PROGRESS REPORT OF KVK TARGHADIA (2005-06)

1. Name and address of the KVK with Zip code: Krishi Vigyan Kendra,
Main Dry Farming Research Station,
Junagadh Agricultural University,
Targhadia, Dist.: Rajkot (Gujrat)
Pin Code - 360 003.

Name of the host organization : Junagadh Agricultural University, Junagadh.

Telephone with STD Code

	STD Code	Phone No.	FAX
Office	0281	2784170	2784722
Residence	R. 2562251	Mo: 93742 02518	

2. Staff Position (as on 30th Sept. 2006)

Sr. No.	Name	Designation	Discipline	Pay Scale	Present basic Pay	Date of Joining	Category SC / ST / OBC / Others
1	2	3	4	5	6	7	8
1.	Dr. B. B. Kabaria	Programmer Coordinator	Plant Protection	12000-420-18300	17040	15-09-06	General
2.	Dr. M.B. Viradiya	SMS (Crop Production)	Agricultural Chemistry & Soil Science	8000-275-13500	8000	17-08-06	General
3.	Dr. A.V. Khanpara	SMS (Plant Protection)	Plant Protection	8000-275-13500	8000	18-08-06	General
4.	Dr. J.B. Kathiriya	SMS (Animal Husbandry)	Animal Science	8000-275-13500	8000	19-08-06	General
5.	Dr. N.D. Polara	SMS (Horticulture)	Horticulture	8000-275-13500	8000	18-08-06	General
6.	Miss. H.A. Manvar	SMS (Home Science)	Home Science	8000-275-13500	8000	17-08-06	General
7.	Shri. P.P. Gajjar	SMS (Agril. Engg.)	Agricultural Engineering	8000-275-13500	8000	19-08-06	OBC
8.	Dr. P.D. Vekariya	Programme Assistant (Farm Manager)	Agronomy	5500-175-9000	7250	16-09-04	General
9.	Shri. G.B. Vekariya	Programme Assistant (Training)	Plant Physiology	6500-200-10500	8700	01-08-06	General
10.	Vacant	Programme Assistant	Computer Operator	5500-175-9000	-	-	-

11.	Shri. J. B. Bhatt	Offi. Sup. Cum A/c. Officer	-	5500-175-9000	6800	14-09-06	General
12.	Shri V.F.Chaudhary	Junior Steno	-	4000-100-6000	Working at Junagadh	01-03-06	ST
13.	Shri. S.D. Dafda	Jeep Driver-Cum Mechanic	-	3050-100-4590		01-08-06	SC
14.	Shri. C. Gardharia	Jeep Driver-Cum Mechanic	-	3050-100-4590	5500	01-03-06	General
15.	Shri.D.K.Makwana	Supporting Staff	-	2650-70-4000		01-07-06	OBC
16.	Smt.U.G.Zala	Supporting Staff	-	2550-70-3200	2900	16-09-04	General

3. Total Land with KVK: 20 ha .

Sr No.	Item	Area (ha)
1	Under Buildings / Roads	1.00
2	Under Demonstration Units	0.50
3	Under Crops	9.00
4	Orchard / Agro- Forestry	6.00
5	Others / DFRS	3.50
Total		**20.00**

4. Infrastructure Development: Nil.

Sr. No.	Name of the Building	Stage Completed (Plinth Area in sq.m.)	In Completed (Plinth Area in(sq.m.)	Source Fund
1.	Administrative Buildings	Fund not allotted	-	ICAR
2.	Farmers Hostel	Fund not allotted	-	ICAR
3.	Staff Position	15	1	ICAR
4.	Demonstration Units	Fund not allotted	-	ICAR
5.	Any Others	Fund not allotted	-	ICAR
Total		-	-	-

5. Description of Agro - Climatic Zones and Farming Situations of District :

North Saurashtra Agro Climatic Zone - VI, Gujarat, District - Rajkot.

Eight Agro-climatic zones have been identified in Gujarat. The North Saurashtra Agro Climatic Zone - No. 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 taluka out of 11), Bhavnagar (6 taluka out of 13), Jamnagar (all the 10 taluka), Rajkot (11 taluka out of 14) and Surendranagar (8 taluka out of 11) covering 43 taluka in all. It is bounded in the north by the gulf of Kutchh and parts of Rajkot as well as Surendranagar district, in the east by Ahmedabad district and coastal part of Bhavnagar district, on the south by the Junagadh

district and parts of Amreli as well as Rajkot district and to the west by Arabian Sea. The farming situation of the district Rajkot is rainfed. Area, production and productivity of field crops are given as below.

(A) Area and Production of field crops of Rajkot District (in Lakhs)

Crop	2001-02		2002-03		2003-04		2004-05		2005-06	
	Area (Ha)	Prod. (Tone)	Area (Ha)	Prod. (Tone)	Area (Ha)	Prod. (Tone)	Area (Ha)	Prod. (Tone)	Area (Ha)	Prod. (Tone)
Kharif Session										
Groundnut	3.83	5.65	3.79	1.98	3.99	9.45	3.89	3.63	3.49	4.69
Cotton	1.84	3.91	1.82	0.83	1.59	3.82	2.44	3.08	2.86	3.52
Pearl Millet	0.43	0.79	0.40	0.29	0.38	0.73	0.24	0.38	0.23	0.37
Sorghum	0.10	0.08	0.09	0.03	0.08	0.05	0.04	0.008	0.013	0.008
Sesamum	0.55	0.35	0.55	0.13	0.56	0.32	0.29	0.06	0.38	0.19
Castor	0.09	0.13	0.10	0.04	0.09	0.18	0.15	0.17	0.08	0.13
Pegion pea	0.02	0.03	0.02	0.07	0.02	0.04	0.01	0.008	0.005	0.008
Black gram	0.09	0.07	0.01	0.003	0.01	0.006	0.008	0.004	0.008	0.005
Green gram	0.08	0.06	0.11	0.02	0.09	0.06	0.07	0.03	0.05	0.03
Rabi Session										
Wheat	0.05	0.15	0.15	0.43	0.77	2.78	0.27	0.88	0.70	-
Mustard	-	-	0.002	0.001	0.01	0.01	0.006	0.009	0.007	-
Cumin	0.05	0.03	0.06	0.03	0.38	0.23	0.23	0.18	0.41	-
Chick Pea	0.01	0.01	0.01	0.008	0.09	0.10	0.05	0.06	0.08	-
Onion	0.01	0.24	0.08	0.18	0.06	1.25	0.06	1.30	0.15	-
Garlic	0.007	0.05	0.009	0.05	0.09	0.64	0.08	0.85	0.11	-

(B) Live Stock

Sr. No.	Bullock & Cow	Buffalo	Sheep	Goat	Horse & Camel	Poultry	Total
1.	494254	179234	308742	171178	2066	19085	1174559

6. Thrust areas of work identified through PRA, Survey or any other Method

1. Increasing the productivity of the major crops by adopting recommended dry farming technologies.
2. In situ soil moisture conservation and rainwater harvesting.
3. Promoting the arid horticulture.
4. Motivating cotton growers to adopt Integrated Pest Management (IPM) practices for reducing the cost of production.

5. Enhancing productivity of milch animals by proper feeding and breeding management.
6. Providing self employment through skill oriented income generating activities
7. Developing interest among youth for agriculture as a profession.
8. Value addition in agriculture produces through proper grading, processing, marketing and information technology.
9. Minimizing the post harvest losses and to create the awareness for proper storage.

7. Training Achievement

(A) On Campus

Sr. No.	Discipline(s)	No. of Courses	No of Participants			SC / ST Participants			Grand Total
			Male	Female	Total	Male	Female	Total	
Practicing farmers									
1.	Crop Production	16	288	290	578	32	35	67	**645**
2.	Horticulture	2	54	8	62	8	2	10	**72**
3.	Live stock production & management	1	32	5	37	3	1	4	**41**
4.	Home Science	5	12	120	132	3	16	19	**151**
5.	Agril. Engg.	6	179	-	179	25	2	27	**206**
6.	Plant Protection	18	321	238	559	34	24	58	**617**
7.	Fisheries	-	-	-	-	-	-	-	**-**
8.	Agril. Extn.	-	-	-	-	-	-	-	**-**
9.	Agro -Forestry	-	-	-	-	-	-	-	**-**
10.	Soil fertility & Management	2	73	-	73	11	-	11	**84**
11.	Others Agril. Meteo.	1	21	-	21	5	-	5	**26**
	Total	**51**	**980**	**661**	**1641**	**121**	**80**	**201**	**1842**
Rural Youth									
1.	Economics	1	-	20	20	-	2	2	**22**
2.	Plant Protection	1	24	-	24	2	-	2	**26**
Total		**2**	**24**	**20**	**44**	**2**	**2**	**4**	**48**
Extension Functionaries / In - service personnel									
1	Cotton Mini-Mission Training Programme	4	93	-	93	-	-	-	**93**
2	Bi-Monthly Workshop	4	57	34	91	2	5	7	**98**
3.	Crop Production Improvement in Oilseeds Crop	1	30	-	30	3	-	3	**33**
Total		**9**	**180**	**34**	**214**	**5**	**5**	**10**	**224**
Grand Total		**62**	**1184**	**715**	**1899**	**128**	**87**	**215**	**2114**

(B) Off Campus .

Sr. No.	Discipline(s)	No. of Courses	No of Participants			SC/ ST Participants			GT
			Male	Female	T	Male	Female	T	
***** Practicing farmers**									
1.	Crop Production	12	435	24	459	29	4	33	**492**
2.	Horticulture	3	98	32	130	8	6	14	**144**
3.	Live stock prod. & Management	1	41	-	41	4	-	4	**45**
4.	Home Science	4	11	88	99	3	12	15	**114**
5.	Agril. Engg.	3	87	-	87	8	-	8	**95**
6.	Plant Protection	8	216	30	246	27	9	36	**282**
7.	Fisheries	-	-	-	-	-	-	-	**-**
8.	Agril. Extn.	-	-	-	-	-	-	-	**-**
9.	Agro -Forestry	-	-	-	-	-	-	-	**-**
10.	Soil fertility & Management	2	42	6	48	5	-	5	**53**
11.	Others Agri. Meteorology	2	68	12	80	12	2	14	**94**
**	**Total**	**35**	**998**	**192**	**1190**	**96**	**33**	**129**	**1319**
***** Rural Youth**									
1.	Horticulture	3	155	21	176	8	-	8	**184**
****	**Total**	**3**	**155**	**21**	**176**	**8**	**-**	**8**	**184**
***** Extension Functionaries / In Service Personnel.**									
1.	Cotton Mini-Mission Training	1	28	-	28	-	-	-	**28**
****	**Total**	**1**	**28**	**-**	**28**	**-**	**-**	**-**	**28**
****	**Grand total**	**39**	**1181**	**213**	**1394**	**104**	**33**	**137**	**1531**

(C) Consolidated Table (On + Off Campus)

Sr. No.	Discipline(s)	No.of Course	No of Participants			SC/ ST Participants			GT
			Male	Female	T	Male	Female	T	
***** Practicing farmers**									
1.	Crop Production	28	723	314	1037	61	39	100	**1137**
2.	Horticulture	5	152	40	192	16	8	24	**216**
3.	Live stock production & management	2	73	5	78	7	1	8	**86**
4.	Home Science	9	23	208	231	6	28	34	**265**
5.	Agril. Engg.	9	266	0	266	33	2	35	**301**
6.	Plant Protection	26	537	268	805	61	33	94	**899**
7.	Fisheries	-	-	-	-	-	-	-	**-**
8.	Agril. Extn.	-	-	-	-	-	-	-	**-**
9.	Agro -Forestry	-	-	-	-	-	-	-	**-**
10.	Soil fertility & Management	4	115	6	121	16	0	16	**137**

11.	Others Agril.Meteo.	3	89	12	101	17	2	19	**120**
**	**Total**	**86**	**1978**	**853**	**2831**	**217**	**113**	**330**	**3161**
***** Rural Youth**									
1	Horticulture	3	155	21	176	8	-	8	**184**
2	Economics	1	-	20	20	-	2	2	**22**
3	Plant Protection	1	24	-	24	2	-	2	**26**
**	**Total**	**5**	**179**	**41**	**220**	**10**	**2**	**12**	**232**
***** Extension Functionaries**									
1.	Cotton Mini-Mission Training	5	132	-	132	-	-	-	**132**
2.	Bi – Monthly Work shop	4	57	34	91	2	5	7	**98**
3.	Crop Production Improvement in Oilseeds Crop	1	30	-	30	3	-	3	**33**
****	**Total**	**10**	**208**	**34**	**222**	**5**	**5**	**10**	**25**
****	**Grand Total**	**101**	**2365**	**928**	**3273**	**232**	**120**	**352**	**3623**

8. Results of Front line demonstration

8. A. OIL SEEDS :

(a) Details of Implementation

Sr. No.	Crop	Year	Season	Variety	Area (ha.)		No. of Farmers/ Demonstrations		
					Proposed	Actual	SC/ST	Other	Total
1	G'nut	2005-06	Kharif	GG - 7	4.4	4.4	-	11	11
2	G'nut	2005-06	Kharif	GG - 5	4.8	4.8	-	12	12
3	Sesamum	2005-06	Kharif	G-Til-2	5.6	5.6	3	11	14

(b) Details of Farming Situation :

Crop: Oil seeds. Season: Kharif -2005 - 06 Dist: Rajkot

Crop	Season	farming situation (Rainfed/ Irrigated	Type of Soil	Status of Soil (low/medi. /high)			Previous Crop	Sowing date	Harvest date	Yield (Q/Ha)	
				N	P	K				Demo	Local Check
Groundnut :											
G'nut	Kharif	Rainfed	Medium black	-	-	-	G'nut	28 - 6 -05	12-10-05	7.50	6.20
								2 - 7- 05	10-10-05	6.50	5.90
								25 - 6 -05	08-10-05	7.80	6.00
								2 - 7 - 05	17-10-05	7.80	6.10
								28 - 6 -05	08-10-05	7.20	5.60
								28 - 6 -05	12-10-05	8.10	6.50
								4 - 7- 05	15-10-05	7.80	5.80
								4 - 7- 05	12-10-05	6.20	5.10
								3 - 7- 05	15-10-05	7.40	5.40
								3 - 7- 05	12-10-05	7.30	5.80

								3 - 7- 05	12-10-05	7.30	5.60
								7 - 7- 05	30-10-05	8.10	5.80
								27 - 6 -05	08-10-05	8.10	5.30
								2 - 7 – 05	10-10-05	7.30	5.70
								25 – 6 05	08-10-05	7.90	5.40
								4 - 7 - 05	18-10-05	8.50	6.40
								4 - 7 - 05	17-10-05	7.20	6.80
								4 - 7 - 05	12-10-05	7.00	6.10
								27 - 6 -05	08-10-05	7.80	6.10
								4 - 7 - 05	15-10-05	8.80	7.00
								3 - 7 - 05	15-10-05	7.50	6.10
								3 - 7 - 05	12-10-05	7.90	6.90
								6 - 7 - 05	28-10-05	7.80	6.85

1	2	3	4	5	6	7	8	9	10	11	12
Sesamum :											
G-Til -2	Kharif	Rainfed	Medium black	-	-	-	G'nut	23 - 6 -05	Vitiated due to heavy rain fall	-	-
								27 - 6 -05	28-09-05	2.00	1.70
								28 - 6- 05	Vitiated due to heavy rain fall	-	-
								28 - 6- 05	- do -	-	-
								28 - 6- 05	- do -	-	-
								28 - 6- 05	- do -	-	-
								28 - 6- 05	- do -	-	-
								2 - 7 - 05	24-09-05	1.70	1.30
								2 - 7 - 05	Vitiated due to heavy rain fall	-	-
								4 - 7 - 05	- do -	-	-
								5 - 7 - 05	- do -	-	-
								5 - 7 - 05	22-09-05	1.85	1.45
								5 - 7 - 05	27-09-05	1.40	1.10
								7 - 7 - 05	05-10-05	1.80	1.60

(C) Crop Performance :

1. District : Rajkot , **2. Season/Year : Kharif – 2005 – 06 ,**
3. Irrigated / Rainfed : Rainfed, **4. Crop : Groundnut, Sesamum .**

Sr. No.	Name of Crop	Variety	Farmers (No.)	Area (ha)	Av. Yield (Q/ha)				Increase in Yield (%)	Cost of cash inputs (Rs./ha)	
					Demonstration			Local Check		Demo	Local check
					High	Low	Av.				
1	2	3	4	5	6	7	8	9	10	12	13
1	Groundnut	GG-7	11	4.40	8.80	7.00	7.80	6.16	26.06	4600	3500
2	Groundnut	GG-5	12	4.80	8.10	6.20	7.40	5.80	27.05	4600	3500
3	Sesamum	G Til-2	14	5.60	2.00	1.40	1.75	1.43	22.37	200	150

8.B. Other than Oilseeds & Pulses.
(a) Details of Implementation .

Sr. No.	Crop	Year	Season	Verity	Area (ha.)		No. of Farmers/ Demonstrations		
					Proposed	Actual	SC/ST	Other	Total
1	Bajra	2005 - 06	Kharif	GHB - 577	7.6	7.6	5	14	19

(b). Details of Farming Situation :
Crop: Bajra **Season: Kharif -2005 - 06** **Dist: Rajkot**

Crop	Season	farming situation (Rainfed / Irrigated	Type of Soil	Status of Soil (low/medi./high)			Previous Crop	Sowing date	Harvest date	Yield (Q/Ha)	
				N	P	K				Demo.	Local Check
Bajra :											
Bajra	Kharif	Rainfed	Medium black	-	-	-	G'nut	27-6-05	23-09-05	11.60	11.35
								28-6-05	Vitiated due to heavy rain fall	-	-
								28-6-05	- do -	-	-
								28-6-05	- do -	-	-
								28-6-05	- do -	-	-
								29-6-05	- do -	-	-
								30-6-05	30-09-05	13.00	12.45
								28-6-05	23-09-05	12.40	12.10
								29-6-05	27-09-05	14.40	12.70
								28-6-05	Vitiated due to heavy rain fall	-	-
								29-6-05	- do -	-	-
								30-6-05	- do -	-	-

								28-6-05	05-10-05	14.00	12.50
								29-6-05	25-09-05	14.00	12.45
								30-6-05	Vitiated due to heavy rain fall	-	-
								28-6-05	- do -	-	-
								29-6-05	- do -	-	-
								30-6-05	05-10-05	12.30	12.10
								7 - 7-05	29-09-05	14.14	12.90

(c). Crop Performance:

1. District : Rajkot , **2. Season/Year : Kharif – 2005 – 06 ,**
3.Irrigated /Rainfed : Rainfed, **4. Crop : Bajara.**

Sr. No.	Name of Crop	Variety	Farmers (No.)	Area (ha)	Av. Yield (q/ha)				Increase In Yield (%)	Cost of cash inputs (Rs./ ha)	
					Demonstration			Local Check		Demo	Local check
					High	Low	Av.				
1	Bajara	GHB - 577	19	7.60	14.4	11.6	13.0	12.31	29.87	100	200

8.C. PULSES :

a) Details of Implementation

Sr. No.	Crop	Year	Season	Verity	Area (ha.)		No.Of Farmers Demonstrations			Remarks
					Proposed	Actual	SC/ST	Other	Total	
1	Gram	2005-06	Rabi	GG - 1	4.0	4.0	10	-	10	-

b) Details of farming situation

Crop	Season	farming situation (RF/ Irrigated	Type of Soil	Status of Soil (low/medium/high)			Previous Crop	Sowing date	Harvest date	Yield (Q/Ha)	
				N	P	K				Demo.	Local Check
Gram	Rabi	Irrigated	Medim black	--	--	--	G'nut.	10-11-05	05-03-06	228	200
								20-11-05	28-02-06	800	735
								26-11-05	02-03-06	850	743
								26-11-05	02-03-06	440	430
								27-11-05	03-03-06	460	435
								12-11-05	19-02-06	600	550
								10-11-05	27-02-06	500	430

	02-11-05	18-02-06	430	400
	15-11-05	01-03-06	160	150
	25-11-05	03-03-06	800	690

c) Crop Performance:

Crop	Variety	No.of Farmers	Area (ha.)	Demonstration Yield (q/ha)				Increase in Yield (%)	Cost of additional cash input(Rs./ha)	
				Highest	Lowest	Average	Local Check		Demonstration	Local Check
Gram	GG-1	10	0.4	8.5	1.6	5.3	4.8	10.4	611	396

8.D. Other then Oilseeds & Pulses.

a). Details of Implementation.

Crop	Year	Season	Variety	Area (ha.)		No.Of Farmers Demonstrations			Remarks
				Proposed	Actual	SC/ST	Others	Total	
Wheat	2005-06	Rabi	GW-322	2.0	2.0	5	-	5	-
Cumin	2005-06	Rabi	GC-4	4.0	4.0	10	-	10	-
**	**Total**	-	-	**6.0**	**6.0**	**15**	-	**15**	-

b). Details of farming situation

Crop	Season	Farming situation (RF/Irrigated	Type of Soil	Status of Soil (low/ medium/ high)			Previous Crop	Sowing date	Harvest date	Yield (Q/Ha)	
				N	P	K				Demo	Local Check
Wheat	Rabi	Irrigated	Medium black	-	-	-	G'nut.	10-11-05	01-03-06	1480	1440
								15-11-05	04-03-06	1515	1427
								10-11-05	28-02-06	1440	1390
								03-11-05	06-03-06	1360	1300
								01-11-05	06-03-06	1470	1385
Cumin	Rabi	Irrigated	Medium black	-	-	-	G'nut.	20-11-05	02-03-06	165	141
								1-11-05	19-02-06	180	145

	05-11-05	21-02-06	160	140
	19-11-05	01-03-06	300	195
	01-11-05	18-02-06	300	145
	17-11-05	25-02-06	240	210
	15-11-05	03-03-06	408	370
	28-11-05	07-03-06	230	200
	28-11-05	05-03-06	240	215
	05-12-05	Fail due to pig damage.		

c). Crop Performance:

Crop	Variety	No.of Farmers	Area (ha.)	Demonstration Yield (q/ha)				Increase in Yield (%)	Cost of additional cash input(Rs./acre)	
				Highest	Lowest	Average	Local Check		Demonstration	Local Check
Wheat	GW-322	5	0.4	35.2	31.7	33.5	29.60	11.64	1500	1250
Cumin	GC-4	10	0.4	4.08	1.45	2.22	1.76	26.1	1250	1000

8.E. Technical Feed Back.

1. To enhance the farmers to use recently developed notified varieties of related crop.

2. Proper use of fertilizers, insecticides and fungicides as per recommendation to reduce the cost of production.

3. To avoid the heavy irrigation with minimizing the number of irrigation and suggestion made for to introduce new technology of drip irrigation in field crops and horticultural crops.

8. F. Farmer's Reactions

1. Yield may be decrease if last showers not received timely.

2. They assume that new varieties are most probably susceptible to insect-pest and diseases.

3. In case of groundnut GG-7 , Due to bold size kernel, testa damages during seed preparation and due to more proteinous material seed borne disease develop fast.

8.G. Details of FLD conducted during Kharif - 2006

Details of Implementation

Sr. No.	Crop	Year	Season	Verity	Area (ha.)		No.Of Farmers Demonstrations			Remarks
					Proposed	Actual	SC/ST	Other	Total	
1	Ground nut	2006-07	Kharif	GG - 20	10.0	10.0	2	18	20	-
2	Cotton	2006-07	Kharif	BT	5.0	5.0	1	9	10	
3	Black gram	2006-07	Kharif	T-9	5.0	5.0	2	8	10	
4	Green gram	2006-07	Kharif	GG-1	5.0	5.0	1	9	10	

Extension activities :

Sr. No.	Activity	Date	No. of activities organized	No.of participants			Remarks
				M	F	T	
1	Field day on Groundnut	Aug-Sept.	16	238	15	253	-
2	Field day on gram	Dec.- Jan	8	80	15	95	-
3	Farmer training on campus	Oct.-Feb	2	61	5	66	-
4	Farmer training off campus	Oct.-Feb	2	50	12	62	-

9. A. On Farm Testing (OFTs) on Groundnut. Kharif - 2005 - 06.

	Ex-1	Ex-2	Ex-3	Ex-4
T1	Use of wrinkled seeds	Tricoderma as a seed dresser @ 5g/kg seed	Reco. Practices	Shallow ploughing with 7 to 8 Inter - culturing
T2	Use of Bold seeds	Tricoderma as basal dose @ 2.5kg /ha in 500 kg castor cake	Farmers method	Deep ploughing with 2 to 4 inter-culturing
T3	Use of mixed seeds	Drenching of Tricoderma @ 50g/10lit.	Use of new systemic insecticide	Medium ploughing with 4 to 5 inter-culturing

9.B. Results of OFTs 2005-06

Sr. No.	Intervention Identified	Yield q/ha			% Increase Yield	C : B Ratio
		T1	T2	T3		
1	Small/ Wrinkled Seed for sowing	8.85	8.30	8.50	6.62	1:1.50
2	Disease management	8.00	8.56	8.10	8.00	1: 1.45
3	Pest management	8.26	7.80	8.40	7.60	1: 1.42
4	Deep Tillage	8.12	8.53	8.24	5.00	1: 1.45

10. Meteorological data (Average of the week) 2005 - 2006

Date/ Month	Week No.	Temperature		Humidity	Rainfall (mm)	No. of rainy day
		Minimum	Maximum			
1	2	3	4	5	6	7
July 02 to 08	27	25.1	31.1	78.5	90.2	2
July 09 to 15	28	26.0	34.5	80.0	2.5	0
July 16 to 22	29	25.2	34.0	83.5	8.0	1
July 23 to 29	30	25.4	33.6	90.5	74.7	1
July 30 to Aug. 05	31	23.8	27.2	94.5	207.4	6
Aug. 06 to 12	32	24.5	30.0	82.5	5.9	1
Aug. 13 to 19	33	24.3	31.3	78.0	0	0
Aug. 20 to 26	34	23.7	32.3	78.5	11.8	2
Aug. 27 to Sep.02	35	23.1	32.5	84.5	10.8	1
Sept. 03 to 09	36	23.5	32.8	84.0	24.4	2
Sept. 10 to 16	37	23.7	31.3	88.5	166.4	5
Sept. 17 to 23	38	23.8	30.5	89.5	173.4	4
Sept. 24 to 30	39	22.4	30.6	78.5	10.5	1
Oct. 01 to 07	40	22.4	32.2	57.0	16.7	1
Oct. 08 to 14	41	20.8	34.3	62.5	0	0
Oct. 15 to 21	42	19.5	35.4	44.5	0	0
Oct. 22 to 28	43	18.2	34.6	43.0	0	0
Oct. 29 to 04 Nov	44	17.8	33.7	44.0	0	0
Nov. 05 to 11	45	15.5	33.3	35.5	0	0
Nov. 12 to 18	46	14.8	32.6	36.5	0	0
Nov. 19 to 25	47	14.9	33.2	35	0	0
Nov. 26 to 02 Dec.	48	12.9	30.5	46.5	0	0

Dec.05 03 to 09	49	11.5	29.5	43	0	0
Dec.05 10 to 16	50	10.9	28.7	50	0	0
Dec.05 17 to 23	51	08.6	27.0	59	0	0
Dec.05 24 to 31	52	10.7	27.0	65	0	0
Jan.2006 01 to 07	1	8.8	25.3	45.0	0	1
Jan.2006 08 to 014	2	11.5	28.8	74.0	0	0
Jan.2006 15 to 21	3	14.1	30.2	54.0	0	0
Jan.2006 22 to 28	4	12.5	27.5	38.5	0	0
29-Jan.-06 to 04 – Feb.06	5	15.3	33.4	32.5	0	0
Feb.06 05 to 11	6	15.0	33.3	37.0	0	0
Feb.06 12 to 18	7	15.6	33.9	49.0	0	0
Feb.06 19 to 25	8	15.4	35.1	58.5	0	0
26 Feb.06 to 04 - Mar.06	9	16.0	34.4	51.5	0	0
March.06 5 to 11	10	15.3	31.9	58.0	5.2	1
March.06 12 to 18	11	17.3	32.5	57.5	0	0
March.06 19 to 25	12	19.7	36.4	53.5	0	0
March.06 26 to 1 Apr.06	13	17.6	36.6	39.5	0	0
April – 06 2 to 8	14	20.4	38.1	32.0	0	0
April – 06 9 to 15	15	21.5	39.0	36.5	0	0
April – 06 16 to 22	16	22.8	38.4	54.5	0	0
April – 06 23 to 29	17	23.4	38.9	54.5	0	0
April –30 to 6 – May - 06	18	23.3	41.3	42.5	0	0
May – 06 7 to 13	19	24.2	43.3	49.0	0	0
May – 06 14 to 20	20	25.7	40.3	58.5	0	0

May – 06 21 to 27	21	26.4	38.9	58.5	0	0
May – 28 to 3 – June-06	22	25.6	37.6	68.0	77.7	3
June – 06 4 to 10	23	25.9	37.7	63.0	0	0
June – 06 11 to 17	24	25.7	38.6	57.5	0	0
June – 06 18 to 24	25	26.1	39.3	61.5	8.9	2
25 June to 1 - July-06	26	26.4	35.9	78.5	33.6	2
July-06 2 to 8	27	24.2	31.9	92.5	120.6	4
July-06 9 to 15	28	26.2	33.0	33.5	1.9	0
July-06 16 to 22	29	25.0	33.6	74.2	79.9	4
July-06 23 to 29	30	24.4	30	87.5	46.3	4
30 July to 5 Aug-06	31	23.6	27.6	93.0	214.1	7
Aug-06 6 to 12	32	24.4	29.9	89.5	20.0	3
Aug-06 13 to 19	33	23.3	28.7	88.8	95.3	5
Aug-06 20 to 26	34	23.8	29.7	84.5	17.5	3
27 Aug to 02 Sept-06	35	21.8	31.3	77.5	1.5	0

11.(A) Farmers Visit to KVK .

Sr. No.	**Date**	**No.of Farmers Visited**			**No. of SC/ST**			**Purpose**	**Suggestion**	**Remarks**
		M	**F**	**T**	**M**	**F**	**T**			
1	2	3	4	5	6	7	8	9	10	11
October to December.2006								**Purpose**	**Suggestion**	**Remarks**
1	Oct. - 2005	354	44	398	5	1	6	To know the activities of the KVK and DFRS for getting information about Rabi crops. To solve the problem faced in the Rabi crops and	Information given for the cultivation practices of Rabi crops. Replay to the farmers for their questions.	Plant Protection measures were suggested during
2	Nov-2006	19	1	20	1	-	1			
3	Dec-2006	237	152	389	19	7	26			

Total	**-**	**610**	**197**	**807**	**25**	**8**	**33**	to get knowledge about improved latest technology and technical guidance about Rabi crops	Guidance as and when needed during the crop period.	the field visit to the farmers field .
January to March.2006								**Purpose**	**Suggestion**	**Remarks**
		M	F	T	M	F	T			
1	Jan.-2006	485	325	810	24	7	31	To know the activities of the KVK and DFRS for getting information about Rabi crops. To solve the problem faced in the Rabi crops and to get knowledge about improved latest technology and technical guidance about Rabi crops .	Information given for the cultivation practices of Rabi crops. Replay to the farmers for their questions. Guidance as and when needed during the crop period.	Plant Protection measures were suggested during the field visit to the farmers field .
2	Feb-2006	154	21	175	8	-	8			
3	Mar-2006	278	57	335	11	2	13			
Total	**-**	**1088**	**403**	**1320**	**43**	**9**	**52**			
April to June.2006								**Purpose**	**Suggestion**	**Remarks**
		M	F	T	M	F	T			
1	Apri-2006	60	5	65	10	2	12	To know the activities of the KVK and DFRS. For getting information about production technology of the different crops. To solve the problem faced in the field crops and to get knowledge about improved latest technology and technical guidance.	Information given for the cultivation practices of different crops. Guidance as and when needed during the crop period. Solution provided to the farmers.	Plant Protection measures were suggested during the field visit to the farmers field.
2	May-2006	5	2	7	-	-	-			
3	June-2006	25	3	28	8	2	10			
Total	**-**	**90**	**10**	**100**	**18**	**4**	**22**			
July to September 2006								**Purpose**	**Suggestion**	**Remarks**
		M	F	T	M	F	T	To know the activities of the KVK and DFRS. For getting information about production technology of the different crops. To solve the problem	Information given for the cultivation practices of different crops. Guidance as and when needed during the crop	Plant protection measures were suggested during the field
1	July-2006	120	40	160	28	13	41			
2	Aug.-2006	185	55	240	35	25	60			

3	Sep.-2006	280	145	425	57	36	93	faced in the field crops and to get knowledge about improved latest technology and technical guidance.	period. Solution provided to the farmers.	visit to the farmers field.
Total		**585**	**240**	**825**	**120**	**74**	**194**			
G.T.	**-**	**2373**	**850**	**3052**	**206**	**95**	**201**			

11.(B). HELP LINE .

Month	No of Received Call
October - 2005	16
November - 2005	22
December - 2005	13
Total	**51**
January - 2006	14
February - 2006	10
March - 2006	33
Total	**57**
April - 2006	12
May - 2006	17
June - 2006	11
Total	**40**
July - 2006	25
August - 2006	42
September - 2006	23
Total	**90**
Grand Total	**238**

12. Other Extension Activities .

Sr. No.	Activities	No.	No. of Participant			No. of SC/ST			No.of Exten. Officer			G.T.
			M	F	T	M	F	T	M	F	T	
1	Kishan Goshti/ Field day	40	613	54	**667**	39	-	**39**	36	2	**38**	**744**
2	Farmers Meeting	2	48	-	**48**	-	-	**-**	-	-	**-**	**48**
3	Kishan Mela (Participated)	1	7568	33	**7601**	98	11	**109**	24	-	**24**	**7734**
4	Khedut Shibir	57	12337	529	**12866**	943	201	**1144**	174	13	**187**	**14197**
5	T.V. Show	-	-	-	**-**	-	-	**-**	-	-	**-**	**-**
6	Radio Talk	6	-	-	**-**	-	-	**-**	-	-	**-**	**-**
7	T.V. Talk Programme	3	38	-	**162**	4	-	**4**	-	-	**-**	**42**
8	Diagnostic Services	12	-	-	**-**	-	-	**-**	-	-	**-**	**12**
9	News Paper Coverage	44	-	-	**-**	-	-	**-**	-	-	**-**	**-**
10	Publication	15	-	-	**-**	-	-	**-**	-	-	**-**	**15**
**	**TOTAL**	180	20604	616	21344	1084	212	1296	234	15	249	22792

13. Functional Linkages with different organizations:

Sr. No.	Name of the Organization	Nature of linkage
1	State Department of Agriculture.	Most of the Organizations are members of Scientific Advisory Committee (SAC) of KVK and have linkage with different activities of KVK viz., Training Programme, Khedut Sibir ,Farmers day, Farmers fair, Film Show, Entraining meeting and Soil health card etc.
	- Dy. Director of Agril. Extension (FTC)	
	- Dy. Director of Horticulture	
	- Dy. Director of Animal Husbandry	
	- Dy. Director of Soil Conservation	
	- Dy. Director of Social Forestry	
2	Jilla Udhyong Kendra	
3	Milk Co-Operative Society	
4	State Bank of Saurastra	
5	National Bank of Agriculture & Rural Development (NABARD)	
6	Dena Bank	
7	Doordarshan Kendra	
8	All India Radio	

14. Salient recommendation of SAC meeting. :

Date	Salient - Recommendations	Action Taken	Remarks
30-09-05	1. Training especially on bakery subject should be organized at least once in a year.	Suggestion accepted Training on bakery subject is included.	-
	2. On and Off campus training should be organized on the basis of thrust area with the help of other Agencies / Dept./Organi.	Suggestion accepted Training will be organized as per Suggestion.	-
	3. At lest one training in a year pertaining farm implements should be organized.	Suggestion accepted Training is included.	-
	4. Maintenance of Agricultural equipment's like spray pump, oil engine etc.	Suggestion accepted Training is included.	

15. Success Stories /Case Studies, if any.

(A) Success story.

1. Higher benefit through Use of small/wrinkled seed of Groundnut crop :

Farmers prefer the bold seeds of groundnut for sowing purpose because they believe that bold seed of groundnut have luxurious growth of plant and produce more yield in the cluster of KVK. due to this seed requirement per unit area is more than recommended seed rate. at the time of off campus training programme, it was suggested that small/ wrinkled / medium seeds of groundnut are equally good for germination as well as for yield potential. Mr. Ravjibhai Bhut took the initiative interest for the same and he has been allotted O.F.T. on 0.4 ha. of land with 3 treatments i.e. sowing of small seeds, bold seeds and mixed seeds. he obtained 23.76 q/ha. yield of groundnut from small seed plot, 21.40 q/ha from mixed seed plot and 20.50 q/ha from bold seed plot. a field day was organized on his field for encouraging the farmers and advised not to remove the small/ wrinkled seeds from the seed

materials which in turn save the 24 % requirement of seeds and also recorded high yield due to optimum plant population in unit area.

Impact :

A saving of around Rs. 150 crores on cost of groundnut seed in area of 18 lakh ha. of Gujarat state.

2. Bumper harvest through Groundnut Variety GG-7 in Rajkot District :

Mr. Dhirubhai Ragor is a famrer of Juna Rajpipla village of Kotda Sagani taluka, Dist. Rajkot. He is a progressive farmer and he regularly remain in touch with the activities of KVK. Previously he was cultivating groundnut with locally available seed and was getting lower yield. after coming in contact with the scientist of KVK, he cultivated the improved variety of groundnut i.e. GG-7 as Front Line Demonstration and harvested good yield (24.00q/ha) as compared to local one (19.25 q/ha) during Kharif 2002. With the introduction of new variety, he got additional net return of Rs. 81500.00 ha as he sold the groundnut as seed purpose to the other neighboring farmers at the rate of Rs. 50/kg. By observing his experience, other farmers of this region are inquiring about the source of the seeds of the improved variety as well as cultivation practices of the same.

Impact :

This variety (GG-7) will increase the production of groundnut from 19.25 q/ha to 24.00 q/ha which will increase the economic growth of the state by earning additional income.

3. An effective approach for the management of groundnut stem rot :

Groundnut and cotton are the major Kharif crops and cumin in Rabi season in operational area of KVK. During the survey in March 2001, it was observed that majority of farmers are growing groundnut variety GG-20 with wide spreading of 90 cm, so that agricultural practices can be done easily. farmers are recommended to sow groundnut by keeping row spacing of 60 cm and for controlling the stem rot, seed should be treated with trichoderma culture @ 4 gm/kg seeds and soil application @ 2.5 kg with 50 kg of castor cake at 30-40 days after sowing by using drill in moist condition. by organizing the activities like group discussion, night meeting, field day etc. Mr. Bhupatsinh Jadeja a farmer of Devalia village who took the interest to conduct demonstration under complete guidance and frequent supervision of KVK scientist. After adopting this improved technology, Mr. Bhupatsinh Jadeja harvest Groundnut pod yield of 31.25 q/ha with gross return of Rs. 46875 per ha as compared to 23.75 q/ ha with gross return of Rs. 35625 per ha by traditional practice.

As a result of the front line demonstration organized by KVK scientists an active role of Mr. Bhupatsinh Jadeja, other farmers of the village are also convinced to adopt scientific technology for higher groundnut production and getting maximum net return per unit area.

Impact :

An additional yield can be obtained in case of groundnut by application of trichoderama.

4. Inter-cropping system ; a sustainable approach in rain fed farming :

The villages of KVK fall in dry farming areas. the rainfall in the operational area of KVK is irregular, uncertain and inadequate. the crop generally fails due to the water stress at

different critical stages of the crops. against the failure of crop due to water stress or drought, Main Dry Farmi0ng Research Station , J.A.U., Targhadia has already recommended the inter cropping systems like Groundnut + Pigeon pea (3:1), Groundnut + Castor (3:1), Pearl millet

+ Pigeon pea (2:1), etc. the frontline demonstration on Groundnut + Pigeon pea (3:1), conducted on the filed of Mr. Kesubhai Rupapara of Bhadva village to overcome the risk. He recorded 13.00 q/ha groundnut as sole crop. Whereas in inter cropping system Groundnut + Pigeon pea (3: 1), he produced 12.00 q/ha. groundnut and 11.50 q/ha grain of pigeon pea. He earned more of Rs. 10150/ha from the inter-cropping as compared to sole groundnut.

Impact:

This method of cultivation will take care of the risk involved due to Uncertainty of rainfall as well as improve the economic condition of the farmers

16. Constraints

a. Administrative

One post of Office Superintendent cum Account Officer is not sufficient for administrative and accounts works.

b. Financial

1. Budget allotment is not sufficient against expenditure estimated for pay allowances, T.A. and contingencies requirement.
2. There is confusion in delegation of power for revalidation of unspent balance.
3. Provision of special grant for farm development is necessary in budget allotment.

c. Infrastructure

Infrastructure facilities i.e. Office/laboratory building, farmers hostel, training hall and store godown are not available at this center.

d. Technical

Supporting staff for farm management is necessary.

17. Performance of Instructional Farm including Seed production .

Twenty hectare (20 ha.) land is allotted to our center this year and seed production programme of Groundnut and Urid bean and other commercial crop production of sesamum and bajara has been taken during Kharif 2005.

18. Details of KVK Bank Accounts .

	Name of the Bank	Location	Account Number
a. With Host. Institute	SBI	Junagadh	---
b. With KVK	SBI	Rajkot	10353003175

19. Utilization of KVK Funds . Year - 2005 – 06

Sr. No.	Item	Sanctioned (Rs in lacs) 01/04/05 to 31/03/06	Released (Rs in lacs)	Expenditure (Rs.)	Unspent balance as on 31-03-06
1	Opening Balance as on 01-04-05	-	-479319	-	-
2	Pay & Allowances	2300000	2300000	1934414	-
3	Recurring Contingencies	620000	620000	458083	-
4	Non - Recurring	870000	870000	533000	-

	Contingencies				
5	Credited in revolving fund A/c	-	-	100000	-
	Total	**3790000**	**3310681**	**3025497**	**+285184**

*Additional requirement of funds for pay & allowance is demanded due to increase of D.A., bonus Leave salary of retire of person, merger DA of 50 % of pay arrears of C.A. & requirement of T.A. for Technical staff.

20. Utilization of Fund under FLD on Oilseeds /Pulses (Rs. in Lakhs).

Year :2005-06

Sr. No.	Item	Sanctioned by ZC		Release by Host Institute		Expenditure		Unspent Balance as on 1st April-2006
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi	
1	Oilseeds							
a.	Inputs	-	-	1,12,036	-	1,08,013	-	4023
b.	Extension activities	-	-	16,005	-	9,739	-	6266
c.	TA/DA/ POL.etc.	-	-	16,005	-	15,758	-	247
1	**Total**	**-**	**-**	**1,44,046**	**-**	**1,33,510**	**-**	**10,536**
2	Pulses							
a.	Inputs	-	-	2141	-	-	-	2141
b.	Extension activities	-	-	-	-	-	-	-
c.	TA/DA/PO L.etc.	-	-	-	-	-	-	-
	Total	**-**	**-**	**2141**	**-**	**-**	**-**	**2141**

N.B. Unspent balance is yet not revalidated.

21. Status of Revolving Fund (Rs. in Lakhs) Year : 2005-06

Sr. No.	Year	Opening Balance	Expenditure Income		Net Balance in hand as on 1st April of each year
			Expenditure	Farm Income	
1	2002 - 03	---	---	---	---
2	2003 - 04	---	---	---	---
3	2004 - 05	---	---	---	---
4	2005 - 06	1,00,000	38,471	1,29,262	1,90,791