

ANNUAL ACTION PLAN

2017-18



KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY
AMRELI



DETAILS OF ACTION PLAN OF KVKs DURING 2017-18**(1st April 2017 to 31st March 2018)****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	942819 1963	nileshjoshi2207@gmail.com

**1.4. Year of sanction: Deputy Secretary, ICAR, New Delhi, Letter No. 13-16/2003/1,
Dt. 7.12.2005**

1.5. Staff Position (as on 30 Sept. 2016)

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/O BC/ 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.patel707@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	karangiyavk@jain	
4	Subject Matter Specialist	Dr. V. K. Karangiya	Subject Matter Specialist	Animal Science	15600-39100	6000	21600	07/12/2016	Permanent	OBC	9601807463	binakin255@gmail.com	
5	Subject Matter Specialist	Dr. H. C. Chhodavadia	Subject Matter Specialist	Extension Education	15600-39100	6000	29070	24/08/06	Permanent	General	9429222247	harshad@jau.in	
6	Subject Matter Specialist	Vaccant	Subject Matter Specialist	Home Science	15600-39100	-	-	-	-	-	-	-	

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	23470	18/01/06	Permanent	General		
9	Computer Programmer	Shri S. N. Joshi	Computer Programmer	-	9300-34800	4400	16640	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	16640	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	11790	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	236506	Working condition
Tractor	2005	3,80,000	--	Working condition
Motor Cycle	2010	42,831	11455	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
Winnowing	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	05-11-2016

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	North Saurashtra Agro climatic Zone VI	<p>Medium black soil, coastal alluvial soil, Rocky soil and Alkaline soil.</p> <p>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.</p>

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	Clayey	75-150	Groundnut Cotton	-	Kunkavav,

	rainfall			Pearl millet Wheat		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

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 (2016-17)

Month	Rainfall (mm)	Temperature °C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April-2016	0.0	31.8	24.0	77	18
May-2016	2.0	41.7	26.2	80	26
June-2016	43.6	38.5	27.3	81	44
July-2016	149.6	32.7	25.6	88	70
August-2016	140.6	30.6	24.9	89	74
September- 2016	199.6	32.2	23.3	90	63
October- 2016	124.0	32.9	21.4	86	50
November- 2016	0.0	33.6	14.8	65	23
Total	659.4				

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(Joga ni)	Lathi	Amreli	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	Harsupur Devaliya	Lathi	Amreli	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	Saladi	Liliya	Amreli	Cotton,	<ul style="list-style-type: none"> • Saline land and 	Conserve

				Green gram	poor quality of irrigation water <ul style="list-style-type: none"> • Poor fertility status of Land 	Moisture agriculture, OFT in cotton on BBF, Training on MIS
4	Jatruda	Liliya	Amreli	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	Vaandaliya	Babra	Amreli	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	Lunidhaar	Kukavav	Amreli	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	Haalariya	Bagasra	Amreli	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	Ditla	Dhari	Amreli	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	Babapur	Amreli	Amreli	Cotton, Castor, Wheat	<ul style="list-style-type: none"> • low yield of major crops • Wild animal 	ICM, introduction of new

					<ul style="list-style-type: none"> problem • poor quality of irrigation water 	varieties, Scientific cropping
10	Shedubhar	Amreli	Amreli	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
11	Vaankiya	Amreli	Amreli	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	Lakhapadar	Khambha	Amreli	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	Nesdi	Savarkundla	Amreli	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	Oliya	Savarkundla	Amreli	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	Maandardi	Rajula	Amreli	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

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
8	22	54	195

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
45	1570	190	11724

Seed Production (Qtl.)	Planting material (Nos.)	Fish seed prod. (Nos)	Soil Samples
(5)	(6)	(7)	(8)
121	5500	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 on personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	INM	Wheat	Farmers do not use bio fertilizer	Effect of liquid bio fertilizer on growth and yield of wheat	--	Use of bio fertilizer and its importance	--	Field Day, Training	Bio Fertilizer
2	Cropping system	Cotton	Farmers do not adopt closer planting, low cotton yield due to less soil moisture and incidence of pest and disease	High Density Planting in Cotton	-	Advantages of High Density Planting in Cotton	-	Field Day, Training	Cotton Seed(bt)
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	--	Use of bio pesticides	--	Field Day, training	Bio Pesticides and botanicals
4	IDM	Chickpea	Low yield in chickpea	Management of Wilt in chickpea	--	IDM	--	Field Day, Training	Bio Fungicide

5	Resource conservation technology	Cotton	Water logging, soil salinization in salt-affected lands. Heavy mortality, difficulties in intercultural operation due to lodging.	Effect of method of sowing on ridges on yield of Cotton	--	--	--	Field Day	--
6	Varietal Evaluation	Okra	Low productivity of non-descriptive local okra varieties	Varietal Evaluation of Okra	--	--	--	Field day	Seed
7	INM	Onion	Low productivity in onion	Effect of Sulphur in onion production	-	-	-	Field day	fertilizer
8	Integrated Nutrient management	Buffalo	Inadequate nutrition, infertility and low milk yields in milch animals.	Effect of supplementation of concentrate and mineral mixture on milk production of local buffalo breed.	--	Effect of supplementation of concentrate and mineral mixture on milk production	--	training	concent rate mixture + Mineral mixture

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					1
Seed / Plant production				1						1
Weed Management										0
Integrated Crop Management										0

Integrated Nutrient Management	1				1					2
Integrated Farming System										0
Mushroom cultivation										0
Drudgery reduction										0
Farm machineries										0
Post Harvest Technology										
Integrated Pest Management				1						1
Integrated Disease Management			1							1
Resource conservation technology				1						1
TOTAL	1	0	1	3	2	0	0	0	0	7

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			NIL							
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease										

Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

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	1							1
Disease of Management								0
Value Addition								0
Production and Management								0
Feed and Fodder								0
Small Scale income generating enterprises								0
TOTAL	1	0	0	0	0	0	0	1

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							
TOTAL							

B. 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 : 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 : 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 : 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 : 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** : 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 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

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 %

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-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	

Sponsored Demonstration

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

B. 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

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	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

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

A) ON Campus

Thematic Area	No. of Courses	No. of Participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
II Horticulture								
a) Vegetable Crops								
b) Fruits								
Cultivation of Fruit	1	30	0	30	5	0	5	35
f) Spices								
Production and Management technology	1	30	0	30	5	0	5	35
III Soil Health and Fertility Management								
Production and use of organic inputs	1	30	0	30	5	0	5	35
Soil and Water Testing	1	30	0	30	5	0	5	35
IV Livestock Production and Management								
Disease Management	1	0	30	30	0	5	5	35
Feed management	1	30	0	30	5	0	5	35
V Home Science/Women empowerment								
Income Generation activities for empowerment of rural women	1	0	30	30	0	5	5	35
Value addition	1	0	30	30	0	5	5	35
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	1	30	0	30	5	0	5	35
Small scale processing and value addition	1	30	0	30	5	0	5	35
VII Plant Protection								
Integrated Pest Management	2	60	0	60	10	0	10	70
X Capacity Building and Group Dynamics								
Group dynamics	1	30	0	30	5	0	5	35
Development Entrepreneurship of practicing farmers/youths	1	00	30	30	0	5	5	35
TOTAL	14	300	120	420	50	20	70	490
(B) RURAL YOUTH								
Integrated farming	1	20	0	20	5	0	5	25
TOTAL	1	20	0	20	5	0	5	25
(C) Extension Personnel								
Integrated pest management	1	15	5	20	3	2	5	25

TOTAL	1	15	5	20	3	2	5	25
G. Total	16	335	125	460	58	22	80	540

B) OFF Campus

Thematic Area	No. of Courses	No. of Participants						Grand Total
		Others			SC/ST			
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Resource Conservation Technologies	1	30	0	30	5	0	5	35
II Horticulture								
a) Vegetable Crops								
Protective cultivation (Green Houses, Shade Net etc.)	1	30	0	30	5	0	5	35
b) Fruits								
Export potential fruits	1	30	0	30	5	0	5	35
f) Spices								
Production and Management technology	1	30	0	30	5	0	5	35
III Soil Health and Fertility Management								
Soil and Water Testing	1	30	0	30	5	0	5	35
IV Livestock Production and Management								
Disease Management	1	30	0	30	5	0	5	35
Feed management	1	0	30	30	0	5	5	35
V Home Science/Women empowerment								
Value addition	1	0	30	30	0	5	5	35
Location specific drudgery reduction technologies	1	0	30	30	0	5	5	35
Household food security by kitchen gardening and nutrition gardening	1	0	30	30	0	5	5	35
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	1	30	0	30	5	0	5	35
Repair and maintenance of farm machinery and implements	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	2	60	0	60	10	0	10	70

Bio-control of pests and diseases	1	30	0	30	5	0	5	35
X Capacity Building and Group Dynamics								
Leadership development	1	30	0	30	5	0	5	35
Formation and Management of SHGs(HS)	1	00	30	30	0	5	5	35
TOTAL	18	390	150	540	65	25	90	630
(B) RURAL YOUTH	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0
(C) Extension Personnel								
Integrated disease management	1	15	5	20	3	2	5	25
TOTAL	1	15	5	20	3	2	5	25
G. Total	19	405	155	560	68	27	95	655

C) Consolidated table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participants							Grand Total
		Others			SC/ST				
		Male	Female	Total	Male	Female	Total		
(A) Farmers & Farm Women									
I Crop Production									
Resource Conservation Technologies	1	30	0	30	5	0	5	35	
II Horticulture									
a) Vegetable Crops									
Protective cultivation (Green Houses, Shade Net etc.)	1	30	0	30	5	0	5	35	
b) Fruits									
Cultivation of Fruit	1	30	0	30	5	0	5	35	
Export potential fruits	1	30	0	30	5	0	5	35	
f) Spices									
Production and Management technology	2	60	0	60	10	0	10	70	
III Soil Health and Fertility Management									
Production and use of organic inputs	1	30	0	30	5	0	5	35	
Soil and Water Testing	2	60	0	60	10	0	10	70	
IV Livestock Production and Management									

Disease Management	1	0	30	30	0	5	5	35
Feed management	1	30	0	30	5	0	5	35
V Home Science/Women empowerment								
Income Generation activities for empowerment of rural women	1	0	30	30	0	5	5	35
Value addition	2	0	60	60	0	10	10	70
Location specific drudgery reduction technologies	1	0	30	30	0	5	5	35
Household food security by kitchen gardening and nutrition gardening	1	0	30	30	0	5	5	35
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	2	60	0	60	10	0	10	70
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	1	30	0	30	5	0	5	35
VII Plant Protection								
Integrated Pest Management	4	120	0	120	20	0	20	140
Bio-control of pests and diseases	1	30	0	30	5	0	5	35
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 (HS)	1	0	30	30	0	5	5	35
Entrepreneurial development of farmers/youths (Agro.)	1	0	30	30	0	5	5	35
TOTAL	32	690	270	960	115	45	160	1120
(B) RURAL YOUTH								
Integrated farming	1	20	0	20	5	0	5	25
TOTAL	1	20	0	20	5	0	5	25
(C) Extension Personnel								
Integrated Pest management	1	15	5	20	3	2	5	25
Integrated Disease management	1	15	5	20	3	2	5	25
TOTAL	2	30	10	40	6	4	10	50
G. Total	35	740	280	1020	126	49	175	1195

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 Conveners meetings	0	0	0	0	0	0	0	0	0	0
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

SI. 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

SI. No.	Crop	Variety	Quantity (Nos.)
FRUITS			
	Papaya	Madhubindu	500
SPICES			
VEGETABLES			
	Brinjal	GJB-3	3000
	Chilli	Resham Patta	1000
	Tomato	GT-1	1000
FOREST SPECIES			
ORNAMENTAL CROPS			
		Total	5500

Bio-products

SI. No.	Product Name	Species	Quantity	
			No	(kg)
BIO PESTICIDES				
1	<i>Tricodermma</i>	<i>harzenium</i>	300	1000
2	Beauveria bassiana	--	600	5000

LIVESTOCK

SI. 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 : 4

(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
1	Kerala(Jogani)	Lathi
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	<i>Trichoderma</i>	▶ 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	<i>Beauveria bassiana</i>	▶ Better control of pests ▶ Economic to other chemical pesticides

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

Horticulture : GJO-3 variety of okra is high yielding variety but it become yellow in color during maturity so get less market price.

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 of bakery products(Piza base, Nan-khatai, Cake, Biscuits etc)	4	0	30	30	0	5	5	35
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/RV	Development Entrepreneurship of practicing farmers/youths	4	30	0	30	5	0	5	35
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i) Farmers & Farm women (Off Campus)

Date	Client ele	Title of the training programme	Durati on in days	Number of participants			Number of SC/ST			G. Tota I
				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		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 addition of Lemon & Aonla	4	0	30	30	0	5	5	35
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	4	30	0	30	5	0	5	35

		botanical pesticides for control of insect pests in agricultural crops									
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	

ii) 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	Agri. 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

iii) 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

iv) 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 protection	ATMA SMS	PF	Organic Pesticides preparation and its	1	20	0	20	5	0	5	25

			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
b) Sponsored research programme											
			Total								
c) Any special programmes											
			Total								