ANNUAL ACTION PLAN

2016-17

KRISHI VIGYAN KENDRA

JUNAGADH AGRICULTURAL UNIVERSITY

AMRELI

DETAILS OF ACTION PLAN OF KVKs DURING 2016-17

(1st April 2016 to 31st March 2017)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Website
	Office	FAX		
Programme Co-ordinator Krishi Vigyan Kendra Junagadh Agricultural University, Keriya Road, Model farm, Amreli (Gujarat)-365601	02792-227122	02792-227122	kvkamreli@gmail.com	--

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

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

1.2.b. Status of KVK website : No

1.2.c. No. of Visitors (Hits) to your KVK website (as on today) :---------

1.2.d Status of ICT lab at your KVK : --------

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. N. S. Joshi, Ph.D, Horticulture	02792 227122	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 30 Sept. 2015)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Grade Pay	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)	Mobile No.	Email id	Please attach recent photograph
1	Programme Coordinator	Dr. N. S. Joshi	Programme Coordinator	Horticulture	15600-39100	**8000**	30320	24/03/15	Permanent	General	9428191963	nileshjoshi2207@gmail.com	
2	Subject Matter Specialist	Dr. M. L. Patel	Subject Matter Specialist	Plant Protection	15600-39100	6000	21600	31/03/2015	Permanent	General	9427244349	mahesh.patel70@gmail.com	
3	Subject Matter Specialist	Shri P. J. Prajapati	Subject Matter Specialist	Crop Production	15600-39100	6000	21600	31/03/2015	Permanent	OBC	8460468032	pinakin255@gmail.com	
4	Subject Matter Specialist	Vacant	Subject Matter Specialist										
5	Subject Matter	Shri H. C. Chhodavadia	Subject Matter	Extension	15600-39100	6000	28220	24/08/06	Permanent	General	9429222247	harshad@jau.in	

	Specialist		Specialist	Education									
6	Subject Matter Specialist	Vacant	Subject Matter Specialist	Home Science									
7	Subject Matter Specialist	Dr. M. S. Dulawat	Subject Matter Specialist	Agriculture Engineering	15600-39100	6000	21600	27/02/09	Permanent	General	9662549615	msdulawat@gmail.com	
8	Programme Assistant	Shri G. C. Parsana	Programme Assistant	-	9300-34800	4400	22780	18/01/06	Permanent	General			
9	Computer Programmer	Shri S .N. Joshi	Computer Programmer	-	9300-34800	4400	16150	01/07/10	Permanent	General			
10	Farm Manager	Vaccant	Farm Manager	-			-						
11	Office Superintendent cum Accountant	Shri H. J. Ravaliya	Office Superintendent cum Accountant		9300-34800	4400	16150	01/12/11	Permanent	SC			
12	Stenographer	Shri A. H. Parmar	Stenographer	-	10,000 fix		-	18/11/2013	Permanent	ST			
13	Driver	Vaccant	Driver	-									
14	Driver	Vacant	Driver	-	-		-	-	-	-			
15	Supporting staff	Shri N. K. Dangar	Supporting staff	-	4440-7440	1650	11440	1/06/05	Permanent	OBC			
16	Supporting staff	Vacant	Supporting staff				----						

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	3.00
2.	Under Demonstration Units	1.00
3.	Under Crops	13.50
4.	Horticulture	0.50
5.	Pond	0.25
6.	Others if any	1.25

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2008	500	5278000	--	--	--
2.	Farmers Hostel	ICAR		305		--	--	--
3.	Staff Quarters(6)	ICAR	2008	400	3204000	--	--	--
4.	Farm Wall	ICAR	2008			--	--	--
5.	RWH system	ICAR	2008	---	960000	--	--	--
6.	Threshing yard	ICAR	2010			--	--	--
7.	Godown and processing shed	RKVY	2010	70.62	500000	--	--	--
8.	Poly House	RKVY	2009	320	281600	--	--	--
9.	Net House	RKVY	2009	150	64450	--	--	--
10.	Training hall	RKVY	2009	190.99	1396300	--	--	--
11.	Pilot scale Process plant	RKVY	2009	197.31	1536400	--	--	--
12.	Implement shed	RKVY	2009	77.33	286300	--	--	--

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
M&M, Bolero XL	2006	4,86,500	242690	Working condition
Tractor	2005	3,80,000	--	Working condition
Motor Cycle	2010	42,831	9482	Working condition
Power Tiller with implements	2011	1,42,000	---	Working condition
Mini Tractor with implements	2014	374820	---	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

1.8. A). Details of SAC meetings to be conducted in the year

Sl.No.		Date
1.	Scientific Advisory Committee	11-02-2016

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, Vermicomposting

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

a) Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1		
2		
3		
4		

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 Types

Sr. No.	Name of Block	Problem Soil							
		Alkaline				Soil erosion			
		Area (ha)	Extent of severity			Area in ha	Extent of severity		
			Very Sever	Sever	Mild		Very Sever	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 (2014-15)

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
1	Pearl millet	7700	11200	1465
2	Jowar	400	400	1083
3	Maize	900	1600	1741
4	Green gram	4000	2000	484
5	Black gram	1900	1100	589
6	Tur	600	600	947
7	Wheat	30900	113200	3665
8	Gram	2400	3100	1274
9	Kharif Groundnut	235800	135900	1001
10	Summer Groundnut	4900	9400	1901
11	Kharif Sesame	10400	3400	327
12	Summer Sesame	3500	6600	1889
13	Castor	2100	4100	2000
14	Irrigated Cotton (Lint)	178300	645800	616
15	UnIrrigated Cotton (Lint)	137600	152600	188
16	Cumin	2500	1300	533
17	Onion	3700	102000	27818
18	Garlic	1700	9600	5760
19	Chilli	100	100	1000

Source: District agriculture department.

2.5. Weather data (2015-16)

Month	Rainfall (mm)	Temperature ^{0}C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April-2015	3.8	39.5	23.8	77	24
May-2015	11.4	42.6	26.3	76	26
June-2015	289.8	35.6	26.3	84	59

July-2015	184.6	33.4	26.2	85	64
August-2015	41.2	32.6	25.0	87	63
September- 2015	200.6	33.3	23.5	87	57
October- 2015	00	36.8	23.4	74	31
November- 2015	00	34.3	19.1	65	29
December- 2015	00	30.8	12.5	61	19
January-2016	00	30.9	12.7	72	24
Februray-2016	0.6	32.5	15.8	53	19
March-2016	0	0	0	0	0
Total	**732**				

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

	Live stocks	**Total**	**:**	**809215**
	Rank 3	Cows crossbreed (In milk)	:	2400 (10.066 kg/day)
		Cows crossbreed (dry)	:	800
		Cows crossbreed (milch)	:	3200 (7.466 kg/day)
	Rank 9	Cows indigenous (In milk)	:	75100 (4.595 kg/day)
		Cows indigenous (dry)	:	35700
		Cows indigenous (milch)	:	110800 (3.116 kg/day)
		Total Cattle: 602444		
	Rank 10	Buffaloes (In milk)	:	99600 (5.142 kg/day)
		Buffaloes (dry)	:	34100
		Buffaloes (Milch)	:	133700 (3.382 kg/day)
		Total Buffaloes	:	240104
		Bullock	:	136707
	Rank 4	Goat	:	135949 (0.516 kg/day)
		Sheep	:	103501
		Camel	:	10
		Donkey	:	360
		Dog	:	31989
		Horse	:	1293
		Poultry	:	9990
		Others	:	22647

2.7 Details of Operational area / Villages

Sr. No.	Name of village	Name of Taluka	Name of District	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Kerala(Jogani)	Lathi	Amreli	Groundnut, Cotton, Sesamum, Wheat, Cumin, Chickpea, Garlic, Onion, Mango, lemon Enterprises are dairy business, vermi composting,	Heavy infestation of sucking pest in cotton, Sesame leaf blight, Stem rot disease in Groundnut, Mango Malformation, Less area under Horticultural crops.	*IPM and INM in major crops of this area, *Motivate the farmers for arid Horticultural Crops. *To create the awareness for grading, processing and marketing (value addition)
2	Harsupur Devaliya	Lathi	Amreli			
3	Saladi	Liliya	Amreli			
4	Jatruda	Liliya	Amreli			
5	Vaandaliya	Babra	Amreli			
6	Lunidhaar	Kukavav	Amreli			
7	Haalariya	Bagasra	Amreli			
8	Ditla	Dhari	Amreli			
9	Babapur	Amreli	Amreli			
10	Shedubhar	Amreli	Amreli			
11	Vaankiya	Amreli	Amreli			
12	Lakhapadar	Khambha	Amreli			
13	Nesdi	Savarkundla	Amreli			
14	Oliya	Savarkundla	Amreli			
15	Maandardi	Rajula	Amreli			

2.8 Priority thrust areas

Sr.No.	Crop/ Enterprise	Thrust area
1.	Cotton, Groundnut, Castor, Cumin, Wheat, vegetables, fruits, etc.	Integrated Crop Management in major crops
2.	Farm waste	Recycling of farm waste through composting, vermicompost, green manuring, etc.
3.	Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
4.	Soil	Reclamation of saline & alkaline soils
5.	Farm Women	Farm women empowerment by training in value addition, handicrafts, and small scale enterprises
6.	Horticulture	Promotion of arid horticulture fruit crops
7.	Improved Implements	Popularization of the mechanized technological know how

3. TECHNICAL PROGRAMME

3. A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
6	12	50.4	127

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
71	2520	190	11724

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (Nos)	Soil Samples
(5)	(6)	(7)	(8)
121	6300	Nil	500

3. B. Abstract of interventions to be undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	INM	Cotton	To increase the yield by balance fertilization	Low Yield of Cotton	--	--	--	Field Day	Fertilizer
2	INM	Wheat	Farmers do not use bio fertilizer	Effect of liquid bio fertilizer on growth and yield of wheat	--	--	--	Field Day	Bio Fertilizer
3	IPM	Cotton	Injudicious use of Chemical pesticides due to lack of knowledge about the use of particular pesticides	Management of sucking pests in Cotton	--	--	--	Field Day	Bio Pesticides and botanicals
4	IDM	Chickpea	Low yield in chickpea	Management of Wilt in chickpea	--	--	--	Field Day	Bio Fungicide
5	Resource conservation technology	Cotton	Decreasing productivity of Cotton due to water scarcity in the region	Effect of different type of mulching materials for water management in Cotton	--	--	--	Field day	Plastic mulch
6	Varietal Evaluation	Okra	Low productivity of non-descriptive local okra varieties	Varietal Evaluation of Okra	--	--	--	Field day	Seed

3.1 Technologies to be assessed and refined

A.1 Abstract on the number of technologies to be assessed in respect of **crops**

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation					1					
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management	1			1						
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management				1						
Integrated Disease Management			1							
Resource conservation technology				1						
Small Scale income generating enterprises										
TOTAL	**1**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**6**

A.2. Abstract on the number of technologies to be refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Kitchen garden	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction	1									
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	1	0	0	0	0	0	0	0	0	1

A.3. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

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

A.4. Abstract on the number of technologies to be refined in respect of livestock / enterprises

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

B. Details of On Farm Trial

OFT- 1: Agronomy (ongoing)

Title of technology: Low Yield of Cotton

Problem Diagnosed/Defined: To increase the yield by balance fertilization

Details of technologies selected for assessment/ refinement:

T1:(Farmers' practices)	150 kg Urea +90 kg DAP ha-1
T2 :(Recommended Practice)	Dose of fertilizer 240-50-150 NPK + 50 $ZnSO_4$, 240 kg N – Four equal split basal, 30,60,90 DAS, Three spraying of KNO_3 at 15 days interval
T3:(Intervention)	T2 + 25 kg $MgSO_4$ ha^{-1} + 500 Kg castor cake / ha.

OFT – 2: Agronomy (New)

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	120-60-0 NPK kg/ha
T_3	Assessment/refined Practices	Soil application of Azotobacter & PSB @ 1 lit./ha with 100 kg FYM +75% RDF

OFT – 3: Plant Protection (New)

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	Recommended Practices	Three spray of Thiamethoxam 25 WG @ 25 gai/ha (2 g / 10 litre of water) at 15 day interval starting from the pest infestation.
T_3	Assessment/ refined Practices	Azadirachtin 1500 PPM and Beauveria bassiana at 15 day interval starting from the pest infestation

OFT –4: Plant Protection (New)

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 : Kharif -2016 to Kharif – 2019

(3) Spacing : 45 x 10

T_1	Farmer practices	No use of seed treatment and Trichoderma
T_2	Recommended Practices	Seed treatment of Carbendazim @ 3g/kg seed
T_3	Assessment/refined Practices	Seed treatment of cow urine/Jivamrut and Soil application of Trichoderma @2.5 kg /ha with Castor cake 500kg.

OFT -5: Agriculture Engineering (ongoing)

a	**Title**	**:**	**Effect of different type of mulching materials for water management in Cotton**
b	Problem Diagnose	:	Decreasing productivity of Cotton due to water scarcity in the region
c	Treatments		
	T1- Farmers' practice	:	No use Mulching materials
	T2-Recommended Technology	:	Black Plastic Mulch(50 micron) under drip irrigation system
	T3-Technology assessed or Refined	:	Wheat straw Mulch (0.5 mt. around the plant under drip irrigation system
d	Number of replication	:	05
e	Source of Technology	:	SAU Recommendation and interaction with farmers
f	Thematic area	:	Plastic in Agriculture
g	Critical Input	:	Plastic for Mulch
h	Unit Cost	:	1500
i	Total Cost	:	Rs. 7500
j	Duration of project	:	2 year
l	Indicator/Parameter	:	Yield, CB ratio, Weed index

OFT -6: Horticulture

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 varietals 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

3.2 Frontline Demonstrations

A. 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	GG-22/9	Varietal Evaluation	Variety	Seed	Kharif-16	4	10	Yield
2	Castor	GCH-7	Varietal Evaluation	Variety	Seed	Kharif-16	4	10	Yield
3	Pigeon Pea	GT-1	Varietal Evaluation	Variety	Seed	Kharif-16	4	10	Yield
4	Cotton	GCH-10/12(Bt)	Varietal Evaluation	Variety	Seed	Kharif-16	4	10	Yield
5	Wheat	GW-366	Varietal Evaluation	Variety	Seed	Rabi 16-17	4	10	Yield
6	Cumin	GC-4	Varietal Evaluation	Variety	Seed	Rabi 16-17	4	10	Yield
7	Gram	GJG-3/GG-5	Varietal Evaluation	Variety	Seed	Rabi 16-17	4	10	Yield
8	Coriander	GC-1/2	Varietal Evaluation	Variety	Seed	Rabi 16-17	4	10	Yield
9	Sesame	GT-3/5	Varietal Evaluation	Variety	Seed	Summer 17	4	10	Yield
10	Black gram	Guj. Urd-1	Varietal Evaluation	Variety	Seed	Summer 17	4	10	Yield
11	Green gram	GM-4/5	Varietal Evaluation	Variety	Seed	Summer 17	4	10	Yield
12	Cluster Bean	Pusa Navbahar	Varietal Evaluation	Variety	Seed	Summer 17	2	5	Yield
13	Papaya/Water melon	-	Resource conservation technology	Plastic Mulch	Plastic Mulch	Summer 17	0.4	2	Yield
					Total		**46.4**	**117**	

Sponsored Demonstration

Crop	Area (ha)	No. of farmers
Cotton	8	20
Wheat	8	20
Gram	8	20

B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	10	2016-17	250
2	Farmers Training	4	2016-17	140
3	Media coverage	-	-	-
4	Training for extension functionaries	2	2016-17	30

C. 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	2016-17	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
		NIL			

3.3 Training (Including the sponsored and FLD training programmes):

A) ON Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems								
Crop Diversification								
Integrated Farming	1	30	0	30	5	0	5	35
Water management								
Seed production								
Nursery management								
Integrated Crop Management								
Fodder production								
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops	1	30	0	30	5	0	5	35
Off-season vegetables								
Nursery raising								
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)								
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition								
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								
Production and Management technology	1	30	0	30	5	0	5	35
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management								
Soil and Water Conservation								
Integrated Nutrient Management	2	60	0	60	10	0	10	70
Production and use of organic inputs								
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	1	30	0	30	5	0	5	35
IV Livestock Production and Management								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management/goat								
Disease Management								
Feed management	1	30	0	30	5	0	5	35
Production of quality animal products	1	0	30	30	0	5	5	35
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								
Gender mainstreaming through SHGs								
Storage loss minimization techniques								
Value addition	1	0	30	30	0	5	5	35
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies	1	0	30	30	0	5	5	35
Rural Crafts								
Women and child care								
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	1	30	0	30	5	0	5	35
Use of Plastics in farming practices								
Production of small tools and implements								
Repair and maintenance of farm machinery and implements	1	30	0	30	5	0	5	35
Small scale processing and value addition	1	30	0	30	5	0	5	35
Post Harvest Technology								
VII Plant Protection								
Integrated Pest Management	2	60	0	60	10	0	10	70
Integrated Disease Management	1	30	0	30	5	0	5	35
Bio-control of pests and diseases	1	30	0	30	5	0	5	35

Production of bio control agents and bio pesticides								
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								
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	1	30	0	30	5	0	5	35
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								
X Capacity Building and Group Dynamics								
Leadership development	1	30	0	30	5	0	5	35
Group dynamics	1	30	0	30	5	0	5	35
Formation and Management of SHGs								
Mobilization of social capital								
Entrepreneurial development of farmers/youths	2	60	0	60	10	0	10	70
WTO and IPR issues								
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems								
XII Others (Pl. Specify)								
TOTAL	**22**	**600**	**60**	**660**	**100**	**10**	**110**	**770**
(B) RURAL YOUTH								
Mushroom Production								
Bee-keeping								
Integrated farming	1	20	0	20	5	0	5	25
Seed production								
Production of organic inputs	1	20	0	20	5	0	5	25
Integrated Farming (Medicinal)								
Planting material production								
Vermi-culture								
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements	1	20	0	20	5	0	5	25
Nursery Management of Horticulture crops								
Training and pruning of orchards								
Value addition								
Production of quality animal products								
Dairying	1	20	0	20	5	0	5	25
Sheep and goat rearing								
Quail farming								
Piggery								
Rabbit farming								

Poultry production								
Ornamental fisheries								
Para vets								
Para extension workers								
Composite fish culture								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing								
Small scale processing								
Post Harvest Technology								
Tailoring and Stitching								
Rural Crafts								
TOTAL	**4**	**80**	**0**	**80**	**20**	**0**	**20**	**100**
(C) Extension Personnel								
Productivity enhancement in field crops	2	40	0	40	10	0	10	50
Integrated Pest Management	1	20	0	20	5	0	5	25
Integrated Nutrient management								
Rejuvenation of old orchards								
Protected cultivation technology								
Formation and Management of SHGs								
Group Dynamics and farmers organization								
Information networking among farmers								
Capacity building for ICT application								
Care and maintenance of farm machinery and implements								
WTO and IPR issues								
Management in farm animals								
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing								
Production and use of organic inputs								
Gender mainstreaming through SHGs								
Any other (Pl. Specify)								
TOTAL	**3**	**60**	**0**	**60**	**15**	**0**	**15**	**75**
G. Total	**29**	**740**	**60**	**800**	**135**	**10**	**145**	**945**

B) OFF Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems	1	30	0	30	5	0	5	35
Crop Diversification								
Integrated Farming								
Water management								
Seed production								
Nursery management								
Integrated Crop Management	2	60	0	60	10	0	10	70
Fodder production								
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops								
Off-season vegetables								

Nursery raising								
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)	1	30	0	30	5	0	5	35
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition	1	30	0	30	5	0	5	35
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								
Production and Management technology								
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management								
Soil and Water Conservation	1	30	0	30	5	0	5	35
Integrated Nutrient Management	1	30	0	30	5	0	5	35
Production and use of organic inputs	1	30	0	30	5	0	5	35
Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	1	30	0	30	5	0	5	35
IV Livestock Production and Management								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management /goat								
Disease Management	1	30	0	30	5	0	5	35
Feed management	1	30	0	30	5	0	5	35
Production of quality animal products								
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								
Gender mainstreaming through SHGs								
Storage loss minimization techniques								
Value addition	1	0	30	30	0	5	5	35

Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies	1	0	30	30	0	5	5	35
Rural Crafts								
Women and child care								
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	2	60	0	60	10	0	10	70
Use of Plastics in farming practices	1	30	0	30	5	0	5	35
Production of small tools and implements								
Repair and maintenance of farm machinery and implements	1	30	0	30	5	0	5	35
Small scale processing and value addition								
Post Harvest Technology	1	30	0	30	5	0	5	35
VII Plant Protection								
Integrated Pest Management	2	60	0	60	10	0	10	70
Integrated Disease Management	1	30	0	30	5	0	5	35
Bio-control of pests and diseases	1	30	0	30	5	0	5	35
Production of bio control agents and bio pesticides	1	30	0	30	5	0	5	35
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								
IX Production of Inputs at site								
Seed Production								
Planting material production (Horti.)								
Bio-agents production								
Bio-pesticides production								
Bio-fertilizer production								
Vermi-compost production (Horti.)								
Organic manures production (A.S.)								
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								
X Capacity Building and Group Dynamics								
Leadership development	1	30	0	30	5	0	5	35
Group dynamics	2	60	0	60	10	0	10	70
Formation and Management of SHGs(HS)	1	30	0	30	5	0	5	35
Mobilization of social capital								
Entrepreneurial development of farmers/youths (Agro.)	2	60	0	60	10	0	10	70
WTO and IPR issues								
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems (Agro)								
XII Others (Pl. Specify)								

TOTAL	**30**	**780**	**120**	**900**	**130**	**20**	**150**	**1050**

C) Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Weed Management								
Resource Conservation Technologies								
Cropping Systems	1	30	0	30	5	0	5	35
Crop Diversification								
Integrated Farming	1	30	0	30	5	0	5	35
Water management								
Seed production								
Nursery management								
Integrated Crop Management	2	60	0	60	10	0	10	70
Fodder production								
Production of organic inputs								
II Horticulture								
a) Vegetable Crops								
Production of low volume and high value crops	1	30	0	30	5	0	5	35
Off-season vegetables								
Nursery raising								
Exotic vegetables like Broccoli								
Export potential vegetables								
Grading and standardization								
Protective cultivation (Green Houses, Shade Net etc.)	1	30	0	30	5	0	5	35
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								
c) Ornamental Plants								
Nursery Management								
Management of potted plants								
Export potential of ornamental plants								
Propagation techniques of Ornamental Plants								
d) Plantation crops								
Production and Management technology								
Processing and value addition	1	30	0	30	5	0	5	35
e) Tuber crops								
Production and Management technology								
Processing and value addition								
f) Spices								
Production and Management technology	1	30	0	30	5	0	5	35
Processing and value addition								
g) Medicinal and Aromatic Plants								
Nursery management								
Production and management technology								
Post harvest technology and value addition								
III Soil Health and Fertility Management								
Soil fertility management								
Soil and Water Conservation	1	30	0	30	5	0	5	35
Integrated Nutrient Management	3	90	0	90	15	0	15	105
Production and use of organic inputs	1	30	0	30	5	0	5	35

Management of Problematic soils								
Micro nutrient deficiency in crops								
Nutrient Use Efficiency								
Soil and Water Testing	2	60	0	60	10	0	10	70
IV Livestock Production and Management								
Dairy Management								
Poultry Management								
Piggery Management								
Rabbit Management/goat								
Disease Management	1	30	0	30	5	0	5	35
Feed management	1	30	0	30	5	0	5	35
Production of quality animal products	1	30	0	30	5	0	5	35
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								
Gender mainstreaming through SHGs								
Storage loss minimization techniques								
Value addition	2	0	60	60	0	10	10	70
Income generation activities for empowerment of rural Women								
Location specific drudgery reduction technologies	2	0	60	60	0	10	10	70
Rural Crafts								
Women and child care								
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	3	90	0	90	15	0	15	105
Use of Plastics in farming practices	1	30	0	30	5	0	5	35
Production of small tools and implements								
Repair and maintenance of farm machinery and implements	2	60	0	60	10	0	10	70
Small scale processing and value addition	1	30	0	30	5	0	5	35
Post Harvest Technology	1	30	0	30	5	0	5	35
VII Plant Protection								
Integrated Pest Management	4	120	0	120	20	0	20	140
Integrated Disease Management	2	60	0	60	10	0	10	70
Bio-control of pests and diseases	2	60	0	60	10	0	10	70
Production of bio control agents and bio pesticides	1	30	0	30	5	0	5	35
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								
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	1	30	0	30	5	0	5	35
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								
X Capacity Building and Group Dynamics								
Leadership development	2	60	0	60	10	0	10	70
Group dynamics	3	90	0	90	15	0	15	105
Formation and Management of SHGs	1	30	0	30	5	0	5	35
Mobilization of social capital								
Entrepreneurial development of farmers/youths	4	120	0	120	20	0	20	140
WTO and IPR issues								
XI Agro-forestry								
Production technologies								
Nursery management								
Integrated Farming Systems								
Sponsored training								
TOTAL	**52**	**1380**	**180**	**1560**	**230**	**30**	**260**	**1820**
(B) RURAL YOUTH								
Mushroom Production								
Bee-keeping								
Integrated farming	1	20	0	20	5	0	5	25
Seed production								
Production of organic inputs	1	20	0	20	5	0	5	25
Integrated Farming								
Planting material production								
Vermi-culture								
Sericulture								
Protected cultivation of vegetable crops								
Commercial fruit production								
Repair and maintenance of farm machinery and implements	1	20	0	20	5	0	5	25
Nursery Management of Horticulture crops								
Training and pruning of orchards								
Value addition								
Production of quality animal products								
Dairying	1	20	0	20	5	0	5	25
Sheep and goat rearing								
Quail farming								
Piggery								
Rabbit farming								
Poultry production								
Ornamental fisheries								
Para vets								
Para extension workers								
Composite fish culture								
Freshwater prawn culture								
Shrimp farming								
Pearl culture								
Cold water fisheries								
Fish harvest and processing technology								
Fry and fingerling rearing								
Small scale processing								
Post Harvest Technology								
Tailoring and Stitching								
Rural Crafts								
TOTAL	**4**	**80**	**0**	**80**	**20**	**0**	**20**	**100**
(C) Extension Personnel								
Productivity enhancement in field crops	2	40	0	40	10	0	10	50
Integrated Pest Management	1	20	0	20	5	0	5	25
Integrated Nutrient management								
Rejuvenation of old orchards								
Protected cultivation technology								

Formation and Management of SHGs								
Group Dynamics and farmers organization								
Information networking among farmers								
Capacity building for ICT application								
Care and maintenance of farm machinery and implements								
WTO and IPR issues								
Management in farm animals								
Livestock feed and fodder production								
Household food security								
Women and Child care								
Low cost and nutrient efficient diet designing								
Production and use of organic inputs								
Gender mainstreaming through SHGs								
Any other (Pl. Specify)								
Total	**3**	**60**	**0**	**60**	**15**	**0**	**15**	**75**
G. TOTAL	**59**	**1520**	**180**	**1700**	**265**	**30**	**295**	**1995**

Details of training programmes attached in **Annexure -I**

3.4. Extension Activities (including activities of FLD programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	10	200	20	220	10	0	10	210	20	230
Kisan Mela	2	600	150	750	25	5	30	625	155	780
Kisan Ghosthi	2	50	0	50	0	0	0	50	0	50
Exhibition	1	300	50	350	5	0	5	305	50	355
Film Show	1	100	0	100	0	0	0	100	0	100
Farmers Seminar	3	300	80	380	2	0	2	302	80	382
Workshop	0	0	0	0	0	0	0	0	0	0
Group meetings	1	40	0	40	0	0	0	40	0	40
Lectures delivered as resource persons	15	750	150	900	5	0	5	755	150	905
Newspaper coverage	10	0	0	0	0	0	0	0	0	0
Radio talks	2	0	0	0	0	0	0	0	0	0
TV talks	1	0	0	0	0	0	0	0	0	0
Popular articles	10	0	0	0	0	0	0	0	0	0
Extension Literature	15	0	0	0	0	0	0	0	0	0
Advisory Services	20	250	20	270	5	0	5	255	20	275
Scientific visit to farmers field	20	300	20	320	0	0	0	300	20	320
Farmers visit to KVK	50	2500	500	3000	50	10	60	2550	510	3060
Diagnostic visits	10	200	0	200	5	0	5	205	0	205
Exposure visits	2	100	0	100	0	0	0	100	0	100
Ex-trainees Sammelan	2	100	50	150	0	0	0	100	50	150
Soil health Camp	1	200	30	230	2	0	2	202	30	232
Animal Health Camp	1	100	50	150	1	0	1	101	50	151
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	3	150	30	180	0	0	0	150	30	180
Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0
Self Help Group	0	0	0	0	0	0	0	0	0	0

Conveners meetings										
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0
Celebration of important days (specify)	3	300	150	450	5	0	5	305	150	455
Krishi Mohostva	2	2500	500	3000	20	5	25	2520	505	3025
Krishi Rath	0	0	0	0	0	0	0	0	0	0
Pre Kharif workshop	1	200	50	250	2	0	2	202	50	252
Pre Rabi workshop	1	200	50	250	2	0	2	202	50	252
PPVFRA workshop	1	200	0	200	25	0	25	225	0	225
Any Other (Specify)	0	0	0	0	0	0	0	0	0	0
Total	**190**	**9640**	**1900**	**11540**	**164**	**20**	**184**	**9804**	**1920**	**11724**

3.5 Target for Production and supply of Technological products

SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
CEREALS			
	Wheat	GW-366	40
OILSEEDS			
	Groundnut	GG-20, GJG-31	70
	Sesame	GT-3/4	3
PULSES			
	Chickpea	GG-3/GJG-5	8
VEGETABLES			
OTHERS (Specify)			

PLANTING MATERIALS

Sl. No.	Crop	Variety	Quantity (Nos.)
FRUITS			
	Papaya	Madhubindu	1000
	Lemon	Kagzi	300
SPICES			
VEGETABLES			
	Brinjal	GJB-3	3000
	Chilli	Resham Patta	1000
	Tomato	GT-1	1000
FOREST SPECIES			
ORNAMENTAL CROPS			
		Total	**6300**

Bio-products

Sl. No.	Product Name	Species	Quantity

			No	(kg)
BIO PESTICIDES				
1	*Tricodermma*	*harzenium*	500	500
2	Beauveria bassiana	--	2000	2000

LIVESTOCK

Sl. No.	Type	Breed	Quantity	
			(Nos)	Unit
Cattle				
GOAT				
SHEEP	NIL			
POULTRY				
Pig farming				
FISHERIES				

3.6. Literature to be Developed/Published

(A) KVK News Letter

Date of start : 1 April 2016

Number of copies to be e-published : 1

(B) Literature developed/published

S.No.	Topic	Number
1	Research paper each scientist	4
2	Technical reports	150
3	News letters	4
4	Training manual all discipline	0
5	Popular article	10
6	Extension literature	15
	Total	**183**

(C) Details of Electronic Media to be Produced

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

3.7. Success stories/Case studies identified for development as a case. -

a. Brief introduction

b. Interventions

c. Output

d. Outcomes

e. Impact

i) Social economic

ii) Bio-Physical

f. Good Action Photographs

3.8 Indicate the specific training need analysis tools/methodology followed for

Practicing Farmers

a) PRA
b) Field level observations
c) Farmer group discussions

Rural Youth

a) PRA
b) Field level observations
c) Farmer group discussions

In-service personnel

a) Field level observations
b) Extension worker group discussions

3.9 Indicate the methodology for identifying OFTs/FLDs

For OFT :

i) PRA
ii) Problem identified from Matrix
iii) Field level observations
iv) Farmer group discussions
v) Others if any

For FLD :

i) New variety/technology
ii) Poor yield at farmers level
iii) Existing cropping system
iv) Others if any

3.10 Field activities

i. Name of villages identified/adopted with block name (from which year) - from 2015

Sr. No.	Name of village	Name of Taluka	Major crops & enterprises	Major problem identified
1	Kerala(Jogani)	Lathi	Groundnut, Cotton, Sesamum, Wheat, Cumin, Chickpea, Garlic, Onion, Mango, lemon Enterprises are dairy business, vermi composting,	Heavy infestation of sucking pest in cotton, Sesame leaf blight, Stem rot disease in Groundnut, Mango Malformation, Less area under Horticultural crops.
2	Harsupur Devaliya	Lathi		
3	Saladi	Liliya		
4	Jatruda	Liliya		
5	Vaandaliya	Babra		
6	Lunidhaar	Kukavav		
7	Haalariya	Bagasra		
8	Ditla	Dhari		
9	Babapur	Amreli		
10	Shedubhar	Amreli		
11	Vaankiya	Amreli		
12	Lakhapadar	Khambha		
13	Nesdi	Savarkundla		
14	Oliya	Savarkundla		
15	Maandardi	Rajula		

ii. No. of farm families selected per village : Whole farm families of the adopted villages

iii. No. of survey/PRA conducted : one

iv. No. of technologies taken to the adopted villages

v. Name of the technologies found suitable by the farmers of the adopted villages: New and Improved Varieties of major crop of district, IPM and INM in major crops of this area, motivate the farmers for arid Horticultural Crops, to create the awareness for grading, processing and marketing the agricultural produce, farm mechanization, organic farming, MIS

vi. Impact (production, income, employment, area/technological– horizontal/vertical)

vii. Constraints if any in the continued application of these improved technologies

3.11. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab:

1. Year of establishment : March-2011

2. List of equipments purchase with amount

Sl. No.	Name of the equipment	Quantity	Cost (Rs)
1	Spectrophotometer	1	39480
2	Flame Photometer	1	44887
3	pH meter	1	3990
4	Conductivity bridge	1	9450
5	Physical balance	1	45066
6	Water Distillation steel	1	157000
7	Shaker	2	49000
8	Refrigerator	1	19200
9	Oven	1	15215
10	Hot plate	1	4725

3. Targets of samples for analysis:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount to be realized
Soil Samples	500	500	100	100000
Water	300	300	50	15000
Plant	--	--	--	--
Total	**800**	**800**	**150**	**115000**

4.0 LINKAGES

4.1 Functional linkage with different organizations

Sl.No.	Name of organization	Nature of Linkage
1.	Dy. Director of Agriculture.	Farmers Training, Diagnostic services
2.	Dy. Director of Agril. Extension (FTC)	Resource person in Lectures
3.	Dy. Director of Horticulture	Resource person in Lectures
4.	Dy. Director of Animal Husbandry	Sponsored training
5.	Dy. Director of Soil Conservation	Resource person in Lectures
6.	Dy. Director of Social Forestry	Resource person in Lectures
7.	Amreli Jilla Madhya sahakari bank	Resource person in Lectures
8.	Milk Co-Operative Society	Resource person in Lectures
9.	State Bank of India	Resource person in Lectures
10.	National Bank for Agriculture & Rural Development (NABARD)	Resource person in Lectures
11.	NHRDF	Sponsored Training, Resource person in Lectures
12.	Doordarshan Kendra	Media coverage
13.	All India Radio	Radio talk
14.	District Rural Development Agency	Sponsored Training, Resource person in Lectures
15.	ATMA	Sponsored Training, Resource person in Lectures, meeting
16.	Mahindra & Mahindra Co. Ltd.	Sponsored Training, Resource person in Lectures

4.2 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

S. No.	Programme	Nature of linkage
1	All the extension activities of district, Amreli	Meeting, Demonstration and Training, as a technical expert

4.3 Give details of programmes under National Horticultural Mission

S. No.	Programme	Nature of linkage
1	Farmers training	as resource person

4.4 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage
1	**NIL**	
2		

5.0 Utilization of hostel facilities

S. No.	Programme	No. of days
1	**Sponsored Training**	**45**
2	**Exposure visit to KVK**	**15**
3	**Scientist**	**25**
	Total	**85**

6.0 Convergence with departments:

7.0 Feedback of the farmers about the technologies demonstrated and assessed:

Crop	Variety/Input	Farmers' reaction
Gram	GG-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
Soybean	GS-3	► Higher yielding variety and less infestation of pest and disease
Groundnut	*Trichodermma*	► Better control of stem rot, when applied for long term
Groundnut	GG-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

8.0 Feedback from the KVK Scientists (Subject wise) to the research institutions/universities:

Annexure - I

Training Programme

i) Farmers & Farm women (On Campus)

Subject	Title of training	Duration (days)	No. of participants	Type of participants
I Quarter April 2016 to June 2016				
Home Science	Tomato processing home level	1	35	FW
Horticulture	Production technology of Kharif vegetable crops	1	35	PF
Crop Production	Soil Analysis and its importance	1	35	PF
Plant Protection	Management of pink bollworm in cotton through integrated approach	1	35	PF
Extension Education	Update knowledge level of farmer on major Kharif crop	1	35	PF
Agril. Engineering	Installation and maintenance of Drip irrigation	1	35	PF
Animal Husbandry	Care and Nutrition of Animal	1	35	FW
II. Quarter July 2016 to September 2016				
Home Science	Use of Solar cooker	1	35	FW
Horticulture	Production technology of Spice crops	1	35	PF
Crop Production	INM in castor	1	35	PF
Plant Protection	Role of Bio control agent in vegetable crops	1	35	PF
Extension Education	Update knowledge level of farmer on processing major Kharif crop	1	35	PF
Agriculture Engineering	Small scale processing and value addition	1	35	PF
Animal Husbandry	Methods to improve milk productivity	1	35	FW
III. Quarter October 2016 to December 2016				
Crop Production	INM in Rabi crops	1	35	PF
Plant Protection	Advance techniques to control the pests and diseases of Rabi crops	1	35	PF
Extension Education	Youth Development through update knowledge on major Rabi crop	1	35	PF
Agriculture Engineering	Training on rotavator and Cotton shredder	1	35	PF
IV. Quarter January 2017 to March 2017				
Crop Production	Organic farming concept and development	1	35	PF
Plant Protection	Development of strategies for management of various stored grain pests	1	35	PF
Extension Education	Youth Development through update knowledge on major Summer crop	1	35	PF
Agriculture Engineering	Bio compost of Farm waste	1	35	PF

ii) Farmers & Farm women (Off Campus)

Subject	Title of training	Duration (days)	No. of participants	Type of participants
I. Quarter April 2016 to June 2016				
Home Science	Drudgery reduction technologies in agriculture	1	35	FW
Horticulture	Net house technology	1	35	PF
Crop Production	To minimize cost of cultivation in kharif crops	1	35	PF
	Soil Analysis and its importance	1	35	PF
Plant Protection	Role of refugia for breakup resistance power of pink boll worm in cotton	1	35	PF
	Importance of Pheromone for monitoring infestation of pink boll worm in cotton	1	35	PF
Extension Education	Income generation through group farming	1	35	PF
Agriculture Engineering	Use of Improved Farm Implement in farm mechanization	1	35	PF

Animal Husbandry	Fodder management	1	35	FW
II. Quarter July-2016 to September- 2016				
Home Science	Processing and value addition of Lemon	1	35	PF
Horticulture	Post harvest technology of mango/banana	1	35	PF
Crop Production	Good agricultural practices of castor	1	35	PF
Plant Protection	Management of Pink bollworm through integrated approach	1	35	PF
Extension Education	Update knowledge on organic farming	1	35	PF
	Youth Development	1	35	PF
Agril Engineering	Rain Water Harvesting	1	35	PF
	Efficient use of water in different irrigation system	1	35	PF
Animal Husbandry	Awareness about vaccination	1	35	FW
III. Quarter October- 2016 to December- 2016				
Crop Production	INM in wheat	1	35	PF
	Production technology of Onion & Garlic	1	35	PF
Plant Protection	Role of botanical pesticides and its uses	1	35	PF
Extension Education	FIG formation	1	35	PF
	Update knowledge level of farmer about major Rabi crop	1	35	PF
Agril Engg.	Installation and maintenance of Drip irrigation	1	35	PF
	Post Harvest Technology	1	35	PF
IV. Quarter January- 2017 to March -2017				
Crop Production	Organic farming concept and development	1	35	PF
Plant Protection	Hazardous effect of chemical pesticides	1	35	PF
	Method for preparation of botanical pesticides and its importance	1	35	PF
Extension Education	Update knowledge level of farmer about major Summer crop	1	35	PF
Agril. Engg	Management of net house and poly house	1	35	PF

iii) ON/OFF Campus Training Programme for Rural youth

Subject	Title of training	Duration (days)	No. of participants	Type of participants
Crop Production	Procedure for organic farming certification	1	25	RY
Plant Protection	Role Organic pesticide and its importance	1	25	RY
Extension Education	Group dynamics in rural youth	1	25	RY
Agril. Engineering	Fabrication of low cost solar cooker	1	25	RY
	Total	**4**	**100**	

RY: Rural Youth

iV) Vocational Training:

Sr. No	Title of training	Duration (days)	No of Partici.	Type of Participant
1	Processing and value addition of Lemon	3	25	Rural girls

V) Extension Personnel Training:

Sr. No	Title of training	Duration (days)	No of Parti.	Type of Participant
1	Pre-seasonal Training on *Kharif* crops	2	25	Ext.workers

2	Pre-seasonal Training on *rabi* crops	2	25	Ext.workers
3.	IPM & IDM in various crops	1	25	Input dealers

Vi) Sponsored Training:

Sr. No	Title of training	No. of Training	No of Parti.	Type of participant
1	Organizing effective FLDs	1	50	ATMA SMS
2	Balance use of fertilizers	1	25	PF (SBI)
3	Greenhouse Technology	1	50	Beneficiary of Horti. dept.
4	Importance of Mass-Media	1	50	ATMA SMS
5	Importance of Kitchen Gardening	1	50	FW/RG (DRDA Amreli)
6	Improved Farm Implements	1	50	PF (ATMA)
7	Training on Embroidery	1	25	Polytec. in HSc, JAU
8	Integrated Pest Management	1	25	NGO SMS (SRTT, A'bad)
9	Scientific production of Kharif crops	1	50	PF (DAO Amreli)
10	Scientific production of Cotton	1	25	PF (AJMS Bank Amreli)
11	Production of Onion & Garlic	1	150	PF(NHRDF, Rajkot)
12	Nutrient management in Kharif crops	1	50	PF (Mahindra Samridhi)
13	Control of storage pest	1	25	PF (FCI)
14	Income generation through fisheries	1	25	College of Fis., JAU
15	Organic farming in horticultural crops	1	50	Ultra Tech Cement, Rajula
	Total	**15**	**600**	