ANNUAL PROGRESS REPORT OF KVK NANA-KANDHASAR (APRIL-13 TO MARCH-14)

1. GENERAL INFORMATION ABOUT THE KVK:

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

Address	Telephone	
	Office	Fax
Krishi Vigyan Kendra, Junagadh Agricultural University Nana-Kandhasar-363 520 Dist: Surendranagar	02751- 294120	02751-280121
	E-mail	
	surendranagar.kvk@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 Junagadh- 362 001	0285-2672080-90	0285-2672653	dee@jau.in

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

Name	Telephone / Contact		
	Resi.	Mobile	E-mail
Dr. J.N. Nariya Programme Coordinator Krishi Vigyan Kendra, Junagadh Agril. University Nanakandhasar-363 520 Dist: Surendranagar	--	99135 74917	surendranagar.kvk@gmail.com

1.4. Year of sanction: October, 2005

1.5. Staff Position (as on 1st April, 2013)

Sr. No	Sanctioned post	Name of the incumbent	Designa-tion	Discipline	Pay scale (Rs.) 6th Pay	Present Basic+ grade pay (Rs.)	Date of joining
1	Programme Coordinator 1	Dr. J N Nariya (Pool at KVK)	Programme Coordinator	Soil science	37400-67000	43250+ 10000	**Vacant**
2	SMS 6	Mr. M.F. Bhoraniya	SMS	Plant Protection	15600-39100	21810+ 6000	18-9-2012
3		Dr. B. C. Bochalya	SMS	Ext Edu.	15600-39100	20590+ 6000	23-8-2006
4		Dr. M. M. Tajapara	SMS	Animal Science	15600-39100	20590+ 6000	22-8-2006
5		Mr. H. M. Bhuva	SMS	Agronomy	15600-39100	20590+ 6000	30-8-2006
6		Dr. R M Javia	SMS	Plant Breeding	15600-39100	20590+ 6000	22-8-2006
7		**VACANT**	SMS	Home Sci			**VACANT**
8	Training Assistant 2	G. K. Sapra	Tr. Asstt	PBG	9300-34800	10810+ 4400	07-01-2009
9		M. V. Pokar	Tr. Asstt	Ext Edu	10000 fix	10000 fix	23-02-2012
10	Computer Programmer 1	P T Patel **	Computer Programmer	B.E. (Comp.)	9300-34800	10810+ 4400	07-02-2008
11	Accountant / Superintendent 1	R P Vagadiya	O. S. cum Accountant	--	9300-34800	9300+ 4200	01-12-2011
12	Stenographer 1	S. H. Shukla	Jr. steno	--	5300 fix	5300 fix	19-11-2013
13	Driver 2	Mr. P. D. Dave	Tractor Driver	--	5200-20200	14200+ 2800	06-09-2007
14		Mr. H. R. Gohil	Jeep Driver	--	5200-20200	11040+ 2400	01-8-2006
15	Supporting staff 2	Mr. M. H. Solanki	Peon	--	4440-7440	9250+ 1650	08-3-2006
16		B. M. Bamanya	Peon	--	4440-7440	4440+ 1300	02-9-2013

* Working at Account office, JAU, Junagadh

1.6. Total land with KVK (in ha):

Sr. No.	Item	Area (ha)
1	Under Buildings	04.00
2.	Under Demonstration Units	16.00
3.	Under Crops	
4.	Orchard/Agro-forestry	
5.	Others	20.00

1.7. Infrastructural Development:

A) Buildings

	Name of building	Source of funding	Stage		
			Complete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.) Total
1	Administrative Building	ICAR	23/7/09	595	30,20,600
2	Farmers Hostel			296	20,74,700
3	Staff Quarters - 6			--	30,55,000
4	Demonstration Shed - 2			78	6,16,000
5	Rat Proof godown			158	8,30,750
6	Implement Shed			77	3,00,000
6	Training Hall	RKVY	1/4/10	191	13,94,500
7	Pilot Scale Processing Plant			198	15,72,000
8	Godown/ store room			71	5,00,000
9	Implement Shed			77	3,00,000

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep Bolero (Purchased by KVK)	2006-07	4,86,500	2,87,126	working condition

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Computer	2006-07	49968	Working Cond.
Copier Machine	2006-07	49816	Working Cond.
Automatic Seed Drill	2006-07	31500	Working Cond.
Tractor mounted Sprayer (200ltr)	2007-08	43000	Working Cond.
Shredder	2007-08	43000	Working Cond.
Dibbler	2007-08	900	Working Cond.
Cotton stock puller	2007-08	1200	Working Cond.
Digital copier with network	2008-09	115300	Working Cond.
Rain gun	2007-08	19800	Working Cond.
LCD projector	2008-09	89985	Working Cond.
Rotavator	2008-09	96000	Working Cond.
Laptop	2008-09	47500	Working Cond.
Harrow cum cultivator (2)	2008-09	75000	Working Cond.
Groundnut Decorticator	2008-09	96530	Working Cond.
Mobile seed processing unit	2008-09	1685000	Working Cond.
Thresher	2008-09	114000	Working Cond.
Zero till drill	2008-09	66700	Working Cond.
Air assisted blower type sprayer	2008-09	98750	Working Cond.
Digital Camera	2008-09	23600	Working Cond.
Plasma TV	2008-09	73750	Working Cond.
Power Tiller	2010-11	1,15000	Working Cond.
Mini Tractor (Mahindra)	2011-12	1,98,000	Working Cond
Trinocular Microscope	2012-13	2,90,000	Working Cond
B.O.D. Incubator	2012-13	1,14,000	Working Cond
Laminar Air Flow	2012-13	1,99,000	Working Cond
Batch top centrifuge	2012-13	46,524	Working Cond
Electronic Balance	2012-13	19,905	Working Cond
TDS meter	2012-13	6,333	Working Cond
Temp & humidity indicator & controller	2012-13	33,071	Working Cond
Digital Hot Air Oven	2012-13	46,333	Working Cond

Deep Fridge	2012-13	47,571	Working Cond
Computer -2	2012-13	72,618	Working Cond
Vertical Autoclave	2012-13	27,900	Working Cond

1.8. A). Details SAC meeting conducted in the 2013-14:

The Ninth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, JAU, Nana-Kandhasar was held at Conference Hall, KVK, Nana Kandhasar on 31st December, 2013. Following members were remain present in the meeting.

SN	Name & Designation	Position
1.	**Dr. N.C. Patel,** Vice Chancellor, JAU, Junagadh	Chairman
2.	**Dr. I. U. Dhruj** Asso. Director of Research, JAU, Junagadh.	Member
3.	**Dr. K. N. Akbari** A.D.R. and Research Scientist (Dry Farming) Main Dry Farming Research Station, JAU, Targhadia	Member
4.	**Dr. V. N. Patel** Nodal Officer & Research Scientist, Main Dry Farming Research Station, JAU, Targhadia	Member
5.	**Dr. H. B. Gardharia** Associate Director of Extension Education, JAU, Junagadh	Member
6.	**Dr. B. B. Kabariya** Programme Co-ordinator, KVK, JAU, Targhadiya	Member
7.	**Shri K.M. Dabhi** District Agriculture Officer (I/C), Surendranagar	Member
8.	**Shri N. J. Gohel** Dy. Director of Agri (Training), Surendranagar	Member
9.	**Dr. B. B. Kunjadiya** Programme Co-ordinator, KVK, JAU, Amreli	Member
10.	**Shri B. T. Vala** Project Director,IWMP, District Water Shed Development Unit, DRDA, Surendranagar	Member
11.	**Shri Bhavesh K. Patel** Dy. Project Director, ATMA, Surendranagar	Member
12.	**Shri Shankarlal H. Makwana** Shri Jansewa Khadi Gramodyod Vikas Trust, Surendranagar	Member
13.	**Shri Anil H. Suvera** BTM (Chotila), ATMA	Invitee

14.	**Smt. Jashuben D. Meniya** SMS (Chotila), ATMA	Invitee
15.	**Shri Nanjibhai Chhaganbhai Detroja** At & Post: Devsar, Ta. Chotila, Dist.Surendranagar	Member
16.	**Shri Nathabhai Somabhai Sanghani** At & Post: Motimoldi, Ta. Chotila, Dist. Surendranagar	Member
17.	**Smt. Gitaben Pravinbhai Jambukiya** At & Post : Magharikheda, Ta. Chotila, Dist. Surendranagar	Member
18.	**Shri Sagarbhai Jagmalbhai** At & Post: Devsar, Ta. Chotila, Dist.Surendranagar	Member
19.	**Shri Kuldeepbhai Varmora** At & Post: Ranmalpur, Ta. Halwad, Dist.Surendranagar	Invitee farmer
20.	**Shri Ashvinbhai Valubhai Varmora** At & Post: Ranmalpur, Ta. Halwad, Dist.Surendranagar	Invitee farmer
21.	**Dr. J. N. Nariya** Programme Co-ordinator, KVK, JAU, Nana-Kandhasar	Member-Secretary

COMMITTEE MADE THE FOLLOWING SUGGESTIONS:

- Permanent board should be kept at each & every FLDs.
- 25 FLDs on Cotton crop should be included in FLD Programmes
- Detail components of FLD of each crop should be finalized and component wise (Latest variety, INM, IPM, IDM) FLD should be conducted
- In Off Campus Training programme, number of participants should be more as possible.
- In case of Animal Science discipline, On & Off Campus training schedule should be finalized after discussion with expert from Veterinary Science College, JAU, Junagadh.
- Details of Onion Seed Producer of adopted villages should be recorded so it should be known to increase in income of onion grower due to seeds production programme.
- As per suggestion given by DAO, Surendranagar, On campus training for farmers of Ranagadh, Nani-katechi, Parani, Parnama, Rakhol, Jasamatpar, Geda & Aanandpar villages of Limbadi taluka should be conducted at KVK office with all type of financial collaboration & other support of DAO Office.

2. DETAILS OF DISTRICT:

2.1 Major farming systems/enterprises

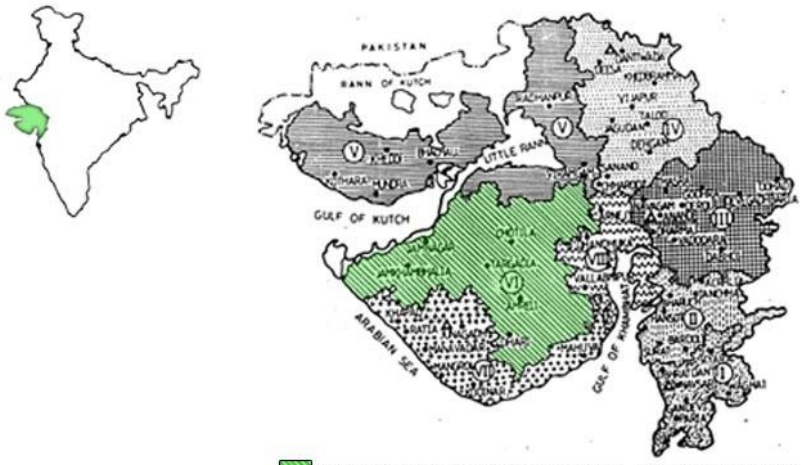
(based on the analysis made by the KVK):

Farming system/enterprise
The district Surendranagar mainly falls in north Saurashtra agro-climatic zone. The district located in India at 22.0° to 23.45° North latitude and 69.45° to 72.15° East longitude. Surendranagar district is bounded in north by Gulf of Kutch and Mehasana district, in the south by Bhavnagar and part of Ahmedabad district, on the east by part of Ahmedabad and west by Rajkot district. The average annual rainfall is 400 mm. The average temperature of the district ranges with 41°C maximum to 11°C minimum. The soil is mostly medium black, shallow to moderately deep and calcareous in nature, therefore cotton is the major crop of the district. Some patches of saline soil found in Dasada and Lakhtar talukas, calcareous sandy soil found in some part of Chotila, Sayla & Dhangdhra taluka and loamy soil is found in some part of Halvad and Dhangdhra taluka. The pH of the soil is alkaline and underground water is non saline in nature. The district covers 10.48 lakh ha geographical area out of which 6.90 lakh ha under cultivation, of which only 0.62 lakh ha is irrigated. Major area comes under rainfed farming. The main sources of irrigation are wells, tube wells, ponds and canals. The major crops of this region are cotton, sesame & pearl millet and others are sorghum, wheat, chick pea, groundnut, mustard, cumin, green gram, black gram, onion, garlic and vegetables. The fruit orchard area is very less.

2.2 Description of Agro-climatic Zone & major agro ecological situations

Agro-climatic Zone	Characteristics

PROFILE OF THE
NORTH SAURASTRA AGRO - CLIMATIC ZONE VI - GUJARAT



NORTH SAURASTRA AGRO - CLIMATIC ZONE

1.	Total geographical area	: 35.02 lakh ha.
2.	Area under forest	: 1.47 lakh ha.
3.	Area under non agricultural use	: 2.10 lakh ha.
4.	Barren and uncultivated land	: 2.52 lakh ha.
5.	Permanent pasture	: 2.45 lakh ha
6.	Current fallows	: 1.70 lakh ha
7.	Net sown area	: 22.17 lakh ha
8.	Total cropped area	: 25.77 lakh ha
9.	Area sown more than one	: 3.61 lakh ha
10.	Climate	: Arid and semi arid
11.	Average rainfall	: 542.14 mm
12.	Soil type	: Black to brown & Shallow to moderately deep soil

13. Cropping pattern :

Crop		Area (lakh ha.)
Kharif cereals	:	5.58
Khrif pulses	:	0.23
Kharif oil seeds	:	12.14
Cash crops	:	4.00
Rabi cereals	:	1.57
Rabi pulses	:	0.56
Others	:	1.69

14. Major croped area (%)

a) Kharif

Groundnut	:	40
Cotton	:	15
Pearmillet	:	12
Sorghum	:	10
Sesamum	:	3
Others	:	20

b) Rabi

Wheat	:	5
Chickpea	:	2
Cumin	:	3

15. Crop sequence:

Crop

Groundnut - -
Groundnut - Wheat
Groundnut - Mustard
Groundnut - Cumin
Groundnut - Chickpea
Pearl millet - Groundnut
Pearl millet- Green gram
Pearl millet- Cumin
Pearl millet- Mustard
Pearl millet - Garlic
Cotton - -
Cotton - Groundnut
Cotton - Sorghum

Agro ecological situation
North Saurashtra agro-climatic zone-VI, Gujarat Eight agro-climatic zones have been identified in Gujarat. The North Saurashtra Agro climatic Zone-VI falls in Saurashtra region. The influence area of North Saurashtra Agro climatic Zone is spread among five districts of Saurashtra region viz., Amreli (9 talukas out of 11), Bhavnagar (6 talukas out of 13), Jamnagar (all the 10 talukas), Rajkot (11 talukas out of 14) and Surendranagar (7 talukas out of 10) covering 43 talukas in all. It is bounded in the north by the gulf of Kutch and parts of Rajkot as well as Surendranagar district, in the east by the Ahmadabad district and coastal part of Bhavnagar district, on the south by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arabian sea. The farming situation of the district Surendranagar is rainfed.

2.3 Soil type/s

Sr. No.	Soil type	Area
1	Medium black	Vadhvan & Muli
2	Saline & Alkaline soils	Dasada & Lakhatar
3	Shallow calcareous sandy soil	Dhanghdhra
4	Red Loamy soil	Halvad, Dhanghdhra
5	Low land soils	Limbadi, Lakhatar
6	Calcareous Sandy soil	Chotila, Sayla

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

Sr. No.	Crop	Area (ha)	Production (t)	Productivity (Kg/ha)
1	Cotton (Irri)	264300	1354100	870
2	Cotton (Rainfed)	212900	361800	289
3	Sesame	37100	24300	654
4	Groundnut	14200	34100	2405
5	Wheat	66900	207100	3096
6	Cumin	72600	66900	921
7	Gram	21600	31400	1456
8	Green Gram	4800	3200	675
9	Mustard	1200	1800	1576

*in the year of 2011-2012

2.5. Weather data

Month	Rainfall (mm)	Rainy Days	Temperature ^{0} C		R. Humidity (%)	
			Max.	Min.	Max.	Min.
April -13	00	00	39.2	19.9	51	15
May-13	00	00	42.5	23.6	45	15
June-13	98	06	38.6	23.2	48	14
July-13	104	12	35.3	23.8	49	15
August-13	53	07	32.6	23.3	51	17
September-13	201	07	35.3	22.6	68	16
October-13	50	03	34.1	20.1	65	17
November-13	00	00	32.4	15.1	65	24
December-13	00	00	30.4	10.1	66	23
January-14	00	00	29.6	8.3	65	16
February-14	00	00	32.1	12.8	59	17
March-14	00	00	37.5	15.1	58	15

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

Category	Population	Production	Productivity
Cattle	2,93,758	54,61,197 lit	
Crossbred	201		--
Indigenous	2,93,557		--
Buffalo	2,02,939		--
Sheep	1,00,589	--	--
Goats	1,79,648	--	--
Pigs	22,948	--	--
Rabbits	--	--	--
Poultry	--	--	--

2.6 Details of Operational area / Villages (2013-14)

Sr. No.	Taluka	Name of block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	2	3	4	5	6	7
1	Chotila	Chotila	Magharikheda	Cotton, Bajra, Sesame, Pulses, Diary Farming,	Dry farming, Sucking pest in cotton, Wild animals, Redding in cotton, Lower milk production.	Dry farming technology Awareness for vaccination & artificial insemination of animals
			Sangani	Coton, Bajra, Groundnut, Sesame, Pulses Diary Farming,	Dry farming, HS disease	Dry farming technology Awareness for vaccination & artificial insemination of animals
			Resamiya	Cotton, Cumin, Groundnut, Sesame, Pulses, Vegetables Diary Farming,	Dry farming, Lower milk production, HS disease	Dry farming technology, Awareness for vaccination & artificial insemination of animals
			Rajapara	Cotton, Bajra, Cumin, Wheat, Sesame, Diary Farming,	Dry farming, Injudicious use of fertilizers & Pesticides, Black quarter disease	Adoption of organic farming, Bio-fertilizers & Vermi-compost Dry farming technologies Awareness for vaccination & artificial insemination of animals
			Moti-modli	Cotton, Groundnut, Cumin, Wheat, Sesame, Diary Farming	Lack of knowledge of modern dry land technologies, lack of Awareness for vaccination & artificial insemination of animals	Awareness for vaccination & artificial insemination of animals

1	2	3	4	5	6	7
2	Sayla	Sayla	Sapar	Cotton, Castor, Groundnut, Wheat Diary Farming,	Lack of knowledge of modern dry land technologies, FMD	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
			Ratanpar	Cotton, Wheat, Cumin, Sesame, Bajra	Lack of knowledge of modern dry land technologies, Injudicious use of fertilizers & Pesticides	Dry farming technologies
			Samatpar	Cotton, Bajra, Sesame, Wheat, Cumin, Diary Farming, Horticulture	Lack of knowledge about weed, pest and diseases & nutrient management HS disease, Trypanosomesis disease	To motivate farmers to grow arid and semi arid horticultural crops. Awareness for vaccination & artificial insemination of animals
			Titoda	Cotton, Wheat, Cumin, Sesame, Bajra, Groundnut	Lack of knowledge of modern dry land technologies, Injudicious use of fertilizers & Pesticides	Dry farming technologies,
			Nawa-sudamada	Horticulture Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Rainfed farming, soil salinity, poor water quality FMD, Lack of knowledge of modern dry land technologies	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
3	Limbadi	Limbad	Tokarala	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Soil salinity, Dry farming, poor drainage system FMD, Lack of knowledge of modern dry land technologies, INM,I PM etc	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
			Raska	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Soil salinity, Dry farming Awareness for vaccination & artificial insemination of animals	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
			Umedpar	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Soil salinity, dry farming low knowledge of scientific cultivation of crops ,HS disease, Injudicious use of fertilizers & Pesticides	Dry farming technologies, Awareness for vaccination & artificial insemination of animals

			Zamdi	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Soil salinity, poor water quality for irrigation, , low knowledge about INM, IPM , in crops,	Dry farming technologies, Awareness for vaccination & artificial insemination of animals
			Borana	Diary Farming, Cotton, G'nut, Sesame, Wheat, Cumin, Bajra	Soil salinity, poor water quality for irrigation, , low knowledge about INM, IPM , in crops,	Dry farming technologies, Awareness for vaccination & artificial insemination of animals

2.7 Prioritized thrust areas

Crop/ Enterprise	Thrust area
Cotton, Sesamum, Groundnut, Bajra	Dry farming technologies.
Animal Husbandry	Awareness for vaccination & artificial insemination of animals
Crop Management	Adoption of organic farming, Bio-fertilizers & Vermi-compost.
Integrated Crop Management	Integrated weed, pest and diseases & nutrient management.
Home Science	Farm women empowerment.
Lemon, Ber	Motivate farmers to grow arid and semi arid horticultural crops.
Fisheries	Aqua culture & inland fisheries

3. TECHNICAL ACHIEVEMENTS:

3.A Details of target and achievements of mandatory activities by KVK during 13-14

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
T	A	T	A	T	A	T	A
3	3	9	11	110	110	110	110

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	T	A	T	A	T	A	T	A
F	75	73	1875	1764	200	248	10000	14983
RY	05	09	0150	0201				
EF	03	03	0150	0185				

Seed Production (kg)		Planting material (Nos.)	
5		6	
T	A	T	A
Groundnut: 10,000	11,862	50,000	80,000
Sesamum: 300	320		
Cumin : 400	392		

3.B. Abstract of interventions undertaken

Sr. 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	2	3	4	5	6	7	8	9	10
1	-	Gram	Low yield	--	Varietal evaluation	Improved cultivation practices for gram & mustard		FLD, Field Days, Training	Seed input : Guj.Gram-3
2	-	Cumin	Low yield	--	Varietal evaluation	Plant protection measures for pest & disease in cumin		FLD, Field Days, Training	Seed input : Guj.Cumin-4
						Improved cultivation practices for wheat & cumin			
						Pure seed production technique in Cumin			
						Efficient water management in major rabi field crops			
3	-	Wheat	Low yield	--	Varietal evaluation	Improved cultivation practices for wheat & cumin		FLD, Field Days, Training	Seed input : GW-496
						Pure seed production technique in Wheat			

						Control measures for pest & disease in cumin & wheat			
4	--	Groundnut	Low yield	–	Varietal evaluation	Pure seed production technique in Groundnut IPM in G'nut Pure seed production technique in Groundnut		FLD, Field Days, Training	Seed input : GG-20
5	--	Sesamum	Low yield		Varietal evaluation	Pure seed production technique in sesamum Pure seed production technique in sesamum Improved cultivation practices for cotton and sesamum Pure seed production technique in sesamum Importance of thinning, gap filling & maintenance of plant populations in major kharif crops Management of pest & disease of sesame		FLD, Field Days, Training	FLD : Seed inputs : Guj.Sesamum-2
6	--	Green Gram	Low yield	--	Varietal evaluation	Proper use of weedicides in field crops	FLD, Field Days,	FLD, Field Days,	FLD : Seed inputs : Guj.Greengram-4

						Control measures for pest & disease of kharif pulses Integrated nutrient management in kharif field crops	Training	Training	
7	--	Cotton	Low yield	Low yield	INM	Improved cultivation practices for cotton and sesamum IPM in cotton	FLD, Field Days, Training		FLD : Fertilizer : Posak (Multimicro) OFT : Insecticides : Methyl Parathionn 2 % dust Methyl parathion 50 % Chlorpyriphos 20 % Bio pesticides : *Verticillium lacani*
8	--	Cotton (CMM-II)	Low yield	Low yield	INM	Importance of IPM	FLD, Field Days, Training		FLD : Fertilizer : Posak (Multimicro)
9	--	Bio-agent	Heavy infestation	Application of Tricho derma against stem rot Disease in g'nut	Yield evaluation	Importance of IDM	FLD, Field Days, Training		FLD : Bio-agent : *Trichoderma harzianum* Culture

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	TOTAL
Varietals Evaluation	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
Weed Management	-	-	-	-	-
Integrated Crop Management	-		-	1	1
INM	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
Drudgery reduction	-	-	-	-	-
Farm machineries	-	-	-	-	-
Value addition	-	-	-	-	-
IPM	-	-	-	1	1
IDM	-		-	-	-
Resource conservation technology	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-
TOTAL	**-**	**-**	**-**	**2**	**2**

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	TOTAL
Varietals Evaluation	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
Weed Management	-	-	-	-	-
Integrated Crop Mgmt	-		-	-	-
INM	-	-	-	-	-
Integrated Farming System	-	-	-	-	-

Mushroom cultivation	-	-	-	-	-
Drudgery reduction	-	-	-	-	-
Farm machineries	-	-	-	-	-
Value addition	-	-	-	-	-
IPM	-	-	-	-	-
IDM	-	-	-	-	-
Resource conservation technology	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-
TOTAL	**-**	**-**	**-**		**-**

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Other	TOTAL
Evaluation of Breeds	-	-	-	-	-	-
Nutrition Management	1	-	-	-	-	**1**
Disease of Management	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-
Women & Child care	-	-	-	-	-	-
TOTAL	**1**	**-**	**-**	**-**	**-**	**1**

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

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

Trial 1: Chelated and area specific mineral mixture for dairy buffalo. (2013-14)

1. Title of Technology assessed / Refined :

   * Chelated and area specific mineral mixture for dairy buffalo

2. Problem Definition

   1. Low milk production
   2. Irregularity of heat after calving
   3. low conception rate after insemination

3. Details of technologies selected for assessment/refinement

   T-1.Farmers practice (control)

   T-2.Recommended practices: Buffalo fed with mineral mixture supplementation 30 gm/day

   T-3.Buffalo fed with Chelated and Area specific mineral mixture supplementation 30 gm/day

4 Source of technology: Anand Agricultural University, Anand.

5 Production system: Increase milk yield & regularity of heat

6 Thematic area: Nutrition management

7 Performance of the Technology with performance indicators

   *Result is in Table -A

8 Final recommendation for micro level situation :Nil

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction: Result is in Table -A

11 Result of On Farm Trial

Table – A

Crop/ enterpri	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Buffalo	-	low milk production and irregularity of heat	Chelated and area specific mineral mixture for dairy buffalo	3	1.Farmers practice (control) 2.Recommended Buffalo fed with mineral mixture supplementation 30 gm/day. 3. Buffalo fed with chelated and area specific mineal mixture supplementation 30 gm/day	1.Milk yield 2.estrus after calving 3.No of insemination for conception	1..litre/day 2..day 3.No of insemination for conception

Pooled Results of assessment			Feedback from the farmer
9			10
Milk yield litre/day			good response but experiment to be continue for milk yield and reproductive efficiency
T1	T2	T3	
4 liter	4.5 liter	5 liter	

Technology Assessed / Refined	Milk yield(Litre/day)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T-1	4.0	-	-
T-2	4.5	-	-
T-3	5.0	-	-

Note : experiment is to be continue for milk yield & estrus after calving and number of insemination for conception

Trial 2: Management of Mealy bug infestation in Cotton. (2013-14)

1. Title of Technology assessed / Refined :

   * Management of Mealy bug infestation in Cotton

2. Problem Definition

   1. Lack of knowledge about the use of particular pesticides
   2. No adoption of recommended practices
   3. Farmers follows instruction given by the local pesticides retailer.

3. Details of technologies selected for assessment/refinement

   T-1.Farmers practice (Use of conventional insecticides after infestation)

   T-2.Recommended practices: pre-sowing application of Methyl parathion 2% Dust, application of insecticides at the time of infestation & Recommended cultural practices.

   T-3.Dusting of Methyl parathion 2% dust as & when required + application of bio-pesticides (Beaveria spp. or Verticillium spp.)

4 Source of technology: Junagadh Agricultural University, Junagadh.

5 Production system: Reduce mealy bug infestation

6 Thematic area: IPM for suppression of mealy bug

7 Performance of the Technology with performance indicators

   *Result is in Table -A

8 Final recommendation for micro level situation

   Recommended practices as well as Dusting of Methyl parathion 2% dust as & when required with application of bio-pesticides (Beaveria spp. or Verticillium spp.)

9 Constraints identified and feedback for research : NIL

10 Process of farmers participation and their reaction: Result is in Table -A

11 Result of On Farm Trial

Table – A

Crop/ enterpri	Farming situation	Problem Diagnose	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Cotton	Irrigated	Mealy bug	Management of Mealy bug infestation in Cotton	3	1.Farmers practice(Use of conventional insecticides after infestation) 2. Recommended practices: pre-sowing application of Methyl parathion 2% Dust, application of insecticides at the time of infestation & Recommended cultural practices. 3. Dusting of Methyl parathion 2% dust as & when required, application of bio-pesticides (Beaveria spp. or Verticillium spp.)	Mealy bug infestation	% Plant infested with mealy bug

% Plant infestation with mealy bug			
T1	T2	T3	There was no infestation occurred in T1, T-2 and T-3 treatments
00	00	00	

Technology Assessed / Refined	Seed cotton (Qt/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T-1	23.25	94,663	4.45
T-2	24.33	1,00,750	4.73
T-3	24.92	1,04,113	4.90

Trial 3: Assessment of sulphur in cumin (2013-14)

1. Title of Technology assessed / Refined : Assessment of sulphur in cumin
2. Problem Definition
   1. Lack of knowledge of Sulphur application.
   2. Sulphur deficient soil of district (60% Area)
   3. Unbalance fertilization.
3. Details of technologies selected for assessment/refinement
   1. Farmers practice (Control)
   2. RDF (30-15-40 NPK kg/ha) through DAP & Urea
   3. T-2 + 15 kg Sulphur through Gypsum
   4. RDF (30-15-40 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate.
4. Source of technology: Spices Research Station, SDAU, Jagudan.
5. Production system: Proper use of Fertilizer
6. Thematic area: Nutrition management
7. Performance of the Technology with performance indicators

   *Result is in Table -A
8. Final recommendation for micro level situation

   Recommended dose of fertilizer (30-15-40 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate.
9. Constraints identified and feedback for research : NIL
10. Process of farmers participation and their reaction: Result is in Table -A
11. Result of On Farm Trial

Table – A

Crop/ enterpris	Farming situation	Problem Diagnosed	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Cumin	Irrigated	Sulphur deficient soil of district	Assessment of sulphur in cumin	5	1. Farmers practice (Control) 2. Recommended dose of fertilizer (30-15-40 NPK kg/ha) through DAP & Urea 3. T-2 + 15 kg Sulphur through Gypsum 4. Recommended dose of fertilizer (30-15-40 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate.	Yield evaluation	Seed Yield (qt/ha)

Results of assessment				Feedback from the farmer
9				10
Av. Seed Yield (qt/ha)				Application of AS and SSP instead of DAP and Urea give very good response to cumin crop
T1	T2	T3	T4	
8.25	8.05	8.20	8.55	

Technology Assessed / Refined	Seed yield (Qt/ha)	Gross return / ha	Net Return (Profit) in Rs. / ha	BC Ratio
Seed Cotton (Qt/ha)	12		13	14
1.Farmers practice	8.25	88688	67033	4.10
2. Recommended dose of fertilizer (30-15-40 NPK kg/ha) through DAP & Urea	8.05	86538	67188	4.47
3.T-2 + 15 kg Sulphur through Gypsum	8.20	88150	68700	4.53
4. Recommended dose of fertilizer (30-15-40 NPK kg/ha) through Ammonium Sulphate & Single Super Phosphate.	8.55	91913	71503	4.50

C. Technology Refinement: NIL

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 2010-11 and recommended for large scale adoption in the district

Sr. 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	Dry farming	GW – 366 (Wheat)	FLD, Field Day & Training	15	2050	300
2		Guj.Cumin-4 (Cumin)				
3		Guj. Gram-3 (Gram)				
4		Guj. Green gram-4 (Green gram)				
5		Guj.Til-3 (Sesame)				
6		GG-31 (G'nut)				
7		*Trichoderma* culture (Bio-agent)				
8		Bt Cotton varieties				

b. Details of FLDs implemented during 2013-14

Sr No	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration		
					P	A	SC/ST	Others	Total
1	Wheat	Crop production	Varietal evaluation, recommended package of practices	Rabi: 12-13	20	20	9	11	20
2	Cumin			Rabi: 12-13	20	20	13	7	20
3	Gram			Rabi: 12-13	10	10	5	5	10
4	Moong			Kharif: 13-14	10	10	5	5	10
5	Sesame			Kharif: 13-14	10	10	5	5	10
6	G'nut			Kharif: 13-14	10	10	5	5	10
7	Bio-agent			Kharif: 13-14	5	5	1	4	5
8	Cotton			Kharif: 13-14	25	25	12	13	25

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Wheat	Rabi 12-13	Irrigated	Medium black	L	M	H	Sesame	20/11/12	11/3/13	500	35
		Irrigated		L	M	H	Sesame	22/11/12	12/3/13		
		Irrigated	–"–	L	M	H	Greengram	25/11/12	15/3/13		
		Irrigated	–"–	L	M	H	Sesame	20/11/12	11/3/13		
		Irrigated	–"–	L	M	H	Sorghum	25/11/12	16/3/13		
		Irrigated	–"–	L	M	H	Sorghum	15/11/12	12/3/13		
		Irrigated	–"–	L	M	H	G'nut	18/11/12	14/3/13		
		Irrigated	–"–	L	M	H	Bajara	18/11/12	10/3/13		
		Irrigated	–"–	L	M	H	Sorghum	20/11/12	14/3/13		
		Irrigated	–"–	L	M	H	Cotton	25/11/12	13/3/13		
		Irrigated	–"–	L	M	H	Cotton	24/11/12	11/3/13		
		Irrigated	–"–	L	M	H	Sesame	20/11/12	14/3/13		
		Irrigated	–"–	L	M	H	Cotton	15/11/12	09/3/13		
		Irrigated	–"–	L	M	H	G'nut	18/11/12	09/3/13		
		Irrigated	–"–	L	M	H	Cotton	27/11/12	18/3/13		
		Irrigated	–"–	L	M	H	G'nut	22/11/12	09/3/13		
		Irrigated	–"–	L	M	H	G'nut	22/11/12	14/3/13		
		Irrigated	–"–	L	M	H	Cotton	17/11/12	06/3/13		
		Irrigated	–"–	L	M	H	Sorghum	25/11/12	16/3/13		
		Irrigated	–"–	L	M	H	Sesame	17/11/12	10/3/13		
Cumi	Rabi 12-13	Irrigated	–"–	L	M	H	G'nut	11/11/12	06/3/13		
		Irrigated	–"–	L	M	H	Greengram	5/11/12	01/3/13		

		Irrigated	–"–	L	M	H	G'nut	18/11/12	11/3/13		
		Irrigated	–"–	L	M	H	G'nut	7/11/12	02/3/13		
		Irrigated	–"–	L	M	H	Greengram	1/11/12	03/3/13		
		Irrigated	–"–	L	M	H	Sesame	10/11/12	10/3/13		
		Irrigated	–"–	L	M	H	G'nut	3/11/12	05/3/13		
		Irrigated	–"–	L	M	H	Sorghum	11/11/12	03/3/13		
		Irrigated	–"–	L	M	H	Sesame	1/11/12	02/3/13		
		Irrigated	–"–	L	M	H	Greengram	6/11/12	10/3/13		
		Irrigated	–"–	L	M	H	Greengram	15/11/12	13/3/13		
		Irrigated	–"–	L	M	H	Sorghum	19/11/12	10/3/13		
		Irrigated	–"–	L	M	H	Cotton	14/11/12	11/3/13		
		Irrigated	–"–	L	M	H	Sorghum	2/11/12	05/3/13		
		Irrigated	–"–	L	M	H	Sesame	8/11/12	01/3/13		
		Irrigated	–"–	L	M	H	G'nut	1/11/12	06/3/13		
		Irrigated	–"–	L	M	H	G'nut	11/11/12	04/3/13		
		Irrigated	–"–	L	M	H	G'nut	20/11/12	01/3/13		
		Irrigated	–"–	L	M	H	Cotton	9/11/12	05/3/13		
		Irrigated	–"–	L	M	H	Cotton	1/11/12	08/3/13		
Gram	Rabi 12-13	Irrigated	–"–	L	M	H	G'nut	1/11/12	17/2/13		
		Irrigated	–"–	L	M	H	Cotton	5/11/12	07/2/13		
		Irrigated	–"–	L	M	H	Greengram	2/11/12	01/2/13		
		Irrigated	–"–	L	M	H	Cotton	1/11/12	07/2/13		
		Irrigated	–"–	L	M	H	Sorghum	1/11/12	10/2/13		
		Irrigated	–"–	L	M	H	Sorghum	6/11/12	12/2/13		
		Irrigated	–"–	L	M	H	Greengram	5/11/12	15/2/13		
		Irrigated	–"–	L	M	H	Greengram	4/11/12	09/2/13		
		Irrigated	–"–	L	M	H	Sesame	6/11/12	09/2/13		
		Irrigated	–"–	L	M	H	G'nut	9/11/12	13/2/13		
Greer Gram	*Kharif 13-14*	Rainfed	–"–	L	M	H	Wheat	20/6/13	05/9/13		
		Rainfed	–"–	L	M	H	Wheat	22/6/13	11/9/13		
		Rainfed	–"–	L	M	H	Cumin	25/6/13	08/9/13		
		Rainfed	–"–	L	M	H	Cumin	28/6/13	14/9/13		
		Rainfed	–"–	L	M	H	Wheat	20/6/13	02/9/13		
		Rainfed	–"–	L	M	H	Cotton	17/6/13	04/9/13		

		Rainfed	–"–	L	M	H	Cumin	18/6/13	31/8/13		
		Rainfed	–"–	L	M	H	Wheat	24/6/13	15/9/13		
		Rainfed	–"–	L	M	H	Cotton	28/6/13	08/9/13		
		Rainfed	–"–	L	M	H	Wheat	22/6/13	08/9/13		
Sesam	*Kharif 13-14*	Rainfed	–"–	L	M	H	G'nut	22/6/13	14/9/13		
		Rainfed	–"–	L	M	H	Wheat	20/6/13	05/9/13		
		Rainfed	–"–	L	M	H	G'nut	28/6/13	18/9/13		
		Rainfed	–"–	L	M	H	Gram	19/6/13	10/9/13		
		Rainfed	–"–	L	M	H	G'nut	25/6/13	05/9/13		
		Rainfed	–"–	L	M	H	Cumin	21/6/13	10/9/13		
		Rainfed	–"–	L	M	H	G'nut	19/6/13	05/9/13		
		Rainfed	–"–	L	M	H	Wheat	24/6/13	15/9/13		
		Rainfed	–"–	L	M	H	G'nut	30/6/13	19/09/13		
		Rainfed	–"–	L	M	H	Juwar	26/6/13	11/09/13		
G'nut	*Kharif 13-14*	Rainfed	Medium black	L	M	H	Cumin	26/6/13	25/10/13		
		Rainfed		L	M	H	Wheat	30/6/13	31/10/13		
		Rainfed	–"–	L	M	H	Wheat	3/7/13	30/10/13		
		Rainfed	–"–	L	M	H	Cumin	29/6/13	25/10/13		
		Rainfed	–"–	L	M	H	Wheat	4/7/13	07/11/13		
		Rainfed	–"–	L	M	H	Wheat	24/6/13	30/10/13		
		Rainfed	–"–	L	M	H	Juwar	29/6/13	25/10/13		
		Rainfed	–"–	L	M	H	Cumin	25/6/13	02/11/13		
		Rainfed	–"–	L	M	H	Wheat	29/6/13	08/11/13		
		Rainfed	–"–	L	M	H	Gram	26/6/13	24/10/13		
Bio-agent	*Kharif 13-14*	Rainfed	Medium black	L	M	H	Wheat	29/6/13	29/10/13		
		Rainfed		L	M	H	Cumin	4/7/13	09/11/13		
		Rainfed	–"–	L	M	H	Wheat	28/6/13	25/10/13		
		Rainfed	–"–	L	M	H	Cumin	25/6/13	02/11/13		
		Rainfed	–"–	L	M	H	Gram	28/6/13	01/11/13		
Cotto	*Kharif 13-14*	Irrigated	Medium black	L	M	H	Cumin	20/6/12	18/12/13		
		Irrigated		L	M	H	Wheat	18/6/12	22/12/13		
		Irrigated	–"–	L	M	H	Wheat	16/6/12	15/12/13		
		Irrigated	–"–	L	M	H	Cumin	26/6/12	12/01/14		
		Irrigated	–"–	L	M	H	Cumin	29/6/12	10/12/13		
		Irrigated	–"–	L	M	H	Wheat	2/7/12	23/12/13		

		Irrigated	–"–	L	M	H	Juwar	8/7/12	10/01/14		
		Irrigated	–"–	L	M	H	Cumin	19/6/12	28/12/13		
		Irrigated	–"–	L	M	H	Sesame	25/6/12	15/01/14		
		Irrigated	–"–	L	M	H	Cotton	2/7/12	10/01/14		
		Irrigated	–"–	L	M	H	Wheat	4/7/12	16/01/14		
		Irrigated	–"–	L	M	H	Cumin	25/6/12	17/12/13		
		Irrigated	–"–	L	M	H	Wheat	27/6/12	21/12/13		
		Irrigated	–"–	L	M	H	Juwar	28/6/12	13/01/14		
		Irrigated	–"–	L	M	H	Wheat	26/6/12	23/12/13		
		Irrigated	–"–	L	M	H	Cumin	29/6/12	10/01/14		
		Irrigated	–"–	L	M	H	Cotton	3/7/12	15/01/14		
		Irrigated	–"–	L	M	H	Cumin	4/7/12	15/12/13		
		Irrigated	–"–	L	M	H	Wheat	29/6/12	08/01/14		
		Irrigated	–"–	L	M	H	Cotton	28/6/12	12/01/14		
		Irrigated	–"–	L	M	H	Wheat	1/7/12	12/12/14		
		Irrigated	–"–	L	M	H	Sesame	27/6/12	16/12/14		
		Irrigated	–"–	L	M	H	Juwar	26/6/12	23/12/13		
		Irrigated	–"–	L	M	H	Cotton	26/6/12	09/01/14		
		Irrigated	–"–	L	M	H	Wheat	28/6/12	13/01/14		

Performance of FLD

Sr. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Wheat	Varietal evaluation, recommended pop	GW-366	20	08	42.30	26.40	35.02	30.79	13.74	-	-
2	Cumin		Guj.Cumin-4	20	08	08.40	05.30	07.27	06.55	11.08	-	-
3	Gram		Guj.Gram-3	10	04	18.30	13.70	16.20	14.42	12.34	-	-
4	Green Gram		Guj.moong-4	10	04	09.70	05.50	07.85	06.82	15.10	-	-
5	Sesame		Guj.Til-3	10	04	08.30	05.10	06.75	05.91	14.21	-	-
6	G'nut		GG-31	10	04	20.30	15.10	17.65	15.30	15.36	-	-
7	G'nut		Bio-Agent	05	02	21.90	17.50	19.40	16.66	16.45	-	-
8	Cotton		Bt Irrigated	25	10	26.00	20.00	22.60	19.93	13.36	-	-

Economic Impact (Continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
18000	18100	57783	50804	39783	32704	1:3.21
16800	16900	85423	76904	68623	60004	1:5.08
14400	14600	52650	46865	38250	32265	1:3.66
10750	10550	47100	40920	36350	30370	1:4.34
13150	12850	118125	103425	104975	90575	1:8.98
18750	18300	64423	55845	45673	37545	1:3.44
18950	18300	70810	60809	51860	42509	1:3.74
26900	27400	118628	104650	91728	77250	1:4.41

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component 1. Seed/Variety	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in Productivity over local check
Wheat	Rabi	GW-366	Irrigated	35.02	30.79	13.74
Cumin		Guj. Cumin-4	Irrigated	7.27	6.55	11.08
Gram		Guj. Gram-3	Irrigated	16.20	14.42	12.34
Green Gram	Kharif	Guj. Green Gram-4	Rainfed	7.85	6.82	15.10
Sesame		Guj.Til-3	Rainfed	6.75	5.91	14.21
G'nut		GG-31	Rainfed	17.65	15.30	15.36
G'nut		Bio-Agent	Rainfed	19.40	16.66	16.45
Cotton		Bt	Irrigated	22.60	19.93	13.36

Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	Groundnut GJ-31 is good variety for pod as well as fodder suitable for *kharif* season in dry farming condition.
2	The wheat variety GW-366 is superior but requires research variety for short duration and late sowing so fit in cotton based cropping pattern.
3	Gram GG-3 is highly adaptable due to wilt resistance & early maturity.
4	In cotton there is further need for tolerant variety against the sucking pest
5	In sesamum there is need for short duration & water logged resistant variety because of heavy rainfall

Farmers' reactions on specific technologies

Sr. No.	Feed Back
1	**Gram :** It is good variety over local varieties, but at maturity stage pod borer infestation occur
2	**Cumin :** High yielder and wilt resistance but late germination observed
3	**Wheat : 366** The variety yield better than Lok-1 The baking quality also fine
4	**Sesamum :** Guj. Til-3 is higher yielder over local
5	**Groundnut :** GJ-31 is good for pod as well as fodder but it is require short duration variety erratic rainfall affect the yield of groundnut
6	**Green gram :** Guj. Green gram-4 is superior over K-851, it mature once a time so more picking not required
7	**Cotton :** Bt variety(Bij dhan) resistance over larvae, it is require the sucking pest resistance variety

Extension and Training activities under FLD

Sr. No	Activity	No. of activities organized	Date	Number of participants
1	Field days	1	06/09/13	17
		1	06/09/13	21
		1	07/09/13	22
		1	07/09/12	28
		1	21/10/13	20
		1	22/10/13	23
		1	23/10/13	19
		1	28/10/13	23
		1	05/02/14	24
		1	05/02/14	18
		1	06/02/14	17
		1	10/02/14	24
		1	13/02/14	21
		1	14/02/14	28
		1	15/02/14	30
		1	17/02/14	19
		1	21/02/14	20
		1	24/02/14	24
		1	04/03/14	21
		1	05/03/14	24
Total		**20**	**--**	**439**
2	Farmers Training	5	--	128
3	Training for extension functionaries	2	--	168
	Total	**27**	**--**	**735**

C. Details of FLD on Enterprises

(i) Farm Implements:

Sr. No.	Physical achievement	Demonstration	
		No. of Demonstration (hectare)	No. of beneficiaries
1	Seed drill	12.5 ha	7
2	Rotavator	15.0 ha	9
3	Shredder	4	4
4	Seed dressing drum	5	5
8	Chaff cutter	2	2
9	Groundnut decorticator	5	5

(ii) Other Enterprises:

1. Deworming of buffalo calf in regular interval for reduction of incidence of worms & calf mortality

	Parameter	Results		% change in parameter
		Farmer practices	Recommended practices	
1	Incidence of worms	80%	15%	81%
2	Buffalo calf mortality	35%	13%	57%

Result : Reduction in parasitic infestation leads to increase income of farmer

2. Mineral Mixture for improve livestock infertility of Cow & Buffalo

	Parameter	Results		% change in parameter
		Farmer practices	Recommended practices	
1	Reproductive disorder	45%	15%	67%
2	Post partum heat (Month)	6 month	3 month	50%

Result : Reduction in reproductive disorder & post partum heat period leads to improve fertility of animal

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		
		M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women										
I Crop Production	**5**	**100**	**0**	**100**	**7**	**0**	**7**	**107**	**0**	**107**
Weed Management	1	23	0	23	1	0	1	24	0	24
Resource Conservation Technologies	1	16	0	16	1	0	1	17	0	17
Cropping Systems										
Crop Diversification										
Integrated Farming										
Water management										
Seed production										
Nursery management										
Integrated Crop Management	3	61	0	61	5	0	5	66	0	66
Fodder production										
Production of organic inputs										
II Horticulture	**1**	**0**	**25**	**25**	**0**	**5**	**5**	**0**	**30**	**30**
a) Vegetable Crops										
Production of low volume and high value crops										
Off-season vegetables										
Nursery raising	1	0	25	25	0	5	5	0	30	30
Exotic vegetables like Broccoli										
Export potential	-	-	-	-	-	-	-	-	-	-

vegetables										
Grading and standardization	-	-	-	-	-	-	-	-	-	-
Protective cultivation (Green Houses, Shade Net etc.)	-	-	-	-	-	-	-	-	-	-
b) Fruits	-	-	-	-	-	-	-	-	-	-
Training and Pruning	-	-	-	-	-	-	-	-	-	-
Layout and Management of Orchards	-	-	-	-	-	-	-	-	-	-
Cultivation of Fruit	-	-	-	-	-	-	-	-	-	-
Management of young plants/orchards	-	-	-	-	-	-	-	-	-	-
Rejuvenation of old orchards	-	-	-	-	-	-	-	-	-	-
Export potential fruits	-	-	-	-	-	-	-	-	-	-
Micro irrigation systems of orchards	-	-	-	-	-	-	-	-	-	-
Plant propagation techniques	-	-	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-	-	-
Nursery Management	-	-	-	-	-	-	-	-	-	-
Management of potted plants	-	-	-	-	-	-	-	-	-	-
Export potential of ornamental plants	-	-	-	-	-	-	-	-	-	-
Propagation techniques of Ornemental Plants	-	-	-	-	-	-	-	-	-	-
d) Plantation crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-

e) Tuber crops	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-	-	-
Production and Management technology	-	-	-	-	-	-	-	-	-	-
Processing and value addition	-	-	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Production and management technology	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
III Soil Health and Fertility Management	**3**	**49**	**0**	**49**	**8**	**0**	**8**	**57**	**0**	**57**
Soil fertility management	1	17	0	17	1	0	1	18	0	18
Soil and Water Conservation	1	15	0	15	6	0	6	21	0	21
Integrated Nutrient Management	1	17	0	17	1	0	1	18	0	18
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										

IV Livestock Production and Management	**6**	**105**	**0**	**105**	**15**	**0**	**15**	**120**	**0**	**120**
Dairy Management	5	86	0	86	12	0	12	98	0	98
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management										
Feed management	1	19	0	19	3	0	3	22	0	22
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	-	-	-	-	-	-	-	-	-	-
Design and deve. of low/minimum cost diet	-	-	-	-	-	-	-	-	-	-
Designing and development for high nutrient efficiency diet	-	-	-	-	-	-	-	-	-	-
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs	-	-	-	-	-	-	-	-	-	-
Storage loss minimization techniques	-	-	-	-	-	-	-	-	-	-
Value addition										
Income generation										

activities for empowerment of rural Women										
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
VI Agril. Engineering	**5**	**124**	**0**	**124**	**20**	**0**	**20**	**144**	**0**	**144**
Installation and maintenance of micro irrigation systems	1	23	0	23	4	0	4	27	0	27
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	3	56	0	56	16	0	16	72	0	72
Small scale processing and value addition										
Post Harvest Technology	1	45	0	45	0	0	0	45	0	45
VII Plant Protection	**4**	**79**	**0**	**79**	**21**	**0**	**21**	**100**	**0**	**100**
Integrated Pest Management	1	20	0	20	6	0	6	26	0	26
Integrated Disease Management	1	23	0	23	3	0	3	26	0	26
Bio-control of pests and diseases	1	17	0	17	2	0	2	19	0	19
Production of bio control agents and bio pesticides	1	19	0	19	10	0	10	29	0	29
VIII Fisheries										
Integrated fish										

farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site	**5**	**111**	**0**	**111**	**30**	**0**	**30**	**141**	**0**	**141**
Seed Production	5	111	0	111	30	0	30	141	0	141
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry										

and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics	**5**	**94**	**0**	**94**	**29**	**0**	**29**	**123**	**0**	**123**
Leadership development	1	20	0	20	5	0	5	25	0	25
Group dynamics	1	18	0	18	9	0	9	27	0	27
Formation and Management of SHGs										
Mobilization of social capital	1	17	0	17	5	0	5	22	0	22
Entrepreneurial development of farmers/youths	1	17	0	17	5	0	5	22	0	22
WTO and IPR issues	1	22	0	22	5	0	5	27	0	27
XI Agro-forestry	-	-	-	-	-	-	-	-	-	-
Production technologies	-	-	-	-	-	-	-	-	-	-
Nursery management	-	-	-	-	-	-	-	-	-	-
Integrated Farming Systems	-	-	-	-	-	-	-	-	-	-
TOTAL	**34**	**662**	**25**	**687**	**130**	**5**	**135**	**792**	**30**	**822**

(B) RURAL YOUTH										
Mushroom Production	-	-	-	-	-	-	-	-	-	-
Bee-keeping	1	13	0	13	2	0	2	15	0	15
Integrated farming	-	-	-	-	-	-	-	-	-	-
Seed production										
Production of organic inputs	-	-	-	-	-	-	-	-	-	-
Integrated Farming	-	-	-	-	-	-	-	-	-	-
Planting material production	-	-	-	-	-	-	-	-	-	-
Vermi-culture	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-
Protected cultivation of vegetable crops	3	56	0	56	6	0	6	62	0	62
Commercial fruit production										
Repair and maintenance of farm machinery and implements										
Nursery Management of Horticulture crops	-	-	-	-	-	-	-	-	-	-
Training and pruning of orchards	-	-	-	-	-	-	-	-	-	-
Value addition										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries	-	-	-	-	-	-	-	-	-	-

Para vets	-	-	-	-	-	-	-	-	-	-
Para extension workers	-	-	-	-	-	-	-	-	-	-
Composite fish culture	-	-	-	-	-	-	-	-	-	-
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries	-	-	-	-	-	-	-	-	-	-
Fish harvest and processing technology	-	-	-	-	-	-	-	-	-	-
Fry and fingerling rearing	-	-	-	-	-	-	-	-	-	-
Small scale processing	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
Tailoring&Stitching	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
TOTAL	**4**	**69**	**0**	**69**	**8**	**0**	**8**	**77**	**0**	**77**

(C) Extension Personnel										
Productivity enhancement in field crops	1	98	0	98	0	0	0	98	0	98
Integrated Pest Management										
Integrated Nutrient mgmt										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation & Mgmt of SHGs										
Group Dynamics & farmers organization										
Information										

networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO,IPR issues										
Management in farm animals	1	15	0	15	2	0	2	17	0	17
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	**2**	**113**	**0**	**113**	**2**	**0**	**2**	**115**	**0**	**115**
ON CAMPUS TOTAL	**40**	**844**	**25**	**869**	**140**	**5**	**145**	**984**	**30**	**1014**

B) OFF Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women										
I Crop Production	**6**	**128**	**0**	**128**	**7**	**0**	**7**	**135**	**0**	**135**
Weed Management	1	21	0	21	1	0	1	22	0	22
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Water management	1	27	0	27	1	0	1	28	0	28
Seed production										
Nursery management										
Integrated Crop Management	3	61	0	61	4	0	4	65	0	65
Fodder production										
Production of organic inputs	1	19	0	19	1	0	1	20	0	20
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops										
Off-season vegetables										
Nursery raising										
Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										

Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
d) Plantation crops										
Production and Management technology										

Processing and value addition										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
III Soil Health and Fertility Management	**4**	**100**	**0**	**100**	**9**	**0**	**9**	**109**	**0**	**109**
Soil fertility management	1	34	0	34	3	0	3	37	0	37
Soil and Water Conservation	1	21	0	21	3	0	3	24	0	24
Integrated Nutrient Management	1	29	0	29	1	0	1	30	0	30
Production and use of organic inputs										
Management of Problematic soils	1	16	0	16	2	0	2	18	0	18
Micro nutrient deficiency in crops										

Nutrient Use Efficiency										
Soil and Water Testing										
IV Livestock Production and Management	**8**	**151**	**0**	**151**	**23**	**0**	**23**	**174**	**0**	**174**
Dairy Management	5	98	0	98	15	0	15	113	0	113
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management	2	37	0	37	6	0	6	43	0	43
Feed management	1	16	0	16	2	0	2	18	0	18
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										

Storage loss minimization techniques										
Value addition										
Income generation activities for empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
VI Agril. Engineering	**3**	**66**	**0**	**66**	**14**	**0**	**14**	**80**	**0**	**80**
Installation and maintenance of micro irrigation systems										
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and maintenance of farm machinery and implements	3	66	0	66	14	0	14	80	0	80
Small scale processing and value addition										
Post Harvest Technology										
VII Plant Protection	**7**	**113**	**3**	**116**	**46**	**4**	**50**	**159**	**7**	**166**
Integrated Pest Management	4	71	3	74	14	1	15	85	4	89
Integrated Disease Management	3	42	0	42	32	3	35	74	3	77
Bio-control of pests										

and diseases										
Production of bio control agents and bio pesticides										
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management & culture of fresh water prawn										
Breeding and culture of ornamental fishes										
Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site	**5**	**96**	**0**	**96**	**25**	**0**	**25**	**121**	**0**	**121**
Seed Production	5	96	0	96	25	0	25	121	0	121
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer										

production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics	**6**	**131**	**0**	**131**	**26**	**0**	**26**	**157**	**0**	**157**
Leadership development	1	19	0	19	2	0	2	21	0	21
Group dynamics	1	19	0	19	4	0	4	23	0	23
Formation and Management of SHGs										
Mobilization of social capital	2	47	0	47	8	0	8	55	0	55
Entrepreneurial development of farmers/youths	1	22	0	22	7	0	7	29	0	29
WTO, IPR issues	1	24	0	24	5	0	5	29	0	29
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL PF	**39**	**785**	**3**	**788**	**150**	**4**	**154**	**935**	**7**	**942**

(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping	1	16	0	16	3	0	3	19	0	19
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production	2	38	0	38	12	0	12	50	0	50
Repair and maintenance of farm machinery and implements										
Nursery Mgmt of Horticulture crops	1	25	0	25	3	0	3	28	0	28
Training &pruning of orchards										
Value addition										
Production of quality animal products	1	18	0	18	9	0	9	27	0	27
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										

Para extension workers										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
TOTAL RY	**5**	**97**	**0**	**97**	**27**	**0**	**27**	**124**	**0**	**124**

(C) Extension Personnel										
Productivity enhancement in field crops	1	68	0	68	2	0	2	70	0	70
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation and Management of										

SHGs										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO and IPR issues										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production & use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	1	68	0	68	2	0	2	70	0	70
OFF CAMPUS TOTAL	**45**	**950**	**3**	**953**	**179**	**4**	**183**	**1129**	**7**	**1136**

C) Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women										
I Crop Production	**11**	**228**	**0**	**228**	**14**	**0**	**14**	**242**	**0**	**242**
Weed Management	2	44	0	44	2	0	2	46	0	46
Resource Conservation Technologies	1	16	0	16	1	0	1	17	0	17
Cropping Systems										
Crop Diversification										
Integrated Farming										
Water management	1	27	0	27	1	0	1	28	0	28
Seed production										
Nursery management										
Integrated Crop Management	6	122	0	122	9	0	9	131	0	131
Fodder production										
Production of organic inputs	1	19	0	19	1	0	1	20	0	20
II Horticulture	**1**	**0**	**25**	**25**	**0**	**5**	**5**	**0**	**30**	**30**
a) Vegetable Crops										
Production of low volume and high value crops										
Off-season vegetables										
Nursery raising	1	0	25	25	0	5	5	0	30	30

Exotic vegetables like Broccoli										
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation										

techniques of Ornemental Plants										
d) Plantation crops										
Production and Management technology										
Processing and value addition										
e) Tuber crops										
Production and Management technology										
Processing and value addition										
f) Spices										
Production and Management technology										
Processing and value addition										
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
III Soil Health and Fertility Management	**7**	**149**	**0**	**149**	**17**	**0**	**17**	**166**	**0**	**166**
Soil fertility management	2	51	0	51	4	0	4	55	0	55
Soil and Water Conservation	2	36	0	36	9	0	9	45	0	45
Integrated Nutrient	2	46	0	46	2	0	2	48	0	48

Management										
Production and use of organic inputs										
Management of Problematic soils	1	16	0	16	2	0	2	18	0	18
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Soil and Water Testing										
IV Livestock Production and Management	**14**	**256**	**0**	**256**	**38**	**0**	**38**	**294**	**0**	**294**
Dairy Management	10	184	0	184	27	0	27	211	0	211
Poultry Management										
Piggery Management										
Rabbit Management										
Disease Management	2	37	0	37	6	0	6	43	0	43
Feed management	2	35	0	35	5	0	5	40	0	40
Production of quality animal products										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening										
Design and deve. of										

low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition										
Income generation activities for empowerment of rural Women										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care										
VI Agril. Engineering	**8**	**190**	**0**	**190**	**34**	**0**	**34**	**224**	**0**	**224**
Installation and maintenance of micro irrigation systems	1	23	0	23	4	0	4	27	0	27
Use of Plastics in farming practices										
Production of small tools and implements										
Repair and	6	122	0	122	30	0	30	152	0	152

maintenance of farm machinery and implements										
Small scale processing and value addition										
Post Harvest Technology	1	45	0	45	0	0	0	45	0	45
VII Plant Protection	**11**	**192**	**3**	**195**	**67**	**4**	**71**	**259**	**7**	**266**
Integrated Pest Management	5	91	3	94	20	1	21	111	4	115
Integrated Disease Management	4	65	0	65	35	3	38	100	3	103
Bio-control of pests and diseases	1	17	0	17	2	0	2	19	0	19
Production of bio control agents and bio pesticides	1	19	0	19	10	0	10	29	0	29
VIII Fisheries										
Integrated fish farming										
Carp breeding and hatchery management										
Carp fry and fingerling rearing										
Composite fish culture										
Hatchery management and culture of freshwater prawn										
Breeding and culture of ornamental fishes										

Portable plastic carp hatchery										
Pen culture of fish and prawn										
Shrimp farming										
Edible oyster farming										
Pearl culture										
Fish processing and value addition										
IX Production of Inputs at site	**10**	**207**	**0**	**207**	**55**	**0**	**55**	**262**	**0**	**262**
Seed Production	10	207	0	207	55	0	55	262	0	262
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production										
Organic manures production										
Production of fry and fingerlings										
Production of Bee-colonies and wax sheets										
Small tools and implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity	**11**	**225**	**0**	**225**	**55**	**0**	**55**	**280**	**0**	**280**

Building and Group Dynamics										
Leadership development	2	39	0	39	7	0	7	46	0	46
Group dynamics	2	37	0	37	13	0	13	50	0	50
Formation and Management of SHGs										
Mobilization of social capital	3	64	0	64	13	0	13	77	0	77
Entrepreneurial development of farmers/youths	2	39	0	39	12	0	12	51	0	51
WTO and IPR issues	2	46	0	46	10	0	10	56	0	56
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	**73**	**1447**	**28**	**1475**	**280**	**9**	**289**	**1727**	**37**	**1764**
(B) RURAL YOUTH										
Mushroom Production										
Bee-keeping	2	29	0	29	5	0	5	34	0	34
Integrated farming										
Seed production										
Production of organic inputs										

Integrated Farming										
Planting material production										
Vermi-culture										
Sericulture										
Protected cultivation of vegetable crops	5	94	0	94	18	0	18	112	0	112
Commercial fruit production										
Repair and maintenance of farm machinery and implements	1	25	0	25	3	0	3	28	0	28
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition	1	18	0	18	9	0	9	27	0	27
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Para vets										
Para extension workers										
Composite fish culture										

Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Small scale processing										
Post Harvest Technology										
Tailoring&Stitching										
Rural Crafts										
TOTAL	**9**	**166**	**0**	**166**	**35**	**0**	**35**	**201**	**0**	**201**
(C) Extension Personnel										
Productivity enhancement in field crops	2	166	0	166	2	0	2	168	0	168
Integrated Pest Management										
Integrated Nutrient mgmt										
Rejuvenation of old orchards										
Protected cultivation technology										
Formation & Mgmt of SHGs										
Group Dynamics & farmers organization										
Information networking										

among farmers										
Capacity building for ICT application										
Care and maintenance of farm machinery and implements										
WTO,IPR issues										
Management in farm animals	1	15	0	15	2	0	2	17	0	17
Livestock feed and fodder production										
Household food security										
Women and Child care										
Low cost and nutrient efficient diet designing										
Production and use of organic inputs										
Gender mainstreaming through SHGs										
TOTAL	**3**	**181**	**0**	**181**	**4**	**0**	**4**	**185**	**0**	**185**
ON+OFF CAMPUS TOTAL	**85**	**1794**	**28**	**1822**	**319**	**9**	**328**	**2113**	**37**	**2150**

Note: Please furnish the details of above training programmes as Annexure in the proforma given below

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	(Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							Male	Female	Total	Male	Female	Total	Male	Female	Total
29/4/13	PF	Soil sampling methods	Soil science		1	ON	17	0	17	1	0	1	18	0	18
9/5/13	PF	Seeds production technique in Groundnut	Plant Breeding		1	ON	26	0	26	4	0	4	30	0	30
15/5/13	PF	Seeds production technique in sesamum	Plant Breeding		1	ON	22	0	22	5	0	5	27	0	27
23/5/13	PF	Use of laser land leveler & rotavator	Agril. Engg.		1	ON	17	0	17	6	0	6	23	0	23
29/5/13	PF	Care & management of animals during summer	Animal Science		1	ON	16	0	16	2	0	2	18	0	18
14/6/13	PF	Seeds treatment in kharif crops	Plant protection		1	ON	19	0	19	10	0	10	29	0	29
21/6/13	PF	Improved cultivation practices for cotton & sesame	Agronomy		1	ON	21	0	21	1	0	1	22	0	22
3/7/13	PF	Farm management	Ext. Educatio		1	ON	20	0	20	5	0	5	25	0	25
24/7/13	PF	Government subsidiary scheme	Ext. Education		1	ON	17	0	17	5	0	5	22	0	22
26/7/13	PF	Group dynamics	Ext. Educatio		1	ON	18	0	18	9	0	9	27	0	27
29/7/13	PF	Management of live stock during monsoon	Animal Science		1	ON	17	0	17	3	0	3	20	0	20
30/7/13	PF	Castor production technology	Agronomy		1	ON	19	0	19	2	0	2	21	0	21
5/8/13	PF	Balance fertilization & INM in cotton	Soil science		1	ON	17	0	17	1	0	1	18	0	18

22/8/13	RY	Cultivation of tomato & capsicum in poly house	Horticulture		1	ON	21	0	21	4	0	4	25	0	25
23/8/13	PF	Importance & use of green fodder in milk production	Animal science		1	ON	19	0	19	3	0	3	22	0	22
11/9/13	RY	Cultivation of tomato & cucumber in poly house	Horticulture		1	ON	20	0	20	2	0	2	22	0	22
13/9/13	PF	Improved cultivation practices for gram	Agronomy		1	ON	21	0	21	2	0	2	23	0	23
13/9/13	PF	Biological & chemical control measures of pest & diseases of cotton and sesame	Plant Protection		1	ON	17	0	17	2	0	2	19	0	19
25/9/13	RY	Green house technology	Horticulture		1	ON	15	0	15	0	0	0	15	0	15
21/10/13	PF	Integrated weed management in rabi field crops	Agronomy		1	ON	23	0	23	1	0	1	24	0	24
21/10/13	PF	Effect of global warming & climate change in agriculture	Ext. education		1	ON	22	0	22	5	0	5	27	0	27
24/10/13	PF	Use of improved farm implements	Agril. Engg.		1	ON	16	0	16	7	0	7	23	0	23
28/10/13	PF	Foot & mouth disease and its control	Animal science		1	ON	17	0	17	2	0	2	19	0	19
2/11/13	PF	Control measures for pest & diseases in cumin	Plant Protection		1	ON	23	0	23	3	0	3	26	0	26
11/11/13	PF	Seeds production technique in cumin	Plant Breeding		1	ON	26	0	26	8	0	8	34	0	34
18/11/13	PF	Seeds production technique in onion	Plant Breeding		1	ON	19	0	19	6	0	6	25	0	25
27/11/13	PF	Providing awareness about AI with audio visual aids	Animal science		1	ON	18	0	18	2	0	2	20	0	20

2/12/13	PF	Micro irrigation systems	Agril. Engg.		1	ON	23	0	23	4	0	4	27	0	27
6/12/13	PF	Soil moisture conservation	Agril. Engg.		1	ON	15	0	15	6	0	6	21	0	21
11/12/13	FW	Raising of seedlings of vegetable crops	Horticulture		1	ON	0	25	25	0	5	5	0	30	30
6/1/14	PF	Precaution while handling pesticides	Plant protection		1	ON	20	0	20	6	0	6	26	0	26
13/1/14	PF	Entrepreneurial development of farmers through secondary agriculture	Ext. education		1	ON	17	0	17	5	0	5	22	0	22
15/1/14	PF	Introduction & use of chaff cutter	Agril. Engg.		1	ON	23	0	23	3	0	3	26	0	26
24/1/14	PF	Creating awareness about balance nutrition management	Animal science		1	ON	18	0	18	3	0	3	21	0	21
27/1/14	PF	Preparation of enriched compost	Agronomy		1	ON	16	0	16	1	0	1	17	0	17
27/1/14	PF	Seeds production technique in summer groundnut	Plant Breeding		1	ON	18	0	18	7	0	7	25	0	25
11-12 /2/14	RY	Honey bee keeping	Plant protection		2	ON Vocational	13	0	13	2	0	2	15	0	15
20-21 /11/13	PF	Post harvest technologies & storage	Agril. Engg.		2	ON Sponsored	45	0	45	0	0	0	45	0	45
27/9/13	Ext. Officer	Infertility treatment in buffalo of surendranagar district by hormonal protocol	Animal Science		1	ON Veterinary officer	15	0	15	2	0	2	17	0	17
18/10/13	Ext. Officer	Pre seasonal training for Rabi crops	Multi disciplinary		1	ON Ext Officer	98	0	98	0	0	0	98	0	98
18/4/13	PF	Soil sampling methods	Soil science		1	OFF	34	0	34	3	0	3	37	0	37

25/4/13	PF	Crop production technology in kharif pulses & gum guar	Agronomy		1	OFF	21	0	21	2	0	2	23	0	23
14/5/13	PF	INM in major kharif field crops	Agronomy		1	OFF	29	0	29	1	0	1	30	0	30
18/5/13	PF	Importance of colostrums in calves	Animal science		1	OFF	21	0	21	4	0	4	25	0	25
3/6/13	PF	Seeds production technique in sesamum	Plant Breeding		1	OFF	20	0	20	5	0	5	25	0	25
4/6/13	PF	Care & management of animals during summer	Animal Science		1	OFF	18	0	18	2	0	2	20	0	20
4/6/13	PF	IPM in cotton	Plant Protection		1	OFF	20	0	20	4	0	4	24	0	24
11/6/13	PF	Seeds production technique in sesamum	Plant Breeding		1	OFF	21	0	21	3	0	3	24	0	24
25/6/13	PF	Management of pest & disease of sesamum	Plant Protection		1	OFF	3	0	3	16	0	16	19	0	19
19/7/13	RY	Cultivation of tomato & capsicum in poly house	Horticulture		1	OFF	19	0	19	6	0	6	25	0	25
23/7/13	PF	Rain water harvesting technology	Agril. Engg.		1	OFF	21	0	21	3	0	3	24	0	24
30/7/13	PF	Use of laser land leveler	Agril. Engg.		1	OFF	19	0	19	6	0	6	25	0	25
31/7/13	RY	Income generation activity through secondary agriculture	Ext. education		1	OFF	18	0	18	9	0	9	27	0	27
31/7/13	PF	Haemorphic septilemea & its control	Animal Science		1	OFF	17	0	17	2	0	2	19	0	19
31/7/13	PF	Soil reclamation	Soil science		1	OFF	16	0	16	2	0	2	18	0	18
30/8/13	PF	Leadership development	Ext. education		1	OFF	19	0	19	2	0	2	21	0	21
2/9/13	PF	Management of pest & disease of vegetables	Plant Protection		1	OFF	18	0	18	13	3	16	31	3	34

20/9/13	PF	Fodder crop production technology	Animal Science		1	OFF	16	0	16	2	0	2	18	0	18
21/9/13	PF	IPM in castor	Plant Protection		1	OFF	13	3	16	3	1	4	16	4	20
24/10/13	PF	Improved cultivation practices for wheat and cumin	Agronomy		1	OFF	21	0	21	1	0	1	22	0	22
30/10/13	PF	Group dynamics & mobilization of social capital	Ext. education		1	OFF	19	0	19	4	0	4	23	0	23
16/11/13	PF	Government subsidiary scheme	Ext. Education		1	OFF	23	0	23	3	0	3	26	0	26
23/11/13	PF	Integrated weed management in major rabi field crops	Agronomy		1	OFF	21	0	21	1	0	1	22	0	22
23/11/13	PF	Uses of improved farm implements	Agril. Engg.		1	OFF	21	0	21	4	0	4	25	0	25
26/11/13	PF	Seed treatments in rabi crops	Plant protection		1	OFF	18	0	18	4	0	4	22	0	22
26/11/13	PF	Seeds production technique in cumin	Plant Breeding		1	OFF	18	0	18	7	0	7	25	0	25
3/12/13	PF	Seeds production technique in wheat	Plant Breeding		1	OFF	20	0	20	5	0	5	25	0	25
12/12/13	PF	Efficient water management in major rabi crops	Agronomy		1	OFF	27	0	27	1	0	1	28	0	28
12/12/13	PF	Contro measures for pest & diseases of rabi crops	Plant protection		1	OFF	21	0	21	3	0	3	24	0	24
12/12/13	PF	Clean milk production by proper milking, watering & washing	Animal Science		1	OFF	20	0	20	2	0	2	22	0	22
17/12/13	PF	Promoting awareness about animal healthcare during winter	Animal Science		1	OFF	18	0	18	3	0	3	21	0	21
15/1/14	RY	Honey bee rearing technique	Plant protection		1	OFF	16	0	16	3	0	3	19	0	19
16/1/14	RY	Protected cultivation	Horticulture		1	OFF	19	0	19	6	0	6	25	0	25

22/1/14	PF	Government subsidiary scheme in agriculture	Ext. Education		1	OFF	24	0	24	5	0	5	29	0	29
23/1/14	PF	Uses of improved farm implements	Agril. Engg.		1	OFF	26	0	26	4	0	4	30	0	30
28/1/14	PF	Seeds production technique in sesame & summer groundnut	Plant Breeding		1	OFF	17	0	17	5	0	5	22	0	22
1/2/14	PF	Importance of natural enemies	Plant protection		1	OFF	20	0	20	3	0	3	23	0	23
4/2/14	PF	Production technology of summer gum guar & sesame	Agronomy		1	OFF	19	0	19	1	0	1	20	0	20
4/2/14	PF	WTO & IPR issues	Ext. Education		1	OFF	24	0	24	5	0	5	29	0	29
5/2/14	PF	Entrepreneurship development	Ext. Education		1	OFF	22	0	22	7	0	7	29	0	29
14/2/14	PF	Management of reproductive disorder in animals	Animal Science		1	OFF	20	0	20	4	0	4	24	0	24
3/3/14	PF	Importance of AI in cow & buffalo	Animal Science		1	OFF	21	0	21	4	0	4	25	0	25
10/3/14	PF	Preparation of vermin compost & vermin wash	Agronomy		1	OFF	19	0	19	1	0	1	20	0	20
25/2/14	RY	Repair and maintenance of improved farm implements	Agril. Engg.		2	OFF Vocational	25	0	25	3	0	3	28	0	28
14/2/14	Ext. Officer	Pre seasonal training for summer crops	Multi disciplinary		1	OFF Ext Officer	68	0	68	2	0	2	70	0	70

8. 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	T	Type of units	Number of units	Number of persons employed	
	11-12/2/14	Honey bee rearing		2	13	2	15	-	-	-	-
	25/2/14	Repairs & Maintenance of improved farm implements		1	25	3	28	-	-	-	-
					38	5	43	-	-	-	-

9. Sponsored / Collaborative Training Programmes

SN	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	20-21/11/13	Post harvest technology & storage		-	2	PF	1	45	0	45	0	0	0	45	0	45	Central ware house corporation

10. Training Programmes under seed village programme

SN	Title	Participants		
		Others	SC/ST	Total
1	Pure seed Production technique in Cumin	21	4	25
2	Pure seed Production technique in Wheat	20	5	25
3	Pure seed Production technique in Wheat	19	6	25
4	Pure seed Production technique in Cumin	20	5	25
	TOTAL	**80**	**20**	**100**

3.4. Extension Programmes (including activities of FLD programmes)

Nature of Extension Activity	Purpose/ topic Date	No. of activities	Participants											
			Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
			M	F	T	M	F	T	M	F	T	M	F	T
Field Day	06/09/13	1	12	2	14	2	0	2	1	0	1	15	2	17
	06/09/13	1	17	0	17	3	0	3	1	0	1	21	0	21
	07/09/13	1	15	3	18	3	0	3	1	0	1	19	3	22
	07/09/12	1	23	0	23	4	0	4	1	0	1	28	0	28
	21/10/13	1	15	4	19	0	0	0	1	0	1	16	4	20
	22/10/13	1	11	3	14	5	3	8	1	0	1	17	6	23
	23/10/13	1	13	0	13	3	0	3	3	0	3	19	0	19
	28/10/13	1	17	3	20	2	0	2	1	0	1	20	3	23
	05/02/14	1	20	0	20	3	0	3	1	0	1	24	0	24
	05/02/14	1	14	2	16	2	0	2	1	0	1	16	2	18
	06/02/14	1	13	0	13	3	0	3	1	0	1	17	0	17
	10/02/14	1	16	3	19	4	0	4	1	0	1	21	3	24
	13/02/14	1	14	4	18	2	0	2	1	0	1	17	4	21
	14/02/14	1	19	5	24	3	0	3	1	0	1	23	5	28
	15/02/14	1	23	0	23	6	0	6	3	0	3	30	0	30
	17/02/14	1	13	2	15	3	0	3	1	0	1	17	2	19
	21/02/14	1	17	2	19	0	0	0	1	0	1	20	0	20
	24/02/14	1	13	5	18	5	0	5	1	0	1	19	5	24
	04/03/14	1	16	2	18	2	0	2	1	0	1	19	2	21
	05/03/14	1	15	3	18	3	2	5	1	0	1	19	5	24
Field Day		**20**	**316**	**43**	**359**	**58**	**5**	**63**	**24**	**0**	**24**	**398**	**48**	**446**
Kisan Ghosthi		10										528	10	538
Film Show		21										1035	134	1169
Farmers Meeting		23										1037	22	1059
Khedut Shibir		04										295	31	326
Lectures delivered as resource persons		49										1891	572	2463
Radio talks		02												

TV talks	3												
Extension Literature distributed	8500												
Advisory Services													
Scientific visit to farmers field	7										67	8	75
Farmers visit to KVK	110										3797	1333	5130
Diagnostic visits	8										47	0	47
Soil health Camp													
Animal Health Camp	6												236 animals
Celebration of Technology week 23-27 /9 /2013	1 week	395	80	475							395	80	475
Pasu palan shibir	3	102	10	112	15	40	55	0	0	0	117	50	167
Celebration of Parthenium awareness week	1 week	102	20	122							102	20	122

Technology week :

Number of Technology weeks celebrated	Types of Activities	No. of Activities	Number of Participants	Related crop / livestock technology
01	Gosthies	5	278	Cotton, Cumin
	Lectures organized	30	395	Crop production
	Exhibition	01	475	Dry Farming tech.
	Film show	05	400	POP, enterpreniur
	Fair	00	00	
	Farm Visit	05	475	Diff demo unit
	Diagnostic Practicals	06	240	
	Distribution of Literature (No.)	05	4000	
	Distribution of Seed (q)			
	Distribution of Planting materials (No.)		17000	Vegetable crops
	Bio Product distribution (Kg)		753	
	Bio Fertilizers (q)			
	Distribution of fingerlings			
	Distribution of Livestock specimen (No.)			
	Total number of farmers visited the technology week		475	

Kisan Mobile Advisory: NIL
No. of Farmers registered: NIL

Details of SMSs: NIL

Interventions on drought mitigation: NIL

3.5 Production and supply of Technological products

SEED MATERIALS:

Major group/class	Crop	Variety	Quantity (Kg.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	--	--	--	--	--
OILSEEDS	Ground Nut	GJG-31	5,649	1,77,320	100
	Ground Nut	GJG-31	991	40,800	--
	Ground Nut	GG-2	1,775	79,650	30
	Ground Nut	GJG-9	2,700	10,800	50
	Ground Nut	GJG-9	747	--	--
	Sesamum	GT-4	189	360	40
	Sesamum	GT-3	132	17,150	28
PULSES	Gum guar	G.Guar-2	730	11,000	350
OTHERS (Specify)	Cumin	GC-4	392	55,912	108

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS			
2	OILSEEDS	122.00	1,48,760	248
3	PULSES	7.30	11,000	350
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS	3.92	55,192	108
TOTAL				

PLANTING MATERIALS :

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
Fruits					
Spices					
Vegetables	Tomato	GT-3	20000		**80**
	Brinjal	GBJ-3	10000		**100**
	Brinjal	Local	25000		**200**
	Chilli	Vadhvani	25000		**90**
Forest Species					
Ornamental Crops					
Plantation Crops					
Others (Specify)					

BIO-PRODUCT :

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOFERTILIZERS						
1	Trichoderma	Trichoderma viride		6000	42000	1570
2	Azotobacter	Azotobacter		242	14460	205
3	Azospirilum	Azospirilum		1	75	1
4	Rhizobium culture	Rhizobium melilopy		7	525	7
	PSB	PSB		2	150	2

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIOAGENTS	-	-	-	-	-
2	BIO FERTILIZERS			6252	57210	1785
3	BIO PESTICIDE	-	-	-	-	-
	TOTAL					

LIVESTOCK : NIL

3.6. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter: nil

(B) Literature developed / published

Item	Title	Authors name	Number of copies
1	2	3	4
Research papers	Hetreosis in sesame (*Sesame indicum* L.)	Javia R.M., Pandya H.M. and Dhaduk H.L.	--
	Response of jatropha curcas grown on wasteland to nitrogen and phosphorus fertilization	Bhuva H.M., Chaudhari D.R., Chikara J., Parmar D.R. and Patolia J.S.	--
	Effect of nutrient management in sesame on sulphur and micronutrient availability in sandy loam soil	Suratria G.S., Vora V.D., Javia R.M., Akbari K.N. and Padmani D.R.	--
	Effect of nutrient management on sesame yield and post harvest soil fertility in sandy loam soils	Akbari K.N., Sutaria G.S., Javia R.M., Vora V.D. and Padmani D.R.	--
	Identification of technological needs and problems of farmers in Agril. Entomology	Bochlya B.C., Javia R.M., Bharadiya A.M. and Bhuva H.M.	--
Total	05	--	--
Leaflets/ folders	Surendranagar jilanu krushi mandir	Kabariya B.B. and Javia R.M.	1000
	Suki khetima vadhare pak utpadan kevi rite Medavasho	Bhuva H.M. and Javia R.M.	1000
	Kapasma jivato tatha rogoni niyantran vyavatha	Bharadiya A.M. and Javia R.M.	1000

	Vadhu dudha utpadan kem midavasho	Tajapar M.M. amd Javia R.M.	1000
	Jal sangrah ane teni vividh paddhatio	Prajapati G.V. and Javia R.M.	1000
	Khedut mahilao ane poshhankhham aahar	Bhalala B.M. and Javia R.M.	1000
	Chaniya khatar no ek matra paryay etle kapasni santhinu khatar	Bhuva H.M., Javia R.M. and Bochliya B.C.	1000
	Alasiya apanavo jamin bachavo	Bhuva H.M., Javia R.M. and Bochliya B.C.	1000
	Ratanjyotni kheti paddhati	Bhuva H.M., Javia R.M. and Tajpara M.M.	1000
	Magafalini jivato ane tenu niyantran	Bharadiya A.M., Javia R.M. and Bhuva H.M.	1000
	Talma rog – jivat niyantran	Bharadiya A.M., Javia R.M. and Bhuva H.M.	1000
	Dudh utpadanma ghatado ane teno ukel	Tajpara M.M., Javia R.M. and Bhuva H.M.	1000
	Pashuchikitsama vaparati davao ane pashurahethanma vaparata jantunashako	Tajpara M.M., Javia R.M. and Bhuva H.M.	1000
Total	**13**	**--**	**13000**

(C) Details of Electronic Media Produced :

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

3.7. Success stories/Case studies

Thematic Area: Vegetable Production

"High Income from Chilly Production through micro irrigation"

Sh. Jentibhi Mohanbhai Dabhi
Village:Aaya, Taluka: Sayala District: Surendranagar, Gujarat
Mo.: 098987 19099

Profile

Age: 31 years
Education: Secondary
Land Holding: 3ha.

Crops:

a) Kharif: Cotton, Castor, Chili

b) Rabi : Wheat

Animals:

1) Cow-1
2) buffalo-2

Social Identity:
Progressive Farmers

Description of Technology:

Description: Mr. Jentibhai is a farmer of the village Aaya of Sayala taluka. He educated up to secondary school only. Initially he is engaged in agriculture with his father and taking field crops like cotton and castor as cash crops. These crops are long duration. He is hard worker but due to any reason he did not getting high income. Meanwhile, he came in contact with KVK during 2011-12. Aaya village is adopted by KVK as operational village. Due to this he continuously in touch with KVK scientists for proper advice. Based on his skill and knowledge KVK scientist encouraged him to grow chilly for extra income. Because chilly crop is more suitable to grow in Aaya locality as it is connected to national highway so good transport facilities are available for nearby market.

Technology: Initially he grow chilly crop (0.5 acre) under the guidance of KVK scientists and adopted recommendations are given by the scientists and he take good profit. This was encouraging him to take chilly crop in more area. In the year 2013, he grows ***SIDDHI*** (B.S.S.-213) variety of chilly in one hectare of land (spacing of 75x45 cm). He directly sown the seed in the field with drip irrigation. This variety is well known for red chilly pickles. He applies the fertilizers through fertigation techniques and control the pest and disease according to recommendations of scientists.

Output: He gets 440 quintals of production in 1 hectare of land and sold this at the average rate of 2500 Rs/q in the market. The total income was 11 lacs in which total investment and expenditures were 2.50 lacs. The net profit was 8.50 lacs. He said that he gets more income Rs.7.50 lacs than the other crops like cotton and castor.

Impact: He encouraged about 15-20 farmers of surrounding villages. As a result of speedy adoption, many farmers adopt the micro irrigation system in their fields and the technology was vast popularized.

Red Chilly for Pickles

Chilly cultivation under drip

Thematic Area: Agri-prenuership

"Agri-prenuership through Vermicompost & Organic Farming"

Sh. Kalubhai Bhupatbhai Dhanadiya

Village: Bhet, Taluka: Muli District: Surendranagar, Gujarat

Mo.:+91 9426570154

Profile
Age: 35 years
Education: MSW
Land Holding: 5ha.

Crops:
a) Kharif: Cotton, Tomato, Chilly

b) Rabi : Wheat

Horticultural crops:
Mango,
Lemon,
Sapota

Animals:
1) Cow herd-40

Social Identity:
Progressive Farmers as Agri-prenuer & "Krishi na Rushi"

Description of Technology:

Description: Mr. Kalubhai is a farmer of the village Bhet of Muli taluka. He educated up to BRS, Master of Social Work. Though he is educated but unemployed. He belongs to poor farming community. His land is also undulated and soil depth is very thin due to hilly rocks. The condition is against him for the better farming, but due to this situation he goes for further education LLB to strength himself and getting his profession, after completion of LLB, he engages in his profession but goes in vein, as his economic condition became poor day by day. As far as one day come in contact with KVK-scientists during a training programme. and after discuss all about him and his farming situation. He is a BRS and has keen interest in Vermi compost technology due to animals. After this KVK scientists give him details of technology. He did his hard work and get success.

Technology: Initially he made a small sized vermin unit of 10x10' on his farm and began to plantation of horticulture crops like Mango and Lemon on his field. He totally used vermi compost in these crops. By getting the success, after this he made a large 160 x 35' sized vermicompost unit and divide them 25x3' sized beds. In which vermicompost is ready in 50-60 days. At present he produce 2000 begs of 50 kg weight and sold them at the rate of 200/beg as "***Ramdev Vermicompost***" Brand at nearby market. Today he makes his own production is highly remunerative due to high demand of his farms produce.
He also gets organic certification of his farm produce and sold at high rate. Today he is capable.

Impact: he encouraged about 50-100 farmers of surrounding villages.

Vermi Compost Unit

Success Story-3.

<table>
<tr><td>  </td><td>Thematic Area: Agri-prenuership
“Raising of Vegetable Nursery”
Sh.Ramshibhai Chhaganbhai Metaliya
Village:Panchvada, Taluka: Chotila
District: Surendranagar, Gujarat
Mo.: +91 99095 47122</td></tr>
<tr><td>Profile:

Age: 46 year

Education: literate

Land Holding: 2 Acre

Farming Experience: 20 Yr

<u>Crop Grown</u> :
Kharif:-
Cotton, Vegetables

Rabi Crops:-Cumin

Fruit Crops:- Lemon

Raising of Vegetable Nursery

Live Stock :Buffalos</td><td>Description: Mr.Ramshibhai is a small farmer of the village Panchvada. He is literate only. Initially he is engaged in taking field crops along with lemon orchards. Due to limited resources, he faced the many constraints most of economic. He is hard worker. Meanwhile, he came in contact with KVK. He appraised about the Nursery demonstration unit and other training programmes of KVK. After that he established liaison with KVK scientists for proper advice. Based on his skill and knowledge KVK scientists encouraged him to start nursery enterprise for extra income to support his family. Initially, he was acquainted with local demand of farmers & purchase good quality Hybrid seeds of vegetables of private companies. Within 2 year from establishment of unit, he produces about 25,00,000 seedlings of different vegetable crops and marketed in nearby village of Chotila taluka. He is Intelligent in marketing and Advertise about his enterprise as quick as possible and win the faith of farmers. Now he is growing these seedlings in plug trays and supply by own rickshaw. Today he earns about Rs.3,50,000 (Three lakh fifty thousand) extra income per year from this enterprise.

Utility: Today farmers of surrounding area can purchase good quality of seedlings of hybrid variety of vegetable crops directly & also give order of specific crop & variety seedlings to Ramshibhai bhai</td></tr>
<tr><td> 
Nursery Board</td><td> 
Nursery of Vegetable crops</td></tr>
</table>

Adoption of INM in Bt cotton

1. Name of farmer : Rajubhai Dalpatbhai Maharaj
2. Name of village : Sapar (Sayala)
3. District : Surendranagar

Cotton is the main cash crop in Surendranagar district of Gujarat, most of the farmers of this area cultivated cotton as a Kharif crop. The average productivity seen in this area for cotton is i.e. 1825 kg/ha of district. Most of the farmer was used bt variety of cotton. These varieties are higher yielder hence more balance requirements of nutrients. Most of the farmers used only DAP and Urea. They not aware about the use of micronutrients. So the yield comes low due to defoliation at the time of maturity and less setting of flower due to more use of nitrogenous fertilizers.

Shri Rajubhai Dalpatbhai Maharaj is a progressive farmer of the Sapar village, Talulka: Sayala. He has about 2 ha land on which he grows mostly cotton in Kharif season. Through Krishi Vigyan Kendra one FLD on INM in cotton was conducted on his field. The treated plots shows vigorous plant growth, more branching and high boll formation than the control plot, hence as a result more yield was obtained against the local check. He told that approximately 15-18 % yields were increased due to the adoption of INM in cotton. He said that for the forthcoming year he will definitely use INM due to higher yield and superior quality.

3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

1. **Method of sowing (<u>Row sowing of cumin):</u>**

Cumin is highly remunerative as compared to other spice crops. In Surendranagar district the area of cumin is increasing due to suitable climatic condition of the district. For successful cultivation of cumin dry and cool climate is most favorable, hence Surendranagar district is suited to its cultivation.

During PRA survey and various field diagnostic visits, it was found that most of the farmers were adopted broad casting method for sowing of cumin. After discussing with all the Subject Matter Specialists of the Krishi Vigyan Kendra under the chairmanship of Programme coordinator, a field experiment on cumin was conducted at the Krishi Vigyan Kendra. The plot is divided into two halves, one for farmer's practice and other for row sowing i.e. for improved practice. All the component of production technologies keeps same. During the initial stage of germination, the germination occurs very well in row sowing as compare to local check. The growth parameters were also good in improved practices than the check. It was found that heavy attack of powdery mildew occur in dense populated farmer's practices plot as compared to improved practices plot. The yield of the crop was also fluctuated. As a result we found that the row sowing method is more suitable for cumin sowing rather than broad casting method.

2. Use of *Tricoderma harzianum* against stem rot disease of groundnut.
3. Cotton Stalk Shredder
4. Cotton Stalk Puller
5. Tractor mounted spryer
6. Minimizing the Fertilizer and Maximizing organic manure in Cotton crop
7. IPM in Cotton

3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

	Crop	ITK Practiced	Purpose of ITK
1	Cotton	Cow urine + Dhatura + Desi Aakada boiled and their boiled extract sprays on cotton crop to control the sucking pest.	To control sucking pest.
2	Black gram	Uses of Mehandi powdar and Black gram for minimize the repeat breeder (Uthalo)	To minimize repeat breeder
3	Cattle	For the control of H.S. disease (Locally called Humaro), Kalthi pulse used in feeding	To control H.S. disease
4	Cotton	Boiled mixture of neem oil (500 gms), Aelovera (4 kg), tobacco (500 gms)& water (20 lit) used to control the heleothis, pink boll worm, semi looper	To control the heleothis, pink boll worm, semi looper
5	Wheat	Use of cactus leaves & fruits to control the termites	To control termites
6	Cumin	For the control of powdery mildew in cumin, boiled extract of 3 kg leaves of Piludi + 20 lit water spray on cumin	To control powdery mildew
7	Castor	Milk of cactus is used for the control of stem rot in castor	To control stem rot
8	Cotton	Fermented bajra floor (Bajra floor dig in heap of gobber for 10 days) used for the control of different larvae in Cotton	To control different larvae
9	Pulses	Ash powder is used to preserve the pulses.	For the storage
10	Grain	Neem leaves are used to store pulses as well as grains.	For the storage
11	Child care	To cure cough and cold in children, ajwain seed or nagarvel leaf should be used. Those are applying on chest and give hot towel treatment to child.	Child care
12	Child care	To cure dehydration, jaggery water is given to child	Child care

Indicate the specific training need analysis tools / methodology followed for

* ***Identification of courses for farmers/farm women:***
    - Training for value addition in wheat, groundnut and pulse
* ***Rural Youth:***
    - Care and maintenance of farm implements.
    - Safe use of agro chemicals.
    - Organic farming.
* ***Inservice personnel:***
    - Pre seasonal training on kharif and rabi crops management

3.11 Field activities

* Number of villages adopted : 15+15
* No. of farm families selected : 300+450
* No. of survey/PRA conducted : 3 PRA, 5 Bench Mark Survey

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Completed

1. Year of establishment : 2010-11
2. List of equipments purchased with amount : --

Sr. No.	Name of the Equipment	Qty.	Cost
1	Specto-photo meter	1	39,480
2	Flame-photo meter	1	4,4887
3	PH meter	2	7,600
4	Conductivity bridge EC Meter	1	9,450
5	Physical balance	1	6,616
6	Chemical balance	1	45,066
7	Water distillation steel	1	1,57,500
8	Shaker	2	36,000
9	Refrigerator	1	19,200
10	Oven	1	15,215
11	Hot plate	2	9,450

3. Details of samples analyzed so far:

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	175	175	15	--
Water Samples	179	175	15	--
Total	**354**	**350**	**30**	**--**

4. IMPACT

4.1 Impact of KVK activities : Details given in Impact analysis

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Composting by using cotton shredder	3500	*77*	--	--
INM in Cotton	275	65	--	--

4.2. Cases of large scale adoption:

Sr. No	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of village	No. of farmers	Area in ha
1	Dry farming	**Latest recommended variety**	Field Day, FLD, Training	30	22000	600
		GG-20, GJG-31 (G'nut)				
		Guj. Til-2,3 (Sesamum)				
		Guj. Greengram-4				
		Guj.Musrard-2 (Mustard)				
		Guj.Gram-3 (Gram)				
		Guj.Cumin-4 (Cumin)				
		GW – 496,366 (Wheat)				
2	Animal husbandry	Vaccination	Training, Animal treatment camp	30	4000	3500 animal
		De-worming		30	2500	5000 animal

- **Details of impact analysis of KVK activities carried out during the reporting period:**

Impact Study of KVK Surendranagar

Krishi Vigyan Kendra, Surendranagar is working in 3 cluster of 14 villages of Chotila, Sayala and Muli talukas of Surendranagar district from 2006. Different programmes like FLDs and OFTs were organized for practicing farmers in selected villages since its inception. The need based training programmes are being planned and organized as on-campus and off campus trainings for the adopted villages. The topics selected were mostly crop production technologies, plant protection measures, water managements etc. the front line demonstrations on recently released varieties of major growing crops and cropping system were organized on farmers fields.

An Interview schedule was prepared to measure the impact of KVK activities such as training, FLDs OFT on beneficiaries. An attempt was made to study the profile of the participants trainees, knowledge and adoption of different agricultural technologies and increase in yield in major crops before KVK and after KVK. The interview schedule was prepared in local language and 100 participant trainees were interview by random sampling method. The study was conducted with following objectives:

1. **To know the profile of trainees**
2. **to identify the agricultural information sources before KVK and after KVK**
3. **to assess the knowledge and adoption of trainees about agricultural technology before and after KVK**
4. **to assess the yield of major growing crops before and after KVK**

(1) Profile of the trainees

A. Age of participants

S.NO.	Category	Percentage
1	Up to 35 years	30
2	36 to 50 years	53
3	More than 50 years	17

The data reveals that about 50 per cent of the participants belongs to 36 to 50 year age group and 30 per cent of participants were from young age group. Hence, more emphasis may be given to attract young age farmers due to their education.

B. Educational status of the participants

S. No.	Category	Percentage
1	Illiterate	18
2	Primary level	52
3	S.S.C./ H.S.C. level	23
4	Graduate and above	7

Majority of the of the farmers were having either primary or high school education the data also show that very few 7 per cent of the respondents were graduate and above. It shows that they are not interested in agriculture and allied aspects.

C. Area of farmland (ha.)

S.No.	Category	Percentage
1	Less than 1 ha.	18
2	1 to 4 ha	57
3	More than 4 ha.	25

The data indicates that majority of the participants farmers were middle to big farmers category.

D. Annual Income (Rs.)

S. N.	Category	Percentage	
		Before KVK	At present
1	10000 to 50000	28	22
2	50001 to 100000	34	30
3	More than 100000	38	48

The farmers having annual income of Rs 10,000 to 50,000 were 28 percent, where as 34 per cent farmers had 50,001 to 1,00000 and 38 percent farmers were having annual income more the 100000 before KVK inception. At present 48 percent farmers were having annual income more than Rs.100000, 30 percent were having Rs 50001 to 100000 and 22 percent having 10000 to 50000. It shows that after KVK, the annual income of the farmers has increased to some extent.

2. Sources of Agricultural information before KVK and at present

S. No.	Sources of agril. information	Percentage	
		Before KVK	At present
1	Radio	30	42
2	TV.	42	48
3	Telephone	23	35
4	News Paper	20	40
5	Agril Literature	28	37
6	KVK Scientist	-	85
7	NGOs	12	25
8	Agro agencies	54	68

The data presented in the table reveals that 54 percent of the respondents got agricultural information from agro agencies, 42 per cent from TV, 30 per cent from radio 28 percent from agril literature and remaining from news papers and various NGO activities. Before the KVK started .in this area. But at present 85 percent getting the information from KVK Scientist, 68 per cent from agro agencies 48 per cent from TV, 42 per cent from Radio and remaining from various sources.

3. Knowledge and Adoption of Agril. Technology before KVK and at present by trainees

A. Knowledge and adoption of Cotton Production Technology

S. N	Particulars	Before KVK		At present	
		Knowledge	Adoption	Knowledge	Adoption
1.	High Yielding Varieties, Bt cotton	60	30	100	95
2	Sowing Time	85	78	95	90
3	Seed Rate	60	55	100	90
4	Seed Treatment	30	25	45	35
5	Row Spacing	35	30	75	70
6	Application of Fertilizer	25	22	85	75
7	Irrigation	78	72	85	80
8	Control measures for Insects	25	20	75	70
9	Control measures for Diseases	22	18	45	40

B. Knowledge and adoption of Groundnut Production Technology

S.No	Particulars	Before KVK		At present	
		Knowledge	Adoption	Knowledge	Adoption
1.	High Yielding Varieties	48	24	95	84
2	Sowing Time	80	75	95	88
3	Seed Rate	65	53	80	75
4	Seed Treatment with Trichoderma	10	2	55	45
5	Row Spacing	26	14	90	85
6	Application of Fertilizer	49	45	65	60
7	Irrigation	78	70	92	88
8	Control measures for Insects	33	27	85	76
9	Control measures for Diseases	28	26	84	74

C. Knowledge and adoption of wheat Production Technology

S. N	Particulars	Before KVK		At present	
		Knowledge	Adoption	Knowledge	Adoption
1.	High Yielding Varieties GW-496, GW-366, 273	65	60	85	84
2	Sowing Time	80	75	98	92
3	Seed Rate	71	65	85	78
4	Seed Treatment	38	30	55	45
5	Row Spacing	46	36	70	65
6	Application of Fertilizer	45	35	75	65
7	Irrigation	75	65	80	75
8	Control measures for Insects	33	25	65	60
9	Control measures for Diseases	10	-	85	45

D. Knowledge and adoption of Cumin Production Technology

S. N	Particulars	Before KVK		At present	
		Knowledge	Adoption	Knowledge	Adoption
1.	High Yielding Varieties GC-2,3,4	40	35	100	100
2	Sowing Time	90	85	100	100
3	Seed Rate	56	50	90	80
4	Seed Treatment	45	40	88	85
5	Row Spacing	45	40	85	80
6	Application of Fertilizer	38	35	90	80
7	Irrigation	80	73	100	94
8	Control measures for Insects	35	30	86	80
9	Control measures for Diseases	28	21	100	95

E. Knowledge and adoption of Chickpea Production Technology

S. N	Particulars	Before KVK		At present	
		Knowledge	Adoption	Knowledge	Adoption
1.	High Yielding Varieties Guj Gram 1,2,3	17	5	75	65
2	Seed Rate	58	39	90	80
3	Seed Treatment	15	-	55	45
4	Row Spacing	55	50	75	70
5	Application of Fertilizer	55	50	80	70
6	Irrigation	86	70	95	90
7	Control measures for Insects	33	25	55	50
8	Control measures for Diseases	22	20	50	45

5. LINKAGES

- **Functional linkage with different organizations**

Name of organization	Nature of linkage
State department of Agriculture - Dy. Director of Agriculture (Extension) - Dy. Director of Horticulture - Dy. Director of Animal husbandry - Dy. Director of Soil Conservation - Dy. Director of Social Forestry -Dy. Director of Fisheries	The head of all the organizations are members of Scientific Advisory Committee of KVK and have linkage with different activities of KVK viz., training programmes, farmers day, field days, etc.
NABARD	
Jilla Udyog Kendra	
Milk Co-operative Society	
State bank of India	
Doordarshan Kendra	
All India Radio	
ATMA, Surendranagar	
AKRSP, Sayala	
NHRDF	
Farmers Training Centre	
ATMA	

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.) 2013-14	
			Recurring	Non-recurring
ATIC	April-2013	GOG		
Seed Village	April-2013	GOG	84,549/-	

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district: Yes

Sr. No.	Programme	Nature of linkage	Remarks
1	Training for farmers, FW, RY	Technical support, Lecture delivered	
2	Training for SMS (ATMA)		
3	FFS		
4	Farmers meeting		

5.4 Give details of programmes implemented under National Horticultural Mission:

Sr. No.	Programme	Nature of linkage	Constraints if any
1	Training for Mali	Lecture delivered as resource person	--
2	Khedut shibir		--

5.5 Nature of linkage with National Fisheries Development Board: NIL

6. PERFORMANCE OF INFRASTRUCTURE IN KVK :

6.1 Performance of demonstration units (other than instructional farm) :

- Establishment of IFS Model

Components:

1. Fish Rearing
2. Poultry (layering)
3. Goat rearing
4. Vegetables Production
5. Cereal Production
6. Composing unit
7. Gir cow rearing

6.2 Performance of instructional farm (Crops) including seed production

Sr. No.	Name of crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of produce	Quantity (Kg)	Seeds Sale (Kg)	Income (Rs.)
1	Ground Nut	19/6/13	8/11/13	5.39	GJG-31	TF	5,649	3720	1,77,320
2	Ground Nut	20/6/13	7/11/13	0.97	GJG-31	Breeder	991	120	40,800
3	Ground Nut	18/6/13	23/10/13	2.19	GG-2	Breeder	1775	885	79,650
4	Ground Nut	20/6/13	2/11/13	3.54	GJG-9	Breeder	2700	120	10,800
5	Ground Nut	21/6/13	3/11/13	0.50	GJG-9	TF	747	--	--
6	Sesamum	19/6/13	7/9/13	0.46	GT-4	Breeder	189	--	360
7	Sesamum	2012-13	2013-13	0.30	GT-3	Breeder	132	--	17,150
8	Gum guar	6/7/13	2/10/13	2.35	G.Guar-2	TF	730	--	11000
9	Cumin	23/11/12	27/2/13	1.50	GC-4	TF	392	365	55912

6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,): NIL

Sr. No.	Name of the product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
-	-	-	-	-	-

6.4 Performance of instructional farm (livestock and fisheries production) :

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	Gir	Milk	1446	--	40,488	
2	Goat	Zalawadi	Milk	1497	--	16,467	
3	Poultry	RIR	Egg	931	--	4,655	

6.5 Rainwater Harvesting Training programme conducted by using rainwater harvesting demonstration unit

Date	Title of the training course	Client	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				M	F	T	M	F	T
2/12/13	Micro irrigation system	PF	1	23	0	23	4	0	4
6/12/13	Soil moisture conservation	PF	1	15	0	15	6	0	6
23/7/13	Rain water harvesting technology	PF	1	21	0	21	3	0	3

6.6 Utilization of hostel facilities:

Accommodation available (No. of beds): 20

Months	Title of the training course/ Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April -13		46	04	
May-13		00	00	
June-13		07	05	
July-13		00	00	
August-13		00	00	
September-13		36	28	
October-13		02	01	
November-13		00	00	
December-13		26	02	
January-14		03	20	
February-14		96	17	
March-14		110	11	
		326	**88**	

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

	Name of the Bank	Location	A/c Number
a. With Host. Institute	SBI	Junagadh	---
b. With KVK (2704 -18)	SBS	Chotila	66002464030
c. With KVK (2076- 22)	SBS	Chotila	66002438769

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2014
	Kharif 2013-14	Rabi 2013–14	Kharif 2013-14	Rabi 2013-14	
Inputs	0	0	0	0	0
Extension activities	0	0	0	0	0
TA/DA/POL etc	0	0	0	0	0
TOTAL	0	0	0	0	0

7.3 Utilization of funds under FLD on Pulses *(Rs. In Lakhs)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2014
	Kharif 2013-14	Rabi 2013–14	Kharif 2013-14	Rabi 2013-14	
Inputs	0	0	0	0	0
Extension activities	0	0	0	0	0
TA/DA/POL etc.	0	0	0	0	0
TOTAL	0	0	0	0	0

7.4 Utilization of funds under FLD on Cotton *(Rs. In Lakhs)*

Item	Released by ICAR	Expenditure	Unspent balance as on 1st April 2014
	Kharif 2013-14	Kharif 2013-14	
Inputs	0	0	0
Extension activities	0	0	0
TA/DA/POL etc.	0	0	0
TOTAL	0	0	0

7.5 Utilization of KVK funds during the year 2012 -13

SN	Items/Head (2012-13)	Sanctioned grant	Grant received	Expenditure
A RECURRING CONTIGENCY				
1	**Pay & Allowances**	**47,50,000**		**47,06,401**
2	**Traveling Allowances**	**1,50,000**		**1,30,000**
3	**Contingencies**	**10,50,000**		**10,48,301**
a.	Stationary, Telephone, Postage and other expenditure on office running	4,20,000		4,19,992
b.	POL, repair of vehicles, tractor and equipments			
c.	Meals/refreshments of trainees	6,30,000		6,28,309
d.	Training materials			
e.	Frontline demonstration except oilseeds and pulses			
f.	On farm testing			
g.	Training of extension functionaries			
h.	Maintenance of building			
	TOTAL-A	**59,50,000**		
B NON-RECURRING CONTIGENCY				
1	Plant Health Clinic	10,00,000	00	9,18,469
	TOTAL-B			
	GRAND TOTAL	**69,50,000**	**66,27,000**	**68,03646**

Utilization of KVK funds during the year 2013 -14

SN	Items/Head (2013-14)	Sanctioned grant	Grant received	Expenditure
A. RECURRING CONTIGENCY				
1	**Pay & Allowances**	**57,00,000**		**55,34,465**
2	**Traveling Allowances**	**1,50,000**		**1,50,000**
3	**Contingencies**	**13,00,000**		**12,98,101**
a.	Stationary, Telephone, Postage and other expenditure on office running	5,20,000		5,19,214
b.	POL, repair of vehicles, tractor and equipments			
c.	Meals/refreshments of trainees	7,80,000		7,78,887
d.	Training materials			
e.	Frontline demonstration except oilseeds and pulses			
f.	On farm testing			
g.	Training of extension functionaries			
h.	Maintenance of building			
	TOTAL-A	**71,50,000**		**69,82,566**
B. NON-RECURRING CONTIGENCY				
	TOTAL-B			
	GRAND TOTAL	**71,50,000**		**69,82,566**

7.3 Status of revolving fund (Rs.) as on 31st March - 2014

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2005 to March 2006	1,00,000	--	--	1,00,000
April 2006 to March 2007	1,00,000	73,778	15,709	1,58,069
April 2007 to March 2008	1,58,069	3,60,622	3,31,160	1,87,531
April 2008 to March 2009	1,87,531	2,87,137	1,87,888	2,86,780
April 2009 to March 2010	2,86,780	6,24,618	1,00,011	8,11,387
April 2010 to March 2011	8,11,387	1,71,380	51	9,82,716
April 2011 to March 2012	9,82,716	6,77,483	5,12,461	11,47,738
April 2012 to March 2013	11,47,738	9,03,804	3,07,645	17,43,897
April 2013 to March 2014	17,43,897	10,15,194	4,37,151	23,21,940

8.0 Please include information which has not been reflected above (write in detail).

8.1 Constraints

(a) Administrative : Nil
(b) Financial : Nil
(c) Technical : Nil

Technology Inventory and Activity Chart - III

S.N	Technology	Crop/ enterprise	Year of release or recommendation of technology	Source of technology	Reference/ citation
1.	Variety: GJG-31	Groundnut	2010	J.A.U., Junagadh	--
2.	Variety : GG-20	Groundnut	1991	G.A.U., S.K. Nagar	--
3.	Variety : Guj. Gram - 3	Gram	2008	J.A.U., Junagadh	--
4.	Variety : Guj. Cumin - 4	Cumin	2002	G.A.U., S.K. Nagar	--
5.	Variety : GW-496	Wheat	1989	J.A.U., Junagadh	--
6.	Variety : G Til-3	Sesame	2006	J.A.U., Junagadh	
7.	Application of Trichoderma against stem rot disease in Groundnut	Groundnut / disease management	2010	J.A.U., Junagadh	--
8.	Variety : Guj. Sesamum-2	Sesamum	1994	J.A.U., Junagadh	--
9.	Variety : Guj. Greengram - 4	Green Gram	2002	G.A.U., S.K. Nagar	--
10.	Management of mealy bug in	Cotton	2012	J.A.U., Junagadh	
11.	Chelated Mineral mixture	Buffalo	2013	AAU, Anand	--
12.	De-worming	New born Calf	2012	AAU, Anand	

Activity Chart

Crop/ Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Mustard	Low yield	--	Improved variety	FLD, Training, Field day	S.K.A.U., S.K. Nagar
Gram	Low yield	--	Improved variety	FLD, Training, Field day	J.A.U., Junagadh
Cumin	Low yield	--	Improved variety	FLD, Training, Field day	G.A.U., S.K. Nagar
Wheat	Low yield	--	Improved variety	FLD, Training, Field day	J.A.U., Junagadh
Groundnut	Low yield	Disease infestation	IDM	FLD, Training, Field day	J.A.U., Junagadh
Sesamum	Low yield	--	Improved variety	FLD, Training, Field day	J.A.U., Junagadh
Green gram	Low yield	--	Improved variety	FLD, Training, Field day	G.A.U., S.K. Nagar
Cotton	Low yield	--	Improved variety	FLD, Training, Field day	--
	Low yield	Infestation of Mealy bug	Management of Mealy bug in cotton	OFT, Training, Field day	J.A.U., Junagadh
Buffalo	Low milk yield	nutrition deficiency	Mineral mixture	Demonstration, Training, Animal camp	A.A.U., Anand
Calf	Mortality	parasitic infestation	De-worming	Demonstration, Training, Animal camp	A.A.U., Anand

Agro-ecosystem Analysis of the focus/target area - II