### ANNUAL PROGRESS REPORT-2009-10 (APRIL - 2009 TO MARCH-2010)

&

### ACTION PLAN (APRIL - 2010 TO MARCH-2011)

OF

# KRISHI VIGYAN KENDRA JAMNAGAR

TO BE PRESENTED AT ANNUAL ZONAL WORKSHOP OF ZONE-VI (Rajasthan & Gujarat)

### Held at JHUNJHUNU

ON

### 22<sup>nd</sup> to 24<sup>th</sup> September, 2010

PREPARED/COMPILED By Dr. K. P. Baraiya, Senior Scientist & Head Smt. A. K. Baraiya, Scientist Dr. N. B. Jadav, Scientist



### **KRISHI VIGYAN KENDRA**

JUNAGADH AGRICULTURAL UNIVERSITY AIRFORCE ROAD, OPP. DIGJAM MILL JAMNAGAR-361 006 GUJARAT



### **ANNUAL PROGRESS REPORT-2009-10**

#### (1<sup>st</sup> APRIL - 2009 TO 31<sup>st</sup> MARCH-2010)

#### KRISHI VIGYAN KENDRA JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR

#### **<u>1. GENERAL INFORMATION ABOUT THE KVK</u>**

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

Address	Telepl	hone	Emoil	Web
Address	Office	FAX	E mail	address
Krishi Vigyan Kendra Millet Research Station, JAU Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	(0288) 2710165	(0288) 2710165	kvkjamnagar@jau.in	www.jau.in

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

Address	Telephone		E-mail	Web address
Address	Office	FAX	E-IIIdii	web address
Junagadh Agricultural University, Junagadh – 362 001 (Gujarat)	PBX 2672080-90	(0285) 2672653	dee@jau.in	www.jau.in

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

	Telephone / Contact					
Name	Residence	Mobile	Email			
Dr. H.R. Khafi	I/c. Programme Coordinator Krishi Vigyan Kendra Junagadh Agricultural University, Airforce Road, Opp. Digjam Mill Jamnagar- 361 006	9979207927	kvkjamnagar@jau.in			

#### 1.4. Year of sanction:

2001, Letter No. F.No. 18(4)/99-NATP Dated October 31<sup>st</sup>, 2001

#### 1.5. Staff Position (as on 1<sup>st</sup> Sept, 2010)

SI. No.	Sanctioned post	Name of the incumbent	Desig- nation	Discipline	Highest qualify- cation	Pay Scale	Present basic	Date of joining	Perm- anent /Temp- orary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Vaccant	РС	-	-	37400- 67000	-	-	-	-
2	Subject Matter Specialist	Vaccant	SMS	Plant Protection	-	15600- 39100	-	-	-	-
3	Subject Matter Specialist	Vaccant	SMS	Crop Production	-	15600- 39100	-	-	-	
4	Subject Matter Specialist	Vaccant	SMS	Horti.	-	15600- 39100	-	-	-	-
5	Subject Matter Specialist	Dr. N. B. Jadav	SMS	Extension Education	Ph.D.	15600- 39100	18320	18-08-06	Temp.	OBC
6	Subject Matter Specialist	Dr. J. N. Thaker	SMS	Fisheries	Ph.D.	15600- 39100	9100	31-08-06	Temp.	Other

7	Subject Matter	Smt. A. K.	SMS	Home	M.Sc.	15600-	8000	17-08-06	Temp.	Other
	Specialist	Baraiya		Science		39100			•	
8	Programme	Shri P. S.	Prog.	Extension	M.Sc.	9300-	18750	24-3-95	Temp.	OBC
Ŭ	Assistant	Gorfad	Asstt.	Education	1111001	34800	10,00	210 33	remp.	000
9	Computer	Shri R.G.	Prog.	Computer	B.C.A.,	5500-	6000	30-12-08	Fix Pay	Other
9	Programmer	Panseria	Asstt.	Operator	P.T.C.	9000	0000	Pool at IT)		Other
10	Farm Manager	Shri A. M.	Prog.	PBG	M.Sc.	5500-	6000	6-1-09	Fix Pay	OBC
10	Failli Mallager	Hadiya	Asstt.	PBG	IVI.SC.	9000	0000	0-1-09	FIX Pay	UBC
11	Accountant /	Vaccant	Sr. Clerk	Adm.		4000-				
11	Superintendent	vaccant	SI. CIEFK	Aum.	-	6000	-	-	-	-
12	Stonographer	Vaccant	Sr. Clerk	Adm.		4000-	_	-		-
12	Stenographer	vaccant	SI. CIEFK	Aum.	-	6000	-	-	-	-
13	Driver	Shri R.R.	Driver	Supt.	7 STD.	4000-	4500	9-10-07	Temp.	S.T.
13	Driver	Karmata	Driver	Supt.	7 310.	6000	4300	9-10-07	remp.	3.1.
14	Driver	Shri. D.M.	Driver	Supt. (Fix)	9 STD	2500	4500	9-10-07	Temp.	S. T.
14	Driver	Chauhan	Driver	Supt. (Fix)	9310	2300	4300	9-10-07	remp.	5.1.
15	Supporting staff	Shri H.G.	Peon	Sunt	7 STD	2550-	7470	1-10-04	Tomp	OBC
12	Supporting stall	Langa	Peon	Supt.	עוני	3200	7470	1-10-04	Temp.	UBC
16	Supporting staff	Shri P. S.	Doon	Supt (Eiv)	12 STD.	1500	3500	1-9-06	Eix Dov	S. T.
10	Supporting start	Damor	Peon	Supt. (Fix)	12 SID.	1300	5500	1-9-00	Fix Pay	3.1.

#### 1.6. Total land with KVK (in ha) : 20.44 ha

Sl. No.	ltem	Area in hectare(s)*
1	Under Building and Road	1.00
2	Under Demonstration units	0.7
3	Under crops	12.56
4	Orchard	3.5
5	Agro-forestry	0.24
6	Others (Farm Pond & Channels)	2.00
	Total	20.44

#### **1.7.** Infrastructural Development:

#### A) Buildings

					Stage	9		
SI.		Source of		Complete		Incomplete		
No.	Name of building	funding	Comp- letion Date	Plinth area (Sq.m)	Expen- diture (Rs.)	Star-ting Date	Plinth area (Sq.m)	Status of const- ruction
1.	Administrative Building	KVK	-	-	-	March-10	550	Work is
2.	Farmers Hostel	KVK	-	-	-	March	305	in
3.	Staff Quarters (6)	KVK	-	-	-	March	400	progress
4.	Demonstration Units	KVK + ATMA	31-3- 2007	-	-	-	-	-
5	Poly House	RKVY	31-3-09	320	281602	-	-	-
	Net House	RKVY	31-3-09	150	64498	-	-	-
	Training Hall	RKVY	20-2-10	190.99	1395800	-	-	-
	Process Plant	RKVY	20-2-10	197.31	1536400	-	-	
	Implement shed	RKVY	11-2-10	77.33	297800	-	-	-
6	Rain Water harvesting system	KVK	31-3- 2007	26m×26m (2 Ponds) 60m×60m (1 Pond)	999000	-	-	-

b) venici	es			
Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Toytoa Quallis	2004	490200	-	Working at Junagadh on pooled basis
Jeep GJ-8 A 3442	1995-96 (Dt 19/5/95)	2,80,000	3,45,921	Working condition

#### B) Vehicles

#### C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Captain Mini Tractor	2001-02	166125	Working
Telephone line	2001-02	19850	Working
Multi tool carrier complete set	2001-02	6500	Working
Photocopier	2001-02	125000	Working
Over head projector	2001-02	17600	Working
Computer	2002-03	29500	Working
HP Laser printer	2002-03	20390	Working
U.P.S. (3 KVA)	2002-03	38000	Working
Qualish (GJ-10 E-288)	2004-05	490200	Working
Spectrophotometer	2005-06	89160	Working
Flame photometer	2005-06		Working
Physical balance	2005-06	10640	Working
Chemical balance	2005-06	100000	Working
Water distillation still	2005-06	96118	Working
Kieldahi digestion and distillation	2005-06	49644	Working
Shaker	2005-06	80080	Working
Grinder	2005-06	80080	Working
Refrigerator	2005-06	16772	Working
Oven	2005-06	30550	Working
Hot plate	2005-06	30330	Working
Aspee tractor mounted sprayer	2006-07	32000	Working
Air assisted blower type sprayer	2009	98750	Working
Laptop computer (HCL)	2009	47500	Working
Digital camera (Nikon)P-90 12.1	2009	24300	Working
Cotton stalk shredder	2008-09	121000	Working
Groundnut digger-tractor operated	2009	78500	Working
Cultivator cum rotavator	2009	90000	Working
Groundnut decorticator	2009	95850	Working
Multi crop thresher	2009	114000	Working
Processing Unit	2009	1685000	Working
Plantar-tractor operator	2009	44000	Working

#### 1.8. A). Details SAC meeting conducted in the year

SI.No.	Date	Number of Participants	Salient Recommendations	Action taken
1.	01-10-2005	21	-	-
2.	07-10-2006	30	-	-
3.	02-11-2007	31	-	-
4.	17-10-2008	30		
5.	14-09-2009	33	As below	As below

KVK, Jamnagar	ΚVΚ.	Jamnaaar
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6. 29-4-2010 35

The fifth Scientific Advisory Committee meeting of Krishi Vigyan Kendra Junagadh Agricultural University, Jamnagar was held at Seminar Hall, K.V.K., J.A.U., Jamnagar on 14<sup>th</sup> Sept, 2009. Committee made the following recommendations after active interaction.

SI. No.	Salient Recommendations	Action Taken	Suggested by
1.	It was suggested to arrange frontline demonstration on fodder crops and soyabean	Suggestation accepted and followed	House & chairman, Dr. R. L. Savaliya
2.	Suggested to imphasis on MIS and Mulching during training	Suggestation accepted and followed	Dr. R. L. Savaliya
3.	It was suggested to concentrate training on efficient use of fertrilizers and micro-nutrients	Suggestation accepted and followed,	House
4.	It was suggested that soil sample ananlysis before and after arrangement of nutritional OFT	Suggestation accepted and followed,	House
5.	Arrange traning on adverse effect of climate, post harvest technology and marketing	Suggestation accepted and followed,	House
6.	Arrange need base and location specific FLDs in district	suggeston accepted	House
7.	It was suggested that arrange training on home science and irrigation in third quarter	Suggestion accepted	House

SAC proceedings along with list of participants in Annexure – I.

#### 2. DETAILS OF DISTRICT (2009-10)

#### 2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

Sr. No.	Farming system/enterprise				
1	Ground-Wheat/Cumin/coriander-Til, Cotton-Summer Groundnut/pulse/Til				
2	Live stock				
3	Fruit and Vegetable				
4	Fishries (340 km)				
5	Value addition in G'nut, Til and Coriender				

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

S. No	Agro- climatic Zone	Characteristics
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Zone – VI		The influence area of North Saurashtra Agroclimatic Zone is spread among five districts (35.2 lakh Ha). Out of total area 73.40 per cent area falls under arid an semi-arid region. The soils of this zone are shallow to moderately deep. The soils of Jamnagar districtis medium black. Monsoon commences usually by the middle of June and withdraws by middle of September. Average annual rainfall of districts is 557 mm.
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Agro	Agro – Ecological situation in the District							
SI. No.	AES	Soil texture	Altitude	Principal crops	Special features	Appro. area (000ha)	Taluka Included	Charact.
AES-1	Shallow Black soils with 500- 600 mm Rainfall	Sandy clay loam to clayey	75 – 150	Groundnut, wheat, sorghum, pearlmillet	Well drained soils with rapid permeability	124	Kalawad, Jamjodhpur, Bhanvad, Okha	Moisture stress, temperature stress
AES-2	Shallow Black soils with 600- 700 mm Rainfall	Clayey	75 – 150	Groundnut, wheat, sorghum, pearlmillet	Slightly well drained soils with rapid permeability	180	Part of Kalyanpur, Jamnagar, Jamkhambhalia, Lalpur, Dhrol, Jodia	Moisture stress, temperature stress
AES-3	Coastal Alluvial soils with 300- 400 mm Rainfall	Clayey loam to clayey	50	Groundnut, pearlmillet, sorghum, chickpea	Low nitrogen and phosphus	181	Jodia, part of Okha, Jamkhambhalia, Kalyanpur & Jamnagar	Salt affected salinity
AES-4	Coastal Alluvial soils with 500- 700 mm Rainfall	Silt clay	25-50	Groundnut, pearlmillet, sorghum, chickpea	Low nitrogen and phosphorus	299	Kalyanpur, Jodia & Jamnagar, Khambhadia, Lalpur, Dwarka	Salt affected salinity
AES-5	Coastal Alluvial shallow black soils with 300- 400 mm Rainfall	Sandy Ioam to clay Ioam	0-25	Sorghum, PearlmilletGr oundnut, Sesamum	Arid climate	31	Okha	Rich in flora and funa.

### 2.3 Soil type

S. No	Soil type	Characteristics	Area in ha
1	Shallow black soils	Light grey in colour. Soils depth varies from 30 cm to 45 cm. They are gravelly but mainly they are sandy clay loam to clayey in texture.	124000 ha (Kalawad, Jamjodhpur, Bhanvad, Okha)
2.	Medium black soils	These residual soils have basaltic trap parent materials. These soils vary in depth from 30 to 60 cm or more at few places. They are calcareous in nature	180000 ha (Part of Kalyanpur, Jamnagar, Jamkham-bhalia, Lalpur, Dhrol, Jodia)
3.	Saline alkali soils	Texturally these soils vary from sandy loam to clay. The degree of salinity and alkalinity is also highly variable. Most of these soils are low to medium in available nitrogen and phosphorus and high in available potash.	181000 ha (Jodia, part of Okha, Jamkhambhalia, Kalyanpur & Jamnagar)
4.	Costal alluvial soils	These soils are sandy clay loam to clay in texture. These soils are also affected with salts and are saline sodic in nature. The surface soil varies from 1.54 to 38.6 m.mhos/cm in Electrical conductivity, and from 9.2 to 74.64 in Exchangeable sodium percentage. The souls are normally medium in fertility	Jodia & Jamnagar, Khambhadia, Lalpur,
5.	Hilly soils	These soils are shallow to moderately deep and are coarse to find in their texture. The texture varies from loamy sand to clay loam to clay. They have under composed rock fragments and are low in fertility status.	Bhanvad and Jamjodhpur)

#### 2.4. Area, Production and Productivity of major crops cultivated in the district (Year-08)

S. No	Сгор	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
	Oilseeds			
1	Groundnut	378335	5675025	15
2	Sesamum	6280	22608	3.6
3	Castor	7375	192487.5	26.1
4	Soybean	8	140	17.5
	Total Oilseeds	391998		
	Cash Crops			
5	Cotton	180440	4150120	23
6	sugarcane	150	7500	50
	Total Cash Crops	180590		
	Food Grain			
7	Wheat	58600	1881060	32.1
8	Pearlmillet	3520	46112	13.1
9	Sorghum	8100	85050	10.5
10	Maize	2850	20520	7.2
	Total Food Grains	73070		
	Pulse Crops			
11	Greengram	4185	23436	5.6
12	Blackgram	2910	17867.4	6.14
13	Cowpea	285	1071.6	3.76
14	Pigeon pea	175	1925	11
15	Moothbean	360	1512	4.2
16	Chickpea	31300	350560	11.2
17	Cluster bean	75	1406.25	18.75
18	Other pulses	15	0	
	Total Pulses	39305		
	SPICES AND CONDIMENTS			
19	Cumin	27690	146757	5.3
20	Fennel	115	241.5	2.1
21	Coriander	1460	15330	10.5
22	Ajwan	1690	6929	4.1
23	Ishabgul	150	1020	6.8
24	Chilli	740	7104	9.6
25	Garlic	7000	518000	74
26	Dill seed	50	275	5.5
	Total spices	38895	0	
	VEGETABLE		0	
27	Onion	2980	518520	174
28	Potato	2150	49450	23
29	Brinjal	1560	173160	111
30	Tomato	1980	301950	152.5
31	Cauliflower	440	44000	100
32	Cowpea	840	34356	40.9
33	Cabbage	435	43500	100
34	Okra	1550	85715	55.3
35	Fenugreek	40	460	11.5
36	Peach	5	10	2
37	Cucurbits	42	1596	38
38	Cluster bean	1138	46999.4	41.3

39	Other vegetable	17	484.5	28.5
	Total Vegetable	13177	0	20.5
	FRUIT CROPS	15177	0	
40	Chiku	238	21658	91
40	Pomegranate	77	4004	52
41	Citrus	173	7006.5	40.5
42	Jamun	7	14.7	2.1
43	Aonla	76	2964	39
45	Guava	15	600	40
46	Custard apple	70	3605	51.5
47	Рарауа	187	86955	465
48	Coconut	380	2850000	7500
49	Ber	300	15750	52.5
50	Almond	55	2200	40
51	Banana	12	1140	95
52	Mango	425	37825	89
53	Cashew nut	7	24.5	3.5
54	Other fruits	165	8250	50
	Total Fruits	2187	0	
	FLOWERS		0	
55	Rose	31	1798	58
56	Merry gold	52	4576	88
57	Shevanti	1	0	
58	Lilly	7	18.9	2.7
59	Other flowers	55	1540	28
	Total flowers	146	0	
	OTHER CORPS		0	
60	Chikori	50	4325	86.5
61	Palma Rosa	43	5375	125
	Total Other crops	93		
	Fodder crops			
62	Lucern	1105	132600	120
63	Sorghum	16660	2499000	150
64	Maize	2910	0	
	Total Fodder crops	20675		

\* Source : DAO, & Dy.Dir.Hort., Jamnagar

### 2.5. Weather data (April-09 to March-10)

Sr	Meteorological week	Rainfall	No of	Tem	nperature °c	Remarks
Sr. no.		(mm)*	Rainy days *	Max.	Min.	Remarks
1	25	012.5	1	36.8	27.0	
2	26	024.0	2	32.8	26.3	
3	27	05.2	1	35.9	27.3	
4	28	055.5	5	33.4	26.2	
5	29	179.0	4	31.7	25.5	
6	30	177.5	4	29.3	25.4	
7	31	0	0	32.8	26.2	
8	32	0	0	33.2	26.2	
9	33	7	1	33.3	25.2	
10	34	0	0	33.3	25.3	

11	35	110.0	3	31.4	25.4	
12	36	0	0	32.8	25.7	
13	37	0	0	33.2	23.7	
14	38	0	0	33.4	23.3	
15	39	0	0	33.8	24.9	
16	40	1.5	0	34.8	26.1	
17	41	0	0	33.8	22.2	
18	42	0	0	34.1	20.3	
19	43	0	0	34.6	17.6	
20	44	0	0	35.6	17.9	
21	45	0	00	33.5	19.2	
22	46	1.0	0	29.7	17.4	
23	47	0	00	29.7	14.6	
24	48	0	0	30.2	14.7	
25	49	0	0	28.1	12.6	
26	50	0	0	28.9	13.3	
27	51	0.5	0	27.2	17.4	
28	52	0	0	27.3	11.7	
29	1	0	0	26.3	13.9	
30	2	0	0	25.5	13.3	
31	3	00	0	26.2	10.6	
32	4	0	0	29.1	10.9	
33	5	0	0	28.7	12.8	
34	6	0	0	29.5	16.0	
35	7	0	0	27.6	11.3	
36	8	0	0	30.2	13.6	
37	9	0	0	32.0	18.1	
38	10	0	0	36.2	18.9	
39	11	0	0	38.0	20.4	
40	12	0	0	34.9	20.8	
41	13	0	0	35.2	20.7	
Total		573.7	21			

\* Source: Meteorological observatory, Millet Research Station, JAU, Jamnagar;

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

Category	Population	Production	Productivity
Cattle	349229	2475.2 qtl total milk	
Crossbred			8.585 lit/day
Indigenous			3.375 lit/day
Buffalo	209616		4.451 lit/ha
Sheep	232530	295.16 lakh kg wool	
Crossbred			
Indigenous			
Goats	173022		0.274 lit/ha
Pigs		290097.9 Qtl meat	
Crossbred			
Indigenous			
Poultry	38041	12.77 lakh eggs	

Hens		
Desi		
Improved		
Horse &	410	
Camels	2260	
Donkey	2577	
Total Milk		
Total egg		
Total wool		

: Assistant Directorate of Fishries, Jamnagar

SI. No	Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1		Rampar,	Cotton,	Heavy infestation	<ul> <li>ICM in major crops of</li> </ul>
	Lalpur	Navi-Pipar	groundnut,	of sucking pest in	the district
		Arikhana, Navi Veraval	sesamum,	cotton, stem rot	<ul> <li>Introudction of</li> </ul>
2		Kalawad,	castor,	disease in	soyabean as
		Nani-Vavadi,	greengram,	Groundnut, Root	intercropping
	Kalawad	Sanala,	wheat, Gram,	rot in castor, Less	<ul> <li>Recycling of farm</li> </ul>
		Hodisang, Nana	cumin,	area under	waste
		badanpar	mustard,	horticulture	<ul> <li>Populirization of MIS</li> </ul>
3	khambha	Viramdad, Hasthal,	Vegetable,	crops, Blight in	<ul> <li>Motivation of fishries</li> </ul>
	dia	Nagada, Jakasia, ,	Soyabean,	cumin, salinity	cultiavtion
4		Makavana, Dhundha,	flowers, live		
	Jamnagar	Chandraga, Dodhiya,	stock		
		Jivapar			

#### 2.7 Details of Operational area / Villages (2009-10)

#### 2.8 Priority thrust areas

SI. No	Crop/ Enterprise	Thrust area
1.	Cotton, groundnut, castor, cumin, wheat, vegetables, fruits, etc.	Integrated Crop Management in major crops
2.	Soyabean	Introduction of new crops in the districts as sole crop and inter cropping
3.	Farm waste	Recycling of farm waste through composting, vermicompost, green manuring, etc.
4.	Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
5.	Soil	Reclamation of saline & alkaline soils
6.	Farm Women	Farm women empowerment by training in value addition, handi crafts, and small scale enterprises
7.	Fisheries	Motivation of fisheries cultivation
8.	Improved Implements	Popularization of the mechanized technological know how

#### **3. TECHNICAL ACHIEVEMENTS**

OFT         Number of OFTs         Number of Farmers           Targets         Achievement         Targets         Achievement           Cotton         2         2         6         6						
	Numbe	er of OFTs	Number o	of Farmers		
	Targets	Achievement	Targets	Achievement		
Cotton	2	2	6	6		
Groundnut	1	1	3	3		

<u>3. A.</u>	Details of target and achievements of mandatory	activities by KVK during 2009-10
0 F T		

1. FLD	Area	of FLD (ha)	Number of Farmers			
	Targets	Achievement	Targets	Achievement		
Kharif -2009-10						
Groundnut	10	10	20	20		
Castor	5	5	10	10		
Green gram	5	5	10	10		
Cotton (Component*)	5	5	10	10		
Groundnut (Component*)	5	5	10	10		
TOTAL	30	30	60	60		
Rabi -2009-10						
Gram	10	10	20	20		
Total	40	40	80	80		

FLD conducting of	other than KVK Scheme du	uring				
		Num	ber of FLDs	Number of Farmers		
Scheme	Crops Targets Achievement		Achievement	Targets	Achievement	
Kharif-2009-10						
Cotton Mini Mission	Cotton (Prod. Tech.)	25	25	50	50	
Rabi – 2009-10						
ATIC	Gram	6	6	12	12	
Summer -2009-1	0					
RKVY	Summer Groundnut	20	20	40	40	
	Sesamum	10	10	20	10	
Total		61	61	122	122	

Training					Extension Activities				
	3				4				
Numb	Number of Participants		Number of activities		Number of Participants				
Clientele	Targets	Achievement	Т	Α	Т	Α	Т	Α	
Farmers	75	67	1500	1328			4000		
Rural youth	10	8	300	239	120	108		3014	
Extn.Functionaries	5	5	120	120					
Total	90	80	2920	1687	120	108	4000	3014	

Seed P	roduction (Qtl.)	Planting material (Nos.)					
	5	6					
Target	Achievement	Target	Achievement				
	63.86	-	-				

#### 3.B. Abstract of interventions undertaken

						Intervent	ions		
S. No	Thrust area	Crop/ Enterpris e	Identified Problem	anyFLD if anyTraining if anyextension personnel if anyactivitiesAnagement of nealy bug infestation in otton-Magt. of mealy bug-Field dayJudiciuous use of fertilizer in cotton-Balance fertilization in cotton-Field day/ Kisan goshtiesApplication methods of 	Extension activities	Supply of seeds, planting material s etc.			
1	Increase the productivity of cotton		Mealy bug infestation	Management of mealy bug infestation in cotton	-	-	-	Field day	Pesticide s
2	Increase the productivity of cotton	•	Imbalance fertilization in cotton		-	fertilization	-		Fertilizer
3	Increase the productivity of groundnut		Stem rot disease in groundnut	methods of	-		-	Field day	Trichode rma

#### Achievements on technologies assessed and refined 3.1

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

Thematic areas	Cereals	Oilseeds	Pulses	Comm -ercial Crops	Veget- ables	Fruits	Flower	Plant- ation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed/Thining Management										
Integrated Crop Management		1								1
Integrated Nutrient Management				1						1
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management				1						1
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL		1		2						3

\*

Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro situation.

A.2. Abstract of the number of	technologie	s refined* in	respect o	of crops/	/enterpri	ses			
Thematic areas	Cereals	Oilseeds	Pulses	Comm -ercial Crops	Veget- ables	Fruits	Flower	Plant- ation crops	TOTAL
Varietal Evaluation									
Seed / Plant production									
Weed Management									
Integrated Crop Management		1							1
Integrated Nutrient Management				1					1
Integrated Farming System									
Mushroom cultivation									
Drudgery reduction									
Farm machineries									
Post Harvest Technology									
Integrated Pest Management				1					1
Integrated Disease Management									
Resource conservation technology									
Small Scale income generating									
enterprises									
TOTAL		1		2					3

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

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

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

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

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

#### B. Details of On Farm Trial carried out on farmers' field

#### A. & B. Technology Assessment/Refinement

#### OFT - 1 :- Cotton

#### 1) Title :- MANAGEMENT OF MEALY BUG INFESTATION IN COTTON

2) Problem diagnose/ definition: Minor infestation of mealybug

- -Leaving in gregarious phase
- -Ability to laid eggs in pouch
- -Eggs are hibernating in unfavorable condition
- -Symbiotic relation with ants

#### 3) Details of technologies selected for assessment/ refinement

Category	Source of technology		Technology detail			
Technology option 1	Farmer	T <sub>1</sub>		Application of conventional insecticides after infestation on Mealy bug		
Technology option 2	Oilseeds Res. Station, JAU, Jnd.	T <sub>2</sub>		Pre-sowing application of Methyl parathion, Application of insecticides at the time of infestation		
Technology option 3		T <sub>3</sub>	Refined practices	Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/biopesticides ( <i>Beauveria</i> spp. or <i>Verticillium</i> spp.)		

4) Source of technology: Junagadh Agricultural University

5) Production system :-Reduce mealy bug infestation

6) Thematic area : IPM for suppression of Mealy bug

#### 7) Performance of the Technology assessed / refined with performance indicators

<u> </u>										
Far-	Name of the farmer	Name of	Data on the	Data on the performance indicators of the						
mer		the Village	technology asses	sed / refined (% Pl	ant infested with					
No			mealybug)							
			T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>					
1	Dhanjibhai Gordhanbhai	Rampar	37	32	11					
2	Goganbhai Ramdevbhai	Viramdal	35	22	5					
3	Krishi Vigyan Kendra	Jamnagar	28	15	2					
		Average	33	23	6					

8) Final recommendation for micro level situation : Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio-pesticides (*Beauveria* spp. or *Verticillium* spp.) having highest non significant yield with farmers practices.

#### 9) Constraints identified and feedback for research:

- -High incidence of sucking pests and spodoptera
- -Found initiation of mealybug incidence
- -Yield increase as compare to farmers practices.
- **10) Process of farmers participation and their reaction:** Farmers have good response and they have support for OFT. Recommended application of the pesticides having low infestation of mealybug attack as well as disease and highest yield found in refinement treatment. They satisfied with this trial.

#### 11) Results of On Farm Trials

Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trials *	Technolog y Assessed	Parameters of assessment	Data on the parameter (% Plant infested)
1	2	3	4	5	6	7	8
					Mangt.	T <sub>1</sub> - Farmers practices Application of conventional insecticides	33
Cotton	otton Irrigate Mealy Management of mealy bug	3	Through	T <sub>2</sub> - Improved Pre-sowing application of Methyl parathion	23		
	d	bug	infestation			T <sub>3</sub> - Refined Practices Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of	6

			host plants & vegetation from	
			boundaries, application of newer	
			insecticides/bio-pesticides	

#### \* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Cotton	Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio-pesticides ( <i>Beauveria</i> spp. or <i>Verticillium</i> spp.) having highest non significant yield with farmers practices.	Farmers have good response and they have support for OFT. Recommended application of the pesticides having low infestation of mealybug attack as well as disease. And highest yield found in refinement treatment. They satisfied with this trial.	Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio- pesticides	Earlier Mealybug was sporadic pest. Now it becomes regular polyphagous pest and breeding continuously.

Crop/ enterprise	Technology Assessed / Refined	*Production kg/ha	Input cost Rs./ha	Gross return Rs./ha (Rate 32.50/kg)	Net Return (Profit) in Rs. / ha	BC Ratio (* only OFT input cost base)
1	13	14			15	16
Cotton	T <sub>1</sub> - Farmers practices Application of conventional insecticides	2750	3800	89375	85575	1:23.5
	T <sub>2</sub> - Improved Pre-sowing application of Methyl parathion	3000	3250	97500	94250	1:29
	T <sub>3</sub> - Refined Practices Pre- sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio- pesticides	3125	4125	101563	97438	1:23.6
OFT – 2 :- Co	tton :			•		J

#### 1) Title :- JUDICIOUS USE OF FERTILIZER IN COTTON

2) Problem definition: Cost increase due to unjudicious use of fertilizer

3) Details of technologies selected for assessment/ refinement

	Treatmo	ent	Period of application	N (kg/ha)	P₂O₅ (kg/ha)	K₂O (kg/ha)	Source
$T_1$	Farmer practices	Farmer	Basal	22.5	57.5	0	DAP
			Split-1(30 DAS)	57.5	0	0	Urea
			Split-2 (45 DAS)	57.5	0	0	Urea
			Split-3 (60 DAS)	80	57.5	0	Urea+DAP
			Split-4 (75 DAS)	57.5	0	0	Urea
			Total	275	115	0	

T <sub>2</sub>	Recommended	Cotton Res.	Basal	40	0	0	AS
	practices	Station, JAU,	Split-1(30 DAS)	40	0	0	Urea
		Junagadh	Split-2 (45 DAS)	40	0	0	Urea
			Split-3 (60 DAS)	40	0	0	Urea
			Total	160	0	0	
T <sub>3</sub>	Refined		Basal	40	60	60	AS + MOP
	practices – I		Split-1(30 DAS)	40	0	0	Urea
			Split-2 (45 DAS)	40	0	0	Urea
			Split-3 (60 DAS)	40	0	0	Urea
			Total	160	60	60	
$T_4$	Refined		Basal	40	60	60	AS + MOP
	practices – II		Split-1(30 DAS)	40	0	20	AS + MOP
			Split-2 (45 DAS)	40	0	20	AS + MOP
			Split-3 (60 DAS)	40	0	20	AS + MOP
			Total	160	60	120	

N.B.:- T<sub>1</sub>, T<sub>2</sub>, T3 & T4 are technology options 1, 2, 3 & 4 respectively.

4) Source of Technologoy :- Junagadh Agricultural Univiersity

5) Production system and thematic area : Balance fertilization in cotton

6) Performance of the Technology assessed / refined with performance indicators

Far-	Name of the farmer	Name of	Data on the performance indicators of the				
mer		the Village	technology assessed / refined				
No			Technology Technology Technology Technolog				
			Option 1	Option 2	Option 3	Option 4	
			Yield	Yield	Yield	Yield	
1	Kantibhai Ajudia	Makvanan	25.3	26.5	28.2	29.3	
2	Jentibhai Karsanbhai	Vodiang	25.1	27	28.6	29.5	
3	Krishi Vigyan Kendra	Jamnagar	26	26.5	29.6	30.2	
		Average	25.46	26.67	28.8	29.67	

**8)** Final recommendation for micro level situation : Basal application of N (40 kg), P<sub>2</sub>O<sub>5</sub> (60 kg) and K<sub>2</sub>O (60 kg) and remaining N application 40 kg each at 30, 45 and 60 days after sowing having highest non significant yield with farmers practices.

#### 9) Constraints identified and feedback for research:

-High incidence of sucking pests and spodoptera

-Found initiation of mealybug incidence

-Yield increase as compare to farmers' practices.

**10) Process of farmers participation and their reaction:** Farmers have good response and they have support for OFT. Recommended application of the fertilizer having low incidence of insect-pests attack as well as disease. And highest yield found in refinement treatment. They satisfied with this trial.

Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trials *	Technolog y Assessed	Parameters of assessment	Data on the parameter Q/ha
1	2	3	4	5	6	7	8
	Cotton Irri- gated INM Lo					$T_1 - Farmers practices (N 275 : P_2O_5 115 : K_2O 00)$	25.46
Cotton		Low yield of Cotton	3	balance	$T_2 \ $ - Improved Practice (N 160 : $P_2O_5$ 00 : $K_2O$ 00)	26.67	
					fertilizers	$T_3~$ - Refined Practices (N 160 : $P_2O_5$ 60 : $K_2O$ 60)	28.8

#### 11) Results of On Farm Trials

					T <sub>4</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 120)	29.67
--	--	--	--	--	---	-------

#### \* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Cotton	application 40 kg each at 30, 45 and 60 days after sowing having highest non significant yield with		N (160 kg), P <sub>2</sub> O <sub>5</sub> (60 kg) and K <sub>2</sub> O (60 kg)	Monocropping system & less availability of FYM

Crop/ enterprise	Technology Assessed / Refined	*Production kg/ha	Input cost Rs./ha	Gross return Rs./ha (Rate 32.50/kg	Net Return (Profit) in Rs. / ha	BC Ratio (* only OFT input cost base)
1	13	14			15	16
Cotton	$T_1 - Farmers \ practices (N \ 275 : P_2O_5 \ 115 : K_2O \ 00)$	2546	5850	82745	76895	13.14
	$T_2$ - Improved Practice (N 160 : $P_2O_5 00 : K_2O 00$ )	2667	5600	86677	81077	14.5
	$T_3~$ - Refined Practices (N 160 : $P_2O_5$ 60 : $K_2O$ 60)	2880	3900	93600	89700	23
	$T_4 \ $ - Refined Practices (N 160 : $P_2O_5$ 60 : $K_2O$ 120)	2967	3500	96427	92927	26.6

#### OFT - 3:- Oilseeds (Groundnut) :

#### 1) Title :- Biological control of Sclerotium rolfsii (stem rot) in groundnut

#### 2) Problem definition :

- -Low plant population
- -Disease problems
- -Lack of knowledge for use of recommended control measure

#### 3) Detalis fo technologies for assessment/ ferinement

Category	Source of technology	Technologoy details					
Technology option 1	Farmer	T <sub>1</sub>	Farmers practice (Control)				
Technology option 2	Main Oilseeds Res. Station, JAU, Junagadh	T <sub>2</sub>	<i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing				
Technology option 3		T₃	Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma harzeanum</i> @2.5 kg/ha at 30 & 45 DAG				

4) Source of Technology:- Junagadh Agricultural University

5) Production system : Integrated disease management

#### 6) Thematic area : Management of stem rot in groundnut

7	Dorformonco of the	Technology accorded	/ rafimad with	performance indicators
	Performance of the	Technology assessed /	reinea with	periormance indicators
- 1				

Far-		Name of	Data on the performance indicators of the technology assessed / refined					
mer No	Name of the farmer	the Village	Technology Option 1	Technology Option 2	Technology Option 3			
			Yield	Yield	Yield			
1	Naranbhai Kalabhai	Arikhana	16.6	20.4	18.00			
2	Rameshbhai Rajsibhai	Hasthal	16.25	20.3	18.20			
3	Krishi Vigyan Kendra	Jamnagar	17.3	20.75	19.00			
		Average	16.71	20.48	18.40			

**8)** Final recommendation for micro level situation: Management of *Sclerotium rolfsii* in groundnut with *Trichoderma harzeanum* @ 2.5 kg/ha and castor cake @ 500kg/ha at the time of sowing having more beneficial

#### 9) Constraints identified and feedback for research :

- -Soil born fungus,
- -Highly related with high moisture & temperature.
- -Reduce stem rot diseases
- -Yield increase compare to control plot
- -Good and bigger quality of pods

**10) Process of farmers participation and their reaction:** Farmers have good response and they have support for OFT. They satisfied with this trial.

,							
Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trials *	Technolog y Assessed	Parameters of assessment	Data on the parameter (kg/ha)
1	2	3	4	5	6	7	8
Groun-	Rain-	Stem rot ( <i>Scler-</i>	Yield losses in groundnut due to	3	ent of stem rot in	<ul> <li>T<sub>1</sub>- Farmers practice (Control)</li> <li>T<sub>2</sub>- Improved Practice</li> <li>(<i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @</li> <li>500kg/ha at the time of sowing)</li> </ul>	1671 2048
dnut	it fed otium Sclero		Sclerotium stem rot	3	ma harzaneu	T <sub>3</sub> – Refined Practices (Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma harzeanum</i> @2.5 kg/ha at 30 & 45 DAG)	1840

#### 11) Results of On Farm Trials

\* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Groundnut	Farmers have good response and they have support for OFT. They satisfied with this trial	Farmers have good response and they have support for OFT. They satisfied with this trial	Trichoderma	Directely comes in contact with stem in drenching

	kg/ha at 30 & 45	
	DAG	

Crop/ enterprise	Technology Assessed / Refined	*Production kg/ha	Input cost Rs./ha	Gross return Rs./ha	Net Return (Profit) in Rs. / ha	BC Ratio (* only OFT input cost base)
1	13	14			15	16
Ground	T <sub>1</sub> - Farmers practice (Control)	1671	2800	40104	37304	13.32
-nut	T <sub>2</sub> - Improved Practice ( <i>Trichoderma</i> <i>harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing)	2048	2250	49152	46902	20.84
	T <sub>3</sub> – Refined Practices (Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma harzeanum</i> @2.5 kg/ha at 30 & 45 DAG)	1840	2547	44160	41613	16.33

\*Field crops – kg/ha, \* for horticultural crops -= kg/t/ha, \* milk and meat – litres or kg/animal, \* for mushroom and vermi compost kg/unit area.

\*\* Give details of the technology assessed or refined and farmer's practice

#### **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 2009-10 and

recommended for large scale adoption in the district

s.	Crop/ Enterprise	Thematic	Technology	Details of popularization		ontal sprea echnology	ad of	
No		Area*	demonstrated	methods suggested to	No. of	No. of	Area in	
				the Extension system	villages	farmers	ha	
1			Newer	Medium duration, high				
	Groundnut	IPM	pesticides	yielding and stem root	2	10	5	
			pesticides	resistance variety				
2	Castor	IPM	Newer	High yielding variety,	5	10	5	
	Castor	IFIVI	pesticides	wilt resistance vareity	5	10	,	
3	Groop grom	IPM	Newer	Short duration, high	5	10	5	
	Green gram	IFIVI	pesticides	pod length and yield	5	10	J	
4	Cotton	IPM	NPV	To control the	5	10	5	
	(Component)	IFIVI	INF V	spodoptera	5	10	Э	
5	G'nut	IDM	Trichoderma	To minimize the stem	3	10	5	
	(Component)	IDIVI	menoderma	rot	5	10	5	
6	Gram	Varietal	GG-3	High yielding variety	3	20	10	
7	Cotton	Varietal	Mallika	High yielding variety	5	25	10	
8	Cotton	INM in	INM	Balance fertilization	5	25	10	
	Cotton	cotton	IINIVI		5	25	10	

\* Thematic areas as given in Table 3.1 (A1 and A2)

# b. Details of FLDs implemented during 2009-10(Information is to be furnished in the following three tables for each category i.e. Oil seed, Pulse and Other)

SI.	Сгор	Thematic	Technology	Season		Area (ha)		of farme onstrat	-	Reasons for shortfall in
No.	Стор	area	Demonstrated	and year	Pro.	Actu al	SC/ ST	Other s	Т	achievement
	Oilseeds									
1	Groundnut	Pest managem ent	Newer pesticides	Kharif 09-10	10	10	5	15	20	-
2	Castor	Pest managem ent	Newer pesticides	Kharif 09-10	5	5	2	8	10	-
3	G'nut (Component)	IDM	Trichoderma	<i>Kharif</i> 09-10	5	5	2	8	10	
	Pulse									
4	Green gram	IPM	IPM	<i>Kharif</i> 09-10	5	5	3	7	10	
5	Chick pea	Verital	GM-3	Rabi 09-10	10	10	4	16	20	
	Others									
6	Cotton (Component)	IPM	NPV	<i>Kharif</i> 09-10	5	5	3	7	10	
7	Cotton	INM and IPM	INM & IPM	Kharif 09-10	20	20	14	36	50	

#### Details of farming situation

		Farming		Sta	tus of s	oil				Seasonal	No.
Сгор	Season	situation (RF/ Irrigated)	Soil type	N	Ρ	к	Previous crop	Sowing date	Harvest date	rainfall (mm)	of rainy days
Oilseeds											
Groundnut	Kharif	Rainfed	MB	М	М	м	G'nut,	1st to 20 th July	15 to 30 Oct	573.7	21
Castor	Kharif	Rainfed	MB	М	М	М	Fodder crops	15 to 30 August	20 to Jan to 15 March	573.7	21
G'nut (Compoent)	Kharif	Rainfed	MB	М	М	м	Wheat	1st to 20 th July	15 to 30 Oct	573.7	21
Pulse											
Green gram	Kharif	Rainfed	MB	М	М	м	Jowar	1st to 20 th July	20 to 30 Sept	573.7	21
Chick pea	Rabi	Irrigated	MB	М	Μ	м	G'nut	8 Nov to 15 Nov	10 to30 Feb	-	-
Other											
Cotton (Component)	Kharif	Rainfed	MB	М	М	М	cotton	15 to 30 June	15 Nov to 10 Jan	573.7	21

#### Performance of FLD

SI. No.	Сгор	Technology Demo.	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha		Demo. Yield Qtl/ha				Demo. Yield Qtl/ha		Demo. Yield Qtl/ha local in Check in		Increase in yield (%)	relation to	
										Demo	Local							
1	2	3	4	5	6	7	8	9	10	11	12	13						
	Oilseeds																	
1	Groundnut	IPM	GG-5	20	10	16.25	13.75	15.00	12.5	16.66	15.00	12.5						
2	Castor	IPM	GCH-4	10	5	41.25	36.25	38.75	35.2	9.67	38.75	35.2						
3	G'nut*	Trichoderma	GG-20	10	5	15	13.75	14.37	13.12	8.69	14.37	13.12						
	Pulse																	
4	Green Gram	IPM	GG-4	10	5	7.5	6.87	7.18	6.5	9.56	7.18	6.5						
5	Chick pea	Variety	GM-3	10	5	18.75	15	16.87	15.00	11.11	16.87	15.00						
	Other																	
6	Cotton *	NPV	Bt.	10	5	21.25	20.00	20.62	18.75	9.09	20.62	18.75						

\*Component demonstration

#### Economic Impact (continuation of previous table)

Gran	Average Cos cultivation (Re		Average Gross (Rs./ha)		Average Net R (Profit) (Rs.,	Benefit-	
Сгор	Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	Cost Ratio
	14	15	16	17	18	19	20
Oilseeds							
Groundnut	20650	22423	41250	34375	20600	11952	2.00
Castor	26500	27400	77500 69500		51000	42100	2.9
G'nut (Component)	18500	22650	39500	36093	21000	13443	2.13
Pulse							
Green Gram	10300	9400	23437	20312	13137	10912	2.27
Chick pea	9762	10200	35427	35427 31500		21300	3.6
Other							
Cotton (Component)	23687	25410	60562	53437	36875	28027	2.55

NB: Attach few good action photographs with title at the back with pencil

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

Сгор	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Groundnut	Kharif	IPM	Rainfed	15.00	12.5	16.66
Castor	Kharif	IPM	Rainfed	38.75	35.2	9.67
Groundnut	Kharif	Trichoderma	Rainfed	14.37	13.12	8.69
Green gram	Kharif	IPM	Rainfed	7.18	6.5	9.56
Chick pea	Rabi	Seed/Variety	Irrigated	16.87	15.00	11.11
Cotton	Kharif	NPV	Irrigated	20.62	18.75	9.09

#### Technical Feedback on the demonstrated technologies

SI. No.	Сгор	Variety/ Technology	Farmers' Feed Back
1	Groundnut	IPM	-Trichoderma control seclerotium effectively -Imidaclorprid effiective for sucking pest
2	Castor	IPM	-Pheromen Trap effectively monitor the Spodoptera -Attack of capsule borer cotrolled by pesti.
3	3 G'nut Trichoerma -A		-Application of Trichoderma at proper time act as a pricortion measure for the stem rots.
4	Green Gram	IPM	-Pink borer controlled by the pesticides and sucking pest
5	Chick pea	GG-3	-Higher yield -Good flowering -Good yield in less irrigated area
6	Cotton (Component)	NPV	-NPV effectively control spodoptera

#### Farmers' reactions on specific technologies

SI. No.	Crop	Variety/ Technology	Farmers' Reaction
1	Groundnut	IPM	Good management against white fungi and increase the yield
2	Castor IPM		Effective control of spodeptera and capsule borer
3	G'nut (Component)		Good management against white fungi
4	Green Gram	IPM	Good result on pest & disease management
5	Chick pea	GG-3	<ul> <li>Yield is higher than GG-2</li> <li>Good grain quality</li> </ul>
6	Cotton (Compoent)	NPV	Good results when temp. is low

#### Extension and Training activities under FLD

Sr. No.	A stivity	No. of Activity	Data	No.	of Partici	pants	Remar
Sr. No.	Activity	organised	Date	Male	Female	Total	ks
	Groundnut						
1.	Field days	2		56	22	78	
2.	Training for farmers	1		20	-	20	
3.	Radio Talk						
	Castor						
1.	Field days	2		60	20	80	
2.	Training for farmers	1		38	4	42	
3.	Radio Talk						
4	Training for Extension functionaries						
	Groundnut (Component)						
1.	Field days	1		23	7	30	
2.	Training for farmers	1		28	4	32	
3.	Radio Talk						
4	Training for Extension functionaries						

	Greengram					
1.	Field days	1	28	12	40	
2.	Training for farmers	1	26	5	31	
3.	Radio Talk					
4	Training for Extension functionaries					
	Chick pea					
1.	Field days	1	25	10	35	
2.	Training for farmers	1	38	4	42	
3.	Radio Talk					
4	Training for Extension functionaries	1				
	Cotton (Component)					
1.	Field days	1	52	14	66	
2.	Training for farmers	1	20	-	20	
3.	Media coverage (Radio Talk)					

#### c. Details of FLD on Enterprises (i) Farm Implements

(1) 1 4	i ili iliipi	ements						
Name of the implemen t	crop	No. of farmers	Area (ha)	Performanc e parameters / indicators	in rela <sup>.</sup> techn	parameter tion to ology strated Local check	% change in the parameter	Remarks
-	-	-	-	-	-	-	-	-

\* Field efficiency, labour saving etc.

#### (ii) Livestock Enterprises

(/ =								
Enterpris e	Breed	No. of farmer s	No. of animals, poultry birds etc.	Performa nce paramete rs / indicators	* Data on p in relati techno demons Demon.	on to ology	% change in the parameter	Remark s
-	-	-	-	-	-	-	-	

\* Milk production, meat production, egg production, reduction in disease incidence etc.

#### (iii) Other Enterprises

Enterprise	Variety/ breed/ Species/ others	No. of farmers	No. of Units	Performa nce paramete rs / indicators	Data on para in relation technolo demonstra Demon.	n to egy	% change in the parameter	Remark s
Mushroom								
Apiary								
Sericulture								
Vermi								
compost								

# **3.3 ACHIEVEMENTS ON TRAINING (Including the sponsored and FLD training programmes and other):**

#### A) ON Campus

	No. of	No. of Participants								
	No. of Cours		Other	s		SC/ST			Total	
Thematic Area	es	М	F	Total	М	F	Total	М	F	Т
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	2	35	5	40	3	0	3	38	5	43
Resource Conservation Technologies										
Integrated Farming										
Water management	1	17	0	17	6	0	6	23	0	23
Seed production	1	14	0	14	5		5	19	0	19
Nursery management							_			_
Integrated Crop Management	1	24	0	24	7		7	31	0	31
Fodder production										
Production of organic inputs										
Total	5	90	5	95	21	0	21	111	5	116
II Horticulture										
a) Vegetable Crops										
Off-season vegetables										
Nursery raising	1	14	8	22	4	2	6	18	10	28
Exotic vegetables like Broccoli										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Micro irrigation systems of orchards										
Plant propagation techniques										
c) Ornamental Plants										
Nursery Management	1	14	6	20	5	4	9	19	10	29
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
d) Plantation crops										
Production and Management technology										
e) Tuber crops										
Processing and value addition										
f) Spices										
Processing and value addition										

a) Madicinal and Associatio Directo										
g) Medicinal and Aromatic Plants										
Nursery management										
Total	2	28	14	42	9	6	15	37	20	57
III Soil Health and Fertility										
Management	2	24	0	24	15		15	40	0	40
Soil fertility management	2	34	0	34	15	0	15	49	0	49
Soil and Water Conservation	1	21	0	21	5	0	5	26	0	26
Integrated Nutrient Management										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	1	20	0	20	6	0	6	26	0	26
Soil and Water Testing	0									
Total	4	75	0	75	26	0	26	101	0	101
IV Livestock Production and										
Management										
Dairy Management										
Production of quality animal										
products										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women										
empowerment										
Gender mainstreaming through SHGs										
		_				10	4.0		<b>F</b> 4	54
Value addition	2	0	41	41	0	10	10	0	51	51
Income generation activities for empowerment of rural Women	1	0	20	20	0	5	5	0	25	25
Location specific drudgery		0	20	20	0	5	5	0	25	25
reduction technologies										
Rural Crafts										
Women and child care	1	0	17	17	0	5	5	0	22	22
Total	4	0	78	78	0	20	20	0	98	98
	- +	0	70	78	U	20	20		50	50
VI Agril. Engineering Small scale processing and value										
addition										
Post Harvest Technology										
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection					-	-		-	-	-
Integrated Pest Management	4	64	17	81	14	4	18	78	21	99
Integrated Disease Management	2	32	5	37	11	2	13	43	7	50
	۷.	52	5	57	<u> </u>	<u> </u>	13	43	,	50
Bio-control of pests and diseases Production of bio control agents										
and bio pesticides										
Total	6	96	22	118	25	6	31	121	28	149
VIII Fisheries				0			0	0	0	0
Integrated fish farming	1	7	0	7	23	0	23	30	0	30
Carp breeding and hatchery	-	, ,		,	2.5		2.5	- 50		50
management										
<u> </u>		1	1		1	1		1		1

			1							
Carp fry and fingerling rearing		<u> </u>								
Composite fish culture	1	10	0	10	22	0	22	32	0	32
Hatchery management and culture										
of freshwater prawn										
Total	2	17	0	17	45	0	45	62	0	62
IX Production of Inputs at site				0			0	0	0	0
Seed Production	2	36	0	36	8	0	8	44	0	44
Planting material production										
Bio-agents production										
Bio-pesticides production										
Bio-fertilizer production										
Vermi-compost production	2	34	12	46	6	4	10	40	16	56
Organic manures production										
Production of Fish feed										
Total	4	70	12	82	14	4	18	84	16	100
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of										
SHGs	2	34	10	44	8	3	11	42	13	55
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Total	2	14	8	22	2	0	2	16	8	24
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
Total	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)										
TOTAL	27	362	125	487	133	30	163	495	155	650
(B) RURAL YOUTH										
Integrated farming										
Seed production										
Production of organic inputs										
Integrated Farming	1	18	5	23	7	0	7	25	5	30
Planting material production										
Vermi-culture	2	32	8	40	12	4	16	44	12	56
Sericulture										
Rural Crafts										
TOTAL	3	50	13	63	19	4	23	69	17	86

(C) Extension Personnel										
Productivity enhancement in field										
crops										
Integrated Pest Management	2	37	0	37	6	0	6	43	0	43
Integrated Nutrient management										
Any other (Pl. Specify)										
TOTAL	2	37	0	37	6	0	6	43	0	27
Grand Total	32	449	138	587	158	34	192	607	172	763

#### B) Off Campus

	No.	f											
	of		Others	;		SC/ST			Tota				
Thematic Area	Cour ses	м	F	т	м	F	т	м	F	Total			
(A) Farmers & Farm Women													
I Crop Production													
Weed Management	2	29	7	36	6	3	9	35	10	45			
Resource Con.Technologies													
Cropping Systems													
Crop Diversification	1	21	0	21	11	0	11	32	0	32			
Integrated Farming													
Water management	1	22	10	32	8	0	8	30	10	40			
Seed production	1	18	8	26	7	0	7	25	8	33			
Nursery management													
Production of organic inputs	0												
Total	5	90	25	115	32	3	35	122	28	150			
II Horticulture													
a) Vegetable Crops													
Production of low volume and													
high value crops													
Nursery raising	1	16	7	23	7	4	11	23	11	34			
Protective cultivation (Green													
Houses, Shade Net etc.)													
b) Fruits													
Training and Pruning													
Micro irrigation systems of													
orchards													
c) Ornamental Plants													
Nursery Management	1	19	5	24	7	0	7	26	5	31			
Propagation techniques of													
Ornamental Plants													
d) Plantation crops													
Production and Management													
technology													
e) Tuber crops													
Processing and value addition													
f) Spices													
Production and Management													
technology													

g) Medicinal and Aromatic Plants										
Nursery management										
Total	2	35	12	47	14	4	18	49	16	65
III Soil Health and Fertility										
Management										
Soil fertility management	1	12	9	21	10	2	12	22	11	33
Soil and Water Conservation	2	32	8	40	12	4	16	44	12	56
Integrated Nutrient Management										
Nutrient Use Efficiency										
Soil and Water Testing										
Total	3	44	17	61	22	6	28	66	23	89
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment										
Gender mainstreaming through SHGs										
Value addition	3	0	55	55	0	12	12	0	67	67
Income generation activities for										
empowerment of rural Women	1	0	19	19	0	11	11	0	30	30
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	2	0	32	32	0	20	20	0	52	52
Total	6	0	106	106	0	43	43	0	149	149
VI Agril. Engineering										
Post Harvest Technology										
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	6	124	22	146	27	8	35	151	30	181
Integrated Disease Management	8	155	24	179	40	12	52	195	36	231
Bio-control of pests and diseases	-			-						
Production of bio control agents and bio pesticides										
Total	14	279	46	325	67	20	87	346	66	412
VIII Fisheries										
Integrated fish farming	3	21	9	30	34	15	49	55	24	79
Pen culture of fish and prawn	-		-							
Shrimp farming	1	9	3	12	15	8	23	24	11	35
Edible oyster farming	<u> </u>		5	14		0	25	27		55
Pearl culture										
Fish processing and value addition										
Total	4	30	12	42	49	23	72	79	35	114

IX Production of Inputs at site										
Seed Production	2	27	0	27	15	0	15	42	0	42
Bio-fertilizer production										
Vermi-compost production	1	15	8	23	10	4	14	25	12	37
Organic manures production										
Production of fry and fingerlings										
Small tools and implements										
Production of Fish feed										
Total	3	42	8	50	25	4	29	67	12	79
X Capacity Building and Group Dynamics										
Leadership development	1	25	3	28	8	4	12	33	7	40
Group dynamics	1	32	0	32	5	0	5	37	0	37
Formation and Management of SHGs	1	28	8	36	6	2	8	34	10	44
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues	0									
Total	3	85	11	96	19	6	25	104	17	121
XI Agro-forestry										
Production technologies										
Total	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)										
TOTAL	40	605	237	842	228	109	337	833	346	1179
(B) RURAL YOUTH										
Training and pruning of orchards										
Value addition	2	0	33	33	0	12	12	0	45	45
Production of quality animal products										
Ornamental fisheries	1	0	0	0	17	9	26	17	9	26
Para vets										
Composite fish culture										
Freshwater prawn culture	2	0	0	0	68	14	82	68	14	82
Tailoring and Stitching										
Rural Crafts										
TOTAL	5	0	33	33	85	35	120	85	68	153
(C) Extension Personnel										
Productivity enhancement in field										
crops	1	21	0	21	9	0	9	30	0	30
Integrated Pest Management	2	37	0	37	10	0	10	47	0	47
Integrated Nutrient management										
Any other (Pl. Specify)										
TOTAL	3	58	0	58	19	0	19	77	0	77

#### C) Consolidated table (On and OFF Campus)

	-	D. of No. of Participants										
	NO. OF		Others	S		SC/ST			Total			
Thematic Area	es	М	F	т	М	F	т	М	F	Т		
(A) Farmers & Farm Women												
I Crop Production												
Weed Management	4	64	12	76	9	3	12	73	15	88		
Resource Conservation												
Technologies												
Cropping Systems												
Crop Diversification	1	21	0	21	11	0	11	32	0	32		
Integrated Farming												
Water management	2	39	10	49	14	0	14	53	10	63		
Seed production	2	32	8	40	12	0	12	44	8	52		
Nursery management												
Integrated Crop Management	1	24	0	24	7	0	7	31	0	31		
Fodder production												
Production of organic inputs												
Total	10	180	30	210	53	3	56	233	33	266		
II Horticulture												
a) Vegetable Crops												
Production of low volume and												
high value crops												
Off-season vegetables												
Nursery raising	2	30	15	45	11	6	17	41	21	62		
Protective cultivation (Green												
Houses, Shade Net etc.)												
b) Fruits												
Training and Pruning												
c) Ornamental Plants												
Nursery Management	2	33	11	44	12	4	16	45	15	60		
Propagation techniques of Ornamental Plants												
d) Plantation crops												
Production and Management												
technology												
e) Tuber crops												
Production and Management												
technology												
f) Spices												
Processing and value addition												
g) Medicinal and Aromatic Plants												
Nursery management												
Total	4	63	26	89	23	10	33	86	36	122		
III Soil Health and Fertility												
Management												

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										_
Soil fertility management	3	46	9	55	25	2	27	71	11	82
Soil and Water Conservation	3	53	8	61	17	4	21	70	12	82
Integrated Nutrient Management										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	1	20	0	20	6	0	6	26	0	26
Soil and Water Testing			-		-					
Total	7	119	17	136	48	6	54	167	23	190
IV Livestock Production and		115	17	130	40	0	54	107	25	150
Management										
Dairy Management										
Production of quality animal										
products										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women										
empowerment										
Gender mainstreaming through										
SHGs										
Storage loss minimization techniques										
Value addition	5	0	96	96	0	22	22	0	118	118
Income generation activities for	5	0	90	90	0	22	22	0	110	110
empowerment of rural Women	2	0	39	39	0	16	16	0	55	55
Location specific drudgery		-			-					
reduction technologies										
Rural Crafts										
Women and child care	3	0	49	49	0	25	25	0	74	74
Total	10	0	184	184	0	63	63	0	247	247
VI Agril. Engineering										
Small scale processing and value										
addition										
Post Harvest Technology										
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	10	188	39	227	41	12	53	229	51	280
Integrated Disease Management	10	187	29	216	51	14	65	238	43	281
Bio-control of pests and diseases										
Production of bio control agents										
and bio pesticides										
Total	20	375	68	443	92	26	118	467	94	561
VIII Fisheries										
Integrated fish farming	4	28	9	37	57	15	72	85	24	109
Carp breeding and hatchery										
management										
Carp fry and fingerling rearing										
Composite fish culture	1	10	0	10	22	0	22	32	0	32
Pen culture of fish and prawn										
Shrimp farming	1	9	3	12	15	8	23	24	11	35
	1	۱	1		ı	ı		í		L

			1		1					
Edible oyster farming										
Total	6	47	12	59	94	23	117	141	35	176
IX Production of Inputs at site										
Seed Production	4	63	0	63	23	0	23	86	0	86
Planting material production										
Bio-fertilizer production										
Vermi-compost production	3	49	20	69	16	8	24	65	28	93
Organic manures production										
Production of livestock feed and fodder										
Production of Fish feed										
Total	7	112	20	132	39	8	47	151	28	179
X Capacity Building and Group										
Dynamics										
Leadership development	1	25	3	28	8	4	12	33	7	40
Group dynamics	1	32	0	32	5	0	5	37	0	37
Formation and Management of SHGs	2	62	10	80	1.4	-	10	76	22	00
	3	62	18	80	14	5	19	76	23	99
Mobilization of social capital										
WTO and IPR issues						_				
Total	5	99	19	118	21	6	27	120	25	145
XI Agro-forestry										
Production technologies										
Total										
XII Others (Pl. Specify)										
TOTAL	67	967	362	1329	361	139	500	1328	501	1829
(B) RURAL YOUTH										
Production of organic inputs										
Integrated Farming	1	18	5	23	7	0	7	25	5	30
Planting material production										
Vermi-culture	2	32	8	40	12	4	16	44	12	56
Sericulture										
Training and pruning of orchards	-			22		10	10		45	45
Value addition Production of quality animal	2	0	33	33	0	12	12	0	45	45
products										
Ornamental fisheries	1	0	0	0	17	9	26	17	9	26
Para vets								·		
Para extension workers										
Composite fish culture										
Freshwater prawn culture	2	0	0	0	68	14	82	68	14	82
TOTAL	8	50	46	96	104	39	143	154	85	239
(C) Extension Personnel										
Productivity enhancement in field										
crops	1	21	0	21	9	0	9	30	0	30
		74	0							90

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Integrated Nutrient management										
Any other (Pl. Specify)										
TOTAL	5	95	0	95	25	0	25	120	0	120
Grand Total	80	1112	408	1520	490	178	668	1602	586	2172

#### (D) Vocational training programmes for Rural Youth

						Γ	lo. c	of Pa	artic	ipar	nts			No. of	Empl-
Crop /		Training	Identified	Dura-	General			SC/ST			Total			person	oyed
Enterprise	Date	title*	Thrust Area	tion (days)	м	F	т	м	F	Т	м	F	Т	s emp- loyed	else where
Fruit	15- 4-09	Preparation of jam, jelly and pickles	Value addition in fruit	1	0	14	14	0	3	3	0	17	17	0	0
Vermi compost	15- 10- 010	Production off varmi compost	Self emplomen t	1	8	3	11	4	0	4	12	3	15	2	1
Vegetable	6- 10- 09	Packaging & Preservation of vegetables	Value addition in vegetable	1	0	17	14	0	8	5	0	25	25	1	0

\*training title should specify the major technology /skill transferred

#### (E) Sponsored Training Programmes (Details of training is given in Annexure-V)

					Total No. of participants									
SI.			Discipli	Dura		Other		:	SC/ ST			Total		Sponsor ing
No.	Date	Title	ne	-tion	м	F	Т	м	F	т	м	F	Т	Agency
1	22-07-09	Crop Production	Agron	1	26	12	38	6	4	10	32	16	48	Mahindra
2	29-07-09	Land Preparation	Agron	1	25	5	30	10	5	15	35	10	45	Mahindra
3	30-07-09	INM	Sol.sci	1	36	7	43	4	3	7	40	10	50	Mahindra
4	05-04-09	IPM & ICM of <i>Kharif</i> crops	Pl.Prot	1	14	4	18	6	4	10	20	8	28	Arya Seed
5	21-05-09	Crop Planning in Kharif	Pl.Prot	1	800	300	1100	250	150	400	1050	450	1500	DRDA
6	05-05-09	Precaution in plant protection for kharif crops	Pl.Prot	1	34	6	40	46	10	56	80	16	96	FSFC
7	07-08-09	Cotton Minimission	Agron	1	12	4	16	9	2	11	21	6	27	DAO
8	07-08-09	Isopom (Oilseeds)	Agron	1	14	5	19	10	1	11	24	6	30	DAO
9	08-08-09	Cotton Minimission	Pl.Prot	1	15	4	19	6	2	8	21	6	27	DAO
10	08-08-09	Isopom (Oilseeds)	Agron	1	16	6	22	11	2	13	27	8	35	DAO
11	11-08-09	Cotton Minimission	Pl.Prot	1	13	7	20	8	1	9	21	8	29	DAO
12	12-08-09	Isopom (Oilseeds)	Agron	1	21	4	25	14	0	14	35	4	39	DAO
13	12-08-09	Cotton Minimission	Pl.Prot	1	22	2	24	9	0	9	31	2	33	DAO
14	18-08-09	Isopom (Oilseeds)	Agron	1	18	1	19	14	0	14	32	1	33	DAO

-														
15	18-08-09	Cotton Minimission	Pl.Prot	1	12	4	16	11	1	12	23	5	28	DAO
16	19-08-09	Isopom (Oilseeds)	Agron	1	16	0	16	10	2	12	26	2	28	DAO
17	19-08-09	Cotton Minimission	Pl.Prot	1	12	0	12	19	0	19	31	0	31	DAO
18	21-08-09	Isopom (Oilseeds)	Pl.Prot	1	18	6	24	11	0	11	29	6	35	DAO
19	21-08-09	Cotton Minimission	Pl.Prot	1	12	5	17	16	2	18	28	7	35	DAO
20	22-08-09	Isopom (Oilseeds)	Agron	1	16	6	22	14	3	17	30	9	39	DAO
21	22-08-09	Cotton Minimission	Pl.Prot	1	15	4	19	12	3	15	27	7	34	DAO
22	25-08-09	Isopom (Oilseeds)	Sol.sci	1	19	3	22	10	4	14	29	7	36	DAO
23	26-08-09	Cotton Minimission	Pl.Prot	1	10	2	12	16	3	19	26	5	31	DAO
24	27-08-09	Isopom (Oilseeds)	Agron	1	21	4	25	14	2	16	35	6	41	DAO
25	28-08-09	Cotton Minimission	Pl.Prot	1	14	0	14	16	0	16	30	0	30	DAO
26	29-08-09	Isopom (Oilseeds)	Pl.Prot	1	16	0	16	14	0	14	30	0	30	DAO
27	14-09- 09	ICM in major crops	Pl.Prot	1	86	0	86	18	0	18	104	0	104	ATMA
28	15-09- 09	Fertility management	Soil.Sci	1	38	0	38	12	0	12	50	0	50	ΑΤΜΑ
29	16-09- 09	Water management	Agro.	1	42	0	42	5	0	5	47	0	47	ATMA
30	17-09- 09	Stretening SHGs	Ext.	1	39	0	39	9	0	9	48	0	48	ATMA
31	18-09- 09	Value addition and child care	Home Sci	1	0	104	104	0	15	15	0	119	119	ATMA
32	19-12- 09	Water shed managemetn	Ext.	1	0	17	17	0	14	14	0	31	31	DRDA
33	22-12- 09	Income Generating employment	Ext.	1	41	0	41	11	0	11	52	0	52	DR DA
34	24-12- 09	Narusery and Gardening	Horti.	1	9	0	9	4	0	4	13	0	13	NHR DF
35	9/1/20 10	Training on recycling farm waste	Soil.Sci	1	18	0	18	4	0	4	22	0	22	KRIBHC O
36	12/1/2 010	Package of practices in summer Groundnut	Pl.Prot	1	59	0	59	8	0	8	67	0	67	DAO
37	18-01- 10	Formation of SHGs in watershed project	Ext.	1	0	20	20	0	6	6	0	26	26	DRDA

### Extension Programmes (including activities of FLD programmes)

Sr.	Ision Programmes	No.	0			-0	-	articipa	ints					
No.	Nature of Extension Activity	of activi	Farm	ners (Ot	hers)	sc/s	T (Farn	ners)		tensio fficia		Grand Total		
	,	ties	м	F	т	М	F	Т	Μ	F	Т	м	F	т
1	2	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Field Day	2	48	20	68	8	2	10				56	22	78
	G'nut	1	20	6	26	3	2	5				23	8	31
	Castor	2	52	3	55	8	1	9				60	4	64
	Green gram	1	26	8	34	2	4	6				28	12	40
	Chick pea	1	22	7	29	3	2	5				25	9	34
	Cotton	1	50	12	62	2	2	4				52	14	66
	Total	8	218	56	274	26	13	39	0	0	0	244	69	313
2.	Kisan Mela													
		1	32		32	3		3				35		35
		1	28		28							28		28
3.	Kisan Ghosthi	1	19		19	7		7				26		26
		1	47		47	3		3				50		50
		1	40		40	2		2				42		42
		1	33		33	4		4		_		37		37
	Total	6	199	0	199	19	0	19	0	0	0	218		218
4.	Exhibition	1		24	24		2	2					26	26
5.	Film Show	1		24	24		2	2					26	26
6.	M. Demo	12	52	11	63	22		22	3	0	3	74	11	05
7.	Formers Cominer	1	25	11 4	29	8		8	3	0	3	33	11 4	85 37
7.	Farmers Seminar Total	1 2	25 77	4 15	29 92	。 30	0	8 30	3	0	3	33 107	4 15	37 122
8.	Workshop	2	//	15	92	50	U	50	3	U	3	107	15	122
	•	1	24		24	3		3				27		27
9.	Group meetings	1	24		24	5		5				21		21
	Total	2	45	0	45	3	0	3	0	0	0	48	0	48
	Lectures delivered	2	124	45	169	21	3	24	-	-	-	145	48	193
10.	as resource	2	145	22	167	15	0	15	-	-	-	160	22	182
	persons	3	223	66	289	31	0	31	-	-	-	254	66	320
		2	98	0	98	12	0	12	-	-	-	110	0	110
		1	0	28	28	0	3	3	-	-	-	0	31	31
		1	137	22	159	21	7	28	-	-	-	158	29	187
	Total	11	727	183	910	100	13	113	0	0	0	827	196	1023
11	News paper	3												
12	Radio talks													
13	TV talks													
14.	Popular articles	1												
15.	Ext.Literatur													
16.	Advisory Services	5												
17.	Scientific visit to farmers field	14	78		78	6		6	2		2	86		86
18.	Farmers visit to KVK	25	487	187	674	127	98	225	21		21	614	285	920
19.	Diagnostic visits	5												
20.	Agri mobile clinic	1050												
21	Soil test campaigns	1550												
23	Night meeting	3	27		27	12		12				39	0	39
24	Colobrative training	6	125		125	27		27				152	0	152

25	Training to ext.functionries	2	42		42	4		4				46	0	46
26	Any other-													
	Total	108	2025	465	2490	354	126	480	26	0	26	2402	591	3014

### 3.5 Production and supply of Technological products (2009-10)

### SEED MATERIALS

Sr.No.	Сгор	Variety	Quantity (Kg.)	Value	Provided No. of farmers
1.	Groundnut	GG-5	3241	80214	-
		GG-6	1170	28372	-
		TPG-37A	515	15450	-
		TPG-41	1250	34375	-
2.	Wheat	GW-366	1215	15795	-
3.	Cotton	Bt.cotton	178	5340	-
4.	Castor	GCH-7	500	46250	195

### SUMMARY

SI. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	1215	15795	
2	OILSEEDS	6675	246641	-
3	PULSES			
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS	178	5340	
	TOTAL			

### PLANTING MATERIALS : Nil..

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES					
VEGETABLES					
FOREST SPECIES					
ORNAMENTAL CROPS					
PLANTATION CROPS					
Others (specify)					

#### SUMMARY

SI. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES			
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			

TOTAL

	BIO PRODUCTS											
Major group/class	Product	Species	pecies Quan			Provided						
	Name		No	(kg)	(Rs.)	to No. of Farmers						
BIOAGENTS												
BIOFERTILIZERS												
BIO PESTICIDES	Savaj	Trichoderma harzianum		135	11475	105						

	SUMMARY											
SI.			Quar	itity		Provided						
No.	Product Name	Species	Nos	(kg)	Value (Rs.)	to No. of Farmers						
1	BIOAGENTS											
2	<b>BIO FERTILIZERS</b>											
3	BIO PESTICIDE	Trichoderma harzianum		135	11475	105						
	TOTAL											

### LIVESTOCK : NIL..

SI. No.	Туре	Breed	Qua	Quantity		Provided to No. of
			(Nos	Kgs	(Rs.)	Farmers
Cattle						
FISHERIES						
Others (Specify)						

	SUMMARY										
SI.			Qua	antity	Value						
No.	Туре	Breed	Nos	Kgs	(Rs.)	Provided to No. of Farmers					
1	CATTLE										
2	FISHERIES										
3	OTHERS										
	TOTAL										

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

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

KVK is already part of JAU newsletter, which is periodically

### (B) Literature developed/published

Item	Title	Authors name	Number
1	2	3	4
Research Paper	-Success with vermicomposting -Testing of IPM technology in Bt. Cotton through farmers participatory approach	-N.B. Jadav, P.S. Gorfad and V.J. Zizala -N.B.Jadav, V.J. Zizala and G. M. Parmar	NA
		- N.B. Jadav,P.S. Gorfad and G.M. Parmar	

	-Impact of frontline demonstrations on groundnut in Jamnagar district		
Total	2		
Technical Reports	Montly Progress Report, Quarterly Progress report Moniterable quarterly Progress report and Annual Progress reports	KVK, Jamnagar	NA
Popular articles	<ul> <li>-Krushi Vigyan Kendra,</li> <li>Krushikarni Diwadandi</li> <li>-Khedutoni Rudhigat Padhatio</li> <li>/manytanu muliyankan adhare</li> <li>sansodhan</li> </ul>	-P.S. Gorfad, N.B. Jadav and V.J. Zinzala -N.B.Jadav, P.S. Gorfad and G.M. Parmar	NA
Extension literature	40*	All officers of KVK	40000
Total	42		
Grand Total	44		

\* Details of extension literature given in annexture: III

### (C) Details of Electronic Media Produced

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

# 3.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

### Success stories: 1

- 1) Reintroducing soyabean crop in the districts
- 2) Back ground : Name : Kantibhai Ajudia

Village : Makvanan

Ta & Dist: Jamngar

Kantibhai Ajudia is one of the innovative farmers and devoted to his occupation. He is always interested to know about new technological know how. He was motivated to cultivate soyabean crops as a intercropping by scientist of KVK, He always take a risk in his farming (i.e. adoption of new technology, variety, enterprise etc.) He cultivated newly relseased soyabean variety (JS-335)in a ha. As an intercrop with Bt. Cotton

He harvested yield of cotton 2750 kg/ha and the revenue of the product worth Rs.96250/-. In addition, to this soybean contributed yield 2125 kg/ha and the additional income of this crop ws Rs.45156/-. The total gross returns was 141406/- and cost of cultivation was Rs. 28125 per unit area. Thus the net profit per unit area was 113281/- . It is advice that to cultivate soyabean as intercrop with cotton crops than sole crops on a unit area of land.

### Success stories: 2

- 1) Cultivation of new chickpea variety
- 2) Back ground: Mr. Lavjibhai Parshotambhai is the farmers of vodisang village of kalawad taluka. The vodisnag village is one of the operational village of KVK since last 2 year. He is regularly in touch with kvks' scientist and one frontline demonstration allotated to him in last rabi season. The flds of newely released chick pea variety gg-3He harvested good yield of 17 q/ha as compare to local one. With introduction of high yielding variety, he got high additional net returns.
- 3) Interventation: Introduction of new crop in area
- 4) Impact: This variety GG-3 will increase the production of 2.5%. and will improve the economic condition of farmers of saurashtra region.
- 5) Horizontal spread surrounding farmers
- 3.8. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year
  - 1. Innovative methodology:
    - Farmers to farmer dissemination
    - Distributed printed leaflet to farmers
  - Farm School on farmer's field

### 2. Innovative technology transfer:

- Use of FYM to minimize the chemical fertilizer in cotton
- Use of Trichoderma against stem rot disease of groundnut
- Tractor mounted sprayer
- Introduction of new variety i.e.GG-3
- Use of trap crop, pheromone trap etc. as a IPM component
- Cotton stalk shredder

## **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)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	Chilly	Use castor as a trap crop	For controlling thrips and jassids
2	Crop husbandry	Crop rotation and mixed cropping	Control weed
З	u	Mixing of ash with pulse/millet grains	While storing to protect from pest
4	u	Vegetable seeds placed inside cowdung	Use for next year
5	Fertility Management	Application of ash	To improve soil fertility
6	u	Sheep and goat penning	To improve soil fertility
7	Harvesting	Harvest pulse crop in the morning hours	To reduce shattering

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

- Identification of courses for farmers/farm women
  - Group discussion
- Rural Youth
  - Filling up research based questionnaires
  - Identification of leader (Sociometric method)
- Inservice personnel
  - Knowledge test (Interview schedule)

#### 3.11 Field activities

i. Number of villages adopted : 24

Sr. No	Name of village	Sr. No.	Name of Village	Sr. No.	Name of Village	Sr. No.	Name of Village
1.	Dharampur	7.	Shaktinagar	13.	Rampar,	19.	Hodisang
2.	Haripar	8.	Kalyanpur	14.	Navi-Pipar	20.	Gokulpur
3.	Sidhdhpur	9.	Kanuda	15.	Butavadar	21.	Ramnagar
4.	Harshadpur	10.	Jakasia	16.	Kalawad	22.	Madhavpur
5.	Juvangadh	11.	Bhinda	17.	Nani-Vavadi	23.	Beraja
6.	Vadatra	12.	Datrana	18.	Sanala	24.	Viramdad

ii. No. of farm families selected : 625

iii. No. of survey/PRA conducted : 1

### **3.12.** Activities of Soil and Water Testing Laboratory

1. Status of establishment of lab
2. Year of establishment

	:	Working
2		2005-06

### 3. List of equipments purchased with amount

SI. No	Name of the Equipment	Qty.	Cost	
1	Spectrophotometer	1	89160	
2	Flame photometer	1		
3	Physical balance	1	10640	
4	Chemical balance	1	100000	
5	Water distillation still	1	96118	
6	Kieldahi digestion and distillation	1	49644	
7	Shaker	1	80080	
8	Grinder	1	16772	
9	Refrigerator	1	10//2	
10	Oven	1	30550	
11	Hot plate	1		
	Total	11	472964	

### 3. Details of samples analyzed during 2009-10

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	1550*	1550	41	
Water Samples	10	10	10	
Total	1560	1560	51	

\*Sample analysed under "Soil Health Card" Project

### 4. Impact study

Krishi Vigyan Kendra are innovative scientific training institutes which have been established throughout the country with the mandates to impart need based and skill oriented trainings to practicing farmers, in-service field level extension workers and to those who wish to go for self employment. The basic objective of Krishi Vigyan Kendra are focused on demonstrating the recent technology at the farmers field and imparting skill oriented vocational trainings to the farmers. The Krishi Vigyan Kendra at Jamnagar was established on 2001, the main aim of establishing the Krishi Vigyan Kendra was to bring about improvement in production and economy of the farmers. In order to achieve this objective, the Krishi Vigyan Kendra Jamnagar carries out a number of training programmes and various other activities on crop production and allied fields. The specific objective of the present paper was to assess the impact of KVK activities in Jamnagar districts.

### METHODOLOGY

The present investigation was undertaken in Jamnagar district of Gujarat state. The district consist of total 10 panchayat samiti out of which Jamnagar was identified based on maximum activities carried out by Krishi Vgyan Kendra. Ten adopted villages of Krishi Vigyan Kendra were selected for the study sample. For selection of respondents, 10 respondents were selected randomly from each adopted villages. Thus, total numbers of respondents were 120. The data were collected by using simple structured scheduled developed by Chandra (1991) with some modification.

### DISCUSSIONS

The data presented in Table 1 revealed that 22.50 per cent of the beneficiaries were high responses towards the KVK activities, whereas 63.33 per cent of the respondents had a medium response towards activities. There were only 14.17 per cent who had least responded towards KVK activities.

Sr. No.	Responses	Frequency	Percentage
1	High responses ( above 80.52)	27	22.50
2	Medium responses (between 80.52 to 35.21)	76	63.33
3	Least responses (Below 35.21)	17	14.17
	Total	120	100

Table 1: Distribution of respondents on the basis of degree of response towards activities carriedout by Krishi Vigyan Kendra.

It is concluded that the respondents under study had positive response towards the activities of Krishi Vigyan Kendra. Table 2 revealed that there were 20 statements for measuring responses of clientele towards various activities of Krishi Vigyan Kendra, which were weighed on five point continum.

### Responses of clientele toward activities:

It is apparent from the table 2 that most of the respondents strongly agreed with the act that "change in attitude" with a MPS 80.00 per cent and ranked 1<sup>st</sup>. This was followed by "extent of spread of technology" and "extent of awareness" ranked 2<sup>nd</sup> and 3<sup>rd</sup> respectively in the table.

Similarly, "increase in production"; "gain in knowledge"; "increase in income" and "introduction of new varieties" were realized as important statements given by ranked 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> respectively. Nine statement of remaining thirteen statement fall in between MPS 65.00 to MPS 50.00 viz, "extent of adoption", "increase in SHGs/FIGs", "decrease in yield gap", "increase in productivity", "increase in

crop area", "improvement in work skill", "generation of employment", "formation of cooperative" and "expansion of enterprise".

	•	,		N= 120
Sr.	Statement	Mean	MPS	Rank
No.	Statement	score		Narik
1	Gain in knowledge	3.42	68.33	V
2	Extent of awareness	3.78	75.67	
3	Change in attitude	4.00	80.00	I
4	Improvement in work performance / skill	2.73	54.67	XIII
5	Extent of spread of technology	3.97	79.33	П
6	Increase in SHGs / FIGs	3.08	61.50	IX
7	Formation / establishment of cooperative	2.58	51.67	XV
8	Introduction of new varieties	3.27	65.33	VII
9	Increase in yield / productivity	2.88	57.50	XI
10	Increase in area	2.78	55.50	XII
11	Increase in production	3.54	70.83	IV
12	Extent of adoption	3.18	63.50	VIII
13	Increase in income	3.28	65.50	VI
14	Generation of employment	2.68	53.67	XIV
15	Expansion of an enterprise	2.58	51.67	XVI
16	Introduction of new enterprise	2.16	43.17	XVII
17	Increase in marketable farm produce	1.51	30.17	XIX
18	Creation of infrastructure	2.16	42.00	XVIII
19	Opening of farm school	1.38	27.67	XX
20	Decrease yield gaps	2.93	58.50	Х

Table 2: Responses of clientele towards various activities carried out by KVK.

While, least MPS in case of "opening of farm school", "increase marketable farm produce", "creation of infrastructure" and "introduction of new varieties" were ranked 20<sup>th</sup>, 19<sup>th</sup>, 18<sup>th</sup> and 17<sup>th</sup> respectively. This result is in conformity with the result of Kumar *et al.* (2006) and Patel (1989).

### CONCLUSION

From the above findings, it may be concluded that majority of the respondents showed positive responses towards various activities being carried out by the KVK. This institution helped in acquiring these kill of new agricultural technology by the farmers, due to which, the selected farmers have adopted the recommended technology and obtained higher agricultural production.

In view of the findings, it is further concluded that due weightage given to the opening of farm school, increase marketable farm produce, creation of infrastructure and introduction of new varieties.

#### 5. Linkage

5.1 Functional linkage with different organizations

Sr.	Name of organization	Nature of linkage
Α	State corporation and state deptt.	
	District Agricultural Officer, Deptt. of Agriculture, District Panchayat, Jamnagar	<ul> <li>Joint diagnostic team visit at farmers field</li> </ul>
2	District Rural Development Agency, Jamnagar	

_			
3	Deputy Director of Veterinary, Department of veterinary & Animal Husbandry, Jamnagar	$\checkmark$	Organizing collaborative training to farmers
4	Deputy Director of Horticulture, Jamnagar		For collaborative off campus training
5	Deputy Director of Agriculture (Training), Farmer Training Centre, Jamnagar		For collaborative training and demonstration Programme
6	Deputy Director of Agriculture (Extension), Jamnagar		Collaborative on campus training programme
7	Asstt. Director of Fisheries, Jamnagar		For providing hostel facilities to
8	Range Forest Officer, Jamnagar	1	participants and organizing
9	Asstt. Director of GLDC, Jamnagar		collaborative Mahila Krishi Mela
10	Estate Engineer, Department of Irrigation, Jamnagar		
11	All Taluka Development Officers, and their team at Taluka level		
12	Rajkot-Jamnagar Gramin Bank, Jamnagar	1	
13	ATMA, Jamnagar	1	
В	Private Corporation		
1	Territory Manager, GSFC, Jamnagar		Impart training on Agril. aspects
2	Territory Manager, GNFC, Jamnagar		Collaborative on/off campus training
3	Territory Manager, IFFCO, Jamnagar		programme
4	Reliance Industries, Dept. of Green Belt, Jamnagar		Sponsor training programme
С	NGOs		
1	Murlidhar Trust, Opp. Trajitpara Branch School, Bhanvad	AA	Impart training on Agril. aspects Collaborative on/off campus training
2	V.D.R.F. Trust, Momai Xerox, B.P. Road, Bhanvad		programme
3	Late J.V. Nariya Educational and Charitable Trust, 49, Modern Market, First Floor, Nr. Amber Cinema		
4	Jay Ashapura Charitable Society, Madhav Nivas, Karmachari Society, Trikonban, Dhrol (DistJamnagar)		
5	Shekhpat Jalstrav Vikas Mandal, AtShekhpat, Post- Aliyabada, Ta.&Dist Jamnagar		
6	Lakhtar Jalstrav Gram Vikas Trust, 55, Shiv Complex, At Bhadra (Patiya), TaJodia, Dist Jamnagar	1	
7	Umiya Mataji Mandir Trust, At Sidsar, Ta Jamjodhpur, DistJamnagar		
8	Shardapith Education Trust, 104-Shrusti complex, Nr. Gurudwara, Jamnagar	1	
9	Chachara Education & Charitable Trust, 104- Shrusti complex, Nr. Gurudwara, Jamnagar		
10	Tata Chemical Society for Rural Development Foundation, At. Mithapur, TaDwarka, DistJamnagar		
NB	The nature of linkage should be indicated in terms of joint dia	gnog	stic survey joint implementation participation in

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

## 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.)
Establishment of Agricultural Technology Information Centre (ATIC)	2005-06	State Government	32000/-
Establishment of Transfer of Technology (TOT)	2005-06	State Government	73000/-
Transfer of technology by adoption of villages	2008-09	RKVY	2081600/-
Rastriya Krishi Vikas yojan-District Agril.Plan (RKVY-DAP Project)	2009-10	RKVY-DAP	580000/-
Soil Health Card	2009-10	State Gov.	800000 /-

### 5.3 Details of linkage with ATMA

### a) Is ATMA implemented in your district (Yes/No) :- Yes

S. No.	Programme	Nature of linkage	Remarks
1	District Level Training	Impart Training on Agricultural Aspects	Celeberate Technology week
2.	Block level training	Lecture delivered	
3.	Village level training		

### 5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1	-	-	District is not inovolve in NHM

### 5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1.	-	-	-

### 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

SI.	Demonstra-tion	Year of		Detai	ils of produ	Amou			
No.	Units	Units Establi- Area Variety pro-	produce	Quantity (Qtl)	Cost of inputs	Gross income	Remark		
1	Vermi compost	2007-08	150	Icenea	Vermi culture	0.50	-	6000	
L	Unit	2007-08	sq. m	fatida	Vermi compost	136.5	-	23975	

6.2 Performance	2.2 Performance of instructional farm (Crops) including seed production								
	Date	(ha)	Detail	s of produ	ction	Amou	ınt (Rs.)		
Name Of the crop	of sowing	f rov Ø Vari		Type of Produce	Qty.	Cost of inputs	Gross income	Remarks	
Cereals	20-11- 09	1	GW-366	Grain	1215		15795		
Oilseeds (Castor)	28-8-09	0.75	GCH-7	Grain	500		46250		
G'nut	15-7-09	3.43	GG-5	Grain	3241		80214		
G'nut	14-7-09	0.9	GG-6	Grain	1170		28372		
G'nut	14-7-09	2.84	TPG-41	Grain	1250		34375		
G'nut	14-7-09	0.70	TG-37A	Grain	515		15450		

### 6.3 Performance of instructional farm (livestock and fisheries production)

SI.	I. Name		ils of production		Amount (Rs.)		
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
1	Major carp	Rohu/ Marigal		3000	139000	2200	
1		KUTU/ Warigat	-	6000	129000	2200	
2.	Gir Cow	Gir Cow	Milk	10143	-	114195	

### 6.3 Training programme conducted by using rain water harvesting Demo. units

Date	Title of the training	g Client No. of including SC/ST		No. of SC/STParticipants		cipants			
Date	course	(PF/RY/EF)	Courses	Male	Female	Total	Male	Female	Total

### 6.4 Utilization of hostel facilities: --- Under construction ---

### 7. FINANCIAL PERFORMANCE

### 7.1 Details of KVK Bank accounts

Bank account	Name of the Bank	Location	Account Number
With Host Institute			
With KVK	State Bank of India	Super Market Jamnagar	10319002389

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

	Released	l by ICAR	Expen	diture	Unspent balance as on 1 <sup>st</sup> April 2010	
Item	Kharif 2009-10	Rabi 2009-10	Kharif 2009-10	Rabi 2009-10		
Inputs	71250		18250			
Extension activities			7075			
TA/DA/POL etc.			43982			
TOTAL	71250		69307		1943	

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

	Release	Released by ICAR		nditure	Unan ant halance as	
ltem	Kharif 2009-10	Rabi 2009-10	Kharif 2009-10	Rabi 2009-10	Unspent balance as on 1 <sup>st</sup> April 2010	
Inputs	71250		37975			
Extension activities						
TA/DA/POL etc.			31209			
TOTAL	71250		69178		2072	

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

	Released	by ICAR	Expen	diture	Unspent
Item	Kharif 2009-10	Rabi 2009-10	Kharif 2009-10	Rabi 2009-10	balance as on 1 <sup>st</sup> April 2010
	2009-10	2009-10	2009-10	2009-10	1 April 2010
Inputs	100000		6200		
Extension activities			19519		
TA/DA/POL etc.			11670		
TOTAL	100000		37389		-5612

### 7.5 Utilization of KVK funds during the year 2009-2010

S.	Particulars	Sanctioned	Released	Expenditure
No.	Decuming Contingencies			-
Α.	Recurring Contingencies	4000000	4000000	2247062
1	Pay & Allowances	400000	4000000	3317963
2	Traveling allowances	100000	100000	48513
3	Contingencies	700000	700000	668814
Α	Stationery, telephone, postage and other			
	expenditure on office running, publication of	175000	175000	158785
	Newsletter and library maintenance (Purchase		_/ 0000	
	of News Paper & Magazines)			
В	POL, repair of vehicles, tractor and equipments	100000	100000	97909
С	Meals/refreshment for trainees (ceiling upto	100000	100000	98791
	Rs.40/day/trainee be maintained)	200000		30731
D	Training material (posters, charts,			
	demonstration material including chemicals etc.	95000	95000	90100
	required for conducting the training)			
Ε	Frontline demonstration except oilseeds and	105000	105000	100000
	pulses (minimum of 30 demonstration in a year)	105000	105000	100000
F	On farm testing (on need based, location specific			
	and newly generated information in the major	75000	75000	73830
	production systems of the area)			
G	Training of extension functionaries	50000	50000	49399
Н	Maintenance of buildings	-	-	-
Ι	Establishment of Soil, Plant & Water Testing	_		
	Laboratory	-	-	-
J	Library	-		-
	TOTAL (A)	4800000	4800000	4035305
В.	Non-Recurring Contingencies			
1	Works		-	-
2	Equipments including SWTL & Furniture	40000	40000	39937

	Vehicle (Four wheeler/Two wheeler, please specify)	-	-	-
4	Library (Purchase of assets like books & journals)	10000	10000	9588
	TOTAL (B)	50000	50000	49525
C.	REVOLVING FUND	-	-	-
	GRAND TOTAL (A+B+C)	4800000	4800000	4084833

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year
April 2007 to March 2008	208946	801158	011489	998615
April 2008 to March 2009	998615	854069	880367	972317
April 2009 to March, 10	972317	839507		1811824
April 2010 to till date	1811824	394758	-	2206582

## 8.0 PLEASE INCLUDE INFORMATION, WHICH HAS NOT BEEN REFLECTED ABOVE (WRITE IN DETAIL).

### 8.1 Constraints

- (a) Administrative : Administrative post are vaccanrt
- (b) Fianacial : Grant released on time (FLDs)
- (c) Technical : 3 SMS post are vacant i.e. Horticulture, Plant protection and

crop protection

### 8.2 KRISHI MAHOTSAV - 2009 held during 20-05-09 to 03-06-09

## Programmes for the Krishi Mahotsav was arranged on Taluka place of the each block/Taluka of

### Jamnagar District..

Following are the Name of seminar and lectured delivered by scientist of KVK

Sr. No.	Name of Block	Date	Title of seminar	Name of Scientist	No. of Farmers
1.	Jamnagar	20-5-09	Strengthening of women	Smt. A. K. Baraiya Smt. A. C. Maheta	450
5.		21-5-09	Vermicompost, compost preparation and use of biofertilizer & chemical fertilizers	Dr. V. J. Zinzala Dr. B.M. Dabhi	300
6.			Micro Irrigation system	Dr. H.R. Khafi Mr. G. V. Maravia	300
7.	Jamjodhpu r	20-5-09	Scientific farming of food grains	Dr. C. J. Dangaria Dr. N.B. Jadav	200
8.			Vermicompost, compost preparation and use of biofertilizer & chemical fertilizers	Dr. N.B. Jadav Dr. C. J. Dangaria	200
9.			Scientic farming of onion & Garlic	Dr. K. P. Baraiya Dr. V.V. Rajani	200
14.	Bhanvad	22-5-09	Recycling of waste material, vermicompost use of biofertilizer	Dr. K.L. Raghwani Mr. P.S. Gorfad	400
18.		23-5-09	Micro irrigation system	Dr. H. R. Khafi	200

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				Mr. P. S. Gorfad	
19.	Jodiya	22-5-09	Animal husbandry & Dairy	Dr. P.U. Gajbhaye Dr. J.N. Thaker	250
20.			Integrated Pests management in Cotton	Dr. K. P. Baraiya Mr. Y. H. Ghelani	250
22.		23-5-09	Vermicompost, compost preparation and use of biofertilizer & chemical fertilizers	Dr. K. P. Baraiya Mr. J. S. Sorathiya	200
23.			Reclamation of saline & alkaline soils	Dr. K. P. Baraiya Dr. V. J. Zinzala	200
24.			Water harvesting & irrigation management	Smt. A.C. Maheta Dr. N.B. Jadav	200
26.	Jam- khambhadi ya	27-5-09	Organic farming & recycling of farm waste	Dr. N. B. Jadav Dr. B.K. Sagarka	250
29.		28-5-09	Micro irrigation system	Dr. H.R. Khafi Mr. B.V. Minipara	180
30.			Water harvesting, irrigation and salinity management	Dr. V. J. Zinzala Dr. K.B. Asodariya	180
33.	Dhrol	27-5-09	Vermicompost, compost preparation and use of biofertilizer & chemical fertilizers	Dr. K.P. Baraiya Dr. V.P. Andani	240
34.		28-5-09	Integrated pests management in cotton	Dr. K. P. Baraiya Mr. Y. H. Ghelani	180
40.	Jam- Kalyanpur	30-5-09	Water harvesting & irrigation management	Smt. A.C. Maheta Smt. A.K. Baraiya	180
41.			Reclamation of saline-alkaline soils.	Dr. V.J. Zinzala Dr. J.N. Nariya	180
43.	Kalawad	29-5-09	Scientific farming of onion-garlic	Dr. K.V. Kalathiya Dr. M.S. Dudhat	480
44.			Cattle breeding & diseases management	Dr. K. P. Baraiya Dr. R.J. Padodara	480
45.			Recycling of waste material, vermicompost use of biofertilizer, fertilizer	Dr. K. P. Baraiya Dr.M.N. Vaghani	480
46.		30-5-09	Integrated pest management in cotton	Dr. K. P. Baraiya Dr. B. V. Sureja	350
47.			Pests management in stored groundnut	Dr. K. P. Baraiya Dr. N.M. Dadhania	350
50.	Dwarka	31-5-09	Reclamation of saline and alkaline soils	Dr. V.J. Zinzala Dr. K.B. Polara	370
55.		31-5-09	Use of FYM, Biofertilizer and biocontrol techniques in organic farming	Dr. L.V. Lakkad Dr. M.N. Vaghani	200
59.	Lalpur	1-6-09	Integrated pest & diseases management in cotton	Dr. K. P. Baraiya Dr. M.D. Khanpara	400
60.			Micro Irrigation systems	Smt. A.C. Maheta	400

### 8.3 Celebration of Technology week

Technolgy week was celebrated at Krishi Vigyan Kendra, JAU, Jamnagar in collebration ATMA, Jamnagar during 14<sup>th</sup> to 18<sup>th</sup> September, 2009. In which following different 574 farmers from different block were participated.

Date	Taluka	Numbers fo participants								
		(	Genera			SC/ST			Total	
		М	F	Total	М	F	Total	Male	Female	Total
14-9	Jamjodhpur	43	0	43	22	0	22	65	0	65
14-9	Jamkhambhadia	52	0	52	20	0	20	72	0	72
15-9	Bhanvad	32	0	32	18	0	18	50	0	50
15-9	Kalyanpur	35	0	35	12	0	12	47	0	47
16-9	Kalaynpur	43	0	43	10	0	10	53	0	53
16-9	Lalpur	50	0	50	17	0	17	67	0	67
17-9	Jodia	32	0	32	15	0	15	47	0	47
17-9	Dhrol	35	0	38	20	0	20	55	0	55
18-9	Jamnagar	35	52	87	8	23	31	43	75	118
18-9	Dwarka	15	0	15	6	0	6	21	0	21
	Total	372	52	409	142	23	165	499	75	574

### Following are the topics deleveried by scientist

- Integrated Pest and disease of major crops
- Importance of micronutrients and fertilizers in agriculture
- Importance of micro irrigation system
- Animal care and maintenance with agriculture
- Value addition in farm products
- Farm women empowerment
- Scrope of horticultural crops in modern agriculture
- Recycling fo farm waste
- Vermin compost and organic farming
- Awarness of climate change and global warming

### Attraction of the technology week

- Animal unit
- Net House/Poly house
- Vermi compost unit
- Fisheries unit
- Horticultural orchard
- Drip and sprinkler sytem
- Crop cafeteria of major crop
- Seed production unit of groundnut
- Demonstration of improved farm implements.

### <u>ANNEXURE – I</u>

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#### PROCEEDING OF THE 5<sup>th</sup> SCIENTIFIC ADVISORY COMMITTEE MEETING OF KRISHI VIGYAN KENDRA, JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR HELD ON 14<sup>th</sup> September, 2010

The fourth Scientific Advisory Committee meeting of Krishi Vigyan Kendra Junagadh Agricultural University, Jamnagar was held at Museum Hall of Millet Research Station, K.V.K., J.A.U., Jamnagar on 14th, Sept, 2009.

The following members were	present in the meeting.
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The following members were present in the meeting.				
Sr. No.	Name & Designation	Position		
1	Director of Extension Education, Junagadh Agricultural University, Junagadh -362001.	Chairman		
2	Asso. Director of Extension Education, Junagadh Agricultural University, Junagadh	Member		
3	Research Scientist (Millet),	Member		
4	Main Millet Research Station, Junagadh Agrultural University, Jamnagar- 361 006. Research Officer Fisheries Research Centre, Junagadh Agricultural University, Okha,	Member		
5	District Agricultural Officer, District Panchayat, Jamnagar	Member		
6	Director, DRDA, Sardar bhavan, Rameshwarnagar, Jamnagar	Member		
7	Dy. Director of Animal Husbandry, Dept. of Veterinary & Animal Husbandry, District Panchayat, Jamnagar	Member		
8	Dy. Director of Horticulture, 30, Digvijay Plot, Jodiyawala Building, Jamnagar	Member		
9	Dy. Director of Agriculture (Extension), Lalbunglow, Nr. Trazery office, Jamnagar	Member		
10	Dy. Director of Agriculture, Farmers Training Centre, Air Force Road, Opp. Digjam Mill, Jamnagar.	Member		
11	Dy. Conservation of Forest, Forest Department (Extension), Nagnath Gate, ganjiwad, Jamnagar	Member		
12	Deputy Director, GLDC Ltd., Near: Shubhash Market, Jamnagar.	Member		
13	Asstt. Director of Fisheries, Sumer club road, Jamnagar	Member		
14	District Manager, State Bank of Saurashtra, Ranjit Road, Jamnagar	Member		
15	Station Director, All India Radio, B/h. Galaxy Cinema rajkot	Member		
16	Shri. Kantilal Bhagwanjibhai Ajudia At. Makwana, Ta. & Dist Jamnagar.	Member		
17	Valjibhai Govindbhai Parmar Vadivistar, At Jivapar Ta. & Dist Jamnagar	Member		
18	Jenamben Alibhai Safiya, C/o. Alibhai Sumarbhai Safiya At. Rabarika, Ta Jamjodhpur, DistJamnagar	Member		
19	Smt. Jiviben Ramjibhai Makwana C/o. Ramjibhai Tapubhai Makwana, At & Po. Dhandha, tal. & Dist. Jamnagar	Member		
20	Programme Coordinator, Krishi Vigyan Kendra, JAU, Targhadiya (Rajkot)	Member		
21	Programme Coordinator, Krishi Vigyan Kendra, JAU, Khapat (Porbander)	Member		
22	Programme Coordinator, Krishi Vigyan Kendra, JAU, Amreli	Member		
23	Programme Coordinator, Krishi Vigyan Kendra, JAU, Nana Khandhasar	Member		
24	Programme Coordinator, Krishi Vigyan Kendra, JAU, Jamnagar	Member		
25	Dr. K. P. Baraiya, SMS, KVK, JAU, Jamnagar - 361006	Member		
26	Dr. N. B. Jadav, SMS, KVK, J.A.U, Jamnagar- 361 006.	Member		
27	Dr. V. J. Zizala SMS, KVK, J.A.U, Jamnagar- 361 006.	Member		
28	Dr. J. N. Thaker SMS, KVK, J.A.U, Jamnagar- 361 006.	Member		
29	Smt. Anjanben K. Baraiya SMS, KVK, J.A.U, Jamnagar- 361 006.	Member		
30	Dr. D. S. Kelaiya, SMS, JAU, Junagadh	Invitee		
31	Mr. A. M. Hadiya, Programme Assistant, KVK, JAU, Jamnagar	Invitee		
32	Shri. P. S. Gorfad, Programme Assistant, KVK, JAU, Jamnagar	Invitee		

Dr. C. J. Dangariya, Research Scientist, Millet Research Station, J.A.U., Jamnagar welcomed all the members of the Scientific Advisory Committee and highlighted the achievements of the centre in brief.

Dr. N.C. Patel, Hon'ble Vice-Chancellor and Chairman of Scientific Advisory Committee engaged in another programme. On behalf of him Dr. R. L. Savaliya, Director of Extension Education, J.A.U, Junagadh chaired the meeting.

After garlanding the guests and dignitaries on the Dias, and inaugurating, the meeting by lightening a lamp and University Invocation Song was presented in House. Dr. M. K. Khistariya, Associate Director of Research, Main Dry Farming Research Station, J.A.U., Targhadiya delivered introductory address.

Dr. K. P. Baraiya, Programme Coordinator, Krishi Vigyan Kendra, Millet Research Station, J.A.U., Jamnagar presented action taken report of the minutes of 4<sup>th</sup> SAC meeting, progress report 2008-09 and technical programme (Action Plan 2009-10).

Committee made the following recommendations after active interaction.

- 1. Dr. R. L. Savaliya, Dirctor of Extension Education, JAU, Junagadh suggested for arrange FLD on fodder crops in Dwarka taluka, arrange FLD on soybean as new crop introduction and calculate cost benefit ratio.
- 2. After active interaction of house Dr. R. L. Savaliya suggested for emphasis on Micro irrigation system and mulching during training in district.
- 3. It was suggested to concentrate training on efficient use of fertilizers and micro nutrients after active interaction of house and chairman, Dr. R.L. Savaliya.
- 4. Dr. R. L. Savaliya suggested for soil sample analysis before and ater arrangement of nutritional OFT
- 5. Emphasizes must be given on adverse effect of climate, post harvest technology and marketing Arrange need base/ location specific FLDs in district suggested by Dr.R.L. Savaliya
- 6 Arrange training on home science and irrigation in third quarter suggested by Dr. D.S. Kelaiya. he also suggested for preparation of progress report in local language for farmers.

After above suggestions from the house Dr. R. L. Savaliya, Director of Extension Education, Junagadh Agricultural University, Junagadh, delivered the keynote address to the house. He appreciated the work done by the station and KVK, Jamnagar. He suggested that involvement of more number of farmers and specially the marginal farmers to be encouraged in activities of KVK. He also suggested for strong linkage and better cooperation as well as collaborative work with other line departments.

The meeting ended with the vote of thanks by Dr. N.B. Jadav, Subject Matter Specialist, KVK, J.A.U., Jamnagar.

Director of Extension Education Junagadh Agricultural University Junagadh

(N.C. Patel) Vice Chancellor Junagadh Agricultural University Junagadh

### ANNEXURE – II

### FRONT LINE DEMONSTRATION:

## Details of each technology demonstrated through Front Line Demonstration to be furnished in the following format separately along with raw data

To be furnished for every technology separately for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton, commercial crops, farm implements, livestock and fishery enterprises, home science technologies, other enterprise.

### 1. Groundnut

- 1) Production system :- Rainfed
- 2) Problem Definition :- Management of stem rot
- 3) Title of the technology demonstrated :- Integrated Pest Management
- 4) Thematic area :- Integrated Disease Management
- 5) Year of release of the technology or Year of assessment :- Year 1999
- 6) Source of technology :- Oil seed research station, JAU, Jamnagar
- 7) Raw data about the performance of the demonstrated technology

No.	Name of the farmers	Name of village	Data on the performance indicators of the technology demonstrated Yield
1	Rameshbhai Vallabhai Vaisnav	Arikhana	16.00
2	Laljibhai Mohanbhai Changani	Arikhana	15.25
3	Uavrajsingh Bharatsingh Sodha	Dhandha	14.50
4	Dasarathsingh Anopsingh Sodha	Dhandha	14.30
5	Rambhaben Ajudia	Makvana	16.25
6	Rajeshbhai Bhagvanjibhai	Makvana	16.00
7	Khimjibhai Ladhabhai	Makvana	15.75
8	Mansukhbhai Laxmanbhai	Sanala	16.00
9	Harsukhbhai Ukabhai	Sanala	15.00
10	Rudiben Laxmanbhai	Sanala	15.00
11	Govindbhai Palabhai	Hasthal	13.75
12	Dadubhai Jinabhai	Hasthal	13.80
13	Mulubhai Vejanandbhai	Hasthal	14.00
14	Nagabhai Jinabhai	Hasthal	14.25
15	Rameshbhai Karsanbhai	Kalawad	16.00
16	Janmamad Valimamad	Kalawad	16.25
17	Devanandbhai Meramanbhai	Viramdal	14.25
18	Gumansingh Karsanji Kachava	Navipepar	13.80
19	Savitriben Jayantbhai Vara	Navipepar	14.00
20	Mansang Nathuji Kachava	Navipepar	15.90

Please specify the indicators 1,2,3 and 4 in addition to yield other parameters should be indicated In case of more indicators please prioritize and analyze only three important common indicators collected from all the farmers implementing this demonstration

- 8) Final recommendation for micro level situation
- 9) Constraints identified and feedback for research
- 10) Process of farmers participation and their reaction

### 2. Castor

- 1) Production system :-Rainfed
- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Varietal assessment and integrated crop management in cotton
- 4) Thematic area :-Integrated Pest Management
- 5) Year of release of the technology or Year of assessment :-Year 2004
- 6) Source of technology :- Oil seed Research Station, Juangadh

7) Raw data about the performance of the demonstrated technology

No.	Name of the farmers	Name of village	Data on the performance indicators of the technology demonstrated Yield
1	Mohanbhai Popatbhai	Nani vavadi	41.25
2	Keshavjibhai Kanjibhai	Vodisang	40.00
3	Pragjibhai Popatbhai	Vodisang	40.25
4	Vijaysingh Krushankumar	Navi piper	37.00
5	Karanabhai Kandhabhai	Navi piper	36.00
6	Keshavjibhai Manjibhai	Rampar	39.00
7	Meramanbhai Naranbhai	Nagada	36.25
8	Karmur Devsibhai Savabhai	Nagada	41.05
9	Hiriben Markhibhai Karmur	Nagada	38.00
10	Punabhai Jethabhai	Nagada	39.00

Please specify the indicators 1,2,3 and 4 in addition to yield other parameters should be indicated In case of more indicators please prioritize and analyze only three important common indicators

collected from all the farmers implementing this demonstration

8) Final recommendation for micro level situation

9) Constraints identified and feedback for research

10) Process of farmers participation and their reaction

### 3. Groundnut (Component)

- 1) Production system :-Rainfed
- 2) Problem Definition :-Title of the technology demonstrated Integrated Disease Management
- 3) Thematic area :-Integrated Pest Management
- 4) Year of release of the technology or Year of assessment :-Year 2001
- 6) Source of technology :- Oil seed Research Station, JAU, Junagadh

7) Raw data about the performance of the demonstrated technology

No.	Name of the farmers	Name of village	Data on the performance indicators of the technology demonstrated Yield
1	Mansang lalsang Chuhan	Navipiper	13.75
2	Bharatsang Chauhan	Navipiper	13.80
3	Hirjibhai Bhojabhai Harijan	Arikhana	14.00
4	Pravinbhai Gokulbhai Munagara	Arikhana	14.25
5	Hirjibhai Ajudiaya	Makavana	15.00
6	Nileshbhai Raghavbhai	Makavana	15.00
7	Nagabhai Goganbhai	Viramdal	14.25
8	Goganbhai Vadher	Hastal	13.80
9	Lakhiben Mulubhai	Hastal	14.00
10	Markhibhai Dadubhai	Hastal	15.00

Please specify the indicators 1,2,3 and 4 in addition to yield other parameters should be indicated

In case of more indicators please prioritize and analyze only three important common indicators collected from all the farmers implementing this demonstration

- 8) Final recommendation for micro level situation
- 9) Constraints identified and feedback for research

10) Process of farmers participation and their reaction

### 4. Green gram

- 1) Production system :-Rainfed
- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Integrated pest Management in brinjal
- 4) Thematic area :-Integrated Pest Management
- 5) Year of release of the technology or Year of assessment :-Year 2006
- 6) Source of technology :- Pulse Research Station, JAU, Junagadh
- 7) Raw data about the performance of the demonstrated technology

No.	Name of the farmers	Name of village	Data on the performance indicators of the technology demonstrated Yield
1	Chandrasingh Govindsingh Gohil	Navi piper	7.20
2	Mohansang Jesang Bloch	Navi piper	7.40
3	Raghavbhai Keshabhai	Makvana	7.00
4	Unushabhai Hurmamad	Nanabadanpar	7.50
5	Manjulaben Rameshbhai Pansuriya	Kalawad	7.20
6	Janaben Vajasibhai	Nagada	7.20
7	Bavanjibhai Damjibhai	Vodisang	7.50
8	Ramjibhai Hamirbhai	Makvana	7.30
9	Laljibhai Rajabhai	Nagada	6.87
10	Ranmalbhai Naranbhai Karangiya	Nagada	7.00

Please specify the indicators 1,2,3 and 4 in addition to yield other parameters should be indicated In case of more indicators please prioritize and analyze only three important common indicators collected from all the farmers implementing this demonstration

- 8) Final recommendation for micro level situation
- 9) Constraints identified and feedback for research
- 10) Process of farmers participation and their reaction

### 5. Chick pea

- 1) Production system :-Irrigated
- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Varietal difference
- 4) Thematic area :-Variety
- 5) Year of release of the technology or Year of assessment :-Year 2008
- 6) Source of technology :- Pulse research Station, JAU, Junagadh
- 7) Raw data about the performance of the demonstrated technology

No.	Name of the farmers	Name of village	Data on the performance indicators of the technology demonstrated Yield		
1	Tamboia Dineshbhai Parbatbhai	Dhandha	15.28		
2	Thummar Chaganbhai Kalabhai	Dhandha	15.00		
3	Ajudia Puspaben Rajeshbhai	Makwana	17.50		
4	Harijan Ramjibhai Arjanbhai	Makwana	17.00		
5	Nagabhai Gogabhai	Viramdal	16.05		

6	Parbatbhai Rajsibhai	Viramdal	16.00
7	Keshurbhai Kalabhai	Viramdal	16.50
8	Nathabhai Samabhai Dethariya	Hasthal	15.00
9	Raidebhai Rambhai Dethariya	Hasthal	15.25
10	Dethariya Ugabhai Savdasbhai	Hasthal	16.00
11	Vinodbahi Goganbhai Amipara	Arikhanan	18.00
12	Chuhan Babubha Vaghaji	Navipiper	18.50
13	Dipakbhai Laljibhai Changani	Navipiper	18.00
14	Arunaben Dilipsingh	Navipiper	18.25
15	Bhanderi Babubhai Mavjibhai	Vodisang	18.75
16	Harijan Mansukhbhai Pamabhai	Vodisang	16.00
17	Lavjibhai Parsottambhai	Vodisang	15.00
18	Ratanabhai Kanabhai	Vodisang	18.75
19	Kadavabhai Kurjibhai	Vodisang	18.00
20	Mukeshbiai Dayabhai	Vodisang	17.50

Please specify the indicators 1,2,3 and 4 in addition to yield other parameters should be indicated In case of more indicators please prioritize and analyze only three important common indicators collected from all the farmers implementing this demonstration

- 8) Final recommendation for micro level situation
- 9) Constraints identified and feedback for research
- 10) Process of farmers participation and their reaction

#### 6. Cotton (Component)

- 1) Production system :-Rainfed
- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Integrated pest Management
- 4) Thematic area :-Variety assessment
- 5) Year of release of the technology or Year of assessment :-Year 2006
- 6) Source of technology :- Cotton Research Station, JAU, Junagadh
- 7) Raw data about the performance of the demonstrated technology

No.	Name of the farmers	Name of village	Data on the performance indicators of the technology demonstrated Yield
1	Ramjibhai Ranchodbhai	Makvana	21.00
2	Ganshayambhai Ragvjibhai	Makvana	21.25
3	Devabhai Lalabhai	Viramdal	21.05
4	Vejanbhai Vatsibhai	Viramdal	21.00
5	Bhimsibhai Dhanabhai	Viramdal	20.30
6	Ramilaben Bhanjibhai	Datrana	20.55
7	Valjibhai Muljibhai	Datrana	21.25
8	Lakhanbhai Karangiya	Nagada	20.00
9	Amit Meramanbhai	Nagada	20.20
10	Meramanbhai Karangiya	Nagada	

Please specify the indicators 1,2,3 and 4 in addition to yield other parameters should be indicated

In case of more indicators, please prioritize and analyze only three important common indicators collected from all the farmers implementing this demonstration 8) Final recommendation for micro level situation

9) Constraints identified and feedback for research

10) Process of farmers participation and their reaction

Sr.	List of Publication (Booklet		No. of
No.	Title	Author	copies
1	Xariya ane bhasmik jamini olakh ane thene sudharana	Dr.V.J. Zinzala and Dr. K.P. Baraiya	1000
2.	Magfalino thadno sado ane thenu niyantran	Dr. K.P. Baraiya	1000
3.	Alasiyani Kheti	Dr. v. J. Zinzala, P.S.Gorfad	1000
		and Dr. K. P. Baraiya	
4	Jamin pruthkran karavi jamini tandurashti jano	Dr.V.J. Zinzala and Dr. K.P.	1000
		Baraiya	
5	Takavu kehti ma suxmo tatvonu mahtav	Dr.V.J. Zinzala and Dr. K.P.	1000
		Baraiya	
6	Jminama poshak tatvoni unep ane teni oldakh ane	Dr.V.J. Zinzala and Dr. K.P.	1000
	dur karvana upayo	Baraiya	
7	Avo ani jaminane odakheye	Dr.V.J. Zinzala and Dr. K.P.	1000
		Baraiya	
8.	Rasayanik khatroma poshktatvonu praman, dar ane	Dr.V.J. Zinzala and Dr. K.P.	1000
	theno kryaxum upyog	Baraiya	
9.	Shkbhajina pak ma suxotatvanu mahatav	Dr. V. J. Zinzala, Dr. N. B.	1000
		Jadav and Dr. K.P.Baraiya	
10	Shangrhel mugfalini kalji	Dr. K.P. Bariay and Smt. A.	1000
		K. Baraiya	
11.	Jeruni Vaganik kethi padhati	Dr.K.P. Baraiya	1000
12	Kapasma cuchiya jivat niyantran	Dr.K.P. Baraiya	1000
13	Kapasama rog niyantran	Dr.K.P. Baraiya	1000
14	Magfalima jivat niyantran vyavstha	Dr.K.P. Baraiya	1000
15	Magfalim rog niyantran vyavastha	Dr.K.P. Baraiya	1000
16	Tal ni vigynanik kehti	Dr.K.P. Baraiya	1000
17	Tal ma rog niyantran vyvashta	Dr.K.P. Baraiya	1000
18	Kapasman sankalit jivat niyantran	Dr.K.P. Baraiya	1000
19	Kapasma milibaugnu sankalit niyantran	Dr.K.P. Baraiya	1000
20	Develama rog jivat niyantran vyvashta	Dr.K.P. Baraiya	1000
21	Divelani vaignanik kehti	Dr.K.P. Baraiya	1000
22	Khatiya padartonu parirakshan	Smt. A.K. Baraiya and Dr.	1000
		K.P. Baraiya	
23	Vividha prakarana biscuit	Smt. A.K. Baraiya and Dr.	1000
		K.P. Baraiya	
24	Vividha prakarana adhana	Smt. A.K. Bariaya and Dr.	1000
		K.P. Bariaya	
25	Amalani vividha banavato	Smt. A.K. Baraiya and Dr.	1000
		K.P. Baraiya	
26	Sagrbha avasta darmiyan stri samghal	Smt. A.K. Baraiya and Dr.	1000
		K.P. Baraiya	
27	Suki kehti ma pak utpadan vadhrva matena vagagnik	Dr.K.P. Bariaya and Smt.	1000
	sidhanto	A.K. Baraiya	
28	Ghuvani Vaiganik kehti padhati	Dr. N.B. Jadav, P.S. Gorfad	1000
		and Dr. K.P. Baraiya	
29	Tarbuchani Vaiganik kehti padhati	Dr. N.B. Jadav, P.S. Gorfad	1000
		and Dr. K.P. Baraiya	
30	Jalstrav vistarma jal jaminni vyvastha	Dr. N.B. Jadav, P.S. Gorfad	1000
		and Dr. K.P. Bariaya	

### ANNEXURE – III List of Publication (Booklets/Folder etc)

31	Jal strava yojananu ayojan	Dr. N.B. Jadav Dr. J. N.	1000
		Thaker and Dr. K.P. Bariaya	
32	Kheti ane salagan ras tharvata juthani rachana	Dr. N. B. Jadav, P.S. Gorfad,	1000
		A.M. Hadiya and	
		Dr.K.P.Bariaya	
33	Watershedna kamama lokni shbhgidari	Dr. N.B. Jadav, P.S. Gorfad	1000
		and Dr. K.P. Bariaya	
34	Batetani Vigananik kethi padhati	Dr. N.B. Jadav, P.S. Gorfad	1000
		and Dr. K.P. Bariaya	
35	Zinga uther	Dr. J. N. Thaker and Dr.	1000
		K.P.Bariaya	
36	Sankalit matsya uther	Dr. J. N. Thaker and Dr.	1000
		K.P.Bariaya	
37	Pasupalan ane dariy udhyog	Dr. J. N. Thaker and Dr.	1000
		K.P.Bariaya	
38	Masali garni banavat ane jalavani	Dr. J. N. Thaker and Dr.	1000
		K.P.Bariaya	
39	Krushi vikas ma krushi vigyan kendrano falo	Shri. P. S. Gorfad, N. B.	1000
		Jadav and Dr. K.P. Bariaya	
40	Fal pkoni kehti ma viganik abhigam	Dr. V. J. Zinzala, Dr.	1000
		K.P.Briaya, Dr. D.k.Varu and	
		Dr. A.N. Makvana	
40	Total		40000

### ANNEXURE – IV TRAINING CUM WORKSHOP ATTENDED BY KVK STAFF

Sr.	Name & Designation	Title	Discipline	Period	Place
1	Dr. V. J. Zinzala	Training of Extension Officer and Field Functionaries on Organic Farming	Ag. Chem and Soil Science	06-10-2009 to 10-10-2009	DEE, Junagadh
2	Dr. N. B. Jadav	Horticulture Extension Management	Extension Education	27-10-2009 to 31-10-2009	DEE, Junagadh
3	Smt. Anjana K.Baraiya	Winter School on "Drudgery Reduction Technologies for Women to Enhance Productivity and Safety in Agriculture"	(Home Science)	17-11-2009 to 07-12-2009	Udaipur
4	Dr. K. P. Baraiya	Annual workshop of KVK	Ag. Entomology	05-10-2009 to 10-10-2009	Anand
5	Dr. K. P. Baraiya	ZREAC Meeting for Rabicrops	Extension	15-10-2009	DFRS, Targhadiya
6	Dr. N. B. Jadav	Photography and Videography workshop	Extension Education	15-12-2009 to 16-12-2009	DEE, Junagadh
7	Dr. K. P. Baraiya	ZREAC meeting for Kharif crops	Extension	02-02-2010	DFRS, Targhadia
8	Dr. K. P. Baraiya Dr. N. B. Jadav Dr. V. J. Zinzala Smt. A. M. Kanani Shri. P. S. Gorfad	Participatory Approach and Recent Trends in Rural Development	Entomology Ext. Education Soil Science Home Science Ext. Education	31-08-2009	Junagadh
9	Dr. K.P.Baraiya	IVth National Congress	Ag. Entomology	06-11-2009 to 08-11-2009	Coimbatore

## Summary of Annual Progress of KVK 2009-10

### **STAFF POSITION**

КVК		PC	PC SMS		5	PA		ADMN		AX		SUPP		P	TOTAL						
	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V
Jamnagar	1	0	0	6	3	3	3	3	0	2	0	2	2	2	0	2	2	0	16	10	6
S- Sanctioned					F-	Fill	ed		V	- Va	acar	nt									

### **REVOLVING FUND**

кук	Opening Balance on 1.4.09 (Rs. in lakhs)	Revenue Generated (Rs. in lakhs)	Closing Balance on 31.3.10 (Rs. in lakhs)
Jamnagar	972317	839507	1811824

### SCIENTIFIC ADVISORY COMMITTEE

кук	No. of meetings conducted	Date of meeting
Jamnagar	1	14-09-2009

### ACTIVITIES OF KVK

### **TECHNOLOGY ASSESSMENT AND REFINEMENT**

Details of technologies assessed and refined List of Technology Assessed during 2009-10

LISC OF T	eennorogj n	33C33Cu uui ilig 2	00) 10	
Sl.N	Enterpr			Thematic
0.	ise	Crop/Animal	Name of the technology**	Area
		/Species		
1	Cash		Management of mealy	Application
	crop	Cotton	bug	of newer
			bug	insecticides
2	Cash			Balance
	crop	Cotton	Low yield of cotton	ferti.in
				cotton
3	Oil seed		Application methods of	Integrated
		Groundnut	trichoderma against stem	disease
			rot disease in groundnut	management

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

### Technologies refined\*\*

Sl.No.	Category	Crop/	Name of the	Thematic Area
		Enterprise	technology**	
1	Cash		Improved Pre-sowing	Management of
	crop	Cotton	application of Methyl	mealy bug
			parathion	
2	Cash		Refined Practices (N	Balance use of
	crop	Cotton	160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O	fertilizer
			120)	
3	Oil seed		Improved Practice	Integrated pest
			(Trichoderma	management
		Groundnut	harzeanum @ 2.5	
		Giounanat	kg/ha with castor cake	
			@ 500kg/ha at the	
			time of sowing)	

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

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

Thematic areas	Oilseeds	Comm - ercial Crops	Veget-	Flower	 Tuber Crops	TOTAL
Varietal Evaluation						
Seed / Plant production						
Weed/Thining						
Management						
Integrated Crop	1					1
Management						
Integrated Nutrient		1				1
Management						
Integrated Farming						
System						
Mushroom cultivation						
Drudgery reduction						
Farm machineries						
Value addition						
Integrated Pest		1				1
Management						
Integrated Disease						
Management						
Resource conservation						
technology						
Small Scale income						
generating enterprises						
TOTAL	1	2				3

- \* Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro situation.
- A.2. Abstract of the number of technologies refined\* in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Puls es	Comm- ercial Crops	Veget -ables	Flowe r	Plant - ation crops	Tuber Crops	TOTA L
Varietal Evaluation									
Seed / Plant production									
Weed Management									
Integrated Crop		1							1
Management									
Integrated Nutrient				1					1
Management									
Integrated Farming									
System									
Mushroom cultivation									
Drudgery reduction									
Farm machineries									
Post Harvest Technology									
Integrated Pest				1					1
Management									
Integrated Disease									
Management									
Resource conservation									
technology									
Small Scale income									
generating enterprises									
TOTAL		1		2					3

Abstract on the number of technologies **assessed** in respect of livestock/enterprises

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

Abstract on the number of technologies **refined** in respect of livestock/ enterprises

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

### PERFORMANCE OF IMPORTANT TECHNOLOGIES

A&B Technology Assessment /Refinement

<u> OFT – 1 :- Cotton</u>

### 1) Title :- MANAGEMENT OF MEALY BUG INFESTATION IN COTTON

### 2) Problem diagnose/ definition: Minor infestation of mealybug

- -Leaving in gregarious phase
- -Ability to laid eggs in pouch
- -Eggs are hibernating in unfavorable condition
- -Symbiotic relation with ants

### 3) Details of technologies selected for assessment/ refinement

Category	Source of technology		Technology detail				
Technolo gy option 1	Farmer	T1	Farmer practice s	Application of conventional insecticides after infestation on Mealy bug			
Technolo gy option 2	Oilseeds Res. Station, JAU, Jnd.	T <sub>2</sub>	practice	Pre-sowing application of Methyl parathion, Application of insecticides at the time of infestation			
Technolo gy option 3		T <sub>3</sub>	Refined practice s	Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio- pesticides ( <i>Beauveria</i> spp. or <i>Verticillium</i> spp.)			

4) Source of technology: Junagadh Agricultural University

5) Production system :-Reduce mealy bug infestation

6) Thematic area : IPM for suppression of Mealy bug

7) Performance of the Technology assessed / refined with performance indicators

Far- mer No	Name of the farmer	Name of the Village	Data on the performance indicators of th technology assessed / refined (% Plant infested with mealybug)		
			<b>T</b> 1	T <sub>2</sub>	T3
1	Dhanjibhai Gordhanbhai	Rampar	37	32	11
2	Goganbhai Ramdevbhai	Viramdal	35	22	5
3	Krishi Vigyan Kendra	Jamnagar	28	15	2
		Average	33	23	6

8) Final recommendation for micro level situation : Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio-pesticides (*Beauveria* spp. or *Verticillium* spp.) having highest non significant yield with farmers practices.

9) Constraints identified and feedback for research:

-High incidence of sucking pests and spodoptera

- -Found initiation of mealybug incidence
- -Yield increase as compare to farmers practices.
- 10) Process of farmers participation and their reaction: Farmers have good response and they have support for OFT. Recommended application of the pesticides having low infestation of mealybug attack as well as disease and highest yield found in refinement treatment. They satisfied with this trial.

Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trial s*	Technol ogy Assesse d	Parameters of assessment	Data on the paramet er (% Plant infested)
1	2	3	4	5	6	7	8
						T <sub>1</sub> - Farmers practices Application of conventional insecticides	33
			Manageme		Mangt. Throug	T <sub>2</sub> - Improved Pre-sowing application of Methyl parathion	23
Cotto n	Irriga ted	Mealy bug	nt of mealy bug infestation	3	h insectici des	T <sub>3</sub> - Refined Practices Pre- sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio-pesticides	6

11) Results of On Farm Trials

\* No. of farmers

Crop/ enterprise Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
---	--------------------------	------------------------	------------------------------------

1	9	10	11	12
	Pre-sowing	Farmers have good	Pre-sowing	Earlier
	application of Methyl	response and they	application of	Mealybug
	parathion 2% Dust at	have support for	Methyl parathion	was sporadic
	15 days interval,	OFT.	2% Dust at 15	pest. Now it
	removal of host	Recommended	days interval,	becomes
	plants & vegetation	application of the	removal of host	regular
	from boundaries,	pesticides having	plants &	polyphagous
Cotton	application of newer	low infestation of	vegetation from	pest and
	insecticides/bio-	mealybug attack as	boundaries,	breeding
		well as disease. And	application of	continuously.
	spp. or <i>Verticillium</i>	highest yield found	newer	
	spp.) having highest	in refinement	insecticides/bio-	
	non significant yield	treatment. They	pesticides	
	with farmers	satisfied with this		
	practices.	trial.		

Crop/ enterprise	Technology Assessed / Refined	*Production kg/ha	Input cost Rs./ha	Gross return Rs./ha (Rate 32.50/kg)	Net Return (Profit) in Rs. / ha	BC Ratio (* only OFT input cost base)
1	13	14			15	16
Cotton	T <sub>1</sub> - Farmers practices Application of conventional insecticides	2750	3800	89375	85575	1:23.5
	T <sub>2</sub> - Improved Pre- sowing application of Methyl parathion	3000	3250	97500	94250	1:29
	T <sub>3</sub> - Refined Practices Pre-sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio- pesticides	3125	4125	101563	97438	1:23.6

### <u>OFT – 2 :- Cotton</u> :

1) Title :- JUDICIOUS USE OF FERTILIZER IN COTTON

### 2) Problem definition: Cost increase due to unjudicious use of fertilizer

3) Details of technologies selected for assessment/ refinement

TreatmentPeriod of applicationNP2O5K2O (kg/ha)Source
--

<b>T</b> 1	Farmer	Farmer	Basal	22.5	57.5	0	DAP
	practices		Split-1(30 DAS)	57.5	0	0	Urea
			Split-2 (45 DAS)	57.5	0	0	Urea
			Split-3 (60 DAS)	80	57.5	0	Urea+DAP
			Split-4 (75 DAS)	57.5	0	0	Urea
			Total	275	115	0	
$T_2$	Recommended	Cotton	Basal	40	0	0	AS
	practices	Res. Station,	Split-1(30 DAS)	40	0	0	Urea
		JAU, Junagadh	Split-2 (45 DAS)	40	0	0	Urea
			Split-3 (60 DAS)	40	0	0	Urea
			Total	160	0	0	
<b>T</b> <sub>3</sub>	Refined		Basal	40	60	60	AS + MOP
	practices – I		Split-1(30 DAS)	40	0	0	Urea
			Split-2 (45 DAS)	40	0	0	Urea
			Split-3 (60 DAS)	40	0	0	Urea
			Total	160	60	60	
<b>T</b> 4	Refined		Basal	40	60	60	AS + MOP
	practices – II		Split-1(30 DAS)	40	0	20	AS + MOP
			Split-2 (45 DAS)	40	0	20	AS + MOP
			Split-3 (60 DAS)	40	0	20	AS + MOP
	1	1	Total	160	60	120	

N.B.:- T<sub>1</sub>, T<sub>2</sub>, T3 & T4 are technology options 1, 2, 3 & 4 respectively. 4) Source of Technologoy :- Junagadh Agricultural Univiersity

5) Production system and thematic area : Balance fertilization in cotton

6	Performance of th	e Technology assessed	/ refined with	performance indicators
U.	I CI IOI Mance OI u	ic i cennology assessed	/ I CHIICU WILLI	perior mance multators

of renormance of the reenhology assessed / renned with performance marcat						c marcutor 5	
Far-	Name of the	Name of	Data on the performance indicators of the				
mer	farmer	the Village	technology assessed / refined				
No			Technology Technology Technology Technolog				
			Option 1   Option 2   Option 3   Option 3			Option 4	
			Yield	Yield	Yield	Yield	
1	Kantibhai Ajudia	Makvanan	25.3	26.5	28.2	29.3	
2	Jentibhai	Vodiang	25.1	27	28.6	29.5	
	Karsanbhai						
3	Krishi Vigyan	Jamnagar	26	26.5	29.6	30.2	
	Kendra						

Average	25.46	26.67	28.8	29.67

- 8) Final recommendation for micro level situation : Basal application of N (40 kg), P<sub>2</sub>O<sub>5</sub> (60 kg) and K<sub>2</sub>O (60 kg) and remaining N application 40 kg each at 30, 45 and 60 days after sowing having highest non significant yield with farmers practices.
- 9) Constraints identified and feedback for research:
  - -High incidence of sucking pests and spodoptera
  - -Found initiation of mealybug incidence
  - -Yield increase as compare to farmers' practices.
- 10) Process of farmers participation and their reaction: Farmers have good response and they have support for OFT. Recommended application of the fertilizer having low incidence of insect-pests attack as well as disease. And highest yield found in refinement treatment. They satisfied with this trial.
   11) Results of On Farm Trials

11) 100								
Crop/	Farm-	Prob-		No.	Technol		Data on	
enter-	ing	lem	Title of	of	ogy	Parameters of assessment	the	
prise	situ-	Diag-	OFT	trial	Assesse	Parameters of assessment	paramet	
	ation	nosed		s*	d		er Q/ha	
1	2	3	4	5	6	7	8	
						T <sub>1</sub> - Farmers practices (N 275 : P <sub>2</sub> O <sub>5</sub> 115 : K <sub>2</sub> O 00)	25.46	
Cotto	Irri-	INM	Low yield	3		T <sub>2</sub> - Improved Practice (N 160 : P <sub>2</sub> O <sub>5</sub> 00 : K <sub>2</sub> O 00)	26.67	
n	gated	111111	of Cotton	5	fertilize rs	T <sub>3</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 60)	28.8	
						T <sub>4</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 120)	29.67	

\* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Cotton	N (40 kg), P <sub>2</sub> O <sub>5</sub> (60 kg) and remaining N application 40 kg each at 30, 45 and 60 days after sowing having highest non significant yield	have support for OFT. Recommended application of the fertilizer having low incidence of insect- pests attack as well as disease. And highest wield found in	N (160 kg), P2O5 (60 kg) and K2O (60 kg)	Monocropping system & less availability of FYM

Crop/ enterprise	Technology Assessed / Refined	*Production kg/ha	Input cost Rs./ha	Gross return Rs./ha (Rate 32.50/kg	Net Return (Profit) in Rs. / ha	BC Ratio (* only OFT input cost base)
1	13	14			15	16
Cotton	T <sub>1</sub> - Farmers practices (N 275 : P <sub>2</sub> O <sub>5</sub> 115 : K <sub>2</sub> O 00)	2546	5850	82745	76895	13.14
	T <sub>2</sub> - Improved Practice (N 160 : P <sub>2</sub> O <sub>5</sub> 00 : K <sub>2</sub> O 00)	2667	5600	86677	81077	14.5
	T <sub>3</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 60)	2880	3900	93600	89700	23
	T <sub>4</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 120)	2967	3500	96427	92927	26.6

OFT - 3:- Oilseeds (Groundnut) :

1) Title :- Biological control of *Sclerotium rolfsii* (stem rot) in groundnut

- 2) Problem definition :
  - -Low plant population

-Disease problems

-Lack of knowledge for use of recommended control measure

### 3) Detalis fo technologies for assessment/ ferinement

Category	Source of	Technologoy details		
	technology			
Technology option 1	Farmer	T <sub>1</sub> Farmers practice (Control)		
Technology option 2	Main Oilseeds Res. Station, JAU, Junagadh	T <sub>2</sub> <i>Trichoderma harzeanum @</i> 2.5 kg/ha with castor cake <i>@</i> 500kg/ha at the time of sowing		
Technology option 3		T3Castorcake@500kg/ha,DrenchingofTrichodermaharzeanum@2.5kg/haat 30& 45DAG		

4) Source of Technology:- Junagadh Agricultural University

5) Production system : Integrated disease management

6) Thematic area : Management of stem rot in groundnut

### 7) Performance of the Technology assessed / refined with performance indicators

,			1				
			Data on the performance indicators of				
Far-		Name of	the technology assessed / refined				
mer	Name of the farmer	the	Technology	Technology	Technology		
No		Village	Option 1	Option 2	Option 3		
			Yield	Yield	Yield		
1	Naranbhai Kalabhai	Arikhana	16.6	20.4	18.00		
2	Rameshbhai Rajsibhai	Hasthal	16.25	20.3	18.20		

3	Krishi Vigyan Kendra	Jamnagar	17.3	20.75	19.00
		Average	16.71	20.48	18.40

8) Final recommendation for micro level situation: Management of *Sclerotium rolfsii* in groundnut with *Trichoderma harzeanum* @ 2.5 kg/ha and castor cake @ 500kg/ha at the time of sowing having more beneficial

9) Constraints identified and feedback for research :

-Soil born fungus,

-Highly related with high moisture & temperature.

-Reduce stem rot diseases

-Yield increase compare to control plot

-Good and bigger quality of pods

**10)** Process of farmers participation and their reaction: Farmers have good response and they have support for OFT. They satisfied with this trial. 11) Results of On Farm Trials

Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trial s*	d	Parameters of assessment	Data on the paramet er (kg/ha)
1	2	3	4	5	6	7	8
					Manage	T <sub>1</sub> - Farmers practice (Control)	1671
Groun -dnut	Rain- fed	(Scler-	Yield losses in groundnut due to	3	in groundn ut	12- Improved Practice ( <i>Trichoderma harzeanum</i> @	2048
		otium rolfcii)	Sclerotium stem rot		Trichod erma harzane	T <sub>3</sub> – Refined Practices (Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma</i>	1840

\* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Groundnut	they have support for OFT. They	5	Drenching of Trichoderma harzeanum	Directely comes in contact with stem in drenching

Crop/	Technology Assessed (	*Production	Input	Gross	Net	BC Ratio
enterprise	Technology Assessed / Refined	ka/ha	cost	return	Return	(* only
-	Keinieu		Rs./ha	Rs./ha	(Profit)	OFT

					in Rs. / ha	input cost base)
1	13	14			15	16
Ground -nut	T <sub>1</sub> - Farmers practice (Control)	1671	2800	40104	37304	13.32
	T <sub>2</sub> - Improved Practice ( <i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing)	2048	2250	49152	46902	20.84
	T <sub>3</sub> – Refined Practices (Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma</i> <i>harzeanum</i> @2.5 kg/ha at 30 & 45 DAG)	1840	2547	44160	41613	16.33

\*Field crops – kg/ha, \* for horticultural crops -= kg/t/ha, \* milk and meat – litres or kg/animal, \* for mushroom and vermi compost kg/unit area. \*\* Give details of the technology assessed or refined and farmer's practice

# Note: one paragraph interpretation on each technology attaching digital clear and

# focused action photograph

#### **FRONTLINE DEMONSTRATIONS**

Crop/enterprise	No.of demonstrations	Area (ha)
Oilseeds	40	20
Pulses	30	15
Cereals		
Millets		
Cash crops	10	5
Fodder crops		
Fruit crops		
Vegetable crops		
Plantation crops		
Spices and condiments		
Flowers and ornamental		
crops		
Medicinal and aromatic		
plants		
Fishery		
Total	80	40
		Units (No.)
Dairy		
Sheep and goat		
Poultry		
Piggery		
Rabbitary		
Apiculture		
Mushroom units		
Total		
Grand total	80	40

### OILSEEDS

	Season			Area	Perform	neters*					
Crop		Name of	No.of		a 1		2		3		Result
crop		technology	farmers	(ha)	Dem	Local	Dem	Local	Demo	Local	**
					Dem	Check	Dem	Check	Denio	Check	
G'nut	Kharif	IPM	20	10	15.00	12.5					16.66
Castor	Kharif	IPM	10	5	38.75	35.2					9.67
G'nut	Kharif	Tricoderma	10	5	14.37	13.12					8.69

\* Include the data on related observations and yield

\*\* Efficacy of technology demonstrated and its impact on yield

### PULSES

	Season	Name of		Area	Perfo	erent	Decult				
Crop					1	L	2	2	3		Result
-		technology	farmers	(ha)	Dama	Local	Dama	Local		Local	
					Demo.	Check	Demo.	Check	•	Check	
Green	Kharif	IPM	10	5	7.18	6.5					9.56
gram											
Chick	Rabi	Variety	10	5	16.87	15.00					11.11
pea											

\* Include the data on related observations and yield

\*\* Efficacy of technology demonstrated and its impact on yield

### Cotton

	Season	eason Name of		A	Per	rent	Result				
Crop		technology	No.of farmers	Area (ha) -	-	1		2		3	
-					Demo	Local Check	Demo	Local Check	Demo	Local Check	**
Cotton	Kharif	NPV	10	5	20.62	18.75					9.09

\* Include the data on related observations and yield

\*\* Efficacy of technology demonstrated and its impact on yield

### **CEREALS, HORTICULTURE AND OTHER CROPS**

	Season	son Name of	No.of farmers	Area (ha)	Per	rent	Result				
Crop					-	1	-	2		3	
Crop		technology			Demo	Local Check	Demo	Local Check	Demo	Local Check	**

\* Include the data on related observations and yield

\*\* Efficacy of technology demonstrated and its impact on yield

### **ENTERPRISES**

	Nam		No	Perf	ormance of	technology	v on differe	nt paramet	ers *	
Enterpri	e of	No.of	No. of	1		2	2	3	3	
se	tech nolo gies	farme rs	Uni ts	Demons tration	Local Check	Demons tration	Local Check	Demons tration	Local Check	Result**
Apicultu re										
Bio-feed (Azolla)										
Dairying										
Duckery										
Mushroo										
m										
Piggery										
Poultry										
Quail farming										
Sheep and Goat producti on										

\* \*\*

Include the data on related observations and yield

Efficacy of technology demonstrated and its impact on yield

### Demonstrations on Hybrid varieties of different crops

	Season	Name of the	No. of	A.m.o.o.	Pe	ent	Result				
Crop			No. of	Area	-	1	2	2	3	3	**
		Hybrid variety	farmers	(ha)	Demo	Local Check	Demo	Local Check	Demo	Local Check	

\* Include the data on related observations and yield

\*\* Efficacy of technology demonstrated and its impact on yield

# Training (including Vocational, Sponsored and FLD training)

	No. of				No. of	Partici	pants			
Thematic Area	Cours		Others	5		SC/ST			Total	
	es	М	F	Т	М	F	Т	М	F	Т
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	4	64	12	76	9	3	12	73	15	88
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification	1	21	0	21	11	0	11	32	0	32
Integrated Farming										
Water management	2	39	10	49	14	0	14	53	10	63
Seed production	2	32	8	40	12	0	12	44	8	52
Nursery management										
Integrated Crop Management	1	24	0	24	7	0	7	31	0	31
Fodder production										
Production of organic inputs										
Total	10	180	30	210	53	3	56	233	33	266
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops										
Off-season vegetables										
Nursery raising	2	30	15	45	11	6	17	41	21	62
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning										
c) Ornamental Plants										
Nursery Management Propagation techniques of	2	33	11	44	12	4	16	45	15	60
Ornamental Plants										
d) Plantation crops Production and Management technology										
e) Tuber crops					1					
Production and Management technology										
f) Spices										
Processing and value addition					1					
g) Medicinal and Aromatic Plants										
Nursery management										
Total	4	63	26	89	23	10	33	86	36	122

III Soil Health and Fertility Management										
Soil fertility management	3	46	9	55	25	2	27	71	11	82
Soil and Water Conservation	3	53	8	61	17	4	21	70	12	82
Integrated Nutrient Management	5		0		11	-		, 0		01
Micro nutrient deficiency in crops										
Nutrient Use Efficiency	1	20	0	20	6	0	6	26	0	26
	1	20	0	20	0	0	0	20	0	20
Soil and Water Testing Total	7	119	17	136	48	6	54	167	23	190
IV Livestock Production and Management	/	119	17	130	48	0	54	107	23	190
Dairy Management Production of quality animal products										
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	5	0	96	96	0	22	22	0	118	118
Income generation activities for empowerment of rural Women	2	0	39	39	0	16	16	0	55	55
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	3	0	49	49	0	25	25	0	74	74
Total	10	0	184	184	0	63	63	0	247	247
VI Agril. Engineering Small scale processing and value addition										
Post Harvest Technology										
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	10	188	39	227	41	12	53	229	51	280
Integrated Disease Management	10	187	29	216	51	14	65	238	43	281
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides										
Total	20	375	68	443	92	26	118	467	94	561
VIII Fisheries										
Integrated fish farming Carp breeding and hatchery management	4	28	9	37	57	15	72	85	24	109
Carp fry and fingerling rearing										
Composite fish culture	1	10	0	10	22	0	22	32	0	32

Pen culture of fish and prawn										
Shrimp farming	1	9	3	12	15	8	23	24	11	35
Edible oyster farming		-			10					
Total	6	47	12	59	94	23	117	141	35	176
IX Production of Inputs at site										
Seed Production	4	63	0	63	23	0	23	86	0	86
Planting material production										
Bio-fertilizer production										
Vermi-compost production	3	49	20	69	16	8	24	65	28	93
Organic manures production Production of livestock feed and fodder										
Production of Fish feed										
Total X Capacity Building and Group Dynamics	7	112	20	132	39	8	47	151	28	179
Leadership development	1	25	3	28	8	4	12	33	7	40
Group dynamics	1	32	0	32	5	0	5	37	0	37
Formation and Management of SHGs	3	62	18	80	14	5	19	76	23	99
Mobilization of social capital										
WTO and IPR issues										
Total	5	99	19	118	21	6	27	120	25	145
XI Agro-forestry										
Production technologies										
Total										
XII Others (Pl. Specify)										
TOTAL	67	967	362	1329	361	139	500	1328	501	1829
(B) RURAL YOUTH										
Production of organic inputs										
Integrated Farming	1	18	5	23	7	0	7	25	5	30
Planting material production										
Vermi-culture	2	32	8	40	12	4	16	44	12	56
Sericulture										
Training and pruning of orchards										
Value addition Production of quality animal products	2	0	33	33	0	12	12	0	45	45
Ornamental fisheries	1	0	0	0	17	9	26	17	9	26
Para vets										
Para extension workers										
Composite fish culture										
Freshwater prawn culture	2	0	0	0	68	14	82	68	14	82
TOTAL	8	50	46	96	104	39	143	154	85	239

(C) Extension Personnel										
Productivity enhancement in field crops	1	21	0	21	9	0	9	30	0	30
Integrated Pest Management	4	74	0	74	16	0	16	90	0	90
Integrated Nutrient management										
Any other (Pl. Specify)										
TOTAL	5	95	0	95	25	0	25	120	0	120
Grand Total	80	1112	408	1520	490	178	668	1602	586	2172

(D) Vocational training programmes for Rural Youth

						N	0.0	f Pa	rtic	ipaı	ıts			No. of	Empl-
Crop /			Identified	Dura-	Ge	enera	l	S	C/S	Т	7	lota	l	person	oyed
Enterprise	Date	Training title*	Thrust Area	tion (days)	М	F	Т	М	F	Т	М	F	Т	s emp- loyed	else where
Fruit	15- 4-09	Preparation of jam, jelly and pickles	Value addition in fruit	1	0	14	14	0	3	3	0	17	17	0	0
Vermi compost	15- 10- 010	Production off varmi compost	Self emploment	1	8	3	11	4	0	4	12	3	15	2	1
Vegetable	6- 10- 09	Packaging & Preservation of vegetables	Value addition in vegetable	1	0	17	14	0	8	5	0	25	25	1	0

\*training title should specify the major technology /skill transferred

# (E) Sponsored Training Programmes

					Total No. of participants									
SI.			Discip	Dur a-		Other	•	9	<u>5C/ST</u>			Total		Sponso ring
No.	Date	Title	line	tion	М	F	Т	М	F	Т	М	F	Т	Agency
1	22-07- 09	Crop Production	Agron	1	26	12	38	6	4	10	32	16	48	Mahindra
2	29-07- 09	Land Preparation	Agron	1	25	5	30	10	5	15	35	10	45	Mahindra
3	30-07- 09	INM	Sol.sci	1	36	7	43	4	3	7	40	10	50	Mahindra
4	05-04- 09	IPM & ICM of <i>Kharif</i> crops	Pl.Prot	1	14	4	18	6	4	10	20	8	28	Arya Seed
5	21-05- 09	Crop Planning in Kharif	Pl.Prot	1	800	300	1100	250	150	400	1050	450	1500	DRDA
6	05-05- 09	Precaution in plant protection for kharif crops	Pl.Prot	1	34	6	40	46	10	56	80	16	96	FSFC
7	07-08- 09	Cotton Minimission	Agron	1	12	4	16	9	2	11	21	6	27	DAO
8	07-08- 09	Isopom (Oilseeds)	Agron	1	14	5	19	10	1	11	24	6	30	DAO

9	08-08- 09	Cotton Minimission	Pl.Prot	1	15	4	19	6	2	8	21	6	27	DAO
10	08-08- 09	Isopom (Oilseeds)	Agron	1	16	6	22	11	2	13	27	8	35	DAO
11	11-08- 09	Cotton Minimission	Pl.Prot	1	13	7	20	8	1	9	21	8	29	DAO
12	12-08- 09	Isopom (Oilseeds)	Agron	1	21	4	25	14	0	14	35	4	39	DAO
13	12-08- 09	Cotton Minimission	Pl.Prot	1	22	2	24	9	0	9	31	2	33	DAO
14	18-08- 09	Isopom (Oilseeds)	Agron	1	18	1	19	14	0	14	32	1	33	DAO
15	18-08- 09	Cotton Minimission	Pl.Prot	1	12	4	16	11	1	12	23	5	28	DAO
16	19-08- 09	Isopom (Oilseeds)	Agron	1	16	0	16	10	2	12	26	2	28	DAO
17	19-08- 09	Cotton Minimission	Pl.Prot	1	12	0	12	19	0	19	31	0	31	DAO
18	21-08- 09	Isopom (Oilseeds)	Pl.Prot	1	18	6	24	11	0	11	29	6	35	DAO
19	21-08- 09	Cotton Minimission	Pl.Prot	1	12	5	17	16	2	18	28	7	35	DAO
20	22-08- 09	Isopom (Oilseeds)	Agron	1	16	6	22	14	3	17	30	9	39	DAO
21	22-08- 09	Cotton Minimission	Pl.Prot	1	15	4	19	12	3	15	27	7	34	DAO
22	25-08- 09	Isopom (Oilseeds)	Sol.sci	1	19	3	22	10	4	14	29	7	36	DAO
23	26-08- 09	Cotton Minimission	Pl.Prot	1	10	2	12	16	3	19	26	5	31	DAO
24	27-08- 09	Isopom (Oilseeds)	Agron	1	21	4	25	14	2	16	35	6	41	DAO
25	28-08- 09	Cotton Minimission	Pl.Prot	1	14	0	14	16	0	16	30	0	30	DAO
26	29-08- 09	Isopom (Oilseeds)	Pl.Prot	1	16	0	16	14	0	14	30	0	30	DAO
27	14-09- 09	ICM in major crops	Pl.Prot	1	86	0	86	18	0	18	104	0	104	ATMA
28	15-09- 09	Fertility management	Soil.Sc i	1	38	0	38	12	0	12	50	0	50	ATMA
29	16-09- 09	Water management	Agro.	1	42	0	42	5	0	5	47	0	47	ATMA
30	17-09- 09	Stretening SHGs	Ext.	1	39	0	39	9	0	9	48	0	48	ATMA
31	18-09- 09	Value addition and child care	Home Sci	1	0	10 4	104	0	15	15	0	119	119	ATMA
32	19-12- 09	Water shed managemetn	Ext.	1	0	17	17	0	14	14	0	31	31	DRDA
33	22-12- 09	Income Generating employment	Ext.	1	41	0	41	11	0	11	52	0	52	DR DA

34	24-12- 09	Narusery and Gardening	Horti.	1	9	0	9	4	0	4	13	0	13	NHR DF
35	9/1/2 010	Training on recycling farm waste	Soil.Sc i	1	18	0	18	4	0	4	22	0	22	KRIBHC O
36	12/1/ 2010	Package of practices in summer Groundnut	Pl.Prot	1	59	0	59	8	0	8	67	0	67	DAO
37	18-01- 10	Formation of SHGs in watershed project	Ext.	1	0	20	20	0	6	6	0	26	26	DRDA

# **Extension activities**

Sr.		No.					P	articipa	ants					
No.	Nature of Extension	of activ	Farm	ers (Ot	hers)	SC/ST	Г (Farr	ners)		tensi fficia		Gr	and To	tal
	Activity	ities	Μ	F	Т	М	F	Т	Μ	F	Т	Μ	F	Т
1	2	4	5	6	7	8	9	10	1 1	12	1 3	14	15	16
1.	Field Day	2	48	20	68	8	2	10				56	22	78
	G'nut	1	20	6	26	3	2	5				23	8	31
	Castor	2	52	3	55	8	1	9				60	4	64
	Green gram	1	26	8	34	2	4	6				28	12	40
	Chick pea	1	22	7	29	3	2	5				25	9	34
	Cotton	1	50	12	62	2	2	4				52	14	66
	Total	8	218	56	274	26	13	39	0	0	0	244	69	313
2.	Kisan Mela													
		1	32		32	3		3				35		35
		1	28		28							28		28
3.	Kisan Ghosthi	1	19		19	7		7				26		26
	Kisan Ghosthi	1	47		47	3		3				50		50
		1	40		40	2		2				42		42
		1	33		33	4		4				37		37
	Total	6	199	0	199	19	0	19	0	0	0	218		218
4.	Exhibition													
5.	Film Show	1		24	24		2	2					26	26
6.	M. Demo	12												
		1	52	11	63	22		22	3	0	3	74	11	85
7.	Farmers Seminar	1	25	4	29	8		8				33	4	37
	Total	2	77	15	92	30	0	30	3	0	3	107	15	122
8.	Workshop													
9.	Group meetings	1	24		24	3		3				27		27
	1 0	1	21		21							21		21
	Total	2	45	0	45	3	0	3	0	0	0	48	0	48
10	Lectures	2	124	45	169	21	3	24	-	-	-	145	48	193
10.	delivered as	2	145	22	167	15	0	15	-	-	-	160	22	182
	resource persons	3	223	66	289	31	0	31	-	-	-	254	66	320
		2	98	0	98	12	0	12	-	-	-	110	0	110
		1	0	28	28	0	3	3	-	-	-	0	31	31
		1	137	22	159	21	7	28	-	-	-	158	29	187
	Total	11	727	183	910	100	13	113	0	0	0	827	196	1023

11	News paper	3												
12	Radio talks													
13	TV talks													
14.	Popular articles	1												
15.	Ext.Literatur													
16.	Advisory Services	5												
17.	Scientific visit to farmers field	14	78		78	6		6	2		2	86		86
18.	Farmers visit to KVK	25	487	187	674	127	98	225	21		21	614	285	920
19.	Diagnostic visits	5												
20.	Agri mobile clinic	1050												
21	Soil test campaigns	1550 *												
23	Night meeting	3	27		27	12		12				39	0	39
24	Colobrative training	6	125		125	27		27				152	0	152
25	Training to ext.functionries	2	42		42	4		4				46	0	46
26	Any other-													
	Total	108	2025	465	249 0	354	126	480	2 6	0	2 6	2402	591	3014

# Production and supply of quality seed and planting material

### **SEED MATERIALS**

Sr.No.	Сгор	Variety	Quantity (Kg.)	Value	Provided No. of farmers
1.	Groundnut	GG-5	3241	80214	-
		GG-6	1170	28372	-
		TPG-37A	515	15450	-
		TPG-41	1250	34375	-
2.	Wheat	GW-366	1215	15795	-
3.	Cotton	Bt.cotton	178	5340	-
4.	Castor	GCH-7	500	46250	195

### SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	1215	15795	
2	OILSEEDS	6675	246641	-
3	PULSES			
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS	178	5340	
	TOTAL			

**PLANTING MATERIALS : Nil..** 

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES					
VEGETABLES					
FOREST SPECIES					
ORNAMENTAL					
CROPS					
PLANTATION					
CROPS					
Others (specify)					

### SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	VEGETABLES			
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL			

BIO PRODUCTS							
Major group/class	Product Name	Species	Quantity No (kg)		Value (Rs.)	Provide d to No. of Farmers	
BIOAGENTS							
BIOFERTILIZERS							
BIO PESTICIDES	Savaj	Trichoderma harzianum		135	11475	105	

	SUMMARY								
SI.	Product		Quar	ntity	Value	Provided			
No.	Name	Species	Nos	(kg)	(Rs.)	to No. of Farmers			
1	BIOAGENTS								
2	BIO FERTILIZERS								
3	BIO PESTICIDE	Trichoderma harzianum		135	11475	105			
	TOTAL								

### LIVESTOCK : NIL..

Sl. No.	Туре	Breed	Quantity		
---------	------	-------	----------	--	--

		(Nos	Kgs	Value (Rs.)	Provided to No. of Farmers
Cattle					
FISHERIES					
Others (Specify)					

	SUMMARY								
SI.		<b>D</b> 1	Quantity		Value	Provided to No. of			
No.	Туре	Breed	Nos	Kgs	(Rs.)	Farmers			
1	CATTLE								
2	FISHERIES								
3	OTHERS								
	TOTAL								

# SOIL AND WATER TESTING

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realised (Rs.)
Soil Samples	1550	1550	41	
Water	10	10	10	
Samples				
<b>Plant Sample</b>				
Petiole				
Samples				
Total	1560	1560	50	