### ANNUAL PROGRESS REPORT-2008-09 (OCTOBER 2008 TO SEPTEMBER-2009)

å

### **ACTION PLAN** (OCTOBER 2009 TO SEPTEMBER 2010)

OF

# KRISHI VIGYAN KENDRA JAMNAGAR

TO BE PRESENTED AT ANNUAL ZONAL WORKSHOP OF ZONE-VI (Rajasthan & Gujarat) HELD AT ANAND AGRICULTURAL UNIVERSITY, ANAND DURING 6<sup>TH</sup> TO 9<sup>TH</sup> OCTOBER, 2009

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



KRISHI VIGYAN KENDRA MILLET RESEARCH STATION JUNAGADH AGRICULTURAL UNIVERSITY JAMNAGAR-361 006 GUJARAT



## **CONTENT**

Sr. No	Particulars								
1.	GENERAL INFORMATION ABOUT THE KVK								
	1.1	Name and address of KVK with phone, fax and e-mail	1						
	1.2	Name and address of host organization with phone, fax and e-mail	1						
	1.3.	Name of the Programme Coordinator with phone & mobile No	1						
	1.4.	Year of sanction:	1						
	1.5.	Staff Position (as on 30 <sup>th</sup> September 2008)	2						
	1.6.	Total land with KVK (in ha) : 20.44 ha	3						
	1.7.	Infrastructural Development:	3						
	1.8.	A). Details SAC meeting conducted in the year	4						
2.	DETA	ILS OF DISTRICT (2007-08)	5						
	2.1.	Major farming systems/enterprises (based on the analysis made by the KVK)	7						
	2.2.	2.2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)							
	2.3.	Soil type	9						
	2.4.	Area, Production and Productivity of major crops cultivated in the district	12						
	2.5.	Weather data	13						
	2.6.	Production and productivity of livestock, Poultry, Fisheries etc. in the district	14						
	2.7.	Details of Operational area / Villages (2007-08)	15						
	2.8	Priority thrust areas	15						
3.	TECH	NICAL ACHIEVEMENTS	16						
	3.A.	Details of target and achievements of mandatory activities by KVK	16						
	3.B1	Abstract of interventions undertaken	17						
	3.1	Achievements on technologies assessed and refined	18						
	3.B2	List of Technology Assessed during 2007-08	19						
	3.B3	List of Technology Refined during 2007-08	19						
	3.C	Details of technology used during reporting period	19						
	В.	Details of each On Farm Trial carried out on farmers field	20						
	3.2	Achievements of Frontline Demonstrations	27						
		a.Follow-up for results of FLDs implemented during evious years	27						
		b.Details of FLDs implemented during 2007-08 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)	28						
		c.Details of FLD on Enterprises	34						

	3.3	Achievements on Training (Including the sponsored and FLD training programmes):	34
		A] On Campus	34
		B] Off Campus	39
		C) Consolidated table (On and OFF Campus)	45
		D) Vocational training programmes for Rural Youth	50
		E) Sponsored Training Programmes	51
	3.4.	Extension Programmes (including activities of FLD programmes)	53
	3.5	Production and supply of Technological products	54
	3.6.	Literature Developed/Published (with full title, author & reference)	56
	3.7.	Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)	58
	3.8.	Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year	61
	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)	61
	3.10	Indicate the specific training need analysis tools/methodology followed for	62
	3.11	Field activities	62
	3.12	Activities of Soil and Water Testing Laboratory	63
4.0	IMPAC	CT	64
	4.1	Impact of KVK activities (Not to be restricted for reporting period).	64
	4.2.	Cases of large scale adoption	64
	4.3	Details of impact analysis of KVK activities carried out during the reporting period	65
	4.4	Impact of Krishi Vigyan Kendra in operational area	65
5.0	LINKA	GES	72
	5.1.	Functional linkage with different organizations	72
	5.2.	List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies	73
	5.3	Details of linkage with ATMA	73
	5.4	Give details of programmes implemented under National Horticultural Mission	73
	5.5	Nature of linkage with National Fisheries Development Board	73
6.	PERFO	DRMANCE OF INFRASTRUCTURE IN KVK	74
	6.1	Performance of demonstration units (other than instructional farm)	74
	6.2	Performance of instructional farm (Crops) including seed production	75
	6.3	Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,)	76
	6.4	Performance of instructional farm (livestock and fisheries production)	76
	6.5	Utilization of hostel facilities	76
7.		Detail of rain water harvesting structure and micro irringation system	77

8.	FINAN	ICIAL PERFORMANCE	77		
	8.1	Details of KVK Bank accounts	77		
	8.2	Utilization of funds under FLD on Oilseed ( <i>Rs. In Lakhs</i> )	77		
	8.3	Utilization of funds under FLD on Pulses (Rs. In Lakhs)	77		
	8.4	Utilization of funds under FLD on Cotton (Rs. In Lakhs)	77		
	8.5	Utilization of KVK funds during the year 2007 -08 and 2008 -09 (upto Sep. 2008) (year-wise separately) (current year and previous year)	78		
	8.6	Status of revolving fund (Rs. in lakhs) for the three years	80		
9.		SE INCLUDE INFORMATION WHICH HAS NOT BEEN REFLECTED ABOVE E IN DETAIL).	80		
	9.1	National fisheries development board	80		
	9.2.	Constraints	80		
	9.3	Krishi mahotsav (07-05-08 to 05-06-08) Total Villages of\ Jamnagar District including 10 Talukas.	81		
ANI	N. – I	Proceeding of the 3 <sup>rd</sup> scientific advisory committee meeting of krishi vigyan kendra, JAU, Jamnagar held on 2 <sup>nd</sup> November-2007	84		
ANI	N.– II	Weekly meteorological data 2007-08			
ANN	I.– III	Front Line Demonstration			
ANN	. – IV	Details of training Achievement	95		
ANN	N.– V	"Khedut Talim Shibir " in Cereals , oilseeds, Pulse crop, Horticultural crops, and other shibirs carried out in different talukas of Jamnagar district organized in collaboration with different line Department of the district	99		
ANN	I.– VI	Impact of KVK in operational area	102		
ANN	.– VII	Attend training cum workshop by the KVK staff	103		
ANN	VIII	PRA SURVEY CONDUCTING DURING 2008 OF DIFFERENT BLOCK OF JAMNAGAR	104		
		SUMMARY TABLES	110		
		ACTION PLAN-2009-10	131		

### ANNUAL PROGRESS REPORT-2008-09 (OCTOBER 2008 TO SEPTEMBER-2009)

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

#### **1. GENERAL INFORMATION ABOUT THE KVK**

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

Address	Telep	hone	E mail	Web	
Address	Office	FAX	E man	address	
Krishi Vigyan Kendra Millet Research Station,	(0288) 2710165 2711793	(0288) 2710165	kvk_jam@ rediffmail.com kpbaraiya2006@yahoo.com	jau.in	
Junagadh Agricultural University,					
Airforce Road, Opp. Digjam Mill <b>Jamnagar- 361 006</b>					

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

Addrog		Teleph	one	E mail	Web	
Address		Office	FAX	E man	address	
Junagadh University,	Agricultural	PBX 2672080-90	(0285) 2672653	dee@jau.in	jau.in	
Junagadh – 362 00	)1 (Gujarat)	2012080-90	2012033			
Director of Extension Junagadh	on Education Agricultural	(0285) 2672653	(0285) 2672653			
University, Junagadh – 362 00	)1 (Gujarat)	Mo. 9879104662				

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

Name	Telephone / Contact				
	Residence	Mobile	Email		
Dr. K. P. Baraiya I/c. Programme Coordinator Krishi Vigyan Kendra Millet Research Station, Junagadh Agricultural University, Airforce Road, Opp. Digjam Mill <b>Jamnagar- 361 006</b>	(0288) 2710461	9427980032 kpbaraiya2006 @yahoo.com			

#### **1.4. Year of sanction:**

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

1.5. Staff Position (as on 30<sup>th</sup> September 2009)

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	Prog. Co- ord.	-	-	12000- 18300	-	-	-	-
2	Subject Matter Specialist	Dr. K. P. Baraiya	SMS	Plant Protection	Ph.D; NET	8000- 13500	9925	17-08-06	Temp.	Other
3	Subject Matter Specialist	Dr. N. B. Jadav	SMS	Extension Education	Ph.D.	8000- 13500	9100	18-08-06	Temp.	OBC
4	Subject Matter Specialist	Smt. A. K. Baraiya	SMS	Home Science	M.Sc.	8000- 13500	8000	17-08-06	Temp.	Other
5	Subject Matter Specialist	Dr. V. J. Zizala	SMS	Crop Production	Ph.D.	8000- 13500	9100	24-08-06	Temp.	OBC
6	Subject Matter Specialist	Dr. J. N. Thaker	SMS	Fisheries	Ph.D.	8000- 13500	9100	31-08-06	Temp.	Other
7	Subject Matter Specialist		SMS			8000- 13500		Vacant		
8	Programme Assistant	Shri P. S. Gorfad	Prog. Asstt.	Extension Education	M.Sc.	5500- 9000	7775	24-3-95	Temp.	OBC
9	Computer Programmer	Shri R.G. Panseria	Prog. Asstt.	Computer Operator	B.C.A. <i>,</i> P.T.C.	5500- 9000	4500	30-12-08	Fix Pay	Other
10	Farm Manager	Shri A. M. Hadiya	Prog. Asstt.	PBG	M.Sc.	5500- 9000	4500	6-1-09	Fix Pay	OBC
11	Accountant / Superintendent	Shri N. H. Vasavda	Sr. Clerk	Adm.	Old SSC	4000- 6000	5800	1-07-05	Temp.	Others
12	Stenographer		Sr. Clerk	Adm.		4000- 6000		Vaccant		
13	Driver	Shri A.D. Qureshi	Driver	Supt.	7 STD.	4000- 6000	5400	1-10-04 (Pooled)	Temp.	OBC
14	Driver	Shri. D.M. Chauhan	Driver	Supt. (Fix)	9 STD	2500	2500	9-10-07	Temp.	S. T.
15	Supporting staff	Shri B.D. Dudakia	Peon	Supt.	7 std	2550- 3200	2720	1-10-04	Temp.	OBC
16	Supporting staff	Shri P. S. Damor	Peon	Supt. (Fix)	12 STD.	1500	1500	1-9-06	Fix Pay	S. T.

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

S1. No.	Item	Area in hectare(s)*
1	Under Building and Road	-
2	Under Demonstration units	0.7
3	Under crops	13.56
4	Orchard	3.5
5	Agro-forestry	0.24
6	Others (Farm Pond & Channels)	2.00
	Total	20.44

\* At present KVK has not separate Office building, laboratory, seminar hall and staff quarters

#### 1.7. Infrastructural Development: A) Buildings

	A Dunungs		Stage							
S1.	Name of	Source		Complete			Incomplete			
No.	building	of 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	-	-	-	-	-	-	-		
2.	Farmers Hostel	-	-	-	-	-	-	-		
3.	Staff Quarters (6)	-	-	-	-	-	-	-		
4.	Demonstration Units (2)	ZC + ATMA	31-3- 2007	-		-	-	-		
5	Fencing	-	-	-	-	-	-	-		
6	Rain Water harvesting system	ZC	31-3- 2007	26m×26m (2 Ponds) 60m×60m (1 Pond)	999000	-	-	-		
7	Threshing floor	-	_	-	-	-	-	-		
8	Farm godown	-	-	-	_	_	-	-		

\* There is no separate facility available with Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar.

#### **B)** Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep GJ-8 A 3442	1995-96 (Dt 19/5/95)	2,80,000	3,05,211	Working condition

### 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 (4-12-04)	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		Working
Refrigerator	2005-06	16772	Working
Oven	2005-06	30550	Working
Hot plate	2005-06		Working

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

Sl.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	As below	As below
5.	10-09-2009	35		

4

The fourth 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 17<sup>th</sup> October, 2008.

S1. No.	Silant Recommendations	Action Taken	Suggested by
1.	It was suggested to plan limited on & off campus training	Suggestation accepted and followed, 125 Training instead of 200 training	chairman,
2.	Suggested for arrangement of training on watermelon cultivation in Dwarka taluka.	Suggestation accepted and followed with Dy. Dir. Hort.	Dr. S. M. Dadhaniya
3.	They suggested adding bio-pesticides and split application of methyl parathion @25 kg per hectare at 15 days interval during infestation period in refined treatment of OFT on cotton mealy bug management.		Dr. R. L. Savaliya & Dr. K. L. Raghwani
4.	In addition to OFT of groundnut, refinement treatment of castor cake @ 500 kg per hectare, it was suggested to add drenching of <i>Trichoderma harzeanum</i> @ 2.5 kg per hectare in root zone.	Suggestation accepted	House
5.	It was suggested to arrange front line demonstration for yellowing of groundnut	Suggestation accepted and followed,	House

Committee made the following recommendations after active interaction.

Attached a copy of second SAC proceedings along with list of participants in Annexure – I.

#### 2. DETAILS OF DISTRICT (2007-08)

The district of Jamnagar is lies in North Saurashtra Agro climatic zone (VI) with an area of 35.02 lakh hectare land. The total geographical area of entire district (21.8 - 22 ON, 69.0 - 70.7 E) occupies 14125 km<sup>2</sup> i.e. 14.125 lakh ha area in the west of Gujarat state. The climate is arid (80%) and semi arid (20%) with a mean moisture index of 67.5. About 95 to 98% of annual rainfall comes during the monsoon month of June to October, July and August being the rainiest months. The co-efficient of variation ranges between 50 and 82%. The annual potential evapo-transpiration ranges between 1500 and 1650mm, three times the precipitation, resulting in no flow in the ephemeral channels for the most of the year. The district is a water scarcity area droughts are common in this region draughts of moderate to severe intensity occur once in 2 to 3 years. Although the integrated drainage system from the story/rocky/gravelly surfaces and torrential nature of precipitation generate 40 to 60% of rainfall as runoff, steeper slopes and

absence of checks allow the water to quickly flow to the sea. Being is hard rock terrain, the groundwater potential is very low, is already over exploited and mined, resulting in either the saline water ingress in the costal aquifers, or drying up of the ground water up to a depth of 100m. Consequently a need for holistic approach to water resource development in the district. Wind velocity prevailing in the district is higher order (14.1 km) ha on an annual average basis due to sea coast area.

According to physiographically, major portion of the area in the district have an altitude ranging between 25 to 150 meters, which consists ten taluka having gentle slope to moderate slope. The district is marked by radical drainage pattern. Deccan trap basalt occupies a major part of the district. The Quaternary formations include milliolite, limestone, alluvium and Geolian sediments. The dominant land forms are colluvial plains and rocky uplands. Low hills occur in the southern part of district and are dissected by numerous large and small seasonal streams, most of which drain towards north and form potential drainage basins. The district is characterized by shallow, black soil and coastal alluvial soils with large variations in depth, texture, structure salinity, and water erosion. Nearly two third area of the district is under cultivation. The major factors of land degradation are accelerated water erosion and Salinization.

	Jusio miormation of operational alberiot, jammagar.						
1	Total geographical area	10.15 lakh ha.					
2	Total cultivable area	6.70 lakh ha.	6.70 lakh ha.				
3	Net cultivated area	5.91 lakh ha.					
4	Total area under forest	0.43 lakh ha.					
5	Total irrigated area	1.17 lakh ha.					
6	Number of holdings	1.77 lakh					
7	Average annual rainfall	550 mm.					
8	Soil type	Medium black					
9	Total number of villages	754 (18 city)					
	Total population	15.63 lakh (1991)					
10	(a) Male	8.02 lakh .					
	(b) Female	7.61 lakh					
11	Literacy percentage	Rural	Urban				
11	a. Male	53.09	67.09				
	b. Female	32.94	50.95				
12	Number of talukas	10 (Ten),					

Basic information of operational district, jamnagar:

Jamnagar	Jodiya
Dhrol	Kalavad
Lalpur	Jamjodhpur
Bhanvad	Jamkhambhalia
Jamkalyanpur	Okha Mandal (Dwarka)

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

S. No	Farming system/enterprise								
1	Crops	Cereals	:	Pearl millet, Sorghum, Wheat, Maize					
		Pulses	:	Greengram, Blackgram, Chickpea, pigeonpea					
		Oilseeds	:	Groundnut, Sesamum, Castor, Mustard,					
		Cash crops	:	Cotton,					
		Spices and condiments	:	Cumin, Fennel, Coriander, ajwan, Ishabgul					
		Vegetables	:	Onion, garlic, potato, chilli, binjal, tomato, cauliflower, Cowpea, cabbage, okra, peach, cucurbits etc					
		Horticulture	:	Chiku, pomegranate, lemon (Citrus), Jamun, Aonla, guava, custard apple, papaya, coconut, ber, Almond, Banana					
		Floriculture	:	Rose, merry gold, vevanti, etc					
		Other Crops	:	Chikori, Fenugreek					
2	Live stock	Bullocks and cows							
		Buffaloes							
		Sheep							
		Goats							
		Horse and camel							
		Poultry							
		Others animals							
3.	Fishery	340 km coastal belt		4832 tonnes fish production					

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

S. No	Agro- climatic Zone	Characteristics
	North	The influence area of North Saurashtra Agroclimatic Zone is spread
– VI	Saurashtra	among five districts <i>viz</i> ., Amreli (7 taluukas out of 10), Bhavnagar (7
		talukas out of 14), Jamnagar (all the 10 talukas), Rajkot (9 talukas of
		13) and Surendranagar (6 talukas out of 9) covering 39 talukas in all.
		The influence area of the zone lies between 21°-02' to 23°-16' North

Latitude and 68°-56' to 72°-12' East Longitude. It is founded in the north by the Gulf of Kutch and parts of Rajkot as well as Surendranagar districts, in the East by the Ahmedabad district and ncoastal part of Bhavnagar district, on the South by the Junagadh district and parts of Amreli as well as Rajkot district, to the west by Arebian sea.

The North Saurashtra region which comprises the peninsular part of Gujarat has low to medium rainfall and shallow to medium black soils and also coastal saline alluvial soils. In this Agro-climatic zone, cotton (Bt), groundnut, pearlmillet, wheat are the major crops which contribute considerably to the economy of the state. In Saurashtra, among this zone taking in to consideration the rainfall pattern, the topography, soil characteristics, the climate and the cropping pattern have been identified in Gujarat. The North Saurashtra zone have five main / sub station cum testing centre of University like Dry Farming Research Station with KVK, Targhadia (Rajkot District), Main Millet Research Station with KVK, Jamnagar, Oilseeds Research Station (Sesamum, Mustard, Sunflower) with KVK, Amreli, Dry Farming Research Station, Nanakandhasar, (Surendranagar District) and Dry Farming Research Station, Jamkhambhalia (Jamnagar District).

#### Agro – Ecological situation in the District

The advent of southwest monsoon greatly influences seasonal patterns of rainfall distribution in the district. Thus, mean annual rainfall provides useful comparison of agricultural potential of a given situation in the district. The mean rainfall in the district 539.17mm

The physiography of entire region of district is more or less flat. However, the region is undulating with slopes having little hilly areas from 25 to 150 meters Physical features of the area vary from flat land to 150 meters above mean sea level. Most of the area falls in the range of 25m to 150m above mean sea level.

Based on the soil survey information of the zone, the soils of the district hence been broadly classified in to fine categories Available information about the properties of these soils and their textures has been considered. The types of soils categories are as under: -

Shallow black soils Medium black soils Saline alkali soils Costal alluvial soils

8

Hilly soils

While delineating the zone into district agro ecological situations, there major factors including various soil types, altitude and the rainfall patterns have primarily been considered. The district can be delineated into five agro ecological situations.

Although, each of the situations has rainfed and irrigated condition, but irrigation has not been considered in identification of the agro ecological situations. While deciding the major crops, cropping patterns and constraints in production, mention has been made of both these conditions one or the other agro ecological situation occurs in the influence area of the district. The fact that this does not preclude the existence of more than one agro ecological situations within the same area.

SI. No.	Agro Ecological Situation	Soil texture	Altitude	Principal crops	Special features	Approximate area (000ha)	Taluka included	Characteristics
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, Pearlmillet, Groundnut, Sesamum	Arid climate	31	Okha	Known salinity for genus ephedra seacoast very rich in Alghl flor and fanner of economic importance.

#### 2.3 Soil type

As the geographical formation of Saurashtra is to volcanic origin, the soils are generally desired from basaltic rock known as Daccan trap. This is the commonest rock in India and due to its extensive occurrence in south is called "Daccan Traps". In many parts, they6 have flat top features and hence, are also known as plateau basalt. The trap rocks, which occupy a large part of western cost of India, is also covering North Saurashtra zone. The most common colour of the trap rock in the region is dark grey. On weathering, trap rock form a ferruginous gravelly material known as murrum, which under lie-soil formed in situ. Soils, thus derived are either brown red in colour or regular, the black soil. In district black or brown colour is predominant. The soils are shallow to moderately deep. The detailed soil survey information for the soils of Jamnagar district are as under.

S.	Soil	Characteristics	Area in ha
No	type		
1	Shallow black	These soils have developed from basaltic trap especially	124000 ha (Kalawad,
	soils	from granite and gneiss parent materials. They light grey in	Jamjodhpur,
		colour. Taxonomically, they are classified as Ustorthents	Bhanvad,
		and Ustochrepts. Soils depth varies for cm to 45 cm. They	Okha)
		are gravelly but mainly they are sandy clay loam to clayey in	
		texture. The clay on tent in surface soil varies from 20% to	
		77.49% and calcium carbonate content varies from 3.76 to	
		26.71 per cent. The soil structure is weak, mainly sub	
		angular blocky and occasionally crumb. Since these soils	
		lack district profile layering and are shallow, capacity to	
		retain moisture is not sufficient.	
		The soils are neutral to alkaline in reaction $p^{H}$ ranges	
		from $7.3 - 8.4$ ) and from fertility point of view, these are	
		medium in available nitrogen, low to medium in available	
		phosphorus and adequate in availability of potash.	
2.	Medium	The major portion of Jamnagar (Some part of Kalyanpur,	180000 ha
	black	KHambhaliya & Jamnagar, major part of Lalpur, Dhrol,	(Part of
	soils	Jodia taluka is covered under medium black soils. These	Kalyanpur, Jamnagar,
		residual soils have basaltic trap parent materials. These	Jamkham-
		soils vary in depth from 30 to 60 cm or more at few places.	bhalia, Lalpur,
		They are calcareous in nature. A layer of murrum	Dhrol, Jodia)
		(Unconsolidated material of decomposed trap and limestone)	
		is generally found in sub soil layer. The drainage does not	
		pose any problem, because of porous sub soil layer.	
		Morphologically, the profile of these soils has A-C horizon	
		characteristics, having moderate sub angular blocky	
		structure. They are plastic and sticky and hard in	
		consistency on drying. The colour of these soils varies from	
		very dark brown to light grey. Taxonomically, these soils are	
		classified as Ustochrepts in Inceptisol order. The soils are	
		dominated by smectite group of clay minerals which give to	
		mild cracking in dry season, due to which these are further	
		classified as <i>Vertic – Ustochrepts</i> at sub group level.	
		The soils are clay loam to clayey in texture. The souls	
		are highly retentive of moisture because higher percentage	
		of clay content. The percentage of clay content in the	
		surface varies from 31.79 to 73.27 per cent, while no definite	

_			
		trend of clay content in different horizon of the profile is	
		observed.	
		The chemical composition of these soils is neutral to	
		alkaline reaction ( $p^{H}$ 7.4 to 8.9). Calcium is the dominant	
		exchangeable cation followed by magnesium. The soils are	
		generally low to medium in available nitrogen, phosphorus	
		and adequately supplied with potassium. The calcium	
		carbonate contents various from 5.26 to 20.36 per cent in	
		these soils.	
3.	Saline	Saline alkali souls are extensively distributed on the coastal	181000 ha
5.	alkali	are3a as well as inlands. These soils are located in the	(Jodia, part of
	soils		Okha,
		districts of Jamnagar (Jodia, part of Okha mandal,	Jamkhambhali
		Kalyanpur, Jamkhambhaliya and jamnagar talukas). These	a, Kalyanpur
		soils are originated as a result of higher water table, low	& Jamnagar)
		rainfall and high evaporation losses during summer months	
		resulting into upward movement of salts, poor drainage, use	
		of saline ground water and ingress of sea water (in coastal	
		areas). The souls are classified as <i>Fluvaquents</i> , <i>Halaquents</i> ,	
		and Haplaquents (Entisol): Haplaquents and Haptaquepts in	
		order - Inceptisol. Texturally these soils vary from sandy	
		loam to clay. The degree of salinity and alkalinity is also	
		highly variable.	
		In Jamnagar district, the saline and alkaly soils are	
		widely distributed mainly termed as coastal soil. The soils	
		are sandy loam to clay loam in texture. The EC varies from	
		1.54 to 38.6 m.mhos/cm and ESP ranges from 9.2 to	
		74.64% in surface soil. The $p^{H}$ varies from 7.6 to 9.00 in	
		surface soils and normally calcareous in nature. Most of	
		these soils are low to medium in available nitrogen and	
		phosphorus and high in available potash.	
4.	Costal	these soils are located in the district of Jamnagar consisting	299000 ha
	alluvial	Kalyanpur, Jodia and Jamnagar, Jamkhambhadia, Lalpur,	(Kalyanpur,
	soils	Dwarka (Okha Mandal) and Dhrol, talukas. These soils are	Jodia &
		sandy clay loam to clay in texture. These soils are also	Jamnagar,
		affected with salts and are saline sodic in nature. The	Khambhadia,
		surface soil varies from 1.54 to 38.6 m.mhos/cm in	Lalpur,
		Electrical conductivity, and from 9.2 to 74.64 in	Dwarka)
		Exchangeable sodium percentage. The soil reaction varies	
		with situation ranging from moderately alkaline ot highly	
		alkaline ( $p^{H}$ 7.6 to 9.0). The souls are normally medium in	
		fertility. Taxonomically, these souls are classified as	
		Halaquents and Haplaquents – Entisol and Helaquepts and	
	* * * * 1 1	Hapdaquents in Inceptisol order.	210001
5.	Hilly	These soils occur in some parts Bhanvad and	31000 ha
	soils	Jamjodhpur talukas of Jamnagar district. Because of the	(Some part of Bhanvad and
		steep slope and erosion, the profile is not developed. These	Jamjodhpur)
		soils are developed because of weathering of parent materials existing basaltic trap limestone and sand stone.	<u> </u>
		materiais existing basalue trap initestone and sand stone.	

			-						
		These soils are shallow to moderately deep and are coarse to							
	find in their texture. The	find in their texture. The texture varies from loamy sand to							
	clay loam to clay. Th	clay loam to clay. They have under composed rock							
	fragments and are low in	fragments and are low in fertility status. These soils are							
	placed in to Ustorthents a	and those near fo	othills and valle	y					
	are comparatively deeper	can be placed u	nder Ustochrep	ts					
	and can be classified un	_							
	respectively.		1						
2.4.	Area, Production and Producti	vity of major cro	ons cultivated i	in the district					
<b>S</b> .			Production	Productivity					
No	Crop	Area (ha)	(Qtl)	(Qtl /ha)					
	Oilseeds		(2)						
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	Courses	840	34356	40.9
33	Coppea	435	43500	100
33	Cabbage		85715	55.3
	Okra	1550		
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	
	FRUIT CROPS		0	
40	Chiku	238	21658	91
41	Pomegranate	77	4004	52
42	Citrus	173	7006.5	40.5
43	Jamun	7	14.7	2.1
44	Aonla	76	2964	39
45	Guava	15	600	40
46	Custard apple	70	3605	51.5
47	Papaya	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
	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
	Maize	2910	0	100
	Total Fodder crops	<b>20675</b>	5	
* 5011	rce : DAO. & Dv.Dir.Hort., Jamnagar			<u> </u>

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

#### 2.5. Weather data

Month	Temperature <sup>0</sup> C		Relative Hu	Rainfall	Rainy	
Month	Maximum	Minimum	Morning	Evening	(mm)	days
Jun-09	33.63	26.78	86.50	64.00	326.00	6.00
Jul-09	31.86	25.96	88.60	67.80	71.00	6.00
Aug-09	30.24	24.58	93.00	71.40	85.00	7.00
Sep-09	32.10	24.80	91.25	64.25	207.50	5.00

Oct-09	34.26	21.38	83.60	45.20	0.00	0.00
Nov-09	30.53	17.20	71.75	39.50	8.50	2.00
Dec-09	27.20	16.83	82.75	52.50	0.00	0.00
Jan-10	26.46	13.96	78.80	41.60	0.00	0.00
Feb-10	30.50	15.00	86.25	32.25	0.00	0.00
Mar-10	34.15	19.00	86.50	30.75	0.00	0.00
Apr-10	0.00	0.00	0.00	0.00	0.00	0.00
May-10	37.93	26.65	81.50	48.50	0.00	0.00
Jun-10	35.75	27.15	83.25	59.50	36.50	3.00
						14.0
Jul-10	32.62	26.12	90.20	71.60	417.00	0
Aug-10						
Sep-10						
			· D 1 0.			

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

\*\* Weekly weather data is given in the Appendix-II

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			
Rabbits			
Poultry	38041	12.77 lakh eggs	
Hens			
Desi			
Improved			
Ducks			
Turkey and others			
Horse &	410		
camels	2260		
Donkey	2577		
Total Milk			
Total egg			
Total wool			

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

Category	Area	Production	Productivity
Fish			

	Marine	342 km		
	Inland			
Praw	'n			
Scan	npi			
Shrir	np			
* Source · Apott Dir Fisheries, Jampagar				

\* Source : Asstt. Dir. Fisheries, Jamnagar

#### 2.7 Details of Operational area / Villages (2006-07)

Sl. No	Taluka /Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Lalpur	Rampar,	Cotton, groundnut,	IPM	IPM in cotton & groundnut
	_	Navi-Pipar	sesamum, castor,	IDM	IPM/IDM/INM
		_	greengram, wheat,	INM	Vermi compost
			blackgram, gram,		Organic farming
			cumin, mustard,		
2	Jamjodhp	Butavadar	Cotton, groundnut,	IPM	IPM/IDM/INM
	ur		sesamum, castor,	IDM	Flower cultivation
			greengram, wheat,	INM	Value addition in flower
			blackgram, gram,		Scope for export of flowers
			cumin, mustard,		
3	Kalawad	Kalawad,	Cotton, groundnut,	IPM	IPM/IDM/INM
		Nani-Vavadi,	sesamum, castor,	IDM	Reclamation of soil
		Sanala,	greengram, wheat,	INM	Value addition in field crop
		Hodisang	blackgram, gram,		
			cumin, mustard,		
4	Jamkha	Gokulpur,	Cotton, groundnut,	IPM	IPM/IDM/INM
	mbhadia	Beraja,	sesamum, castor,	IDM	Organic farming
		Viramdad,	greengram, wheat,	INM	Green house technology
		Dharampur,	blackgram, gram,		Vermi compost
		Haripar,	cumin, mustard,		Water harvest technology
		Sidhdhpur,	Vegetable		Crop production
		Vadatra, Jakasia,			
5	Jamkha	Madhavpur,	Vagatabla Cattar	IPM	
5	mbhadia	Ramnagar,	Vegetable, Cotton,	IPM IDM	IPM/IDM/INM Bio-fertilizer
	monadia	Shaktinagar,	groundnut, sesamum, castor,	IDM INM	
		Kalyanpur, Harshadpur,		11111/1	Dry farming technology Value addition in field crops
		Juvangadh,			value addition in neid crops
		Biillua, Kalluua	cumin, mustard,		

#### 2.8 **Priority thrust areas**

S1. No	Crop/ Enterprise	Thrust area		
1.	cotton, groundnut, castor, cumin, wheat, vegetables, fruits, etc.	Integrated Crop Management in major crops		
2.	Farm waste	Recycling of farm waste through composting, vermicompost, green manuring, etc.		

3.	Micro irrigation	Efficient use of water by micro irrigation system, water harvesting structure, and water conservation techniques
4.	Soil	Reclamation of saline & alkaline soils
5.	Farm Women	Farm women empowerment by training in value addition, handi crafts, and small scale enterprises
6.	Fisheries	Motivation of fisheries cultivation
7.	Improved Implements	Popularization of the mechanized technological know how

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

## 3.A. Details of target and achievements of mandatory activities by KVK during 2007-08

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

1. FLD	Area o	f FLD (ha)	Number of Farmers		
	Targets	Achievement	Targets	Achievement	
Kharif -2008-09					
Groundnut (GG-5)	10	10	20	20	
Cotton (Bt. Cotton)	10	10	20	20	
Chilli (Reshampatto)	5	5	10	10	
Brinjal (PLR-1)	5	5	10	10	
Tomato (TP-3)	5	5	10	10	
TOTAL					
Rabi -2008-09					
Wheat (GW-366)	20	20	40	40	
Cumin (Guj.Cum4)	10	10	20	20	
Total	65	65	130	130	

FLD conducting other than KVK Scheme during						
Kharif-2008-09		Num	ber of FLDs	Numbe	Number of Farmers	
Scheme	Crops	Crops Targets Achievement		Targets	Achievement	
Kharif-2008-0	9					
ATIC	Sesamum (Guj3)	10	10	20	20	
ТОТ	Mung (GM-4)	5	5	10	10	
Cotton Mini	Cotton (Prod. Tech.)	25 Acr.	25 Acr.	25	25	
Mission	Cotton (INM)	25 Acr.	25 Acr.	25	25	
Total		65	65	80	80	

Training       3       Number of Courses     Number of Participants					
Farmers	109	99	2700	2976	
Rural Youth	12	16	200	300	
Extension Functionaries	4	4	100	111	
Total	125	119	3000	3387	

<b>Extension Activities</b>				
4				
	Number of activities		Number of Participants	
	Targets	Achievement	Targets	Achievement

Groundnut (GG-5)	4	3	80	98
Cotton (Bt. Cotton)	5	5	100	147
Chilli (Reshampatto)	2	2	40	62
Brinjal (GBL-1)	2	2	40	71
Tomato (GT-2)	2	2	40	77
Wheat (GW-366)	7	7	200	222
Cumin (Guj.Cum4)	4	4	80	86

Seed Production (Qtl.) 5										
Crop	Variety	Target	Achievement							
Wheat	GW-366	200	400.00							
Groundnut	GG-5	50	58.93							
Groundnut	GG-6	3	3.23							
Groundnut	TPG-41	5	11.03							
Groundnut	TG-37A	3	3.32							
Groundnut	GG-16	3	3.07							

Planting material (Nos.)								
6								
	Target	Achievement						
	Nil	Nil						

#### **3.B1.** Abstract of interventions undertaken

						Interventio	ns		
S. No	Thrust area	Crop/ Enterprise	ldentified Problem	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	GG-20 is highly susceptible to stem rot	Groundnut	Stem rot of groundnut	Yield losses in groundnut duet to <i>Sclerotium</i> stem rot	FLD on stem rot resistant variety GG-5	Integrated management of stem rot	IDM in groundnut	Field day, Radio talk, Training on IDM,	GG-5
2	Seed setering and yield	Sesamum	Seed setering and low yield	-	Synchronized maturity and high yielding variety with good quality	ICM system, IPM, IDM	-	Field day, radio talk training on ICM/ IPM/ IDM,	G.Til-2
3	Pest-Disesae & yield	Castor	Wilt <i>,</i>	-	IDM in castor	ICM, IPM, IDM	-	Field day, radio talk	GCH-7
4	Low yield of bajara	Pearl Millet	Time of thinning	Effect of time of thinning on yield of bajara	Effect of time of thinning on yield of bajara	Importance of Thinning period,	-	Field day, radio talk, TV prog.	GHB-577
5	Pest & disease problem	Chick pea	Wilt & pod borer problem,	-	IPM in chickpea	IPM in chickpea	-	Field day	Guj-2
6	Yield	Wheat	Low yield of wheat	-	Low yield of wheat	ICM, IDM	-	Field day, Radio talk	GW-496
7	Yield	Mustard	Low yield due to pest	-	Resistant & high yielding variety	IPM, ICM	ICM, INM, IDM,	Field day, radio talk	GM-3
8	INM	Cotton	Unjudicious use of fertilizers	Low yield in cotton	INM in cotton	INM, IPM	INM, IPM	Field day, training	Bt. Cotton
9	Pest & Disease	Cotton	Mealybug	-	IPM	IPM	IPM	Radio talk, Literature	Compone nts

#### 3.1 Achievements on technologies assessed and refined

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

Thematic areas	Cereals	Oilseeds	Pulses	Comm -ercial Crops	Veget-	Î	Flower	Plant-	Tuber	TOTA L
Varietal Evaluation	1		1							2
Seed / Plant production										
Weed/Thining Management	1									1
Integrated Crop Management		1		1						2
Integrated Nutrient Management					2					2
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management			1		2					3
Integrated Disease Management		2	1	1						4
Resource conservation										
technology										
Small Scale income generating										
enterprises										
TOTAL	2	3	3	2	4					14

## \* 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	Pulses	Comm- ercial Crops	Veget- ables	Fruits	Flower	Plant- ation crops	Tuber Crops	TOTAL
Varietal Evaluation	1		1							2
Seed / Plant production										
Weed Management	1									1
Integrated Crop Management		1		1						2
Integrated Nutrient Management					2					2
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management			1		2					3
Integrated Disease Management		2	1	1						4
Resource conservation										
technology										
Small Scale income generating										
enterprises										
TOTAL	2	3	3	2	4					14

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	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								

#### 3.B2 List of Technology Assessed during 2008-09

S. No	Thematic area	Name of the technology assessed	Area (ha.)	Number of trials	Remarks if any
1	IDM in groundnut	IDM, Variety	5	10	Groundnut (GG-5)
2	ICM in cotton	Variety,IPM	20	40	Cotton (Bt. Cotton)
3	IPM in chilli	IPM	5	10	Chilli (Reshampatto)
4	IPM in brinjal	IPM	5	10	Brinjal (GBL-1)
5	INM in tomato	INM	5	10	Tomato (GT-2)
6	INM in tomato	INM	10	20	Cabbage/ Cauliflower
7	Varietal Evaluation of wheat	Variety	20	40	Wheat (GW-366)
8	IDM in cumin	IDM	10	20	Cumin (Guj.Cum4)
	Total (Wherever applicable)		80	160	

#### 3.B3 List of Technology Refined during 2008-09

S. No	Thematic area	Name of the technology refined	Area (ha.)	Number of trials	
1	Weed management	Time of thinning in bajara	3	3	(2006-07)
2	Integrated Disease management	Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma</i> <i>harzeanum</i> @2.5 kg/ha at 30 & 45 DAG	3	3	2007-08
3	INM in cotton	Use of balance fertilizers, Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 60)	3	3	2007-08

4.	Mealybug in Cotton	sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio-pesticides	3	3	2008-09
Total (wherever applicable)			12	12	

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

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

#### <u>OFT – 1 :- Cotton</u>

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

**2) Problem diagnose/ definition:-** Heavy infestation of mealybug is found, now a days Mealy bug becomes haddock in cotton.

- ✤ More number of host range
- Dispersion is very fast
- Mealy like powder covered on the body
- Leaving in gregarious phase
- ✤ Ability to laid eggs in pouch
- Eggs are hibernating in unfavorable condition
- Symbiotic relation with ants
- Low incidence of natural enemies
- High capacity of migration and climbing of crawlers.

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

Category	Source of technology	Technology detail				
Technolog y option 1	Farmer	$T_1$	Farmer practices	Application of conventional insecticides after infestation on Mealy bug		
Technolog y option 2	Main Oilseeds Res. Station, JAU, Junagadh	$T_2$	Recommende d practices	Pre-sowing application of Methyl parathion, Application of insecticides at the time of infestation		
Technolog y 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/bio-pesticides ( <i>Beauveria</i> spp. or <i>Verticillium</i> spp.)		

4) Source of technology: Junagadh Agricultural University

#### 5) Production system :-

Irrigated & rainfed condition having heavy infestation of mealy bug

- **Variety** : B.t. cotton (Government approved variety)
- Season : *Kharif* –2008, irrigated

Size of the plot : 0.40 ha.

#### **6) Thematic area :** IPM for suppression of Mealy bug

#### 7) 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 (% Plant
No			infested with mealybug)

			$T_1$	$T_2$	T <sub>3</sub>
1	Oodhavaji Kanjibhai	Makwana	65	34	13
2	Ratilal Devrajbhai Sangani	Badanpar	62	31	9
3	Krishi Vigyan Kendra	Jamnagar	53	25	8
		Average	60	30	10

**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 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

	oures c		aimi imais				
Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trial s*	Technolo gy Assessed	Parameters of assessment	Data on the parameter (% Plant infested)
1	2	3	4	5	6	7	8
						T <sub>1</sub> - Farmers practices Application of conventional insecticides	60
			Managemen		Mangt.	T <sub>2</sub> - Improved Pre-sowing application of Methyl parathion	30
Cotton	Irrigat ed	Mealy bug	t of mealy bug infestation	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/bio-pesticides	10

#### \* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Cotton	of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio-		application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries,	sporadic pest. Now it becomes regular polyphagous pest and breeding

non significant yield	insecticides/bio-	
with farmers practices.	pesticides	

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
Cotton	T <sub>1</sub> - Farmers practices Application of conventional insecticides	3078	4500	84645	80145	1:17.81
	T <sub>2</sub> - Improved Pre- sowing application of Methyl parathion	2243	3500	61683	58183	1:16.62
	$T_3$ - 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	3085	4200	84838	80638	1:19.20

#### <u>OFT - 2 :- Cotton</u> :

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

#### 2) Problem definition:

- ✤ Farmers are using phosphatic fertilizer as basal as well as top dressing.
- Plant needs more phosphorus at initial growth stage.
- Improper variety selection
- High labour charges
- ✤ Lack of proper practices knowledge
- Plant stand per hectare
- Monocropping
- Long duration crops
- Injudicious use of fertilizers
- Injudicious use of pesticides
- ✤ Lack of disease management
- Scheduling of irrigation

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

	Treatme	ent	Period of application	N (kg/ha)	P <sub>2</sub> O <sub>5</sub> (kg/ha)	K <sub>2</sub> O (kg/ha)	Source
$T_1$	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 Res.	Basal	40	0	0	AS
	practices	Station,	Split-1(30 DAS)	40	0	0	Urea
			Split-2 (45 DAS)	40	0	0	Urea

		JAU,	Split-3 (60 DAS)	40	0	0	Urea
		Junagadh	Total	160	0	0	
$T_3$	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.:-  $T_1$ ,  $T_2$ , T3 & T4 are technology options 1, 2, 3 & 4 respectively.

4) Source of Technologoy :- Junagadh Agricultural Univiersity

#### 5) Production system and thematic area : Application of DAP

Variety : Mallika {B.t. cotton (Government approved variety)}

Season : Kharif-2008

Size of the plot : 0.40 ha.

6) Thematic area : Unjudicious use of chemical fertilizers in cotton production

#### 7) 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	tee	chnology ass	essed / refin	ed	
No			Technology	Technology	Technology	Technology	
			Option 1	Option 2	Option 3	Option 4	
			Yield	Yield	Yield	Yield	
1	Viredrasingh	Dhandha	30.3	21.7	29.7	29.9	
	Bachubha						
2	Bhimsi Dhanabhai	Viramdad	30.2	21.8	29.7	29.85	
	Ambaliya						
3	Krishi Vigyan Kendra	Jamnagar	30.5	22.4	30.0	30.1	
		Average	30.3	21.9	29.8	30.0	

**8)** Final recommendation for micro level situation : Basal application of N (40 kg),  $P_2O_5$  (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

Γ	Crop/	Farm-	Prob-		No.			Data on
	enter- prise	ing situ-	lem Diag-	Title of OFT	of trial	Technolo gy Assessed	Parameters of assessment	the parameter
		ation	nosed		s*	100000000		(kg/ha)
	1	2	3	4	5	6	7	8

Cotton	Irri- gated	INM	Low yield of Cotton	3	fertilizers	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3032 2198 2980 3000
--------	----------------	-----	------------------------	---	-------------	--	------------------------------

\* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
	Basal application of N (40 kg), $P_2O_5$ (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	application of the fertilizer having low incidence of insect-pests attack as well as disease And highest	(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	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)	3032	5850	83380	77530	1:13.25
	$T_2$ - Improved Practice (N 160 : P <sub>2</sub> O <sub>5</sub> 00 : K <sub>2</sub> O 00)	2198	1945	60445	58500	1:30.08
	$T_3$ - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 60)	2980	3900	81950	78050	1:20.01
	$T_4$ - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 120)		4500	82500	78000	1:17.33

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

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

#### 2) Problem definition :

- ✤ Reduction in plant population/ unit area due to disease at initial stage
- Poor quality of pod as well as straw
- Pods detached from the plant and remains in the soil
- $\boldsymbol{\diamond}$  Lack of knowledge about the proper method and time of application

- Set furrow sowing system
- Soil bunding enhance the disease intensity
- ✤ Lack of summer deep ploughing
- Lack of crop rotation

#### 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> Trichoderma harzeanum @ 2.5 kg/h with castor cake @ 500kg/ha at th time of sowing
Technology option 3		T3Castor cake @ 500 kg/ha, DrenchingTrichoderma harzeanum @2.5 kg/ha30 & 45 DAG

4) Source of Technology:- Junagadh Agricultural University

#### 5) Production system

Variety: GG-20

Season: Kharif- 2008

Size of plot : 0.40 ha

5) Production system and thematic area : Management of stem rot in groundnut

6) Thematic area : Management of stem rot in groundnut

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

Far-		Name of		performance plogy assessed	indicators of d / refined
mer No	Name of the farmer	the Village	Technology Option 1	Technology Option 2	Technology Option 3
			Yield	Yield	Yield
1	Pithabhai Popatbhai Vasoya	Chandra	15.5	23.2	21.7
		ga			
2	Gajubha Vibhaji Sodha	Dhandha	15.6	23.0	21.6
3	Krishi Vigyan Kendra	Jamnaga	15.7	23.4	21.8
		r			
		Average	15.6	23.2	21.7

**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*	Technolo gy Assessed	Parameters of assessment	Data on the parameter (kg/ha)
1	2	3	4	5	6	7	8
					manage	T <sub>1</sub> - Farmers practice (Control)	1560
Groun	Rain-	Stem rot ( <i>Scler</i> -	Yield losses in groundnut	3	ment of stem rot in	T <sub>2</sub> - Improved Practice ( <i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing)	2325
-dnut	fed	otium rolfcii)	due to Sclerotium stem rot	0	through Trichoder ma	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)	2170

\* 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	response and they have support for OFT. They	of Trichoderma	Directely comes in contact with stem in drenching

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- nut	T <sub>1</sub> - Farmers practice (Control)	1560	3000	39000	36000	1:12.00
	T <sub>2</sub> - Improved Practice ( <i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing)	2325	1750	58125	56375	1:32.21
	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)	2170	2300	54250	51950	1:22.59

\*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

Among the various methods of transfer of technology, frontline demonstration is one the most powerful tool. All FLDs on different crops conducted on the farmers' field in the adopted villages during *kharif*-08 and *rabi*-08-09. The efforts made to test the yield potentiality of these varieties on the farmers' field and yield compared with local existing varieties. In most of the cases, yield performances of newly demonstrated varieties of various crops on farmers' field found superior over local check. Performance of various demonstrations presented below.

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

List of technologies demonstrated during previous year and popularized during 2008-09 and recommended for large scale adoption in the district

s.	Crop/ Enterprise	Thematic	Technology	Details of popularization methods suggested		ontal spre chnology	
No		Area*	demonstrated	to the Extension system			Area in ha
1	Groundnut (GG-5)	IDM	IDM, Variety	Field day, Radio talk, TV programme, training etc.	15	650	2000
2	Cotton (Bt. Cotton)	ICM	IPM	_ " _	50	2000	4000
3	Chilli (Reshampatto)	IPM	IPM	_ " _	5	300	500
4	Brinjal (GBL-1)	IPM	IPM	_ " _	5	200	400
5	Tomato (GT-2)	INM	INM	_ " _	3	50	100
6	Wheat (GW-366)	Varietal	Variety	_ " _	25	1000	5000
7	Cumin (Guj.Cum 4)	IDM	IDM	_ " _	15	450	1500
8	Mung (GM-4)	Varietal	Variety	_ " _	15	200	300
9	Sesamum (GT-2)	ICM	IDM	_ " _	25	500	1000
10	Castor (GCH-6)	Variety	Variety, IDM	_ " _	15	300	500
11	Cabbage	IPM	IPM	_ " _	3	35	50
12	Chickpea (G-2)	IDM,IPM	IDM,IPM	_ " _	18	400	1000

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

# b. Details of FLDs implemented during 2007-08 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

SI. No.	Сгор	Thematic area	Technology Demonstrated	Season and year	Area (	ha)		of farme nonstrati		Reasons for shortfall in achievement
				year	Proposed	Actual	SC/ST	Others	Total	
	Oilseeds									
1	Groundnut (GG-5)	IDM	IDM, Variety	<i>Kharif</i> 08-09	10	10	14	6	20	-
	Cotton									
2	Cotton (Bt. Cotton)	ICM	IPM	<i>Kharif</i> 08-09	10	10	13	7	20	-
	Vegetables									
3	Chilli (Reshampatto)	IPM	IPM	<i>Kharif</i> 07-08	5	5	2	8	10	-
4	Brinjal (GBL-1)	IPM	IPM	<i>Kharif</i> 07-08	5	5	1	9	10	-
5	Tomato (GT-2)	INM	INM	<i>Kharif</i> 07-08	5	5	2	8	10	-
	Cereals									
6	Wheat (GW-366)	Varietal Evaluation	Variety	<i>Rabi</i> 07-08	20	20	25	15	40	-
	Horticultural Crops									
7	Cumin (Guj.Cum4)	IDM	IDM	<i>Rabi</i> 07-08	10	10	13	7	20	-

#### Details of farming situation

		Farming		S	tatus of so	oil				Seasonal	No.
Crop	Season	situation (RF/ Irrigated)	Soil type	Ν	Ρ	к	Previous crop	Sowing date	Harvest date	rainfall (mm)	of rainy days
Oilseeds											
Groundnut (GG-5)	Kharif	Rainfed	Medium black soil	Low	Medium	High	G'nut, Sesamum	1 to 18 July. 08	10 to 29 Oct. 08	669	22
Cotton											
Cotton (Bt. Cotton)	Kharif	Rainfed	Medium black soil	Low	Medium	High	cotton	1 to 20 July. 08	20 to 29 Feb. 09	669	22
Vegetables											
Chilli (Reshampatto)	Kharif	Rainfed	Medium black soil	Low	Medium	High	cotton	1 to 28 July. 08	20 to 29 Jan. 09	669	22
Brinjal (GBL-1)	Kharif	Rainfed	Medium black soil	Low	Medium	High	cotton	1 to 28 July. 08	20 to 29 Jan. 09	669	22
Tomato (GT-2)	Kharif	Rainfed	Medium black soil	Low	Medium	High	cotton	1 to 28 July. 08	20 to 29 Jan. 09	669	22
Cereals											
Wheat (GW- 366)	Rabi	Irrigated	Medium black	Low	Medi-um	high	Groun- dnut	5 – 15 Nov08	8 – 22 Mar. 09	-	-
Horticultural Crops											

											_
Cumin (Guj.Cum4)	Rabi	Irrigated	Light soil	Low	Medium	high	Groun- dnut	5 – 15 Nov08	1 – 20 Feb. 09	-	-

#### Performance of FLD

SI. No.	Сгор	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha local Check Qtl./ha H L A		Demo. Yield Qtl/ha		-	relation to	
										Demo	Local	
1	2	3	4	5	6	7	8	9	10	11	12	13
	Oilseeds											
1	Groundnut	IDM, Variety	GG-5	20	10	24.3	17	20.62	16.25	21.21	7000	8500
	Cotton											
2	Cotton	IPM, Variety	Bt. Cotton	20	10	29	21	25.00	20.31	18.75	2880	5000
	Vegetables											
3	Chilli	IPM	Resham patto	10	5	122	118	120	102.5	14.58	8250	9300
4	Brinjal	IPM	PLR-1	10	5	515	510	512.5	452.5	11.70	12535	13522
5	Tomato	INM	TP-3	10	5	580	570	575	502.5	12.60	5231	6241
	Cereals											
6	Wheat	Variety	GW-366	40	20	55	52.50	53.75	45	16.27	1050	920
	Horticultural Crops											
7	Cumin	Variety	Guj. Cum4	20	10	14.5	10.5	12.5	10	20.00	930	1250

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

<b>C</b> = = =	Average Cost of cu (Rs./ha)	ultivation	Average Gross (Rs./ha)		Average Net Retu (Rs./ha)	• •	Benefit-
Сгор	Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	Cost Ratio
	14	15	16	17	18	19	20
Oilseeds							
Groundnut	26200	27100	58550	46625	32350	19525	2.23
Cotton							
Cotton	22600	23000	76406	53320	53806	30320	3.8
Vegetables							
Chilli	27250	30240	137525	115000	110275	84760	5.05
Brinjal	36785	41450	182560	168456	145775	127006	4.96
Tomato	37788	40400	167625	157875	129837	117475	4.44
Cereals							
Wheat	13400	15000	60468	50625	47068	35625	3.51
Horticultural Crops							
Cumin	12000	13500	95312	76250	83312	62750	3.94

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	Averag e Yield (q/ha)	Local Check Yield (q/ha)	Percentage increase in productivity over local check
Ground nut	Kharif - 2007	Seed (Variety)	GG-5	Rainfed	20.62	16.25	21.21
		Bio-fertilizer	PSB+ Culture				
		Fertilizer Management					
		Plant Protection	Thiram, Trichoderma, Carbendazim 0.05%, Imidacloprid @ 0.006%				
		Combination of Components					
Cotton	<i>Kharif -</i> 2007	Seed (Variety)	Bt. Cotton	Rainfed	25.0	20.31	18.75
		Bio-fertilizer					
		Fertilizer Management					
		Plant Protection	imidacloprid 0.006%				
		Combination of					
		Components					
Chilli	Kharif - 2007	Seed (Variety)		Irrigated	120	102.5	14.58
		Bio-fertilizer					
		Fertilizer Management					
		Plant Protection	Imidacloprid 0.006%, Carbendazim 0.05%				
		Combination of Components					
Brinjal	Kharif - 2007	Seed (Variety)		Irrigated	512	452.5	11.70
		Bio-fertilizer					
		Fertilizer Management					
		Plant Protection	Imidacloprid 0.006%, Carbendazim 0.05%				
		Combination of Components					
Tomato	Kharif - 2007	Seed (Variety)		Irrigated	575	502.5	12.60
		Bio-fertilizer					
		Fertilizer Management	Mix Micronutirent				
		Plant Protection	Imidacloprid 0.006%, Carbendazim 0.05%				
		Combination of Components					
Wheat	Rabi 2007 - 08	Seed (Variety)	GW – 366	Irrigated	53.75	45	16.28
		Bio-fertilizer	PSB+ Culture				
		Fertilizer Management	Zinc Sulphate, 120:60:0				
		Plant Protection	Chlorpyriphos				
		Combination of Components					
Cumin	Rabi 2007 - 08	Seed (Variety)	Gu.Cum4	Irrigated	12.5	10	20
		Bio-fertilizer	PSB culture				
		Fertilizer Management	Zinc sulphate, 50:50:0				
		Plant Protection	Mancozeb, sulpher,				
		Combination of Components					

#### Technical Feedback on the demonstrated technologies

S1. No.	Crop	Variety	Farmers' Feed Back
1	Groundnut	GG-5	<ul> <li>Stress resistance variety having grow in rainfed as well as irrigated condition</li> </ul>
			<ul> <li>High yield potentiality</li> </ul>
			<ul> <li>Bunch type &amp; short duration variety (90 days)</li> </ul>
			<ul> <li>Low vegetative growth</li> </ul>
2	Cotton	Bt.Cotton	<ul> <li>Bollworm resistant</li> </ul>
		Breotton	High yielding variety
			<ul> <li>Short duration variety</li> </ul>
3	Chilli	Local	<ul> <li>Higher yield</li> </ul>
			<ul> <li>Resistant to anthracnose diseases</li> </ul>
			Good result on pest & disease management
4	Brinjal	Local	Good result on pest & disease management
5	Tomato	Local	<ul> <li>Higher yield</li> </ul>
			Low incidence of pests & Disease
			<ul> <li>Fruit quality is good</li> </ul>
6	Wheat	GW-496	<ul> <li>Seed provided was healthy with good germination</li> </ul>
			<ul> <li>Require termite and stem borer resistant variety.</li> </ul>
			<ul> <li>Variety GW – 496 has good potential yield</li> </ul>
			<ul> <li>Good variety for chapatti &amp; Backing,</li> </ul>
			<ul> <li>Grain quality is good for higher market price</li> </ul>
7	Cumin	Guj.	<ul> <li>Diseases resistant variety</li> </ul>
		Cum4	<ul> <li>High yielding variety</li> </ul>

## Farmers' reactions on specific technologies

S1. No.	Crop	Variety	Farmers' Reaction
1	Groundnut	GG-5	<ul> <li>Seed provided was healthy with good germination.</li> <li>this variety is better than local variety</li> <li>There is clear difference between demonstrated variety and local variety in performance</li> </ul>
2	Cotton	Bt. Cotton	<ul> <li>&gt; Bollworm resistant</li> <li>&gt; High yielding variety</li> <li>&gt; Short duration variety</li> </ul>
3	Chilli	Local	<ul> <li>Higher yield</li> <li>Resistant to anthracnose diseases</li> <li>Good result on pest &amp; disease management</li> </ul>
4	Brinjal	Local	<ul> <li>Good result on pest &amp; disease management</li> </ul>
5	Tomato	Local	<ul> <li>&gt; Higher yield</li> <li>&gt; Low incidence of pests &amp; Disease</li> <li>&gt; Fruit quality is good</li> </ul>
6	Wheat	GW-496	<ul> <li>Seed provided was healthy with good germination</li> <li>Require termite and stem borer resistant variety.</li> </ul>
7	Cumin	Guj. Cum4	<ul> <li>Diseases resistant variety</li> <li>High yielding variety</li> </ul>

## **Extension and Training activities under FLD**

_					e         22       78         20       -       20         20       -       20         20       -       20         20       -       20         20       -       20         20       -       20         20       105       -         20       105       -         20       105       -         20       105       -         20       105       -         20       10       -         20       10       -         30       4       32         30       4       32         31       -       -         31       -       -         31       -       -         32       -       -       -         33       12       40         35       -       -       -         35       10       35	ipants	
Sr. No.	Activity	No. of Activity organised	Date	Male		Total	Rema rks
	Groundnut						
1.	Field days	2		56	22	78	
2.	Training for farmers	1		20	-	20	
3.	Radio Talk	1					
	Cotton						
1.	Field days	4		85	20	105	
2.	Training for farmers	1		38	4	42	
3.	Radio Talk	1					
4	Training for Extension functionaries						
	Chilli						
1.	Field days	1		23	7	30	
2.	Training for farmers	1		28	4	32	
3.	Radio Talk	1					
4	Training for Extension functionaries						
	Brinjal						
1.	Field days	1		28	12	40	
2.	Training for farmers	1		26	5	31	
3.	Radio Talk	1					
4	Training for Extension functionaries						
	Tomato						
1.	Field days	1		25	10	35	
2.	Training for farmers	1		38	4	42	
3.	Radio Talk	1					
4	Training for Extension functionaries						
	Wheat						
1.	Field days	5		110	32	142	
2.	Training for farmers	2		80	-	80	

3.	Media coverage (Radio Talk)	1				
4.	Training for Extension functionaries					
	Cumin					
1.	Field days	3	52	14	66	
2.	Training for farmers	1	20	-	20	
3.	Media coverage (Radio Talk)	1				
4	Training for Extension functionaries	1	27		27	

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

Name of the implement	crop	No. of farme rs (ha)		parameters	relation to	parameter in technology nstrated	% change in the	Remarks
		IS		/indicators	Demon.	Local check	parameter	
Sprayer	Groundn ut	10	5	Men power	-	-	-	-
Blower	orchard	2	2	Men power				
Rotavator	cotton	10	5	Recycling material				
Chalf- cutter	cotton	10	5	Recycling material				

\* Field efficiency, labour saving etc.

## (ii) Livestock Enterprises

Enter- prise	Breed	No. of farmers	No. of animals, poultry birds etc.	Performance parameters /indicators	paran relat techi	ita on neter in ion to nology nstrated Local check	% change in the parameter	Remarks
-	-	-	-	-	-	-	-	-

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

## (iii) Other Enterprises

Enterprise	Variety/ breed/ Specie	reed/ No. of No. of Inc		Performance parameters	relation to	barameter in technology Instrated	% change in the	Remarks
	s/ others	anners	Onits	/indicators	Demon.	Local check	parameter	
Mushroom	-	-	-	-	-	-	-	-
Apiary	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-
Vermi compost	-	-	-	-	-	-	-	-

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

## A) ON Campus

	No.				No. o	f Partic	ipants			
Thematic Area	of		Others			SC/ST			Total	
mematic Area	Cou rses	Male	Female	Total	Male	Femal e	Total	Male	Femal e	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	3	36	12	48	20	5	25	56	17	73
Resource Conservation Technologies				0			0	0	0	0
Cropping Systems				0			0	0	0	0
Crop Diversification				0			0	0	0	0
Integrated Farming				0			0	0	0	0
Water management	1	13	2	15	3	2	5	16	4	20
Seed production	1	14	7	21	7	2	9	21	9	30
Nursery management				0			0	0	0	0
Integrated Crop Management	1	14	2	16	2	1	3	16	3	19
Fodder production				0			0	0	0	0
Production of organic inputs	1	16	3	19	3	1	4	19	4	23
Total	7	93	26	119	35	11	46	128	37	165
II Horticulture				0			0			0
a) Vegetable Crops				0			0	0	0	0
Production of low volume and high value crops				0			0	0	0	0
Off-season vegetables				0			0	0	0	0
Nursery raising	2	41	14	55	17	9	26	58	23	81
Exotic vegetables like Broccoli				0			0	0	0	0
Export potential vegetables				0			0	0	0	0
Grading and standardization				0			0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)				0			0	0	0	0
b) Fruits				0			0	0	0	0
Training and Pruning				0			0	0	0	0
Layout and Management of Orchards				0			0	0	0	0
Cultivation of Fruit				0			0	0	0	0
Management of young plants/orchards				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Export potential fruits				0			0	0	0	0
Micro irrigation systems of orchards				0			0	0	0	0
Plant propagation techniques				0			0	0	0	0
c) Ornamental Plants				0			0	0	0	0
Nursery Management	2	26	9	35	7	1	8	33	10	43
Management of potted plants				0			0	0	0	0

Export potential of ornamental plants				0			0	0	0	0
Propagation techniques of Ornamental Plants				0			0	0	0	0
d) Plantation crops				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
e) Tuber crops				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
f) Spices				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
g) Medicinal and Aromatic Plants				0			0	0	0	0
Nursery management				0			0	0	0	0
Production and management technology				0			0	0	0	0
Post harvest technology and value addition				0			0	0	0	0
Total	4	67	23	90	24	10	34	91	33	124
III Soil Health and Fertility Management				0			0			0
Soil fertility management	2	27	8	35	11	3	14	38	11	49
Soil and Water Conservation	2	27	10	37	13	5	18	40	15	55
Integrated Nutrient Management				0			0	0	0	0
Production and use of organic inputs				0			0	0	0	0
Management of Problematic soils				0			0	0	0	0
Micro nutrient deficiency in crops				0			0	0	0	0
Nutrient Use Efficiency				0			0	0	0	0
Soil and Water Testing				0			0	0	0	0
Total	4	54	18	72	24	8	32	78	26	104
IV Livestock Production and Management				0			0			0
Dairy Management				0			0	0	0	0
Poultry Management				0			0	0	0	0
Piggery Management				0			0	0	0	0
Rabbit Management				0			0	0	0	0
Disease Management				0			0	0	0	0
Feed management				0			0	0	0	0
Production of quality animal products				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0

V Home Science/Women empowerment				0			0			0
Household food security by kitchen gardening and nutrition gardening				0			0	0	0	0
Design and development of low/minimum cost diet				0			0	0	0	0
Designing and development for high nutrient efficiency diet				0			0	0	0	0
Minimization of nutrient loss in processing				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0
Storage loss minimization techniques				0			0	0	0	0
Value addition	4	0	80	80	0	21	21	0	101	101
Income generation activities for empowerment of rural Women	1	0	14	14	0	3	3	0	17	17
Location specific drudgery reduction technologies				0			0	0	0	0
Rural Crafts	1	0	14	14	0	4	4	0	18	18
Women and child care	1	0	16	16	0	2	2	0	18	18
Total	7	0	124	124	0	30	30	0	154	154
VI Agril. Engineering				0			0			0
Installation and maintenance of micro irrigation systems				0			0	0	0	0
Use of Plastics in farming practices				0			0	0	0	0
Production of small tools and implements				0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Small scale processing and value addition				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection				0			0			0
Integrated Pest Management	10	186	49	235	51	18	69	237	67	304
Integrated Disease Management	7	141	39	180	41	17	58	182	56	238
Bio-control of pests and diseases				0			0	0	0	0
Production of bio control agents and bio pesticides				0			0	0	0	0
Total	17	327	88	415	92	35	127	419	123	542
VIII Fisheries				0			0			0
Integrated fish farming	1	45	6	51	6	4	10	51	10	61
Carp breeding and hatchery management				0			0	0	0	0
Carp fry and fingerling rearing				0			0	0	0	0

Composite fish culture	2	31	7	38	9	3	12	40	10	50
Hatchery management and	4	51	1	50	9	5	14	70	10	50
culture of freshwater prawn				0			0	0	0	0
Breeding and culture of ornamental fishes				0			0	0	0	0
Portable plastic carp				0			0	0	0	0
hatchery Pen culture of fish and										
prawn				0			0	0	0	0
Shrimp farming				0			0	0	0	0
Edible oyster farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Fish processing and value addition				0			0	0	0	0
Total	3	76	13	89	15	7	22	91	20	111
IX Production of Inputs at site	0		10	0	10		0		20	0
Seed Production	2	25	11	36	10	2	12	35	13	48
Planting material production		20	**	0	10		0	0	0	0
Bio-agents production				0			0	0	0	0
Bio-pesticides production				0			0	0	0	0
Bio-fertilizer production				0			0	0	0	0
Vermi-compost production	3	32	26	58	10	10	20	42	36	78
Organic manures production	1	16	10	26	6	4	10	22	14	36
Production of fry and fingerlings				0			0	0	0	0
Production of Bee-colonies and wax sheets				0			0	0	0	0
Small tools and implements				0			0	0	0	0
Production of livestock feed and fodder				0			0	0	0	0
Production of Fish feed				0			0	0	0	0
Total	6	73	47	120	26	16	42	99	63	162
X Capacity Building and Group Dynamics				0			0			0
Leadership development	1	14	8	22	2	0	2	16	8	24
Group dynamics	1	12	5	17	4	1	5	16	6	22
Formation and Management of SHGs	1	11	4	15	12	5	17	23	9	32
Mobilization of social capital				0			0	0	0	0
Entrepreneurial development of farmers/youths				0			0	0	0	0
WTO and IPR issues				0			0	0	0	0
Total	3	37	17	54	18	6	24	55	23	78
XI Agro-forestry				0			0			0
Production technologies				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Farming Systems				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)				0			0			0

TOTAL	51	727	356	1083	234	123	357	061	479	1440
IOTAL	51	121	350	1083	234	123	357	961	479	1440
(B) RURAL YOUTH				0			0			0
Mushroom Production				0			0	0	0	0
Bee-keeping				0			0	0	0	0
				0			0	0	0	0
Integrated farming										
Seed production				0			0	0	0	0
Production of organic inputs	1	0	2	0	4	0	0	0	0	0
Integrated Farming	1	8	3	11	4	0	4	12	3	15
Planting material production				0			0	0	0	0
Vermi-culture				0			0	0	0	0
Sericulture				0			0	0	0	0
Protected cultivation of vegetable crops				0			0	0	0	0
Commercial fruit production				0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Nursery Management of Horticulture crops				0			0	0	0	0
Training and pruning of				0			0	0	0	0
orchards Value addition	6	0	77	77	0	27	27	0	104	104
Production of quality animal	0	0	11		0	21		-		
products				0			0	0	0	0
Dairying				0			0	0	0	0
Sheep and goat rearing				0			0	0	0	0
Quail farming				0			0	0	0	0
Piggery				0			0	0	0	0
Rabbit farming				0			0	0	0	0
Poultry production				0			0	0	0	0
Ornamental fisheries				0			0	0	0	0
Para vets				0			0	0	0	0
Para extension workers				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Freshwater prawn culture				0			0	0	0	0
Shrimp farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Cold water fisheries				0			0	0	0	0
Fish harvest and processing technology				0			0	0	0	0
Fry and fingerling rearing				0			0	0	0	0
Small scale processing				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Tailoring and Stitching				0			0	0	0	0
Rural Crafts	1	12	12	24	3	4	7	15	16	31
TOTAL	8	20	92	112	7	31	38	27	123	150
(C) Extension Personnel				0			0			0

Productivity enhancement in field crops	1	15	2	17	5	0	5	20	2	22
Integrated Pest Management	1	19	1	20	8	0	8	27	1	28
Integrated Nutrient management				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Protected cultivation technology				0			0	0	0	0
Formation and Management of SHGs				0			0	0	0	0
Group Dynamics and farmers organization				0			0	0	0	0
Information networking among farmers				0			0	0	0	0
Capacity building for ICT application				0			0	0	0	0
Care and maintenance of farm machinery and implements				0			0	0	0	0
WTO and IPR issues				0			0	0	0	0
Management in farm animals				0			0	0	0	0
Livestock feed and fodder production				0			0	0	0	0
Household food security				0			0	0	0	0
Women and Child care				0			0	0	0	0
Low cost and nutrient efficient diet designing				0			0	0	0	0
Production and use of organic inputs				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0
Any other (Pl. Specify)				0			0	0	0	0
TOTAL	2	34	3	37	13	0	13	47	3	50
Grand Total	61	781	451	1232	254	154	408	1035	605	1640

## **B) Off Campus**

	No.				No. o	f Partic	ipants			
Thematic Area	of		Others			SC/ST			Total	
Thematic Aica	Cour ses	Male	Female	Total	Male	Femal e	Total	Male	Femal e	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	2	29	7	36	12	5	17	41	12	53
Resource Conservation Technologies				0			0	0	0	0
Cropping Systems				0			0	0	0	0
Crop Diversification	1	45	2	47	8	3	11	53	5	58
Integrated Farming				0			0	0	0	0
Water management	1	18	1	19	9	2	11	27	3	30
Seed production	1	26	10	36	3	2	5	29	12	41
Nursery management				0			0	0	0	0
Integrated Crop Management	1	15	2	17	6	2	8	21	4	25
Fodder production				0			0	0	0	0

Production of organic inputs				0			0	0	0	0
Total	6	133	22	155	38	14	52	171	36	207
II Horticulture	0	100		0	00		0		00	0
a) Vegetable Crops				0			0	0	0	0
Production of low volume										
and high value crops				0			0	0	0	0
Off-season vegetables				0			0	0	0	0
Nursery raising	2	48	9	57	12	4	16	60	13	73
Exotic vegetables like Broccoli				0			0	0	0	0
Export potential vegetables				0			0	0	0	0
Grading and standardization				0			0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)				0			0	0	0	0
b) Fruits				0			0	0	0	0
Training and Pruning				0			0	0	0	0
Layout and Management of Orchards				0			0	0	0	0
Cultivation of Fruit				0			0	0	0	0
Management of young plants/orchards				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Export potential fruits				0			0	0	0	0
Micro irrigation systems of orchards				0			0	0	0	0
Plant propagation techniques				0			0	0	0	0
c) Ornamental Plants				0			0	0	0	0
Nursery Management	1	14	3	17	3	2	5	17	5	22
Management of potted plants				0			0	0	0	0
Export potential of				0			0	0	0	0
ornamental plants				0			0	0	0	0
Propagation techniques of Ornamental Plants				0			0	0	0	0
d) Plantation crops				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
e) Tuber crops				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
f) Spices				0			0	0	0	0
Production and Management technology				0			0	0	0	0
Processing and value addition				0			0	0	0	0
g) Medicinal and Aromatic Plants				0			0	0	0	0
Nursery management				0	<u> </u>		0	0	0	0
Production and management technology				0			0	0	0	0
<i>w</i>		1		1				1	1	1

	-	-					1			
Post harvest technology and value addition				0			0	0	0	0
Total	3	62	12	74	15	6	21	77	18	95
III Soil Health and Fertility Management				0			0			0
Soil fertility management				0			0	0	0	0
Soil and Water Conservation	2	43	14	57	16	5	21	59	19	78
Integrated Nutrient				0			0	0	0	0
Management				0			0	0	0	0
Production and use of organic inputs				0			0	0	0	0
Management of Problematic soils				0			0	0	0	0
Micro nutrient deficiency in crops	1	12	2	14	3	2	5	15	4	19
Nutrient Use Efficiency	1	15	4	19	6	1	7	21	5	26
Soil and Water Testing				0			0	0	0	0
Total	4	70	20	90	25	8	33	95	28	123
IV Livestock Production and Management				0			0			0
Dairy Management				0			0	0	0	0
Poultry Management				0			0	0	0	0
Piggery Management				0			0	0	0	0
Rabbit Management				0			0	0	0	0
Disease Management				0			0	Ű	0	0
Feed management				0			0	0	0	0
Production of quality animal								-		_
products				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment				0			0			0
Household food security by kitchen gardening and nutrition gardening				0			0	0	0	0
Design and development of low/minimum cost diet				0			0	0	0	0
Designing and development for high nutrient efficiency diet				0			0	0	0	0
Minimization of nutrient loss in processing				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0
Storage loss minimization techniques				0			0	0	0	0
Value addition	2	0	44	44	0	13	13	0	57	57
Income generation activities for empowerment of rural Women	1	0	14	14	0	8	8	0	22	22
Location specific drudgery reduction technologies				0			0	0	0	0
Rural Crafts				0			0	0	0	0
Women and child care	2	0	28	28	0	24	24	0	52	52

Total	5	0	86	86	0	45	45	0	131	131
VI Agril. Engineering				0			0			0
Installation and maintenance of micro irrigation systems				0			0	0	0	0
Use of Plastics in farming practices				0			0	0	0	0
Production of small tools and implements				0			0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Small scale processing and value addition				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection				0			0			0
Integrated Pest Management	9	162	32	194	48	16	64	210	48	258
Integrated Disease Management	6	137	18	155	38	8	46	175	26	201
Bio-control of pests and diseases	2	49	5	54	24	8	32	73	13	86
Production of bio control agents and bio pesticides				0			0	0	0	0
Total	17	348	55	403	110	32	142	458	87	545
VIII Fisheries				0			0			0
Integrated fish farming	2	41	9	50	11	6	17	52	15	67
Carp breeding and hatchery management			-	0		-	0	0	0	0
Carp fry and fingerling rearing				0			0	0	0	0
Composite fish culture	1	18	2	20	8	2	10	26	4	30
Hatchery management and culture of freshwater prawn				0			0	0	0	0
Breeding and culture of ornamental fishes				0			0	0	0	0
Portable plastic carp hatchery				0			0	0	0	0
Pen culture of fish and prawn				0			0	0	0	0
Shrimp farming	1	15	3	18	2	0	2	17	3	20
Edible oyster farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Fish processing and value addition				0			0	0	0	0
Total	4	74	14	88	21	8	29	95	22	117
IX Production of Inputs at site				0			0			0
Seed Production	2	37	7	44	18	5	23	55	12	67
Planting material production				0			0	0	0	0
Bio-agents production				0			0	0	0	0
Bio-pesticides production				0			0	0	0	0
Bio-fertilizer production				0			0	0	0	0

	1			1						
Vermi-compost production	2	29	6	35	9	2	11	38	8	46
Organic manures production	2	47	9	56	7	2	9	54	11	65
Production of fry and fingerlings				0			0	0	0	0
Production of Bee-colonies and wax sheets				0			0	0	0	0
Small tools and implements				0			0	0	0	0
Production of livestock feed				0			0	0	0	0
and fodder				_				-		-
Production of Fish feed				0			0	0	0	0
Total	6	113	22	135	34	9	43	147	31	178
X Capacity Building and Group Dynamics				0			0			0
Leadership development	1	28	3	31	8	4	12	36	7	43
Group dynamics	1	34	8	42	5	3	8	39	11	50
Formation and Management of SHGs	1	31	8	39	6	2	8	37	10	47
Mobilization of social capital				0			0	0	0	0
Entrepreneurial development of farmers/youths				0			0	0	0	0
WTO and IPR issues				0			0	0	0	0
Total	3	93	19	112	19	9	28	112	28	140
XI Agro-forestry				0			0			0
Production technologies				0			0	0	0	0
Nursery management				0			0	0	0	0
Integrated Farming Systems				0			0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	-		-	0	-		0	-	-	0
TOTAL	48	893	250	1143	262	131	393	1155	381	1536
(B) RURAL YOUTH				0			0			0
Mushroom Production				0			0	0	0	0
Bee-keeping				0			0	0	0	0
Integrated farming				0			0	0	0	0
Seed production				0			0	0	0	0
Production of organic inputs				0			0	0	0	0
Integrated Farming				0			0	0	0	0
Planting material production				0			0	0	0	0
Vermi-culture				0			0	0	0	0
Sericulture Protected cultivation of				0			0	0	0	0
vegetable crops				0			0	0	0	0
Commercial fruit production				0	1		0	0	0	0
Repair and maintenance of farm machinery and implements				0			0	0	0	0
Nursery Management of Horticulture crops				0			0	0	0	0
Training and pruning of orchards				0			0	0	0	0

				I					I	
Value addition	2	0	32	32	0	16	16	0	48	48
Production of quality animal products				0			0	0	0	0
Dairying				0			0	0	0	0
Sheep and goat rearing				0			0	0	0	0
Quail farming				0			0	0	0	0
Piggery				0			0	0	0	0
Rabbit farming				0			0	0	0	0
Poultry production				0			0	0	0	0
Ornamental fisheries	1	0	0	0	12	4	16	12	4	16
Para vets				0			0	0	0	0
Para extension workers				0			0	0	0	0
Composite fish culture				0			0	0	0	0
Freshwater prawn culture	5	0	0	0	72	14	86	72	14	86
Shrimp farming				0			0	0	0	0
Pearl culture				0			0	0	0	0
Cold water fisheries				0			0	0	0	0
Fish harvest and processing technology				0			0	0	0	0
Fry and fingerling rearing				0			0	0	0	0
Small scale processing				0			0	0	0	0
Post Harvest Technology				0			0	0	0	0
Tailoring and Stitching				0			0	0	0	0
Rural Crafts				0			0	0	0	0
TOTAL	8	0	32	32	84	34	118	84	66	150
(C) Extension Personnel				0			0			0
Productivity enhancement in	1	21	0	01	9	0	9	30	0	30
field crops			-	21		0			-	
Integrated Pest Management	1	23	0	23	8	0	8	31	0	31
Integrated Nutrient management				0			0	0	0	0
Rejuvenation of old orchards				0			0	0	0	0
Protected cultivation technology				0			0	0	0	0
Formation and Management of SHGs				0			0	0	0	0
Group Dynamics and farmers organization				0			0	0	0	0
Information networking among farmers				0			0	0	0	0
Capacity building for ICT application				0			0	0	0	0
Care and maintenance of farm machinery and implements				0			0	0	0	0
WTO and IPR issues				0			0	0	0	0
Management in farm animals				0			0	0	0	0
Livestock feed and fodder	<u> </u>			0			0	0	0	0
production										
Household food security				0			0	0	0	0

Grand Total	58	937	282	1219	363	165	528	1300	447	1747
TOTAL	2	44	0	44	17	0	17	61	0	61
Any other (Pl. Specify)				0			0	0	0	0
Gender mainstreaming through SHGs				0			0	0	0	0
Production and use of organic inputs				0			0	0	0	0
Low cost and nutrient efficient diet designing				0			0	0	0	0
Women and Child care				0			0	0	0	0

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

			Campu	~1	NT	CD /	. ,			
	No.		041		No. o	f Partici			T-+-1	
Thematic Area	of Cour		Others			SC/ST			Total Femal	
	ses	Male	Female	Total	Male	Femal e	Total	Male	e e	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	5	65	19	84	32	10	42	97	29	126
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	1	45	2	47	8	3	11	53	5	58
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Water management	2	31	3	34	12	4	16	43	7	50
Seed production	2	40	17	57	10	4	14	50	21	71
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	2	29	4	33	8	3	11	37	7	44
Fodder production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	1	16	3	19	3	1	4	19	4	23
Total	13	226	48	274	73	25	98	299	73	372
II Horticulture	0	0	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	4	89	23	112	29	13	42	118	36	154
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0	0	0
b) Fruits	0	0	0	0	0	0	0	0	0	0
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0

					1					
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Nursery Management	3	40	12	52	10	3	13	50	15	65
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of				0			0	0	0	0
ornamental plants	0	0	0		0	0				
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops	0	0	0	0	0	0	0	0	0	0
Production and Management	0	0	0		0	0		-		-
technology	0	0	0	0	0	0	0	0	0	0
Processing and value	0	0	0	0	0	0	0	0	0	0
addition	0	0	0	0	0	0	0	0	0	0
e) Tuber crops Production and Management	0	0	0	0	0	0	0	0	0	0
technology	0	0	0	0	0	0	0	0	0	0
Processing and value	0	0	•	0	0	Ū	0	0	0	0
addition	0	0	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0	0	0	0	0
Production and Management	•		0	0			0	0	0	0
technology	0	0	0	-	0	0	-	-	-	-
Processing and value addition	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic				0			0	0	0	0
Plants	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and				0			0	0	0	0
value addition	0	0	0	0	0	0	U	0	0	0
Total	7	129	35	164	39	16	55	168	51	219
III Soil Health and Fertility	0	0	0	0	0	0	0	0	0	0
Management	0	0	0	0	0	0	0	0	0	0
Soil fertility management	2	27	8	35	11	3	14	38	11	49
Soil and Water Conservation	4	70	24	94	29	10	39	99	34	133
Integrated Nutrient				0			0	0	0	0
Management Production and use of	0	0	0		0	0				
organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in				14			5	15	4	19
crops	1	12	2		3	2				
Nutrient Use Efficiency	1	15	4	19	6	1	7	21	5	26
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Total	8	124	38	162	49	16	65	173	54	227
IV Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Dairy Management	0	0	0	0	0	0	0	0	0	0

									1	
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Disease Management	0	0	0	0	0	0	0	0	0	0
Feed management	0	0	0	0	0	0	0	0	0	0
Production of quality animal		-		0	-		0	0	0	0
products	0	0	0	0	0	0	-	-	-	
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women	0	0	0	0	0	0	0	0	0	0
empowerment Household food security by kitchen gardening and	0	0	0	0	0	0	0	0	0	0
nutrition gardening Design and development of	0	0	0	0	0	0	0	0	0	0
low/minimum cost diet	Ŭ	Ŭ	•	Ű	Ŭ	Ű	Ŭ	Ű	Ű	
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	6	0	124	124	0	34	34	0	158	158
Income generation activities for empowerment of rural Women	2	0	28	28	0	11	11	0	39	39
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	14	14	0	4	4	0	18	18
Women and child care	3	0	44	44	0	26	26	0	70	70
Total	12	0	210	210	0	75	75	0	285	285
VI Agril. Engineering	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	19	348	81	429	99	34	133	447	115	562
Integrated Disease Management	13	278	57	335	79	25	104	357	82	439
Bio-control of pests and diseases	2	49	5	54	24	8	32	73	13	86

							1			
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Total	34	675	143	818	202	67	269	877	210	1087
VIII Fisheries	0	0	0	0	0	0	0	0	0	0
Integrated fish farming	3	86	15	101	17	10	27	103	25	128
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	3	49	9	58	17	5	22	66	14	80
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	1	15	3	18	2	0	2	17	3	20
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Total	7	150	27	177	36	15	51	186	42	228
IX Production of Inputs at site	0	0	0	0	0	0	0	0	0	0
Seed Production	4	62	18	80	28	7	35	90	25	115
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	5	61	32	93	19	12	31	80	44	124
Organic manures production	3	63	19	82	13	6	19	76	25	101
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Total	12	186	69	255	60	25	85	246	94	340
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Leadership development	2	42	11	53	10	4	14	52	15	67
Group dynamics	2	46	13	59	9	4	13	55	17	72
Formation and Management of SHGs	2	42	12	54	18	7	25	60	19	79
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0

WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Total	6	130	36	166	37	15	52	167	51	218
XI Agro-forestry	0	0	0	0	0	0	0	0	0	0
Production technologies	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0		0	0		0		0	0
Integrated Farming Systems			0			0		0		
Total	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	99	1620	606	2226	496	254	750	2116	860	2976
	0	0	0	0	0	0	0			
(B) RURAL YOUTH	0	0	0	0	0	0	0			0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Integrated Farming	1	8	3	11	4	0	4	12	3	15
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Value addition	8	0	109	109	0	43	43	0	152	152
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	1	0	0	0	12	4	16	12	4	16
Para vets	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	5	0	0	0	72	14	86	72	14	86
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0

Datewise details of tra								•	1002	5567
Grand Total		1718	733	2451	617	319	936	2335	1052	3387
TOTAL	4	78	3	81	30	0	30	108	3	111
Any other (Pl. Specify)	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	2	42	1	43	16	0	16	58	1	59
Productivity enhancement in field crops	2	36	2	38	14	0	14	50	2	52
(C) Extension Personnel	0	0	0	0	0	0	0			0
	0	0	0	0	0	0	0			
TOTAL	16	20	124	144	91	65	156	111	189	300
Rural Crafts	1	12	12	24	3	4	7	15	16	31
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0

Datewise details of training programmes given in Annexure – IV

## (D) Vocational training programmes for Rural Youth

							N	o. of	Partio	cipan	ts				No. of
			Identified	Dura-	G	ener	al	υ,	SC/ST	Γ		Total		No. of	persons
Crop / Enterprise	Date	Training title*	Thrust Area	tion (days)	Male	Female	Total	Male	Female	Total	Male	Female	Total	persons emp- loyed	empl- oyed else where
Integrated	15- 10- 08	Integrated farming	Mix farming	1	8	3	11	4	0	4	12	3	15	2	1

Vegetable	27-2- 09	Packaging & Preservation of vegetables		1	0	15	15	0	3	3	0	18	18	2	1
Vegetable	3-3- 09	Packaging & Preservation of vegetables	Value addition in vegetable	1	0	14	14	0	5	5	0	19	19	1	0
Fruit	15-4- 09	Preparation of Jam - Jelly & pickles	Value addition in fruits	1	0	10	10	0	4	4	0	14	14	1	0
Fruit	23-4- 09	Preparation of Jam - Jelly & pickles	Value addition in fruits	1	0	14	14	0	3	3	0	17	17	0	0
Fisheries	17-1- 09	Ornamental fisheries	Income generation	1	0	0	0	12	4	16	12	4	16	1	0
Fisheries	6-2- 09	Fresh prawn culture	Income generation	1	0	0	0	21	3	24	21	3	24	2	0
Fisheries	5-3- 09	Fresh prawn culture	Income generation	1	0	0	0	12	2	14	12	2	14	1	0

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

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

SI.			Discipline I hematic area		Dura-					. of pa	rticipa	ants			Sponsoring
No.	Date	Title	Discipline	I nematic area	tion		Other	r		SC/ ST			Total		Agency
		Farmers													
1	14- 10-08	lsopom (Oilseeds)	Pl.Prot	IPM /INM /ICM	1	15	5	20	8	2	10	23	7	30	DAO
2	14- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	19	4	23	5	2	7	24	6	30	DAO
3	15- 10-08	lsopom (Oilseeds)	Pl.Prot	-"-	1	13	4	17	9	3	12	22	7	29	DAO
4	15- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	12	7	19	7	4	11	19	11	30	DAO
5	16- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	14	8	22	6	3	9	20	11	31	DAO
6	16- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	12	6	18	9	4	13	21	10	31	DAO
7	18- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	13	7	20	6	3	9	19	10	29	DAO
8	18- 10-08	lsopom (Oilseeds)	Pl.Prot	-"-	1	13	8	21	9	3	12	22	11	33	DAO
9	20- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	18	1	19	12	2	14	30	3	33	DAO
10	20- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	21	0	21	9	4	13	30	4	34	DAO
11	21- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	22	0	22	8	5	13	30	5	35	DAO
12	21- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	17	0	17	10	6	16	27	6	33	DAO

		-		•								-			
13	22- 10-08	lsopom (Oilseeds)	Pl.Prot	-"-	1	16	0	16	17	7	24	33	7	40	DAO
14	22- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	18	0	18	15	5	20	33	5	38	DAO
15	23- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	13	0	13	8	4	12	21	4	25	DAO
16	23- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	16	0	16	6	5	11	22	5	27	DAO
17	24- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	17	5	22	11	6	17	28	11	39	DAO
18	24- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	14	2	16	7	7	14	21	9	30	DAO
19	27- 10-08	lsopom (Oilseeds)	Pl.Prot	_"_	1	11	1	12	13	3	16	24	4	28	DAO
20	27- 10-08	lsopom (Oilseeds)	Pl.Prot	_"-	1	17	0	17	8	8	16	25	8	33	DAO
21	24- 11-08	National Soil Conservation Saptah	Soil health	INM, Improve Soil	1	48	8	56	22	2	24	70	10	80	DRDA
22	29- 11-08	National Soil Conservation Saptah	Soil health	INM, Improve Soil		35	15	50	12	8	20	47	23	70	DRDA
23	11- 11-08	Crop Production	Crop Prod	IPM /INM /ICM	1	45	8	53	8	3	11	53	11	64	IFFCO
24	22 to 24- 12-08	Crop Production	Crop Prod	IPM /INM /ICM	2	35	0	35	5	0	5	40	0	40	IFFCO
25	16- 12-08	Horticultural crops	Hort	ICM &	1	25	5	30	10	5	15	35	10	45	NHRDF
26	28- 12-08	Kharif crop improvement	Crop Prod	IPM /INM /ICM	1	950	150	1100	350	50	400	1300	200	1500	Pesticide Asso.
27	22- 07-09	Crop Production	Crop Prod	IPM /INM /ICM	1	26	12	38	6	4	10	32	16	48	Mahindra
28	29- 07-09	Land Preparation	Soil health	Land Preparation	1	25	5	30	10	5	15	35	10	45	Mahindra
29	30- 07-09	INM	Soil health	IPM /INM /ICM	1	36	7	43	4	3	7	40	10	50	Mahindra
30	05- 04-09	IPM & ICM of Kharif crops	Pl.Prot	IPM/INM/ ICM	1	14	4	18	6	4	10	20	8	28	Arya Seed
31	31- 01-09	IPM & ICM	Pl.Prot	IPM /INM /ICM	1	45	10	55	15	5	20	60	15	75	BOB
32	21- 05-09	Crop Planning in Kharif	Crop Prod	IPM /INM /ICM	1	800	300	1100	250	150	400	1050	450	1500	DRDA
33	23- 01-09	Organic Farming	Crop Prod	Organic Farming	1	45	15	60	10	5	15	55	20	75	Kisan Sangh
34	03- 02-09	Winter crop productionq	Crop Prod	IPM /INM /ICM	1	15	5	20	12	3	15	27	8	35	Mahindra
35	05-	Precaution in plant protection for kharif crops	Pl.Prot	IPM/ICM/INM	1	34	6	40	46	10	56	80	16	96	FSFC
36	07- 08-09	Cotton	Pl.Prot	IPM/ICM/INM	1	12	4	16	9	2	11	21	6	27	DAO
37	07- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	14	5	19	10	1	11	24	6	30	DAO
L	I	· · ·	l	I		I	I	I	I	1	1	1	I	I	II

_															
38	08- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	15	4	19	6	2	8	21	6	27	DAO
39	08- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	16	6	22	11	2	13	27	8	35	DAO
40	11- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	13	7	20	8	1	9	21	8	29	DAO
41	12- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	21	4	25	14	0	14	35	4	39	DAO
42	12- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	22	2	24	9	0	9	31	2	33	DAO
43	18- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	18	1	19	14	0	14	32	1	33	DAO
44	18- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	12	4	16	11	1	12	23	5	28	DAO
45	19- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	16	0	16	10	2	12	26	2	28	DAO
46	19- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	12	0	12	19	0	19	31	0	31	DAO
47	21- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	18	6	24	11	0	11	29	6	35	DAO
48	21- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	12	5	17	16	2	18	28	7	35	DAO
49	22- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	16	6	22	14	3	17	30	9	39	DAO
50	22- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	15	4	19	12	3	15	27	7	34	DAO
51	25- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	19	3	22	10	4	14	29	7	36	DAO
52	26- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	10	2	12	16	3	19	26	5	31	DAO
53	27- 08-09	Isopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	21	4	25	14	2	16	35	6	41	DAO
54	28- 08-09	Cotton Minimission	Pl.Prot	IPM/ICM/INM	1	14	0	14	16	0	16	30	0	30	DAO
55	29- 08-09	lsopom (Oilseeds)	Pl.Prot	IPM/ICM/INM	1	16	0	16	14	0	14	30	0	30	DAO
56	05- 01-09	Rural Youth Preservation of Fruit & Vegetable	Home Sci	Food Preservation	1	0	10	10	0	5	5	0	15	15	Home Sci. SDAU
		Extension Personnels													
57	15 to 16- 01-09	Ravi pre seasonal training	Home Sci	Increase knowledge of crop production	1	16	0	16	7	0	7	23	0	23	DAO
58	02- 09- 2009	Training for cotton minimission	Pl.Prot	Reduce cost of cultivation	2	23	0	23	12	0	12	35	0	35	DAO
59	11- 08-09	Training on plant protection of saurashtra crops	Pl.Prot	Reduce cost of cultivation	1	35	0	35	12	0	12	47	0	47	DuPont

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

Nature of	No. of				No. c	of Partici	pants			
Extension	Progr-		General			SC / ST			Total	
Programme	ammes	Male	Female	Total	Male	Female	Total	Male	Female	Total

P: 11 P		0.05	110	10.1		4.0	67	0.5.0	400	101
Field Day	25	305	119	424	48	19	67	353	138	491
Kisan Mela	6	2520	980	3500	792	308	1100	3312	1288	4600
Kisan Ghosthi	17	1306	509	1815	387	151	538	1693	660	2353
Exhibition	2	648	252	900	216	84	300	864	336	1200
Film Show		0	0		0	0		0	0	0
Method Demonstrations		0	0		0	0		0	0	0
Farmers Seminar	124	1439	560	1999	320	125	445	1759	685	2444
Workshop		0	0		0	0		0	0	0
Group meetings		0	0		0	0		0	0	0
Lectures delivered as resource persons	87	7179	2793	9972	1195	466	1661	8374	3259	11633
Newspaper coverage	9	0	0		0	0		0	0	0
Radio talks	4	0	0		0	0		0	0	0
TV talks	6	0	0		0	0		0	0	0
Popular articles		0	0		0	0		0	0	0
Extension Literature	10	7819	3041	10860	1058	412	1470	8877	3453	12330
Advisory Services	16	0	0		0	0		0	0	0
Scientific visit to farmers field	211	222	87	309	45	18	63	267	105	372
Farmers visit to KVK	101	1039	405	1444	229	90	319	1268	495	1763
Diagnostic visits		0	0		0	0		0	0	0
Exposure visits		0	0		0	0		0	0	0
Ex-trainees Sammelan		0	0		0	0		0	0	0
Soil health Camp		0	0		0	0		0	0	0
Animal Health		0	0		0	0		0	0	0
Camp		_	-						-	-
Agri mobile clinic	4308	3160	0	3160	547	0	547	3707	0	3707
Soil test campaigns		0	0		0	0		0	0	0
Farm Science Club Conveners meet		0	0		0	0		0	0	0
Self Help Group Conveners meetings		0	0		0	0		0	0	0
Mahila Mandals Conveners meetings		0	0		0	0		0	0	0
Celebration of important days (specify)		0	0		0	0		0	0	0
Female groups	7		55	55	0	30	30	0	85	85
Night Meetting	15	255	100	355	48	19	67	303	119	422
Crop Shibir/Farmer shibir	68	1126	438	1564	128	50	178	1254	488	1742
Collobrative training	45	956	372	1328	276	108	384	1232	480	1712

Total	5067	28082	9754	37836	5315	1891	7206	33397	11645	45042
Any Other (Specify)		0	0		0	0		0	0	0
Functionaries										
Training to Extension	6	108	43	151	26	11	37	134	54	188

#### 3.5 Production and supply of Technological products (2007-08) SEED MATERIALS

S1. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Wheat	GW-366	400.00	945012.5	
OILSEEDS	Groundnut	GG-5	58.93	31406	100
	Groundnut	GG-6	3.23	6850	3
	Groundnut	TPG-41	11.03	18407	2
	Groundnut	TG-37A	3.32	6636	2
	Groundnut	GG-16	3.07	14070	5
PULSES					
VEGETABLES					
OTHERS (Specify)	Vermi culture	Icenea fatida	0.26	5200	6
	Vermi compost		91.25	27375	

#### SUMMARY

S1. No.	Сгор	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	400	945013	
2	OILSEEDS	79.58	77369	112
3	PULSES			
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS (Vermi Culture)	0.26	5200	6
	TOTAL	479.84	1027582	118

#### PLANTING MATERIALS

			Quantity	Value (Rs.)		<b>Provided</b> to	
S1. No.	Сгор	Variety	(Nos.)	Per plant	Total	No. of Farmers	
FRUITS							
SPICES							

VEGETABLES			
FOREST SPECIES			
ORNAMENTAL CROPS			
PLANTATION CROPS			
Others (specify)			

#### SUMMARY

S1. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS			
2	SPICES			
3	VEGETABLES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL			

#### **BIO PRODUCTS**

S1. No.	Product Name	Species	Quantity		Valu	Provided to No.
			No	(kg)	е (Rs.)	of Farmers
BIOAGENTS	-	-	-	-	-	-
BIOFERTILIZERS	Rhizobium culture					
BIO PESTICIDES	Trichoderma					
SUMMARY						

S1.		0	Qu	Quantity		Provided to No.	
No.	Product Name	Species	No	(kg)	(Rs.)	of Farmers	
1	BIOAGENTS						
2	BIO FERTILIZERS						
3	BIO PESTICIDE						
	TOTAL						

## LIVESTOCK

S1. No.	Туре	Breed	Qua	ntity	Value	Provided to No.
			(Nos	Kgs	(Rs.)	of Farmers
Cattle	-	-	-	-	-	-
SHEEP AND GOAT	-	-	-	-	-	-
POULTRY	-	-	-	-	-	-
FISHERIES	-	-	-	-	-	-
Others (Specify)	-	-	-	-	-	-

#### SUMMARY

S1.	Turne	Drood	<b>Breed</b> Quantity		Value	Provided to No.	
No.	Туре	Бгеец	Nos	Kgs	(Rs.)	of Farmers	
1	CATTLE	-	-	-	-	-	
2	SHEEP & GOAT	-	-	-	-	-	

3	POULTRY	-	-	-	-	-
4	FISHERIES	-	-	-	-	-
5	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 news letter which is periodically

## (B) Literature developed/published

Item	Title	Author	Num ber
Research papers	<ul> <li>Paper presented in seminar on "Participatory approach and Rural Trends in Rural Development" to be held on 31<sup>st</sup> August, 2009 at Junagadh Agricultural University, Junagadh</li> <li>1. Using Participatory Approach for Testing Integrated Disease Management in Groundnut.</li> </ul>	K. P. Baraiya, A.K. Baraiya, N. B. Jadav and R. L. Savaliya	
	<b>2.</b> Strategic and Innovative Use of ICT Tools in Transfer of Technology	N.B. Jadav, P. S. Gorfad and P.R. Kanani	
	<b>3.</b> Empowering Farmers by Using Kisan Blog	V.J. Zinzala, N.B. Jadav and P.S. Gorfad	
	<b>4.</b> Recent Trends in Agricultural Extension: Using Information and Communication Technology	P. S. Gorfad, N.B. Jadav and P.R. Kanani	
Technical reports	Monthly Progress Report, Quarterly Progress Report, Half-yearly Progress Report, Annual Report, ZREAC Report, AGRESCO Report	KVK, JAU, Jamnagar	
Popular article	GORFAD, P. S. <b>JADAV, N.B. and</b> ZIZALA, V.J. (2009) Krishi Vigyan Kendra – Krishikar ni divadandi. " Krishi Jivan" April – 2009 Vol - IX		
Leaflet/ folders			
1.	Khadya Padarthonu Pariraxan	Shri Anjana M. Kanani & Dr. J.N. Nariya	
2.	Vividh Prakarna Biscuit	Shri Anjana M. Kanani & Dr. J.N. Nariya	
3.	Vividh Prakarna Athana	Shri Anjana M. Kanani & Dr. J.N. Nariya	
4.	Sanagna Rash Dharavta Kheti Juthni Rachna, Udesho, Kaydo Ane Vyavastha	Dr. N.B. Jadav & Dr. J.N. Nariya	

5.	Rasayanik Khataroma Poshaktatvonu Praman (%), Dar Ane Teno Karyaxam Upyog	Dr. V.J. Zizala & Dr. J.N. Nariya
6.	Xariya Ane Amliya Jamin Vara Vistaro	Dr. V.J. Zizala
		& Dr. J.N. Nariya
7.	Padtar Jaminme Jinga Uchcher Dwara Arthik Saddharta	Dr. J.N. Thaker R.P. Vavaiya, Dr. J.N. Nariya
8.	Kapasma Chusiya Jivatonu Niyantran	Dr. K.P. Baraiya Dr. J.N. Nariya
9.	Jiruni Vaigyanik Kheti Padhdhti	Dr. K.P. Baraiya Dr. J.N. Nariya
10.	Magphalima Jivat Niyantran Vyavastha	Dr. K.P. Baraiya Dr. J.N. Nariya
11.	Sangrahel Magphalini Kalji	Dr. K.P. Baraiya Dr. J.N. Nariya
12.	Magphalima Rog Niiyantran Vyavastha	Dr. K.P. Baraiya Dr. J.N. Nariya
13.	Kapasma Rog Niyntran Vyavastha	Dr. K.P. Baraiya Dr. J.N. Nariya
14.	Kapasma Sankalit Jivat Niyantran	Dr. K.P. Baraiya Dr. J.N. Nariya
15.	Divelani Vaignanik Kheti	Dr. K.P. Baraiya Dr. J.N. Nariya
16.	Magphalina thadno Sado ane tenu Niyantran	Dr. K.P. Baraiya Dr. J.N. Nariya
17.	Kapasma Mealybugnu Sankalit Niyantran	Dr. K. P. Baraiya Dr. J. N. Nariya

N.B. :- Please enclose a copy of each. In case of literature prepared in local language please indicate the title in English

## (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)

## 3.7.1 Adoption of IPM in cotton for Mealybug & Sucking Pests

- 1. Name of farmer : Shri Kishorbhai Laljibhai Pedhadiya
- 2. Name of the village : Sumari, Ta.:- Jamnagar
- 3. District : Jamnagar Mo.:-9925410324

Though groundnut is a major crop of this district in *kharif* season, some of the farmers having irrigation facilities are also growing cotton. Cotton attacked by numbers of insect-pests, which causes heavy losses. Farmers are using various toxic insecticides for the control of cotton pests. Indiscriminate uses of insecticides adversely affect the agroeco system. IPM is only the solution to maintain the natural balance.

Mr. Kishorbhai Laljibhai Pedhadiya is a progressive farmer. Since last three year, he visits KVK to get advice for the planning of plant protection schedule for cotton pests regularly. he adopted some of the IPM component as listed below.

- 1. Seed treatment with Imidachloprid 70 W.S. @ 7.5 gr. /kg seed.
- 2. Growing Castor and marigold plant surrounding cotton field as a trap crop.
- 3. One row of maize after every 10 row of cotton crop for conservation of Chrysoperla and Coccinelidae (Lady bird beetle)
- 4. Pheromone traps @ 6 trap/ha for *Helicoverpa armigera*. And 6 trap/ha for *Spodoptera litura*.
- 5. Spraying of 450 LE HNPV during evening period.
- 6. Spraying of Beauveria bassiana @ 2.5 kg/ha
- 7. Spraying of neem based botanical pesticide.
- 8. Need base application of safer insecticides like Endosulfan @ 0.07 per cent or Phosalone 0.05 per cent for the control of bollworm of cotton.
- 9. Application of Methyl parathion 2 % dust along with boudnries and remove shrubs from there for the management of Mealybug

According to Kishorbhai, he was applying 12 to 15 sprays of various insecticides for the control of cotton pests. The total cost of plant protection was approximately 15 to 18 thousand rupees per hectare every years. IPM components suggested to him. He required only five sprays of Endosulfan 0.07 per cent, Imidacloprid, and Phosalone 0.05 per cent alternatively, for satisfactory control of pests and to obtain good yield. Thus, total cost of plant protection alongwith IPM components was approximately Rs. 5600/-. Thus, by adopting IPM in cotton he saved more than 10,000/- rupees.

## 3.7.2 Adoption of disease resistant variety of cumin

- 1. Name of farmer : Mr. Amarshibhai Dhanjibhai Dalsaniya
- 2. Name of the village : Lakhtar Ta.:- Jodia
- 3. District : Jamnagar. Mo. 9979742105

Shri Amarshibhai Dhanjibhai Dalsaniya is a progressive farmer of Lakhtar village. He is regular cultivator of the cumin. Mostly farmers of this region are using Gujarat Cumin-2 which is susceptible to blight disease. Through KVK one FLD of Gujarat Cumin-3 variety was allotted to shri Hasmukh bhai during *rabi* 2007-08. This variety performed better against the local one. During last *rabi* season i. e. 2007-08 he cultivated this variety in about three hectare of land due to heavy rainfall during last kharif season there was continuous humid cloudy weather throughout the season. Due to humid condition, most of the cumin field infected by *Alternaria bernsi* but the field of shri Amarshibhai escaped from the disease, because of adoption of disease resistant variety and irrigation management. During off-campus training cumin cultivation technology and package and practices was given to the farmers. During the crop growth period necessarily other information also given to the farmers. Due to adoption of the practices, the crop remain free from blight diseases and.

## 3.7.3 Success Story : On Vermiculture

Name:	Sri Kantibhai Bhagvanjibhai Ajudia
Village	Makvana
District & Taluka	Jamnagar
Mobile No.	09824218489



The name of Shri Kantibhai Ajudia of village Makvana of halar area in Jamnagar District is well known as a most successful progressive farmer of the District. By dint of perseverance hard working, intelligent farm planning and management, ably supported by trainings, study tours outside the state sponsored by the ATMA and has attained this status due to assistances received from the ATMA, KVK, JAU, Jamnagar. KVK, JAU, Jamnagar



Born in a typical poverty striken farm family, Sri Ajudia is the son of Bhagvanjibhai Ajudia. He used to help his father in farming activities since his school days. He could not prosecute studies after S.S.C due to poverty. He took full control of family land since 1985 and since then he never looked back. Step by step he extended in his intensive farming activities with expected returns and visible economic upliftment. Today Sri Kantibhai Ajudia is the pride owner of 45 *bighas* of agricultural land. He is well supported by his family members in farming activities. At present the other farmers are visiting his farm to know he used scientific crop production technology for higher production like groundnut (4 quintals/*bigha*), cotton (9 quintals/bigha) and wheat (13 quintals/bigha). He is in position to achieve this by frequent visit to KVK and remained in constant touch with expertise of KVK, JAU, Jamanagar.

He was adjudged best farmer by the GSFC and was *sanmanit* with certificate. He has also delivered the radio talk in *Akashavani* and guidance to many farmers. He rewarded several times by different organisations as a mark of recognition of his successful farming carrier.

Sri Kantibhai Ajudia, has started small-scale vermicompost unit on his farm in year 2001-2002 and gained sufficient experience and underwent training in KVK, JAU, Jamnagar. He is earning Rs. 80,000 and Rs. 40,000 per annum by saling vermicompost and verms, respectively. Now he is extending his unit on large scale with technical support from KVK, JAU, Jamangar .



The success story of Sri Kantibhai Ajudia is an eye-opener to present educated youth for adopting farming as a means of livelihood.

## 3.7.4 Adoption tomato growing & spread in taluka

- 1. Name of farmer : Mr.Hirabhai Veljibhai Nakum Mo.- 9824818346
- 2. Name of the village : Dharampur Ta .:- Jamjodhpur
- 3. District : Jamnagar.

Shri Hirabhai was 4<sup>th</sup> standard literate traditional farmer of the Dharampur (Ta.:-Jamkhambhadia). He cames in contact of Krishi Vigyan Kendra with the help of Mr. Vajshibhai Chavada (Vajashibhai is Gramsevek of Jamkhambhadia). Before, KVK Contact he was growing groundnut and littlel area of vegetables like Chilli, brinjal. After training by KVK he appreciated for farming of vegetable. He growing Tomato in 2 hactor with *DRIP* irrigation system. He get Rs. 3 lakhs in single season. He spread this Micro irrigation system technology in taluka and now a days area of toamato becomes 1500 ha in Jamkhambhadia Taluka. Thus, Jamkhambhadia Taluka becomes leader of Tomato due to "TOMATO KING Mr. Hirabhai"

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

Farmers to farmer dissemination Distributed printed leaflet through farmers Farm School on farmer's field

# 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.		ITK Practiced	Purpose of ITK
1	Groundnut, castor	Intercropping of Groundnut – Castor	For more utilization of land
	Cotton, sesamum	Intercropping of sesamum - cotton	Reduction of risk in dry farming area
	Maize, cotton, groundnut		Sown maize as inter cropping for increase population of natural eneries which reduce pest population
	Groundnut, cotton	Motorcycle operated sprayer	It is very cheaper for man power

## 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

- 1. Rampar,
- 2. Navi-Pipar
- 3. Butavadar
- 4. Kalawad
- 5. Nani-Vavadi
- 6. Sanala
- 7. Hodisang
- 8. Gokulpur
- 9. Ramnagar

- 10. Madhavpur
- 11. Beraja
- 12. Viramdad
- 13. Dharampur
- 14. Haripar
- 15. Sidhdhpur
- 16. Harshadpur
- 17. Juvangadh
- 18. Vadatra
- 19. Shaktinagar
- 20. Kalyanpur
- 21. Kanuda
- 22. Jakasia
- 23. Bhinda
- 24. Datrana
- ii. No. of farm families selected : 625
- iii. No. of survey/PRA conducted : 1

: 2005-06

## 3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab

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

S1. 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	-
9	Refrigerator	1	16772
10	Oven	1	30550
11	Hot plate	1	
	Total	11	472964

## 3. Details of samples analyzed so far

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	324	324	47	2350
Water Samples	288	288	42	1800
Total	612	612	89	4150

:

:

## 4. Details of samples analyzed during 2007-08

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	25	25	12	
Water Samples	18	18	12	
Total	43	43	24	

# 4.0 IMPACT

# 4.1. Impact of KVK activities (Not to be restricted for reporting period).

S1.	Name of Specific	No. of	% of	Change in Income		
No.	technology/ Skill transferred	particip ants	Adoption	Before Training (Rs./ Unit)	After Training (Rs./ Unit)	
1.	Vermi compost Unit	95	16	Nil	Initial development of vermicompost unit	
2.	Jam-Jelly, Pickle preparation	40	8	Nil	Initial development	
3.	Bekery items	18	4	Nil	Initial development	
4.	Inland fisheries	19	8	Nil	Initial development	

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

#### 4.2. Cases of large scale adoption (Please furnish detailed information for each case)

Sr. No.		Item	Prior to KVK activities	Post KVK activities
1	Change in c	cropping intensity	Mono crop system	30% increase & Mix cropping system
2	Change in p	productivity of		
	Cereal	: Pearlmillet	1875 kg/ha yield	2140 kg/ha yield
		: Wheat	3610 kg/ha yield	5240 kg/ha yield
	Oilseeds	: Groundnut	392 kg/ha yield	1260 kg/ha yield
		: Castor	2468 kg/ha yield	2860 kg/ha yield
		: Sesamum	146 kg/ha yield	560 kg/ha yield
		: Mustard	1502 kg/ha yield	1790 kg/ha yield
	Pulses	: Green gram	940 kg/ha yield	1790 kg/ha yield
		: Chickpea	918 kg/ha yield	1640 kg/ha yield
	Others	: Cotton	2275 kg/ha yield	3250 kg/ha yield
		: cumin	791 kg/ha yield	920 kg/ha yield
3	Change in in	rrigation areas	557 ha	850 ha
4	Use of H varieties)	IYV (High yielding	Local varieties, old hybrids	New developed varieties
5	Use of fertili	izers (NPK)	Over use of Fertilizers	Balance or recommended fertilizer doses
6	Use of pesti	cides/Fungicides	Injudicious use of pesticides	Judicious use as per recommendation and information
7	Use of FYM	& other bio-fertilizer		Use FYM, vermicompost, decomposed FYM use, some farmers use azotobactor & phosphobacterium cultures for seed treatment
8	Total diesel	consumption (litres)	15000 ltrs.	18000 ltrs.

9	Total electricity consumption (Kwh)	4250 kwh	5275 kwh
10	Number of tractors/ machinery	222	450
11	Change in environment & ecology		
	a. No. of trees possessed by the farmers	10110	20350
	b. Wastelands regenerated (ha)	5-4 water shed (ponds)	20-25 small & large ponds in adopted villages
12	Change in alternative energy/ nutrient use pattern	Not use of solar light	Use of solar light, vermi compost, castor cakes
13	Employment generated	Nil	Vermi compost unit, vegetable production
14	Change in economic indicators		
	a. Net returns (Rs./ha)	2000-3000	3500 -4000

# 4.3 Details of impact analysis of KVK activities carried out during the reporting period

- Group discussion
- Filling up research based questionnaires
- Knowledge test (Interview schedule)

# 4.4 IMPACT OF KRISHI VIGYAN KENDRA IN OPERATIONAL AREA

Krishi Vigyan Kendra, Jamnagar started in 2003-04. After the establishment of KVK at Jamnagar, year 2003-04 to 2007-08 KVK selected 10 villages of Jamnagar districts. Among them five villages are rainfed and remaining villages are irrigated. The various activities were planned according to the thrust area on basis of PRA survey. During five year, KVK conducted FLDs in Kharif and rabi to test the yield potentiality of newly released varieties of field crops, need based training programe on various activities, field days and F-S interaction were done in ten KVK villages.

Sr. No.	Village	Farming situation	Total population	Total no. of farmers	Total no. of selected farmers
1	Mokhana	Rainfed	1200	125	7
2	Knonja	Rainfed	250	55	6
3	Chandraga	Rainfed	600	200	10
4	Makwana	Rainfed	300	60	7
5	Dhandha	Rainfed	455	200	10
6	Amara	Irrigated	6000	500	18
7	Jivapar	Irrigated	3500	250	16
8	Dodhiya	Irrigated	1600	250	16
9	Balambhadi	Irrigated	575	100	8
10	Bed	Irrigated	11000	1200	22
Tota	l		25480	2940	120

Table 1 Detail status and selected respondents

\* Crop wise impact of all the kvk villages is given in Annexure-VI

With a view to measure the overall impact of Krishi Vigyan Kendra on farmers of ten villages, questionnaires were prepared in local language in two parts, according to ZC office suggestions. 1) Extension intervention indicator 2) Technological intervention indicator. Basic information of selected villages and proportionately selection of respondents are given in Table No. 1. It was considered worthwhile to study entitled "Impact of KVK on selected villages" with following objective.

- 1. To study the socio-economic profile of selected respondents
- 2. To assess the impact of extension indicator
- 3. To study the technological impact of KVK activities.

# Socio economic profile of the respondents

Considering the objectives of the study, socio-economic profile of the respondents viz, age, education, family member, size of land holding, social participation, extension contact and farm mechanization index were worked out of selected KVKs respondents. Selected characteristics are narrate in Table no. 2 Table : 2 Distribution of the respondents according to their characteristics

Sr No	Socio-economic characteristics		Selected respondents (n=120)			
NO		Frequency	Per cent			
1	2	3	4			
1	Age					
	Young age (up to 35 year)	32	26.67			
	Middle age (36 to 50 year)	52	43.33			
	Old age (above 50 year)	36	30.00			
2	Education					
	Illiterate	13	10.83			
	Low education (1 <sup>st</sup> to 7 <sup>th</sup> std.)	50	41.67			
	Medium education ( 8 <sup>th</sup> to 10 <sup>th</sup> std)	32	26.67			
	High education (above 10 <sup>th</sup> std)	25	20.83			
3	Size of family					
	Necular family (> 5 member)	34	28.33			
	Joint family ( < 5 member )	86	71.67			
4	Social Participation					
	Low social participation (>2.14 score)	24	20.00			
	Medium social participation (2.14 to 7.14 score)	68	56.67			
	High social participation (<7.14 score)	28	23.33			

5	Extension Participation		
	Low extension participation (> 3.25 score )	25	20.83
	Medium extension participation (3.25 to 10.40	62	
	score)		51.67
	High extension participation (<10.40 score)	33	27.50
6	Size of land holding		
	Small holding (up to 2 ha score)	42	35.00
	Medium holding (>2 to 4 ha score)	49	40.83
	Large holding (above 4 ha score)	29	24.17
7	Farm mechanization index		
	Small holding (less than 1.76 score)	18	15.00
	Medium holding (1.76 to 7.58 score)	79	65.83
	Large holding (above 7.5 score )	23	19.17

The data presented in table 2.1 reveled that maximum numbers of the respondents were of 36 to 50 years of age group. i.e. 52.00 per cent followed by old age group 30.00 per cent. In case of education, majority (41.67 per cent) of respondents were educated up to seven standards followed by 26.67 respondents were in medium education. Majority (71.67 per cent) of the respondents were belonged to joint family, followed by necular family (28.33 per cent).

The data presented in table revealed that more than half (56.67 per cent) of the respondents had medium social participation followed by high (23.33 per cent) and low (20.00 per cent) social participation. In case of extension participation, 51.67 per cent of the respondents had medium extension participation, whereas 27.50 per cent and 20.83 per cent of them had high and low extension participation respectively.

It is quit clear from table that 40.83 per cent respondents were having 2 to 4 ha of land holding and having 35.00 per cent having more than 4 ha of land holding while only 24.17 per cent respondents having up to 2 ha of land holding. Whereas 65.83 per cent of the farmers had medium farm mechanization index followed by 19.17 per cent respondents had high farm mechanization index.

# Impact of extension indicator

In view to ascertain impact of extension indicator, questionnaire made on five years previous experience of the farmers and present experiences of the farmers. The percentage worked out and percent increase should be the growth of the farmers after the KVK activities in entire village. The data should be given in

following table.

							N = 120
_		Impac	t of Krish				
Sr. No	Extension	Befo	re	Afte	er	Differenc	Ranke
	indicator	Frequenc y	Percen t	Frequenc y	Percen t	e	đ
1	Gain in knowledge about technology and package of practices	38	31.67	82	68.33	36.67	IV
2	Extent of awareness	30	25.00	90	75.00	50.00	III
3	Change in attitude	26	21.67	96	80.00	58.33	III
4	Improvement in work performance / skill	55	45.83	65	54.17	8.33	VI
5	Extent of spread of technology (Farertrise / Arcatrise)	24	20.00	96	80.00	60.00	Ι
6	Increase in SHGs / FIGs	48	40.00	72	60.00	20.00	VI
7	Formation / establishmen t of cooperative	58	48.33	62	51.67	3.33	VII

Table	:	3	Distribution	of	the	respondents	according	to	its	extension
interv	en	tio	n							

Other extension indicator, the difference is less than 50.00 per cent whereas gain in knowledge about technology and package of practices (36.67 %) and increase in SHGs /CIGs (20.00 %). The least difference is in casse of improvement in work performance and skill (8.33 %) and formation and establishment of cooperative (3.33 %).

From above discussion, it could be concluded that spread of technology (ranked first), change in attitude (ranked second), extent of awarness

The perusal of data presented in table 3 revelead that more than 50.00 per cent difference in case of spread of technology (60.00 %), change in attitude (58.33 %) and extent of awarness (50.00 %).

(ranked third), gain in knowledge (ranked fourth) and increase in SHGs/CIgs (ranked fifth).

# Impact of technological indicator

To find out the technological impact, the following 13 technologies were tested, amongst three i.e. introduction of new verities, increase in yield /production and increase in area were tested in four major crops of our district which is cotton, groundnut, castor and wheat.

0	<b>M</b> 1 1 1 1	Impac	dra				
Sr. No.	Technological indicator	Befo	re	After Diffe- rence Ranke		Ranked	
		Frequency	Percent	Frequency	Percent	Tence	
1	Introduction of new verities	43.25	36.04	76.75	63.96	27.92	III
	Cotton	20	16.67	100	83.33	66.67	
	Groundnut	52	43.33	68	56.67	13.33	
	Castor	56	46.67	64	53.33	6.67	
	Wheat	45	37.50	75	62.50	25.00	
2	Increase in yield / productivity	51	42.50	69	57.50	15.00	VI
	Cotton	35	29.17	85	70.83	41.67	
	Groundnut	58	48.33	62	51.67	3.33	
	Castor	55	45.83	65	54.17	8.33	
	Wheat	56	46.67	64	53.33	6.67	
3	Increase in area	53.5	44.58	66.5	55.42	10.83	VII
	Cotton	38	31.67	82	68.33	36.67	
	Groundnut	63	52.50	57	47.50	-5.00	
	Castor	59	49.17	61	50.83	1.67	
	Wheat	54	45.00	66	55.00	10.00	
4	Increase in production	15	12.50	85	70.83	58.33	I
5	Extent of adoption	44	36.67	76	63.33	26.67	IV
6	Increase in income	42	35.00	78	65.00	30.00	II
7	Generation of employment	56	46.67	64	53.33	6.67	VIII
8	Expansion of an enterprise	58	48.33	62	51.67	3.33	IX
9	Introduction of new enterprise	59	49.17	61	50.83	1.67	X
10	Increase in marketable farm produce	59	49.17	61	50.83	1.67	x
11	Creation of infrastructure	51	42.50	69	57.50	15.00	VI

Table 4. Distribution of farmers according to his technological indicator

12	Opening of farm school	58	48.33	62	51.67	3.33	IX
13	Decrease in yield gaps	50	41.67	70	58.337	16.67	v

It is cleared from above mentioned table 4 that the highest difference (58.33 %) observed in increase in production, increase in income (30.00 per cent), introduction of new varieties (27.92 per cent), extent of adoption (26.67 per cent) and 16.67 per cent difference is in decrease in yield gaps.

While remaining technological indicator has less difference observed like same difference (15.00 per cent ) observed in increase in yield / productivity and in creation of infrastructure.

Least difference observed in case of generation of employment (6.67 per cent), opening of farm school (3.33 per cent), expansion of an enterprise (3.33 per cent) and 1.67 per cent difference observed in introduction of new enterprise and increase marketable farm produce.

From above discussion it can be concluded that increase in production (ranked first), increase in income (ranked second), introduction of new verities (ranked third), extent of adoption (ranked fourth) and decrease in yield gaps (ranked fifth).

The reason for increase in production and income of respondents is due to constant concentration and contact of subject matter specialist to the farmers vis versa. Farmers could be solved the problem regarding plant protection and crop production by direct of the specialist. Introduction of new varieties ranked third because new and yield superiority variety is given to farmers as front line demonstration and most of the farmers grow Bt. Cotton variety.

Sr.No.	Practices	Year 2003	Year 2008	Per cent increase
a)	Farm mechanization			
1	Tractor (No.)	45	366	87.70
2	Thresher (No.)	49	91	46.15
3	Seed drill (No.)	62	85	27.06
4	Sprayer (No.)	1725	1975	12.66
5	Seed cum ferti. Drill (No)	22	45	51.11
6	Drip / Sprikler irrigation set (Ha)	2	18	88.89
b)	Integrated nutrient management			
1	FYM (t)	7250	7560	4.10

Impact of farm mechanization / IPM / INM etc.

2	Urea (t)	311	1287	75.84
3	DAP (t)	67	236	71.61
4	SSP (t)	32	73	56.16
5	Potash (t)	2	51	96.08
6	Mineral mix (kg)	300	2441	87.71
7	Vermi compst (t)	4	8	50.00
8	Gypsum / Sulpher (t)	2	519	99.61
c)	IPM			
1	Use of Trichoderma (kg)	0	1600	100.00
2	Pheromen Trap (no)	0	12	100.00
3	NPV (no)	0	4	100.00
4	Neem oil (ltr)	98	1125	91.29
5	Bio pesticides	45	875	94.86

It can be concluded from above Table that in case of farm mechanization the highest per cent increase in Drip / Sprinkler irrigation set (ha) (88.89 per cent), tractor (87.70 per cent), Seed cum ferti drill (51.11 per cent). Least percent increase in case of spraying pump (12.66 per cent). Use of drip and sprinkler ranked first because of increase in area of cotton and in cotton more feasibility. In addition, KVK /GGRC and GOI more emphasized to use drip irrigation system.

In integrated nutrient management the highest percent increase in use of Gypsum (99.61 per cent), use of potash (96.08 per cent) and use of mineral mixture (87.71 per cent). Per cent use of increase use of Urea, DAP and SSP is accordance to increase in area of rabi crops and summer crops. While least percent increase in case use of FYM (4.10 per cent).

In IPM component, highest percent increase in use of trichoderma, NPV and pheromen trap (100.00 per cent). This is due to the constant contact of KVK officer to the farmers by regular visit, mobile and distribution of trichoderma from the centre in addition to farmers are visited KVK in mode of training, problem and for new technology guidance.

Increase and decrease of productivity of major crops KVK villages in last five year (year 2003-2007)

ycai		(year 2003-2007)				
Sr. No.	Crop	Productivity Difference (Kg/ha)	Rank			
1	Groundnut	-6.90	IX			
2	Cotton	57.70	V			
3	Castor	75.29	III			
4	Sesamum	78.60	II			
5	Wheat	130.85	Ι			
6	Mustard	75.00	IV			
7	Gram	48.50	VII			

8	Groundnut (summer)	36.75	VIII
9	Green gram (summer)	54.25	VI

From above table, it is clear that more than 50 kg/ha productivity increased in crop viz, wheat (130.85 kg/ha), sesamum (78.60 kg/ha), castor (75.29 kg/ha), Mustard (75.00 kg/ha), cotton (57.70 kg/ha) and Green gram (summer) (54.25 kg/ha).

While, less than 50 kg/ha productivity increased in crop viz, gram (48.50 kg/ha) and groundnut (summer) 36.75 kg/ha.

In case of groundnut *Kharif*, productivity is decreased about 6.90 kg/ha in last five years. This is due to the heavy attack of stem rot disease in groundnut.

From above table it is concluded that wheat (ranked first), sesamum (ranked second), castor (ranked third), mustard (ranked fourth), cotton (ranked fifth), greengram (sixth), gram (seventh), groundnut (summer ) (ranked eighth) and groundnut Kharif (ranked ninth )

# **5.0 LINKAGES**

Sr. No.	Name of organization	Nature of linkage					
Α	Junagadh Agricultural University						
1	College of Agriculture, Junagadh.	Impart training on Agril. aspects.					
2	College of Agril. Engg, Junagadh	Impart training on Engg. aspects					
3	Spices Research station, Jagudan	Imparrt training on spices crops and supply of seeds for FLDs					
4	Pulse Research Station, Junagadh	Resource in imparting collaborative training to extension functionaries on ODV in pulses. Supply of seeds for FLDs					
5	Pulse Research Station, S.K. Nagar	Supply of seeds for crop museum					
6	Cotton Research Station, Surat	Supply of seeds for crop museum					
7	Sorghum Research Station, Surat	Supply of seeds for crop museum					
8	Oilseeds Research Station, Junagadh	Supply of seeds for crop museum					
9	Oilseeds Research Station, Amreli	Supply of seeds for crop museum					
10	Oilseeds Research Station, S.K. Nagar	Supply of seeds for crop museum, & FLD					
11	Research Officer (Fisheries), JAU,Dwarka	Impart Training on Fisheries aspects					

# 5.1 Functional linkage with different organizations

В	State corporation and state deptt.		
1	District Agricultural Officer, Deptt. of Agriculture, District Panchayat, Jamnagar		Joint diagnostic team visit at farmers field
2	District Rural Development Agency, Jamnagar		Organizing collaborative training to farmers
3	Deputy Director of Veterinary, Department of veterinary & Animal Husbandry, Jamnagar		For collaborative off campus training For collaborative training and
4	Deputy Director of Horticulture, Jamnagar		demonstration Programme
5	Deputy Director of Agriculture (Training), Farmer Training Centre, Jamnagar	$\checkmark$	Collaborative on campus training programme
6	Deputy Director of Agriculture (Extension), Jamnagar	$\checkmark$	For providing hostel facilities to participants and organizing collaborative Mahila Krishi Mela
7	Asstt. Director of Fisheries, Jamnagar		
8	Range Forest Officer, Jamnagar		
9	Asstt. Director of GLDC, Jamnagar		
10	Estate Engineer, Department of Irrigation, Jamnagar		
11	All Taluka Development Officers, and their team at Taluka level		
12	Rajkot-Jamnagar Gramin Bank, Jamnagar		
13	ATMA, Jamnagar		
С	Private Corporation		
1	Territory Manager, GSFC, Jamnagar		Impart training on Agril. aspects
2	Territory Manager, GNFC, Jamnagar	$\triangleright$	Collaborative on/off campus
3	Territory Manager, IFFCO, Jamnagar		training programme Sponsor training programme
4	Reliance Industries, Dept. of Green Belt, Jamnagar		
5	Essar Oil Industries, Jamnagar		
D	NGOs		
1	Murlidhar Trust, Opp. Trajitpara Branch School, Bhanvad	AA	Impart training on Agril. aspects Collaborative on/off campus
2	V.D.R.F. Trust, Momai Xerox, B.P. Road, Bhanvad		training 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, At Shekhpat, Post-Aliyabada, Ta.&Dist Jamnagar
6	Lakhtar Jalstrav Gram Vikas Trust, 55, Shiv Complex, At Bhadra (Patiya), TaJodia, Dist Jamnagar
7	Umiya Mataji Mandir Trust, At Sidsar, Ta Jamjodhpur, DistJamnagar
8	Shardapith Education Trust, 104-Shrusti complex, Nr. Gurudwara, Jamnagar
9	Chachara Education & Charitable Trust, 104- Shrusti complex, Nr. Gurudwara, Jamnagar
10	Tata Chemical Society for Rural Development Foundation, At. Mithapur, TaDwarka, Dist Jamnagar

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	70000/-
Establishment of Transfer of Technology (TOT)	2005-06	State Government	100000/-
Transfer of technology by adoption of villages	2008-09	RKVY	5849410/-

# 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	
2.	Block level training		

# 5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Const	traints if any					
1	We have already applied for 5 projects	- They have not sanctioned							
5.5 Nature of linkage with National Fisheries Development Board									
S. No.	. No. Programme I		Nature of linkage						
1.									

#### 6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

			Year of		Details of production			Amou	nt (Rs.)			
S1. No.	Demonst tion Uni		Establi shmen		Variety	produce	Quantit (Qtl)	y Cost of inputs		-	ark	
1	Vermi com Unit	post	2007-08	3 150 sq. m	Icenea fatida	Vermi culture	0.26	12000	5200			
2	Vermi com Unit	post	2007-08	3 150 sq. m	Icenea fatida	Vermi compost	91.25	300	27375	5		
6.2	Perform	nane	ce of in	structi	onal fa	rm (Cro	ops) inc	uding s	eed p	roducti	on	
						Detail	s of Prod	uction	Amou	nt (Rs.)		
Nan	ne of Crop		ate of owing	Date of harvest	Area (ha.)	Variety	Type of produce	Quantit y (Qt1.)	Cost of inputs	Gross income	Rem arks	
Cere	als											
	Wheat	t	Nov. 08 o 2 <sup>nd</sup> ec.08	24 to 30 <sup>tl</sup> March 09	87	GW-366		400.00	50000 0	945012 .5		
							Fodder					
Puls												
<b>Oils</b> Gr	oundnut		to 19	5 to13	7.15	GG-5	Pod	58.93	20000	31406		
GI	ounanat	Jı	1n.08	Oct. 08	7.10	44.0	Fodder					
Gr	oundnut	1 7th	Jun.08	16 Oct. 08	0.64	00.6	Pod	3.23	5000	6850		
		17	Jun.08			GG-6	Fodder					
Gr	oundnut		to 17 in. 08	14 Oct. 08	4.25	TPG-41	Pod	11.03	16000	18407		
		00		00			Fodder					
Gr	oundnut	3 <sup>rd</sup> v	June 08	16 <sup>th</sup> Oct. 08	1.25	TG-37A	Pod Fodder	3.32	5500	6636		
		17 <sup>tl</sup>	<sup>h</sup> June	16 <sup>th</sup> Oct.			Pod	3.07	5000	14070		
Gr	oundnut	17	08	08	1.0	GG-16	Fodder					
Fibe	rs		-	-	-	-	-	-	-	-	-	
	Cotton					Bt.	Lint	2.26	4000	6102		
	es & tatpion s		-	-	-	-	-	-	-	-	-	
Flor	iculture		-	-	-	-	-	-	-	-		
Frui	ts		-	-	-	-	-	-	-	_		
Vege	etable		-	-	-	-	-	-	-	-		
	Brinjal	20	-1-09	2-3-09	0.2	PLR-1		1.05	2000	525		
	Fomato	20	-1-09	2-3-09	0.1	Guj-1		0.35	1000	350		
	Chilli	20	-1-09	2-3-09	0.1			0.85	1000	42.50		
	Okra	20	-1-09	2-3-09	0.1	Guj-1		0.20	1000	200		
Ric	lge gourd	20	)-1-09	2-3-09	0.1	Jaypur- 2		0.10	1000	50		
Spo	nge gourd	20	)-1-09	2-3-09	0.1	Guj-1		0.10	1000	50		

Other (Fodder)	-	-	-	-	-	-	-	-	
Sorghum	20 <sup>th</sup> July 08	1 <sup>st</sup> Oct, 08			Fodder	1650.0	5000		
Maize	20 <sup>th</sup> July 08	1 <sup>st</sup> Oct, 08			Fodder	4.30	2000		

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

S1. No.	Name of		Amou	nt (Rs.)	
	the Product	Qty	Cost of inputs	Gross income	Remarks
-	-	-	-	-	-

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

S1.	Name	Details o	Details of production				
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
1	Major carp	Rohu/ Marigal	-	3000 6000	139000	Nil	Stocking in Aug07
2.	Gir Cow	Gir Cow	Milk	7765	166453	108710	
			Dung	125 ton		62500	

#### 6.5 <u>Rainwater Harvesting</u> Training programmes conducted by using Rainwater Harvesting DemonstrationUnit

<u>01</u> 0				8					
Date	Title of the training course	Client	No. of Courses		of Partici luding SC	±	SC/	No. of STPartici	pants
	training course	(PF/RY/EF)	Courses	Male	Female	Total	Male	Female	Total
1-1-09	Soil & Water Conservation	PF	1	10	2	12	5	3	8
21-4-09	Soil & Water Conservation	PF	1	17	8	25	8	2	10
2-5-09	Water management	PF	1	13	2	15	3	2	5
8-4-09	Soil & Water Conservation	PF	1	15	4	19	9	1	10
17-6-09	Water management	PF	1	18	1	19	9	2	11

# Utilization of hostel facilities

Accommodation available (No. of beds) : - nil -

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2008	-	-	-
November 2008	-	-	-
December 2008	-	-	-
January 2009	-	-	-
February 2009	-	-	-
March 2009	-	-	-
April 2009	-	-	-
May 2009	-	-	-
June 2009	-	-	-

July 2009	-	-	-
August 2009	-	-	-
September 2009	-	-	-

#### 7. Details on Rain Water Harvesting structure and micro-irrigation system

		Details of		Activities conducted					Aree
Amount sanction (Rs.)	Expenditure (Rs.)	infrastructure created / micro irrigation system etc.	No. of Training programmes	No. of Demonstration s	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)	water harvested in '000 litres	Area irrigated / utilization pattern
999000	999000	Pond	8	0	0	10000	100	1.5 ha	20 ha
		Tubewell	0	0	0	0	0	0	20 ha

# 8. FINANCIAL PERFORMANCE

### 8.1 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

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

	Released by ICAR		Exper	diture	Unspent
Item	Kharif 2008	Rabi 2008-09	Kharif 2008	Rabi 2008-09	balance as on 1 <sup>st</sup> April 2009
Inputs				18785	
Extension activities			42364	12400	
TA/DA/POL etc.					
TOTAL	72560		42364	30185	11

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

	Released by ICAR		Exper	nditure	Unspent balance
Item	Kharif 2008	Rabi 2008-09	Kharif 2008	Rabi 2008-09	as on 1 <sup>st</sup> April 2009
Inputs			7865		
Extension activities			1410	1073	
TA/DA/POL etc.					
TOTAL	10371.56		9275	1073	23.56

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

	Released by ICAR		Exper	Unspent	
Item	Kharif 2008	Rabi 2008-09	Kharif 2008	Rabi 2008-09	balance as on 1 <sup>st</sup> April 2009
Inputs				20768	

Extension activities		139305	98750	
TA/DA/POL etc.				
TOTAL	190600	139305	119518	- 68223

# 8.5 Utilization of KVK funds during the year 2007 -08

S. No.	Particulars	Sanctioned	Released	Expenditure
А.	Recurring Contingencies			
1	Pay & Allowances	3600000	3600000	2954160
2	Traveling allowances	100000	100000	71178
3	Contingencies	670000	670000	708305
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	160000	160000	160000
В	POL, repair of vehicles, tractor and equipments	95000	95000	110000
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	80000	80000	80000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	80000	80000	100000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	115000	115000	118305
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	65000	65000	65000
G	Training of extension functionaries	50000	50000	50000
Η	Maintenance of buildings	25000	25000	25000
Ι	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
	TOTAL (A)	4370000	4370000	3733643
В.	Non-Recurring Contingencies			
1	Works	_	-	-
2	Equipments including SWTL & Furniture	-	-	-
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	-	-	-

	<b>Library</b> (Purchase of assets like books & journals)	_	-	-
	TOTAL (B)	-	-	-
с.	<b>REVOLVING FUND</b>	-	-	-
	GRAND TOTAL (A+B+C)	4370000	4370000	4370000

# Utilization of KVK funds during the year 2009 -10 (upto Sep. 2008)(current year)

S. No.	Particulars	Sanctioned	Released	Expenditure
A.	Recurring Contingencies			
1	Pay & Allowances	36,00,000		
2	Traveling allowances	1,00,000		
3	Contingencies	7,00,000		
Α	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,75,000		
В	POL, repair of vehicles, tractor and equipments	1,00,000		
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1,00,000		
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	95,000		
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	1,05,000		
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	75,000		
G	Training of extension functionaries	50,000		
Η	Maintenance of buildings			
Ι	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
	TOTAL (A)	44,00,000		
В.	Non-Recurring Contingencies			
1	Works	41,00,000		
	a) Administrative Building (1 <sup>st</sup> Instal.)	18,00,000		
	b) Farmer's Hostel (1 <sup>st</sup> Instal.)	10,00,000		
	c) Staff Quarter (1 <sup>st</sup> Instal.)	13,00,000		
2	Equipments including SWTL & Furniture	40,000		
	a) Digital Camera	25,000		
	b) Fax Machine	15,000		
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)	-		

	<b>Library</b> (Purchase of assets like books & journals)	10,000	
	TOTAL (B)	41,40,000	
С.	<b>REVOLVING FUND</b>	-	
	GRAND TOTAL (A+B+C)	85,50,000	

### 8.6 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 2004 to March 2005	-	-	-	-
April 2005 to March 2006	1.00	0.2772	0.07674	1.20043
April 2006 to March 2007	1.20043	1.5697	0.68064	2.08946
April 2007 to March 2008	2.08946	8.01158	0.11489	9.98615
April 2008 to March 2009	9.98615	8.54069	8.80367	9.72317
April 2009 to 21stAugust, 2009	9.72317	2.10846	-	11.83163

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

### 9.1 Natioanl fisheries development board

# 9.2 CONSTRAINTS

#### a. Administrative

1. Vaccant post (one post of SMS & one post of computer operator) should provide as earliest for better implementation of the programme.

# b. Financial

- 1. For on campus training, farmers may be given to and fro fare to reach the KVK. At present, there is a provision of Rs. 40 per trainee per day for providing boarding facility. During on campus training this amount is to be increase up to Rs. 75 in view of hike of prices.
- 2. Fund should be release immediately after allotement of FLDs so that purchase of crtitical inputs can be made and supply in time to the farmers.

# c. Technical

1. In case of FLD of groundnut, the amount of critical inputs should be increase for better implementation.

# d. Scientific

- 1. Management of Sclerotium rolfsii (White fungus) in groundnut.
- 2. Wilting of cotton at maturity stage.
- 3. Yellowing of groundnut
- 4. Mealybug infestation in cotton
- 5. Reddening of cotton leaves.

#### d. Others

- 1. Separate lecture hall, Office building, Museum hall, Soil Testing Laboratory and home science laboratory should be provided as early as possible.
- 2. Requirement of purchase new vhicle for mandatory work of KVK. We have already very old vehicle (1992 purchase).

### 9.3 KRISHI MAHOTSAV – 2009 was arranged 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..

Collaborative widely extension activities jointly "Millet research station & KVK Scientists with Department of Agriculture and Others line Departments" were carried out in the district as below.

Sr.	Name of Block	Date	Title of seminar	Name of Scientist	No. of
No.					Farmers
1.	Jamnagar	20-5-09	Strengthening of females	Smt. A. K. Baraiya Smt. A. C. Maheta	450
2.			Pest Diseases Management	Mr. Y. H. Ghelani	450
			in major crops	Dr. G. M. Parmar	
3.			Cattle breeding & diseases	Mr. I. G. Dhorajiya	450
			management	0.0	
4.		21-5-09	Scientific farming of Potato	Dr. A.G. Patel	300
			& vegetables	Mr. B. M. Butani	
5.			Vermicompost, compost		300
0.			preparation and use of		000
			biofertilizer & chemical	Dir Dinir Dubin	
			fertilizers		
6.			Micro Irrigation system	Dr. H.R. Khafi	300
0.			inicio inigation system	Mr. G. V. Maravia	000
7.	Jamjodhpur	20-5-09	Scientific farming of food	Dr. C. J. Dangaria	200
1.	oanjoanpu	20000	grains	Dr. N.B. Jadav	200
8.			Vermicompost, compost		200
0.			preparation and use of		200
			biofertilizer & chemical	DI. C. J. Daligaria	
			fertilizers		
9.			Scientic farming of onion &	Dr. V. D. Doroirro	200
9.			Garlic	Dr. K. P. Baraiya	200
10		01 5 00		Dr. V.V. Rajani	200
10.		21-5-09	Animal breeding programme	Dr. S.K. Datta	200
11				Dr. K.S. Murti	000
11.			Scientific farming of Papaya	Dr. D.L. Kadwani	200
10			& Horticultual crops	Mr. H.G. Vansjaliya	000
12.			Integrated Pests & Diseases	Dr. K. L. Raghwani	200
10	D1 1	00 5 00	Management in cotton		100
13.	Bhanvad	22-5-09	Scientific farming of	Dr. D.K. Varu	400
			horticultural crops	Mr. H.K. Kandoria	
14.			Recycling of waste material,	Dr. K.L. Raghwani	400
			vermicompost use of	Mr. P.S. Gorfad	
			biofertilizer		
15.			Pest-diseases management	Dr. G. M. Parmar	400
			in Onion-Garlic	Dr. V.R. Virani	
16.		23-5-09	Pests-Diseases management	Dr. D.L. Kadwani	200
			in Groundnut	Dr. M.F. Acharya	
17.			Animal husbandry & Dairy	Mr. B.V. Minipara	200
				Mr. M.U. Vachhani	
18.			Micro irrigation system	Dr. H. R. Khafi	200
				Mr. P. S. Gorfad	
19.	Jodiya	22-5-09	Animal husbandry & Dairy	Dr. P.U. Gajbhaye	250
	-			Dr. J.N. Thaker	

20.			Integrated Pests	Dr. K. P. Baraiya	250
0.1			management in Cotton	Mr. Y. H. Ghelani	050
21.			Diseases management in	Dr. D.L. Kadwani	250
22.		03 E 00	groundnut & Cumin Vermicompost, compost	Dr. K.K. Dhedhi Dr. K. P. Baraiya	200
22.		23-5-09		5	200
			preparation and use of biofertilizer & chemical	Mr. J. S. Sorathiya	
			fertilizers		
23.			Reclamation of saline &	Dr. K. P. Baraiya	200
40.			alkaline soils	Dr. V. J. Zinzala	200
24.			Water harvesting &	Smt. A.C. Maheta	200
4т.			irrigation management	Dr. N.B. Jadav	200
25.	Jam-	27-5-09	Scientific farming of tomato,	Dr. M. V. Kanzaria	250
40.	khambhadiya	21-0-09	potato & Vegetqables	Dr. V. L. Purohit	200
26.	manyu		Organic farming & recycling	Dr. N. B. Jadav	250
20.			of farm waste	Dr. B.K. Sagarka	200
27.			Processing, packing &		250
41.			Marketing of farm product	Dr. Prodod Mohanat	200
28.		28-5-09	Animal husbandry & Dairy	Dr. H. G. Shekhat	180
<u> </u>			indobaliary & Durry	Dr. H.S. Savsani	100
29.			Micro irrigation system	Dr. H.R. Khafi	180
				Mr. B.V. Minipara	
30.			Water harvesting, irrigation	Dr. V. J. Zinzala	180
			and salinity management	Dr. K.B. Asodariya	
31.	Dhrol	27-5-09	Cattle breeding & its	Dr. M.D. Odedara	240
			important	Mr. R.P. Mendapara	-
32.			Scientific farming of food	Dr. H.J. Joshi	240
			grains	Mr. R.M. Vikani	
33.			Vermicompost, compost		240
			preparation and use of		
			biofertilizer & chemical		
			fertilizers		
34.		28-5-09	Integrated pests	Dr. K. P. Baraiya	180
			management in cotton	Mr. Y. H. Ghelani	
35.			Diseases Management in	Dr. D. L. Kadwani	180
			groundnut & Cumin	Mr. N.N. Galani	
36.			Scientific farming of	Mr. I. J. Golani	180
			vegetables	Dr. V.L. Purohit	
37.	Jam-	29-5-09	Cattle breeding & dairy	Dr. H.S. Savsani	250
	Kalyanpur			Dr. B.B. Javia	
38.			Natural energy & irrigation		250
			management	Dr. P.M. Chauhan	
39.			Groundnut growing for	Dr. K.D. Mungrqa	250
4.0			export	Dr. K.K. Dhedhi	100
40.		30-5-09	Water harvesting &	Smt. A.C. Maheta	180
4 1			irrigation management	Smt. A.K. Baraiya	100
41.			Reclamation of saline-	Dr. V.J. Zinzala	180
4.0			alkaline soils.	Dr. J.N. Nariya	100
42.			Diseases management in	Dr. K.L. Raghwani	180
4.2	17 - 1 - 1		cumin and groundnut	Mr. N.K. Tank	400
43.	Kalawad	29-5-09	Scientific farming of onion-	Dr. K.V. Kalathiya	480
11			garlic	Dr. M.S. Dudhat	400
44.			Cattle breeding & diseases	Dr. K. P. Baraiya	480
			management	Dr. R.J. Padodara	

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
48.			Use of micro irrigation systems	Smt. A.C. Maheta Dr. L.G. Vanparia	350
49.	Dwarka	31-5-09	Fisheries and marketing	Dr. K. L. Jetani Dr. S.R. Thaker	370
50.			Reclamation of saline and alkaline soils	Dr. V.J. Zinzala Dr. K.B. Polara	370
51.			Scientific farming of food grains	Dr. C.J. Dangaria Dr. K.K. Dhedhi	370
52.		1-6-09	Cattle breeding and dairy	Dr. S.K. Murthi Dr. K.S. Datta	200
53.			Scientific farming of horticultural crops	Dr. K.M. Karetha Dr. Virendra Singh	200
54.			Scientific farming of meditational & aromatic crops	Dr. H.L. Dhaduk Dr. K.H. Dabhi	200
55.	Lalpur	31-5-09	Use of FYM, Biofertilizer and biocontrol techniques in organic farming	Dr. L.V. Lakkad Dr. M.N. Vaghani	200
56.			Cattle breeding & dairy	Dr. S.K. Murthi Dr. K.S. Datta	200
57.			Scientific farming of vegetable	Dr. K.V. Kalathiya Dr. V.L. Purohit	200
58.		1-6-09	Integrated diseases management in groundnut	Dr. D.L. Kadwani Dr. R.M. Solanki	400
59.			Integrated pest & diseases management in cotton	Dr. K. P. Baraiya Dr. M.D. Khanpara	400
60.			Micro Irrigation systems	Smt. A.C. Maheta	400

#### ANNEXURE – I

# PROCEEDING OF THE 4<sup>th</sup> SCIENTIFIC ADVISORY COMMITTEE MEETING OF KRISHI VIGYAN KENDRA, JUNAGADH AGRICULTURAL UNIVERSITY, JAMNAGAR HELD ON 17<sup>th</sup> OCTOBER, 200

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 17<sup>th</sup> October, 2008.

Sr.	Name & Designation	Position
No.	<b>8</b>	
1	Director of Extension Education,	Chairman
	Junagadh Agricultural University, Junagadh -362001.	
2	Asso. Director of Extension Education,	Member
	Junagadh Agricultural University, Junagadh	
3	Research Scientist (Millet),	Member
	Main Millet Research Station, Junagadh Agrultural	
	University, Jamnagar- 361 006.	
4	Research Officer,	Member
	Fisheries Research Centre, Junagadh Agricultural	
	University, Okha, Dist: Jamnagar.	
5	District Agricultural Officer	Member
	District Panchayat, Jamnagar	
6	Dy. Director of Horticulture,	Member
	30, Digvijay Plot, Jodiyawala Building, Jamnagar	
7	Dy. Director of Agriculture (Extension),	Member
	Lalbunglow, Nr. Trazery office, Jamnagar	
8	Dy. Director of Agriculture,	Member
	Farmers Training Centre, Air Force Road, Opp. Digjam	
	Mill,	
	Jamnagar.	
9	Deputy Director,	Member
	Gujarat Land Development Corporation Ltd., Near:	
	Shubhash Market, Jamnagar.	
10	Asstt. Director of Fisheries,	Member
	Sumer club road, Jamnagar	
11	Shri. Kantilal Bhagwanjibhai Ajudia	Member
	At. Makwana, Ta. & Dist Jamnagar.	
12	Valjibhai Govindbhai Parmar	Member
1.0	Vadivistar, At Jivapar Ta. & Dist Jamnagar	
13	Jenamben Alibhai Safiya, C/o. Alibhai Sumarbhai Safiya	Member
	At. Rabarika, Ta Jamjodhpur, DistJamnagar	
14	Mukesh N. Rupapara	Member
1 =	At Rampur; Ta:- Lalpur; Dist.:- Jamnagar	
15	Sangitaben Mukeshbhai Rupapara	Member
	At Rampur; Ta:- Lalpur; Dist.:- Jamnagar	
16	Dr. K. P. Baraiya	Member
	SMS, KVK, J.A.U, Jamnagar- 361 006.	

The following members were present in the meeting.

17       Dr. N. B. Jadav       Member         SMS, KVK, J.A.U, Jamnagar- 361 006.       Member         18       Dr. V. J. Zizala       Member         SMS, KVK, y J.A.U, Jamnagar- 361 006.       Member         19       Dr. J. N. Thaker       Member         SMS, KVK, J.A.U, Jamnagar- 361 006.       Member         20       Smt. Anjanben K. Baraiya       Member         SMS, KVK, J.A.U, Jamnagar- 361 006.       Member         21       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.       Member         22       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)       Invitee         23       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)       Invitee         24       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar       Invitee         25       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar       Member         26       Dr. H. R. Khafi       Member         Research Scientist (Agronomy)       Millet Research Station, JAU, Jamnagar       Member         27       Dr. K. L. Raghwani       Member         Research Scientist (Pl. Breeding)       Millet Research Station, JAU, Jamnagar			
18       Dr. V. J. Zizala       Member         SMS, KVK, v J.A.U, Jamnagar- 361 006.       Member         19       Dr. J. N. Thaker       Member         SMS, KVK, J.A.U, Jamnagar- 361 006.       Member         20       Smt. Anjanben K. Baraiya       Member         21       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.       Member         22       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)       Invitee         23       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)       Invitee         24       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar       Invitee         25       Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar       Invitee         26       Dr. H. R. Khafi       Member         Research Scientist (Agronomy) Millet Research Station, JAU, Jamnagar       Member         27       Dr. K. L. Raghwani Research Scientist (Pl. Breeding) Millet Research Station, JAU, Jamnagar       Member         29       Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Station, JAU, Jamnagar       Member         30       Shri. H. R. Vadar       Subject Matter Specialist (Fishries) <td>17</td> <td>Dr. N. B. Jadav</td> <td>Member</td>	17	Dr. N. B. Jadav	Member
SMS, KVK,v J.A.U, Jamnagar- 361 006.Member19Dr. J. N. Thaker SMS, KVK, J.A.U, Jamnagar- 361 006.Member20Smt. Anjanben K. Baraiya SMS, KVK, J.A.U, Jamnagar- 361 006.Member21Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.Member22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)Invitee23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Scientist (Pl. Breeding) Millet Research Scientist Research Scientist (Pl. Breeding) Millet Research Scientist Millet Research Station, JAU, JamnagarMemb		SMS, KVK, J.A.U, Jamnagar- 361 006.	
19Dr. J. N. Thaker SMS, KVK, J.A.U, Jamnagar- 361 006.Member20Smt. Anjanben K. Baraiya SMS, KVK, J.A.U, Jamnagar- 361 006.Member21Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.Member22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)Invitee23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Scientist (Pl. Breeding) Millet Research Scientist Millet Research Scientist <td>18</td> <td>Dr. V. J. Zizala</td> <td>Member</td>	18	Dr. V. J. Zizala	Member
SMS, KVK, J.A.U, Jamnagar- 361 006.20Smt. Anjanben K. Baraiya SMS, KVK, J.A.U, Jamnagar- 361 006.21Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)23Programme Coordinator, Krishi Vigyan Kendra, Junagadh 		SMS, KVK,v J.A.U, Jamnagar- 361 006.	
20Smt. Anjanben K. BaraiyaMemberSMS, KVK, J.A.U, Jamnagar- 361 006.21Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.Member22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)Invitee23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Scientist (Pl. Breeding) Millet Research Scientist (Pl. Breeding) Millet Research Scientist (Maton, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Scientist Millet Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Shrishi Research Station, JAU, Jamnagar	19	Dr. J. N. Thaker	Member
SMS, KVK, J.A.U, Jamnagar- 361 006.21Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Amreli25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, Jamnagar27Dr. K. L. Raghwani Research Station, JAU, Jamnagar28Dr. H. J. Joshi Research Station, JAU, Jamnagar29Dr. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Station, JAU, Jamnagar30Shri. H. R. Vadar Subject Matter Specialist (Fishries)		SMS, KVK, J.A.U, Jamnagar- 361 006.	
21Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Jamnagar- 361 006.Member22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)Invitee23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Synanagar	20	Smt. Anjanben K. Baraiya	Member
Agricultural University, Jamnagar- 361 006.22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)Invitee23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Scientist (Pl. Breeding) Millet Research Scientist Research Scientist Research Scientist (MJ, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Scientist Mil		SMS, KVK, J.A.U, Jamnagar- 361 006.	
22Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Tadghadiya (Rajkot)Invitee23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Scientist Millet Research Scientist Millet Research Scientist Subject Matter Specialist (Fishries)Member	21	Programme Coordinator, Krishi Vigyan Kendra, Junagadh	Member
Agricultural University, Tadghadiya (Rajkot)23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Amreli25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, Jamnagar27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, Jamnagar28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, Jamnagar29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Station, JAU, Jamnagar30Shri. H. R. Vadar Subject Matter Specialist (Fishries)		Agricultural University, Jamnagar- 361 006.	
23Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Khapt (Porbandar)Invitee24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Sinti Kendra	22	Programme Coordinator, Krishi Vigyan Kendra, Junagadh	Invitee
Agricultural University, Khapt (Porbandar)24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Amreli25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana Kandhasar26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, Jamnagar27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, Jamnagar28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, Jamnagar29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet		Agricultural University, Tadghadiya (Rajkot)	
24Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, AmreliInvitee25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Member	23	Programme Coordinator, Krishi Vigyan Kendra, Junagadh	Invitee
Agricultural University, Amreli25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. KhafiMemberResearch Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Shrie Station Station, Stat		Agricultural University, Khapt (Porbandar)	
25Programme Coordinator, Krishi Vigyan Kendra, Junagadh Agricultural University, Nana KandhasarInvitee26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Sinti Kishi	24	Programme Coordinator, Krishi Vigyan Kendra, Junagadh	Invitee
Agricultural University, Nana Kandhasar26Dr. H. R. KhafiMemberResearch Scientist (Agronomy)Millet Research Station, JAU, JamnagarMember27Dr. K. L. RaghwaniMemberResearch Scientist (Ag. Entomology)Millet Research Station, JAU, JamnagarMember28Dr. H. J. JoshiMemberResearch Scientist (Pl. Breeding)Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. KadwaniMember30Shri. H. R. VadarSubject Matter Specialist (Fishries)Member		Agricultural University, Amreli	
26Dr. H. R. Khafi Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Shri. H. R. Vadar	25	Programme Coordinator, Krishi Vigyan Kendra, Junagadh	Invitee
Research Scientist (Agronomy) Millet Research Station, JAU, JamnagarMember27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Shri. Fishries		Agricultural University, Nana Kandhasar	
Millet Research Station, JAU, Jamnagar27Dr. K. L. Raghwani Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. Joshi Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Sama and and and and and and and and and an	26	Dr. H. R. Khafi	Member
27Dr. K. L. RaghwaniMemberResearch Scientist (Ag. Entomology)Millet Research Station, JAU, JamnagarMember28Dr. H. J. JoshiMemberResearch Scientist (Pl. Breeding)Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. KadwaniMemberAssociate Research ScientistMemberMillet Research Station, JAU, JamnagarMember30Shri. H. R. VadarSubject Matter Specialist (Fishries)		Research Scientist (Agronomy)	
Research Scientist (Ag. Entomology) Millet Research Station, JAU, JamnagarMember28Dr. H. J. JoshiMemberResearch Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. KadwaniMemberAssociate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Image: Constant of the second secon		Millet Research Station, JAU, Jamnagar	
Millet Research Station, JAU, Jamnagar28Dr. H. J. JoshiMemberResearch Scientist (Pl. Breeding)Millet Research Station, JAU, Jamnagar29Dr. V. V. Rajani/Dr. D. L. KadwaniMemberAssociate Research ScientistMillet Research ScientistMillet Research Station, JAU, JamnagarMember30Shri. H. R. VadarSubject Matter Specialist (Fishries)	27	Dr. K. L. Raghwani	Member
28Dr. H. J. JoshiMemberResearch Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. KadwaniMemberAssociate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Shri. B. V. V. P. V. V. P. V.		Research Scientist (Ag. Entomology)	
Research Scientist (Pl. Breeding) Millet Research Station, JAU, JamnagarMember29Dr. V. V. Rajani/Dr. D. L. Kadwani Associate Research Scientist Millet Research Station, JAU, JamnagarMember30Shri. H. R. Vadar Subject Matter Specialist (Fishries)Image: Comparison of the second secon		Millet Research Station, JAU, Jamnagar	
Millet Research Station, JAU, Jamnagar29Dr. V. V. Rajani/Dr. D. L. KadwaniMemberAssociate Research ScientistMillet Research ScientistMillet Research Station, JAU, Jamnagar3030Shri. H. R. VadarSubject Matter Specialist (Fishries)	28	Dr. H. J. Joshi	Member
29Dr. V. V. Rajani/Dr. D. L. KadwaniMemberAssociate Research ScientistMillet Research Station, JAU, JamnagarMember30Shri. H. R. VadarSubject Matter Specialist (Fishries)Member		Research Scientist (Pl. Breeding)	
Associate Research Scientist Millet Research Station, JAU, Jamnagar30Shri. H. R. Vadar Subject Matter Specialist (Fishries)		Millet Research Station, JAU, Jamnagar	
Millet Research Station, JAU, Jamnagar30Shri. H. R. VadarSubject Matter Specialist (Fishries)	29	Dr. V. V. Rajani/Dr. D. L. Kadwani	Member
30 Shri. H. R. Vadar Subject Matter Specialist (Fishries)		Associate Research Scientist	
Subject Matter Specialist (Fishries)		Millet Research Station, JAU, Jamnagar	
	30		
		Subject Matter Specialist (Fishries)	

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. B. K. Kikani, Hon'ble Vice-Chancellor and Chairman of Scientific Advisory Committee was busy 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. S. M. Dadhaniya, Associate Director of Extension Education, J.A.U., Junagadh delivered introductory address.

Dr. J.N. Nariya, 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 2007-08 and technical programme (Action Plan 2008-09).

Committee made the following recommendations after active interaction.

- 1. It was suggested to plan limited on & off campus training after active interaction of House and chairman, Dr. R. L. Savaliya.
- 2. Dr. S. M. Dadhaniya, Associate Director of Extension Education suggested for arrangement of training on watermelon cultivation in Dwarka taluka.
- 3. Dr. R. L. Savaliya and Dr. K. L. Raghwani suggested adding bio-pesticides and split application of methyl parathion @25 kg per hectare at 15 days interval during infestation period in refined treatment of cotton mealy bug management OFT.
- 4. In addition to OFT of groundnut, refinement treatment of castor cake @ 500 kg per hectare, it was suggested to add drenching of *Trichoderma harzeanum* @ 2.5 kg per hectare in root zone.
- 5. It was suggested to arrange front line demonstration for yellowing of groundnut

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. K. P. Baraiya, Subject Matter Specialist, KVK, J.A.U., Jamnagar.

Director of Extension Education Junagadh Agricultural University Junagadh

(B. K. Kikani) Vice Chancellor Junagadh Agricultural University Junagadh

Std	Temp. °C	Temp. °C	DROLOGICA R.H.	R.H	Rainfall	Doiner dame
Std. week	Max.	Min.	Morning	Evening	mm	Rainy days
23	34.7	27	83	62	15.5	2
24	32	26.3	90	68	289	3
25	34	27.1	85	59	0	-
26	33.8	26.7	88	67	21.5	1
27	31.8	26.3	87	66	13	1
28	31.9	26.5	86	65	0	-
29	32.7	26	86	62	0	-
30	32.8	25.7	89	67	29	1
31	30.1	25.3	95	79	29	4
32	30	25.4	92	79	10	1
33	28.4	24.4	96	77	46	2
34	31.1	24	92	61	0	-
35	31.6	23.8	90	61	0	-
36	33.1	25.2	86	56	0	
37	33.7	25.5	91	67	90	3
38	30.3	24.7	94	71	117.5	2
39	31.3	23.8	94	63	0	
40	33	23.6	93	57	0	
41	35.1	23.4	88	43	0	
42	35.6	21.5	72	38	0	
43	35	19	75	32	0	
44	32.6	19.4	90	56	0	
45	33.4	18.3	82	42	0	
46	31	17.6	71	33	0	
47	29.1	15.4	63	34	0	
48	28.6	17.5	71	49	8.5	2
49	29.8	20.7	84	53	0	
50	26.6	15.6	81	51	0	
51	25.7	18.9	78	60	0	
52	26.7	12.1	88	46	0	
1	26.6	13	74	39	0	
2	24.7	14.5	66	48	0	
3	25.9	17.4	78	51	0	
4	27.2	14.6	87	40	0	
		I	02	I	I	

### ANNEXURE – II WEEKLY METEOROLOGICAL DATA 2008-09

5	27.9	10.3	89	30	0	
6	27.1	13.4	85	35	0	
7	29.1	13.1	82	32	0	
8	32.4	14.8	81	29	0	
9	33.4	18.7	97	33	0	
10	32.7	16.3	85	26	0	
11	35	16.7	85	22	0	
12	34.3	20.9	91	35	0	
13	34.6	22.1	85	40	0	
14	36.6	22.6	82	37	0	
15	36	19.8	74	29	0	
16	37.1	22.7	73	29	0	
17	38.9	22.7	81	19	0	
18	38.5	24.6	85	40	0	
19	36.5	25	84	50	0	
20	40	26.5	84	42	0	
21	38	27	81	48	0	
22	37.2	28.1	77	54	0	
23	36.2	27.3	80	58	0	
24	37.2	28	78	52	0	
25	36.8	27	83	59	12.5	1
26	32.8	26.3	92	69	24	2
27	35.9	27.3	86	58	5	1
28	33.4	26.2	92	76	55.5	5
29	31.7	25.5	95	81	179	4
30	29.3	25.4	92	81	177.5	4
31	32.8	26.2	86	62	0	
32						
33						
34						
35						
36						
37						
38						
39						
	•					•

# ANNEXURE – III

### **B. 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 Disease 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	Premjibhai Popatbhai Tarpara	Nani vavadi	20
2	Ashokbhai Premjibhai Tarpara	Nani vavadi	20.5
3	Mohanbhai Popatbhai Tarpara	Nani vavadi	19.75
4	Gopalbhai Gordhanbhai Sutaria	Nani vavadi	21
5	Jantibhai Jerambhai	Nani vavadi	21.25
6	Mansukhbhai Laxanbhai	Sanala	18.5
7	Savitaben Maganbhai	Sanala	17.9
8	Rajesbhai Chanabhai	Sanala	18
9	Rudiben Laxaman	Sanala	17
10	Harsukhabhai Ukabhai	Sanala	17.5
11	Ravjibhia Parbat Vasoya	Haripar	21
12	Ogha parbat	Haripar	22.2
13	Pravin Bachaer	Haripar	21.2
14	Devsibhai Govindbhai	Haripar	23
15	Dayabhai Ramjibhai Chuhan	Haripar	20.65
16	Pravin Laxamnbhai	Vodisang	22.5
17	Jantibhai Karasanbhai	Vodisang	24.3
18	Mansubhai Karsanbhai Dama	Vodisang	21.78
19	Vijaybhai Kesabhai	Vodisang	22.42
20	Dilipbhai Chunbhai Nathvani	Jasapara	22

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. Cotton

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 crop management
- 5) Year of release of the technology or Year of assessment :-Year 2004
- 6) Source of technology :- Nijuvedu seeds, S'bad
- 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	Goganbhai Ramdevbhai Vadher	Viramdal	26
2	Govabhai Nagabhai Ambaliya	Viramdal	29
3	Devsibhai Vatsibhai Vadher	Viramdal	27
4	Masribhai Vatsibhai Vadher	Viramdal	25
5	Arjanbhai Ramsibhai Ambaliya	Viramdal	28
6	Muljibhai Madhabhai Joshi	Zakasiya	26
7	Dhanjibhai Madha	Zakasiya	27
8	Dadubhai Ranabhai	Datrana	25
9	Jesbhai meshabhai Gagiya	Veraval	25
10	Palabhai Devrakhibhai Bera	Veraval	21
11	Karsanbhai Naranbhai Gagiya	Veraval	24
12	Babubhai Maldebhai Gagiya	Veraval	22
13	Bharbhai Bhikabhai Gagiya	Veraval	23
14	Nathabhai Vejabhai Gagiya	Veraval	23
15	Gopalabhai Khimabhai Rathod	Veraval	24
16	Mukeshbhai Valjibhai	Rampar	22
17	Virjibhai Keshavjibhai Bhanderi	Rampar	21
18	Virjibhai Ravjibhai Munagra	Rampar	25
19	Mukeshbhai Nanjibhai Rupapra	Rampar	29
20	Bipinbhai Jamanbhi	Rampar	28

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. Chillli

- 1) Production system :-Irrigated
- 2) Problem Definition :-Title of the technology demonstrated Integrated pest Management in chillie
- 3) Thematic area :-Integrated Pest Management
- 4) Year of release of the technology or Year of assessment :-Year 2001

6) Source of technology :- Vegetable 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	Pravinbhai Chandubhai Chopada	Dharmpur	121.5
2	Jantibhai Kanabhai Mahudia	Ramnagar	120
3	Ranmalbhai Govabhai	Dharmpur	118
4	Savjibhai Bhikhabhai Nakum	Dharmpur	119.5
5	Chandulal Dhamjibhai Kanzaria	Shanktinagar	120.5
6	Majibhai Jivabhai Kanzaria	Shanktinagar	119
7	Kachetia Jetha Harjibhai	Juvanpur	118.5
8	Jentilal Nanjibhai Khandhar	Dharmpur	122
9	Shamjibhai Govindbhai Nakum	Harshadpur	121.5
10	Ramesh Jeram	Dharmpur	119.5

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. Brinjal

- 1) Production system :-Irrigated
- 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 :- Vegetable 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	Haribhai Jinabhai Kachetia	Kanuda	513.5
2	Ranmalbhai Govabhai Kanzaria	Dharmpur	510.5
3	Savjibhai Bhanabhai Nakum	Dharmpur	511.5
4	Kantibhai Harjibhai Kachetia	Junvanpur	512.5
5	Sagarbhai Jentibhai Khandhar	Dharmpur	513
6	Ketanbhai Samjibhai Nakum	Harshadpur	515
7	Shanitlal Gopalbhai Kanzaria	Ramnagar	513
8	Jentibhai Manjibhai Hadial	Harshadpur	510.5
9	Mohanbhai Hirabhai Nakum	Shaktinagar	511.5
10	Shrish Dayabhai Kacehtia	Gundamora	514

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. Tomato

1) Production system :-Irrigated

- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Integrated Nutrient Management in Tomato
- 4) Thematic area :-Integrated Nutrient Management
- 5) Year of release of the technology or Year of assessment :-Year 2006
- 6) Source of technology :- Vegetable 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	Ramesh Jeram	Dharmpur	578
2	Kachetia Virjibhai Harjibhai	Juvanpur	570
3	Valjibhai Nanajibh Khandar	Dharmpur	579
4	Kaniyalal Aswinbhai Kanzaria	Ramnagar	574
5	Vasharambhai Manjibhai Hadial	Harshadpur	576
6	Nathubhai Nanjibhai Khandhar	Dharmpur	570
7	Vajsibhai Govabhai Bodar	Bhinda	577
8	Devraj Ravjibhai Chopada	Dharmpur	580
9	Dayabhai Hirabhai Hadial	Harshadpur	572
10	Aswinbhai Govindbhai Kanzaria	Ramnagar	574

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. Wheat

- 1) Production system :-Irrigated
- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Assessment of varietal difference in wheat
- 4) Thematic area :-Variety assessment
- 5) Year of release of the technology or Year of assessment :-Year 2006
- 6) Source of technology :- Wheat 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	Vittalbhai Mavjibhai	Rampar	53.4
2	Keshvjibhai Jerambhai Rabadiaq	Rampar	53.6
3	Jamanbhai Trikambhai	Rampar	52.7
4	Valjibhai Limbabhai	Rampar	52.9
5	Keshvjibhai Manjibhiai	Rampar	53.9
6	Vittalbhai Limbabhai	Rampar	53.3
7	Gagia natha Veja	Navi Veraval	53.4
8	Der Pithabhai Jinabhai	Navi Veraval	55
9	Kanrangiya Kanabhai Mandabhai	Navi Veraval	53.2
10	Karmur Karsanbhai Rambhai	Navi Veraval	53.5

11	Gagia Naranbhai Bhimasibhai	Navi Veraval	53.7
12	Gagia Malade Naran	Navi Veraval	54.1
13	Gagia Bhikha Nathu	Navi Veraval	54.3
14	Chandrvadiya Nathu Arjan	Butavadar	54.6
15	Pehtabhai Govindbhai Kanzaria	Gokalpar	53.9
16	Gopalbhai Khimabhai Rathod	Beraja	52.7
17	Bhikabhai Bhulabhai Rathode	Beraja	52.5
18	Jesabhai Rambhai Vadher	Viramdal	53.9
19	Virabhai Versibhai Vadher	Viramdal	54
20	Godalbhai Naranbhai Ambalia	Viramdal	54.2
21	Pareshbhai Hirabhai Nakum	Dharampur	52.6
22	Parmar Laljibhai Dosabhai	Siddihpur	54.9
23	Jivabhai Mandanbhai Nandaniya	Vadatara	53.1
24	Varava Khimbhai Vadotaria	Vadatara	53.4
25	Mansukhbhai Parsottambhai Taker	Jakasia	54.9
26	Karanabhai Rambhai Ambalia	Madhavpur	52.6
27	Devayatbhai Khimabhia Lagariya	Madhavpur	54.4
28	Kanjibhai Sambhubhai	Kalawad	54.6
29	Janmohmad Valimohmad	Kalawad	53.4
30	Narasibhai Hirabhai	Kalawad	53.7
31	Nanjibhai Bhurabhai	Nani Vavadi	53.5
32	Premjibhai Ramjibhai	Nani Vavadi	53.9
33	Savitaben Maganbhai	Sanala	54.3
34	Maniben Manjibhai Sanala	Sanala	54.3
35	Rudien Laxambhai	Sanala	54.6
36	Mansukbhai Laxamnbhai	Sanala	54.9
37	Mankukbhai Popatbhai	Vodisang	55
38	Jantibhai Laljibhai	Vodisang	52.6
39	Kalubhai Nanjibhai	Vodisang	53.1
40	Ratilal Kurjibhai	Vodisang	53.6

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

#### 7. Cumin

- 1) Production system :-Irrigated
- 2) Problem Definition :-
- 3) Title of the technology demonstrated :-Integrated Disease Management in cumin
- 4) Thematic area :-Integrated Disease Management
- 5) Year of release of the technology or Year of assessment :-Year 2002
- 6) Source of technology :- Spices and Condiments Research Station, Jagudan
- 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	Younus Hurmamad	Nanabadanpar	10.5

2	Bharat Ravjibhai	Nanabadanpar	10.9
3	Jerambhai Ramjibhai	Nani Vavadi	14.4
4	Jamanbhai Popatabhai	Nani Vavadi	14.3
5	Vinodbhai Govindbhai	Vodisang	14.5
6	Navalbhai Vallabhai	Vodisang	13.1
7	Yunish Nurmamad Buch	Kalawad	13.4
8	Narsi Hira	Kalawad	13.6
9	Arjanbhai Manjibhai	Sanala	13.7
10	Pruthaviraj Ajesang Chuhan	Navi pipar	12
11	Dhansing Kishorsinh Chuhan	Navi pipar	14.2
12	Vijay Krushnkumar	Navi pipar	12
13	Vikramsingh Pruthviraj Chauhan	Navi pipar	11.3
14	Nagabhai Goganbhai Vcadher	Viramdal	11.8
15	Lakhamanbhai Virabhai Kanzaria	Gokalpar	11.3
16	Rajasibhai Pithabhai Pindaria	Nava Thathia	11.5
17	Kachar Khima Varu	Vadatara	11.7
18	Kishorbhai Vallabh Kapuria	Arikhana	11.5
19	Jayntibhai Popatbhai Sojitra	Arikhana	12.4
20	Harikisan Dhanjibhai Bhatt	Jakasia	12

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

# ANNEXURE – IV DETAILS OF ACHIEVEMENT TRAINING (Including the sponsored and FLD training programmes)

# A. ON Campus

				Dur									
				a- tion	C	Genera	I		sc / st	<u>٢</u>	Tota		
Date	Title of the training programme	Subject	Thematic area	in day	Mal e	Fem ale	Tot al	Mal e	Fem ale	Tot al	Mal e	Fem ale	Tot al
	Farmers & Farm Women			S									
			Weed										
03-10-08	Weed Management in Rabi crops	Crop Pro	Management	1	13	3	16	6	2	8	19	5	24
06-10-08	Seed Production	Prod. Site	Seed Production	1	11	6	17	3	0	3	14	6	20
10-10-08	Vermi-compost production	Prod. Site	Vermicompost	1	0	14	14	0	4	4	0	18	18
13-10-08	IPM in Cotton	Plant Prot	IPM	1	15	2	17	8	1	9	23	3	26
14-10-08	IPM in Grouondnut	Plant Prot	IPM	1	16	4	20	3	2	5	19	6	25
21-10-08	IPM in Castor	Plant Prot	IPM	1	18	2	20	4	2	6	22	4	26
23-10-08	IDM in Groundnut	Plant Prot	IDM	1	14	2	16	7	3	10	21	5	26
			Weed				10	~	2	10	22	-	20
04-11-08	Weed Management in Rabi crops	Crop Pro	Management	1	14	5	19	8	2	10	22	7	29
08-11-08	Nursery raising of Onion	Hort.	Nursery Raising	1	18	6	24	4	2	6	22	8	30
13-11-08	Income generation activities for empowerment of rural women	Home Sci	Women Empowerment	1	0	14	14	0	3	3	0	17	17
19-11-08	Women and Child care	Home Sci	Women & Child Care	1	0	16	16	0	2	2	0	18	18
28-11-08	IDM in cumin	Plant Prot	IDM	1	21	4	25	4	3	7	25	7	32
29-11-08	IDM in cumin	Plant Prot	IDM	1	16	6	22	5	2	7	21	8	29
						-	16	2	1	3	16	3	19
12-12-08	ICM of Rabi crops Value Addition of Vegetable	Crop Pro	ICM	1	14	2	10	2	1	5	10	5	19
29-12-08	Crops	Home Sci	Value Addition	1	0	12	12	0	6	6	0	18	18
10-12-08	IPM in cumin	Plant Prot	IPM	1	13	2	15	3	0	3	16	2	18
20-12-08	IPM in Chickpea	Plant Prot	IPM	1	9	4	13	2	0	2	11	4	15
26-12-08	IDM in Chickpea	Plant Prot	IDM	1	12	2	14	2	1	3	14	3	17
06-12-08	Vermi-compost production	Prod. Site	Vermicompost	1	18	2	20	2	1	3	20	3	23
01-01-09	Soil & Water Conservation	Soil Fert	Water conservation	1	10	2	12	5	3	8	15	5	20
23-01-09	Rural Craft	Home Sci	Women Empowerment	1	0	14	14	0	4	4	0	18	18
09-01-09	IDM in cumin	Plant Prot		1	16	3	19	10	3	13	26	6	32
29-01-09	IPM in Wheat		IPM	1	12	12	24	6	2	8	18	14	32
15-01-09	Vermi-compost production	Prod. Site	Vermicompost	1	14	10	24	8	5	13	22	15	37
19-01-09	Formation and Management of SHGs		Capacity	1			15	12	5	17	23	9	32
		Cap.Build	Building	1	11	4	21	12	7	20	26	1	<b>F</b> 1
10-02-09	Nursery raising Value Addition of Vegetable	Hort.	Nursery Raising	1	23	8	31	13	7	20	36	15	51
25-02-09	Crops	Home Sci	Value Addition	1	0	24	24	0	4	4	0	28	28
06-03-09	Nursery management	Hort.	Nursery Raising	1	13	3	16	2	0	2	15	3	18
	Organic manures production		Organic	-	10		26	6	4	10	22	14	36
17-03-09		Prod. Site	Farmiong	1	16	10							
09-04-09	Seed Production technology	Crop Pro	Seed Production	1	14	7	21	7	2	9	21	9	30
17-04-09	Nursery management	Hort.	Nursery Raising	1	13	6	19	5	1	6	18	7	25
21-04-09	Soil & Water Conservation	Soil Fert	Water conservation	1	17	8	25	8	2	10	25	10	35
22-04-09	Value Addition of Fruit Crops	Home Sci	Value Addition	1	0	25	25	0	8	8	0	33	33
13-04-09	Composite Fish Culture	Fisheries	Fish farming	1	18	5	23	6	1	7	24	6	30

	1												
29-04-09	Leadership development	Cap.Build	Leadership development	1	14	8	22	2	0	2	16	8	24
		Capibana	Water	-				-	-	_			
02-05-09	Water Management	Crop Pro	Management	1	13	2	15	3	2	5	16	4	20
07-05-09	Soil Fertility Management	Soil Fert	Fertility Management	1	16	3	19	4	1	5	20	4	24
12-05-09	Soil Fertility Management	Soil Fert	Fertility Management	1	11	5	16	7	2	9	18	7	25
09-05-09	Value Addition of Fruit Crops	Home Sci	Value Addition	1	0	19	19	0	3	3	0	22	22
14-05-09	Seed Production	Prod. Site	Seed Production	1	14	5	19	7	2	9	21	7	28
16-05-09	Group dynamics	Cap.Build	Capacity Building	1	12	5	17	4	1	5	16	6	22
	Weed Management in Kharif		Weed				13	6	1	7	15	5	20
23-06-09	crops	Crop Pro	Management	1	9	4	12	0	T	/	15	C	20
12-06-09	Composite Fish Culture	Fisheries	Fish farming	1	13	2	15	3	2	5	16	4	20
24-07-09	Production and management technology for spices crops	Crop Pro	Crop Production	1	16	3	19	3	1	4	19	4	23
14-07-09	IPM in Grouondnut	Plant Prot	IPM	1	18	6	24	6	5	11	24	11	35
10-07-09	IPM in Cotton	Plant Prot	IPM	1	13	9	22	4	4	8	17	13	30
13-08-09	IDM in Groundnut	Plant Prot	IDM	1	23	12	35	8	3	11	31	15	46
18-08-09	IDM in Cotton	Plant Prot	IDM	1	39	10	49	5	2	7	44	12	56
07-08-09	Integrated Fish Farming	Fisheries	Fish farming	1	45	6	51	6	4	10	51	10	61
08-09-09	IPM in Cotton	Plant Prot	IPM	1	38	6	44	7	2	9	45	8	53
17-09-09	IPM in Kharif crop	Plant Prot	IPM	1	34	2	36	8	0	8	42	2	44
							108						144
				51	727	356	3	234	123	357	961	479	0
	Rural Youth												
15 10 00	Integrated Forming	Rural Youth	Integrated	1	8	3	11	4	0	4	12	3	15
15-10-09	Integrated Farming	Rural	Farming Women	1	0	3							
10-11-09	Rural Craft	Youth	empowerment	1	12	12	24	3	4	7	15	16	31
		Rural					8	0	8	8	0	16	10
24-01-09	Value Addition vegetables	Youth	Value addition	1	0	8	o	0	0	0	0	10	16
27-02-09	Value Addition vegetables	Rural Youth	Value addition	1	0	15	15	0	3	3	0	18	18
03-03-09	Value Addition vegetables	Rural Youth	Value addition	1	0	14	14	0	5	5	0	19	19
		Rural						_					
15-04-09	Value Addition fruits	Youth	Value addition	1	0	10	10	0	4	4	0	14	14
22.04.00	Malua Addition for the	Rural		4	~		14	0	3	3	0	17	17
23-04-09	Value Addition fruits	Youth Rural	Value addition	1	0	14							
05-05-09	Value Addition fruits	Youth	Value addition	1	0	16	16	0	4	4	0	20	20
	Total Rural Youth			8	20	92	112	7	31	38	27	123	150
	Extension Personnel												
	Productivity Enhancement in field						17	5	0	5	20	2	22
02-07-09	crop	Ext.Fun	Crop Production	1	15	2	1/	5	0	5	20	2	~~
08-08-09	IPM & IDM in Kharif crops	Ext.Fun	IPM, IDM	1	19	1	20	8	0	8	27	1	28
	Total Extension Personnel			2	34	3	37	13	0	13	47	3	50
	Grand Total			61	781	451	123 2	254	154	408	103 5	605	164 0
		I	1	71		,,,,	-	207	1.7	100	5		

# **Off Campus**

				Dur			Nur	ticipa	ants				
				a- tion	C	Genera	d 🗌		SC / ST	r		Total	1
Date	Title of the training programme	Subject	Thematic area	in day s	Mal e	Fem ale	Tot al	Mal e	Fem ale	Tot al	Mal e	Fem ale	Tot al
	Farmers & Farm Women												
01-10-08	Weed Management	Crop Pro	Weed Management	1	15	3	18	4	2	6	19	5	24
04-10-08	IPM in Cumin	Plant Prot	IPM	1	14	3	17	5	1	6	19	4	23
07-10-08	IPM in Castor	Plant Prot	IPM	1	12	5	17	7	2	9	19	7	26
09-10-08	IPM in Cotton	Plant Prot	IPM	1	15	2	17	4	0	4	19	2	21
17-10-08	IPM in Vegetables	Plant Prot	IPM	1	16	2	18	3	1	4	19	3	22
18-10-08	IDM in Cumin	Plant Prot	IDM	1	18	6	24	4	0	4	22	6	28
25-10-08	Vermi-compost production	Prod. Site	Vermi Compost	1	15	4	19	6	0	6	21	4	25
28-10-08	Seed Production	Prod. Site	Seed Production	1	14	6	20	8	3	11	22	9	31
05-11-08	Weed Management	Crop Pro	Weed Management	1	14	4	18	8	3	11	22	7	29
07-11-08	Nursery Managemen	Hort.	Nursery Management	1	14	3	17	3	2	5	17	5	22
11-11-08	Nurtient Use Efficiency	Soil Fert	Nutrient Management	1	15	4	19	6	1	7	21	5	26
12-11-08	Women and Child care	Home Sci	Women Empowerment	1	0	16	16	0	11	11	0	27	27
06-11-08	IPM in Chickpea	Plant Prot	IPM	1	25	2	27	2	1	3	27	3	30
26-11-08	IDM in cumin	Plant Prot	IDM	1	14	3	17	3	0	3	17	3	20
20-11-08	Vermi-compost production	Prod. Site	Vermi Compost	1	14	2	16	3	2	5	17	4	21
22-12-08	ICM in Rabi Crops	Crop Pro	ICM	1	15	2	17	6	2	8	21	4	25
24-12-08	Micro Nutrient Efficeincy in crops	Soil Fert	Soil Fertility	1	12	2	14	3	2	5	15	4	19
16-12-08	Women and Child care	Home Sci	Women Empowerment	1	0	12	12	0	13	13	0	25	25
01-12-08	IDM in cumin	Plant Prot	IDM	1	14	2	16	3	1	4	17	3	20
03-12-08	IPM in Chickpea	Plant Prot	IPM	1	16	5	21	3	1	4	19	6	25
19-12-08	Shrimp farming	Fisheries	Fish Farming	1	15	3	18	2	0	2	17	3	20
08-12-08	Organic manures production	Prod. Site	Organic Farming	1	18	4	22	3	1	4	21	5	26
06-01-09	Income generation activities for empowerment of rural women	Home Sci	Women Empowerment	1	0	14	14	0	8	8	0	22	22
16-01-09	IDM in Vegetables	Plant Prot	IDM	1	22	5	27	5	1	6	27	6	33
21-01-09	IPM in Vegetables	Plant Prot	IPM	1	19	6	25	12	6	18	31	12	43
27-01-09	Formation and Management of SHGs	Cap.Build	Capacaity Building	1	31	8	39	6	2	8	37	10	47
17-02-09	Crop Diversification	Crop Pro	Crop Produciton	1	45	2	47	8	3	11	53	5	58
04-02-09	Soil & Water conservation	Soil Fert	Water Management	1	28	10	38	7	4	11	35	14	49
20-02-09	Value adition of vegetables	Home Sci	Value Addition	1	0	26	26	0	7	7	0	33	33
12-02-09	Organic manures production	Prod. Site	Organic Farming	1	29	5	34	4	1	5	33	6	39

		-					_			_			
02-03-09	Nursery Raising	Hort.	Nursery Management	1	32	6	38	4	2	6	36	8	44
13-03-09	Value adition of vegetables	Home Sci	Value Addition	1	0	18	18	0	6	6	0	24	24
09-03-09	Seed Production	Prod. Site	Seed Production	1	23	1	24	10	2	12	33	3	36
16-04-09	Seed production techniques	Crop Pro	Seed Production	1	26	10	36	3	2	5	29	12	41
24-04-09	Nursery Raising	Hort.	Nursery Management	1	16	3	19	8	2	10	24	5	29
08-04-09	Soil & Water conservation	Soil Fert	Water Management	1	15	4	19	9	1	10	24	5	29
28-04-09	IPM in Summer Gfoundnut	Plant Prot	IPM	1	19	5	24	3	4	7	22	9	31
04-04-09	Integrated fish farming	Fisheries	Fish Farming	1	25	6	31	6	6	12	31	12	43
11-04-09	Leadership development	Cap.Build	Capacaity Building	1	28	3	31	8	4	12	36	7	43
04-05-09	Group dynamics	Cap.Build	Capacaity Building	1	34	8	42	5	3	8	39	11	50
17-06-09	Water Management in kharif crops	Crop Pro	Water Management	1	18	1	19	9	2	11	27	3	30
20-06-09	Integrated fish farming	Fisheries	Fish Farming	1	16	3	19	5	0	5	21	3	24
22-07-09	IDM in Groundnut	Plant Prot	IDM	1	48	0	48	16	0	16	64	0	64
03-08-09	Biocontorl of Pests & Diseases	Plant Prot	IPM	1	15	2	17	12	5	17	27	7	34
11-08-09	IDM in Cotton	Plant Prot	IDM	1	21	2	23	7	6	13	28	8	36
17-08-09	Composite fish culture	Fisheries	Fish Farming	1	18	2	20	8	2	10	26	4	30
11-09-09	Biocontorl of Pests & Diseases	Plant Prot	IPM	1	34	3	37	12	3	15	46	6	52
23-09-09	IPM in Cotton	Plant Prot	IPM	1	26	2	28	9	0	9	35	2	37
	Total Farmers & Farm Women			48	893	250	114 3	262	131	393	115 5	381	153 6
	Rural Youth												
10-10-08	Value Addition	Rural Youth	Value Addition	1	0	18	18	0	10	10	0	28	28
15-11-08	Value Addition	Rural Youth	Value Addition	1	0	14	14	0	6	6	0	20	20
17-01-09	Ornamental Fisheries	Rural Youth	Fish farming	1	0	0	0	12	4	16	12	4	16
06-02-09	Fresh water Prawn culture	Rural Youth	Fish farming	1	0	0	0	21	3	24	21	3	24
05-03-09	Fresh water Prawn culture	Rural Youth	Fish farming	1	0	0	0	12	2	14	12	2	14
18-04-09	Fresh water Prawn culture	Rural Youth	Fish farming	1	0	0	0	15	3	18	15	3	18
30-04-09	Fresh water Prawn culture	Rural Youth	Fish farming	1	0	0	0	11	3	14	11	3	14
19-05-09	Fresh water Prawn culture	Rural Youth	Fish farming	1	0	0	0	13	3	16	13	3	16
	Total Rural Youth			8	0	32	32	84	34	118	84	66	150
	Extension Personnel												
16-07-09	IPM & IDM in Kharif Crops	Ext.Fun	IPM, IDM	1	23	0	23	8	-	8	31	0	31
10-08-09	Productivity Enhancement in Field Crops	Ext.Fun	Crop Production	1	21	0	21	9	<u> </u>	9	30	0	30
	Total Extension Personnel			2	44	0	44	17	0	17	61	0	61
L	I	1	1	I			I			I		1	

-				1								
	Grand Total		58	027	202	121	262	165	520	130	447	174
	Gland Total		20	937	202	9	363	102	520	0	447	7

## ANNEXURE -V

**"Khedut Talim Shibir**" in Cereals, oilseeds, Pulse crop, Horticultural crops, and other shibirs carried out in different talukas of Jamnagar district organized in collaboration with different line Department of the district.

								Tot	al No.	of pa	rticipa	ints			
SI.	Data	Title			Dura		Other			SC/ ST	-		Total		Sponsorin
No	Date	Title			-tion	Male	Female	Total	Male	Female	Total	Male	Female	Total	g Agency
		Farmers													
1	14-10-08	lsopom (Oilseeds)	Methan	Jamjodhpur	1	15	5	20	8	2	10	23	7	30	DAO
2	14-10-08	lsopom (Oilseeds)	Khirasara, Dangarwada , Nagadia	Kalyanpur	1	19	4	23	5	2	7	24	6	30	DAO
3	15-10-08	lsopom (Oilseeds)	Jamnagar	Jamnagar	1	13	4	17	9	3	12	22	7	29	DAO
4	15-10-08	lsopom (Oilseeds)	Nanduri	Lalpur	1	12	7	19	7	4	11	19	11	30	DAO
5	16-10-08	lsopom (Oilseeds)	Bhanvad	Bhanvad	1	14	8	22	6	3	9	20	11	31	DAO
6	16-10-08	lsopom (Oilseeds)	Jamkhambh adia	Jamkhambhadi a	1	12	6	18	9	4	13	21	10	31	DAO
7	18-10-08	lsopom (Oilseeds)	Dhrol	Dhrol	1	13	7	20	6	3	9	19	10	29	DAO
8	18-10-08	lsopom (Oilseeds)	Jodia	Jodia	1	13	8	21	9	3	12	22	11	33	DAO
9	20-10-08	lsopom (Oilseeds)	Dwarka	Dwarka	1	18	1	19	12	2	14	30	3	33	DAO
10	20-10-08	lsopom (Oilseeds)	Kalawad	Kalawad	1	21	0	21	9	4	13	30	4	34	DAO
11	21-10-08	lsopom (Oilseeds)	Jamjodhpur	Jamjodhpur	1	22	0	22	8	5	13	30	5	35	DAO
12	21-10-08	lsopom (Oilseeds)	Lalpur	Lalpur	1	17	0	17	10	6	16	27	6	33	DAO
13	22-10-08	lsopom (Oilseeds)	Jamkhambh adia	Jamkhambhadi a	1	16	0	16	17	7	24	33	7	40	DAO
14	22-10-08	lsopom (Oilseeds)	Jamnagar	Jamnagar	1	18	0	18	15	5	20	33	5	38	DAO
15	23-10-08	lsopom (Oilseeds)	Kanlyanpur	Kalyanpur	1	13	0	13	8	4	12	21	4	25	DAO
16	23-10-08	lsopom (Oilseeds)	Dwarka	Dwarka	1	16	0	16	6	5	11	22	5	27	DAO
17	24-10-08	lsopom (Oilseeds)	Bhanvad	Bhanvad	1	17	5	22	11	6	17	28	11	39	DAO
18	24-10-08	lsopom (Oilseeds)	Dhrol	Dhrol	1	14	2	16	7	7	14	21	9	30	DAO
19	27-10-08	lsopom (Oilseeds)	Jodia	Jodia	1	11	1	12	13	3	16	24	4	28	DAO
20	27-10-08	lsopom (Oilseeds)	Kalawad	Kalawad	1	17	0	17	8	8	16	25	8	33	DAO
21	24-11-08	National Soil	Viramdad	Jamkhambhadi a	1	48	8	56	22	2	24	70	10	80	DRDA

		Conservati on Saptah													
22	29-11-08	National Soil Conservati on Saptah	Jamnagar	Jamnagar		35	15	50	12	8	20	47	23	70	DRDA
23	11-11-08	Crop Production	Nathuvadla	Jamnagar	1	45	8	53	8	3	11	53	11	64	IFFCO
24	22 to 24- 12-08	Crop Production		Jamnagar	2	35	0	35	5	0	5	40	0	40	IFFCO
25	16-12-08	Horticultur al crops	Rajkot	Rajkot	1	25	5	30	10	5	15	35	10	45	NHRDF
26	28-12-08	Kharif crop improveme nt	Jamkhambh adia	Jamkhambhadi a	1	950	150	1100	350	50	400	1300	200	1500	Pesticide Asso.
27	22-07-09	Crop Production	Jamnagar	Jamnagar	1	26	12	38	6	4	10	32	16	48	Mahindra
28	29-07-09	Land Preparatio n	Jamnagar	Jamnagar	1	25	5	30	10	5	15	35	10	45	Mahindra
29	30-07-09	INM	Jamnagar	Jamnagar	1	36	7	43	4	3	7	40	10	50	Mahindra
30	05-04-09	IPM & ICM of <i>Kharif</i> crops	Jamnagar	Jamnagar	1	14	4	18	6	4	10	20	8	28	Arya Seed
31	31-01-09	IPM & ICM	Chandragad h	Jamnagar	1	45	10	55	15	5	20	60	15	75	вов
32	21-05-09	Crop Planning in Kharif	Pest. Dealers	Jamnagar	1	800	300	1100	250	150	400	1050	450	1500	DRDA
33	23-01-09	Organic Farming	Jamnagar	Jamnagar	1	45	15	60	10	5	15	55	20	75	Kisan Sangh
34	03-02-09	Winter crop production q	Jamnagar	Jamnagar	1	15	5	20	12	3	15	27	8	35	Mahindra
35	05-05-09	Precaution in plant protection for kharif crops	Jamnagar	Jamnagar	1	34	6	40	46	10	56	80	16	96	FSFC
36	07-08-09	Cotton Minimissio n	Manpar	Jodia	1	12	4	16	9	2	11	21	6	27	DAO
37	07-08-09	lsopom (Oilseeds)	Bizalka	Dhrol	1	14	5	19	10	1	11	24	6	30	DAO
38	08-08-09	Cotton Minimissio n	Satapar	Jamjodhpur	1	15	4	19	6	2	8	21	6	27	DAO
39	08-08-09	lsopom (Oilseeds)	Bhavneshwa r	Bhanvad	1	16	6	22	11	2	13	27	8	35	DAO
40	11-08-09	Cotton Minimissio n	Nanathavari a	Jamnagar	1	13	7	20	8	1	9	21	8	29	DAO
41	12-08-09	lsopom (Oilseeds)	Thebda	Lalpur	1	21	4	25	14	0	14	35	4	39	DAO

	•	•													
42	12-08-09	Cotton Minimissio n	Balva	Jamjodhpur	1	22	2	24	9	0	9	31	2	33	DAO
43	18-08-09	lsopom (Oilseeds)	Pirlakhasar	Jamkhambhadi a	1	18	1	19	14	0	14	32	1	33	DAO
44	18-08-09	Cotton Minimissio n	Dabasang	Lalpur	1	12	4	16	11	1	12	23	5	28	DAO
45	19-08-09	lsopom (Oilseeds)	Khirasara	Kalyanpur	1	16	0	16	10	2	12	26	2	28	DAO
46	19-08-09	Cotton Minimissio n	Bhogat	Kalyanpur	1	12	0	12	19	0	19	31	0	31	DAO
47	21-08-09	lsopom (Oilseeds)	Motabhavd a	Dwarka	1	18	6	24	11	0	11	29	6	35	DAO
48	21-08-09	Cotton Minimissio n	Kotadiya	Jamkhambhadi a	1	12	5	17	16	2	18	28	7	35	DAO
49	22-08-09	lsopom (Oilseeds)	Rajpar	Dhrol	1	16	6	22	14	3	17	30	9	39	DAO
50	22-08-09	Cotton Minimissio n	Lakhtar	Jodia	1	15	4	19	12	3	15	27	7	34	DAO
51	25-08-09	lsopom (Oilseeds)	Nana Panchdevda	Kalawad	1	19	3	22	10	4	14	29	7	36	DAO
52	26-08-09	Cotton Minimissio n	Arla	Kalawad	1	10	2	12	16	3	19	26	5	31	DAO
53	27-08-09	lsopom (Oilseeds)	Tupani	Dwarka	1	21	4	25	14	2	16	35	6	41	DAO
54	28-08-09	Cotton Minimissio n	Ravani Khijadia	Jamnagar	1	14	0	14	16	0	16	30	0	30	DAO
55	29-08-09	lsopom (Oilseeds)	Sanakhla	Bhanvad	1	16	0	16	14	0	14	30	0	30	DAO
		Rural Youth						0			0	0	0	0	
56	05-01-09	Preservatio n of Fruit & Vegetable	SDAU	Dantiwada	1	0	10	10	0	5	5	0	15	15	Home Sci. SDAU
		Extension Personnels						0			0	0	0	0	
57	15 to 16- 01-09	Ravi pre seasonal training	Ext. Personnel	Jamnagar	1	16	0	16	7	0	7	23	0	23	DAO
58	02-09- 2009	Training for cotton minimissio n	Ext. Personnel	Jamnagar	2	23	0	23	12	0	12	35	0	35	DAO
59	11-08-09	Training on plant protection of saurashtra crops	Pest. Dealers	Jamnagar	1	35	0	35	12	0	12	47	0	47	DuPont

## ANNEXURE – VI IMPACT OF KVK IN OPERATIONAL AREA

				K	VKs Villag	ges (10)					
				Rainfed				]	rrigated	1	
Sr. No	crop	Makvan a	Chandrag a	Konza	Dhandh a	Mokhan a	Dodhiy a	Amara	Bed	Balam- bhadi	Jivapa r
		2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
1	Groundun t	96	98	99	94	54	75	94	125	125	156
2	Cotton	154	150	125	156	105	156	187	219	125	156
3	Castor	240	200	210	250	0	106	0	126	125	0
4	Sesamum	312	223	200	312	0	0	31	0	125	0
5	Wheat	176	170	170	187	0	219	156	0	125	125
6	Mustard	0	0	0	44	0	0	40	0	125	0
7	Gram	92	90	88	94	0	0	0	0	125	0
8	Groundun t	60	62	63	125	0	0	0	0	125	0
	(summar)										
9	Greengra m (summar)	304	310	305	312	0	0	0	0	125	0
10	chillies	0	0	0	0	0	0	0	0	125	0
	•	Ŭ	<u> </u>	Ű		Ŭ		Ŭ	0	120	Ŭ
		Makvan	Chandrag		Dhandh	Mokhan	Dodhiy			Balam-	Jivapa
Sr. No	crop	a	a	Konza	a	а	a	Amara	Bed	bhadi	r
МО	_	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
1	Groundun t	129	132	140	125	50	62	44	94	75	94
2	Cotton	224	245	240	219	125	212	256	256	190	1175
3	Castor	325	340	350	312	156*	156	156	156	125	125 *
4	Sesamum	375	325	310	375	0	0	86	44 *	0	0
5	Wheat	324	326	325	312	156 *	319	187	250 *	250 *	156
6	Mustard	0	0	0	110	0	0	130	0	0	0
7	Gram	139	140	142	137	62*	0	0	0	0	0
8	Groundun t (summar)	84	92	94	187	75*	75 *	94	125 *	62 *	125 *
9	Greengra m (summar)	354	360	390	344	0	0	0	312 *	0	0
10	chillies	0	0	0	0	0	1875*	1500	1060 *	0	0
	Ajma	0	0	0	0	0	0	0	44 *	0	0
	1.j	Ŭ	Ŭ	-	ů.	Difference		Ű		Ŭ	Ű
Sr. No	crop	Makvan a	Chandrag a	Konza	Dhandh	Mokhan a	Dodhiy a	Amara	Bed	Balam- bhadi	Jivapa r
		-				-					-
1	Groundun t	33	34	41	31	-4	-13	-50	-31	-50	-60
2	Cotton	70	95	115	63	20	56	69	37	33	19
3	Castor	85	140	140	62	0	50	0	30	20	0
4	Sesamum	63	102	110	63	0	0	55	0	0	0
5	Wheat	148	156	155	125	0	100	131	250 *	0	101
6	Mustard	0	0	0	60	0	0	90	0	0	0
7	Gram	47	50	54	43	0	0	0	0	0	0
8	Groundun t	24	30	31	62	0	0	0	0	0	0
	(summar)										

	Greengra										
9	m	50	50	85	32	0	0	0	0	0	0
	(summar)										
10	chillies	0	0	0	0	0	0	0	0	0	0
11	Ajma	0	0	0	0	0	0	0	0	0	0

## **ANNEXURE – VII**

## ATTEND TRAINING CUM WORKSHOP BY THE KVK STAFF

Sr. No.	Period	Name of Officer	Place	Subject
1	$18^{th}$ Nov to $8^{th}$	Dr. V. J. Zizala	CSSRI, Karnal,	Recent advances in
	Dec, 2008		Haryana	Diagnostic technologies and
				Mgt. of poor quality water
				/soil
2	19 <sup>th</sup> to 21	Dr. N. B. Jadav	NAU, Navsari,	New Paradigms in
	Nov, 2008		Guj	Agronomic Research
3	15 <sup>th</sup> Dec,	Dr. V. J. Zizala	Soil Science and	Integrated Plant Nutrient
	2008 to $5^{\text{th}}$		Agril Chemistry,	supply and Management
	Jan 2009		IARI, New Delhi	system for enhancing soil
				quality, input, use efficiency
				and crop productivity
4	5 <sup>th</sup> 25 <sup>th</sup> Jan,	Dr. N. B. Jadav	CAS,	Entrepreneurship
	2009		Department of	development in
			Ext. Edn. IARI,	Agriculture.
			New Delhi	
5	30rd Dec.to	Dr. J. N.	CMFRI, Cochin	Recent Advance in breeding
	19 <sup>th</sup> Jan,	Thaker		and larviculture of marine
	2009			finfish and shellfish
6	15 Nov to 26	Dr. V. J. Zizala	ZCU-VI, ICAR,	" LAN/WAN Technologies
	Dec., 2008		CAZRI, Jodhpur	
7	$3^{rd}$ to $12^{th}$	Dr. N. B. Jadav	ZCU-VI, ICAR,	" LAN/WAN Technologies
	Dec, 2008		CAZRI, Jodhpur	
8.	16 <sup>th</sup> to 18 <sup>th</sup> , March, 2009	Dr. K. P. Baraiya Dr. N. B. Jadav Dr. J.N. Thaker Dr. V. J. Zizala Smt. A.K. Baraiya Mr. P.S. Gorfad	Director of Extension Education, JAU, Junagadh	Training in identified area for technical personnel of KVKs

				NEXU							
	PRA SURVEY	COND				OFTH					
Sr.	Particulars	Makau		Irrigated		Makha			Rainfed		4
No	Farticulars	Makaw ana	Chndr aga	Dhand ha	Konza	Mokha na	Bed	Bainbh adi	Dodhiy a	Jivapa r	Aanma bra
		65.04	64	80.86	70	544	497	32	92.8	27.2	32
2	Net cultivated area	63.04	64	80	50	240	16	24	40	7.2	32
		144	-						_		640
	Irrigated area		2733	80	60	80	720	24	400	0	
4	Rainfed Problematic Soil Pasture	128	160	240	100	192	112	16	80	0	328
5	land	63.04	0		0	304	496	28	43.2	23.2	0
6	Forest Land	2	0	0.96	0	32	1.6	4	0	16	0
7	Others			0	0	0	0	0	0	0	0
8	Total Framers	60	200	200	60	125	12000	60	137	1812	1000
•	Small	35	50	40	30	100	4000	30	37	1700	780
	Marginal	15	0	0	15	5	7850	25	50	100	200
	Big	10	150	160	15	20	150	5		100	200
9	Animal Popuplation	-							25		
9		102	425	187	43	2190	3800	5120	615	247	505
	Cow	32	15	50	10	90	300	60	70	125	200
	Baffelo	10	60	40	15	500	700	30	100	120	125
	Goat	0	200	7	0	500	1200	0	100	0	60
	Sheep	0	50	0	0	1000	1000	0	300	0	40
	Bullock	60	100	90	18	100	100	30	45	22	80
	Poultry	0	0	0	0	0	500	5000	0	0	0
	Season wise area under var	ious cro	ps in ha	:							
1	Kharif Season										
	Groundunt	120	144	160	150	64	100	11.2	240	55	30
	Bajra	98	22	77	70	30	44	12	66	10	5
	Jowar	16	8	3.2	10	24	30	20	40	9	8
	Sesamum	24	8	3.2	22	20	12	1.6	0.8	8	4
	Cotton	140	208	128	120	128	66	15	192	15	15
	Castor	4.8	16	4.8	16	48	22	8	11.2	10	10
	Pulses	10	4	5	4	12	15	7	11	8	9
	Others	9	7	8	0	5	9	5	8	5	7
2	Rabi Season										
	Wheat	64	80	112	100	80	50	22	240	20	19
	Gram	24	32	40	22	16	15	1.12	1.6	4	9
	Garlic	3.2	3.2	16	14	0	11	1.6	0	8	11
	Cumin	1.6	3.2	3.2	0	0	7	1.6	0	1.6	14
3	Summer Season	1.0	0.2	0.2	•			1.0	0	1.0	
5	Groundunt	48	16	64	15	25	22	2.4	96	10	12
	Pulses	22	10	25	10	15	6	4	10	5	4
	Bajra	15	11	20	11	21	10	8	5	6	8
4	Others										
	Vegetables	10	9	22	5	8	0	0	32.8	21	19
	Horticultural	8	4	0.96	0	10	9.6	0	2.4	10	14
	Gresis Average productivity of ma	4	11	1.6	0	128	16	1.6	48	9	8
1	Kharif season :		<u>ы ( к./ па</u>								
	Groundunt	1500	2465	2478	1200	2444	1500	1475	1385	1700	1950
	Bajra	1250	2150	2944	1375	1222	1000	1100	1225	2750	2043
	Sesamum	325	247	244	375	300	279	325	375	325	300
~	Cotton	1275	1375	1678	1500	1245	1275	1444	1450	1367	1220
2	Rabi Season :	2070	2444	2740	2700	2000	2740	2770	2750	2000	2100
	Wheat Gram	3870 1159	3444 1340	3740 1375	3700 1250	3000 1474	3740 1444	2779 1120	3756 1320	2889 1340	2100 1255
	Garlic	1685	2783	2978	1685	2744	2544	2145	2400	1200	1135

## ANNEXURE – VIII

	PRA SURVEY CONDUCTING DURING 2008 OF JAMKHAMBHADIA BLOCK												
				Irrigated					Rainfed				
		Dharm pur	Vadatr a	Jakasiy a	Beraja	Virmad ada	Haripur	Madhu pur	Sidhpu r	Navata thiya	Gokala par		
1	Total area	232	1120	320	5136	340	1632	479	232	480	324		
2	Net cultivated area	160	1040	295	480	320	96	464	195	320	100		
	Irrigated area	80	560	185	320	304	80	160	112	80	160		
-	Rainfed	48	480	102	160	16	16	304	48	240	160		
	Problematic Soil Pasture												
5	land	72	70.4	13	336	9	67.2	71	40	0	4.8		
6	Forest Land	0	9.6	12	0	11	0	80	0	0	0		
7	Others	0	0	0	0	0	0	0	0	0	0		
8	Total Framers	7000	2000	265	600	125	250	125	360	80	125		
	Small	3000	30	100	300	20	100	20	250	7	30		
	Marginal	2000	20	50	200	10	100	10	100	0	5		
	Big	2000	1950	115	100	95	50	95	10	73	90		
9	Animal Popuplation	2750	3450	140	1250	300	1145	160	670	251	305		
	Cow	500	150	80	150	10	90	10	200	8	150		
	Baffelo	200	1300	60	150	150	30	150	30	150	35		
	Goat	1400	0	0	200	0	300	0	50	0	0		
	Sheep	600	0	0	500	0	700	0	200	0	0		
	Bullock	50	2000	0	250	140	25	0	200	90	120		
	Poultry	0	0	0	0	0	0	0	0	0	0		
	Season wise area under var	-			•	Ŭ	Ŭ	0	Ŭ	Ŭ			
1	Kharif Season		1										
	Groundunt	48	200	100	320	225	400	80	128	128	123		
	Bajra	8	25	75	179	74	79	66	71	91	82		
	Jowar	16	20	60	88	59	3	63	10	20	22		
	Sesamum	8	10	15	25	33	8	32	160	30	33		
	Cotton	40	249	150	160	208	40	208	64	160	125		
	Castor	24	35	70	77	32	60	77	4.8	6.4	46		
	Pulses	9	6	31	22	28	10	21	66	24	20		
	Others	20	30	70	23	23	22	19	20	18	10		
2	Rabi Season	20	00	10	20	20		10	20	10	10		
-	Wheat	32	80	257	80	100	100	150	32	167	122		
	Gram	96	50	90	64	80		80	16	20	25		
	Garlic	90 4	9	90 7	4	4	10 10	11	8	18	25 15		
	Cumin	4	20	15	4	9	22	18	0 12	10	13		
2	Summer Season	10	20	10	4	3		10	12	10	13		
3		10	0	7	16	20	14	0	24	20	22		
	Groundunt Pulses	10 13	8 20	7 32	16 15	20 20	11 18	9 22	24 15	30 10	22 20		
	Bajra	18	55	44	33	40	21	18	20	10	12		
	Others												
	Vegetables	26	50	62	9.28	30	70	33	3.04	40	35		
	Horticultural	48	20	32	685	22	23	19	19	21	18		
	Gresis Average productivity of maj	4	10 • <b>(K/h</b> a	5	52	10	8	7	9	100	9		
1	Kharif season :												
	Groundunt	1875	2200	2279	2015	2378	1700	1489	1687	1236	1900		
	Bajra	4375	2150	2267	2068	2111	1250	1650	1754	1768	1366		
	Sesamum	375	790	725	798	568	375	325	366	377	325		
	Cotton	1250	2150	2378	1250	2444	1789	1750	1250	1457	1470		
2	Rabi Season :	4075	2075	4777	2552	0477	2040	0445	2405	2475	2007		
	Wheat Gram	4375 1875	3975 1850	4777 1780	3556 1327	3477 1268	3210 1750	2115 1786	3125 1250	3175 1150	3907 1387		
	Garlic	1250	2785	2000	2163	2470	2975	1670	1562	2780	1285		
	Cumin	1875	1150	1125	1025	1500	700	348	375	745	375		

## PRA SURVEY CONDUCTING DURING 2008 OF JAMKHAMBHADIA BLOCK

	PRA SURV						je No				
Sr.	De de las			Irrigated	1				Rainfed		
No	Particulars	Dhudh na		Golaniy a		Kalava d	Naniva vadi	Sanad a	Prabhu jipipadi a	Nanab adnapa r	Haripar
1	Total area	1165	270	371	1481	200	1034	824	633	295	159
2	Net cultivated area	564	203.2	178	1006	106	807	604	386	225	120
3	Irrigated area	350	124	70	468	90	413	250	171	0	56
4	Rainfed	214	78.56	105	538	60	394	354	215	225	64
5	Problematic Soil Pasture land	483	67	192	338	50	114	141	202	70	39
6	Forest Land	1.6	0	0	-	0	-	-	-	0	0
7	Others	176	0	30	136	0	113	79	45	0	21
8	Total Framers	82	677	115	400	100	334	331	194	90	751
	Small	50	279	42	130	50	119	67	78	31	120
	Marginal	7	42	8	40	25	40	44	29	9	20
	Big	25	356	65	230	25	175	220	87	40	538
9	Animal Popuplation	102	163	85	128	51	109	84	65	65	102
	Cow	48	21	22	58	20	48	36	25	45	34
	Baffelo	32	28	45	40	15	39	28	22	20	28
		0	0		-+0 0		0	0	0		0
	Goat Sheep	0	0	0	0	0	0	0	0	0	0
	Bullock	22	14	18	30	16	22	20	18	0	40
	Poultry	0	0	0	0	0	0	0	0	0	0
	Season wise area under va	rious cro	ops in ha	l:							
1	Kharif Season										
	Groundunt	280	104	170	554	120	435	335	210	125	510
	Bajra	-	0	0	-	0	-	-	-	0	0
	Jowar	-	0	0	-	0	-	-	-	0	0
	Sesamum	10	0.8	0	15	12	5	15	5	0	0
	Cotton	220	312	60	373	100	294	204	125	63	273
	Castor	10	16	10	15	20	10	15	5	0	10
	Pulses	10	0	0	15	0	15	14	14	0	0
	Others	0	0	0	0	0	0	0	0	0	0
2	Rabi Season	00		10	75	10	70	50	00	05	00
	Wheat Gram	20 50	8 24	10 20	75 145	10 20	70 110	50 100	30 45	25 30	80 120
	Garlic	20	10.4	10	25	15	10	100	45 5	5	20
	Cumin	0	0	0	20	0	20	5	10	5	0
3	Summer Season										
	Groundunt	30	12	10	21	20	23	17	25	5	13
	Pulses	10	0	0	-	0	-	-	-	-	0
	Bajra	0	0	0		0				0	0
4	Others										
	Vegetables	2	0	5	4	6	3	2	3	0	5
	Horticultural Gresis	0	0	0	0	0	0	0	0	0	0
	Average productivity of ma	-		-	U	U	U	U	U	U	U
1				, . 							
	Groundunt	1200	2400	1250	1200	2100	1200	1200	1200	24000	1250
	Bajra	-	0	0	-	0	-	-	-	0	0
	Sesamum	1000	2000	0	1000	1500	1000	1000	1000	0	
	Cotton	3150	6250	2900	3150	2750	3125	3125	3125	6000	0
2	Rabi Season :	0405	0050	0500	0405	0750	0405	0405	0405	0000	0500
	Wheat Gram	3125 1500	6250 18170	3500 1800	3125 1500	3750 1800	3125 1500	3125 1500	3125 1500	6200 3006	3500 1500
	Olam	1000	10170	1000	1000	1000	1000	1000	1000	3000	1300

### PRA SURVEY CONDUCTING DURING 2008 OF KALAVAD BLOCK

Garlic	3800	3000	3200	3800	3500	3800	3900	3850	2016	2500
Cumin	0	0	0	1125	0	1125	1115	1125	1200	0

## PRA SURVEY CONDUCTING DURING 2008 OF LALPUR BLOCK

Sr.						Villag	ge No				
No	Particulars			Irrigated					Rainfed		
		Navi Veraval	VeravalR amapar	Arikhan a	Murila	Godav ari	Kanvira di	Apiya	Rasan par	Naniraf udar	Navipip ar
1	Total area	597	1886	915	450	658	816	1356	1363	1360	3952
2	Net cultivated area	399	1550	659	300	658	364	639	1037	838	1439
3	Irrigated area	213	500	306	175	380	164	180	300	240	681
4	Rainfed	186	1000	350	125	278	200	459	737	598	758
-	Problematic Soil Pasture	100	1000	000	120	210	200	400	101	000	100
5	land	63	205	115	50	-	307	237	184	211	1163
6	Forest Land	104	-	10	-	-	-	408	-	150	306
7	Others	31	161	131	50	-	45	62	142	102	44
8	Total Framers	188	617	314	217	150	110	260	215	238	266
	Small	83	265	72	85	100	30	110	65	88	253
	Marginal	17	45	36	45	25	20	30	40	35	64
	Big	88	417	206	87	25	60	120	110	115	249
9	Animal Popuplation	60	151	89	100	121	69	98	95	98	84
	Cow	22	45	25	30	40	22	30	40	35	35
	Baffelo	10	45 50	15	20	30	25	35	25	30	29
			0	2			0		0		0
	Goat	5			5	10	-	5		15	
	Sheep	5	0	3	5	15	0	8	0	4	0
	Bullock	18	56	44	40	26	24	20	30	25	20
	Poultry Season wise area under var	0	0 no in ho	0	0	0	0	0	0	0	0
4			ps in na	l . 						0	
1	Kharif Season	400	500	000	450	0.40	455		000	0	005
	Groundunt	100	500	200	152	240	155	280	380	330	935
	Bajra	25	60	10	-	10	15	20	40	30	20
	Jowar	-	-	-	-	-	-	-	-		-
	Sesamum	20	90	20	10	10	20	20	40	30	55
	Cotton	150 40	550 100	360 60	164 12	270 80	125 20	200 30	350 40	275 35	260 75
	Castor	-									
	Pulses	10	30	5	7	15	10	5	20	13	10
2	Others Rabi Season	0	0	0	0	0	0	0	0	0	0
2	Wheat	40	80	80	80	70	30	40	50	45	45
	Gram	25	50	60	20	40	15	20	25	23	25
	Garlic	25	40	60	10	40	20	15	40	28	20
	Cumin	10	10	2	4	30	5	5	5	5	35
3	Summer Season									0	
	Groundunt	5	20	40	24	10	10	8	20	14	25
	Pulses	3	0.5	3	4	5	3	2	2	2	5
4	Bajra <b>Others</b>	5	3	2	4	5	8	5	5	5	5
-	Vegetables	0	2	3	3	4	2	3	3	3	3
	Horticultural			0			_	<u> </u>	0	0	
	Gresis										
	Average productivity of ma	or crops	s ( K./ ha	ı):		n			I	I	
1	Kharif season :	4.10-	4.1 ===	4.1 ==	4005	4405	4.105	4055	4055	4055	4075
	Groundunt	1100	1150	1150	1200	1100	1100	1050	1050	1050	1250
	Bajra Sesamum	1800 350	1750 350	2000 400	1800 450	1950 400	1700 350	1650 350	1700 300	1675 325	1700 550
	Cotton	3200	3100	3250	450 3300	3000	2600	2650	2600	2625	2500
2	Rabi Season :	0200	0.00	0200	0000	0000	2000	2000	2000	2020	2000
	Wheat	3400	3400	3500	3450	3400	3400	3200	3400	3300	3000
	Gram	850	850	850	850	1050	1000	800	950	875	850

Garlic	3800	3700	3800	3500	3950	3800	3600	3800	3700	2850
Cumin	800	700	825	800	850	700	850	700	775	750

## ANNEXURES - X

#### District Profile - I

### Include the details of

- 1. General census
- 2. Agricultural and allied census
- 3. Agro-climatic zones
- 4. Agro-ecosystems
- 5. Major and micro-farming systems
- 6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.
- 7. Major agriculture and allied enterprises

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

#### Include

- 1. Names of villages, focus area, target area etc.
- 2. Survey methods used (survey by questionnaire, PRA, RRA, etc.)
- 3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.
- 4. Analysis and conclusions
- 5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem
- 6. Matrix ranking of problems
- 7. List of location specific thrust areas
- 8. List of location specific technology needs for OFT and FLD
- 9. Matrix ranking of technologies
- 10. List of location specific training needs

## Technology Inventory and Activity Chart - III

#### Include

- 1. Names of research institutes, research stations, regional centres of NARS (SAU and ICAR) and other public and private bodies having relevance to location specific technology needs
- 2. Inventory of latest technology available \*

SI.	Technology	Crop/enterprise	Year of release or	Source of	Reference/citation
No			recommendation	technology	
			of technology		
1.	Cv. BSMR-8 *	Pigeonpea	2006	MAU,	Notification no. 656 dated
				Parbhani	25.06.2006 of Central/State
					Varietal Release Committee/
					Proceedings no. 66 of MAU,
					Parbhani dated 04.02.2006
2.	Modified Paddy	Improved Farm	2007	Directorate of	Proceedings/Notification no.
	Drum Seeder*	Implements		<b>Rice Research</b>	77 of DRR, Hyderabad dated
					04.02.2007
3.	Stem application	Cotton	2008	ANGRAU,	Proceedings/Notification no.
	of Imidachloropid			Hyderabad	88 of ANGRAU, Hyderabad
	@ 0.04%*				dated 04.02.2008

**PS** \* an example for guidance only

#### 1. Activity Chart

Crop/Animal/ Enterprise	Problem	Cause	Solution	Activity	Reference of Technology
Cotton	Low productivity of cotton under rainfed medium black soils of Northern Amaravati	<ol> <li>Imbalance fertilizer application</li> <li>Pest and disease occurance</li> <li>Flower and fruit drop due to micro- nutrient deficiency</li> </ol>	<ol> <li>Application of recommend dose of Nutrients</li> <li>Integrated Pest control</li> <li>Micro-nutrient i.e boron application to control flower and fruit drop</li> </ol>	<ol> <li>Single component FLD to demonstrate effect of recommended dose of nutrients</li> <li>Training and FLD programme on integrated pest management of cotton pest</li> <li>OFT on management boron deficiency to control flower and fruit drop</li> </ol>	<ol> <li>Sl. No. 6 of Technology Inventory</li> <li>Sl. No. 45 of technology Inventory</li> <li>Sl. No. 99 of Technology inventory</li> </ol>
Soybean					
Mulberry					
Jersy Cow					

#### 4. Details of each of the technology under Assessment, Refinement and demonstration

#### Include

- 1. Detailed account on varietal/breed characters for each of the variety/breed selected for FLD and OFT
- 2. Details of technologies that may include formulation, quantity, time, methods of application of nutrients, pesticides, fungicides etc., for technologies selected under FLD and OFTs

Details of location/area specificity of recommended technology viz., for each of the variety/breed/technology selected for FLD and OFT

## SUMMARY TABLES OF ANNUAL PROGRESS REPORT – 2008-09

(OCTOBER 2008 TO SEPTEMBER-2009)

#### **STAFF POSITION**

KVK	PC		SMS		PA		ADMN		AX		SUPP		TOTAL		L						
KVK	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V
KVK, JAU, Jamnagar	1	0	1	6	5	1	3	3	0	2	1	1	2	2	0	2	2	0	16	13	3

S- Sanctioned

F- Filled V- Vacant

#### **REVOLVING FUND**

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 2008 to March 2009	9.98615	8.54069	8.80367	9.72317

#### SCIENTIFIC ADVISORY COMMITTEE

S1.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	As below	As below
5.	14-09-2009	35		

#### 1 Details of Technologies assessed and refinement

#### List of Technology Assessed

S. No	Enter prise	Crop/ Animal/ Species	Name of the technology assessed	Thematic area	Area (ha.)	Number of trials	
1	Oilseeds crops	Groundnut	IDM, Variety	IDM in groundnut 5 10		Groundnut (GG-5)	
2	Fibre crops	Cotton	Variety,IPM	ICM in cotton	20	40	Cotton (Bt. Cotton)
3	Vegetable	Chilli	IPM	IPM in chilli	5	10	Chilli (Reshampatto)
4	Vegetable	Brinjal	IPM	IPM in brinjal	5	10	Brinjal (GBL- 1)
5	Vegetable	Tomato	INM	INM in tomato	5	10	Tomato (GT-2)
6	Vegetable	Tomato	INM	INM in tomato	10	20	Cabbage/ Cauliflower
7	Cereals	Wheat	Variety	Varietal Evaluation of wheat	20	40	Wheat (GW- 366)
8	Hort. Crops	Cumin	IDM	IDM in cumin	10	20	Cumin (Guj.Cum4)
	Total (	Wherever ap	oplicable)		80	160	

LISU	of fechnol	ogy Refined					
S. No	Category	Crop/ enterprise	Name of the technology refined	Thematic area	Area (ha.)	Number of trials	Remarks if any
1	Cereals	Bajara	Time of thinning in bajara	Weed management	3	3	(2006-07)
2	Oilseeds	Groundnut	Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma</i> <i>harzeanum</i> @2.5 kg/ha at 30 & 45 DAG	Integrated Disease management	3	3	2007-08
3	Cash crop	Cotton	Use of balance fertilizers, Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 60)	INM in cotton	3	3	2007-08
4.	Cash crop	cotton	sowing application of Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides/bio- pesticides	Mealybug in Cotton	3	3	2008-09
	Total	(wherever a	pplicable)		12	12	

## List of Technology Refined

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

Thematic areas	Cereals	Oilseeds	Pulses	Com m- ercial Crops	-ables	Flowe r	-	Tube r Crops	TOTA L
Varietal Evaluation	1		1						2
Seed / Plant production									
Weed/Thining Management	1								1
Integrated Crop Management		1		1					2
Integrated Nutrient Management					2				2
Integrated Farming System									
Mushroom cultivation									
Drudgery reduction									
Farm machineries									
Value addition									
Integrated Pest Management			1		2				3
Integrated Disease Management		2	1	1					4
Resource conservation technology									

Small Scale income generating enterprises								
TOTAL	2	3	3	2	4			14

\* 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	Pulses	Comm- ercial Crops	Veget- ables	Fruits	Flower	Plant- ation crops	Tuber Crops	TOTAL
Varietal Evaluation	1		1							2
Seed / Plant production										
Weed Management	1									1
Integrated Crop Management		1		1						2
Integrated Nutrient Management					2					2
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management			1		2					3
Integrated Disease Management		2	1	1						4
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	2	3	3	2	4					14

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	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:-** Heavy infestation of mealybug is found, now a days Mealy bug becomes haddock in cotton.

- More number of host range
- Dispersion is very fast
- Mealy like powder covered on the body
- ✤ Leaving in gregarious phase
- ✤ Ability to laid eggs in pouch
- Eggs are hibernating in unfavorable condition
- Symbiotic relation with ants
- Low incidence of natural enemies
- High capacity of migration and climbing of crawlers.

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

Category	Source of technology			Technology detail	
Technolog y option 1	0		Farmer practices	Application of conventional insecticides after infestation on Mealy bug	
Technolog y option 2	Main Oilseeds Res. Station, JAU, Junagadh	<b>T</b> <sub>2</sub>	Recommende d practices	Pre-sowing application of Methyl parathion, Application of insecticides at the time of infestation	
Technolog y 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/bio-pesticides ( <i>Beauveria</i> spp. or <i>Verticillium</i> spp.)	

4) Source of technology: Junagadh Agricultural University

## 5) Production system :-

Irrigated & rainfed condition having heavy infestation of mealy bug

- **Variety** : B.t. cotton (Government approved variety)
- Season : *Kharif* –2008, irrigated

**Size of the plot** : 0.40 ha.

6) Thematic area : IPM for suppression of Mealy bug

#### 7) 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 a	assessed / refin	ned (% Plant	
No			infested with mealybug)			
			$T_1$	$T_2$	T <sub>3</sub>	

1	Oodhavaji Kanjibhai	Makwana	65	34	13
2	Ratilal Devrajbhai Sangani	Badanpar	62	31	9
3	Krishi Vigyan Kendra	Jamnagar	53	25	8
		Average	60	30	10

**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 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*	Technolo gy Assessed	Parameters of assessment	Data on the parameter (% Plant infested)
1	2	3	4	5	6	7	8
						T <sub>1</sub> - Farmers practices Application of conventional insecticides	60
			Managemen		Mangt.	T <sub>2</sub> - Improved Pre-sowing application of Methyl parathion	30
Cotton	Irrigat ed	Mealy bug	t of mealy bug infestation	3	insecticid es	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	10

## 11) Results of On Farm Trials

\* No. of farmers

Crop/ enterprise			Any refinement done	Justification for refinement
1	9	10	11	12
Cotton	Dust at 15 days interval, removal of host plants & vegetation from boundaries, application of newer	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	Methyl parathion 2% Dust at 15 days interval, removal of host plants & vegetation from	sporadic pest. Now it becomes regular polyphagous

Ī	pesticides (Beauveria	treatment. They	v satisfied	application c	f breeding
	spp. or Verticillium	with this trial.		newer	continuously.
	spp.) having highest			insecticides/bio-	
	non significant yield			pesticides	
	with farmers practices.				

Crop/ enterprise	terprise Technology Assessed / Refined		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
Cotton	T <sub>1</sub> - Farmers practices Application of conventional insecticides	3078	4500	84645	80145	1:17.81
	T <sub>2</sub> - Improved Pre- sowing application of Methyl parathion	2243	3500	61683	58183	1:16.62
	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	3085	4200	84838	80638	1:19.20

## <u>OFT – 2 :- Cotton</u> :

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

#### 2) Problem definition:

- Farmers are using phosphatic fertilizer as basal as well as top dressing.
- Plant needs more phosphorus at initial growth stage.
- ✤ Improper variety selection
- High labour charges
- Lack of proper practices knowledge
- Plant stand per hectare
- Monocropping
- Long duration crops
- Injudicious use of fertilizers
- Injudicious use of pesticides
- ✤ Lack of disease management
- Scheduling of irrigation

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

Treatment			Period of application	N (kg/ha)	P <sub>2</sub> O <sub>5</sub> (kg/ha)	K <sub>2</sub> O (kg/ha)	Source
$T_1$	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	<b>275</b>	115	0	oica
					115	_	
$T_2$	Recommended	Cotton Res.	Basal	40	0	0	AS
	practices	Station,	Split-1(30 DAS)	40	0	0	Urea
		JAU,	Split-2 (45 DAS)	40	0	0	Urea
		Junagadh	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.:-  $T_1$ ,  $T_2$ , T3 & T4 are technology options 1, 2, 3 & 4 respectively.

4) Source of Technologoy :- Junagadh Agricultural Univiersity

5) Production system and thematic area : Application of DAP

Variety : Mallika {B.t. cotton (Government approved variety)}

Season : *Kharif* –2008

Size of the plot : 0.40 ha.

6) Thematic area : Unjudicious use of chemical fertilizers in cotton production

## 7) 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	tee	chnology ass	essed / refin	ed		
No			Technology Technology Technology Technology					
			Option 1	Option 2	Option 3	Option 4		
			Yield	Yield	Yield	Yield		
1	Viredrasingh	Dhandha	30.3	21.7	29.7	29.9		
	Bachubha							
2	Bhimsi Dhanabhai	Viramdad	30.2	21.8	29.7	29.85		
	Ambaliya							
3	Krishi Vigyan Kendra	Jamnagar	30.5	22.4	30.0	30.1		
		Average	30.3	21.9	29.8	30.0		

**8)** Final recommendation for micro level situation : Basal application of N (40 kg),  $P_2O_5$  (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

II) Ke	(1) Results of On Farm Trials											
Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trial s*	Technolo gy Assessed	Parameters of assessment	Data on the parameter (kg/ha)					
1	2	3	4	5	6	7	8					
	Inni		I on viold of		Use of	$\begin{array}{rrrr} T_1 & - \mbox{ Farmers practices (N 275} \\ : \ P_2O_5 \ 115 : \ K_2O \ 00) \\ T_2 & - \ Improved \ Practice \ (N \ 160 : \ P_2O_5 \ 00 : \ K_2O \ 00) \end{array}$	3032 2198					
Cotton	Irri- gated		Low yield of Cotton	3	balance fertilizers	To Refined Practices (N 160 ·	2980					
						$T_4$ - Refined Practices (N 160 : $P_2O_5 60 : K_2O 120$ )	3000					

\* No. of farmers

Crop/ enterprise	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	9	10	11	12
Cotton	(40 kg), $P_2O_5$ (60 kg) and $K_2O$ (60 kg) and remaining N	support for OFT. Recommended application of the fertilizer having low incidence of insect-pests attack as well as disease. And highest vield found in refinement	(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	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 O0)	3032	5850	83380	77530	1:13.25
	T <sub>2</sub> - Improved Practice (N 160 : P <sub>2</sub> O <sub>5</sub> 00 : K <sub>2</sub> O 00)	2198	1945	60445	58500	1:30.08
	T <sub>3</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 60)	2980	3900	81950	78050	1:20.01
	T <sub>4</sub> - Refined Practices (N 160 : P <sub>2</sub> O <sub>5</sub> 60 : K <sub>2</sub> O 120)	3000	4500	82500	78000	1:17.33

## <u>OFT – 3:- Oilseeds (Groundnut)</u> :

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

2) Problem definition :

- Reduction in plant population/ unit area due to disease at initial stage
- Poor quality of pod as well as straw
- Pods detached from the plant and remains in the soil
- Lack of knowledge about the proper method and time of application
- Set furrow sowing system
- Soil bunding enhance the disease intensity
- ✤ Lack of summer deep ploughing
- ✤ Lack of crop rotation

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

Category	Source of	Technologoy details				
	technology					
Technology option 1	Farmer	$T_1$	Farmers practice (Control)			
Technology option 2	Main Oilseeds Res.	$T_2$	Trichoderma harzeanum @ 2.5 kg/ha			
	Station, JAU,		with castor cake @ 500kg/ha at the			
	Junagadh		time of sowing			
Technology option 3		<b>T</b> <sub>3</sub>	Castor cake @ 500 kg/ha, Drenching of			
			Trichoderma harzeanum@2.5 kg/ha at			
			30 & 45 DAG			

## 4) Source of Technology:- Junagadh Agricultural University

## 5) Production system

Variety: GG-20

Season: Kharif- 2008

Size of plot : 0.40 ha

## 5) Production system and thematic area : Management of stem rot in groundnut

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

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

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	Pithabhai Popatbhai Vasoya	Chandra ga	15.5	23.2	21.7			
2	Gajubha Vibhaji Sodha	Dhandha	15.6	23.0	21.6			
3	Krishi Vigyan Kendra	Jamnaga r	15.7	23.4	21.8			
		Average	15.6	23.2	21.7			

**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) Re	suits	oi Un r	arm Triais				
Crop/ enter- prise	Farm- ing situ- ation	Prob- lem Diag- nosed	Title of OFT	No. of trial s*	Technolo gy 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	3	ment of stem rot in	T <sub>1</sub> - Farmers practice (Control) T <sub>2</sub> - Improved Practice ( <i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing)	1560 2325
-dnut	fed	otium rolfcii)	due to Sclerotium stem rot		through Trichoder ma	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)	2170

## 11) Results of On Farm Trials

\* No. of farmers

Crop/ enterprise	- Describe of Foodbook from the		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	Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma</i> <i>harzeanum</i> @2.5 kg/ha at 30 & 45 DAG	

Crop/ enterprise	terprise Technology Assessed / / Refined		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)	1560	3000	39000	36000	1:12.00	
nut	T <sub>2</sub> - Improved Practice ( <i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing)	2325	1750	58125	56375	1:32.21	

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)	2170	2300	54250	51950	1:22.59
--	------	------	-------	-------	---------

\*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

## FRONTLINE DEMONSTRATIONS

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

#### OILSEEDS

SI. No.	Сгор	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha	Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit- Cost Ratio (Gross Return / Gross
								Demo	Local	(13./110)	Cost)
1	Groundnut	IDM, Variety	20	10	20.62	16.25	21.21	7000	8500	32350	1:2.23

#### PULSES

SI. No.	Сгор	Technology Demonstrated	No. of Farmers	Area (ha.)	Yield of local		Data on parameter in relation to	Average Net Return	Benefit- Cost Ratio
------------	------	----------------------------	-------------------	---------------	-------------------	--	--	--------------------------	---------------------------

		Demo. Yield Qtl/ha	Check Qtl./ha	Increase in yield (%)	techno demons Demo	•••	(Profit) (Rs./ha)	(Gross Return / Gross Cost)

#### Cotton

SI. No.	Сгор	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha	Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit- Cost Ratio (Gross Return / Gross
						- Cliffic		Demo	Local	(15./110)	Cost)
2	Cotton	IPM, Variety	20	10	25.00	20.31	18.75	2880	5000	53806	1:3.8

#### CEREALS, HORTICULTURE AND OTHER CROPS

SI. No.	Сгор	Technology No. o Demonstrated Farme		Area (ha.)	Demo. Yield Qtl/ha	Yield of local Check Qtl./ha	Increase in yield (%)	Data paramo relatio techno demons	eter in on to ology	Average Net Return (Profit) (Rs./ha)	Benefit- Cost Ratio (Gross Return / Gross
								Demo	Local	(13./110)	Cost)
3	Chilli	IPM	10	5	120	102.5	14.58	8250	9300	110275	1:5.05
4	Brinjal	IPM	10	5	512.5	452.5	11.70	12535	13522	145775	1:4.96
5	Tomato	INM	10	5	575	502.5	12.60	5231	6241	129837	1:4.44
6	Wheat	Variety	40	20	53.75	45	16.27	1050	920	47068	1:3.51
7	Cumin	Variety	20	10	12.5	10	20.00	930	1250	83312	1:3.94

#### ENTERPRISES

				Perfor	mance o	of technology on	differen	t parameters *		
Enterprise	Name of	No.of	No. of	1		2		3		Result**
Enterprise	technologies	farmers	Units	Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	Result
Apiculture										
Bio-feed (Azolla)										
Dairying										
Duckery										
Mushroom										
Piggery										
Poultry										
Quail										
farming										
Sheep and										
Goat										
production										

\* 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			Perfo	rmance	of technology on	different	t parameters*		
Crop		the Hybrid	No. of	Area	1		2		3		Result
crop		variety	farmers	(ha)	Demonstration	Local	Demonstration	Local	Demonstration	Local	**
		variety			Demonstration	Check	Demonstration	Check	Demonstration	Check	

\* Include the data on related observations and yield

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

## **3. DETAILS OF TRAINING PROGRAMMES CONDUCTED:**

## Table - 3 AArea-wise distribution of On + Off Campus Training Courses for Farmers and<br/>Farm Women, Rural Youth & Extension Personnel (regular + sponsored)

Farm women, Rural Youth c	No.		I Feison			f Partici				
Thematic Area	of		Others			SC/ST	÷		Total	
Thematic Area	Cour	Male	Female	Total	Male	Femal	Total	Male	Femal	Total
(A) Farmers & Farm Women	ses					е			e	
I Crop Production										
-	_	<b>6 -</b>	10			10	10	97	29	126
Weed Management Resource Conservation	5	65	19	84	32	10	42	97	29	
Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	1	45	2	47	8	3	11	53	5	58
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Water management	2	31	3	34	12	4	16	43	7	50
Seed production	2	40	17	57	10	4	14	50	21	71
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	2	29	4	33	8	3	11	37	7	44
Fodder production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	1	16	3	19	3	1	4	19	4	23
Total	13	226	48	274	73	25	98	299	73	372
II Horticulture	0	0	0	0	0	0	0	0	0	0
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	4	89	23	112	29	13	42	118	36	154
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0	0	0
b) Fruits	0	0	0	0	0	0	0	0	0	0
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants	0	0	0	0	0	0	0	0	0	0

		1								1
Nursery Management	3	40	12	52	10	3	13	50	15	65
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops	0	0	0	0	0	0	0	0	0	0
Production and Management	0	0	0		0	0	_	-	-	_
technology	0	0	0	0	0	0	0	0	0	0
Processing and value	_	_	_	0	_	_	0	0	0	0
addition	0	0	0		0	0	-	-	_	
e) Tuber crops	0	0	0	0	0	0	0	0	0	0
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
f) Spices	0	0	0	0	0	0	0	0	0	0
Production and Management	0	0	0		0	0		-		_
technology	0	0	0	0	0	0	0	0	0	0
Processing and value				0			0	0	0	0
addition	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Total	7	129	35	164	39	16	55	168	51	219
III Soil Health and Fertility Management	0	0	0	0	0	0	0	0	0	0
Soil fertility management	2	27	8	35	11	3	14	38	11	49
Soil and Water Conservation	4	70		94	29	10	39	99	34	133
Integrated Nutrient Management	4	0	24 0	0	0	0	0	0	0	0
Production and use of	0	0	0		0	0				
organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic	•		0	0			0	0	0	0
soils	0	0	0	-	0	0	-	-	-	_
Micro nutrient deficiency in crops	1	12	2	14	3	2	5	15	4	19
Nutrient Use Efficiency	1	15	4	19	6	1	7	21	5	26
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Total	8	124	38	162	49	16	65	173	54	227
IV Livestock Production										
and Management	0	0	0	0	0	0	0	0	0	0
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Disease Management	0	0	0	0	0	0	0	0	0	0
				0			0	0	0	0
Feed management	0	0	0	U	0	0	U	U	U	U

Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment	0	0	0	0	0	0	0	0	0	0
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	6	0	124	124	0	34	34	0	158	158
Income generation activities for empowerment of rural Women	2	0	28	28	0	11	11	0	39	39
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	1	0	14	14	0	4	4	0	18	18
Women and child care	3	0	44	44	0	26	26	0	70	70
Total	12	0	210	210	0	75	75	0	285	285
VI Agril. Engineering	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	19	348	81	429	99	34	133	447	115	562
Integrated Disease Management	13	278	57	335	79	25	104	357	82	439
Bio-control of pests and diseases	2	49	5	54	24	8	32	73	13	86
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Total	34	675	143	818	202	67	269	877	210	1087
VIII Fisheries	0	0	0	0	0	0	0	0	0	0
Integrated fish farming	3	86	15	101	17	10	27	103	25	128

#### KVK, JAU, Jamnagar

Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	3	49	9	58	17	5	22	66	14	80
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	1	15	3	18	2	0	2	17	3	20
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Total	7	150	27	177	36	15	51	186	42	228
IX Production of Inputs at site	0	0	0	0	0	0	0	0	0	0
Seed Production	4	62	18	80	28	7	35	90	25	115
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	5	61	32	93	19	12	31	80	44	124
Organic manures production	3	63	19	82	13	6	19	76	25	101
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Total	12	186	69	255	60	25	85	246	94	340
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Leadership development	2	42	11	53	10	4	14	52	15	67
Group dynamics	2	46	13	59	9	4	13	55	17	72
Formation and Management of SHGs	2	42	12	54	18	7	25	60	19	79
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
	0			1	1					
Total	6	130	36	166	37	15	52	167	51	218
Total XI Agro-forestry		130 0	36 0	166 0	37 0	15 0	52 0	167 0	51 0	218 0
	6									

	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	99	1620	606	2226	496	254	750	2116	860	2976
	0	0	0	0	0	0	0			
(B) RURAL YOUTH	0	0	0	0	0	0	0			0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Integrated Farming	1	8	3	11	4	0	4	12	3	15
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Value addition	8	0	109	109	0	43	43	0	152	152
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	1	0	0	0	12	4	16	12	4	16
Para vets	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	5	0	0	0	72	14	86	72	14	86
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology								1		
Post Harvest Technology Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0

#### KVK, JAU, Jamnagar

TOTAL	16	20	124	144	91	65	156	111	189	300
	0	0	0	0	0	0	0		105	
(C) Extension Personnel	0	0	0	0	0	0	0			0
Productivity enhancement in field crops	2	36	2	38	14	0	14	50	2	52
Integrated Pest Management	2	42	1	43	16	0	16	58	1	59
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Any other (Pl. Specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	4	78	3	81	30	0	30	108	3	111
Grand Total	119	1718	733	2451	617	319	936	2335	1052	3387

## (D) Vocational training programmes for Rural Youth

			5 F 8				N	o. of	Partio	cipan	ts				No. of
			Identified	Dura-	G	enera	al	<b>U</b> ,	SC/ST	Γ		Total		No. of	persons
Crop / Enterprise	Date	Training title*	Thrust Area	tion (days)	Male	Female	Total	Male	Female	Total	Male	Female	Total	persons emp- loyed	empl- oyed else where
Integrated	15- 10- 08	Integrated farming	Mix farming	1	8	3	11	4	0	4	12	3	15	2	1
Vegetable	27-2- 09	Packaging & Preservation of vegetables	Value addition in vegetable	1	0	15	15	0	3	3	0	18	18	2	1
Vegetable	3-3- 09	Packaging & Preservation of vegetables	Value addition in vegetable	1	0	14	14	0	5	5	0	19	19	1	0

Fruit	15-4- 09	Preparation of Jam - Jelly & pickles	Value addition in fruits	1	0	10	10	0	4	4	0	14	14	1	0
Fruit	23-4- 09	Preparation of Jam - Jelly & pickles	Value addition in fruits	1	0	14	14	0	3	3	0	17	17	0	0
Fisheries	17-1- 09	Ornamental fisheries	Income generation	1	0	0	0	12	4	16	12	4	16	1	0
Fisheries	6-2- 09	Fresh prawn culture	Income generation	1	0	0	0	21	3	24	21	3	24	2	0
Fisheries	5-3- 09	Fresh prawn culture	Income generation	1	0	0	0	12	2	14	12	2	14	1	0

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

## (E) Sponsored Training Programmes

	<u> </u>										
Thematic area	Client	No. of Course	М	F	Total	М	F	Total	М	F	Total
Food Preservation	RY	1	0	10	10	0	5	5	0	15	15
ICM &	PF	1	25	5	30	10	5	15	35	10	45
Increase knowledge of crop production Total	RY	1	25	5	30	10	5	15	35	10	45
INM, Improve Soil Total	PF	1	25	5	30	10	5	15	35	10	45
IPM /INM /ICM Total	PF	41	2507	607	3114	1028	298	1326	3535	905	4440
Land Preparation Total	PF	1	25	5	30	10	5	15	35	10	45
Organic Farming Total	RY	1	45	15	60	10	5	15	55	20	75
Reduce cost of cultivation Total	EF	3	58	0	58	24	0	24	82	0	82

## Table 4. Extension Programmes (including activities of FLD programmes)

			No. of Participants									
Nature of Extension	No. of Progr-		General			SC / ST			Total			
Programme	ammes	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Field Day	25	305	119	424	48	19	67	353	138	491		
Kisan Mela	6	2520	980	3500	792	308	1100	3312	1288	4600		
Kisan Ghosthi	17	1306	509	1815	387	151	538	1693	660	2353		
Exhibition	2	648	252	900	216	84	300	864	336	1200		
Film Show		0	0		0	0		0	0	0		
Method Demonstrations		0	0		0	0		0	0	0		
Farmers Seminar	124	1439	560	1999	320	125	445	1759	685	2444		
Workshop		0	0		0	0		0	0	0		
Group meetings		0	0		0	0		0	0	0		
Lectures delivered as resource persons	87	7179	2793	9972	1195	466	1661	8374	3259	11633		
Newspaper coverage	9	0	0		0	0		0	0	0		
Radio talks	4	0	0		0	0		0	0	0		
TV talks	6	0	0		0	0		0	0	0		
Popular articles		0	0		0	0		0	0	0		
Extension Literature	10	7819	3041	10860	1058	412	1470	8877	3453	12330		
Advisory Services	16	0	0		0	0		0	0	0		
Scientific visit to farmers field	211	222	87	309	45	18	63	267	105	372		

#### KVK, JAU, Jamnagar

				_	-	_	-	_	_	_
Farmers visit to KVK	101	1039	405	1444	229	90	319	1268	495	1763
Diagnostic visits		0	0		0	0		0	0	0
Exposure visits		0	0		0	0		0	0	0
Ex-trainees Sammelan		0	0		0	0		0	0	0
Soil health Camp		0	0		0	0		0	0	0
Animal Health Camp		0	0		0	0		0	0	0
Agri mobile clinic	4308	3160	0	3160	547	0	547	3707	0	3707
Soil test campaigns		0	0		0	0		0	0	0
Farm Science Club Conveners meet		0	0		0	0		0	0	0
Self Help Group Conveners meetings		0	0		0	0		0	0	0
Mahila Mandals Conveners meetings		0	0		0	0		0	0	0
Celebration of important days (specify)		0	0		0	0		0	0	0
Female groups	7		55	55	0	30	30	0	85	85
Night Meetting	15	255	100	355	48	19	67	303	119	422
Crop Shibir/Farmer shibir	68	1126	438	1564	128	50	178	1254	488	1742
Collobrative training	45	956	372	1328	276	108	384	1232	480	1712
Training to Extension Functionaries	6	108	43	151	26	11	37	134	54	188
Any Other (Specify)		0	0		0	0		0	0	0
Total	5067	28082	9754	37836	5315	1891	7206	33397	11645	45042

# Table 5Production and supply of Technological products (2007-08)Table 5ASEED MATERIALS

S1. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Wheat	GW-366	400.00	945012.5	
OILSEEDS	Groundnut	GG-5	58.93	31406	100
	Groundnut	GG-6	3.23	6850	3
	Groundnut	TPG-41	11.03	18407	2
	Groundnut	TG-37A	3.32	6636	2
	Groundnut	GG-16	3.07	14070	5
PULSES					
VEGETABLES	Brinjal	PLR-1	1.05	525	
	Tomato	Guj-1	0.35	350	
	Chilli		0.85	42.50	
	Okra	Guj-1	0.20	200	
	Ridge gourd	Jaypur-2	0.10	50	

	Sponge gourd	Guj-1	0.10	50	
	Sponge gouru	Guj-1	0.10	50	
FLOWER CROPS					
OTHERS (Specify)	Vermi culture	Icenea fatida	0.26	5200	6
	Vermi compost		91.25	27375	

#### SUMMARY

S1. No.	Стор	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	400	945013	
2	OILSEEDS	79.58	77369	112
3	PULSES			
4	VEGETABLES	2.65	1217.5	
5	FLOWER CROPS			
6	OTHERS (Vermi Culture)	0.26	5200	6
	Vermi compost	91.25	27375	
ТОТА	L	573.74	1056174.5	118

#### Table 5B PLANTING MATERIALS

			Quantity	Value (Rs.	)	Provided to
S1. No.	Crop	Variety	(Nos.)	Per plant	Total	No. of Farmers
FRUITS						
SPICES						
VEGETABLES						
FOREST SPECIES						
ORNAMENTAL CROPS						
PLANTATION CROPS						
Others (specify)						

#### SUMMARY Quantity Provided to S1. No. Value (Rs.) Crop (Nos.) No. of Farmers 1 FRUITS 2 SPICES 3 VEGETABLES 4 FOREST SPECIES 5 ORNAMENTAL CROPS 6 PLANTATION CROPS 7 OTHERS TOTAL

#### Table 5CBIO PRODUCTS

S1. No.	Product Name	Species	Quantity		Valu	Provided to No.	
			No	(kg)	е (Rs.)	of Farmers	
BIOAGENTS	-	-	-	-	-	-	
BIOFERTILIZERS	Rhizobium culture						
BIO PESTICIDES	Trichoderma						
		SUMMARY	7				

#### SUMMARY

S1.	SI. D. I. ( )	a .	Qu	antity	Value	Provided to No.	
No.	Product Name	Species	No	(kg)	(Rs.)	of Farmers	
1	BIOAGENTS						
2	BIO FERTILIZERS						
3	BIO PESTICIDE						
	TOTAL						

#### Table 5D LIVESTOCK

S1. No.	Туре	Breed	Qua	ntity	Value	Provided to No. of Farmers	
			(Nos	Kgs	(Rs.)		
Cattle	-	-	-	-	-	-	
SHEEP AND GOAT	-	-	-	-	-	-	
POULTRY	-	-	-	-	-	-	
FISHERIES	-	-	-	-	-	-	
Others (Specify)	-	-	-	-	-	-	

#### SUMMARY

S1.	S1. Twne	Breed	Qua	antity	Value	Provided to No. of Farmers						
No.	Туре	Breed	Nos	Kgs	(Rs.)							
1	CATTLE	-	-	-	-	-						
2	SHEEP & GOAT	-	-	-	-	-						
3	POULTRY	-	-	-	-	-						
4	FISHERIES	-	-	-	-	-						
5	OTHERS	-	-	-	-	-						
	TOTAL	-	-	-	-	-						