tr> <td>Off campus trainings</td> <td>2</td> <td>125</td> </tr> <tr> <td>Sponsor training</td> <td>8</td> <td>750</td> </tr> <tr> <td>Lecture delivered</td> <td>7</td> <td>620</td> </tr> <tr> <td>Distribution of pamphlets</td> <td>3500</td> <td>3500</td> </tr> <tr> <td>Telephonic guidance</td> <td>124</td> <td>124</td> </tr> <tr> <td>WhatsApp message</td> <td>15</td> <td>385</td> </tr> <tr> <td>TOTAL</td> <td>3658</td> <td>5652</td> </tr> </tbody> </table> Table 2: Various bio agent made available to farmers by KVK Amreli (2016-17) <table border="1" data-bbox="724 1339 1417 1413"> <thead> <tr> <th>Bio agent</th> <th>Quantity</th> <th>Price (Rs./Kg)</th> </tr> </thead> <tbody> <tr> <td>Trichoderma</td> <td>2100 kg</td> <td>70/kg</td> </tr> </tbody> </table>	Extension Activities	Activities(Nos.)	Beneficiary farmers (Nos.)	On campus trainings	2	148	Off campus trainings	2	125	Sponsor training	8	750	Lecture delivered	7	620	Distribution of pamphlets	3500	3500	Telephonic guidance	124	124	WhatsApp message	15	385	TOTAL	3658	5652	Bio agent	Quantity	Price (Rs./Kg)	Trichoderma	2100 kg	70/kg
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Bio agent	Quantity	Price (Rs./Kg)																																	
Trichoderma	2100 kg	70/kg																																	
	Out come	: <ul style="list-style-type: none"> Increased groundnut production 17.99 % Farmers are getting aware about low cost control of stem rot in groundnut i.e. bio-control. 																																	
	Impact	: <ul style="list-style-type: none"> Farmers adopted new variety i.e. GAG-22 Farmers were able to identify stem rot and its damage. Cost of cultivation in groundnut reduced. Usage of highly toxic pesticides reduced. 																																	
																																			
Off campus training		Selling of bio products at Krushi Mela																																	

XIII. STATUS of REVOLVING FUNDS

Utilization of KVK funds during the year 2016-17

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	6200000	5298809	5703728
2	Traveling allowance	100000	100000	71516
3	Contingencies	2150000	1799000	1333722
Total (A)		84,50,000	71,47,809	71,08,966
B. Non-Recurring Contingencies				
1	Equipments including SWTL & Furniture/Vehicle/Library	460000	378000	371081
Total (B)		460000	378000	371081
C.	Revolving fund	0	0	0
GRAND TOTAL (A+B+C)		89,10,000	75,25,809	74,80,047

Status of revolving fund (Rs.) for the last three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2014 to March 2015	17,89,711	8,95,790	5,00,100	21,85,401
April 2015 to March 2016	21,85,401	10,42,027	4,23,335	28,04,093
April 2016 to March 2017	28,04,093	40,97,467	32,63,244	36,38,316

Other Schemes Activities

1 Agriculture Technology Information Centre Activities (ATIC):

I. Trainings

Sr. No.	Types of training	No. of Training	No. of participants
1	On Campus	06	206
2	Off Campus	12	545
Total		18	751

II. Front Line Demonstration: (ATIC)

Sr. No.	Crop	Season	Component /Variety	No of FLD	Area (ha.)	Average yield (q/ha)		% increase in productivity over local check
						Demo.	Local check	
1	Cotton	Kharif 16	G.Cot.8 Bt	40	16	18.66	16.47	15.41
2	Groundnut	Kharif 16	GJG-9	30	7.5	26.01	23.54	10.79
3	Sesame	Kharif 16	GT-4	30	7.5	9.83	8.25	20.90
4	Castor	Kharif 16	GCH-7	40	10	38.01	34.27	11.03
5	Cotton	Kharif 16	IPM	40	10	18.66	16.47	15.41
6	Wheat	Rabi 16-17	GW-366	20	5	43.93	37.51	18.48
7	Cumin	Rabi 16-17	GC-4	10	2.5	6.38	5.51	19.52
8	Gram	Rabi 16-17	GJG-3	20	5	20.90	17.45	20.99
Total				230	63.5			

2 I. Activities under National Innovations on Climate Resilient Agriculture (NICRA)

Trainings:

Sr. No	Title of training	No. of Courses	No. of beneficiaries		
			Male	Female	Total
1	Natural resource management	1	34	0	34
2	Nutrient management	1	29	0	29
3	Farm implements and machineries	1	45	0	45
4	Value addition in Lemon	1	0	106	106
5	Kitchen Garden and Organic Farming	1	0	63	63
6	Live stock management	1	0	36	36
7	Pest and diseases management	1	109	0	109
Total		7	217	205	422

II. Front line demonstrations:

Interventions	Crop	Critical input (Variety, Fertilizer / Chemicals doses)	No. of farmers	Area (ha)	Average Yield (q /ha)		
					Demo	Local chek	% increase over local cheek
Crop diversification	Green Gram	GM-4	5	2	8.96	7.64	17.12
Mulching	Cotton	Plastic Mulch	3	1.2	25.17	18.47	38.30
New latest varieties	Cotton	GCH- 12 (Bt)	10	4	20.53	17.44	17.94
New latest varieties	Groundnut	GJG-22	5	2	30.56	26.26	16.65
Intercropping systems	Cotton	Intercrop of Sesame	5	2	18.40	17.44	15.15
Lodging resistance varieties	Wheat	GW-173	5	2	52.20	47.80	9.70
High Yield Variety	Wheat	GW-366	5	2	55.60	48.40	15.65
Crop diversification	Onion	GWO-1	5	2	427.4	379.0	12.82
Moderately resistant to wilt and tolerant to pod borer	Gram	GJG-3	5	2	22.40	18.86	19.13
Total			48	19.2			

III. Work under Natural Resource Management:

Name of intervention undertaken	No of units	Area (ha)	No of farmers benefitted	Remarks
Water harvesting Structure	1	2	65	Water harvesting Structure Length width Depth (Pond) 376 m 98 m 1.45 m
In-situ moisture conservation practices	1	10	10	Summer deep ploughing
Total	2	12	75	

IV. Livestock:

Intervention undertaken	Critical input	No. of Animals	No of farmers covered
Mineral Mixture Supplementation	Mineral Mixture	20	20
Nutritional Supplement(Fat plus)	Fat plus	5	5
Animal treatment camp (Buffalo, Cows, Goat, Sheep, Bullock, Horse)	General Treatment	150	95
Preventive vaccination for FMD & HS	Vaccines	350	95

V. Extension Activities

Thematic area	No. of activities	No. of beneficiaries		
		Male	Female	Total
Method demonstration	11	168	70	193
Agro advisory services	12	410	183	593
Awareness	7	130	115	245
Exposure visit	1	40	0	40
Field Day	4	56	0	56
Group discussion	15	65	167	232
Diagnostic visit	16	135	262	397
Total	66	1004	797	1756

VI. Equipment procurement of farm machinery/implements for custom hiring center (CHC)

S.No.	Item	No. of units	Remarks
1	Battery operated sprayer	5	Purchased
2	Rotavator	2	
3	Mobile Shredder	1	
4	Tractor operated reaper	1	
5	Motor operated Chaff cutter	2	
6	Drip lateral line collector	5	
7	Small Weather station	1	
8	Seacutter	10	
9	Dibbler	3	
10	Seed dressing drum	5	
11	Multi crop thresher	1	
12	Tractor operated ridge former	1	
13	Automatic seed-cum-fertilizer drill	1	
Total		38	

VII. Institutional interventions revenue generated through custom hiring center:

Name of the implement	No. of units	Area covered (ha)	No. of beneficiaries	Revenue generated (Rs.)	Implement used for which crop
Battery operated sprayer	5	78	90	3950	Cotton, groundnut, sesame, and Wheat
Rotavator	2	74	98	10600	Cotton, Wheat and Groundnut
Mobile Shredder	1	70	89	10600	Cotton
Motor operated Chaff cutter	2	40	71	6000	Sorghum, Maize, Hy. Napier, Bajra
Multipurpose thresher	1	15	22	2000	Green Gram, Sesame, Gram
Drip Line Collector	5	20	12	900	Cotton
Automatic seed-cum-fertilizer drill	1	5	6	800	Sorghum, Onion
Total	17	302	388	34850	

3 I. Activities-Cluster base Front Line Demonstrations of Kharif Pulses under NFSM:

Sr. No.	Types of training	No. of Training	No. of participants
1	On campus	1	43
2	Off campus	2	117

II. Cluster Front Line Demonstrations of Kharif Pulses under NFSM:

Sr. No.	Crop	Season	Component /Variety	No of FLD	Area (ha.)	Average yield (q/ha)		% increase in productivity over local check
						Demo.	Local check	
1	Green gram	Kharif 16	GM-4	40	16	8.55	7.36	17.26
2	Green gram	Kharif 16	Azadirechtin & Beaveriya bassiana	10	04	9.14	8.16	12.24
3	Pigeon pea	Kharif 16	Vaishali	10	04	20.86	17.79	17.31
4	Pigeon pea	Kharif 16	Azadirechtin & Beaveriya bassiana	15	06	22.12	19.68	16.70
5	Gram	Rabi 2016-17	GJG-3	10	4	18.80	15.88	20.74
6	Gram	Rabi 2016-17	GJG-5	10	4	21.84	18.66	18.66
7	Gram	Rabi 2016-17	t. harzenium, HaNPV, Azadirechtin, Pheromone trap	30	12	18.66	15.69	17.54
Total				125	50			

4 Activities-Cluster base Front Line Demonstrations of Kharif Oilseeds under NMOOP:

I. Cluster Front Line Demonstrations of Kharif Pulses under NMOOP:

Sr. No.	Crop	Season	Component /Variety	No of FLD	Area (ha.)	Average yield (q/ha)		% increase in productivity over local check
						Demo.	Local check	
1	Groundnut	Kharif -2016	GJG-9	30	12	27.83	23.68	17.99
2	Sesame	Kharif -2016	GT-4	40	16	9.73	8.16	20.78
Total				70	28			

5 Seed Production under SEED HUB:

Crop	Variety	No. of Farmers	Area(Acre)	Production (quintal)
Pigeon Pea	Vaishali	10	20	200

6. Mera Gaon Mera Gaurav (MGMG)

Table 1: Details of MGMG Team

Team	Name of scientists with discipline	Name of village	Name of block
1	2	3	4
Team 31	Dr. N.S.Joshi (Horticulture) Shri P.J.Prajapati (Agronomy) Dr. M.L.Patel (Pl.Prot.)	1.Nava Khijadiya 2.Khari khijadiya 3.Toda 4. Amba 5.Champathal	1.Amreli 2.Bagasara 3.Lathi 4. Liliya 5. Amreli
Team 32	Dr. H. C. Chhodvadia (Extension) Dr. M.S.Dulawat (Agril.Engg.) Shree G. C. Parsana (Agri Officer)	1.Mota Ankadiya 2.Malvan 3.Akala 4.Monpur 5. Dhareshwar	1.Amreli 2.Amreli 3.Lathi 4.Amreli 5. Rajula

Table 2: Activities carried out in the selected villages

Visit to village		Goshthis/ Interface meetings conducted		Demonstrations conducted		
No. of visits	No. of farmers	No. of goshthis/ interface meetings	No. of farmers	Title of demonstration	No. of demons	No. of farmers
1	2	3	4	5	6	7
8	45	4	170	Crop cultivation	45	45

Table 2 continue.....

Mobile-based advisory		Literature support provided	
No. of farmers	No. of advisories	No. of literature	No. of farmers
8	9	10	11
856	07	9	583

7 Activities for management of Pink Bollworm

A. On campus Training Courses:

Title of Training	Duration (Days)	No. of Participants
Importance of Pheromone for monitoring infestation of pink bollworm in cotton	2 days 1 st to 2 nd June 2016	23

B. Off campus Training Courses:

Title of Training	Duration (Days)	Village	No. of Participants
Management of pink bollworm in cotton through integrated approach	1 day 04/05/2016	Amba (Liliya)	62
Integrated pest and diseases management in field crops	1 day 05/08/2016	Venivadar	56

C. Sponsored Training Courses:

Date of Training	Title of Training	Duration (Days)	No. of Participants	Sponsored Agency	Village
18/06/2016	Detail information on Various practices for management of pink bollworm in Cotton	1	45	ATMA	Ingorala (Lathi)
21/06/2016		1	30	State Department	Nesdi (Savarkundla)
13/07/2016		1	30	State Department	Amreli-Keria Road
16/07/2016		1	30	State Department	Khijadiya-Radadiya
25/07/2016		1	90	ATMA	Khakhariya (Babra)
29/07/2016		1	135	ATMA	Bantwa Devali (Kukavav)
9/08/2016		1	75	Reliance Foundation	Sukhpur (Babra)
23/08/2016		1	200	ATMA	Balel Pipariya (90) and Babra (110)
30/08/2016		1	40	State Department	Chakkargadh (Amreli)

D. Lecture on Awareness among the farmers to control pink bollworm in cotton

Date of Training	Duration (days)	No. of participants	Village
05/04/2016	1	597	PFBYs -Programme
09/04/2016	1	50	Juni Haliyad
11/05/2016	1	125	Shilana, Juni Haliyad
13/05/2016	1	48	Karjala
7/06/2016	1	52	Ditla
14/06/2016	1	65	Mota Bhandariya
10/08/2016	1	56	Bambhaniya
12/08/2016	1	20	Ditla and Lakhpadar
30/08/2016	1	15	Sukhpur (Dhari)

E. Lecture on Awareness among the farmers to control pink bollworm in cotton at Farmer Training centre-Amreli

Date of Training	Duration (days)	No. of participants	Village
25/07/2016	1	80	
03/08/2016	1	68 (Female)	Dahida and Shekh Pipariya
08/08/2016	1	130	Mota Liliya and Pipalia
19/08/2016	1	71	Thordi and Mota Bhamodra
29/08/2016	1	65	Rugnathpur and Lunghiya

8. Training-cum-Awareness Program on “Protection of Plant Varieties & Farmers' Right Act, 2001:

Krishi Vigyan Kendra, JAU, Amreli organized **Training-cum-Awareness Program on “Protection of Plant Varieties & Farmers' Right Act, 2001” on 20th March 2017 at KVK Campus** under the sponsorship of PPV & FR Authority, Ministry of Agriculture, Govt. of India, New Delhi. More than 132 participants including farmers of 28 villages of Amreli district, scientists & faculty from KVK and ARS, JAU, Amreli, and State Govt. official participated in the training programme.

9. Skill development programme:

There were two 200 hrs skill development training programmes were organized in KVK, JAU, Amreli during 20/02/2017 to 20/03/2017 under the Agriculture Skill Council of India, Govt. of India. After completion of trainings, on 25/03/2017 exam was conducted by ASCI officer of all participants.

S.N.	Title of training programme	Officer incharge	No. of participants	Content of training
1.	Vermi compost producer	Dr. H.C.Chhodavadiya	20	<ul style="list-style-type: none"> • Introduction of vermicompost, • Vermicompost and its utilization, • Materials for preparation of Vermicompost, • Phases of composting, • Vermicompost Production Methodology, • Common Bedding Materials, • Common Worm Feed Stocks, • Nutritive value of vermicompost, • Pests and diseases of vermicompost, • Advantages of vermicompost by theory, practical and field visits
2.	Quality seed grower	Shri. P.J.Prajapati	20	<ul style="list-style-type: none"> • Selection of site, • Land preparation, • Isolation distance, • Sowing time for high seed production, • Use and dose of fertilizers (chemical, organic and bio-fertilizers) as per crops, • Irrigation management, • pest and diseases managements, • harvesting and threshing methods, • Seed storage and seed standards for certified seed in different crops.

ACTION PLAN

(April- 2017 to March-2018)

K.V.K., JAU, AMRELI

A. Details of On Farm Trial

OFT – 1: Agronomy (Ongoing)

Title: Effect of liquid bio fertilizer on growth and yield of wheat.

Problem Diagnosed / Defined: Farmers do not use bio fertilizer.

Details of technologies selected for assessment/refinement:

- (1) Crop : Wheat
- (2) Season/ Year : Rabi 2016-17 to Rabi 2018-19
- (3) Spacing : 22.5 cm (row to row) by automatic seed drill.

T ₁	Farmer practices	Use only DAP and Urea in various dose
T ₂	Recommended Practices	120-60-60 NPK kg/ha
T ₃	Assesment	Soil application of Azotobacter & PSB @ 1 lit./ha with 100 kg FYM +75% RDF

- (4) Number of replication : 02
- (5) Source of technology : Department of Agronomy, JAU, Junagadh
- (6) Production system thematic area : Rainfed Farming
- (7) Thematic area : INM
- (8) Cost : Rs 120

OFT -2: Agronomy (New)

1) Title of technology: High Density Planting in Cotton

2) Problem Diagnosed/Defined: Farmers do not adopt closer planting, there for get low cotton yield due to less soil moisture and incidence of pest and disease.

Detail of technologies selected for assessment/refinement

- (1) Crop : Cotton
- (2) Season/Year : Kharif 2017-18 to Kharif 2019-20

T1: (Farmers' practices)	120 X 45-60 cm (18519-13888 plants/ha)
T2 : (Recommended Practice)	90 X 30 cm (37037 plants/ha) (Var. G. cot-8 (bt)

- (3) Number of replication : 02
- (5) Source of technology : Cotton Research Station, JAU, Junagadh
- (6) Production system thematic area : Rainfed Farming
- (7) Thematic area : Closure Planting method
- (9) Cost : Rs 3200

OFT – 3: Plant Protection (Ongoing)

Title: Management of sucking pests in Cotton

Problem Diagnosed / Defined: Injudicious use of Chemical pesticides due to lack of knowledge about the use of particular pesticides

Details of technologies selected for assessment/refinement:

- (1) Crop : Cotton
- (2) Season/ Year : Kharif -2016 to Kharif – 2018
- (3) Spacing : 120 x 45 cm

T ₁	Farmer practices	High dose and Use of conventional Chemical pesticides
T ₂	Assessment/ refined Practices	Three spray of imidacloprid 200 SL @ gai /ha (40 ml/10 lit. water) or thiamethoxam 25 WG @ 25 gai /ha (2 g / 10 lit. water) at 15 day interval starting from the pest infestation.

- (4) Number of replication : 02
- (5) Source of technology : JAU, Junagadh
- (6) Production system thematic area : Rainfed Farming
- (7) Thematic area : IPM
- (8) Total Cost : Rs 2000

OFT –4: Plant Protection (Ongoing)

Title: Management of Wilt in chickpea

Problem Diagnosed / Defined: Low yield in chickpea

Details of technologies selected for assessment/refinement:

- (1) Crop : Chickpea
- (2) Season/ Year : Rabi -2016 to Rabi – 2019
- (3) Spacing : 45 x 10

T ₁	Farmer practices	No use of seed treatment and Trichoderma
T ₂	Assessment/refined Practices	Seed treatment of Carbendazim @ 3g/kg seed, Soil application of Trichoderma @2.5 kg /ha with Castor cake 500kg

- (4) Number of replication : 02
- (5) Source of technology : JAU, Junagadh
- (6) Production system thematic area : Rainfed Farming
- (7) Thematic area : IDM
- (8) Total Cost :Rs 2500

OFT -5: Agriculture Engineering (New)

a	Title	:	Effect of method of sowing on ridges on yield of Cotton
b	Problem Diagnose	:	Decreasing productivity of Cotton due to water logging, soil salinization in salt-affected lands. Heavy mortality, difficulties in intercultural operation due to lodging.
c	Treatments		
	T1- Farmers' practice	:	Traditional Sowing of Cotton on Flat bed(152 cm apart)
	T2-Recommended Technology	:	To prepare the field by ploughing followed by blade harrowing & planking and sow the crop on ridges (120 cm apart). (Year 2013-14, Department of Agronomy, JAU, Junagadh)
d	Number of replication	:	04
e	Source of Technology	:	JAU Recommendation and interaction with scientists
g	Thematic area	:	Soil conservation and improvement
h	Plot size(ha)	:	0.6 ha/farmer
i	Critical Input	:	Cotton Seed, Dibbler and Shredder(rent)
j	Unit Cost	:	Rs. 1000
k	Total Cost	:	Rs. 4000
	Duration of project	:	3 year
	Indicator/Parameter	:	Yield, CB ratio, Balls per plant, Soil analysis

OFT -6: Horticulture (Ongoing)

1) **Title of technology: Varietal Evaluation of Okra**

2) **Problem Diagnosed/Defined:** Low productivity of non- descriptive local okra varieties

Details of technologies selected for assessment/ refinement: Varietal evaluation of okra varieties

Treatments	Technology option	No. of Trials
T ₁	Farmer practices-Private Variety	Two
T ₂	Gujarat Junagadh Okra-3	
T ₃	Gujarat Junagadh Okra Hybrid- 3	

3) Source of technology : JAU, Junagadh

4) Production system thematic area : Rainfed Farming

5) Thematic area : Integrated varieties management

6) Performance of the Technology with performance indicator: Results showed that production per hectare is higher in **T1** and **T2** as compare to **T3**.

7) Final recommendation for micro level situation : GJO-3 give higher production and BC ratio

8) Constraints identified and feedback for research : Need to be more trials

9) Process of farmers participation and their reaction: Field days at farmers field, evaluation of the trial and their reaction towards the performance

OFT -7: Horticulture (Ongoing)

1) **Title of technology: Effect of Sulphur in Onion production**

2) **Problem Diagnosed/Defined:** Low productivity in onion

Technology Assessed: Use of Sulphur in onion Production

Treatments	Technology option	No of trial
T ₁	Farmer practice- 100 kg N/ha, 50 kg P ₂ O ₅ /ha	Two
T ₂	Recommended Practices NPK :- 75 kg N/ha, 50 P ₂ O ₅ /ha, 50 K ₂ O kg/ha and 20 kg S/ha)	

3) Source of technology : JAU, Junagadh

4) Production system thematic area : Irrigated Farming

5) Thematic area : Integrated Nutrient management

6) Performance of the Technology with performance indicator: Results showed that production per hectare is higher in T₂ and T₃ as compare to T₁.

7) Final recommendation for micro level situation : Recommended practices found best in case of production, net return BC ratio

8) Constraints identified and feedback for research : Need to be more trials

9) Process of farmers participation and their reaction: Field days at farmers field, evaluation of the trial and their reaction towards the performance

OFT: 8 Animal Science (New)

1. **Title: Effect of supplementation of concentrate and mineral mixture on milk production of local buffalo breed.**

2. **Problem diagnose/defined:** Inadequate nutrition is a major cause of low live-weight gains, infertility and low milk yields in milch animals. The aim of the OFT is about the awareness of dairy farmers to know the nutritional management of milch animals to increase milk yield. Therefore, the above entitle OFT has been proposed.

3. Details of technologies selected for assessment/refinement:

Treatment:

Treatment 1 : Routine Farmer Practice (Roughage+concentrate)

Treatment 2 : Feeding of concentrate mixture (5kg/animal/day) + Mineral mixture (50 gm/animal/day) (Recommended)

3. Source of technology: Veterinary College, N.A.U., Navsari

4. Production system thematic area: Integrated Nutrient management

5. Thematic area: Integrated Nutrient management

6. Experimental Animals : 12 (6 Animals/treatment)

Observations to be recorded: Milk yield (Lit/day) & Fat %

B Frontline Demonstrations

1. Details of FLDs to be organized -

Sl. No.	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs	Season and year	Area (ha)	No. of farmers/demon.	Parameters identified
1	Groundnut	GJG-22/9	Varietal Evaluation	Variety	Seed	Kharif-17	4	10	Yield
2	Castor	GCH-7	Varietal Evaluation	Variety	Seed	Kharif-17	4	10	Yield
3	Pigeon Pea	GT-1	ICM	Intercropping	Seed	Kharif-17	4	10	Yield
4	Cotton	GCH-10/12(Bt)	Varietal Evaluation	Variety	Seed	Kharif-17	4	10	Yield
5	Vegetable crops	Vegetable seeds(JAU)	Nutritional security	Kitchen gardening	Seed	Kharif 17	-	50	Yield
6	Wheat	Local	INM	Nutrients	Micromix, azatobactor, PSB	Rabi 17-18	4	10	Yield
7	Cumin	Local	IDM	Seed treatment and Soil Application	Carboxin, t. harzenium	Rabi 17-18	4	10	Yield
8	Onion	GWO-1	Varietal Evaluation	Variety	Seed	Rabi 17-18	2	5	Yield
9	Coriander	GC-1/2	Varietal Evaluation	Variety	Seed	Rabi 17-18	4	10	Yield
10	Sesame	GT-3/5	Varietal Evaluation	Variety	Seed	Summer 18	4	10	Yield
11	Black gram	Guj. Urd-1	Varietal Evaluation	Variety	Seed	Summer 18	4	10	Yield
12	Green gram	GM-4/5	Varietal Evaluation	Variety	Seed	Summer 18	4	10	Yield
13	Okra	GJO-3	Varietal Evaluation	Variety	Seed	Summer 18	2	5	Yield
Total							44	160	

2. Sponsored Demonstration (NFSM & NMOOP)

Crop	Area (ha)	No. of farmers
Groundnut	20	50
Green Gram	20	50

3. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	10	2017-18	250
2	Farmers Training	4	2017-18	140
3	Media coverage	-	-	-
4	Training for extension functionaries	2	2017-18	30

4. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators
Cotton Shredder	Cotton	2017-18	10	4	Cotton Shredder	Field capacity

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds/ha. etc.	Critical inputs	Performance parameters / indicators
Feed Management	Local Cattle	10	2016-17	Anabolite liquid	Milk yield (Lit/day)
Feed Management	Local Cattle	10	2016-17	mineral mixture	Milk yield (Lit/day)

(iii) Others

Name of the Enterprises	Crop	Season and year	No. of farmer women	Area (ha)	Critical inputs	Performance parameters / indicators
Zero energy cool chamber	Vegetables	2017-18	05	-	-	Self life of fruits and vegetables

C. Training Programme

i) Farmers & Farm women (On Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
12/04/2017	PF	Importance of Soil Analysis	4	30	0	30	5	0	5	35
09/01/2018	PF	Registration process of organic farming	4	30	0	30	5	0	5	35
Horticulture										
08/05/2017	PF	Production technology of Lime and banana	4	30	0	30	5	0	5	35
08/08/2017	PF	Production technology of Cumin and Coriander	4	30	0	30	5	0	5	35
Livestock prod.										
28/09/2017	FW	Care and Management of mastitis in dairy animals	4	0	30	30	0	5	5	35
05/12/2017	PF/FW	Methods to improve milk productivity	4	30	0	30	5	0	5	35
Agril. Engg.										
10/04/2017	PF	Installation and maintenance of Drip irrigation	4	30	0	30	5	0	5	35
06/09/2017	PF	Small scale processing and value addition	4	30	0	30	5	0	5	35
Home Sc.										
26/05/2017	FW	Preparation of different types	4	0	30	30	0	5	5	35

		of bakery products(Piza base, Nan-khatai, Cake, Biscuits etc)								
04/07/2017	FW	Preparation of value added products from Soybean	4	0	30	30	0	5	5	35
Plan prot.										
01/05/2017	PF	Integrated Management for the control of white grub in ground nut	4	30	0	30	5	0	5	35
15/05/2017	PF	Integrated Management for the control of pink bollworm in cotton	4	30	0	30	5	0	5	35
Extension Edu.										
18/07/2017	PF	Group dynamics	4	30	0	30	5	0	5	35
24/10/2017	PF/R Y	Development Entrepreneurship of practicing farmers/youths	4	30	0	30	5	0	5	35

ii) Farmers & Farm women (Off Campus)

Date	Clientele	Title of the training programme	Duration in days	Number of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
Crop Production										
22/05/2017	PF	To minimize cost of cultivation in kharif crops	4	30	0	30	5	0	5	35
25/04/2017	PF	Importance of Soil Analysis	4	30	0	30	5	0	5	35
04/10/2017	PF	Production technology of Onion & Garlic	4	30	0	30	5	0	5	35
Horticulture										
27/06/2017	PF	Net house technology	4	30	0	30	5	0	5	35
16/08/2017	PF	Post harvest technology of mango/banana	4	30	0	30	5	0	5	35
Livestock prod.										
25/09/2017	PF/FW	Care and management of Sheep and Goat	4	30	0	30	5	0	5	35
26/12/2017	PF/FW	Fodder management	4	0	30	30	0	5	5	35
Agril. Engg.										
27/04/2017	PF	Rain Water Harvesting	4	30	0	30	5	0	5	35
19/09/2017	PF	Use of Improved Farm Implement in farm mechanization	4	30	0	30	5	0	5	35
22/11/2017	PF	Post Harvest Technology	4	30	0	30	5	0	5	35
Home Sc.										
30/05/2017	FW	Work simplification in household activities and Drudgery reduction technologies in agriculture	4	0	30	30	0	5	5	35
12/07/2017	FW	Processing and value	4	0	30	30	0	5	5	35

		addition of Lemon & Aonla									
04/01/2018	FW	Organic kitchen gardening and its importance on health	4	0	30	30	0	5	5	35	
Plan prot.											
16/06/2017	PF	Management of Stored Grain Pest	4	30	0	30	5	0	5	35	
14/09/2017	PF	IPM in cotton and Ground nut	4	30	0	30	5	0	5	35	
03/01/2018	PF	Role of bio agent and botanical pesticides for control of insect pests in agricultural crops	4	30	0	30	5	0	5	35	
Extension Edu.											
30/08/2017	FW/Ry	Income Generation through secondary agriculture	4	0	30	30	0	5	5	35	
08/11/2017	PF/Ry	Formation and Strengthening of SHGs	4	30	0	30	5	0	5	35	

iii) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	Duration (days)	No. of Participants			SC/ST participants			G.Total
				M	F	T	M	F	T	
Entrepreneurship	Agril. Engineering	Fabrication of low cost solar cooker	21	15	0	15	5	0	5	20
Entrepreneurship	Home Science	Preservation of fruits and vegetables	8	0	20	20	0	5	5	25

iv) Training programme for extension functionaries

Date	Clientele	Title of the training programme	Duration in days	No. of participants			Number of SC/ST			G. Total
				M	F	T	M	F	T	
On Campus										
07/04/2017	EF	Management of pink bollworm in cotton and white grub in groundnut	2	15	5	20	3	2	5	25
Off Campus										
10/10/2017	EF	Integrated Pest and disease management in Chickpea	2	15	5	20	3	2	5	25

v) Sponsored programme

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of course	No. of participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored training programme											
Plant	ATMA SMS	PF	Organic Pesticides	1	20	0	20	5	0	5	25

protection			preparation and its uses									
Agronomy	PF (SBI)	PF	Balance use of fertilizers	1	20	0	20	5	0	5	25	
Horticulture	Beneficiary of Horti. dept.	PF	Greenhouse Technology	1	45	0	45	5	0	5	50	
Extension Edu.	ATMA SMS	PF	Importance of Mass-Media	1	45	0	45	5	0	5	50	
Horticulture	FW/RG (DRDA Amreli)	FW	Importance of Kitchen Gardening	1	0	45	45	0	5	5	50	
Agriculture Engineering	PF (ATMA)	PF	Improved Farm Implements	1	45	0	45	5	0	5	50	
Home science	ATMA Amreli	RY	Training on Embroidery	1	0	20	20	0	5	5	25	
Plant protection	NGO SMS (SRTT, A'bad)	PF	Integrated Pest Management	1	20	0	20	5	0	5	25	
Agronomy	PF (DAO Amreli)	PF	Scientific production of Kharif crops	1	45	0	45	5	0	5	50	
Agronomy	PF (AJMS Bank Amreli)	PF	Scientific production of Cotton	1	20	0	20	5	0	5	25	
			Total	10	260	65	325	40	10	50	375	

D. Summary of Training Programmes:

Sr. No	Subject	On campus	Off Campus	Total
1	Home Science	2	3	5
2	Horticulture	2	2	4
3	Crop Production	2	3	5
4	Plant Protection	2	3	5
5	Extension Education	2	2	4
6	Agriculture Engineering	2	3	5
7	Animal Husbandry	2	2	4
8	Vocational training	1	1	2
9	In service Training	1	1	2

10	Sponsored Training	4	6	10
Total		20	26	46

During the year 2017-18, 20 on campus and 26 off campus training programmes will be organized in different subjects for the Farming community by the KVK, Amreli.

E. Extension activity:

Sr.No	Activity	Proposed No.
1	Field day	20
2	Kisan Gosthi	12
3	Radio talk	As & when required
4	TV show	As & when required
5	Khedut shibir	12
6	News paper coverage	As & when required
7	Diagnostic service	As & when required
8	Advisory service	As & when required
9	Popular articles	10
10	Extension Literature	4
11	Celebration of Important day	2

F. PROJECTS (New)

Project I

1.	Title	:	Training needs of Farmers about recommended practices in cotton and groundnut crop of Amreli district.
2.	Name of the lead organization	:	Krishi Vigyan Kendra, JAU, Amreli
3.	Name of Principle investigator	:	(1) Mr. H C. Chhodavadia, Subject Matter Specialist (Extension) (2) Dr. N. S. Joshi, Programme co-ordinator (3) Dr. A. M. Parkhia, Director Of Extension Education, JAU, Junagadh
4.	Problems statements (Source of problems & clear statement of problems)	:	Low Knowledge Level regarding New Agricultural Technology

5.	Introduction	:	<p>In Saurashtra region the Amreli is agriculture dominated district. About 80 % of population is engaged in agriculture and allied activities. The Amreli district offers good scope for Agricultural development. Agricultural Production potential depends mostly on the management practices. These practices vary significantly across various agro-ecological regions due to many factors.</p> <p>Decision making process on farm matter, perform many of the farm operations and undertake many responsibilities concerning management of farm activity. Agricultural activities are the main areas of the economic activities for rural area.</p> <p>Thus for making training more effective, it should be based on farmers felt needs. The training programme which is not need based may have a little impact on bring desired change in the clientele system. Keeping this fact in view, the future study of training needs of farmer with respect to new agricultural production practices in Amreli district of Saurashtra region of Gujarat State will be undertaken with following specific objectives:</p>
6.	Objectives		<ol style="list-style-type: none"> 1. To study the socio-economic and psychological characteristics of the Farmer. 2. To study the training needs of the farmer with respect to recommended practices of cotton and groundnut crop. 3. To study the association between the socio-economic and psychological characteristics of the farmer with their training needs. 4. To study the relative suitability of venue, time, duration, interval and choice of teacher-trainer for farmers with respect to new agricultural practices.
7.	Methodology		<ol style="list-style-type: none"> 1. Selection of five taluka :Purposive sampling method 2. Selection Ten Villages (2 from each Taluka) : Random sampling method 3. Selection of farmers (Total :100), Ten farmers from each village 4. Knowledge interview schedule 5. Personal contact (questionnaire fill) 6. Data collection 7. Analysis

Project II

1.	Title	:	Knowledge level of farmers about organic farming
2.	Name of the lead organization	:	Krishi Vigyan Kendra, JAU, Amreli
3.	Name of Principle investigator	:	<ol style="list-style-type: none"> 1. Mr. P. J. Prajapati, Subject Matter Specialist (Agronomy) 2. Dr. N. S. Joshi, Programme co-ordinator 3. Dr. A. M. Parakhia, Director of Extension Education, Junagadh Agricultural University

4.	Problems statements (Source of problems & clear statement of problems)	:	Health consciousness
5.	Introduction	:	The global concerns of safe foods have introduced the concept of organic farming. Organic agriculture is an eco-friendly production system that promotes and enhances biodiversity, biological cycles and biological activities. The principle is based on minimal use of off-farm inputs and management practices that help to maintain and enhance ecological balance. Organic agriculture is chemical free. Producing organically is a commitment to a system which ensures that healthy, nutritious food can be produced year after year.
6.	Objectives		<ol style="list-style-type: none"> 1. To study the personal and socio-economic profile of farmers 2. To know the extent of knowledge level of farmers about organic farming. 3. To assess the knowledge level of farmers about organic foods. 4. To ascertain relationship between selected dependent and independent variables. 5. To find out the constraints faced by farmers in adopting organic farming.
7.	Methodology		<ol style="list-style-type: none"> 1. Selection of two taluka : Purposive sampling method (Amreli & Bagasara) 2. Selection Ten Villages (5 from each Taluka) : Random sampling method 3. Selection of farmers (Total :100), Ten farmers from each village 4. Knowledge interview schedule 5. Personal contact (questionnaire fill) 6. Data collection 7. Analysis

G. Seeds to be produced

S. No.	Name of crop	Season	Area (ha)	Variety	Type of Produce
1	Groundnut	Kharif (2017)	7	GG-20	Label
2	Groundnut	Kharif (2017)	2	GG-20	Breeder
3	Sesame	Kharif (2017)	2	GT-4	Breeder
4	Wheat	Rabi (2017-18)	1	GW-366	General
5	Gram	Rabi (2017-18)	1	GG-3	General

Annexure

Proceeding of 12th Scientific Advisory Committee Meeting held on 05th, November, 2016 at KVK, JAU, Amreli

The meeting of Scientific Advisory Committee (SAC) of Krishi Vigyan Kendra, Junagadh Agricultural University, Amreli was held on 5th November, 2016 chairmanship of Dr. A.M.Parakhia, Director of Extension Education, Junagadh Agricultural University, Junagadh. The meeting was attended by Dr. V.P.Chovatia, Director of Research, J.A.U., Junagadh, Officers of Junagadh Agricultural University and line departments, ATMA, farmers and farm women representatives, Scientist of KVK and other related departments (List of participants enclosed).

Dr. V.R.Virani, Principal, College of Agriculture, J.A.U., Amreli welcomed the chairman and members of SAC and highlighted the activities of Krishi Vigyan Kendra. At the outset, all the dignitaries were welcomed with bouquet.

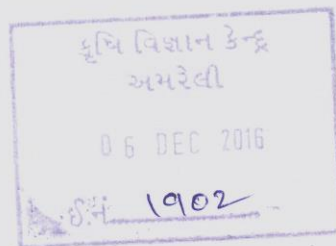
Dr. A.M.Parakhia, Director of Extension Education, Junagadh gave the introductory address and highlighted the work and achievements carried out by the Krishi Vigyan Kendra and main objectives of the SAC meeting.

Dr. N.S.Joshi, Senior Scientist and Head, Krishi Vigyan Kendra, J.A.U., Amreli presented action taken report on last SAC meeting, the summary of progress report for the year 2016-17 and action plan for the year 2017-18. The detail of progress report was presented discipline-wise by individual Scientist namely Dr. M.L.Patel (Plant Protection), Dr. H.C.Chhodavadia (Extension Education), and Dr. M.S.Dulawat (Agriculture Engineering), Shri. P.J.Prajapati (Agronomy). The progress report was thoroughly discussed and suggestions were made by the house.

Dr. A.M.Parakhia, Director of Extension Education, Junagadh Agricultural University, Junagadh, Chairman of the meeting presented his view on KVK's activities and made valuable suggestions as under.

1. Refine the OFT on Agril. Engineering
2. Training should be organized on Arid fruits, stored pests, preparation of bio pesticides.
3. No. of Training should be increased in participation of input dealers.
4. No. of Training should be increased for preservation of lemon and value addition of it.
5. Training should be organized on goat and sheep and on farm mechanization before monsoon period.
6. Establishment of vermi compost unit at KVK

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ATARI



7. Increase publication of articles in news paper / magazine for wide publicity of technology
8. Organize cafeteria on fodder crops and Conduct survey of animals.
9. Arrange the training on minimize the cost of cultivation.
10. Emphasized to increase the training on organic farming, farm mechanization and farm water harvesting.

Dr. V.P.Chovatia, Director of Research, Junagadh Agricultural University, Junagadh

1. To get a feedback from benefits and durability of ploy house and net house in district and training should be also organized on it.
2. Survey on effect of beauveria bassiana (bio agent) on crops and target pests
3. To Conduct the FLDs on Okra instead of Cluster bean.

Dr. A.V.Kumbhani, Assistant Director, Animal Husbandry, Amreli

1. To conduct demonstration of bypass protein to increase milk productivity under NICRA project.
2. To arrange animal camp on artificial in-semination.


Mrs. Bhartiben Rasikbhai Akbari - Progressive farmer


1. To organize night meeting on Pink Boll Worm
2. Exposure visit should be organized at J.A.U., Junagadh

Comments of the Chairman of the Committee

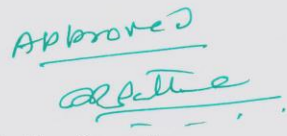
Dr. A.M.Parakhia, Director of Extension Education, Junagadh Agricultural Univerity, Junagadh, Chirman of SAC appropriated the work done by the KVK, Amreli and assured the members of the SAC that their valuable suggestions will be included in the programmes. He emphasized to have a good co-ordination which each other. Further he opine that the technologies developed by J.A.U., Junagadh are useful and so should be properly documented for the benefit of stakeholder.

The meeting was ended with the vote of thanks by Dr. H.C.Chhodavadia, Scientist, Krishi Vigyan Kendra, J.A.U., Amreli


Senior Scientist and Head,
Krishi Vigyan Kendra
Junagadh Agricultural University,
Amreli


Director of Extension Education
Junagadh Agricultural University,
Junagadh

Note: Proceeding for Approval please


Hon'ble Vice Chancellor
Junagadh Agricultural University,
Junagadh

List of Participants:

1.	Dr. A. M. Parakhia, Director of Extension Education, Junagadh Agricultural University, Junagadh
2.	Dr. V. P. Chovatiya, Director of Research, Junagadh Agricultural University, Junagadh
3.	Dr. V. N. Patel, Associate Director of Research, Dry Farming Research Station, JAU, Targhadia, Rajkot
4.	Dr. V.R.Virani, Principal, College of Agriculture, Mota Bhandariya, Amreli
5.	Dr. B.V.Radadiya, Associate Research Scientist, Agricultural Research Station, JAU, Amreli
6.	Dr. Jiju Vyas, Principal, Polytechnic in Home Science, JAU, Amreli
7.	Dr. M. S. Chandawat, Senior Scientist and Head, Krishi Vigyan Kendra, Nana Kandasar, Surendranagar
8.	Dr. Savaliya, Animal husbandry, Amreli
9.	Dr. A. V. Kumbhani, Assi. Director, Animal husbandry, Amreli
10.	Shri. D.M.Finaviya, Agril. Department, District Panchayat, Amreli
11.	Shri. G.P.Joshi, (MDT- Engg), PD, DWRU, Amreli
12.	Miss. Deepaben R. Chauhan, WDT, Lathi
13.	Shri. D.A.Chavda, DPD, ATMA, Amreli
14.	Shri Mehubhai Kantibhai Antala, Village : Haripara, Ta. Dhari, Dist. Amreli
15.	Shri Ramesh bhai B. Gondaliya, Progressive Farmer, Village: Babapur, Ta: Amreli
16.	Shri Nareshbhai Jethabhai Kathrotiya Village :Haripara, Ta. Dhari, Dist. Amreli