ANNUAL PROGRESS REPORT

(APRIL-2012 TO MARCH-2013)

&

ACTION PLAN

(APRIL-2013 TO MARCH-2014)

KRISHI VIGYAN KENDRA

JUNAGADH AGRICULTURAL UNIVERSITY

AMRELI-365601 (Gujarat)

List of Content

KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, AMRELI

ANNUAL PROGRESS REPORT 2012-13
(April 2012 TO March 2013)

1. GENERAL INFORMATION ABOUT THE KRISHI VIGYAN KENDRA:

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

Address	Telephone		E-mail
	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 Name and Address of host organization with phone, fax and e-mail

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

1.3 Name of the Programme Co-ordinator with phone & mobile no

Name	Telephone/Contact		
	Office	Mobile	E-mail
Dr. B. B. KUNJADIA Ph.D , SOIL SCIENCE	02792 227122	9428241955	kvkamreli@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 in K.V.K., J.A.U., Amreli (as on 1st March, 2013)

Sr. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/OBC/ Others)
1	Programme Coordinator	Dr. B. B. Kunjadia	Programme Coordinator	Soil Science	37400-67000	57110	21/03/13	Permanent	General
2	Subject Matter Specialist	Vacant	Subject Matter Specialist	Agronomy	15600-39100	-----	-----	------	-----
3	Subject Matter Specialist	Vacant	Subject Matter Specialist	Plant Protection	15600-39100	-----	-----	-----	------
4	Subject Matter Specialist	Dr. N. S. Joshi	Subject Matter Specialist	Horticulture	15600-39100	18320	21/08/06	Permanent	General
5	Subject Matter Specialist	Shri H. C. Chhodavadia	Subject Matter Specialist	Extension Education	15600-39100	18320	24/08/06	Permanent	General
6	Subject Matter Specialist	Miss M. K. Bariya	Subject Matter Specialist	Home Science	15600-39100	18320	24/08/06	Permanent	General
7	Subject Matter Specialist	Shri M. S. Dulawat	Subject Matter Specialist	Agriculture Engineering	15600-39100	15600	27/02/09	Permanent	General
8	Programme Assistant	Shri G. C. Parsana	Programme Assistant	-	9300-34800	15600	18/01/06	Permanent	General
9	Computer Programmer	Shri S .N. Joshi	Computer Programmer	-	10,000 fix	-	01/07/10	Permanent	General
10	Farm Manager	Shri N. V. Patel	Farm Manager	-	10,000 fix	-	22/2/12	Permanent	General
11	Office Superintendent cum Accountant	Shri H. J. Ravaliya	Office Superintendent cum Accountant		10,000 fix		01/12/11	Permanent	General
12	Stenographer	Vacant	Stenographer	-			-	-	-
13	Driver	Shri V. U. Chauhan	Driver	-	5200-20200	13410	1/03/06	Permanent	OBC
14	Driver	Vacant	Driver	-	-	-	-	-	-
15	Supporting staff	Shri N. K. Dangar	Supporting staff	-	4440-7440	8190	1/06/05	Permanent	OBC
16	Supporting staff	Vacant	Supporting staff	-					

1.6 Total land with KVK: 20 Ha

Sr. no.	Item	Area (ha)
1	Under Building	3.00
2	Under Demonstration units	0.50
3	Under crops	13.50
4	Orchard / Agro-forestry	0.50
5	Others	2.50
	Total	**20.00**

1.6 Infrastructure development: A) Buildings:

Sr. No.	Name of the Building	Source of fund	Plinth area (Sq.m)	Expenditure (Rs in lakh)	Status
1.	Administrative Building	ICAR	500	31.90	Completed
2.	Farmers Hostel	ICAR	305	20.88	Completed
3.	Staff Quarters(6)	ICAR	400	32.04	Completed
4.	Farm Wall	ICAR			Incomplete
5.	RWH system	ICAR	---	9.60	Completed
6.	Threshing yard	ICAR			Completed
7.	Godown and processing shed	RKVY	70.62	5.00	Completed
8.	Poly House	RKVY	320	2.816	Completed
9.	Net House	RKVY	150	0.6445	Completed
10.	Training hall	RKVY	190.99	13.963	Completed
11.	Pilot scale Process plant	RKVY	197.31	15364	Completed
12.	Implement shed	RKVY	77.33	2.863	Completed

B) Vehicles (up to 31 March 2013)

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
M&M, Bolero XL	2006	4,86,500	173100	Working condition
Tractor	2005	3,80,000	--	Working condition
Motor Cycle	2010	42,831	4743	Working condition
Power Tiller with implements	2011	1,42,000	---	Working condition

B) Equipments & AV aids:

Sr. No.	Year of purchase	Equipments and AV aids	Cost (Rs.)	Present status
1	2008-09	Digital camera	11070	Working condition
2	2008-09	Air assisted blast type sprayer	98750	
3	2008-09	Vacuum cleaner, RO, water cooler	41780	
4	2008-09	Samsung A/C, Nos.-2	47300	
5	2008-09	Fax machine	17500	
6	2008-09	LCD projector	98799	
7	2008-09	Winnowing fan	8500	
8	2008-09	Chaff cutter	30188	
9	2008-09	Plasma TV, Nos.-2 (21 and 52")	139952	
10	2008-09	Cotton stock shredder-Nos.-3	363000	
11	2008-09	Spiral binding machine	9090	
12	2008-09	Rotavator with cultivator, Nos.-2	180000	
13	2008-09	Inverter	19800	
14	2008-09	Manually operated seed dressing drum	20930	
15	2008-09	Exhibition display	39974	
16	2008-09	Decorticator groundnut machine	98850	
17	2008-09	Cotton shredder, Nos.-2	242000	
18	2008-09	Battery operated sprayer	4940	
19	2008-09	Aspee knapsack sprayer	7400	
20	2008-09	Bullock drawn pipe farm seed drill	161000	
21	2008-09	Zero till drill	66725	
22	2008-09	Bullock drawn clod breaker	52000	

23	2008-09	Tractor operated groundnut digger	235500	
24	2008-09	Multipurpose thresher (engine operated)	114000	
25	2008-09	Mobile seed processing unit	1685000	
26	2008-09	Electronic balance	19425	
27	2008-09	Power generated	49500	
28	2008-09	RO system	24450	
29	2008-09	Air condition Nos.-2	51580	
30	2008-09	Air condition, Nos.-3	89970	
31	2008-09	Photo copier	124000	
32	2008-09	LCD and accessories	103912	
33	2008-09	Oven and freeze	30605	
34	2008-09	Tractor drawn harrow cum cultivator	75000	
35	2008-09	Planter	44000	
36	2008-09	Rotavator	96000	
37	2008-09	Laptop	47500	
38	2008-09	Pipe frame blade harrow piece	11000	
39	2008-09	Solar equipments	81830	
40	2009-10	Gas connection for lab.	9700	
41	2009-10	Digital Sony Camera	24750	
42	2009-10	Post Whole Digger	38000	
43	2009-10	Motor, 1 Hp	8650	
44	2009-10	Power Generator	45576	
45	2010-11	Multi Crop thresher	38000	
46	2010-11	BOD incubator	75863	
47	2010-11	Compound light microscope	90851	
48	2010-11	Motor 7.5 Hp	28600	
49	2010-11	Motor 5 Hp	17000	
50	2010-11	Desktop Computer	34810	
51	2010-11	Hot air Oven	15215	
52	2010-11	Hot plate	4725	
53	2010-11	Physical Balance	3623	
54	2010-11	Refrigerator	19200	
55	2010-11	PH meter	3990	
56	2010-11	Conductivity bridge	9450	

57	2010-11	Chemical Balance	45066	
58	2010-11	Shaker-2 no.	49000	
59	2010-11	Flame Photometer	44887	
60	2010-11	Spectrophotometer	39480	
61	2010-11	Water Distillation Still	1,57,500	
62	2010-11	Seed Drill	27500	
63	2010-11	Winnower	37000	
64	2012-13	Disc Plow	30400	
65	2012-13	Disc Harrow	37500	
66	2012-13	Nine tine Cultivator	19600	

1.8 (A) Details of SAC meeting conducted in the year 2012

The Seventh Scientific Advisory Committee meeting of Krishi Vigyan Kendra Junagadh Agricultural University, Amreli was held at Seminar Hall, K.V.K., J.A.U., Amreli on 17th March, 2012.

Committee made the following recommendations after active interaction.

Sr .No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1	17/03/11	Dr. N. C. Patel Hon. Vice Chancellor, Junagadh Agricultural University, Junagadh	To organize the training on Women Empowerment and Micro Irrigation System.	Accepted and implemented
2.		Dr. A. M. Parakhia Director of Extension Education, Junagadh Agricultural University, Junagadh	Prepare a leaflet of KVK - detail activities of KVK and distribute in adopted villages.	Accepted and implemented
			Refine the OFTs on Home science, Horticulture and Agri. Engineering.	Accepted and implemented
			FLDs should be organized on technology instead of crop variety and also increase no. of FLDs on various Implements.	Accepted and implemented and this year will be further increased.
			Increase publication/articles in news paper/magazine for widespread of technology.	Accepted and implemented

			Organize demonstration on IPM, INM on KVK farm.	Accepted and we have conducted INM on Groundnut.
			Change Training module according to the crop season.	Accepted and planed training programmes according to the seasons.
			Organize crop cafeteria on fodder crops.	Accepted and implemented

*A copy of SAC proceedings along with list of participants in Annexure II

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
	Rainfed : Cotton, Groundnut, Sesame, Black gram, Green gram, Mango, Onion
	Agriculture – Horticulture (Mango)
	Agriculture – Dairy
	Agriculture – Fisheries
	Cotton based cropping system
	Groundnut based cropping system
	Sesame based cropping system
	Enterprise: Poultry, Fishery, Dairy, Sericulture, Vermicomposting

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

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

2.3 Soil type and their characteristics

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
	Total	**212470**	**0**	**102167**	**110303**	**408085**	**0**	**225403**	**182682**

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Bajara	10600	193000	18.21
2	Jowar	1200	13000	10.70
3	Maize	1600	26000	16.38
4	Mung	5400	26000	4.81
5	Udad	2300	14000	6.09
6	Tur	700	7000	9.85
7	Wheat	55000	2082000	37.85
8	Gram	2400	35000	14.82
9	Groundnut	221000	3825000	17.31
10	Sesame	20000	90000	4.50
11	Castor	1100	22000	20.08
12	Cotton	269400	11426000	7.21
13	Cumin	2800	15000	5.46
14	Garlic	5900	1616000	273.90
15	Onion	2200	126000	57.09

2.5. Weather data of the year 2012-13 of Amreli district

Month	Rainfall (mm)	Temperature ^{o}C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April-2012	--	42.3	22.0	74	29
May-2012	--	42.1	24.0	78	27
June-2012	20.5	40.0	25.2	85	30
July-2012	70.0	37.7	22.8	86	63
August-2012	94.3	35.0	23.4	86	63
September-2012	179.3	35.8	22.8	90	61

October- 2012	38.0	37.2	15.7	74	32
November-2012	--	35.0	12.4	63	23
December-2012	--	34.9	10.4	63	27
January-2013	--	32.8	8.5	53	22
Feburary-2013	--	36.0	8.0	58	22
March-2013	--	39.8	15.2	54	22

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

Category	Population	Production	Productivity
Cattle			
Crossbred	8469	7660 tone milk	
Indigenous	260515	90420 tone milk	
Buffalo	200569	150380 tone milk	
Sheep	136607	202830 Kg Wool	
Goats	133764	9040 tone milk	
Pigs	389	--	
Horses	857	--	
Pony	25	---	
Donkey	177	--	
Camel	2	--	
Poultry			
Hens	---	---	
Desi	13519	6.27 lakh egg	
Improved	0.00	0.00	
Ducks	64	--	
Turkey and others	13	--	

2.7 Adopted village: 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	Mota Bhandariya	Amreli	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	Sanosara	Amreli	Amreli			
3	Lapaliya	Amreli	Amreli			
4	Ponjapadar	Liliya	Amreli			
5	Godhavadar	Liliya	Amreli			
6	Boradi	Dhari	Amreli			
7	Kathrota	Dhari	Amreli			
8	Gigasan	Dhari	Amreli			
9	Mota agariya	Rajula	Amreli			
10	Victor/Pipavav	Rajula	Amreli			
11	Shilana	Bagasra	Amreli			
12	Karjala	Savarkundla	Amreli			
13	Mayapadar	Kukavav	Amreli			
14	Nava vaghaniya	Kukavav	Amreli			
15	Matirala	Lathi	Amreli			
16	Charkha	Babra	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, Vermi Compost, 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

2. TECHNICAL ACHIEVEMENTS

3.A. Details of the target and achievements of mandatory activities by KVK during 2012-2013

OFT				FLD			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs (Crops/Component)		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	2	42	34	14	16	165	174

Trainings (Including sponsored, vocational etc.)				Extension Activities			
3				4			
Number of Courses		Number of participants		Number of Activities		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
109	133	3735	5665	98	1978	---	3330

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
-	17.655	--	2000

3.B. Abstract of interventions 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	Awareness of IPM in Cotton	Cotton	Lack of knowledge about IPM in Cotton	Effect of N & P to cotton	IPM of Cotton	IPM in Cotton	Pest & Disease management	Demonstration IPM, ,Field day	BB Powder and Neem oil for Ball Worm
2	Awareness of IDM in Groundnut	Groundnut	Lack of knowledge about IDM in Groundnut	Control of Stem rot in G'Nut	IDM of Groundnut	IDM in Groundnut	Integrated Disease management	Demonstration IDM, ,Field day	Trichoderma powder for stem rot
3	Use of improved varieties of Groundnut	Groundnut	Low yield of Groundnut	-	Introduction of TG-37A varieties of Groundnut	Groundnut production	-	Field day	Seed of variety TG-37A
4	Improved varieties of Sesame	Sesame	Low yield of Sesame	-	FLD on Sesame	Sesame Production	-	Field day	Seed of variety GT-3
5	High-tech Technology	Capsicum	Unawareness protected cultivation	--	--	Greenhouse Technology	--	--	--
6	Dry land Horticulture	Arid fruits	Introduction of Arid fruits	--	--	Production technology of arid fruits	--	--	--
7	Micro irrigation	Cotton	Lack of water	--	--	Use of Micro irrigation system	--	Field day	--

8	Bio compost	Cotton	Farm waste-cotton stalk	--	FLD on cotton shredder	Bio compost of farm waste	--	Demonstration	Cotton shredder
9	Use of improved varieties of Soybean	soybean	Introduction of Soybean crop	--	FLD on Soybean	Soybean production	-	Field Day	Seed of variety GS-3
10	Use of Plant growth hormones	Mango	Low yield of mango	Induction of early flowering in mango through Paclobutrazol	---	Use of Paclobutrazol in mango	-	Field Day	Paclobutrazol
11	Improvement in vegetable production	Brinjal, tomato, chilly	Low productivity due to local variety for cultivation.	-	FLD on Brinjal	Production Technology in vegetable cultivation	-	Field day	Varietal seed of JBGR-1, GJB-2
12	Rejuvenation of old orchards	Mango	Low yield of mango	-	--	Rejuvenation of old Mango orchards	--	Field Day	-
13	Formation and functioning of SHGs	SHGs	Lack of economic independence in Rural youth	-	-	Formation and functioning of SHGs	-	-	-
14	Awareness about various governmental schemes	Government schemes	Lack of knowledge about various governmental schemes	-	-	Awareness about various governmental schemes	-	-	-
15	Entrepreneurship development	Small scale processing	Low income of rural youth	-	-	Entrepreneurship development	-	-	-

16	Farm women Empowerment	Small Scale Enterprise	Unawareness about processing, handicrafts.	-	-	1. Preservation of fruits and vegetables 2. Rural art and craft	-	Demonstration	-
17	Value Addition	Fruits and vegetables	Low market rate			Preparation of Jam, Tomato Catch-up and different types of Pickles	--	Demonstration	--
18	Improve the health status of anemic adolescence girls	Girls	Anemia in adolescence girls	Prevalence of Anemia among Rural adolescence girls	-	Improve health of anemic adolescence tribal girls.	-	Medical camp	Folic acid tablets and iron rich food

3.1 Achievements on technologies assessed and refined

A.1 Abstract of the number of technologies assessed* in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	Total
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management						1				1
Integrated Nutrient Management				1						1
Integrated Farming System						1				1

Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management				1						1
Integrated Disease Management										
Small Scale income generating enterprises										1(Home science)
TOTAL										**5**

A.2. Abstract of the number of technologies refined* in respect of crops/enterprise

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Total
Varietal Evaluation						
Seed / Plant production						
Weed Management						
Integrated Crop Management						
Integrated Nutrient Management						
Integrated Farming System						
Mushroom cultivation						
Drudgery reduction						
Farm machineries						

Post Harvest Technology						
Integrated Pest Management						
Integrated Disease Management						
Resource conservation technology						
Small Scale income generating enterprises						1(Home science)
TOTAL						**1**

***Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.*

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Pigg.	Rabbity.	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management	**Nil**							
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								

Disease of Management		**Nil**						
Value Addition								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

B. Details of each On Farm Trial to be furnished in the following format

A. Technology Assessment

OFT: 1 Homescience

1) Title of technology assessed/Refined: **Prevalence of Anemia among rural adolescent girls**.
2) Problem definition :
   - ✓ Low iron content in diet.
   - ✓ Lack of knowledge about nutritional foods.
   - ✓ Use of traditional diet.
3) Details of technologies selected for assessment/refinement :

Category	Source of technology	Technology details
Technology Option1	-	First group for control
Technology Option2	-	Recommended practice-iron tablet per day with existing dietary pattern
Technology Option3	-	Iron tablet per day + 50 gm roasted soybean + 100 gm rice flakes per day with existing dietary pattern

4) Thematic area : Women care

5) Performance of the technology with performance indicators :

S. No.	Name of the girls	Name of the Village	Data on the performance indicators of the technology assessed/refined					
			Technology option 1		Technology option 2		Technology option 3	
			Indicator 1 : Body weight increase (kg)	Indicator 2: Hemoglobin increase (%)	Indicator 1 : Body weight increase (kg)	Indicator 2: Hemoglobin increase (%)	Indicator 1 : Body weight increase (kg)	Indicator 2: Hemoglobin increase (%)
1	D.M. Savaliya	Mayapadar	0.500	0.5				
2	D.U. Savaliya	Mayapadar	0.700	0.5				
3	D.D. savaliya	Mayapadar	0.900	0.5				
4	R.J. solanki	Mayapadar	1.000	0.0				
5	S.G. Makvana	Bambhania	0.500	0.0				
6	R.K. Chavda	Bambhania	1.000	1.0				
7	M.M. Jethava	Bambhania	0.400	0.0				
8	R.C. Sarsaiya	Bambhania	1.000	1.0				
9	P.K. Parmar	Bambhania	1.000	0.5				
10	L.K.Sarsaiya	Bambhania	0.800	0.5				
11	S.L.Makvana	Mayapadar		0.0	1.000	1.0		
12	S.A. Savaliya	Mayapadar			0.700	0.0		
13	V.B.Savaliya	Mayapadar			1.000	1.0		
14	S.C. Savaliya	Mayapadar			0.200	0.5		

15	k.C. Thumar	Mayapadar			0.600	0.5		
16	P.N. Pari	Bambhania			0.800	0.5		
17	A.N. Gosai	Saringpur			0.900	1.5		
18	P.N.Gosai	Saringpur			1.000	0.5		
19	P.J. Chavda	Saringpur			1.100	1.0		
20	D.M. Boghani	Bambhania			1.100	0.5		
21	A.V. Chauhan	Mayapadar					0.600	0.5
22	V.A. Savaliya	Mayapadar					1.700	1.5
23	V.R. Savaliya	Mayapadar					1.000	2.0
24	N.D. Pokal	Mayapadar					1.800	1.5
25	S.B. Savaliya	Mayapadar					1.000	1.0
26	S.B. Movadia	Saringpur					1.200	1.5
27	K.V. Solanki	Mayapadar					0.800	1.5
28	S.P. Solanki	Mayapadar					2.000	3.0
29	M.G. Maru	Bambhania					0.700	1.0
30	D.M. chavda	Bambhania					0.900	1.0
Average			**0.780**	**0.4**	**0.840**	**0.7**	**1.170**	**1.45**

Indicator 1: Body weight increase (kg), Indicator 2: Hemoglobin increase (%)

6) Final recommendation from micro level situation:

7) Constrains identified and feedback for research:

8) Process of farmers participation and their reaction

9) Results of on farm trials

Crop/ enterprise	Problem definition	Title of OFT	No of trials	Technology Assessed	Parameters of assessment
1	2	3	4	5	6
Home Science	Low Hemoglobin	Prevalence of anemia among rural adolescent girls	3	Feeding of Iron rich diet to adolescent girl in rural for remove Anemia.	• Weight of adolescent girls. (Kg) • Hemoglobin of adolescent girls. (%)

Data on the parameter	Results of assessments	Feedback from the farmers	Technology assessed/refined
7	8	9	10
Acc. to parameter 6	Iron table / day with existing dietary pattern	-	Iron tablet / day + 50 gm roasted soybean + 100 gm rice flakes / day with existing dietary pattern

OFT: 2 Horticulture

1. **Title of OFT** : Induction of Early flowering in mango through paclobutrazol
2. **Description about the problem** : The farmers of this region are using almost double to triple dose of paclobutrazol for early flowering and regular bearing in mango. So they obtained good production but it is not economically beneficial to the farmer due to higher treatment cost.
3. **Treatment** : T-1= Cultar 20 ml / tree (Recommended)
   T-2= Cultar 50 ml / tree (Farmer's Practice)
   T-3= Cultar 30 ml / tree (Modified treatment)
   T-4= Control or without Cultar treatment

Any refinement done	Justification for refinement	Production per tree Kg/tree	Net return (profit) in Rs/tree	BC ratio
Ongoing OFT	The farmers of this region are using almost double to triple dose of paclobutrazol for early flowering and regular bearing in mango	RESULT AWAITED		

OFT -3 – Agronomy

Title of technology: Effect of Nitrogen & Phosphorus to Cotton

Problem Diagnosed/Defined: Non efficient use of Nitrogenous & Phosphatic fertilizers

Details of technologies selected for assessment/ refinement:

T1:(Farmers' practices)	23 kg N/ha + 57 kg P_2O_5/ha as a Basal dose and 115 kg N/ha in three split dose.
T2 :(Recommended Practice)	40 kg N/ha as a Basal dose and 120 kg N/ha in three split dose.
T3: (Refined practice)	Application of 26 kg N/ha as a Basal dose in the form of A.S. and 133 kg N/ha in five splits each at 20 days interval in the form of Urea.

OFT organised but due to no rain and unavailability of Irrigation crop failed after germination. It will be taken to next Kharif season.

OFT: 4 – Plant Protection

(1) Title:- Integrated management of insect pests and diseases of groundnut under rain fed condition

(2) Problem diagnose/defined:- Lack of knowledge for use of combination of Insecticides with fungicides.

(3) Details of technologies selected for assessment / refinement:-

1. Mixing compitable or uncompitable insecticides and fungicides each other and seed treatment with macozeb (Farmer's Practices)
2. Spray the spray mixture as spray following schedule Thiamethoxam 25 WG @ 4g+ hexaconazole 5EC @ 10ml/10 liter at 35 DAS, actamiprid 20 SP @ 2g+ chlorothalonil 75 WP @25g/10 lit. at 50 DAS and imidachloprid 17.8 SL @ 4ml+ carbendazim 50 WP @ 5g+ mancozeb 75WP @ 26g/10lit at 65DAS for effective and integrated management of the sucking insect pests and disease(i.e. aphid, jassids, thrips, tikka, rust etc). (Recommendation)
3. Seed treatment with tebuconazole 1.5g/kg of seed and spray the tank mixture of acetamiprid 20 SP @ 2g + chlorothalonil 75 WP @ 25g/10lit at 40 DAS and imidachloprid 17.8 SL @ 4ml + macozeb 75 WP @ 26g/10 lit at 60 DAS. (Intervention)

OFT organised but due to no rain and unavailability of Irrigation crop failed after germination. It will be taken to next Kharif season.

OFT: 5 – Agriculture Engineering:

Title: Mulching in Papaya crop

Problem: Poor growth and high mortality in Papaya seedlings

Causes:

1) Poor soil fertility
2) Improper sowing time
3) High temperature
4) High evaporation of soil moisture
5) Inefficient use of irrigation water
6) Lack of knowledge
7) Non availability of quality seedlings
8) Poor plant protection measures

Intervention: High evaporation rate of soil moisture

Treatments: T1 – Local Method (without mulching)
T2 –Wheat straw mulching
T3 - Plastic Mulching (Recommendation)

Due to less monsoonal rainfall, and poor access to irrigation constitutes a common cause for failure, in current year this OFT will be taken again.

3.2 Achievements of Frontline Demonstrations:

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

List of technologies demonstrated during previous year and popularized during 2012-13 and recommended for large scale adoption in the district

S. No	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of villages	No. of farmers	Area in ha
1	Varietal evaluation	Introduction of variety of Gram GG-3	Training, demonstration, field days	06	29	11.6
2	Varietal Evaluation	Introduction of variety of Maize HQPM-1	Training, demonstration, field days	04	10	4
3	Varietal Evaluation	Introduction of variety of Cumin GC-4	Training, demonstration	04	10	4
4	Varietal Evaluation	Introduction of variety of Wheat GW-366	Training, demonstration, field days	09	25	10
5	Varietal Evaluation	Introduction of variety of Sesame GT-3	Training, demonstration, field days	04	10	4
6	Varietal Evaluation	Introduction of variety of Groundnut TG-37A	Training, demonstration, field days	05	10	4
7	Varietal Evaluation	Introduction of variety of Soybean GS-3	Demonstration, field days	06	10	4
8	Varietal Evaluation	Introduction of variety of Brinjal JBGR-1	Training, demonstration, field days	05	05	2

9	Varietal Evaluation	Introduction of variety of Brinjal GJB-2	Training, demonstration, field days	03	05	2
10	IPM in Cotton	IPM in Cotton	Training, demonstration, field days	10	15	6
11	IDM in Groundnut	IDM in Groundnut	Training, demonstration, field days	09	19	7.6
12	Farm Machineries	Introduction of Cotton shredder	Training, demonstration, field days	10	10	20
13	Farm Machineries	Introduction of Air assisted blast sprayer for mango orchard	Training, demonstration, field days	02	05	02

Details of farming situation of FLDs conducted (April 2012 to March 2013)

Crop	Season	Farming situation	Type of Soil	Status of Soil			Sowing date	Harvesting Date
				N	P	K		
Gram	Rabi 2011-12	Irrigated	M.Black	L	H	H	2nd week of Nov.-2011	1st to 2nd week of Feb.-2012
Maize	Rabi 2011-12	Irrigated	M.Black	L	H	H	1st and 2nd Week of Nov. 2011	2nd to 3rd week of Feb.-2012
Cumin	Rabi 2011-12	Irrigated	M.Black	L	H	H	1st and 2nd Week of Nov. 2011	2nd to 3rd week of Feb.-2012
Wheat	Rabi 2011-12	Irrigated	M.Black	M	M	H	1st and 2nd Week of Nov. 2011	3rd to 4th week of Feb.-2012
Sesame	Summer 2012	Irrigated	M.Black	M	M	H	4th week of Feb.-2012	4th week of April-2012

Groundnut	Summer 2012	Irrigated	M.Black	L	M	H	2nd to 3rd week of Feb.-12	1st week of May-2012
Soyabean	Kharif 2012	Rainfed	M.Black	L	M	M	3rd week of June to 2nd July-2012	3rd to 4th week of Sept.-2012
Maize	Kharif 2012	Rainfed	M.Black	L	M	M	3rd week of June to 2nd July-2012	3rd to 4th week of Sept.-2012
Groundnut	Kharif 2012	Rainfed	M.Black	L	M	H	3rd week of June to 2nd July-2012	3rd to 4th week of Sept.-2012
Cotton	Kharif 2012	Rainfed	M.Black	L	M	M	3rd week of June to 2nd July-2012	3rd to 4th week of Sept.-2012
Brinjal	Kharif 2012	Rainfed	M.Black	M	M	M	3rd week of June to 2nd July2012	3rd to 4th week of Dec.-2012
Gram	Rabi 2012-13	Irrigated	M.Black	L	H	H	3rd week of Nov.-2012	1st week of March-2013
Cumin	Rabi 2012-13	Irrigated	M.Black	L	H	H	3rd week of Nov.-2012	1st week of March-2013
Wheat	Rabi 2012-13	Irrigated	M.Black	M	M	H	3rd week of Nov.-2012	1st fortnight of March-2013
Brinjal	Rabi 2012-13	Irrigated	M.Black	L	H	H	1st week of Nov.-2012	1st week of March-2013
Sesame	Summer 2013	Irrigated	M.Black	M	M	H	2nd to 3rd week of Feb.-2013	Standing
Groundnut	Summer 2013	Irrigated	M.Black	M	M	H	4th week of Feb.-2013	Standing

Performance of Front line demonstrations of crops

Sr. No.	Crop	Season	Component /variety	No of FLD	Area in ha.	Average yield (q/ha)		% increase in productivity over local check
						Demon.	Local check(Variety)	
1	Gram	Rabi 2011-12	GG-3	10	4	17.5	15(Local)	16.67
2	Maize	Rabi 2011-12	HQPM-1	10	4	12.5	11.13(Local)	12.36
3	Cumin	Rabi 2011-12	GC-4	10	4	6.19	5.66(GC-2)	9.75
4	Wheat	Rabi 2011-12	GW-366	25	10	45.35	42.40(LoK-1)	7.09
5	Sesame	Summer 2012	GT-3	10	4	11.33	10.35(GT-2)	9.48
6	Groundnut	Summer 2012	TG-37	10	4	17.37	15.79(GG-2)	10.16
7	Soyabean	Kharif 2012	GS-3	10	4	13.35	11.43(Local)	17.18
8	Maize	Kharif 2012	HQPM-1	10	4	5.25	4.58(Local)	13.23
9	Groundnut	Kharif 2012	Trichoderma	19	9.6	14.26	13.23	10.70
10	Cotton	Kharif 2012	IPM	15	7.5	19.45	17.17	13.67
11	Brinjal	Kharif 2012	JBGR-1	5	2	135.26	126.90(Local)	6.60

12	Gram	Rabi 2012-13	GG-3	10	4	14.32	12.80(Local)	10.94
13	Cumin	Rabi 2012-13	GC-4	10	4	5.51	4.96(GC-2)	9.68
14	Wheat	Rabi 2012-13	GW-366	25	10	31.49	28.35(LoK-1)	10.95
15	Brinjal	Rabi 2012-13	GJB-2	5	2	73	66.4(Local)	8.43
16	Sesame	Summer-2013	GT-3	20	4	Crop Standing		
17	Groundnut	Summer-2013	TG-37	5	2	Crop Standing		
			Total	**209**	**83.1**			

Economic Impact of FLDs

Sr. No.	Crop	Variety/ Component	Season	Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Cost Ratio (Gross Return / Gross Cost)	
				Demo	Local Check	Demo	Local Check	Demon.	Local Check	Demo.	Local
1	Gram	GG-3	Rabi 2011-12	13050	13050	56875	48750	43825	35700	4.36	3.74
2	Maize	HQPM-1	Rabi 2011-12	9500	9500	17500	15575	8000	6075	1.84	1.64
3	Cumin	GC-4	Rabi 2011-12	14080	14080	86625	79188	72545	65108	6.15	5.62

4	Wheat	GW-366	Rabi 2011-12	24228	24228	56688	53000	32460	28772	2.34	2.19
5	Sesame	GT-3	Summer 2012	8889	8889	62333	51736	53444	42847	7.02	5.82
6	Groundnut	TG-37	Summer 2012	14280	14280	60795	55265	46515	40985	4.27	3.88
7	Soybean	GS-3	Kharif 2012	12700	12700	36712	31419	24012	18718	2.86	2.44
8	Maize	HQPM-1	Kharif 2012	12000	11650	18375	14000	6375	2350	1.53	1.20
9	Groundnut	Trichoderma	Kharif 2012	36679	37468	80381	72765	43702	35297	2.19	1.94
10	Cotton	IPM	Kharif 2012	28156	26492	104830	92553	76674	66061	3.70	3.47
11	Brinjal	JBGR-1	Kharif 2012	33985	32050	54104	38067	20119	6017	1.59	1.19
12	Gram	GG-3	Rabi 2012-13	13725	13650	59057	52829	45332	39179	4.30	3.87
13	Cumin	GC-4	Rabi 2012-13	12500	12500	60910	54848	48410	42348	4.87	4.39
14	Wheat	GW-366	Rabi 2012-13	24500	24500	59042	53149	34542	28649	2.41	2.17
15	Brinjal	GJB-2	Rabi 2012-13	29500	29500	56880	52456	27380	22956	1.93	1.78
16	Sesame	GT-3	Summer-13	Crop Standing							
17	Groundnut	GG-2	Summer-13	Crop Standing							

Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Name of the technology demonstrated	Crop	No. of farmers	Area (ha)	Performance parameters / Indicators (Field Capacity) ha/hr	Remarks
Cotton Shredder	Compost of Farm waste	Cotton	10	20	0.33 to 0.28	-
Air Assisted Blast Sprayer	Orchard Spray	Mango	5	2	0.25	Very effective spraying

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter
					Demon.	Local	
	NIL						

(iii) Other Enterprises

Enterprise	Variety/ breed/Species /others	No. of farmers	No. of Units	Performance parameters / indicators	Data on parameter in relation to technology demonstrated		% change in the parameter
					Demo	Local	
Mushroom		NIL					
Apiary							
Sericulture							

Frontline Demonstration on

Frontline Demonstration on Maize

Frontline Demonstration on Soybean

Frontline Demonstration on Cotton

FRONT LINE DEMONSTRATION

Frontline Demonstration on Cumin

Frontline Demonstration on

Frontline Demonstration on Wheat

Frontline Demonstration on Cumin

Implement Demonstration

Farmers Reaction:

Crop	Variety	Farmers' reaction
Gram	GG-3	► High Yield Variety. ► Bold seeded Variety ► Stunt virus resistant Variety
Cumin	GC-4	►Research needs on cumin wilt disease ►Wilt disease found less as compare to other Variety
Wheat	GW-366	► Seed provided was healthy with good germination ►Grain quality is good for higher market price
Soyabean	GS-3	► Higher yielding variety and less infestation of pest and disease
Groundnut	TG-37A	► Higher yield Variety
Groundnut	*Trichodermma*	► Better control of stem rot, when applied for long term
Sesame	GT-3	►Bold seeded, whiteness more and higher production then other varieties
Bajari	GHB-538	► Higher yielding variety, best for fodder purpose ► Synchronization in maturity
Maize	HQPM1	► Good for food purpose
Brinjal	JBGR-1	► Higher yielding variety ► Good quality fruits and best for Bhartha

3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

A) ON Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Horticulture										
Production technology of Vegetables	1	17	0	17	0	0	0	17	0	17
Nursery raising	1	15	0	15	5	0	5	20	0	20
Production technology of root crops	1	4	0	4	10	0	10	14	0	14
New varieties of Summer vegetables	1	12	0	12	5	0	5	17	0	17
Fruits in dry land area	1	16	0	16	0	0	0	16	0	16
Value addition in dry land fruits	1	20	0	20	0	0	0	20	0	20
Production technology of Spices crops	1	20	0	20	0	0	0	20	0	20
Total	**7**	**104**	**0**	**104**	**20**	**0**	**20**	**124**	**0**	**124**
II Home Science										
Preparation of low cost diet for children	1	0	21	21	0	04	04	0	25	25
Work simplification for women in household & agri. Activities	1	0	17	17	0	03	03	0	20	20

Drudgery reduction technologies for women	1	0	29	29	0	10	10	0	39	39
Value addition in food grains	1	0	14	14	0	0	0	0	14	14
Tie & Die work	1	0	20	20	0	0	0	0	20	20
Protein & Energy rich diet	1	0	25	25	0	0	0	0	25	25
Capacity building training for SHGs for women	1	0	13	13	0	17	17	0	30	30
Preparation of Jam & Catch up	1	0	20	20	0	0	0	0	20	20
Total	**8**	**0**	**159**	**159**	**0**	**34**	**34**	**0**	**193**	**193**
III Agril. Engineering										
Training on Biogas Plant	1	24	0	24	11	0	11	35	0	35
Repairing & Maintenance of Farm Implements	1	17	0	17	2	0	2	19	0	19
Watershed Management	1	17	0	17	9	0	9	26	0	26
Bio Compost of Farm waste	1	5	0	5	7	0	7	12	0	12
Training on Rotavator and Cotton Shredder	1	15	0	15	9	0	9	24	0	24
Installation & Maintenance of Drip Irrigation	1	21	0	21	6	0	6	27	0	27
Use Plastic in Agriculture	1	24	0	24	5	0	5	29	0	29
New & Improved on Farm Implements	1	21	0	21	9	0	9	30	0	30

Renewable energy in Agriculture	1	27	0	27	5	0	5	32	0	32
Total	**9**	**171**	**0**	**171**	**63**	**0**	**63**	**234**	**0**	**234**
IV Plant Protection										
IPM and IDM in Summer crops	1	22	0	22	0	0	0	22	0	22
IPM and IDM in Vegetable crops	1	0	15	15	0	0	0	0	15	15
IDM in Kharif crops	1	19	0	19	0	0	0	19	0	19
Biological Controls of Kharif crops	1	0	15	15	0	0	0	0	15	15
IPM and IDM in Rabi crops	1	11	22	33	0	0	0	11	22	33
Use of Botanical Pesticides	1	19	15	34	0	0	0	19	15	34
Total	**6**	**71**	**67**	**138**	**0**	**0**	**0**	**71**	**67**	**138**
V Extension										
Update knowledge level of farmer on Kharif crop	1	20	0	20	0	0	0	20	0	20
Organizing effective FLDs	2	23	30	53	0	0	0	23	30	53
Skill Development for WDT	1	23	11	34	4	2	6	27	13	40
Leadership development & Importance of training	1	26	0	26	0	0	0	26	0	26
Leadership development in students	1	48	35	83	15	6	21	63	41	104
Youth development on Rabi crops	1	30	0	30	0	0	0	30	0	30
Total	**7**	**170**	**76**	**246**	**19**	**8**	**27**	**189**	**84**	**273**
(B) Rural Youth										
Watershed Management	1	18	17	35	12	8	20	30	25	55

Youth development on Summer crops	1	0	12	12	0	12	12	0	24	24
Total	**2**	**18**	**29**	**47**	**12**	**20**	**32**	**30**	**49**	**79**
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**39**	**534**	**331**	**865**	**114**	**62**	**176**	**648**	**393**	**1041**

B) Off Campus Training

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Horticulture										
Production technology of Summer Vegetables Crops	1	0	0	0	20	0	20	20	0	20
Production Technology of Cucurbitaceous family crops	1	18	0	18	0	0	0	18	0	18
Green House Technology	1	31	0	31	3	0	3	34	0	34
Net House Technology	1	23	0	23	0	0	0	23	0	23
Crops Grown in Net House	1	27	0	27	13	0	13	40	0	40

New varieties of Vegetables crops	1	0	0	0	49	0	49	49	0	49
Information about Gum Guar	1	19	0	19	0	0	0	19	0	19
Organic farming	1	29	0	29	4	0	4	33	0	33
Production Technology of Water melon & Musk melon	1	10	0	10	39	0	39	49	0	49
Production technology of Cumin	1	18	0	18	2	0	2	20	0	20
Production technology of Chilly	1	23	0	23	17	0	17	40	0	40
Total	**11**	**198**	**0**	**198**	**147**	**0**	**147**	**345**	**0**	**345**
II Home Science										
Work simplification for women in household & agri. Activities	1	0	64	64	0	0	0	0	64	64
Minimization of nutrient loss in processing	1	0	52	52	0	05	05	0	57	57
Different Nutritious recipes	1	0	110	110	0	0	0	0	110	110
Awareness about Vaccination for Children	1	0	40	40	0	25	25	0	65	65
Different embroidery works	1	0	24	24	0	15	15	0	39	39
Nutritional requirements for pregnant & lactating women	1	0	18	18	0	04	04	0	22	22
Value addition in Milk	1	0	10	10	0	04	04	0	14	14
Safe storage of food grains	1	0	10	10	0	08	08	0	18	18
Total	**8**	**0**	**328**	**328**	**0**	**61**	**61**	**0**	**389**	**389**

III Agril. Engineering										
Installation and maintenance of Drip irrigation	1	66	0	66	20	0	20	86	0	86
Training on Rotavator and Cotton Shredder	1	41	0	41	4	0	4	45	0	45
Use Plastic in Agriculture	1	17	0	17	3	0	3	20	0	20
New & Improved Farm Implements	1	9	0	9	9	0	9	18	0	18
Training on Biogas	1	17	0	17	3	0	3	20	0	20
Use of Improved Farm Implements	1	23	0	23	0	0	0	23	0	23
Efficient use of water in different Irrigation System	1	19	0	19	1	0	1	20	0	20
Use of Cotton shredder and Bio compost of farm waste	1	35	25	60	8	0	8	43	25	68
Total	**8**	**227**	**25**	**252**	**48**	**0**	**48**	**275**	**25**	**300**
IV Plant Protection										
IPM and IDM in Summer crops	1	42	0	42	2	0	2	44	0	44
IPM and IDM in Vegetable crops	1	27	15	42	0	0	0	27	15	42
IDM in Kharif crops	1	41	0	41	0	0	0	41	0	41
Biological Controls of Kharif crops	1	38	0	38	0	0	0	38	0	38
IPM and IDM in Rabi crops	1	29	15	44	0	0	0	29	15	44
Use of Botanical Pesticides	1	38	10	48	0	0	0	38	10	48
Total	**6**	**215**	**40**	**255**	**2**	**0**	**2**	**217**	**40**	**257**

V Extension										
Update knowledge of farmers on mix farming	1	35	0	35	0	0	0	35	0	35
Income Generation though Co-operative movement	2	0	49	49	0	4	4	0	53	53
New extension system & youth development	1	31	0	31	6	0	6	37	0	37
FIG formation & knowledge of soil testing	1	0	30	30	0	0	0	0	30	30
Update knowledge of farmer on major Rabi crops	1	42	0	42	12	0	12	54	0	54
Update knowledge of farmer on major Summer crops	1	59	0	59	1	0	1	60	0	60
Total	**7**	**167**	**79**	**246**	**19**	**4**	**23**	**186**	**83**	**269**
(B) RURAL YOUTH										
Bank loans/Insurance for field crops	1	21	0	21	0	0	0	21	0	21
Total	**1**	**21**	**0**	**21**	**0**	**0**	**0**	**21**	**0**	**21**
(C) EXTENSION PERSONNEL										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**41**	**828**	**472**	**1300**	**216**	**65**	**281**	**1044**	**537**	**1581**


Off Campus

Krishi Mahostav


Off Campus


Off Campus

Technology Week

Technology Week


On Campus


On Campus

C SUMMARY OF TRAINING:

Training Achievement: (On campus)

Sr No	Subject	No of training	No of Participants		
			Male	Female	Total
Training for Farmers and Farm women					
1	Horticulture	7	124	0	124
2	Home Science	8	0	193	193
3	Plant Protection	6	71	67	138
4	Agriculture Engineering	9	234	0	234
5	Extension Education/Capacity building	7	189	84	273
6	Training for Rural youth	2	30	49	79
7	Training for Extension Functionaries	0	0	0	0
Total		**39**	**648**	**393**	**1041**

Training Achievement: (Off campus)

Sr No	Subject	No of training	No of Participants		
			Male	Female	Total
Training for farmers and Farm women					
1	Horticulture	11	345	0	345
2	Home Science	8	0	389	389
3	Plant Protection	6	217	40	257
4	Agriculture Engineering	8	275	25	300
5	Extension Education/capacity building	7	186	83	269
6	Training for Rural youth	1	21	0	21
7	Training for Extension Functionaries	0	0	0	0
Total		**41**	**1044**	**537**	**1581**

D Vocational training programmes for Rural Youth

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
					M	F	Total	Type of units	Number of units	Number of persons employed	
Enterprise	07/08/12 to 09/08/12	Different bakery products	Income generation	3	0	24	24	0	0	0	0
Enterprise	30/10/12	Production and handling of bioagent and microbial pesticides	Income generation	1	0	21	21	0	0	0	0

E Sponsored Training Programmes

Sr. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/ RY/EF)	No. of courses	No. of Participants									Sponsoring Agency
								Others			SC/ST			Total			
								M	F	T	M	F	T	M	F	T	
1	01/05/12	Crop Production	Agronomy	Production Technology	3	FW	1							0	24	24	ATMA Junagadh
2	03/05/12	Safe use of Pesticides	Plant protection	IPM	1	FW	1							0	40	40	ATMA
3	12/06/12	FIG formation	Extension		3	RY	1							17	0	17	ATMA Junagadh
4	14/06/12	Leadership development	Extension		1	RY	1							35	0	35	ATMA

5	26/06/12	Prod. Technology of Vegetable crops	Horticulture	Production Technology	1	RY/EF	1							505	0	505	Ultra Tech Cement Kovaya
6	18/07/12	Greenhouse Technology	Horticulture	High Technology	1	RY	1							22	18	40	DRDA Amreli
7	21/07/12	Importance of training	Extension		1	EF	1							25	0	25	ATMA
8	23/07/12	New and Improved Farm Implements	Agri. Engg.	Farm Mechanization	3	PF	1							31	0	31	ATMA Junagadh
9	29/08/12	Prod. Technology of Vegetable crops	Horticulture	Production Technology	1	RY/EF	1							715	0	715	SBI Rajula
10	28/08/12	Value Addition in fruits and vegetables	Home science		3	RY/PW	1							0	81	81	ATMA Junagadh
11	12/09/12	FIG formation	Extension		3	RY/FW	1							0	25	25	ATMA Junagadh
12	25/09/12	Net house technology	Horticulture	High Technology	3	RY	1							25	0	25	ATMA Junagadh
13	09/10/12	Prod. Technology of beet root, rapeseed	Horticulture	Production Technology	2	RY	1							15	0	15	SRTT, A,bad
14	6/11/12	Production technology of Rabi crops	Agronomy	Production Technology	3	RY/PW	1							0	28	28	ATMA Junagadh

15	27/11/12	Production technology of Rabi crops	Agronomy	Production Technology	3	RY/PW	1							0	28	28	ATMA Junagadh
16	4/12/12	Value addition in milk	Home science		3	FW	1							0	30	30	ATMA Junagadh
Total							**16**							**1390**	**274**	**1664**	

3.4. Extension Activities (including activities of FLD programmes)

S. No.	Nature of Extension Activity	No. of activities	No of participants (General)			No of participants (SC/ST)			Total		
			M	F	T	M	F	T	M	F	Total
1	Field Day	22	201	38	239	23	5	28	224	43	267
2	Kisan Ghosthi	26	197	50	247	17	11	28	214	61	275
3	News paper coverage	9	-	-	-	-	-	-	-	-	-
4	Popular article	5	-	-	-	-	-	-	-	-	-
5	Extension literature	5	-	-	-	-	-	-	-	-	-
6	Scientist visit to farmers field	143	109	7	89	27	0	27	136	7	143
7	Farmers visit to KVK	750	601	41	642	101	7	108	702	48	750
8	Diagnostic service	224	196	0	196	28	0	28	224	0	224
9	Telephonic Guidelines	656	-	-	-	-	-	-	-	-	-
10	Lecture delivered	41	881	210	1091	189	38	227	1070	248	1318
11	Implement Demo.	48	-	-	-	-	-	-	-	-	-
12	Celebration of Technology Week	1	237	59	296	45	12	57	282	71	353
13	Soil/Water Sample Analyzed	48	--	--	--	--	--	--	--	--	--
	Grand Total	**1978**									**3330**

Diagnostic Service

Diagnostic Service

Diagnostic Service

Diagnostic Service

Sponsored Training

Field Day

Kissan Goshti

Kissan Goshti

3.5 Production and supply of Technological products

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
	Wheat	GW-366	94.5	93160	363
	Maize	HQPM1	0.8	8000	10
OILSEEDS					
	Ground nut	TG-37A	1.5	10500	10
	Sesame	GT-3	0.2	2200	20
Pulses					
	Soybean	GS-3	2.5	10000	10
	Gram	GG-3	7.25	42050	29
Vegetables					
	Brinjal	GJB-2	0.001	600	5
	Tomato	GT-3	0.001	600	5
	Indian Bean	JI-11	0.001	400	2
OTHERS (Specify)					

SUMMARY

Sr. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS (Wheat)	95.3	101160	373
2	OILSEEDS	1.7	12700	30
3	PULSES	9.75	52050	39
4	VEGETABLES	0.003	1600	12
5	OTHERS			
TOTAL		**106.753**	**167510**	**454**

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
VEGETABLES					
	Brinjal	JBGR-1	1750	375	22
	Tomato	GT-3	250	125	8

SUMMARY

Sr. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	-	-	-
2	VEGETABLES	2000	500	30
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL	**2000**	**500**	**30**

BIO PRODUCTS						
Major group/class	**Product Name**	**Species**	**Quantity**		**Value (Rs.)**	**Provided to No. of Farmers**
			No	**(kg)**		
BIOAGENTS	*Trichodermma*	T.hargenium	250	250	17500	150
	BB powder					
		NIL				
BIOFERTILIZERS						
1						
2						
3						
4						
BIO PESTICIDES						
1	Neem Oil					

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	*Trichodermma*	*T.hargenium*	250	250	17500	150
2	*BB powder*					
2	BIO FERTILIZERS		NIL			
3	BIO PESTICIDE	Neem oil				
	TOTAL		250	250	17500	150

3.6. Literature Developed/Published

(A) KVK News Letter

(B) Literature developed/published:

Item	Title	Authors name	Number of copies
Research papers	Solar Tunnel Dryer for Rural Area	M. S. Dulawat, A. M. Parakhia, B. B. Kunjadia, N. S. Joshi	-
	Effect of Different Dose of Chemical Fertilizers on Quality and Nutrient Content of Chrysanthemum Varieties	N. S. Joshi, M. S. Dulawat, D. M. Pathak and N. V. Patel	-

	Biology of Onion Thrips, Thrips Tabaci (Lind.) (Thysanoptera: Thripidae) On Onion Allium Cepa (Linnaeus)	N. V. Patel, D. M. Pathak, N. S. Joshi and M. R. Siddhapara	-
	Effect of Different Level of Nitrogen Fertilizer on the Incidence of Onion Thrips, Thrips Tabaci (Lind.) (Thysanoptera: Thripidae) On Onion Allium Cepa (Linnaeus)	N. V. Patel, D. M. Pathak, N. S. Joshi, M. R. Siddhapara	-
	Control of sesame phyllody caused by PLO's	D. M. Pathak , N. S. Joshi , M.S. Dulawat and N. V. Patel	-
	Phyllody Caused By Plo's: An Alarming Disease in Sesame	D. M. Pathak , N. S. Joshi, M.S. Dulawat and N. V. Patel	-
Total	**5**		
Technical reports	ZREAC Rabi 2011-12, Summer 2012	-	40
	ZREAC Kharif 2012		40
	AGRESCO 2012-13		35
Popular articles	2		
Leaflets/folders	Details Activities of KVK Amreli	-	1650
Total	6	-	-
Grand Total	**13**	**-**	**1765**

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1	VCD	Activities and demonstration unit of KVK	1

3.7. Success stories

I. Theme - High tech technology

Title -Growing of capsicum in green house

Name -Shri Bharatbhai Bhanubhai Kikani

Village: - Varsada, Tal/Dist: - Amreli

Gujarat, Phone no: - 09879157937

Age :- 29 yrs Education :- BA(Hindi) Land :- 4 ha Experience :- 2 years Main crops :- cotton, gum guar, capsicum Others :- Member of Gujarat green house farmer association	Bharatbhai kikani is farmer of varsada village of amreli district. First he growing cotton as usual crops after he take training and contact with KVK, amreli and gain the knowledge. He makes a greenhouse about 4000 sq. meter in his field and scientifically growing capsicum in green house. He takes production about 40 to 50 ton/4000 sq. meter. He also give fertiliser through drip irrigation also installed fogger for cooling effect in site green house. He earns 3,00,000 rupees in four month. Cost of growing capsicum is 1,00,000 lakh rupees without project cost (24 lakh projected cost) so he get net profit about 2,00,000 lakh rupees from 4000 sq. meter in last four month

Use of this technology:-

Due to this technology, bharatbhai give knowledge to other farmer and aware about this technology. So, their friend circle and other farmer adopt this technology.

II Success Story

Name of the farmer: Rameshbhai Balubhai Gondalia Village: Babapur Ta/Dist.: Amreli Age : 60 years Education : B.A. Landholding : 18 Acre Farming Experience : 40 years Crops Grown : Cotton, wheat, castor, Sorghum, Pearl millet, Pulses Livestock : Cow	

Rameshbhai get ready to make experiment on comparison of Wheat variety after got the training from KVK. He has compare Wheat Variety GW-366 and older Lok -1 on his field in one acre each. He found Result as shown in Table

Table: Result of Comparison

Variety Yield	Lok–1	GW–366	Difference	Feedback
Yield Q/ha	22.68	30.89	8.21 (Q/ha) 36.22 %	(1) No effect of Salt affected water to this new variety i.e. GW-366 (2) Spike is long as compare to Lok-1

As a success of this he gets additional income Rs. 15394 per hectare just due to changing variety. He also advises to farmers in various programme such as training, telephone etc. as a contact farmer of KVK.

III Success Story: Value Addition in Jujube (Ber)

Personal Profile

Name of Farmer with Adress	:	Arvindbhai Bavabhai Gediya Village: Bhuva Taluka: Savar Kundla Mo. No. 9427277014
Age	:	46 years
Education (Highest level and subject)	:	5th standard
Land holding (hectare)	:	2.5 ha
Crops grown Rice, Wheat etc.	:	Cotton, Jujube (251 trees)
Lives stock (cow, buffalo etc in number)	:	2

Arvind Bhai is a farmer of Bhuva village. He has 251 trees of Jujube. In the Season of Jujebe production he gets low selling rate, So he started drying of Jujube. He sells dried fruits and also made Athanu & Candy powder from dried Jujube. He sell dried fruits in rate of Rs. 150/kg and before dry he gets Rs. 30/kg, his dried product has good demand in market. After drying there is 70 % reduction in moisture. He dries approximately 400 kg of Jujube in a year.

3.8 Other activities:

Innovative Technology:

Sr. No.	Crop/ Enterprise	Innovative Technology
1	Cumin	Line sowing instead of broadcasting
2	Cotton	Irrigation in alternate furrow
		Application of fertilizer in nitrogenous form
3	Groundnut	Application of fertilizer in SSP and Ammonium Sulphate form
4	Wheat	Spraying of DiEthane M-45 at milking stage to avoid diseases.

3.9 Indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development

Sr. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	All Line sowing crops	Manually operated seed drill	Sowing purpose
2	Groundnut/Cotton	Sprayer operating by Bicycle	Spraying purpose
3	Cotton	Extraction of cow urine with dhatura and desi akda	For the control of sucking pest of cotton
4	Cotton	Fermented Bajra extract	Larvae of cotton pest
5	Pulses and cereals	Use of Neem leaves	Storage purpose
6	Castor	Use of milk of Castor	Stem rot of castor

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

- Identification of courses for farmers/farm women: Need based
- Rural Youth: Self employment
- In-service personnel: Capacity building

3.12 Field activities

i. Number of villages adopted: ---10+6 (for 2012-13 year)=16

ii. No. of farm families selected : --60

3.13 Activities of Soil and Water Testing Laboratory

1. Year of establishment : March-2011
2. List of equipments purchased with amount:

Sr. No	Name of the Equipment	Qty.	Cost
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

3.14 Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	48			
Water Samples		**NIL**		
Plant Samples				
Petiole Samples				
Total				

3.15 Other Schemes Activities

A) Agriculture Technology Information Centre Activities (ATIC):

Sr. No.	Types of training	No. of Training	No. of participants
1	On Campus	10	251
2	Off Campus	6	376
	Total	**16**	**627**

Front Line Demonstration: (ATIC)

Sr. No.	Crop	Season	Component /Variety	No of FLD	Area (ha.)	Average yield (q/ha)		% increase in productivity over local check
						Demo.	Local check	
1	Gram	Rabi 2011-12	GG-3	5	2	20	17.5	14.29

Economic Impact of FLDs

Sr. No	Crop	Variety	Season	Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Cost Ratio (Gross Return / Gross Cost)	
				Demo	Local Check	Demo	Local Check	Demo.	Local Check	Demo.	LC
1	Gram	GG-3	Rabi	13050	13050	65000	56875	51950	43825	4.98	4.36

B) Field Farm School on Groundnut

S. No.	Date	Village	Taluka	Duration (days)	Total of participants		
					M	F	T
1	26/09/12	Mayapadar	Kukavav	1	-	25	25
2	28/09/12	Matirala	Lathi	1	25	-	25
3	29/09/12	Mota Bhandariya	Amreli	1	25	-	25
4	16/10/12	Gigasan	Dhari	1	25	-	25
5	17/10/12	Karjala	Savarkundla	1	25	-	25
6	18/10/12	Shilana	Bagasra	1	25	-	25
7	03/11/12	Dhulia Agariya	Rajula	1	25	-	25
				Total	**150**	**25**	**175**

Field Farm School on Wheat

S. No.	Date	Village	Taluka	Duration (days)	Total of participants		
					M	F	T
1	21/02/13	Liliya	Liliya	1	25	-	25
2	01/03/13	Khari	Bagasra	1	25	-	25
3	02/03/13	Mota Bhandariya	Amreli	1	-	25	25
4	04/03/13	Karjala	Savarkundla	1	25	-	25
5	05/03/13	Godavadar	Liliya	1	25	-	25
6	06/03/13	Mayapadar	Kukavav	1	-	25	25
7	07/03/13	Babapur	Amreli	1	25	-	25
				Total	**125**	**50**	**175**

Inputs given under FFS:

Sr. No.	Crop	Inputs	Season/Year	No. of Farmers
1	Groundnut	Carbendazim (100 gm) Diethan-M-45 (500 gm) Acetamaprid (100 gm) Imidachloprid (100 ml) Pak Sarankshan Book (1 no.)	Kharif 2012	175
2	Wheat	Seed (GW-496 : 40 kg)	Rabi 2012-13	07

C) Seed Village Programmes:

I. Training under Seed Village Programme:

Sr. No.	Title	Participants		
		Others	SC/ST	Total
1	IDM in Rabi Crops	0	51	51
2	Biological Control of Pests and Diseases	0	24	24
3	Care during Harvesting, Grading and Storage of seeds	0	57	57
4	Pure seed production technique of wheat	150	50	200
5	Pure seed production technique of Gram	25	0	25
	Total	**175**	**182**	**357**

II. Seed Supplied:

Sr. No.	Crop	Variety	Season/Year	No. of demo.	Area (ha)
1	Groundnut	TG-37A	Summer 2012	10	2.5
2	Gram	GG-3	Rabi 2012-13	14	5.6
3	Wheat	GW-366	Rabi 2012-13	338	135.2
4	Groundnut	TG-37A	Summer 2013	10	2.5
5	Sesame	GT-3	Summer 2013	10	2.5
			Total	**382**	**148.3**

D) Celebration of Technology Week: 1st to 6th October-2012

Technology week was celebrated during the 1st to 6th October-2012. Farmers/farm women/rural youth and rural girls visited the centre. In this week information given about production technology and plant protection of different agricultural and horticultural crops, and different improved farm implements demonstrated like air assisted air sprayer, rotavator, shredder etc. Total 353 farmers/rural youth/farm women participated during the week.

4.0 Impact of Krishi Vigyan Kendra (2006-11)

Distribution of the respondents according to its extension intervention

N = 120

Sr. No.	Extension indicator	Impact of Krishi Vigyan Kendra				Difference	Ranked
		Before		After			
		Frequency	Percent	Frequency	Percent		
1	Gain in knowledge about technology and package of practices	43.00	35.83	77.00	64.17	28.33	IV
2	Extent of awareness	25.00	20.83	95.00	79.17	58.33	III
3	Change in attitude	22.00	18.33	98.00	81.67	63.33	II
4	Improvement in work performance / skill	51.00	42.50	69.00	57.50	15.00	V
5	Extent of spread of technology	18.00	15.00	102.00	85.00	70.00	I
6	Increase in SHGs / FIGs	53.00	44.17	67.00	55.83	11.67	VI
7	Formation / establishment of co-operative	53.00	44.17	67.00	55.83	11.67	VI

Impact of technological indicator

Sr. No.	Technological indicator	Impact of Krishi Vigyan Kendra				Diffe-rence	Ranked
		Before		After			
		Frequency	Percent	Frequency	Percent		
1	Introduction of new verities	40	33.33	80	66.66	33.33	III
2	Increase in yield / productivity	49	40.83	71	59.16	18.33	VI
3	Increase in area	51	42.50	69	57.50	15.00	VII
4	Increase in production	22	18.33	98	81.66	63.33	I
5	Extent of adoption	43	35.83	77	64.17	28.34	IV
6	Increase in income	38	31.66	82	68.33	36.67	II
7	Generation of employment	55	45.83	65	54.16	8.33	IX
8	Expansion of an enterprise	59	48.33	61	51.67	3.33	X
9	Introduction of new enterprise	58	48.33	62	50.83	1.67	XI
10	Increase in marketable farm produce	59	49.17	61	50.83	1.67	XI
11	Creation of infrastructure	52	43.33	68	56.66	13.33	VIII
12	Opening of farm school	58	48.33	62	51.67	3.33	X
13	Decrease in yield gaps	47	39.16	73	60.83	21.67	V

Impact of farm mechanization / IPM / INM etc.

Sr.No.	Practices	Year 2006	Year 2011	Per cent increase
a)	**Farm mechanization**			
1	Tractor (No.)	30	58	86.67
2	Thresher (No.)	15	23	53.33
3	Seed drill (No.)	30	44	46.67
4	Sprayer (No.)	60	120	100.00
5	Seed cum ferti. Drill (No)	24	39	62.50
6	Drip / Sprikler irrigation set (Ha)	12	22	83.33
b)	**Integrated nutrient management**			
1	FYM (t)	720	780	8.33

2	Urea (t)	30	54	80.00
3	DAP (t)	42	78	85.71
4	SSP (t)	24	38	58.33
5	Potash (t)	12	21	75.00
6	Mineral mix (kg)	12	18	50.00
7	Vermi compst (t)	4	7	75.00
8	Gypsum / Sulpher (t)	30	54	80.00
c)	**IPM**			
1	Use of Trichoderma (kg)	0	300	100.00
2	Pheromen Trap (no)	9	15	66.67
3	NPV (no)	0	13	100.00
4	Neem oil (ltr)	124	236	90.32
5	Bio pesticides	45	85	88.89

Increase of productivity of major crops in KVK adopted villages in last five year (year 2006-2011)

Sr. No.	Crop	Productivity Difference (Q/ha)	Rank
1	Wheat	4.88	**V**
2	Bajara	7.16	**III**
3	Gram	5.77	**IV**
4	Green gram	2.16	**VI**
5	Sesamum	1.29	**VII**
6	Groundnut	9.07	**II**
7	Cumin	0.98	**VIII**
8	Cotton	16.47	**I**

Krishi Vigyan Kendra functioning since 2006 in the Amreli district. Transfer of Agricultural Technology in Rural area during last five year (2006-11) this centre has organised 528 training programme for farmers, Extension functionaries and Rural Youth. Conducting 10 On Farm Trial and 814 Frontline Demonstration. Other Extension activities like field day, lectures, radio talk, scientist visit to farmer's field, farmer fair, diagnostic service etc. organised when needed.

Positive changes occur in adopted villages as result of these activities of the centre. 70 per cent spread of technology, 63 per cent change in attitude of farmer and 58 per cent extent of awareness increases. While increase 33.33 per cent introducing new variety, increase 28.33 percent in the knowledge level of farmers and adoption. Improvement in work performance/skill (15%) and increases 11.67 per cent in FIG/SHG and other co-operative movement and Introduce and expansion of enterprises. Also increases farm mechanisation, IPM,INM. Decreases 21.67 per cent yield gap.

It is concluded that due to KVK activities in adopted villages, increase in crop production from 98 to 1647 kg/ha in major crops resulted in 36.67 per cent increase in income. Generation of 8 per cent employment and increase 13.33 per cent infrastructural facilities.

5.0 LINKAGES

5.1 Functional linkage with different organizations

Sr. No.	Name of linkages
1.	Dy. Director of Agriculture.
2.	Dy. Director of Agril. Extension (FTC)
3.	Dy. Director of Horticulture
4.	Dy. Director of Animal Husbandry
5.	Dy. Director of Soil Conservation
6.	Dy. Director of Social Forestry
7.	Amreli Jilla Madhya sahakari bank
8.	Milk Co-Operative Society
9.	State Bank of India
10.	National Bank for Agriculture & Rural Development (NABARD)
11.	NHRDF
12.	Doordarshan Kendra
13.	All India Radio
14	District Rural Development Agency
15.	ATMA
16.	Mahindra & Mahindra Co. Ltd.

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt. /Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
ATIC	April-2005	State	

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

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

6. Performance of demonstration units

6.1 Nursery raising at KVK:

We also developed one small scale nursery in net house, raising the different vegetables crops seedlings like Brinjal, Papaya and Tomato and selling the seedlings to farmers at normal price.

Sr. No.	Name of seedlings/plants	Quantity (No.)	Provided to No. of farmers
1	Brinjal(JBGR-1)	1750	22
2	Tomtao(JT-3)	250	8

6.2 Horticultural Demonstration Units

Sl. No.	Demo Unit	Year of Estt.	Area ha.	Details of production	Amount (Rs.)		Remarks
				Variety/No. of various plants	Cost of inputs	Gross income	
1	Herbal garden	May-2007	0.5	50	--	--	Age of 4 yrs
2	Orchards unit	2008	0.5	62	--	--	Age of 4 yrs

6.3 Establishment of Herbal Garden

Name of medicinal plants	Tababiya, Vikalo, Mindhol, Garud, Jerkochalu, Nagod, Sarpgandha, Pankhuti, Hadsankal, Simaruba,Ashok, Rukhado, Umaro, bijoru, Pabadi, Bahuniya, Koyalvel, Borsali, Baheda, Dudhalo, Aloe-vera,Mahogani, Nigrokoffi, Harde, Raktchandan, Kamboi, Prushnaparni, Chanothi, Ashwagandha, Barmasi, Mattarsingi, Milishya, Putranjiva, Dudhali, Mindhiaval, Garmalo, Ragatrohido, Paraspipalo, Kadam, Neem, Cheri, Mahudo, Bili, Tetu, Gugal,Ardusi, Lemon grass

Planting date: 29/04/2008-Celebration of Gaurav Din

6.4 Establishment of Orchard

Sr. No.	Name of tree	Number	Sr. No.	Name of tree	Number
1	Mango	3	**7**	Custard apple	05
2	Sapota	9	**8**	Jambun	06
3	Guava	10	**9**	Drum stick	03
4	Lime	3	**10**	Gunda	03
5	Pomegranate	7	**11**	Date palm	05
6	Aonla	8		**Total**	**62**

6.5 Performance of instructional farm including seed Production

S. No.	Name of crop	Date of Sowing	Date of Harvesting	Area (ha)	Details of production			Amount(Rs)	
					Variety	Type of produce	Qty. (Kg)	Cost of input	Gross income
1	Gram	04/11/11	06/02/12	3	GG-3	(General) Seed	4440	50000	269000
2	Wheat	02/12/11	06/03/12	2	GW-366	(General) Seed	10010	50000	218000
3	Sesame	24/02/12	14/05/12	0.5	GT-2	(Breeder) Seed	160	6000	Awaited
4	G'Nut	04/07/12	07/11/12	0.9	GG-2	Seed	325	15300	Awaited
5	G'Nut	04/07/12	08/11/12	0.6	GG-31	Seed	270	10200	Awaited
6	G'Nut	05/07/12	20/11/12	10	GG-20	Seed	2250	120000	Awaited
7	Gram	26/12/12	04/03/13	0.4	GG-3	Seed	200	8000	Awaited

Farm Pond

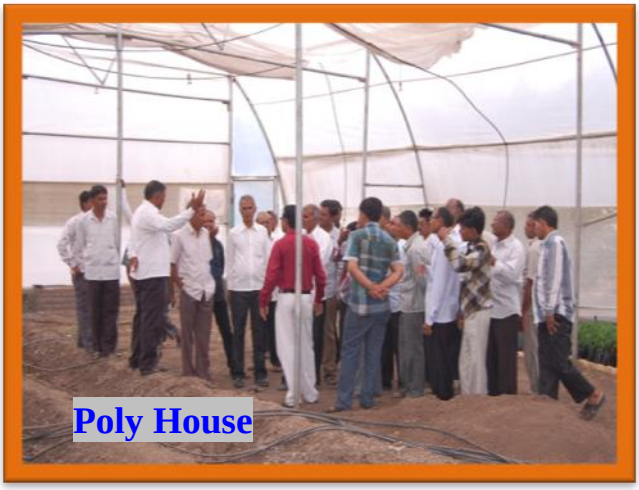

Horticulture cum Biodiversity Unit


Well Recharge Unit

Bio gas Unit


Water shed demonstration Unit


Herbal Garden


Poly House


Green Manuring-KVK Farm

Net house - Capsicum

Net house

Net house - Nursery

Net house

News paper coverage

6.6 Utilization of hostel facilities

Accommodation available (No. of beds): 30

Months	Title of the training course/purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for shortfall (if any)
Apr-12	Visit of farmers	11	11	
Total		**11**	**11**	
May-12	Crop production technology	24	48	
	Crop production technology	25	25	
Total		**49**	**73**	
Jun-12	FIG formation	17	34	
	officer	1	1	
Total		**18**	**35**	
Jul-12	Green House Technology	31	93	
	Visit of farmers	8	8	
Total		**39**	**101**	
Aug-12	Production technology of Horti. Crop	16	16	
	Different bakery product	21	42	
	value addition in fruit crop	33	66	
Total		**70**	**154**	
Sep-12	FIG formation	30	60	
	Net house technology	12	12	
	officer	2	2	
	Value Addition	26	52	
Total		**70**	**126**	
Oct-12	Visit of farmers	14	14	
	Production technology of beet root, rapeseed	15	15	
Total		**29**	**29**	
Nov-12	Production technology of rabi crop	30	60	
	Production technology of rabi crop	28	56	
Total		**58**	**116**	
Dec-12	Value addition in Milk	31	31	
	officer	1	5	
Total		**32**	**36**	
Jan-13	Youth Development	9	9	
	officer	2	2	
Total		**11**	**11**	
Feb-13	Bio- compost of farm waste	21	21	
Total		**21**	**21**	
Mar-13	Student of MBA AAU	2	8	
Total		**2**	**8**	
Grand Total		**410**	**721**	

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
A. With Host Institute	State Bank of India	Agril campus, junagadh	**-----**
B. With KVK	State Bank of India	Amreli (Current A/C) Amreli (Saving A/C)	10837874780 10837877690

7.2 Utilization of funds under FLD on Oilseed *(Rs. In Lakhs)*

Item	Released by ICAR		Expenditure		Unspent balance as on
	Kharif	Rabi	Kharif	Rabi	
Inputs	Nil	-	-	-	-
Extension activities	Nil	-	-	-	-
TA/DA/POL etc.	Nil	-	-	-	-
TOTAL		-	-	-	-

7.3 Utilization of funds under FLD on Maize *(Rs.)*

Item	Released by ICAR		Expenditure		Unspent balance as on March.-13
	Kharif	Rabi	Kharif	Rabi	
Inputs					
Extension activities					
TA/DA/POL etc.					

7.4 Utilization of funds under cotton mini mission (Rs.)

Item	Sanction by ICAR/Comptroller		Expenditure		Unspent balance as on March-13
	Kharif-	Rabi	Kharif	Rabi	
Oilseed	Nil	Nil			
Cotton mini mission	Nil	Nil		---	---

7.5 Utilization of KVK funds during the year 2012-13

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	43,50,000	43,50,000	42,64,605
2	Traveling allowance	1,00,000	1,00,000	39,877
3	Contingencies	9,00,000	9,00,000	8,99,625
	Total (A)	**53,50,000**	**53,50,000**	**52,04,104**
B. Non-Recurring Contingencies				
1	Equipments including SWTL & Furniture/Vehicle/Library	0	0	0
	Total (B)	**0**	**0**	**0**
C.	**Revolving fund**	0	0	0
	GRAND TOTAL (A+B+C)	**53,50,000**	**53,50,000**	**52,04,104**

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

Year	Opening balance as on	Income during the year	Expenditure during the year	Net balance in hand as on
April 2010 to March 2011	6,49,753	8,90,819	7,67,158	7,47,636
April 2011 to March 2012	7,47,636	4,13,798	94,443	11,61,434
April 2012 to March 2013	11,61,434	7,63,965	96,882	18,28,517

8.1 Constraints

(1) Timely release of funds is requested.

(2) Grant on FLD is sanctioned timely but released very late.

(3)Lack of vehicle for transportation of farmers

9. Workshop/Seminar/Conference/Meeting etc attended during the April-2012 to March-2013

S. No.	Name Of Officer	Name of training/ Workshop /Refresher course conference attended	Place	Duration (days)
1	Dr.B.B.Kunjadia	National conference	PAU, Ludhiyana	3
2	Dr.B.B.Kunjadia	Zonal workshop	NAU, Navsari	2
3	Dr. D.M.Pathak	Orientation Programme	V.V. Nagar	28
4	Dr. D.M.Pathak	Bio-Monthly Workshop	DEE, JAU, Junagadh	2
5	Dr. D.M.Pathak	Khedut Margdarshan Samelan	APMC Rajula	1
6	Dr. N.S.Joshi	Khedut Margdarshan Samelan	APMC Rajula	1
7	Miss M.K.Bariya	Managerial skills for extension personal	DEE, JAU, Junagadh	5
8	Shri M.S.Dulawat	Training Programme on Agricultural Marketing	NIAM, Jaipur	3
9	Shri M.S.Dulawat	Utilization of Minor Agri Produce to improve Food Access for Achieving Nutrition Security"	MPUAT, Udaipur	21
10	Dr. B. B. Kunjadia Dr. D. M. Pathak Dr. N. S. Joshi Miss M. K. Bariya Shri M S Dulawat	Training Programme on "Recent advamces in Protected Cultivation, Animal Husbandry and Office Procedure"	DEE, JAU, Junagadh	3
11	Miss M. K. Bariya	Gender Budgeting	NIRD, Jaipur	3

ACTION PLAN
(April- 2013 to March-2014)
K.V.K., JAU, AMRELI

The KVK is a Innovative technological information centre for the development of farming community. The KVK carry out various activities as per objectives and mandates. i.e organizing on campus and off campus short and long term vocational training programmes in agriculture and allied vocational for the farmers, rural youth and farm women with emphasis on " Learning by doing". Organize training to update the extension personal with emerging advances in agricultural research. Gaps to generate production data and feedback will be conducting OFT for identification of specific location technologies. The above activities of KVKs will be organized in details for April, 2013 to March, 2014 is as narrated as under.

1. Training programmes:

The training programmes on various aspects related to Agricultural technology based on thrust areas will be organized during the quarter wise April, 2013 to March, 2014. Details of training programmes are as under.

A. On campus Training Courses:

Subject	Title of training	Durati-on (days)	No. of particip ants	Type of partici-pants
I Quarter April 2013 to June 2013				
Crop Production	Production technology of cotton	1	35	PF
Plant Protection	Biological controls in Kharif crops	1	35	PF
Home Science	Preparation of mango pulp	1	35	FW
	Preparation of Protein and Energy rich diet	1	35	FW
Horticulture	Production technology of chilly	1	35	PF
Extension Education	Update knowledge level of farmer on major Kharif crop	1	35	PF
	Organizing effective frontline Demonstration	1	35	PF
Agril Engineering	Installation and maintenance of Drip irrigation	1	35	PF
	Use of Plastics in Agriculture	1	35	PF
II. Quarter July 2013 to September 2013				
Crop Production	Production of castor	1	35	PF
Plant Protection	IPM and IDM in Vegetable crops	1	35	PF
Home Science	Different types of Painting on glass and clothes	1	35	FW
Horticulture	Post harvest technology of mango	1	35	PF
	Planning for kharif 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
III. Quarter October 2013 to December 2013				
Home Science	Preservation of pickles	1	35	FW
Horticulture	Production technology of spices crops	1	35	PF
	Organic farming	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 2014 to March 2014				
Home Science	Value addition in food grains	1	35	FW
	Preparation of different products from Aonla	1	35	FW
Horticulture	Net house technology	1	35	PF
Extension Education	Youth Development through update knowledge on major Summer crop	1	35	PF
	Organizing effective frontline Demonstration	1	35	PF
Agriculture Engineering	Bio compost of Farm waste	1	35	PF
	Efficient use of water in different irrigation system	1	35	PF

PF: Practicing farmer, FW: Farm women

B. ON/OFF Campus Training Programme for Rural youth

Subject	Title of training	Duration (days)	No. of particpants	Type of participants
Home Science	Preparation of different types of Bakery products	1	25	RG
Horticulture	Net house technology	1	25	RY
Extension Education	Bank loans for field crops/crop insurance	1	25	RY
Agril Engineering	Water shed management	1	25	RY
	Total	**4**	**100**	

RY: Rural Youth, RG: Rural Girl

C. OFF Campus Training Programme Courses

Subject	Title of training	Duration (days)	No. of partic-pants	Type of partici-pants
I. Quarter April 2013 to June 2013				
Crop production	Production technology of cotton	1	35	PF
Plant Protection	Plant protection in Cotton	1	35	PF
Home Science	Value addition in milk	1	35	FW
	Drudgery reduction technologies in household activities & agriculture	1	35	FW
Horticulture	Crops grown in net house in summer season	1	35	PF
	Nursery raising	1	35	PF
Extension Education	Bank loans for field crops/crop insurance	1	35	PF
	Income generation through Co-operative movement	1	35	PF
Agriculture Engineering	Use of Improved Farm Implements	1	35	PF
	Energy Conservation in Agriculture	1	35	PF
II. Quarter July-2013 to September- 2013				
Crop Production	Weed management	1	35	PF
Plant Protection	Plant protection in Groundnut	1	35	PF
Home Science	Minimization of nutrient loss in processing	1	35	FW
	Awareness about vaccination in children	1	35	FW
Horticulture	Newly varieties of vegetable crops	1	35	PF
	Arid fruit technology	1	35	PF
Extension Education	Income generation through Co-operative movement	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
III. Quarter October- 2013 to December- 2013				
Home Science	Nutrient requirement for pregnant & lactating women	1	35	FW
	Safe storage of food grains	1	35	FW
Horticulture	Production technology of spices crops	1	35	PF
	Production technology of onion and garlic	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- 2014 to March -2014				
Home Science	Adulteration in food stuffs	1	35	FW
	Awareness about daily requirement of nutrients	1	35	FW
Horticulture	Production technology of summer vegetable crops	1	35	PF
	Net house technology	1	35	PF
Extension Education	Update knowledge level of farmer about major Summer crop	1	35	PF
	Update knowledge level of farmer about major Summer crop	1	35	PF
Agril. Engg	Use of Improved Farm Implements	1	35	PF
	Energy Conservation in Agriculture	1	35	PF

D. Training Programme (Quarter wise summary):

Sr. No	**Subject**	**On campus**					**Off campus**					**G.T**
		I	**II**	**III**	**IV**	**T**	**I**	**II**	**III**	**IV**	**T**	
1	Crop production	1	1	0	0	2	1	1	0	0	2	4
2	Plant Protection	1	1	0	0	2	1	1	0	0	2	4
3	Home Science	2	1	1	2	6	2	2	2	2	8	14
4	Horticulture	1	2	1	2	6	2	2	2	2	8	14
5	Extension Education	2	1	1	2	6	2	2	2	2	8	14
6	Agriculture Engineering	2	1	1	2	6	2	2	2	2	8	14
Total		**9**	**7**	**4**	**8**	**26**	**10**	**10**	**8**	**8**	**34**	**64**

E. Vocational Training:

Sr. No	**Title of training**	**Duration (days)**	**No of Partici.**	**Type of Participant**
1	Different bakery products	3	25	Rural girls
2	Solar drying of food production and packaging	1	25	Rural Youth

F. In Service Training:

Sr. No	Title of training	Duration (days)	No of Parti.	Type of Participant
1	Pre-seasonal Training on *Kharif* crops	3	25	Ext.workers
2	Pre-seasonal Training on *rabi* crops	3	25	Ext.workers
3.	Child care and their development	1	25	Ext. workers (Anganwadi)

G. Sponsored Training:

Sr. No	Title of training	Duration (days)	No of Parti.	Type of participant
1	Organizing effective FLDs	1	25	ATMA SMS
2	Balance use of fertilizers	1	25	Farmers
3	Greenhouse Technology	1	25	Benificery of Horti. dept.
4	Importance of training	1	25	ATMA SMS
5	Importance of Kitchen Gardening	1	25	FW/RG
6	Improved Farm Implements	1	25	PF
7	Package of practices in Vegetable crops	1	25	SRTT, A'bad
8	Integrated Pest Management	1	25	SRTT, A'bad
Total		**8**	**200**	

The 8 training courses will be organizing with the 200 participant's by the collaboration with the different agency like NGO and Agro dealer in different subjects.

H. Summary of Training Programmes:

Sr. No	Subject	On campus	Off Campus	Total
1	Crop Production	2	2	4
2	Plant Protection	2	2	4
3	Home Science	6	8	14
4	Horticulture	6	8	14
5	Extension Education	6	8	14
6	Agriculture Engineering	6	8	14
7	Vocational training	1	1	2
8	In service Training	2	1	3
9	Sponsored Training	4	4	8
Total		**37**	**44**	**81**

During the year 2013-14, 37 On campus and 44 Off campus training programmes will be organised in different subjects for the Farming community by the KVK, Amreli.

I. Extension activity:

Sr.No	Activity	Proposed No.
1	Field day	18
2	Kisan Gosthi	24
3	Radio talk	As & when required
4	TV show	As & when required
5	Khedut shibir	12
6	News paper coverage	As & when required
7	Diagnostic service	As & when required
8	Advisory service	As & when required
9	Popular articles	3
10	Extension Literature	4
11	Celebration of Important day	1

J. Front Line Demonstration (Proposed)

Sr No	Crop/Input	Variety/Technology	Title	No of Demons.	Area (ha)
Kharif-2013					
1	Brinjal	JBGR-1	Yield potentiality	5	2
2	Maize	HQPM1	Yield potentiality	10	4
3	Soyabean	GS-3	Yield potentiality	10	4
4	Cotton	INM	Yield potentiality	10	4
			Total	**35**	**14**
Rabi - 2013-14					
1	Wheat	INM	Yield potentiality	20	8
2	Cumin	GC-4	Yield potentiality	10	4
3	Gram	GG-3	Yield potentiality	10	4
			Total	**40**	**16**
Summer-2014					
1	Sesame	GT-3	Yield potentiality	20	8
2	Groundnut	GJG-31	Yield potentiality	10	4
			Total	**30**	**12**
Farm implements/Enterprises					
1	Renewable Energy applications	Box type Solar Cooker	Energy conservation	20	
2	Agri. Engineering (Farm Machinery)	Tractor operated Boom Sprayer	Farm Mechanization	10	4

3	Agriculture Engineering(Farm Machinery)	Tractor operated Air assisted Blast Sprayer	Farm Mechanization	10	4
4	Papaya/Watermelon	Plastic Mulch	Moisture Conservation	5	0.5
				45	**8.5**
			GT	**150**	**50.5**

During the year 2013-14, it will be organized 150 FLD in 50.5 hectare for the Farming community by the KVK, Amreli.

K. ON FARM TESTING

OFT : 1 – Home Science :
Title :- Use of solar Cooker for cooking of Nontraditional cooking items
Items:-

1. Murbba,
2. sweet potato,
3. sweet corn,
4. Roasted and salted groundnut

Objective:-

(1) To improve quality of Prepared items
(2) To reduce drudgery of farm women
(3) To reduce time and fuel consumption

Treatment: - Item no. 1	**Treatment: - Item no. 2-4**	**No. of Replications: - 4**
(1) Preparation by traditional method (2) preparation by sunlight heat (3) preparation by solar cooker	(1) Preparation by traditional method (2) Preparation by roasting (3) Preparation by solar cooker	**Observations:-** (1) Time consumption (2) Fuel consumption (3) Movement (4) Cost saving (5) Organo lactic test a. Sweetness b. Texture c. Consistency d. Overall acceptance

OFT -2 – Agronomy

Title of technology: Effect of Nitrogen & Phosphorus to Cotton

Problem Dignosed/Defined: Non efficient use of Nitrogenous & Phosphatic fertilizers

Details of technologies selected for assessment/ refinement:

T1:(Farmers' practices)	23 kg N/ha + 57 kg P_2O_5/ha as a Basal dose and 115 kg N/ha in three split dose.
T2 :(Recommended Practice)	40 kg N/ha as a Basal dose and 120 kg N/ha in three split dose.
T3: (Refined practice)	Application of 26 kg N/ha as a Basal dose in the form of A.S. and 133 kg N/ha in five splits each at 20 days interval in the form of Urea.

Annexure I: Details of District

1	Total geographical area	7,36,500 ha		
2	Total cultivable area	5,83,800 ha		
3	Total area under forest	44,200 ha		
4	Total irrigated area	110,900 ha		
5	Average annual rainfall	580 mm		
6	Soil type	Medium black		
7	Total no. of villages	615 (8 Urban areas)		
9	Total population	15,13,614 (Rural: 11,27,808 Urban: 3,85,806)		
10	(a) Male	7,70,651		
	(b) Female	7,42,963		
	Literacy percentage	74.49 %		
11	(a) Male	81.82 %		
	(b) Female	66.97 %		
	No. of Talukas	11		
12	Major crop grown	Cereals: Wheat, Sorghum and Pearl millet		
13		Pulses: Green gram, Black gram, chickpea		
		Oilseeds: Groundnut, Sesame, Castor, Mustard,		
	Live stocks	Total	:	665737
		Bullock & Cows	:	235900
		Buffaloes	:	148300
		Goat	:	125700
		Sheep		131300
		Others(Camel, Pig, etc)	:	8900
		Commercial Dairy farms	:	3000
		Poultry	:	12637

Source: Statistical report, Jilla Panchayat, Amreli