ANNUAL PROGRESS REPORT (2007- 08)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Krishi Vigyan Kendra Navsari Agricultural University Regional Rice Research Station Vyara, Dist. Tapi, Gujarat-394 650	(02626) 221869	(02626) 220212	kvkvyara@yahoo.co.in	-

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Director of Extension Education Navsari Agricultural University Navsari	(02637) 282026	(02637) 282706	deenaunvs@yahoo.co.in	Nau.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. H.D.Mehta	(02625) 241376	09426876730	kvkvyara@yahoo.co.in

1.4. Year of sanction: 2004 (As ZARS KVK – 2000)

1.5. Staff Position (as on 15th September 2008)

Sr. No	Sanctioned post	Name of the incumbent	Desig.	Discipline	Highest Qualification (for PC, SMS and Prog. Asstt.)	Pay Scale with present basic	Date of joining	Permanent / Temporary	Category(SC/ ST/OBC/ Others)
1	Programme Coordinator	Dr. H. D. Mehta	PC (I/C)	Plant Breeding	Ph.D. (Plant Breeding)	16400-22400 (20000)	01/04/04	Permanent	Others
2	Subject Matter Specialist	Dr. H. M. Virdia	SMS	Agronomy	Ph.D.(Agronomy)	8000-13500 (9650)	03/07/06	Permanent	Others
3	Subject Matter Specialist	Mr.B.M..Tandel	SMS	Horticulture	M.Sc. (Agri.) (Horticulture)	8000-13500 (8550)	03/07/06	Permanent	OBC
4	Subject Matter Specialist	Dr. J. J. Pastagia	SMS	Plant Protection	Ph.D.(Agril. Entomology)	8000-13500(8825)	03/07/06	Permanent	OBC
5	Subject Matter Specialist	Dr. C. K. Timbadia	SMS	Extension Education	Ph.D.(Agril. Ext.)	8000-13500(9650)	03/07/06	Permanent	Others
6	Subject Matter Specialist	Arti N. Soni	SMS	Home Science	M.Sc.(H.Sci.) Foods & Nutrition	8000-13500 (8000)	04/04/08	Permanent	Others
7	Subject Matter Specialist	-	-	Veterinary Science	-- Post is vacant--				
8	Programme Assistant	Nital N. Patel	Prog. Assi.	Home Science	M.Sc.(H.Sci) Human Development	5500-9000 (4500 Fix)	18/08/08	Permanent	OBC
9	Computer Programmer	Nisheeta R. Patel	Comp. Prog.	-	BCA	5500-9000 (4500 Fix)	21/08/08	Permanent	SC
10	Farm Manager	Mr. V. N. Parmar	Farm Manager	-	M.Sc. (Agri. Economics)	5500-9000 (4500 Fix)	23/08/07	Permanent	Others
11	Accountant / Superint.	Mrs. I. G. Chaudhari	Acct. / Super.	-	-	5500-9000 (6950)	01/11/04	Permanent	ST
12	Stenographer	K. R. Parmar	Steno.	-	-	4000-6000 (2500 Fix)	18/08/08	Permanent	Others
13	Driver	Mr. A.C.Chaudhari	Driver	-	-	3050- 4500 (3575)	01/04/07	Permanent	ST
14	Driver	Mr. C. I. Patel	Driver	-	-	3050- 4500 (2500 Fix)	23/08/07	Permanent	Others
15	Supporting staff	Mr. A .B. Chaudhari	Suppo. staff	-	-	2550-3200 (3475)	01/11/04	Permanent	ST
16	Supporting staff	Mr. H. G. Nayka	Suppo. staff	-	-	2550-3200 (1500 Fix)	23/08/07	Permanent	ST

1.6. Total land with KVK (in ha) :

Sr. No.	Item	Area (ha)
1.	Under Buildings	--
2.	Under Demonstration Units	0.5
3.	Under Crops	2.0
4.	Orchard/Agro-forestry	--
5.	Others	--

1.7. Infrastructural Development:

A) Buildings

Sr. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	--	--	--	--	--	--	--
2.	Farmers Hostel	--	--	--	--	--	--	--
3.	Staff Quarters (6)	--	--	--	--	--	--	--
4.	Demonstration Units (2)	--	--	--	--	--	--	--
5.	Fencing	--	--	--	--	--	--	--
6.	Rain Water harvesting system	--	--	--	--	--	--	--
7.	Threshing floor	--	--	--	--	--	--	--
8.	Farm Godown	--	--	--	--	--	--	--

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2004	4,30,500=00	129338	Working
Tractor	2001	3,31225=00	551 hrs	Working

C) Equipments & AV aids

Sr.No.	Name of Equipments/ Instruments/Farm Machineries	No.	Date of Purchase	Price	Present Status
1	**2**	**3**	**4**	**5**	**6**
(1)	Furniture (Godrej)				
1	Table T-402	4	30/3/2001	26636	Working
2	Table T-104	1	30/3/2001	8515	Working
3	Chair CH-186	20	30/3/2001	43300	Working
4	Chair PCH-7000'D	1	30/3/2001	8168	Working
5	Chair CH-7B	4	30/3/2001	5692	Working
6	Store Well – Glass Door	1	30/3/2001	9259	Working
7	Slotted Angel Racks	4	30/3/2001	4900	Working
(2)	Mahindra Tractor model 575 DI 45 HP & Accessories	1	30/3/2001	3,31,225	Working
(3)	Photo Copier NP 7160 Canon NPG-1	1	31/3/2001	117274	Not working
(4)	Furniture (Godrej)				
1	Table –T- 402	5	27/12/2002	24600	Working
2	Comp. Table C-6	1	27/12/2002	5255	Working
3	Store Well – Glass Door	1	27/12/2002	9730	Working
4	Store Well Plane	2	27/12/2002	16000	Working
5	Chair CHR7B	15	27/12/2002	22350	Working
6	Chair PCH-5002 T	2	27/12/2002	7230	Working
7	Filing Cabinet	1	27/12/2002	7900	Working
(5)	Computer & Peripherals	1	28/12/2002	51850	Working
(6)	3 KVA on line UPS	1	28/12/2002	38000	Not working
(7)	HP Laser Jet 1200 Printer	1	28/12/2002	20600	Working
(8)	MSXP standard edition with Indian Longwise Proofing tools	1	30/12/2002	6450	Working
(9)	CD writer	1	28/12/2002	3025	Working
(10)	HP Scan jet 2300c Scanner	1	28/12/2002	3700	Working
(11)	Ceramic steel white writing board 4'x6'	1	21/2/2003	9000	Working
(12)	Ceramic chalk writing board 4'x 6'	1	21/2/2003	9000	Working
(13)	Over Head Projector	1	22/3/2003	27690	Working
(14)	Plastic screen with tripod stand	1	22/3/2003	4500	Working
(15)	LG 29 CA Color TV 29"	1	21/3/2003	26990	Working
(16)	Thomson 5 in 1 VCD player	1	21/3/2003	6990	Working
(17)	P.A. System				
1	Amplifier SSA 250	1	22/3/2003	9400	Working
2	Eco Mixture DMX 40	1	22/3/2003	3249	Working
3	Full Range Speaker SRX 250 D	4	22/3/2003	24472	Working
4	Microphone		22/3/2003	5273	Working
5	ALD 101 x LR	1	22/3/2003	1140	Working
6	ATP 20 M	1	22/3/2003	489	Working
7	WM 201	1	22/3/2003	1615	Working
8	Unit Horn Combination UHC 30	1	22/3/2003	1188	Working

Sr.No.	Name of Equipments/ Instruments/Farm Machineries	No.	Date of Purchase	Price	Present Status
	x T				
9	Micro Phone Stand		22/3/2003		Working
	DGN	1	22/3/2003	456	Working
	DGT	1	22/3/2003	285	Working
	ATS:5	1	22/3/2003	100	Working
(18)	A.V. Trolly	1	22/3/2003	4132	Working
(19)	Laminated Chart with wooden Frame size 20” x 30”	33	22/3/2003	24420	Working
(20)	Sony Digital Handy cam	1	22/3/2003	32750	Working
1	Power adapter	1			Working
2	Battery	1			Working
3	Remote Control	1			Working
4	AV Connecting Cable	1			Working
5	Belt shoulder strap	1			Working
6	Handy Cam Recording Caset	1			Working
(21)	Automatic slide Projector	1	22/3/2003	13695	Working
(22)	Portable Generator EXK 2000 AC	1	24/3/2003	38200	Working
(23)	Education Exhibition Panel System	1	25/3/2003	13500	Working
1	News Paper Stand	1	25/3/2003	3500	Working
2	Displayer/Book/ Magazine Stand	1	25/3/2003	3500	Working
3	Notice Writing Board with Acrylic Shutter	1	25/3/2003	4450	Working
(24)	Modem	1	31/3/2003	2020	Working
(25)	Laminated Charts with Plywood Framing size 24”x30”	5	12/3/2004	3000	Working
(26)	Colour Enlargement charts	33	29/3/2004	24420	Working
(27)	Jeep Mahindra & Mahindra Bolero D.I. & Acessories	1 -	2/12/2004 2/12/2004	430500 21650	Working Working
(28)	Whirlpool freez	1	27/3/2006	15800	Working
(29)	Electronic Automatic Kel Pus Microprocessor based eight place macro block digestion system model KES-08L	1	27/3/2006	88120	Working
(30)	Electronic Kel plus micro processor based Automatic Distillation system model distil EM	1	27/3/2006	142300	Working
(31)	Double still with thermo sensor hr (All glass) cat No 2348	1	27/3/2006	38550	Working
(32)	Nova Rotary shaking machine				
1	(a)Capacity 16 flasks of 250 ml	1	27/3/2006	24500	Working
2	(b)Capacity 25 flasks of 250 ml	1	27/3/2006	29750	Working
3	Nova Hot plate Rectangular model NV-8535 stainless steel				
	(a) Size 12” x 20”	1	27/3/2006	8500	Working
	(b) Size 18” x 24”	1	27/3/2006	11250	Working
4	Nova willy mill stain lese steel	1	27/3/2006	31900	Working

Sr.No.	Name of Equipments/ Instruments/Farm Machineries	No.	Date of Purchase	Price	Present Status
	camber Size 100 x 50 mm				
(33)1	Laboratory Table	4	27/3/2007	34400	Working
2	Racks	6	27/3/2007	9000	Working
3	Stools	12	27/3/2007	5400	Working
4	Steel cupboard storewell	4	27/3/2007	19200	Working
5	Steel cupboard storewel	4	27/3/2007	14000	Working
6	Steel racks	4		8600	
6	Partition racks	3	27/3/06	22500	Working
7	Office chair	4	27/3/06	4000	Working
(34)	Systronics make				
1	Micro controller based Digital spectrophotometer model -106	1	27/3/06	26800	Working
2	Systronics make micro controller based flame photometer compressor model-128	1	27/3/06	35200	Working
3	Systronics make micro controller based PH meter	1	27/3/06	10900	Working
4	Systronics make micro processor based conductivity meter	1	27/3/06	12800	Working
(35)	Hot air oven	1	27/3/06	21200	Working
(36)	Chemical Balance	1	27/3/06	75000	Working
(37)	CENTRO FIX WATERBATH	1	27/3/06	10800	Working
(38)	CENTRO FIX – Muffle furnace	1	27/3/06	29500	Working
(39)	Automatic autoclave	1	27/3/06	21000	Working
(40)	City weigh balance model ST-10 Cap- 10 kg	1	27/3/06	10640	Working
(41)	LG AC-15 ton	1	27/3/06	23740	Working
(43)	Micro kjeldahl Assembly	1	27/3/06	10700	Working
(44)	Burner maker type with stop coke	8	27/3/06	2000	Working
(45)	Voltas make water cooler	1	27/3/06	26500	Working

1.8. A). Details SAC meeting* conducted in 2007-08- Not conducted

2. DETAILS OF DISTRICT

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

Sr. No	Farming system/enterprise
1.	Agriculture and Animal Husbandry as well as and Agro forestry
2.	Agriculture and horticulture
3.	Agro-forestry

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

Sr. No	Agro-climatic Zone	Characteristics
1.	South Gujarat Heavy Rainfall Zone-I	• It consists of four talukas of Surat district i.e. Songadh, Vyara Valod, and Mahuva taluka • It has an intensive rainfall over 1500 to 2200 mm per annum • Rain mostly received during month of July-August • The zone has clyey soil with normal pH and Ec, medium organic carbon and phosphorous and high potash
2.	South Gujarat Rainfall Zone-II	• It consists of ten talukas i.e. Bardoli, Choryasi, Kamrej, Mandvi, Palsana, Mangrol, Umerpada,Olpad, Uchchhal and Nizar. • Rainfall of the area varying between 1000 to 1500 mm per annum • This zone has black soil of medium to heavy texture • 75 per cent of the area is rainfed.

Sr. No	Agro ecological situation	Characteristics
1.	Situation I	• The total geographical area is about 5.57 lack ha., which is 58 per cent of the zone, of which 53 Per cent is under forest • Cultivated area is 15.29 per cent as it is a heavy rainfall situation • 5 per cent area is under doubled crop • Major field crops grown are paddy, minor millets, pulses, sorghum and oilseeds like ground nut and soybean.
2.	Situation III	• The total geographical area is about 2.22 lack ha., which is 25.21 per cent of the zone, of which 59.3 Per cent is under cultivation • Cultivated area is 1.64 lakh ha. • 14.5 per cent area is under doubled crop Soil of this situation is deep and fine textured.

2.3 Soil types

Sr. No.	Soil type	Characteristics	Area in ha (Cultivated)
1.	Hilly Area – Light soil	Lateritic and eroded shallow soil with high infiltration rate	130023
2.	Plain area- Heavy Black soil	Heavy Black to medium black with medium to poor drainage. In some area it is water logged and salt affected	208779
3.	Coastal area- Saline sodic soil	Heavy black, salt affected with poor drainage and water logged condition	156270

2.4 Area, Production and Productivity of major crops cultivated in the district (2007-08)

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1.	Paddy Irrigated	61775	1915020	31.00
2.	Paddy rainfed	32531	611580	18.80
3.	Sorghum Kharif	37638	474230	12.60
4.	Maize kharif	2878	41870	14.55
5.	Other kharif cereals	390	3980	12.20
6.	Pigeon pea	34083	361270	10.60
7.	Green gram kharif	4587	30270	6.60
8.	Black gram	4117	28400	6.90
9.	Other Kharif pulses	1861	10880	5.85
10.	Ground nut	8103	121540	15.00
11.	Sesame	221	1120	5.10
12.	Castor	675	11130	16.5
13.	Cotton Irrigated	4800	105600	22.00
14.	Cotton rainfed	3458	43220	12.50
15.	Soybean	11979	100620	8.40
16.	Sugarcane	110000	88000000	800
17.	Ground nut summer	19500	4627000	23.73
18.	Green gram summer	2000	15200	7.63
Fruit Crops				
1.	Mango	8550	82080	9.60
2.	Chiku	1990	20298	10.20
3.	Banana	11750	705000	60.00
4.	Papaya	1450	83375	57.50
5.	Custard Apple	50	307	6.15
6.	Cashew	110	163	1.49
	Others	640	3698	29.3

Vegetables				
1.	Chili	2590	3765	1.50
2.	Turmeric	220	3520	16.00
3.	Brinjal	7050	137475	22.00
4.	Okra	7569	77203	10.20
5.	Tomato	1700	26350	18.50
6.	Onion	20	600	30.00
	Others	9105	91456	66.1

* sources. District Agricultural Officer, Surat District

2.5 Weather data

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)
		Maximum	Minimum	
October 07	34	32.6	19.6	83.5
November 07	--	34.4	19.2	81.4
December 07	--	30.3	14.5	67.3
January 08	--	30.1	12.8	60.1
February 08	--	31.8	13.9	62. 6
March 08	--	35.2	16.8	64.7
April 08	--	37.4	20.3	68.4
May 08	**--**	37.8	19.4	67.3
June 08	101	34.5	19.4	79.8
July 08	548.4	29.2	18.1	98.1
August 08	689.8	29.6	18.9	96.4
Sept.'o8	129	30.1	19.9	97.4

* sources. Meteorological observatory of Regional Rice Research Station, Vyara

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

Category	Population	Production ('000 tones)	Productivity (kg/day)
Cattle			
Crossbred	68,650	74.87	6.58
Indigenous	2,18,400	99.00	2.99
Buffalo	2,35,000	271.03	3.64
Sheep	3,500	5 M.tone(wool)	1.33 wool/sheep
Goats	1,04,100	7.95	0.253
Pigs	24,000	585.9 meat	-
Rabbits	1000	-	-
Poultry			
Desi	5,55,700	244.31 lakh eggs	0.3198 (no.)
Improved	2,22,200	530.99 lakh eggs	0.8085 (no.)
Donkey	1143	-	-

* Source: 24th survey report on estimates & major livestock products for the years 2006-07 Guj. State, Directorate of Animal Husbandry, Gandhinagar

2.7 Details of Operational area / Villages

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Vyara	Champawadi	Champawadi	Sugarcane, Paddy, Ground nut, Gram, Pigeon pea, Sorghum	Majority area is un-irrigated Majority area has light soil with undulated land Erratic heavy rainfall Use of local variety High seed rate No seed treatment No use of organic manures Unbalance use of fertilizers No weeding Low adoption level of farmers Lack of pest management knowledge Poor live stock management Poor food grain storage practices Lack in dietary pattern of pregnant and nursing mother	Crop production technology Crop protection Low cost green house Modern method of irrigation Marketing management Live stock management Dietary management of pregnant and nursing mother Technologies of storage of food grains
2.	Vyara	Gadat	Gadat	Paddy, Sorghum, Groundnut, Vegetable, gram wheat	Majority area is un-irrigated Majority area has light soil with undulated land Erratic heavy rainfall Use of local variety Use of high seed rate No seed treatment No use of organic manures Unbalance use of fertilizers No weeding Low adoption level of farmers	Introduction of soybean crop to replace drilled paddy Integrated pest management in vegetables Land configuration in pigeon pea Increase area under vegetable crops Low cast green house Increase conscious on health and hygiene Marketing management Kitchen gardening

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					Poor live stock management Use of only chemical control of pest management in vegetables Lack of awreness about health and sanitation Inadequate intake of fruits and vegetables Poor economic condition	Income generation activities for farm women
3.	Vyara	Pati	Pati	Paddy, Ground nut, Okra, sorghum, Pigeon pea, Pulses	Frequent application of insecticides at higher doses in vegetables No management of powdery mildew High seed rate of paddy and other crops Imbalance use of fertilizers No use of organic manures Lack of dietary pattern of pregnant woman and nursing mothers Inadequate intake of fruits and vegetables Poor animal management Lower economic condition	Integrated Nutrient management in okra Integrated pest management in okra Crop production technology for field crops Increase area under vegetables Replacing drilled paddy with soybean Kitchen gardening Value addition in field crops Vermi-composting Income generation activities
4.	Songadh	Gatadi	Gatadi	Paddy, Ground nut, sorghum, Tur	Low irrigation facility Erratic heavy rainfall Use of local variety Use of high seed rate No seed treatment No use of organic manures Unbalance use of fertilizers	Crop production technology Integrated pest and disease management Low cost green house Modern method of irrigation Land configuration in ground nut and pigeon pea Marketing management

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					No weeding Low adoption level of farmers Poor live stock management Use of only chemical control of pest management in vegetables No supplementary feeding at right time to children Inadequate intake of fruits and vegetables	Live stock management Dietary management of pregnant and nursing mother Kitchen gardening
5.	Valod	Ambach	Ambach	Sugarcane, Paddy, Okra, Cowpea, Mango	High seed rate High dose of fertilizers, Frequent and heavy irrigations Frequent spraying of insecticides with high dose Low/ non use of organic manures Lack of knowledge about scientific method of fruits and vegetable preservation	Crop production technology IPM in sugarcane, Vegetable, Paddy and fruit crops Value addition in horticultural crops Organic manure/ vermin-composting Green manuring Increase area under high value horticultural crops. Value addition in horticultural crops
6.	Mandvi	Khareda	Khareda	Paddy, sorghum, Ground nut Brinjal, Pigeon pea	Use of local/ hybrid varieties Use of high seed rate No seed treatment No use of organic manures Unbalance use of fertilizers No weeding Low adoption level of farmers Poor live stock management Use of only chemical control of pest management in vegetables Inadequate intake of fruits and vegetables	Production technology in ground nut, paddy and vegetables Integrated nutrient management in Brinjal Integrated pest management in Brinjal and field crops Increase area under vegetable crops Low cost production technology Animal husbandry Change in dietary pattern

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
7.	Nizar	Velda	Velda	Cotton, Sorghum, Soybean, papaya, Chili, wheat, Sugarcane Gram	Use of high doses of fertilizers Frequent spraying of insecticides at higher doses No green manuring No use of organic manures Poor livestock management No marketing facility Lack of knowledge about scientific method of fruit and vegetable preservation	Crop production technology for cotton, wheat and sugarcane Integrated pest management in cotton Green manuring Animal husbandry Value addition through preservation Increase area under high tech horticulture, high value crops Increase area under fruit crops Marketing management
8.	Umarpada	Chakra	Chakra	Paddy, Sorghum, Ground nut, papaya, vegetables, Water melon, Gram, wheat	Unleveled land Problem of soil and water erosion High weed problem Low education Adoption level is very low Marketing problem Poor animal management Lack of awreness about health and hygiene Inadequate intake of fruits and vegetable	Soil and water management Increase in drip irrigation system Crop production and protection technology Chemical weed management Increase area under fruits and vegetable crops Animal husbandry Improvement in health hygiene and dietary pattern
9	Uchchhal	Bhitkhurd	Bhitkhurd	Paddy, Sorghum, Ground nut, Gram, Soybean, Pulses	Use local varieties of rice, sorghum and pulses High seed rate No knowledge of scientific production technology Problem of soil and water erosion Less irrigation facility	Crop production and protection technologies Land configuration in ground nut and pulses Low energy drip and low cost production technology Increase area under soybean Development in health, sanitation and

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					Lack of awareness about health and sanitation Inadequate intake of fruits and vegetables Marketing problem Poor economic condition	dietary pattern Arid horticultural development Income generation through activities and kitchen gardening
10.	Uchchhal	Bhitbhudrak	Bhitbhudrak	Paddy, Ground nut, sorghum, pigeon pea, maize, Vegetables	Use of local varieties in drilled paddy, sorghum and pulses Heavy and erratic rain Problem of soil and water erosion Poor animal management Lack of knowledge about insect pest and disease and its management Lack in dietary pattern of pregnant and nursing mothers Inadequate intake of fruits and vegetables	Crop production and protection technologies Land configuration in ground nut and other crops Increase area under vegetable crops and tuber crops Low cost green house Health and dietary development Marketing management
Note: One village each from remaining districts of surat district is also selected for extensive approach where awareness programme are being conducted.						

2.8 Priority thrust areas

SR. No.	Thrust area
1	Crop production management (Paddy, Sugarcane, Vegetables, Pulses & Groundnut)
2	Soil & water conservation and water management
3	Arid horticulture development
4.	Integrated nutrient management
5	Integrated pest management
6	Low cost technology
7	Organic farming
8	Self employment to Rural youth and farm women
9	Women empowerment
10	Management of dairy animals
11	High tech agriculture

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs(ha)		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
1	1	5	6	71	125.52	208	253

Training				Extension Activities			
3				4			
Number of Courses		Number of Participants		Number of activities		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
76	87	1448	3418	916	1,286	20000	65,986

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
30	32.9	6,00,500	17,33,136

3.B1. Abstract of interventions undertaken

Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1.	Crop production management	Paddy Ground nut Sugarcane Cotton Soybean Gram Pigeon pea	Use of local variety High seed rate, Imbalance use of fertilizers No use of bio fertilizer	--	Varietal demonstration Nutrient management Use of biofertilizers	Scientific Cultivation of major crops	Scientific cultivation of sugarcane and oilseed crops	Field days, khedut shibirs, News paper coverage, film show Radio talk Exhibitions etc.	Seeds of improved varieties paddy, ground nut, soybean Gram Pigeon pea etc
2.	Soil & water conservation and water management	Pigeon pea, Ground nut, Gram	Heavy rainfall and water logging cause high mortality of plants	Land configuration in pigeon pea	Growing ground nut and gram on raised bed	Land configuration in field crops	--	Field days, khedut shibirs, News paper coverage, film show Exhibitions etc.	Seeds, ground nut, Gram , pigeon pea,etc
3.	Arid horticulture development	Drum stick Custard apple Ber, guava Vegetables	Due to rain fed area, and inadequate irrigation facility cultivated area under fruits and vegetable is very less and per capita consumption is also less	--	Kitchen gardening Low cost green house Vadi yojna	Arid horticulture development in rain fed area	--	Field days, khedut shibirs, News paper coverage, film show Exhibitions etc.	Seeds of different vegetables and planting material of mango, drum stick and custard apple
4.	Integrated nutrient management	Brinjal, Okra	Imbalance use of fertilizers farmers are unable to harvest good crop	--	INM in Brinjal INM in Okra	INM in vegetables	INM in vegetables	Field days, khedut shibirs, News paper coverage, film show Exhibitions etc.	Bio compost Fertilizers
5.	Integrated pest	Brinjal, Okra,	Farmers are unable	--	IPM of Brinjal	IPM in	IPM in	Field days,	Pheromone

Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
	management	Cotton, Mango cucurbits	to manage disease and insect pest eventhogh frequent application of insecticides at higher doses		fruit and shoot borer IPM of okra fruit and shoot borer IPM in cotton Integrated management of fruit flies in mango and cucurbits	vegetables IPM in cotton Management of fruit flies	Vegetables	khedut shibirs, News paper coverage, film show Exhibitions etc.	traps, neem products, Microbial products Methyl eugenol traps
6.	Low cost technology	Major crops	Poor economic condition of farmers	--	--	Low cost green house	--	khedut shibirs, News paper coverage, film show Exhibitions etc	--
7.	Organic farming	Vegetables, Groundnut, Gram, Soybean	High use of chemicals	--	--	Vocational training on vermicomposting	--	khedut shibirs, News paper coverage, film show Exhibitions etc Vermi-compost demonstrations	--
8.	Self employment to Rural youth and farm women	Mushroom Vermi-composting Value addition	Poor economic condition of farmers	--	--	Vocational training in mushroom cultivation, Vermi-composting and value addition	--	News paper coverage, film show,	Mushroom spawn

Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
9.	Women empowerment	Formation of Self Help Groups	Poor socio-economic condition of farm women	--	--	Income generation activities like hand embroidery Machine embroidery and fruits and vegetable preservations	--	khedut shibirs, News paper coverage, film show	Cloth, Sewing material
10.	Management of dairy animals	management of dairy animal	Poor management of dairy animals	--	--	--	--	khedut shibirs, News paper coverage, film show Publication of books Demonstration units on campus	--
11.	High tech agriculture	Green house technology, Drip irrigation, High value crops	Due to lack of technological knowledge farmers are unable to get good returns	--	--	Green house technology	--	khedut shibirs, News paper coverage, film show	--

3.B2 List of Technology Assessed during 2007-08

Sr. No	Thematic area	Name of the technology assessed	Area (ha.)	Number of trials	Remarks if any
1	**Resource conservation technology**	**Raised bed**	**1.2**	**6**	**--**

3.B3 List of Technology Refined during 2007-08

Sr. No	Thematic area	Name of the technology refined	Area (ha.)	Number of trials	Remarks if any
1	**Resource conservation technology**	**Ridges & furrow**	**1.2**	**6**	**--**

3.C Details of technology used during reporting period

Sr No	Title of Technology	Crop	Mode of use				No. of farmers covered					
							Other farmers			SC / ST farmers		
			OFT	FLD	Training	Popular article/ News coverage	M	F	T	M	F	T
1	Popularized high yielding variety	Groundnut (K)	--	√	√	√	--	--	--	75	28	103
		Pigeon pea	--	√	√	√	--	--	--	63	11	74
		Green gram	--	√	√	√	--	--	--	67	17	84
		Drill paddy	--	√	√	√	--	--	--	106	1	107
		T.P. Paddy	--	√	√	√	--	--	--	58	91	147
2.	Popularized new crop.	Soybean	--	√	√	√	--	--	--	82	54	136
3.	INM	Groundnut (s)	--	√	√	√	--	--	--	54	12	66
		Okra	--	√	√	√	--	--	--	53	80	133
		Brinjal	--	√	√	√	24	0	24	58	0	58
4.	IPM	Okra	--	√	√	√	--	--	--	81	0	81
		Brinjal	--	√	√	√	--	--	--	51	3	54
		Cotton	--	√	√	√	194	0	194	35	0	35
		Bitter gourd	--	√	√	√	--	--	--	8	0	8
		Mango	--	√	√	√	--	--	--	12	0	12
5.	Land configuration	Gram	--	√	√	√	--	--	--	68	3	71
		Pigeon pea	√			√	--	--	--	6	0	6

3.1 Achievements on technologies assessed and refined

A. Results of On Farm Trial

Crop	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement done	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Pigeon pea	RF	Low yield High rainfall, Poor plant population	Land configuration	6	1. Flat bed 2. Ridges & furrow 3. Raised bed	Yield of Pigeon pea seeds	790 kg/ha 994 kg/ha 1048 kg/ha	Raised bed & Ridges and furrow gave good yield	It is difficult to prepare raised bed so adoption of ridges & furrow is better	Ridges & Furrow	Not availability of raised bed former and strength of bed not remain longer period due to heavy rainfall .

Technology Assessed / Refined	Production per unit (Kg/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16
Flat bed sowing	790	15560	1.91
Sowing on raised bed/broad bed furrow	1048	21040	2.02
Ridge and furrow	994	19820	1.98

B. On Farm Trial -

1) **Title of the Technology Assessed / Refined :** Land Configuration
2) **Problem Definition :** Low yield ,High rainfall, Poor plant population
3) **Details of technologies for assessment/refinement**

Flat bed sowing

Sowing on raised bed/ broad bed furrow
Ridge and furrow

4) **Source of Technology :** Research Scientist , Pulse Crops, NAU, Navsari
5) **Production system and thematic area :** Drill paddy + Pigeon pea cropping system – Land configuration
6) **Performance of the Technology assessed / refined with performance indicators**

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined (Yield kg/ha)		
			Flat bed sowing	Sowing on raised bed/broad bed furrow	Ridge and furrow
1	Girishbhai Narsingbhai Gamit	Gatadi	685	935	875
2	Maganbhai Babaliyabhai gamit	Gatadi	850	1105	1025
3	Babubhai P. Patel	Chapavadi	795	1038	960
4	Rameshbhai Ravjibhai Chaudhari	Gadat	845	1207	1006
5	Jitubhai Makanjibhai Gamit	Maipur	830	1100	1045
6	Mukeshbhai Arvindbhai Chaudhari	Gatadi	735	1003	1053
		Average	790	1048	994

7) **Final recommendation for micro level situation :**

Ridges and furrow or raised bed system found better for higher pigeon pea yield.

8) **Constraints identified and feedback for research :**

Develop suitable variety for high rainfall area. Resistant variety for Tur pod fly.

9) Process of farmers participation and their reaction :

Appreciate the technology and ready to adopt ridge and furrow system as raised bed former is not available .

3.2Achievements of Frontline Demonstrations

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

S. No	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
				No. of villages	No. of farmers	Area in ha
1.	Integrated crop management	Use of improved variety	Training, Front line demonstrations, Field days. Khedut shibirs, film show, Popular articles, radio talk	Survey is under progress		

b. Details of FLDs implemented during 2007-08

A. Oilseeds

a. Detail of implementation

Sr No	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Groundnut	ICM	Popularizing high yielding variety.	Kharif -07	5	5	13	-	13	-
2	Soybean	Crop diversification	Popularize new crop	Kharif -07	5	5	19	-	19	-
3	Ground nut	ICM	INM	Summer-08	20	20	40	-	40	-

b. Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Groundnut	Kharif -07	RF	Medium Black & light shallow	L	M	H	Ground nut	14th to 20th Jun	29th Nov to 1 st Nov	1785	68
Soybean	Kharif -07	RF	Medium Black & light shallow	L	M	H	Paddy	21th to 28th Jun	28th Oct to 1st Nov	1785	68
Ground nut	Summer-08	Irrigated	Medium Black & light shallow	L	M	H	Paddy	8thjan.to 1st Feb.	26th May to 4th June	Nil	Nil

C. Performance of FLD

Sr. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Groundnut	Popularizing high yielding variety.	GG-20	13	5	9.20	5.60	7.05	5.45	29		
2	Soybean	Popularize new crop	GS-2	19	5	14.40	10.40	11.64	9.65	21		
3	Groundnut	INM	TG-37A	40	20	29.0	19.20	22.99	18.03	28		

D. Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	**15**	**16**	**17**	**18**	**19**	**20**
9115	9510	17625	13625	8510	4115	1.9
7885	7230	37248	30880	29363	23650	4.7
17722	11722	57475	45075	39753	33353	3.2

Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Groundnut	Kharif -07	Variety seed Bio fertilizer	RF	7.05	5.45	29
Soybean	Kharif -07	Seeds Biofertilizer Fertilizer	RF	11.64	9.65	21
Groundnut	Summer-08	Seeds Gypsum Biofertilizer	Irrigated	22.99	18.03	28

Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	Required to developed early maturing , high yielding & HPS type variety of groundnut suitable for *rabi –summer* condition
2	Required to developed farm machinery and threshing equipment for groundnut.
3	Suitable variety in soybean for this region

Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Raised bed gave good result. Appreciated the variety. Crop good under bio fertilizer treated plot
2	Appreciated the crop & variety as it performing well and gave more return than drill paddy
3	Good variety to replace old

Extension and Training activities under FLD

Sr.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	6	9/10/07,2/4/08, 3/3/08,8/7/08,7/7/08,10/9/08	173	
2	Farmers Training	3	26/12/07,2/6/08,6/6/08	86	
3	Media coverage	3	17/12/07,31/3/08,16/6/08	-	
4	Training for extension functionaries	1	20-21/2/08	30	

B. Pulses Crop

a. Detail of implementation

Sr. No	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Tur	Resource conservative technology	Popularized new variety & Land configuration	Kharif -07	5	5	19	-	19	
2	Gram	Resource conservative technology	Land configuration	Rabi- 08	10	10	23	-	23	
3	Green gram	ICM	Popularized new variety	Summer-08	5	5	21	-	21	

b. Details of farming situation

Crop	Season	Farming situation (RF/ Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Tur	Kharif -07	RF	Medium Black & light shallow	L	M	H	Paddy	29th june to 1st July	25th jan to 7th Feb	1785	68
Gram	Rabi- 08	Irrigated	Medium Black & light shallow	L	M	H	Paddy	27th Oct to 6th Nov	4th to 6th Feb	Nil	Nil
Green gram	Summer-08	Irrigated	Medium Black & light shallow	L	M	H	Paddy/ Sugarcan	24th to 28th Feb.	2nd to 6th Jun	Nil	Nil

c. Performance of FLD

Sr. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Tur	Popularized new variety & Land configuration	Vaishali	19	5	11.20	7.60	8.84	6.62	33.5		
2	Gram	Land configuration	GG-2	23	10	24.70	17.84	20.78	16.00	29.8		
3	Green gram	Popularized new variety	GM-4	21	5	7.75	5.50	6.31	5.87	7.4		

d.Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	**15**	**16**	**17**	**18**	**19**	**20**
8140	7232	19448	14564	10609	7332	2.3
8898	8362	51950	40000	43052	31638	5.8
5904	4960	15775	14675	9871	9715	2.7

e. Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Tur	Kharif -07	Variety seed Bio fertilizer	RF	6.62	33.5	33.5
Gram	Kharif -07	Seeds Biofertilizer Fertilizer	Irrigated	16.00	29.8	29.8
Green gram	Summer-08	Seeds Gypsum Biofertilizer	Irrigated	5.87	7.4	7.4

f. Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	To develop high yielding & YVM resistant variety for summer cultivation for green gram.
2	Farmers require small grain & high yielding gram variety.
3	Unavailability of raised bed former.
4	Developed suitable variety for high rainfall area & resistant variety for Tur pod fly.

g. Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Good variety to replace local . Crop good under bio fertilizer treated plot
2	Bold seeded, high yielding gave good market price. Raised bed really good for this crop
3	Due to YVM , variety not attract the farmers

h. Extension and Training activities under FLD

Sr. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	4	15/12/07,5/9/08, 28/1/08, 13/2/08	124	
2	Farmers Training	4	27/10/07,25/10/07, 23/2/08, 3/6/07	110	
3	Media coverage	4	19/11/07,24/12/07, 24/3/08, 21/2/08	-	
4	Training for extension functionaries	1	20-21/2/08	30	

C. Cereals crops

a. Detail of implementation

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Drill Paddy	ICM	Popularize new Variety	Kharif -07	5	5	16	-	16	
2	T.P. Paddy	ICM	Popularize new Variety	Kharif -07	5	5.52	23	-	23	

b. Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Drill Paddy	Kharif -07	RF	Medium Black & light shallow	L	M	H	Paddy	8 to 11th July	15th to 25th Sept.	1785	68
T.P. Paddy	Kharif -07	RF	Medium Black & light shallow	M	H	H	Groundnut/ Sugar can	8 to 9th July	15th to 24th Oct.	1785	68

c. Performance of FLD

Sr. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Drill Paddy	Popularize new Variety	GR-8 GR-9 GR-5	10 3 3	2.2 1.3 1.5	18.40 21.50 23.40	14.60 19.88 20.60	16.74 20.66 22.23	13.28 16.00 13.75	26 29 60	-	-
2	T.P. Paddy	Popularize new Variety	GR-7 GR-12	10 13	2.4 3.12	55.68 81.00	45.60 43.40	52.05 51.09	40.65 40.93	28 25	-	-

d. Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
4150	3210	7533	5976	3383	2766	1.8
4440	3590	9297	7200	4857	3610	2.0
6210	3590	13338	6875	7128	3285	2.1
17400	19300	36435	30487	19035	11187	2.1
17900	19900	38317	30697	20417	10797	2.1

e. Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Drill Paddy	Kharif -07	Variety seed Seed traetment	RF	16.74 20.66 22.23	13.28 16.00 13.75	26 29 60
T.P. Paddy	Kharif -07	Variety seed Seed traetment	Irrigated	52.05 51.09	40.65 40.93	28 25

f. Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	Weed management in drill paddy
2	Require to developed high yielding rice hybrid suitable for this region.

g. Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Variety gave good result than old .

h. Extension and Training activities under FLD

Sr.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	4	13/10/07,16/7/08,6/9/08,15/9/08,	140	
2	Farmers Training	4	9/6/08,11/6/08,2/7/08,6/9/08	144	
3	Media coverage	5	12/2/07,16/6/07,25/6/07,7/7/07,14/7/07		
4	Training for extension functionaries				

D. Horticulture

a. Detail of implementation

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Okra	INM & IPM	INM & IPM	Rabi-07	2.0	2.0	8	-	8	-
2	Brinjal	INM & IPM	INM & IPM	Summer-08	2.0	2.0	8	-	8	-

b.Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Okra	Rabi-07	Irrigated	Medium Black & light shallow	L	M	H	Paddy	28th Oct to 15th Nov.	9th March to 29th March	Nil	Nil
Brinjal	Summer-08	Irrigated	Medium Black & light shallow	L	M	H	Paddy	24th Dec. to 5th Jan.	1st Jun to 14th Jun	Nil	Nil

c. Performance of FLD

Sr. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Okra	INM & IPM	Hybrid	8	2.0	186.32	139.36	166.61	123.28	35	-	-
2	Brinjal	INM & IPM	Surtiravia	8	2.0	216.40	194.80	203.95	161.78	26	-	-

d. Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
42052	46720	133288	98624	91236	51904	3.2
42784	39739	101975	80890	59191	41151	2.4

e. Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Okra	Rabi-07	Bio compost Fertilizer	Irrigated	166.61	123.28	35
Brinjal	Summer-08	Bio compost Fertilizer	Irrigated	203.95	161.78	26

f. Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	Wilt and Fruit & shoot borer management technology require in brinjal.
2	VYM and Fruit & shoot borer management technology require in Okra.

g. Farmers' reactions on specific technologies

Sr. No	Feed Back
1	It increase yield & improve soil health and quality of fruits.
2	It increase yield & improve soil health and quality of fruits

h. Extension and Training activities under FLD

Sr. No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	1	28/1/08	27	
2	Farmers Training	2	23/11/07, 3/3/08	63	
3	Media coverage	5	4/2/08, 11/2/08, 28/2/08, 3/3/08, 9/6/08	-	
4	Training for extension functionaries	1	13-14/8/08	20	

E. Plant protection

a. Detail of implementation

Sr. No	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Cotton	IPM	IPM	Kharif-07	-	50.0	-	33	33	
2	Bittergourd	IPM	Management fruit fly	Summer-08	2.0	2.0	8	-	8	
3	Mango	IPM	Management fruit fly	Summer-08	5.0	5.0	12	-	12	

b. Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Cotton	Kharif-07	Irrigated	Medium Black & light shallow	M	H	H	Wheat	15th May to 1st June	30th oct. to 7th Nov.	1785	68
Bitter gourd	Summer-08	Irrigated	Medium Black & light shallow	L	M	H	Paddy	24th Dec. to 5th Jan.	1st Jun to 14th Jun	Nil	Nil
Mango	Summer-08	Irrigated	Medium Black & light shallow	L	M	H	Mango	5th to 10th January	15th June	Nil	Nil

c. Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Cotton	IPM	Bt. cotton	33	50.0	45.00	25.00	31.36	29.09	8		
2	Bitter gourd	Management fruit fly	Hybrid	8	2.0	109.10	98.30	105.40	96.20	9		
3	Mango	Management fruit fly	Kesar	12	5.0	% infested fruit in treated plot 2 %						

d. Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	
14	15	16	17	18	19	20
16375	19670	84672	78543	72297	62873	5.2
27779	27475	79050	72150	51271	44675	2.8

e. Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Cotton	Kharif-07	Bio pesticide, Pheromone trap, Pesticides	Irrigated	166.61	123.28	35
Bitter gourd	Summer-08	Pheromone trap	Irrigated	203.95	161.78	26
Mango	Summer-08	Pheromone trap	RF	% infested fruit in treated plot 2 %		

f. Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	--
2	--

g. Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Large scale adoption of this technology should be made and more concentration should be given to collection and destruction of fallen fruits.

h. Extension and Training activities under FLD

Sr.No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	-	-	-	-
2	Farmers Training	1	16/5/09	18	
3	Media coverage	6	7/1/08,18/2/08,12/5/08,19/5/08,26/5/08,30/6/08	--	--
4	Training for extension functionaries	1	15-16/7/08	53	--

3.3 Achievements on Training (Including the sponsored and FLD training programmes):

A. ON Campus

Farmers and Farm Women

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
20-21/05/08	Importance of summer ploughing and clean field and compost preparation (vermicompost)	2	-	-	-	20	-	20	20	-	20
01-02/09/08	Package of practices of major kharif crops	2	-	-	-	23	28	51	23	28	51
(B) Horticulture											
27-28/03/08	Summer vegetable production and planning for kharif	2	-	-	-	21	-	21	21	-	21
03-04/06/08	Cultivation of Aromatic and medicinal plant	2	-	-	-	24	-	24	24	-	24
08-09/08/08	Scientific cultivation of brinjal	2	-	-	-	20	-	20	20	-	20
(C) Plant Protection											
16-17/05/08	Integrated pest management in cotton	2	80	-	80	20	-	20	100	-	100
(D) Home Science											
12-13/05/08	Balanced diet from locally available food	2	-	-	-	-	32	32	-	32	32

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	material										
20-21/06/08	Iron deficiency diseases anemia and its control	2	-	4	4	-	27	27	-	31	31
29-30/07/08	Anemia and its control	2	-	-	-	-	20	20	-	20	20
11-12/09/08	Nutrition for pregnant women, lactating woman and children	2	-	-	-	-	31	31	-	31	31
(E) Extension Education											
13-14/05/08	Low cost green house technology and marketing for agro products	2	-	-	-	-	32	32	-	32	32
30-31/07/08	Marketing of farm produce	2	-	-	-	-	27	27	-	27	27
17-18/08/08	Women participation in value addition of agricultural produce	2	-	-	-	-	16	16	-	16	16
(F) FLD/OFT training											
25/10/07	Cultivation practices of Gram	1	-	-	-	23	-	23	23	-	23
26/12/07	Scientific cultivation of Groundnut	1	-	-	-	28	3	31	28	3	31
23/02/08	Scientific cultivation of Green gram	1	-	-	-	25	-	25	25	-	25
02/06/08	Scientific cultivation of Soybean	1	-	-	-	13	2	15	13	2	15
03/06/08	Scientific cultivation of Pigeon pea	1	-	-	-	25	2	27	25	2	27

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
06/06/08	Scientific cultivation of kharif Groundnut	1	-	-	-	19	-	19	19	-	19
02/07/08	Scientific cultivation of Paddy	1	-	-	-	-	45	45	-	45	45
(G) Sponsored Training											
26/12/07 to 06/01/08	RAWE Programme	12	22	03	25	-	-	-	22	03	25
10-11/06/08	Multi Disciplinary Training	2	-	-	-	31	366	397	31	366	397
27-28/06/08	ATMA orientation	2	24	-	24	-	-	-	24	-	24
05-06/08/08	Multi Disciplinary Training	2	-	-	-	189	85	247	189	85	247
21-22/08/08	RAWE Programme	2	-	-	-	47	05	52	47	05	52

Rural Youth

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
3-4/12/07	Improved production technology for sugarcane /gram/ groundnut / wheat	2	-	-	-	25	-	25	25	-	25
22-23/02/08	Seed production technology for sugarcane	2	-	-	-	25	-	25	25	-	25
(B) Horticulture											
29-30/12/07	Scientific cultivation of rabi vegetable	2	-	-	-	26	-	26	26	-	26

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(C) Plant Protection											
04-05/01/08	Integrated pest management in vegetables	2	-	-	-	20	-	20	20	-	20
04-05/04/08	Integrated pest management in vegetables	2	-	-	-	25	-	25	25	-	25
30/06/08 01/07/08	Integrated pest management in field crops	2	-	-	-	28	-	28	28	-	28

Extension Personnel

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
20/02/08 to 21/02/08	Oilseed production technology	2	21	-	21	09	-	09	30	-	30
(B) Horticulture											
13/08/08 to 14/08/08	Refresher Course on Vegetable Production	2	14	-	14	06	-	06	20	-	20
(C) Plant Protection											
15/07/08 to 16/07/08	Integrated Pest Management	2	17	3	20	20	-	20	37	3	40
(D) Extension Education											
27/06/08	How to conduct demonstration	1	17	-	17	10	-	10	27	-	27

A) OFF Campus

Farmers and Farm Women

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A)Agronomy											
29/10/07	Utility and importance of bio-fertilizer in Oilseeds and pulses	1	-	-	-	18	-	18	18	-	18
11/4/08	Compost preparation and its important	1	-	-	-	9	28	37	9	28	37
15/4/08	Importance of crop rotation and green manuring in paddy based cropping system	1	-	-	-	32	46	78	32	46	78
23/4/08	Land preparation for major kharif crop of the area	1	-	-	-	34	50	84	34	50	84
02/06/08	Improve production technology for Pigeon pea cultivation	1	-	-	-	22	-	22	22	-	22
11/6/08	Integrated weed management in drill paddy, pigeon pea, groundnut	1	1	-	1	34	-	34	35	-	35
11/7/08	Production technology in Bt. Cotton	1	-	-	-	34	-	34	34	-	34
25/8/08	Important post-sowing / planting agro techniques for more return in kharif crops	1	-	-	-	21	17	38	21	17	38
(B) Horticulture											
23/11/07	Package of practices of Okra	1	-	-	-	-	45	45	-	45	45
28/11/07	Scientific cultivation of Brinjal	1	24	-	24	-	-	-	24	-	24
20/12/07	Prospects & Scope of floriculture	1	2	-	2	27	-	27	29	-	29
03/03/08	INM & Water management in	1	-	-	-	18	-	18	18	-	18

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	Brinjal										
14/03/08	Off season cultivation of vegetable	1	-	-	-	-	29	29	-	29	29
19/04/08	Cultivation of high value horticulture crop	1	-	-	-	6	41	47	6	41	47
05/05/08	Arid horticulture development	1	-	-	-	26	-	26	26	-	26
30/05/08	Arid horticulture development	1	-	-	-	26	5	31	26	5	31
09/06/08	Cultivation of vegetable under low cost green house	1	-	-	-	24	-	24	24	-	24
(C) Plant protection											
01/12/07	Integrated pest management in vegetables	1	-	-	-	-	30	30	-	30	30
17/12/07	Integrated pest management in Okra	1	-	-	-	18	3	21	18	3	21
20/12/07	Integrated pest management in Sugarcane	1	23	-	23	7	-	7	30	-	30
13/02/08	Integrated pest & Disease management in Sugarcane	1	17	-	17	-	-	-	17	-	17
20/04/08	Integrated pest management in Field crop	1	6	-	6	20	-	20	26	-	26
01/05/08	Integrated pest management in Chilli & vegetable	1	18	-	18	-	-	-	18	-	18
04/08/08	Integrated pest management in Brinjal	1	31	-	31	-	-	-	31	-	31
11/07/08	Integrated pest management of Mealybugs	1	3	-	3	15	-	15	18	-	18
22/07/08	Integrated pest management of Mealybugs	1	18	-	18	-	-	-	18	-	18
06/08/08	Integrated pest management	1	60	-	60	-	-	-	60	-	60

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	of Mealybugs										
(D) Home Science											
22/04/08	Awareness about nutrition & health among women & children	1	-	1	1	-	50	50	-	51	51
11/07/08	Child nutrition & health	1	-	28	28	-	-	-	-	28	28
22/07/08	Nutrition for pregnant women, lactating women & children	1	-	-	-	-	38	38	-	38	38
25/08/08	Nutrition education to combat malnutrition	1	-	-	-	-	21	21	-	21	21
16/09/08	Importance of vegetables in a daily diet	1	-	-	-	-	52	52	-	52	52
(E) Extension Education											
04/01/08	WTO & Farmers	1	-	-	-	-	30	30	-	30	30
07/01/08	Leadership development	1	17	-	17	-	-	-	17	-	17
(F) FLD/OFT training											
27/10/07	Land configuration	1	35	-	35	-	-	-	35	-	35
06/12/07	Integrated pest management in Okra	1	-	-	-	8	1	9	8	1	9
16/05/08	IPM in Cotton	1	59	-	59	49	-	49	118	-	118
09/06/08	Scientific cultivation of Drill Paddy	1	-	-	-	23	-	23	23	-	23
11/06/08	Scientific cultivation of Drill Paddy	1	-	-	-	34	-	34	34	-	34
31/07/08	Integrated Nutrient Management in Brinjal	1	-	-	-	12	-	12	12	-	12
06/09/08	Cultivation practices of sorghum	1	-	-	-	42	-	42	42	-	42

Rural Youth

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
30/11/07	Production technology of the major rabi/summer crops(wheat)	1	28	-	28	-	-	-	28	-	28
04/12/07	Planting techniques & inter cropping in Sugarcane & summer Paddy cultivation	1	-	-	-	25	-	25	25	-	25

Extension Personnel : --Nil--

C) Consolidated table (ON and OFF Campus)

Farmers and Farm Women

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
20-21/05/08	Importance of summer ploughing and clean field and compost preparation (vermicompost)	2	-	-	-	20	-	20	20	-	20
01-	Package of	2	-	-	-	23	28	51	23	28	51

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
02/09/08	practices of major kharif crops										
29/10/07	Utility and importance of bio-fertilizer in oilseeds and pulses	1	-	-	-	18	-	18	18	-	18
11/4/08	Compost preparation and its important	1	-	-	-	9	28	37	9	28	37
15/4/08	Importance of crop rotation and green manuring in paddy based cropping system	1	-	-	-	32	46	78	32	46	78
23/4/08	Land preparation for major kharif crop of the area	1	-	-	-	34	50	84	34	50	84
02/06/08	Improve production technology for Pigeon pea cultivation	1	-	-	-	22	-	22	22	-	22
11/6/08	Integrated weed management in drill paddy, pigeon pea, groundnut	1	1	-	1	34	-	34	35	-	35
11/7/08	Production technology in Bt. Cotton	1	-	-	-	34	-	34	34	-	34
25/8/08	Important post-sowing / planting	1	-	-	-	21	17	38	21	17	38

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	agro techniques for more return in kharif crops										
(B) Horticulture											
27-28/03/08	Summer vegetable production and planning for kharif	2	-	-	-	21	-	21	21	-	21
03-04/06/08	Cultivation of Aromatic and medicinal plant	2	-	-	-	24	-	24	24	-	24
08-09/08/08	Scientific cultivation of brinjal	2	-	-	-	20	-	20	20	-	20
23/11/07	Package of practices of Okra	1	-	-	-	-	45	45	-	45	45
28/11/07	Scientific cultivation of Brinjal	1	24	-	24	-	-	-	24	-	24
20/12/07	Prospects & Scope of floriculture	1	2	-	2	27	-	27	29	-	29
03/03/08	INM & Water management in Brinjal	1	-	-	-	18	-	18	18	-	18
14/03/08	Off season cultivation of vegetable	1	-	-	-	-	29	29	-	29	29
19/04/08	Cultivation of high value horticulture crop	1	-	-	-	6	41	47	6	41	47
05/05/08	Arid horticulture development	1	-	-	-	26	-	26	26	-	26
30/05/08	Arid horticulture	1	-	-	-	26	5	31	26	5	31

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	development										
09/06/08	Cultivation of vegetable under low cost green house	1	-	-	-	24	-	24	24	-	24
(C) Plant Protection											
16-17/05/08	Integrated pest management in cotton	2	80	-	80	20	-	20	100	-	100
01/12/07	Integrated pest management in vegetables	1	-	-	-	-	30	30	-	30	30
17/12/07	Integrated pest management in Okra	1	-	-	-	18	3	21	18	3	21
20/12/07	Integrated pest management in Sugarcane	1	23	-	23	7	-	7	30	-	30
13/02/08	Integrated pest & Disease management in Sugarcane	1	17	-	17	-	-	-	17	-	17
20/04/08	Integrated pest management in Field crop	1	6	-	6	20	-	20	26	-	26
01/05/08	Integrated pest management in Chilli & vegetable	1	18	-	18	-	-	-	18	-	18
04/08/08	Integrated pest management in	1	31	-	31	-	-	-	31	-	31

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	Brinjal										
11/07/08	Integrated pest management of Mealybugs	1	3	-	3	15	-	15	18	-	18
22/07/08	Integrated pest management of Mealybugs	1	18	-	18	-	-	-	18	-	18
06/08/08	Integrated pest management of Mealybugs	1	60	-	60	-	-	-	60	-	60
(D) Home Science											
12-13/05/08	Balanced diet from locally available food material	2	-	-	-	-	32	32	-	32	32
20-21/06/08	Iron deficiency diseases anemia and its control	2	-	4	4	-	27	27	-	31	31
29-30/07/08	Anemia and its control	2	-	-	-	-	20	20	-	20	20
11-12/09/08	Nutrition for pregnant women, lactating woman and children	2	-	-	-	-	31	31	-	31	31
22/04/08	Awareness about nutrition & health among women & children	1	-	1	1	-	50	50	-	51	51
11/07/08	Child nutrition & health	1	-	28	28	-	-	-	-	28	28
22/07/08	Nutrition for	1	-	-	-	-	38	38	-	38	38

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	pregnant women, lactating women & children										
25/08/08	Nutrition education to combat malnutrition	1	-	-	-	-	21	21	-	21	21
16/09/08	Importance of vegetables in a daily diet	1	-	-	-	-	52	52	-	52	52
(E) Extension Education											
13-14/05/08	Low cost green house technology and marketing for agro products	2	-	-	-	-	32	32	-	32	32
30-31/07/08	Marketing of farm produce	2	-	-	-	-	27	27	-	27	27
17-18/08/08	Women participation in value addition of agricultural produce	2	-	-	-	-	16	16	-	16	16
04/01/08	WTO & Farmers	1	-	-	-	-	30	30	-	30	30
07/01/08	Leadership development	1	17	-	17	-	-	-	17	-	17
(F) FLD/OFT training											
25/10/07	Cultivation practices of Gram	1	-	-	-	23	-	23	23	-	23
26/12/07	Scientific cultivation of Groundnut	1	-	-	-	28	3	31	28	3	31

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
23/02/08	Scientific cultivation of Green gram	1	-	-	-	25	-	25	25	-	25
02/06/08	Scientific cultivation of Soyabean	1	-	-	-	13	2	15	13	2	15
03/06/08	Scientific cultivation of Pigeon pea	1	-	-	-	25	2	27	25	2	27
06/06/08	Scientific cultivation of kharif Groundnut	1	-	-	-	19	-	19	19	-	19
02/07/08	Scientific cultivation of Paddy	1	-	-	-	-	45	45	-	45	45
27/10/07	Land configuration	1	35	-	35	-	-	-	35	-	35
06/12/07	Integrated pest management in Okra	1	-	-	-	8	1	9	8	1	9
31/07/09	Integrated Nutrient Management in Brinjal	1	-	-	-	12	-	12	12	-	12
06/09/09	Cultivation practices of sorghum	1	-	-	-	42	-	42	42	-	42
16/05/08	IPM in Cotton	1	59	-	59	49	-	49	118	-	118
09/06/08	Scientific cultivation of Drill Paddy	1	-	-	-	23	-	23	23	-	23
11/06/08	Scientific	1	-	-	-	34	-	34	34	-	34

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
	cultivation of Drill Paddy										
(G) Sponsored Training											
26/12/07 to 06/01/08	RAWE Programme	12	22	03	25	-	-	-	22	03	25
10-11/06/08	Multi Disciplinary Training	2	-	-	-	31	366	397	31	366	397
27-28/06/08	ATMA orientation	2	24	-	24	-	-	-	24	-	24
05-06/08/08	Multi Disciplinary Training	2	-	-	-	189	85	247	189	85	247
21-22/08/08	RAWE Programme	2	-	-	-	47	05	52	47	05	52

Rural Youth

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
3-4/12/07	Improved production technology for sugarcane/gram/groundnut/wheat	2	-	-	-	25	-	25	25	-	25
22-23/02/08	Seed production technology for sugarcane	2	-	-	-	25	-	25	25	-	25
30/11/07	Production technology of the major rabi/summer crops(wheat)	1	28	-	28	-	-	-	28	-	28

04/12/07	Planting techniques & inter cropping in Sugarcane & summer Paddy cultivation	1	-	-	-	25	-	25	25	-	25
(B) Horticulture											
29-30/12/07	Scientific cultivation of rabi vegetable	2	-	-	-	26	-	26	26	-	26
(C) Plant Protection											
04-05/01/08	Integrated pest management in vegetables	2	-	-	-	20	-	20	20	-	20
04-05/04/08	Integrated pest management in vegetables	2	-	-	-	25	-	25	25	-	25
30/06/08 01/07/08	Integrated pest management in field crops	2	-	-	-	28	-	28	28	-	28

Extension Personnel

Date	Title of the training programme	Duration in days	Number of participants (General)			Number of SC/ST			Total number of participants		
			M	F	T	M	F	T	M	F	T
(A) Agronomy											
20/02/08 to 21/02/08	Oilseed production technology	2	21	-	21	09	-	09	30	-	30
(B) Horticulture											
13/08/08 to 14/08/08	Refresher Course on Vegetable Production	2	14	-	14	06	-	06	20	-	20
(C) Plant Protection											

15/07/08 to 16/07/08	Integrated Pest Management	2	17	3	20	20	-	20	37	3	40
(D) Extension Education											
27/06/08	How to conduct demonstration	1	17	-	17	10	-	10	27	-	27

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title	No.of courses	Duration (days)	No. of Participants General			No. of Participants SC/ST			No. of Participants Total			Number of persons employed else where
					M	F	T	M	F	T	M	F	T	
Home Science	Self Employment to rural youth & farm women	Hand Embroidery/ Machine Embroidery	1	30	-	-	-	-	42	42	-	42	42	-
Agronomy		Organic Farming	1	2	-	-	-	-	28	28	-	28	28	-
Agronomy		Vermi compost	1	1	-	-	-	-	41	41	-	41	41	-
Horticulture		Value addition in Horticultural crops	1	3	-	-	-	-	12	12	-	12	12	-
Plant Protection		Mushroom cultivation	1	2	-	-	-	4	16	20	4	16	20	-

(E) Sponsored Training Programmes (Give details only for sponsored programmes)

Farmers

Sr. No	Title	Thematic area	Month	Duration (days)	No. of courses	No. of Participants							Sponsoring Agency
						Male		Female		Total			
						Others	SC/ST	Others	SC/ST	Others	SC/ST	Total	
1	RAWE Programme	-	Dec-07 Jan-08	12	1	22	-	03	-	25	-	25	N.M.College of Agriculture, NAU., Navsari
2	Multi Disciplinary Training	-	June-08	2	1	-	31	-	366	-	397	397	ATMA
3	ATMA orientation	-	June-08	2	1	24	-	-	-	24	-	24	ATMA
4	Multi Disciplinary Training	-	Aug-08	2	1	-	189	-	85	-	274	274	ATMA
5	RAWE Programme	-	Aug-08	2	1	-	47	-	05	-	52	52	N.M.College of Agriculture, NAU., Navsari
					Total	**46**	**267**	**03**	**456**	**49**	**723**	**772**	

3.4. Extension Programmes (including activities of FLD programmes)

For Farmers

Nature of Extension Programme	No. of Prog.	No. of Participants (General)			No. of Participants SC / ST			Total		
		M	F	T	M	F	T	M	F	T
Field Day	9	58	-	58	243	23	266	301	23	324
Kisan Mela	2	1900	475	2375	5120	1543	6663	7020	2018	9038
Kisan Ghosthi	2	25	-	25	105	-	105	130	-	130
Exhibition	4	7000	1650	8650	20000	7880	27880	27000	9530	36530
Film Show	22	298	13	311	305	205	510	603	218	821
Method Demonstrations	14	26	-	26	93	77	170	119	77	196
Group meetings (SHG)	15	-	38	38	-	366	366	-	404	404
Lectures delivered as resource persons	26	105	23	128	691	352	1043	796	375	1171
Newspaper coverage	12	--Published in local Newspaper--								
Radio talks	2	--Broadcasted in AIR, Vadodara--								
TV talks	1	-	-	-	-	-	-	-	-	-
Popular articles	55	--Published in Gujarat Mitra & Magazine--								
Extension Literature	23	-	-	-	-	-	-	-	-	-
Advisory Services										
Scientist visit to farmers field	81	51	-	51	509	113	622	560	113	673
Farmers visit to KVK	397	81	31	112	178	107	285	259	138	397
Diagnostic visits	31	14	-	14	17	-	17	31	-	31
Ex-trainees Sammelan	1	-	-	-	56	21	77	56	21	77
Self Help Group Conveners meetings	3	-	-	-	-	71	71	-	71	71
Khedut shibir	21	734	03	737	1600	1084	2684	2334	1087	3421

Nature of Extension Programme	No. of Prog.	No. of Participants (General)			No. of Participants SC / ST			Total		
		M	F	T	M	F	T	M	F	T
Horti. Shibir	2	-	-	-	279	39	318	279	39	318
Crop symposium	1	475	-	475	-	-	-	475	-	475
Panthenium Awareness programme	1	-	-	-	112	240	352	112	240	352
Scientist Farmers interaction	4	109	-	109	160	240	400	269	240	509
Sample diagnosed	68	10	2	12	51	05	56	61	07	68
Formation of SHGs	5	-	27	27	-	34	34	-	61	61
Rapport building meeting	1	24	02	26	80	-	80	104	02	106
Telephone helpline	397	121	27	148	184	65	249	305	92	397
Guidance through letter	5	5	-	5	-	-	-	5	-	5
Krishi Mahotsav-08	1	1760	101	1861	5009	3308	8317	6769	3409	10178
Total	**1206**	**12796**	**2392**	**15188**	**34792**	**15773**	**50565**	**47588**	**18165**	**65753**

For Extension personnel

Nature of Extension Programme	No. of Prog.	No. of Participants (General)			No. of Participants SC / ST			Total		
		M	F	T	M	F	T	M	F	T
Film Show	04	69	03	72	45	-	45	114	03	117
Group meetings	02	11	-	11	20	-	20	31	-	31
Advisory Services										
Scientist visit to farmers field	11	04	-	04	17	-	17	21	-	21
Farmers visit to KVK	57	15	-	15	37	-	37	52	-	52
Diagnostic visits	06	05	-	05	07	-	07	12	-	12
Total	**80**	**104**	**03**	**107**	**126**	**-**	**126**	**230**	**03**	**233**

3.5 Production and supply of technological products (2007-08)

SEED MATERIALS

Sr. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	IR-28	32.90	48,470	59

3.5.1 Seed material: Research Farm:

Sr. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	GR-3	30.50	48,800	40
		GR-4	65.70	119574	88
		GR-5	4.70	6660	12
		GR-12	9.97	18145	20
		Jaya	126.03	187990	95
		Gurjari	103.30	154788	89
Total			**340.2**	**535,957**	**344**

SUMMARY

Sr. No.	Crop	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS Paddy KVK	32.90	48,470	59
2	Research farm	340.2	535,957	344
TOTAL		**373.1**	**584,427**	**403**

PLANTING MATERIALS

Sr. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS Grafts	Mango	Kesar	450	20250	18
		Dasheri	50	2250	3
SPICES Seedling	Onion	Pili Patti	1558600	44385	26
VEGETABLES seedlings	Brinjal	Surti ravaiya	174400	23945	72
	Drum stick	PKM-1	636	3180	62

SUMMARY

Sr. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	500	22500	21
2	VEGETABLES	175036	27125	134
3	SPICES	1558600	44385	26
	TOTAL	**1734136**	**94010**	**181**

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

(A) KVK News Letter: -Nil –

(B) Literature developed/published

Item	Title	Authors name	Number
Research papers	Appendix I	Dr. J.J.Pastagia Dr. C. K. Timbadia	Two each
Technical reports	Agresco, ZREAC, MPR, QPR, APR, AAP etc	PC and all SMS	One each
Technical bulletins	1. Production technology of oilseed crops	Dr. H.D. Mehta Dr. H.M. virdia Dr. J.J.Pastagia Dr. C. K. Timbadia	50
Popular articles	Appendix II	PC and all SMS	54
Extension literature Folders	Appendix III	PC and all SMS	23
Books	1.Pashupalan 2.Prathmic Pashu Rog Upchar ane Sarvar	Dr. C. K. Timbadia and LRS Scientists	One Each

3.7. Success Stories / Case studies: ---Nil---

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

- The mobile telephone numbers of Programme Coordinator and Subject Matter Specialists is being given to farmers and extension functionaries during extension activities which are best utilized by farmers.
- Telephone Advisory Service has been started and its response from farmers is very effective.
- Agricultural Information column in News Paper Gujarat Mitra is regularly run by KVK which is published in its Monday Edition. In this column the answers are being given for the questions asked by the farmers.

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)

Sr. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	All crops	3 kg of Jathropa leaves is taken in 20 liters of water and boiled at a temperature of 60 to 70^0 C until it becomes 5 liters. Take 250 ml and add it to 15 liters and spray.	For controlling sucking pests
2.	All crops	Farmers are using mixture of cow dung, urine and buttermilk for the control of sucking pest.	For controlling sucking pests
3.	Cotton	One farmer used black ants for the control of cotton insect pests. For the purpose, the used to put jaggery at the base of plant (5-10) grams) and release black ants which are reared in tank.	To control cotton pests
4.	Okra	Growing okra in winter with high seed rate and closer spacing	To get more number of tender fruits per plant which fetch more prices in market.

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

Farmers/farm women: - PRA and group discussion

Rural youth: - Group discussion with youth

In service personnel: - Discussion with extension workers and their superiors.

3.11 Field activities

i. Number of villages adopted : 10
ii. No. of farm families selected : 160
iii. No. of survey/PRA conducted : 10

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :

1. Year of establishment : 2005-06 (September 2006)
2. List of equipments purchased with amount :

Sr. No.	Name of Equipments	Qty.	Cost(Rs.)
1	2	3	4
1.	Whirlpool freeze	1	15800
2.	Electronic Automatic Kel Pus Microprocessor based eight place macro block digestion system model KES-08L	1	88120
3.	Electronic Kel plus micro processor based Automatic Distillation system model distil EM	1	142300
4.	Double still with thermo sensor hr (All glass) cat No 2348	1	38550
5.	Nova Rotary shaking machine		
	(a)Capacity 16 flasks of 250 ml	1	24500
	(b)Capacity 25 flasks of 250 ml	1	29750
6.	Nova Hot plate Rectangular model NV-8535 stainless steel		
	(a) Size 12” x 20”	1	8500
	(b) Size 18” x 24”	1	11250
7.	Nova willy mill stain lese steel camber Size 100 x 50 mm	1	31900
8.	Laboratory Table	4	34400
9.	Racks	6	9000
10.	Stools	12	5400
11	Steel cupboard storewel	4	19200

Sr. No.	Name of Equipments	Qty.	Cost(Rs.)
12.	Steel cupboard storewel	4	14000
13.	Steel racks	4	8600
14.	Partition racks	3	22500
15.	Office chair	4	4000
16.	Systronics make		
17.	Micro controller based Digital spectrophotometer model -106	1	26800
18.	Systronics make micro controller based flame photometer compressor model-128	1	35200
19.	Systronics make micro controller based PH meter	1	10900
20.	Systronics make micro processor based conductivity meter	1	12800
21.	Hot air oven	1	21200
22.	Chemical Balance	1	75000
23.	CENTRO FIX WATERBATH	1	10800
24.	CENTRO FIX – Muffle furnace	1	29500
25.	Automatic autoclave	1	21000
26.	City weigh balance model ST-10 Cap- 10 kg	1	10640
27.	LG AC-15 ton	1	23740
28.	Micro kjeldahl Assembly	1	10700
29.	Burner maker type with stop coke	8	2000
30.	Voltas make water cooler	1	26500

3. Details of samples analyzed so far :

Details	No. of Samples analysed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	472*	109	96	52400
Water Samples	55	45	40	2250
Plant samples	10	04	04	800
Total	**537**	**158**	**140**	**55450**

3.1. Details of samples analyzed during 2007-08 :

Details	No. of Samples analysed	No. of Farmers benefited	No. of Villages	Amount realized(Rs.)
Soil Samples	231*	52	50	46200
Water Samples	11	11	08	550
Plant samples	--	--	--	--
Total	**242**	**63**	**58**	**46750**

* included samples from farm

4.0 IMPACT

4.1. Impact of KVK activities –Nil**--**

4.2. Cases of large scale adoption –Nil**--**

5.0 LINKAGES

5.1 Functional linkage with different organizations

Sr. No.	Name of Organization	Nature of Linkage
1	Dept. of Agriculture	Participation * Khedut Shibir * Soil Health Card & In-service Training * Extension Activities
2	Dept. of Horticulture	Participation * Khedut Shibir * Extension Activities
3	ATMA	Participation * Khedut Shibir * Extension Activities * Training programmes
4	Main Rice Res. Station, AAU, Nawagam	Collaboration-FLD on paddy
5	Main Cotton Res. Station, NAU, Surat	Collaboration-FLD on cotton
6	Main Water Management Research Unit, NAU, Navsari	Collaboration-FLD on soil & water management, Greenhouse
7	Research Stations, NAU	Participation-Farmers day
8	FTC, Vyara	Joint implementation- Farmers visit and expert lectures, Farmer's Fair
9	Sugar Factories	Collaboration-In-service training
10	Govt. of Gujarat	Collaboration – Krishi Mahotsav
11	State Bank of India/Bank of Baroda	SHG work
12	Gujarat state co-operative federation Ltd.Gandhinagar	Collaboration-In-service training

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.)
1. Plant Health Clinic	March 08	National Horticulture Mission	15.50 lakhs

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes and KVK act as implementing agency

Sr. No.	Programme	Nature of linkage	Remarks
1.	Formation of FIG/ SIG/ WIG	Implementing Agency	302 groups have been formed with 4246 members out of them 4128 members belongs to ST and 118 as others
2.	Awareness programme on activities of ATMA	Implementing Agency	At village Pati, 140 participants
3.	Training progammes : Five	Implementing Agency	542 participants
4.	Front line Demonstrations: 437	Implementing Agency	437 farmers
5.	Group meetings : SEVEN	Implementing Agency	818 participants
6.	Governing board meeting & management committee meeting	Implementing Agency	36 members
7.	Scientist farmers interaction	Implementing Agency	352 participants

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

Sr. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermi compost	2006	400 sq.m	--	Compost	15 ton.	15000	45000	
2	Low cost green house	2008	100 sq.m	Vegetable	Seedling	60000	1000	6000	

6.2 Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Paddy	2nd week of July 07	2nd week of October 07	1	IR-28	Certified	3290 Kg	12400	48470	-
	2nd week of July 08	--	1	Jaya	Certified	Crop is standing			
Groundnut	15th January	1st June	0.40	TG-37A	Commer-cial	145 Kg	4000	3487	Due to shortage of irrigation water yield is low
Vegetable nursery	Round the year	Periodical	0.20	Brinjal- Surti-raviya Onion-	Seedling	1.74 Lac. 15.58	11000 26000	23945 44385	

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
				Pilipati		Lac.			
Mango	February	Jun	500 no.	Kesar Dasheri	Graft	500	8000	22500	-
Drumstick	May	July	636	PKM-1	Plant	636	1400	3180	Plant are damage due to heavy rainfall

6.5 Utilization of hostel facilities: --No hostel facility available in KVK

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

8. FINANCIAL PERFORMANCE

8.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute	State Bank of India	Navsari	2704-1
With KVK	State Bank of India	Vyara	10716339605

8.2 Utilization of funds under FLD on Oilseed *(Rs. in Lakh)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007-08	
Inputs	92000	-	74440	-	42864
Extension activities	-	-	-	-	-
TA/DA/POL etc.	-	-	-	-	-
TOTAL	**92000**	**-**	**74440**	**-**	**42864**

8.3 Utilization of funds under FLD on Pulses *(Rs. in Lakh)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007 -08	
Inputs	24000	-	23473	-	507
Extension activities	-	-	-	-	-
TA/DA/POL etc.	-	-	-	-	-
TOTAL	**24000**	**-**	**23473**	**-**	**507**

8.4 Utilization of funds under FLD on Cotton *(Rs. in Lakh)*

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007 -08	
Inputs	66250	-	66054	-	196
Extension activities	-	-	-	-	-
TA/DA/POL etc.	-	-	-	-	-
TOTAL	**66250**	**-**	**66054**	**-**	**196**

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) (Rs. in lakh)

year 2007 -08

Sr. No.	Particulars	Sanctioned (Rs. In lakh)	Released (Rs.)	Expenditure (Rs.)
A.	**Recurring Contingencies**		**26,74,000**	
1	**Pay & Allowances**	27.00		13,67,138
2	**Traveling allowances**	1.00		58,451
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.10		1,24,070
B	POL, repair of vehicles, tractor and equipments	0.65		1,53,359
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.70		37,617
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.80		69,436
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.80		89,868
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.55		9,168
G	Training of extension functionaries	0.40		9,724
H	Maintenance of buildings	-		4,93,000
I	Establishment of Soil, Plant & Water Testing Laboratory	-		-
J	Library	-		-
TOTAL (A)		**5.00**		**19,18,831**

B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	-	-	-
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	-	-	-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)			-	-
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**33.00**	**26,74,000**	**19,18,831**

year 2008 -09 (upto August 2008)

Sr. No.	Particulars	Sanctioned (Rs. In lakh)	Released (Rs.)	Expenditure (Rs.)
A.	**Recurring Contingencies**		**3,19,000**	
1	**Pay & Allowances**	27.00		6,88,572
2	**Traveling allowances**	1.00		28,441
3	**Contingencies**	6.00		
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.50		27,708
B	POL, repair of vehicles, tractor and equipments	0.90		10,094
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	0.70		15,716
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.80		47,558
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	0.90		21,225
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.60		-
G	Training of extension functionaries	0.40		-
H	Maintenance of buildings	0.20		-
I	Establishment of Soil, Plant & Water Testing Laboratory	-		-
J	Library	-		-
TOTAL (A)		**34.00**		**8,39,314**

B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	-	-	-
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	-	-	-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		**-**	-	-
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**34.00**	**3,19,000**	**8,39,314**

8.6 Status of revolving fund (Rs. in lakh) for the three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2005 to March 2006	77,845	89,016	25,293	1,41,568
April 2006 to March 2007	1,41,568	21,745	1,40,450	22,863
April 2007 to March 2008	22,863	2,02,831	2,06,303	19,391

SUMMARY TABLES

1 Details of Technology assessment and refinement

Table 1A: Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Resource conservation technology	-	-	1	-	-	-	-	-	-	1
TOTAL	-	-	1	-	-	-	-	-	-	1

Table 1 B; Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Resource conservation technology	-	-	1	-	-	-	-	-	-	1
TOTAL	-	-	1	-	-	-	-	-	-	1

Table – 1 E Details of technology refined

Crop	Technology Assessed	No. replications	Technology refined	Result justifying the refinement
Pigeon pea	Broad bed furrow	6	Ridge and furrow	Raised bed & Ridges and furrow gave 45 %higher yield over flat bed

2. Details of Frontline Demonstrations

Table – 2 A Front Line Demonstrations on Oilseed Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield Q/ha	Local Check Q/ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Groundnut	Popularizing high yielding variety.	13	5	7.05	5.45	29	--	--	8510	1.9
Soybean	Popularize new crop	19	5	11.64	9.65	21	--	--	29363	4.7
Ground nut	INM	40	20	22.99	18.03	28	--	--	39753	3.2

Table – 2 B Front Line Demonstrations on Pulse Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield Q/ha	Local Check Q/ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Tur	Popularized new variety & Land configuration	19	5	8.84	6.62	33.5	--	--	11609	2.3
Gram	Land configuration	23	10	20.78	16.00	29.8	--	--	43052	5.8
Green gram	Popularized new variety	21	5	6.31	5.87	7.4	--	--	9871	2.7

Table – 2 C Front Line Demonstrations on Cotton

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield Q/ha	Local Check Q/ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Cotton	IPM	33	50	31.36	29.08	8	5 no. of spray	9 no. of spray		

Table – 2 D Front Line Demonstrations on Other Crops

Crop	Technology Demonstrated	No. of Farmers	Area (ha.)	Demo. Yield	Local Check	Increase in yield (%)	Data on parameter in relation to technology demonstrated		Average Net Return (Profit) (Rs./ha)	Benefit-Cost Ratio (Gross Return / Gross Cost)
							Demo	Local		
Drill paddy	Popularize new Variety	16	5	16.74 20.66 22.23	13.28 16.00 13.75	26 29 60	--	--	3383 4857 7128	1.8 2.0 2.1
T.P. Paddy	Popularize new Variety	23	5.52	52.05 51.09	40.65 40.93	28 25	--	--	19035 20417	2.1 2.1
Okra	INM/IPM	8	2.0	166.61	123.28	35	9 %infest.	15.25 %infest.	91236	3.2
Brinjal	INM/IPM	8	2.0	203.95	161.78	26	12 %infest.	30 %infest.	59191	2.4
Bitter gourd	Management of Fruit fly	8	2.0	10.54	9.62	9	5 %infest.	9 %infest.	51271	2.8
Mango	Management of Fruit fly	12	5.0	% infested fruit in treated plot 2 %						

3. Details of training programmes conducted:

Table – 3 A Area-wise distribution of On + Off Campus Training Courses for Farmers and Farm Women (regular + sponsored)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
Crop Production								
Weed Management	1	1	-	1	34	-	34	35
Integrated Crop Management	9	28	-	28	210	63	273	301
Soil and Water Conservation	1	-	-	-	34	50	84	84
Integrated Nutrient Management	1	-	-	-	23	28	51	51
Horticulture								
a) Vegetable Crops								
Production of low value and high volume crop	5	24	-	24	47	86	133	157
Off-season vegetables	1	-	-	-	-	29	29	29
Nursery raising	1	-	-	-	24	-	24	24
Protective cultivation	1	-	-	-	18	-	18	18
b) Fruits								
Cultivation of Fruit	2	-	-	-	52	5	57	57
c) Ornamental Plants								
Propagation techniques of Ornamental Plants	1	2	-	2	27	-	27	29
d) Plantation crops								
Production and Management technology	1	-	-	-	24	-	24	24
Home Science/Women empowerment								
Design and development of low/minimum cost diet	1	-	-	-	-	32	32	32
Designing and development for high nutrient efficiency diet	3	-	8	8	-	99	99	103
Value addition	2	-	-	-	-	46	46	46
Women and child care	5	-	29	29	-	140	140	169
Plant Protection								

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
Integrated Pest Management	13	239	-	239	153	33	186	325
Integrated Disease Management	1	17	-	17	-	-	-	17
Production of Inputs at site								
Bio-fertilizer production	1	-	-	-	18	-	18	18
Vermi-compost production	2	-	-	-	29	28	57	57
Capacity Building and Group Dynamics								
Leadership development	1	17	-	17	-	-	-	17
Entrepreneurial development of farmers/youths	2	-	-	-	-	59	59	59
Others								
RAWE programme	2	22	3	25	47	5	52	77
Multidisciplinary training	2	-	-	-	220	451	644	644
ATMA orientation	1	24	-	24	-	-	-	24
TOTAL	**60**	**374**	**40**	**414**	**960**	**1154**	**2087**	**2380**

Table – 3 B Area-wise distribution of On + Off Campus Training Courses for Rural Youth (regular + sponsored + vocational)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
Mushroom Production	1	-	-	-	4	16	20	20
Production of organic inputs	1	-	-	-	-	28	28	28
Vermi-culture	1	-	-	-	-	41	41	41
Value addition	1	-	-	-	-	12	12	12
Tailoring and Stitching	1	-	-	-	-	42	42	42
TOTAL	5	-	-	-	4	139	143	143

Table – 3 C Area-wise distribution of On + Off Campus Training Courses for In-service Extension Personnel (regular + sponsored)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		M	F	T	M	F	T	
Productivity enhancement in field crops	1	21	-	21	9	-	9	30
Integrated Pest Management	1	17	3	20	20	-	20	40
Integrated Nutrient management	1	14	-	14	6	-	6	20
Any other-How to conduct demonstration	1	17	-	17	10	-	10	27
Total	4	69	3	72	45	-	45	117

Table – 4 Numbers of Extension Activities and Beneficiaries

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		M	F	T	M	F	T	M	F	T
Field Day	9	301	23	324	-	-	-	301	23	324
Kisan Mela	2	7020	2018	9038	80	4	84	7100	2022	9122
Kisan Ghosthi	2	130	-	130	20	-	20	150	-	150
Exhibition	4	27000	9530	36530	55	5	60	27055	9535	36590
Film Show	22	603	218	821	111	3	114	714	221	935
Method Demonstrations	14	119	77	196	-	-	-	119	77	196
Group meetings (SHG)	15	-	404	404	-	4	4	-	408	408
Lectures delivered as resource persons	26	796	375	1171	52	-	52	848	375	1223
Newspaper coverage	12	--Published in local Newspaper--								
Radio talks	2	--Broadcasted in AIR, Vadodara--								
TV talks	1	-	-	-	-	-	-	-	-	-
Popular articles	55	--Published in Gujarat Mitra & Magazine--								
Extension Literature	23	-	-	-	-	-	-	-	-	-
Advisory Services										
Scientist visit to farmers field	81	560	113	673	4	-	4	564	113	677
Farmers visit to KVK	397	259	138	397	9	-	9	268	138	406
Diagnostic	31	31	-	31	2	-	2	33	-	33

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		M	F	T	M	F	T	M	F	T
visits										
Ex-trainees Sammelan	1	56	21	77	2	-	2	58	21	79
Self Help Group Conveners meetings	3	-	71	71	-	2	2	-	73	73
Khedut shibir	21	2334	1087	3421	210	5	215	2544	1093	3636
Horti. Shibir	2	279	39	318	10	-	10	289	39	328
Crop symposium	1	475	-	475	4	-	4	479	-	479
Parthenium Awareness programme	1	112	240	352	10	-	10	122	240	362
Scientist Farmers interaction	4	269	240	509	20	-	20	289	240	529
Sample diagnosed	68	61	07	68	2	-	2	63	07	70
Formation of SHGs	5	-	61	61	-	-	-	-	61	61
Rapport building meeting	1	104	02	106	3	-	3	107	02	109
Telephone helpline	397	305	92	397	-	-	-	305	92	397
Guidance through letter	5	5	-	5	-	-	-	5	-	5
Krishi Mahotsav-08	1	6769	3409	10178	125	25	150	6894	3434	10328
Total	**1206**	**47588**	**18165**	**65753**	**719**	**48**	**767**	**48307**	**18213**	**66520**

Table – 5 A Productions of Seeds

SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	IR-28	32.90	48,470	59

3.5.1 Seed material: **Research Farm:**

Sl. No.	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	GR-3	30.50	48,800	40
		GR-4	65.70	119574	88
		GR-5	4.70	6660	12
		GR-12	9.97	18145	20
		Jaya	126.03	187990	95
		Gurjari	103.30	154788	89
Total			**340.2**	**535,957**	**344**

SUMMARY

Sr.No.	Crop	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS Paddy KVK	32.90	48,470	59
2	Research farm	340.2	535,957	344
	TOTAL	**373.1**	**584,427**	**403**

PLANTING MATERIALS

Sr. No.	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS Grafts	Mango	Kesar	450	20250	18
		Dasheri	50	2250	3
SPICES Seedling	Onion	Pili Patti	1558600	44385	26
VEGETABLES seedlings	Brinjal	Surti ravaiya	174400	23945	72
	Drum stick	PKM-1	636	3180	62

SUMMARY

Sr. No.	Crop	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	500	22500	21
2	VEGETABLES	175036	27125	134
3	SPICES	1558600	44385	26
	TOTAL	**1734136**	**94010**	**181**

DETAILED PROFORMA FOR OFT AND FLD CONDUCTED DURING 2007-08

A. On Farm Trial -

1) Production system : Drill paddy + pigeon pea cropping system

2) Problem Definition : Low yield ,High rainfall, Poor plant population

3) Title of the Technology Assessed / Refined : Land Configuration

4) Thematic area : Resource conservation technology

5) Details of technologies for assessment/refinement

Category	Source of Technology	Technology details
1 Farmers practices	Research Scientist	Flat bed sowing
2 Recommended practices	Pulses crop	Sowing on raised bed/ broad bed furrow
3 Intervention technology	NAU, Navsari	Ridge and furrow

6) Production system and thematic area : Pigeon pea cropping system – Land configuration

7) Raw data about the performance of the Technology assessed / refined with performance indicators

Farmer No	Name of the farmer	Name of the Village	Data on the performance indicators of the technology assessed / refined (Yield kg/ha)		
			Flat bed sowing	Sowing on raised bed/broad bed furrow	Ridge and furrow
1	Girishbhai Narsingbhai Gamit	Gatadi	685	935	875
2	Maganbhai Babaliyabhai Gamit	Gatadi	850	1105	1025
3	Babubhai P. Patel	Champavadi	795	1038	960
4	Rameshbhai Ravjibhai Chaudhari	Gadat	845	1207	1006
5	Jitubhai Makanjibhai Gamit	Maipur	830	1100	1045
6	Mukeshbhai Arvindbhai Chaudhari	Gatadi	735	1003	1053
		Average	790	1048	994

8) Final recommendation for micro level situation : Ridges and furrow or raised bed system found better for higher pigeon pea yield.

9) Constraints identified and feedback for research :

Develop suitable variety for high rainfall area. Resistant variety for Tur pod fly.

10) Process of farmers participation and their reaction : Appreciated the technology

and ready to adopt ridge and furrow system as raised bed former is not available .

B.1 Front Line Demonstration on Oil seeds crop

a. *Kharif* Groundnut

1) **Production system :** Groundnut based cropping system
2) **Problem Definition :** Low yield of *kharif* groundnut
3) **Title of the Technology demonstrated :** Popularizing high yielding variety GG-20
4) **Thematic area :** Integrated Crop management
5) **Year of release of the technology or Year of assessment :** 1991
6) **Source of technology :** Research Scientist, Oil seeds, Junagadh
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated Yield (Kg/ha)
1	Harilalbhai Poslabhai Gamit	Gatadi	680
2	Bhimsingbhai Jalamsingbhai Gamit	Gatadi	840
3	Fuljibhai Bondliyabhai Gamit	Gatadi	920
4	Chandubhai Bondaliyabhai Gamit	Gatadi	660
5	Gulabbhai Valjibhai Gamit	Gatadi	720
6	Vasanjibhai Divanjibhai Gamit	Gatadi	700
7	Anilbhai Kikabhai Gamit	Gatadi	640
8	Natubhai Bhukhiyabhai Gamit	Gatadi	680
9	Hirabhai Kuvarjibhai Gamit	Gatadi	640
10	Ruvajibhai Divanjibhai Gamit	Gatadi	800
11	Bhimsingbhai Maganbhai Gamit	Gatadi	720
12	Jagdishbhai Ramabhai gamit	Gatadi	560
13	Thakorbhai Bondaliyabhai Gamit	Gatadi	600
	Total (Average)		**705**

8) **Final recommendation for micro level situation : Performed better than local**

9) **Constraints identified and feedback for research :** Required to developed early maturing , high yielding and drought resistant variety.

10) **Process of farmers participation and their reaction :** Raised bed gave good result and appreciated the variety. Crop good under bio fertilizer treated plot

b. Soybean:

1) **Production system :** Rice based cropping system

2) **Problem Definition :** Low return in drill rainfed paddy

3) **Title of the Technology demonstrated :** To popularize new crop.

4) **Thematic area :**Crop diversification

5) **Year of release of the technology or Year of assessment :** 1992

6) **Source of technology :** Niger Res. Station, NAU, Navsari

7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
1	Anilbhai Vanabhai Chaudhari	Gadat	1080
2	Hasubhai H. Chaudhari	Gadat	1280
3	Rakeshbhai Jivanbhai Chaudhari	Gadat	1200
4	Rashikkumar H. Chaudhari	Gadat	1080
5	Sandipbhai Sahdewvbhai Chaudhari	Gadat	1440
6	Manojkumar Chandubhai Chaudhari	Gadat	1120
7	Girdharbhai Narsingbhai Chaudhari	Gadat	1080
8	Chimanbhai Holiyabhai Chaudhari	Gadat	1080
9	Govindbhai Narsingbhai Chaudhari	Gadat	1280
10	Navinbhai H. Chaudhari	Gadat	1040
11	Avsabhai Amlabhai Chaudhari	Gadat	1160
12	Rohitbhai Arvindbhai Chaudhari	Gadat	1160
13	Natubhai Lachhabhai Chaudhari	Gadat	1320
14	Jarasingbhai Fuljibhai Chaudhari	Gadat	1120

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
15	Vasantbhai Savlabhai Chaudhari	Gadat	1240
16	Khansingbhai Bhimsingbhai chaudhari	Gadat	1040
17	Ashokbhai Amlabhai Chaudhari	Gadat	1240
18	Surjibhai Amrabhai Chaudhari	Gadat	1040
19	Mahendrabhai Lallubhai Gamit	Dhamodi	1120
	Average		**1164**

8) **Final recommendation for micro level situation :** Appreciated the crop & variety as it performing well and gave more return than drill paddy.
9) **Constraints identified and feedback for research :** Suitable variety for this region & mechanized harvesting.
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

c. Groundnut Summer

1) **Production system :** Rice based groundnut cropping system
2) **Problem Definition :** Low yield and poor soil condition
3) **Title of the Technology demonstrated :** Integrated nutrient management
4) **Thematic area :**Integrated Crop management
5) **Year of release of the technology or Year of assessment :** 2006
6) **Source of technology :** Research Scientist, Oil seeds, Junagadh & BARS, Trombay

7) Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1
1	Naranbhai Mogariabhai Chaudhari	Gatadi	2240
2	Thakorbhai Bondalabhai Gamit	Gatadi	2160
3	Rakeshbhai Jayantibhai Gamit	Gatadi	2280
4	Ramanbhai Balubhai Gamit	Gatadi	1960
5	Dilipbhai Maganbhai Gamit	Gatadi	2160
6	Amarsingbhai Rutabhai Gamit	Gatadi	2320
7	Fuljibhai Bandaliabhai Gamit	Gatadi	2160
8	Prakashbhai Chimanbhai Gamit	Gatadi	2280
9	Sakabhai Namlabhai Gamit	Gatadi	1960
10	Lalubhai Jiriabhai Gamit	Gatadi	2340
11	Parshottambhai Balubhai Gamit	Gadat	2180
12	Navinbhai Harisingbhai Chaudhari	Gadat	2260
13	Vasantbhai Savlabhai Chaudhari	Gadat	1940
14	Shamjibhai Dhankabhai Gamit	Gatadi	2280
15	Champaben Mahendrabhai Chaudhari	Gadat	2160
16	Rakeshbhai Jivanbhai Chaudhari	Gadat	2320
17	Ramdashbhai Dattubhai Patel	Chakra	2480
18	Barjibhai Vanshibhai Chaudhari	Ambach	2060
19	Laxmanbhai Dattubhai Patel	Chakra	2840
20	Kashinathbhai Dattubhai Patel	Chakra	2780
21	Harjibhai Sambhubhai Kajavdara	Chakra	2850
22	Maragiyabhai Damaniyabhai Vasava	Chakra	2900
23	Ishvarbhai Devjibhai Vasava	Chakra	2840
24	Dhanjibhai Kotiyabhai Vasava	Chakra	2780
25	Lalsingbhai Kachakiyabhai Vasava	Chakra	2740
26	Laxmanbhai Hatiyabhai Vasava	Chakra	2780
27	Balubhai P. Patel	Ambach	2480
28	Hinaben Chhotubhai Chaudhari	Gadat	2360

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1
29	Sudhaben Arjunbhai Chaudhari	Gadat	2070
30	Chandubhai Gamit	Champawadi	2050
31	Gulabbhai T. Chaudhari	Champawadi	2150
32	Ajitkumar C. Chaudhari	Panvadi	1920
33	Prakashbhai chimanbhai Chaudhri	Gadat	1960
34	Kamleshbhai Barjibhai Chaudhari	Ambach	2060
35	Anokhbhai Honabhai Gamit	Chapawadi	2130
36	Ukarabhai Jivlabhai Gamit	Champawadi	2210
37	Amarsingbhai Chhaganbhai Gamit	Champawadi	2080
38	Chimanbhai Paniyabhai Gamit	Champawadi	2260
39	Vanitaben Vaniyabhai Gamit	Champawadi	2100
40	Krushi Vigyan Kendra	Vyara	2090
	Total		**2299**

8) **Final recommendation for micro level situation :** Bold kernel, suitable for this region.
9) **Constraints identified and feedback for research :** Required to developed early maturing , high yielding & HPS type variety of groundnut suitable for *rabi –summer* condition. Farm machinery and threshing equipment for groundnut
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

B.2 Front Line Demonstration on Pulses crop

a. Pigeon pea :

1) **Production system :** Drill paddy pigeon pea inter cropping system
2) **Problem Definition :** Low yield of pigeon pea
3) **Title of the Technology demonstrated :** Popularized new variety & land configuration**.**
4) **Thematic area :**Resource conservation technology.

5) Year of release of the technology or Year of assessment : 2007

6) Source of technology : Research Scientist, Pulses crop, Navsari

7) Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
1	Sandipbhai Thakorbhai Chaudhari	Gadat	830
2	Manojbhai Chandubhai Chaudhari	Gadat	780
3	Anilbhai Vanabhai Chaudhari	Gadat	920
4	Khansingbhai Bhimsingbhai Chaudhari	Gadat	1120
5	Vijaybhai A. Chaudhari	Gadat	968
6	Ranjitbhai Amarsingbhai Chaudhari	Gadat	788
7	Fatesingbhai Babubhai Chaudhari	Gadat	840
8	Babubhai Maganbhai chaudhari	Gadat	888
9	Jivanbhai Fuljibhai Chaudhari	Gadat	960
10	Dhansukhbhai Somabhai Chaudhari	Gadat	792
11	Vinodbhai Natubhai Chaudhari	Gadat	980
12	Lallubhai Manshingbhai Chaudhari	Gadat	1020
13	Ratilalbhai Bhimsingbhai Chaudhari	Gadat	840
14	Naginbhai Narsingbhai Chaudhari	Gadat	860
15	Vijaybhai Rhakorbhai Gamit	Champawadi	760
16	Vajayabhai Gangaliyabhai Gamit	Champawadi	940
17	Subhasbhai Laljibhai Gamit	Champawadi	920
18	Bhimabhai Limjibhai Gamit	Champawadi	832
19	Vechiyabhai Nuriyabhai Gamit	Champawadi	760
		Average	**884**

8) **Final recommendation for micro level situation :** Technology suitable for this region.
9) **Constraints identified and feedback for research :** Developed suitable variety for high rainfall area. Resistant variety for Tur pod fly.
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

b. Gram :

1) **Production system :** Rice gram cropping system
2) **Problem Definition :** Poor land condition.
3) **Title of the Technology demonstrated :** Land configuration
4) **Thematic area :** Resource conservation technology
5) **Year of release of the technology or Year of assessment :** 1998
6) **Source of technology :** Research Scientist, Pulses crop, Navsari
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
1	Vasantbhai Bajiyabhai Gamit	Bhitkhurd	2360
2	Morarjibhai Bajiyabhai Gamit	Bhitkhurd	2180
3	Ruvajibhai Bajiyabhai Gamit	Bhitkhurd	2350
4	Bhimsingbhai Bapjibhai Gamit	Bhitkhurd	2240
5	Nidaliyabhai Jankibhai Gamit	Bhitkhurd	2390
6	Bhanudas Sahitrabhai Gamit	Bhitkhurd	2470
7	Madubhai Dungariyabhai Gamit	Bhitkhurd	2420
8	Bapjibhai Nuriyabhai Gamit	Bhitkhurd	2340
9	Dilipbhai Maganbahi Gamit	Gatadi	1860
10	Thakorbhai Bondaliyabhai Gamit	Gatadi	1930
11	Amrutbhai Thakorbhai Gamit	Gatadi	1960
12	Balubhai Kuvarjibhai Gamit	Gatadi	1784
13	Amarsingbhai Butabhai Gamit	Gatadi	1840

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
14	Nurjibhai Dajibhai Gamit	Gatadi	2030
15	Haljibhai Poshlabhai Gamit	Gatadi	2070
16	Babubhai Divanjibhai Gamit	Gatadi	1860
17	Natubhai Bhukhiyabhai Gamit	Gatadi	1990
18	Ashokbhai Vajiyabhai Gamit	Gatadi	1872
19	Maganbhai Babaliyabhai Gamit	Gatadi	1928
20	Mukeshbhai Arvindbhai Chaudhari	Gadat	2040
21	Pannaben Navinbhai Chaudhari	Gadat	1840
22	Hinaben Chhitubhai Chaudhari	Gadat	1948
23	Kalpanaben Ashokbhai Chaudhari	Gadat	2088
	Average		2078

8) **Final recommendation for micro level situation :** Technology suitable for raising gram in kyari land condition.
9) **Constraints identified and feedback for research :** Farmers require small grain & high yielding gram variety.
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

c. Green Gram :

1) **Production system :** Rice/ Sugarcane - green gram cropping system
2) **Problem Definition :** Low yield of local variety.
3) **Title of the Technology demonstrated :** Popularize new variety.
4) **Thematic area :** Integrated crop management
5) **Year of release of the technology or Year of assessment :** 2004
6) **Source of technology :** Research Scientist, Pulses crop, S. K. Nagar

7) Raw data about the performance of the demonstrated technology

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
1	Bipinbhai Khansingbhai Chaudhari	Ambach	625
2	Dipakbhai Babarbhai Chaudhari	Ambach	650
3	Gamanbhai Gagjibhai Chaudhari	Ambach	675
4	Mohanbhai Keshabhasi Chaudhari	Ambach	700
5	Pravinbhai Sumanbhai Chaudhari	Ambach	620
6	Jaydipbhai Chhatrasing Chaudhari	Ambach	775
7	Samirbhai Chandubhai Chaudhari	Ambach	650
8	Jitendrabhai Sankarbhai Chaudhari	Ambach	725
9	Pravinbhai Gamanbhai Chaudhari	Ambach	625
10	Sunilbhai Naranbhai Gamit	Champawadi	600
11	Bachubhai Ukkadbhai Gamit	Champawadi	575
12	Madhusudanbhai Ukkadbhai Gamit	Champawadi	575
13	Anilbhai Bhagubhai Gamit	Champawadi	600
14	Manishbhai Semulbhai Gamit	Champawadi	575
15	Maganbhai Radatiabhai Gamit	Champawadi	640
16	Babubhai Fulchandbhai Gamit	Champawadi	625
17	Govindbhai Mafatbhai Gamit	Champawadi	600
18	Babubhai Panachndbhai Gamit	Champawadi	575
19	Jivanbhai Kalidashbhai Gamit	Champawadi	550
20	Chhaganbhai Holiyabhai Gamit	Champawadi	575
21	Anokhbhai Hanabhai Gamit	Champawadi	725
	Average		**631**

8) Final recommendation for micro level situation : Variety susceptible to YVM

9) Constraints identified and feedback for research: To develop high yielding & YVM resistant variety for summer cultivation.

10) Process of farmers participation and their reaction : Farmers not adopted this variety due to VYM.

B.3 Front Line Demonstration on cereals crop

a. Drill Paddy :

1) **Production system :** Rice + sorghum/pigeon pea cropping system
2) **Problem Definition :** Low yield of drill paddy
3) **Title of the Technology demonstrated :** Popularize new variety.
4) **Thematic area :** Integrated crop management
5) **Year of release of the technology or Year of assessment :** GR-8 :2000
   GR-9 :2001
   GR-5 :1990
6) **Source of technology :** Research Scientist, Rice, AAU, Nawagam
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
1	Sonabhai Nanabhai Vasava	Sevlan	1988
2	Ramjibhai Ukadiyabhai Vasava	Sevlan	1750
3	Devnabhai Radatiyabhai Vasava	Sevlan	1825
4	Damjibhai Movaliyabhai Vasava	Sevlan	2060
5	Gunvantbhai Movaliyabhai Vasava	Sevlan	2150
6	Kantilalbhai Maganbhai Vasava	Sevlan	1820
7	Amarsingbhai Rupabhai Vasava	Sevlan	1770
8	Mansingbhai Rupabhai Vasava	Sevlan	1600
9	Vestabhai Ukadiyabhai Vasava	Sevlan	1475
10	Mansingbhai Chetariyabhai Vasava	Sevlan	1840
11	Narsingbhai Lkhiyabhai Vasava	Sevlan	1680
12	Bharatbhai Pohanabhai Vasava	Sevlan	1460
13	Shantilalbhai Nanabhai vasava	Sevlan	1520
14	Sunilbhai Bondaliyabhai Gamit	Gatadi	2270
15	Jethbhai Afaniyabhai gamit	Gatadi	2340
16	Babubhai Bholiyabhai Gamit	Gatadi	2060
	Average		1851

8) **Final recommendation for micro level situation :** Varieties suitable to this region
9) **Constraints identified and feedback for research :** Weed management in drill rice.
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

b. T.P.Paddy :

1) **Production system :** Rice sugarcane cropping system
2) **Problem Definition :** Low yield and high diseases – pest incidence.
3) **Title of the Technology demonstrated :** Popularize new variety.
4) **Thematic area :** Integrated crop management
5) **Year of release of the technology or Year of assessment :** GR-7 : 2000
   GR-12 : 2004
6) **Source of technology :** Research Scientist, Rice, AAU, Nawagam
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
1	Maleshbhai Magtabhai Gamit	Champawadi	1350
2	Devjibhai Bhukhaliyabhai Gamit	Champawadi	1315
3	Ashvinbhai Narsingbhai Gamit	Champawadi	1298
4	Subhashbhai Bhimsingbhai Gamit	Champawadi	1430
5	Babubhai Devaliyabhai Gamit	Champawadi	1140
6	Diljitbhai Vinubhai Gamit	Champawadi	1390
7	Govindbhai Mafatlalbhai Gamit	Champawadi	1392
8	Navinbhai Thagabhai Gamit	Champawadi	1155
9	Ajitbhai Menubhai Gamit	Champawadi	1295

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Indicator 1 (Yield Kg/ha)
10	Anilbhai Nadulalbhai Gamit	Champawadi	1248
	Average		**1301**
11	Sunilbhai Naranbhai Gamit	Champawadi	1085
12	Bachubhai Ukkadbhai Gamit	Champawadi	1095
13	Semulbhai Somsungbhai Gamit	Champawadi	1530
14	Babubhai P. Patel	Champawadi	1456
15	Mahendrabhai Vasantbhai Gamit	Champawadi	1145
16	Ashokbhai Kahanjibhai Gamit	Champawadi	1260
17	Navinbhai Ranchodbhai Gamit	Champawadi	1165
18	Sumanbhai Bandiyabhai Gamit	Champawadi	1130
19	Rakeshbhai Lallubhai Gamit	Champawadi	1230
20	Babubhai Fulchandbhai Gamit	Champawadi	1225
21	Atulbhai Kanjibhai Gamit	Champawadi	1195
22	Bhaljibhai Chhaganbhai Gamit	Champawadi	1295
23	Manilal Bondaliyabhai Gamit	Champawadi	1225
	Average		**1234**

8) **Final recommendation for micro level situation :** Varieties suitable to this region
9) **Constraints identified and feedback for research:** Require to developed high yielding rice hybrid suitable to this region.
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

B.4 Front Line Demonstration on vegetable crop

a. Brinjal :

1) **Production system :** Rice based vegetable cropping system

2) **Problem Definition :** Poor nutrient management & Injudicious use of pesticides.

3) **Title of the Technology demonstrated :** Integrated Nutrient management/IPM

4) **Thematic area :** Integrated Nutrient management/IPM

5) **Year of release of the technology or Year of assessment :** 2005

6) **Source of technology :** Research Scientist , Vegetable, NAU, Navsari

7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated	
			Yield (Kg/ha)	% infested
1	Jayeshbhai Jivanbhai Gamit	Champawadi	19960	9.00
2	Naranbhai Manga Chaudhari	Khareda	20320	15.00
3	Dansingbhai Chhana Chaudhari	Khareda	21120	10.00
4	Kiranbhai Amsi Chaudhari	Khareda	21640	12.00
5	Sureshbhai Vadsi Chaudhari	Khareda	20080	11.00
6	Ramsing Jagabhai Chaudhari	Khareda	20720	14.00
7	Kamleshbhai Amsi Chaudhari	Khareda	19480	13.00
8	Arjunbhai Udra Chaudhari	Khareda	19840	12.00
	Average		**20395**	**12**

8) **Final recommendation for micro level situation :** INM give higher yield with good quality fruit.

9) **Constraints identified and feedback for research :** Wilt and fruit & shoot borer management technology require.

10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

c. Okra :

1) **Production system :** Rice-Okra cropping system

2) **Problem Definition :** Poor nutrient management, Injudicious use of pesticides.

3) **Title of the Technology demonstrated :** Integrated Nutrient management /IPM

4) **Thematic area :** INM/IPM

5) **Year of release of the technology or Year of assessment :** 2005

6) **Source of technology :** Research Scientist , Vegetable, NAU, Navsari

7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated	
			Yield (Kg/ha)	% infestation
1	Jayantibhai Bhagubhai Chaudhari	Gadat	18340	8.00
2	Rakeshbhai Jivanbhai Chaudhari	Gadat	17460	6.50
3	Mukeshbhai Arvindbhai Chaudhari	Gadat	17180	10.00
4	Vijaybhai Avshabhai Chaudhari	Gadat	15380	12.50
5	Navinbhai Harisingbhai Chaudhari	Gadat	18220	11.00
6	Pannaben Navinbhai Chaudhari	Gadat	18632	9.00
7	Ishvarbhai Dhanjibhai Chaudhari	Gatadi	14136	8.00
8	Shakabhai Namlabhai Chaudhari	Gatadi	13936	7.00
	Average		**16661**	**9**

8) **Final recommendation for micro level situation :** INM give higher yield with good quality fruit.

9) **Constraints identified and feedback for research :** VYM and fruit & shoot borer management technology require. Technology develop for *rabi* okra

10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

B.5 Front Line Demonstration on Plant Protection

a. Cotton :

1) **Production system :** Cotton - Wheat cropping system

2) **Problem Definition :** Heavy load of pesticide application

3) **Title of the Technology demonstrated :** Integrated Pest management

4) **Thematic area :** Integrated Pest management

5) **Year of release of the technology or Year of assessment :** 2002

6) **Source of technology :** Main Cotton Research Station, NAU, Surat

7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated	
			Yield (Kg/ha)	Number of spray
1	Ratilalbhai Somjibhai Patel	Veldha	4000	4
2	Kantilalbhai Somjibhai Patel	Veldha	4500	4
3	Laxmanbhai Haribhai Patel	Veldha	3000	5
4	Jaganbhai Himmakanbhai Patel	Veldha	3250	6
5	Radhesymbhai Uddhavbhai Patel	Veldha	3500	4
6	Dineshbhai Uddhavbhai Patel	Veldha	3250	6
7	Jadvbhai Radhunathbhai Patel	Veldha	3750	4
8	Ambalalbhai Narottambhai Patel	Veldha	2500	5
9	Shantaben Rohidashbhai Patel	Veldha	2500	6
10	Sudambhai Bandhubhai Patel	Veldha	3000	4
11	Manilalbhai Maganbhai Patel	Veldha	2750	8
12	Dagdubhai Durlabhbhai Patel	Veldha	3000	2
13	Tukarambhai Sadashivbhai Patel	Veldha	3250	5
14	Shomjibhai Bandhubhai Patel	Veldha	4250	6
15	Girdharbhai Bandhubhai Patel	Veldha	3500	4
16	Manekbhai Pursottambhai Patel	Veldha	2750	6
17	Satishbhai Eknathbhai Patel	Veldha	2500	5
18	Limjibhai Ramjibhai Patel	Veldha	2500	4
19	Chunilabhai Ramjibhai Patel	Veldha	2500	5
20	Bhupendrabhai Sureshbhai Patel	Veldha	2500	4
21	Ratilalbhai Patel	Veldha	3750	6
22	Limjibhai Gorakhbhai Patel	Veldha	2500	4
23	Manekbhai Pursottambhai Patel	Veldha	3000	5

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated	
			Yield (Kg/ha)	Number of spray
24	Narttambhai Kasinathbhai Patel	Veldha	3000	4
25	Jashodaben Narottambhai Patel	Veldha	3250	6
26	Tukarambhai Gorakhbhai Patel	Veldha	3000	4
27	Jaganbhai Murarbhai Patel	Veldha	2500	5
28	Sureshbhai Narsaibhai Patel	Veldha	3000	7
29	Parshubhai Shankarbhai Patel	Veldha	3250	5
30	Aokarbhai Natthubhai Patel	Veldha	3000	5
31	Shankarbhai Natthubhai Patel	Veldha	3000	8
32	Gorakhbhai Bhikkanbhai Patel	Veldha	3750	4
33	Pareshbhai Jadavbhai Patel	Veldha	3750	6
	Average		**3136**	**5**

8) **Final recommendation for micro level situation :** Farmers are able to manage the pests effectively with minimum application of chemical
9) **Constraints identified and feedback for research : --**
10) **Process of farmers participation and their reaction :**Good response from farmers and they are appreciating technology

b. Cucurbits:

1) **Production system :** Rice vegetable cropping system
2) **Problem Definition :** High incidence of fruit fly
3) **Title of the Technology demonstrated :** Management of fruit fly
4) **Thematic area :** Integrated Pest Management
5) **Year of release of the technology or Year of assessment :** 2005
6) **Source of technology :** Associate Research Scientist, Gandevi
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated	
			Yield (Kg/ha)	% infestation
1	Rajendra Sevu Konkani	Bhojpur	9980	7.00
2	Panabhai Ukadia Gamit	Chikhalda	10730	3.00
3	Mohanbhai Ravjibhai Gamit	Maypur	10910	2.00
4	Rajeshbhai Lallubhai Gamit	Nanichikhli	9830	8.00
5	Babubhai Navlabhai	Sarkuva	10640	5.00
6	Hemantbhai bhagubhai	Nanichikhli	10830	4.00
7	Chunilal Belabhai	Bhitbhudrak	10560	6.00
8	Fulsinghbhai Vasava	Bhitbhudrak	10840	5.00

8) **Final recommendation for micro level situation :** Large scale adoption of this technology should be made and more concentration should be given to collection and destruction of fallen fruits.
9) **Constraints identified and feedback for research:--**
10) **Process of farmers participation and their reaction:** Farmers appreciated the technology

c. Mango:

1) **Production system :** Mango plantation
2) **Problem Definition :** High incidence of fruit fly
3) **Title of the Technology demonstrated :** Management of fruit fly
4) **Thematic area :** Integrated Pest Management
5) **Year of release of the technology or Year of assessment :** 2005
6) **Source of technology :** Associate Research Scientist, Gandevi
7) **Raw data about the performance of the demonstrated technology**

Farmer No.	Name of the farmer	Name of the Village	Data on the performance indicators of the technology demonstrated
			Number of fruit fly catch / trap
1	Chhitubhai d Gamit	Dhanturi	550
2	Barjibhai Vanchhi Chaudhary	Ambach	700
3	Babubhai Vanchhi Chaudhary	Ambach	850
4	Kuldip Mukund chudhary	Ambach	300
5	Sitaram dansinghbhai Chaudhary	Ambach	450
6	Rahulbhai Natubhai Chaudhary	Ambach	950
7	Natubhai Dahyabhai Bhakta	Ambach	400
8	Gaman bhai zinabhai Chaudhary	Ambach	1050
9	Girishbhai Akherbhai Chaudhry	Ambach	800
10	Musa farm	Ambach	600
11	Chhaganbhai L. Patel	Kalamkui	450

8) **Final recommendation for micro level situation :** Large scale adoption of this technology should be made and more concentration should be given to collection and destruction of fallen fruits.
9) **Constraints identified and feedback for research : --**
10) **Process of farmers participation and their reaction :** Farmers appreciated the technology

ANNUAL ACTION PLAN

2008-09

(October 2008 to September 2009)

आकृअप
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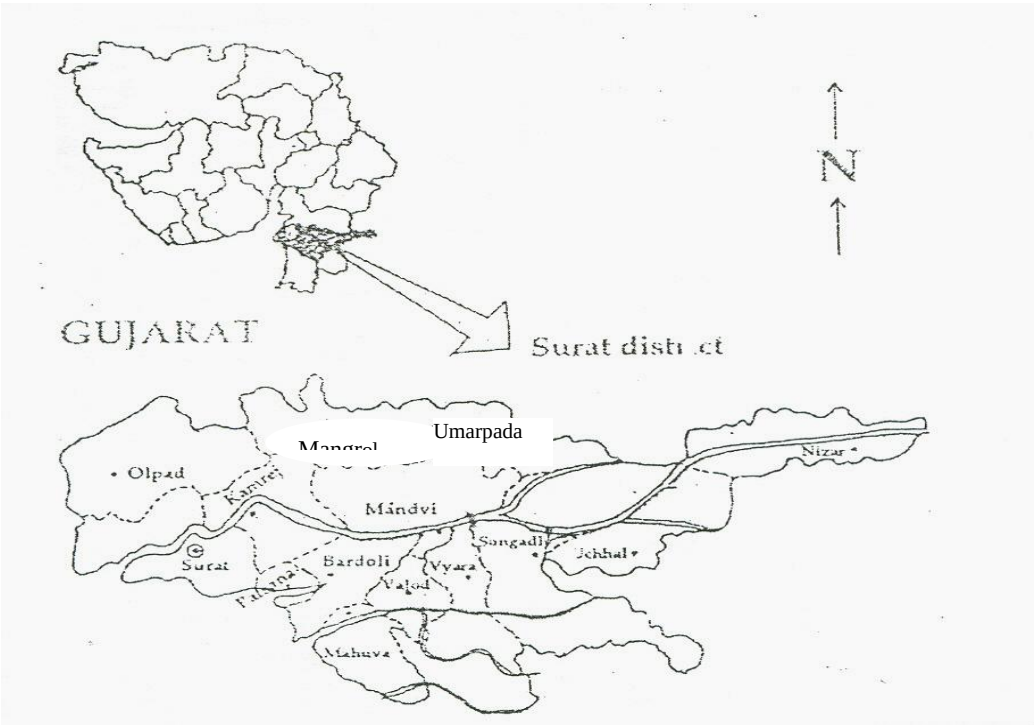
NAVSARI AGRICULTURAL UNIVERSITY

KRISHI VIGYAN KENDRA

NAVSARI AGRICULTURAL UNIVERSITY,
VYARA-394 650
DIST. TAPI (GUJARAT)



THRUST AREA

i) Crop production management (Paddy, Sugarcane, Vegetables, Pulses & Groundnut)

ii) Soil & water conservation and water management

iii) Arid horticulture development

iv) Integrated pest management

v) Organic farming

vi) Self employment to Rural youth

vii) Women empowerment

viii) Management of dairy animals

ix) High tech agriculture

ANNUAL ACTION PLAN –2008-09

Quarter wise summary of Annual Action plan KVK, Vyara for the year-2008-09

1. Training Programme

Sr. No	Subject	ON CAMPUS/ OFF CAMPUS																TOTAL ON CAMPUS				TOTAL OFF CAMPUS				Grand TOTAL
		PF				FW				RY				EF												
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1	Crop production	2	2	3	3	1	-	-	-	-	1	1	-	-	-	1	-	1	1	3	1	2	2	2	2	**14**
2	Horticulture	2	3	2	2	-	-	-	-	1	-	2	1	-	-	1	-	1	1	3	1	2	2	2	2	**14**
3	Plant Protection	2	3	2	1	1	-	-	1	-	1	-	2	-	1	-	-	1	2	1	2	2	3	1	2	**14**
4	Extension Education	2	1	-	2	-	-	1	-	-	1	-	-	-	-	1	-	1	1	2	1	1	1	-	1	**08**
5	Home Science	-	-	-	-	3	3	3	3	1	-	1	-	-	-	1	-	2	1	3	1	2	2	2	2	**15**
6	Animal Science	-	1	1	1	-	-	-	-	1	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	**04**
7	Sponsored	1	1	-	-	-	1	1	-	-	-	-	1	-	-	-	-	1	1	1	1	-	1	-	-	**05**
	Total	**9**	**11**	**8**	**9**	**5**	**4**	**5**	**4**	**3**	**3**	**4**	**4**	**-**	**1**	**4**	**-**	**8**	**8**	**14**	**8**	**9**	**11**	**7**	**9**	**74**

PF : Practicing Farmers, **FW** : Farm Women, **RY** : Rural Youth, **EF** : Extension Functionary

2. Demonstrations

Sr. No.	Particulars of the FLD	Season	Crop	Area ha./No.	No. of Demonstration
1	FLD on Oilseeds	Kharif-2009	Groundnut	5	10
			Soybean	5	10
		Summer-2009	Groundnut	10	20
		Kharif-2009	Castor	5	10
2	FLD on Pulses	Kharif-2009	Pigeon pea	5	10
		Rabi-2008-09	Gram	5	10
		Summer-2009	Green gram	5	10
3	Cereal crops	Kharif-2009	Paddy-Irri	10	20
		Kharif-2009	Paddy-Rainfed	5	10
4	Vegetable crops	Rabi-2008-09	Brinjal	2	8
		Rabi-2008-09	Okra	2	8
		Summer-09	Turmeric	2	8
5	Plant Protection	Rabi-2008-09	Okra	3	10
			Brinjal	3	10
			Cucurbits	2	5
			Gram	5	10
		Summer-09	Mango	5	10
		Kharif-2009	Cotton	50	50
		Kharif -2009	Paddy	5	10
6	Home Science	Kharif-2009	Kitchen gardening	-	50
			Total	**134**	**289**

3. On Farm Testing

(i) Land configuration in pigeon pea

(ii) Varietal performance of groundnut variety

(iii) Varietal performance of paddy under drill condition.

(iv) Refinement of sowing time in okra

4. Extension Activities

Sr.No.	Name of Activities	Proposed No.
1.	Field day	6
2.	Farmers day	1
3.	Agril. exhibition	5
4.	Awareness programmes	4
5.	Scientist farmers interaction/Vichar gosthi	4
6.	Farm science club	2
7.	Mahila mandal / SHGs	8
8.	SHG meeting for activation of Groups	12
9.	Ex. Trainees meeting	4
10.	Puppet show	4
11.	Bhavai (musical drama)	4
12.	Day's celebration	3
13.	Diagnostic services	
	(i) Farmers visit to KVK	500
	(ii) Scientist visit to farmers field	120
14.	Lectures to be delivered in other programmes	As per need
15.	Distribution of seed on cost basis	80 tons
16.	Soil & water sample analysis	100
17.	Publication - Calendar-Toran (Slogan)	2
18.	Leaflet/ Folders	4
19.	Poster	2
20.	Booklet	3
21.	Guidance through mail	4
22.	Communication media	
	(i) Radio talk	As per AIR allotment
	(ii) TV /Film show	20
	(iii) News paper coverage	20
	(iv) Subscription to farm Magazine	50

5. Proposed plan of work for instructional farm.

- Graft -- 4000 no.

- Vegetable Seedling -- 6 Lakhs

- Paddy seed production -- 1 ha.

6. SAC meeting proposed. (Sept.-2009)

1. TRAINING PROGRAMME

1.1 On campus Trainings (For practicing farmers, farm women and rural youth)

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
I Quarter					
Crop production	Recent advances in sugarcane cultivation	3-4/10/08	2	20	RY
Horticulture	Off season cultivation of vegetable crops under low cost green house	6-7/10/08	2	20	RY
Plant protection	Integrated pest management in vegetables	10-11/10/08	2	20	PF
Home science	Nutrition for mother and child	20-21/10/08	2	20	FW
Extension Education	Agricultural development programme of tribal farmer	1-2/12/08	2	20	PF
Animal Science	Management of new borne calf	18-19/11/08	2	20	RY
II Quarter					
Crop production	Scientific cultivation of Wheat / Gram in cotton / paddy	2-3/1/09	2	20	PF
Horticulture	Cultivation of high value vegetable crops (Okra, Brinjal, Tomato, Chillies)	6-7/1/09	2	20	PF
Plant protection	Integrated pests and disease management in field crops	3-4/2/09	2	20	RY
Home science	Balanced diet from locally available food material	16-17/1/09	2	20	FW
Extension Education	Entrepreneurship development programme for	12-13/2/09	2	20	RY
Animal Science	Care & management of milch animal.	5-6/3/09	2	20	PF
III Quarter					
Crop production	Importance of land preparation in paddy / sugarcane / cotton based cropping system	1-2/4/09	2	20	PF

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
Horticulture	High tech horticulture	3-4/6/09	2	20	RY
Plant protection	Integrated pest management in cotton	9-10/4/09	2	20	PF
Home science	Preservation and processing of mango	7-8/5/09	2	20	RY
Extension Education	Importance of Co-operatives/ Self Help Groups in contract farming	18-19/5/09	2	20	FW
Animal Science	Preventive health care of dairy animal	16-17/6/09	2	20	PF
IV Quarter					
Crop production	Direct seeded rice cultivation in changing environment	2-3/7/09	2	20	PF
Horticulture	Planning for cultivation of short duration horticultural crops (cabbage, Cauliflower, Water melon, Musk melon)	15-16/9/09	2	20	PF
Plant protection	Integrated pests and disease management in vegetables	7-8/7/09	2	20	RY
Home Science	Anemia and its control	16-17/7/09	2	20	FW
Extension Education	Value addition in farm produce	4-5/9/09	2	20	PF
Animal Science	Feeding management of dairy animal	10-11/8/ 09	2	20	PF

1.2 Off campus Trainings (For practicing farmers, farm women and rural youth)

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
I Quarter					
Crop production	Land preparation and planting techniques of	4/11/08	1	20	PF
	Weed management in Wheat and Gram	11/12/08	1	20	FW
Horticulture	INM & water management in	15/10/08	1	20	PF
	INM in Okra.	14/11/08	1	20	PF
Plant protection	Integrated management of	13/10/08	1	20	FW
	Integrated management of mango pests	27/12/08	1	20	PF
Home Science	Preparation of Tomato ketchup and Papaya jam	25/11/08	1	20	FW
	Importance of vegetables in a daily diet	30/12/08	1	20	FW

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
Extension Education	Marketing of farm produce	26/11/08	1	20	PF
II Quarter					
Crop production	Improvement in summer groundnut cultivation	7/2/09	1	20	PF
	Importance of organic farming and its input	12/3/09	1	20	RY
Horticulture	INM in Brinjal	13/1/09	1	20	PF
	Cultivation of medicinal plant (Turmeric, Ginger)	27/3/09	1	20	PF
Plant protection	Management of ground nut pests and diseases	27/1/09	1	20	PF
	Integrated pest management in field crops	25/2/09	1	20	PF
	Integrated pests management in cotton	19/3/09	1	20	PF
Home science	Use of sprouted pulses in preparation of low cost	20/2/09	1	20	FW
	Anemia and its control	17/3/09	1	20	FW
Extension Education	WTO and rural farmers	22/1/09	1	20	PF
III Quarter					
Crop production	Green manuring in paddy based cropping system	22/5/09	1	20	PF
	Scientific cultivation of paddy	19/6/09	1	20	PF
Horticulture	Arid horticultural development	15/4/09	1	20	PF
	Paddy base vegetable cropping sequences.	28/5/09	1	20	PF
Plant protection	Integrated pest management in Paddy	24/6/09	1	20	PF
Home science	Preparation of low cost nutritious diet for infant and	23/4/09	1	20	FW
	Nutritional deficiencies and its control in women and	29/6/09	1	20	FW
Extension Education	Integrated Agricultural Development	10/6/09	1	20	PF
IV Quarter					
Crop production	Weed management in upland rice	5/8/09	1	20	PF
	Scientific cultivation of castor	1/9/09	1	20	PF
Horticulture	Yearly planning of vegetable cultivation	22/7/09	1	20	RY

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
	Care & Management of Mango orchard.	13/8/09	1	20	PF
Plant protection	Integrated management in vegetables	29/7/09	1	20	FW
	Integrated management in sugarcane	21/8/09	1	20	PF
Home science	Preparation of banana wafers and lemon squash	27/8/09	1	20	FW
	Nutrition for vulnerable group	8/9/09	1	20	FW

1.3 In-service Training Programme

Subject	Title of training	Date	Duration (days)	No. of parti.	Type of parti.	Sponsoring agency
Crop Production	Refresher course on crop production technology	Oct.-08	2	20	VLWs/ sugar factory field staff	Dist. Panchayat, Tapi
Horticulture	Refresher course on vegetable production (okra, brinjal & pointed guard)	March-09	2	20	VLWs	Dist. Panchayat, Tapi
Plant protection	Integrated pest management in vegetables	July-09	2	20	VLWs	Dist. Panchayat, Tapi
Home Science	Maternal health and child care	Dec-08	2	20	Anganwadi workers	ICDS
Extension Education	How to conduct demonstration	Nov.-08	2	20	VLWs	Dist. Panchayat, Tapi

1.4 Vocational Training Programme

Title of training	Discipline	Month	Duration (days)	No. of parti.	Type of parti
Nursery management in horticulture crops	Horticulture	Mar'09	15	20	RY
Maintenance of micro irrigation system	Agronomy	April'09	8	20	RY
Mushroom Cultivation	Plant Protection	Aug'09	30	20	RY
Paper cup / leaf cup making	Home Science	Nov'08	15	20	RY
Value addition in fruits and vegetables	Home Science	May'09	15	20	FW

2. DEMONSTRATION

2.1 Front Line Demonstrations

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Specific technology	Critical inputs	Remarks
Oilseeds									
G'nut	Demonstration of high yielding variety & technology	GG-6	Irrigated	10	20	- Use old variety & tradition cultivation.	Performance of improve variety.	Seeds , Bio fertilizer,	Summer (Jan–09)
G'nut	Land configuration	GG-20	Irrigated	10	20	- Use of old variety. - No use of bio-fertilizer - Growing G'nut on flat bed	Land configuration, seed treatment, use of bio-fertilizer	Seeds, Bio fertilizer,	Kharif (June-09)
Soybean	Integrated nutrient management	G.S.-2	Rainfed	10	20	-Use of local variety -No use of FYM -Inadequate use of ferti.	Balance use of fertilizer, manure & Bio fertilizer.	Seeds Rhizobium & fertilizer.	Kharif (June-09)
Castor	Introduction of new crop.	GCH-4/6	Rainfed	5	10	Low productive cropping system	To replace low out put crops (Jowar,Mung,Urid)	Seed	Kharif (June-09)
Pulses									
Gram	Land configuration and use of bio fertilizer.	GG-2	Irrigated	5	10	-lack of knowledge about use of bio fertilizer& imbalance use of fertilizer. - Growing in flat bed.	- Use of bio- fertilizer - Land configuration.	Seeds, Bio-fertilizer.	Rabi-2008-09
Green gram	INM & performance of new variety.	GM-3	Irrigated	5	10	- Imbalance use of fertilizer.	- Balance use of fertilizer.	- Seeds , Bio fertilizer, - Fertilizer	Summer (Jan–09)
Pigeon pea	Demonstration of high yielding variety	Vaishali	Rainfed	5	10	- Use local variety - No use of bio-fertilizer	Performance of improved variety.	Seeds, Bio-fertilizer	Kharif (June-09)

2.2 Demonstrations other than FLD

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Proposed technology	Critical inputs	Remarks
A. Crop Demonstration									
Paddy	Importance of green manuring in paddy cultivation.	Gurjari	Irrigated	5	10	No green manuring	Green manuring before planting.	Seeds,	Kharif-2009
	Popularize new variety	NAUR-1	Irrigated	5	10	Use of low yielding disease susceptible variety	New variety	Seeds	Kharif 2009
	Popularize new variety	GR-5, GR-8, GR-9	Rainfed	5	10	Use of low yielding old variety Imbalance use of fertilizers	New variety	Seeds	Kharif 2009
B. Vegetable Production									
Brinjal	Integrated nutrient management.	Surtiravaiya	Irrigated	2	4	-Imbalance use of fertilizer. - No use of organic matter.	- Balance use of fertilizer. - Use of organic matter.	O.M., Fertilizer	Rabi-2008-09
Okra	Integrated nutrient management	Hybrid	Irrigated	2	4	-Imbalance use of fertilizer. - No use of organic matter.	- Balance use of fertilizer. - Use of organic matter.	O.M., Fertilizer	Rabi-2008-09
Turmeric	Introduction of new high value crop	Kesar	Irrigated	2	8	- Cultivation of low out put crops	- To replace low out put crops (paddy)	Seeds	Kharif 2009
C . Plant protection									
Brinjal	Management of Brinjal fruit and shoot borer	Surtiravaiya	Irrigated	3	10	Un –know about P.P. measures.	Integrated pest management.	Pheromone trap, Bio pesticide	Rabi-2008-09
Okra	Management of okra fruit and shoot borer	Hybrid	Irrigated	3	10	Un –know about P.P. measures	Integrated pest management	Pheromone trap,Bio pesticide	Rabi-2008-09

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Proposed technology	Critical inputs	Remarks
Cucurbits	To manage fruit fly	Improved	Irrigated	2	5	Un –know about P.P. measures	Mass trapping	Pheromone trap	Rabi-2008-09
Chick pea	Management of wilt	GG-2	Irrigated	5	10	Unable to manage wilt	Application of *Trichoderma*	*Trichoderma*	Rabi 2008-09
Mango	Control fruit fly	--	Irrigated	5	10	Un –know about fruit fly control.	To popularize Methyl eugenol trap	Methyl eugenol trap	Summer-2009
Cotton	IPM	--	Irrigated	50	50	Un –know about P.P. measures	Integrated pest management.	Pheromone trap, Bio pesticide	Kharif-2009
Paddy	IPM	Improved	Irrigated	5	10	Unknown about management	IPM module by N.A.U.	Chemicals/ seed treatments	Kharif- 2009

2.3 Home Science

Sr. No.	Name of activity	Objective	Specific technology intervention	No. of families covered	Critical inputs to be supplied
1	Kitchen gardening	To improve nutritional status of family	Introduction of lay out and techniques of sowing	50	Seed, seedlings and fertilizers

2.4 Vadi Yojna : 4 Units each of one acre (NAU Vadi model)

2.5 Demonstration Unit

1	Crop museum
2	Vermicompost
3	Bio-Compost
4	Mushroom production
5	Apiculture
6	Bio control Laboratory
7	Calf rearing unit
8	Drip irrigation
9	Low cost greenhouse
10	Kitchen Garden

3. On Farm Testing

3.1 Title: - Land configuration in pigeon pea. (On going)

Pigeon pea is grown in *kharif* season in this area. Due to heavy rainfall and water logged condition the germination and growth of pigeon pea is poor. Further, the farmers of the area sow their crop in flat soil which increases the chances of accumulation of water in root zone resulted congenial condition for the wilt disease which some time leads to complete failure of the crop.

Reason of low productivity:-

1. Improper field condition and poor drainage
2. Sowing in flat soil
3. Lack of good quality of seed
4. No seed treatment is given
5. No use of bio-fertilizer
6. Imbalance use of fertilizer

Intervention point:-

1. Sowing on raised bed
2. Seed treatment with fungicides and bio fertilizers
3. Use of recommended fertilizer

Technology intervention:-

Sowing on raised bed

Variety: Vaishali

Treatment sowing of seeds

1. Growing on raised bed with recommended practices
2. Ridges and furrow sowing
3. Local method of sowing (flat bed)

Plot size:- 0.25 ha **No. of farmers**: - 5

Critical input to be supplied: seeds, bio-fertilizer and fungicides.

3.2 Title: - Varietal performance of summer groundnut variety (New).

Farmers are growing old variety like GG-2 & SB-11.Which give comparatively low yield. Newly release variety GG-6 & TG-26 gave more yield as compared to this older one but farmers are not adopt to this new variety. To sow the performance of newly release variety in this OFT is proposed.

Reason of low productivity:-

1. Lack of knowledge of High yielding new variety.
2. No seed treatment is given
3. No use of bio-fertilizer
4. Imbalance use of fertilizer
5. Lack of irrigation facility at last stage

Intervention point:-

1. High yielding variety
2. Seed treatment with fungicides and bio fertilizers
3. Use of recommended fertilizer

Technology intervention:-

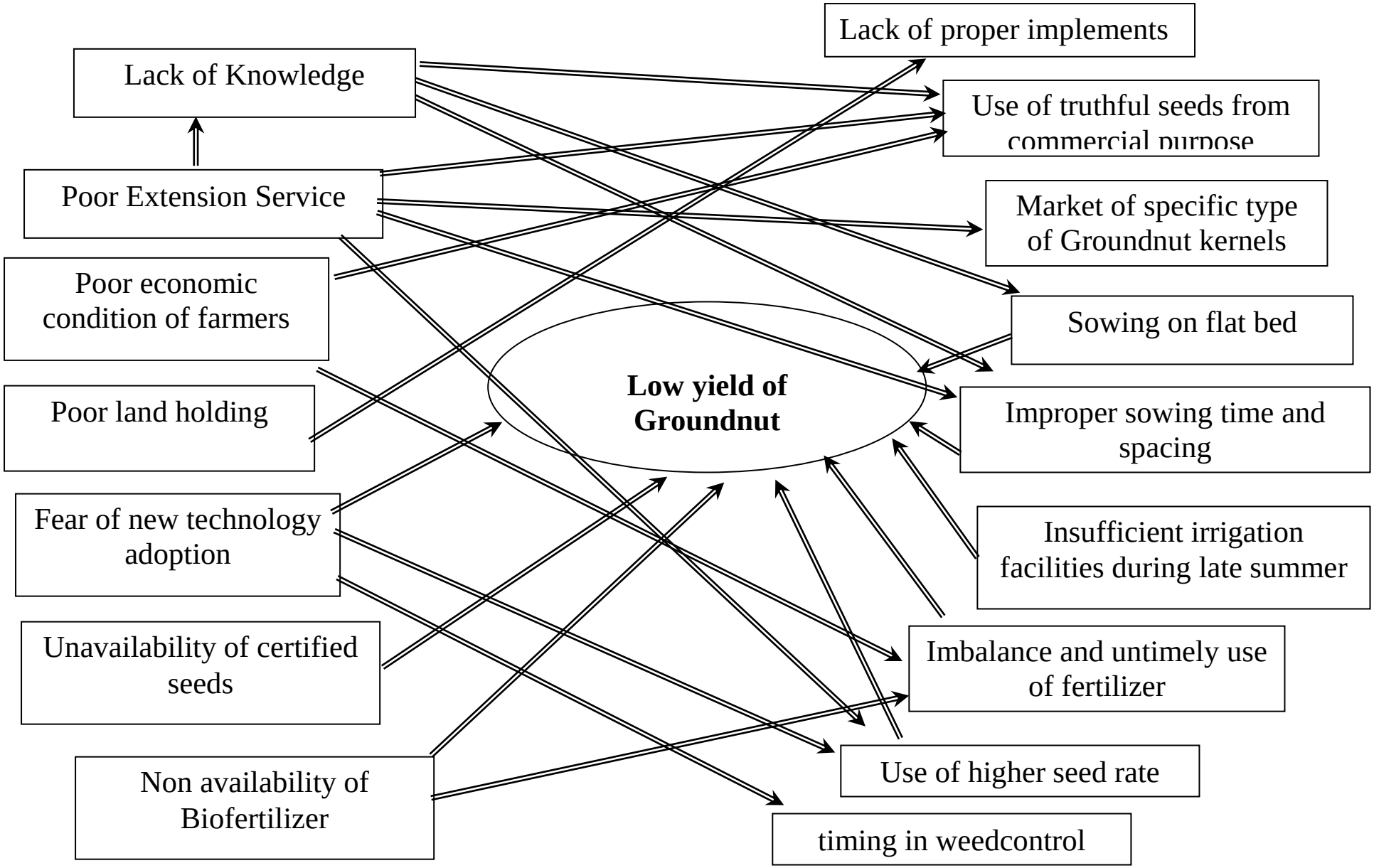
High yielding variety.

Treatment

1. GG-2
2. SB-11
3. GG-6
4. TG-26

Plot size:- 0.20 ha **No. of farmers**: - 5

Critical input to be supplied: seeds, bio-fertilizer and fungicides.


Lack of proper implements
Lack of Knowledge
Use of truthful seeds from commercial purpose
Poor Extension Service
Market of specific type of Groundnut kernels
Poor economic condition of farmers
Sowing on flat bed
Low yield of Groundnut
Poor land holding
Improper sowing time and spacing
Fear of new technology adoption
Insufficient irrigation facilities during late summer
Unavailability of certified seeds
Imbalance and untimely use of fertilizer
Use of higher seed rate
Non availability of Biofertilizer
timing in weedcontrol

3.3 Title: - Varietal performance of paddy variety under drill condition. (New)

Farmers are growing old variety like Tichun, Dodiu .Which give comparatively low yield. Newly release variety GR-5, GR-8,GR-9, Ashoka 200 F gave more yields as compared to this older one but farmers are not adapting to this new variety. To sow the performance of newly release variety in this OFT is proposed.

Reason of low productivity:-

1. Lack of knowledge about high yielding variety.
2. No seed treatment is given
3. No use of bio-fertilizer
4. Imbalance use of fertilizer

Intervention point:-

1. High yielding variety
2. Seed treatment with fungicides and bio fertilizers
3. Use of recommended fertilizer

Technology intervention:-

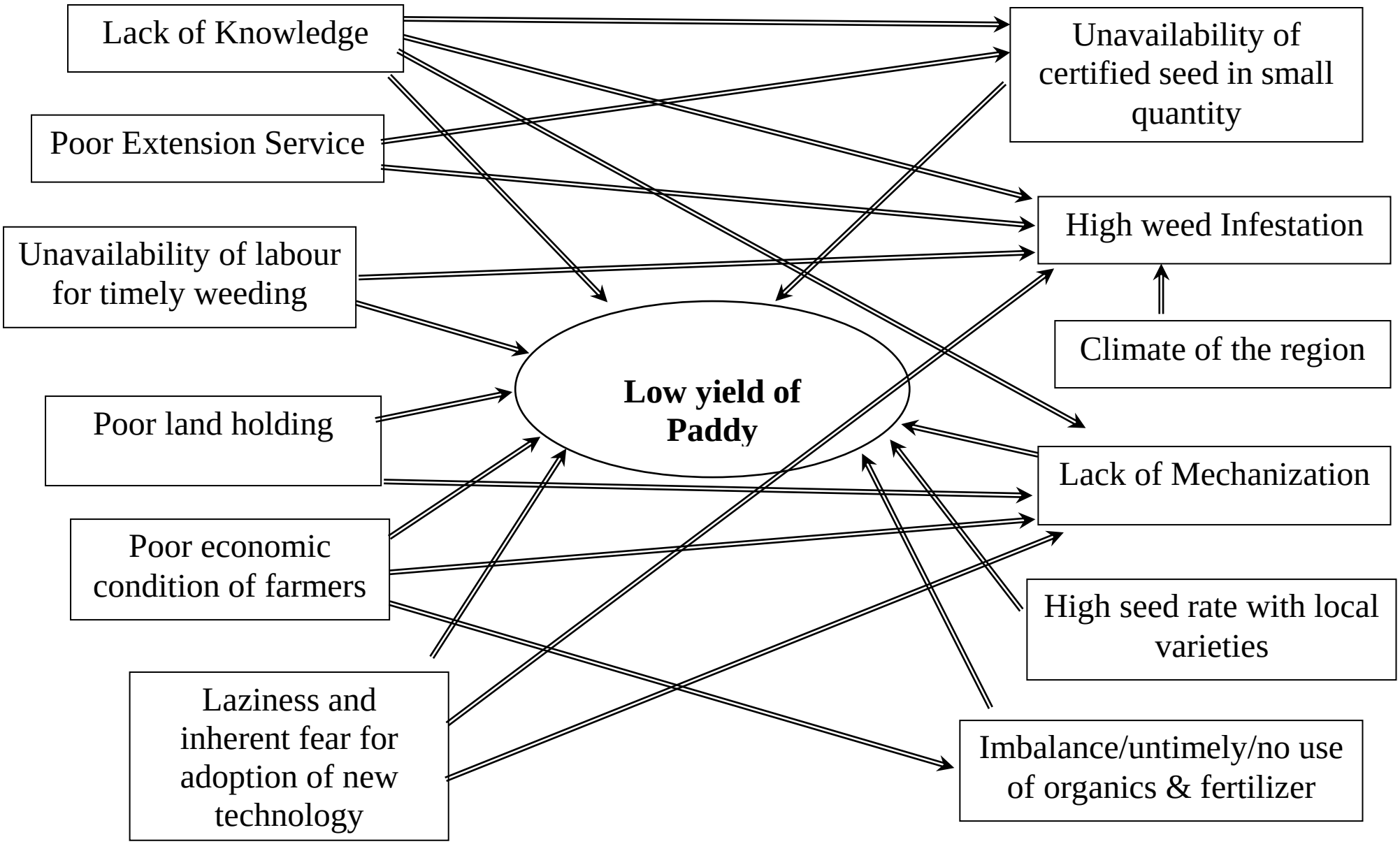
High yielding variety.

Treatment

1. GR-5
2. GR-9
3. GR-8
4. Ashoka 200 F

Plot size:- 0.20 ha **No. of farmers**: - 5

Critical input to be supplied: seeds, bio-fertilizer and fungicides.



PROBLEM CAUSE DIAGRAM

3.4 Title: - Refinement of sowing time in okra (New)

The farmers of eastern belt of Surat and Tapi and some part of Dang districts are growing okra in Rabi season, sow their crops immediate after harvesting of kharif crops i.e. from October onward. The university recommends growing of okra either in kharif or simmer. Farmers have no irrigation facility during summer so they grow okra as vegetable crop during rabi season.

Reason for Low Productivity

1. Growing during rabi season.
2. Imbalance use fertilizer.
3. Use high seed rate.
4. Higher incidence of pest & diseases.

Intervention point

1. Time of sowing
2. Use of recommended fertilizer

Technology intervention

Time of sowing
Variety: Arka Abhai / Pusa A_4

Treatment

1. Date of sowing 15th Oct.
2. Date of sowing 30th Oct.
3. Date of sowing 15th Nov.(Famers practices)

Plot size :- 0.20 ha **NO. of farmers** :- 5

Critical input to be supplied :- seed, bio-fertilizer

4. EXTENSION ACTIVITIES

Sr. No.	Name of Activities	Quarter				Total
		I	II	III	IV	
1.	Field day	2	2	1	1	6
2.	Farmers day	1	-	-	-	1
3.	Agril exhibitions	1	2	2	-	5
4.	Awareness Programmes	1	1	1	1	4
5.	Scientist farmers interaction- Vichar Gosthi	1	1	1	1	4
6.	Farm science club	1	-	1	-	2
7.	Mahila mandal / SHGs	2	2	2	2	8
8.	SHG meeting for activation of Groups	3	3	3	3	12
9.	Ex. Trainees meeting	1	1	1	1	4
10.	Puppet show	1	1	1	1	4
11.	Bhavai(Musical Drama)	1	1	1	1	4
12.	Day's celebration	2	1	-	-	3
13.	Diagnostic service					
	(i) Farmers visit to KVK	125	125	125	125	500
	(ii) Scientist visit to farmers field	30	30	30	30	120
14.	Lectures to be delivered in other programmes	-As per need-				
15.	Distribution of seed on cost basis	20	20	20	20	80 tons
16.	Soil & water sample analysis	25	25	25	25	100
17.	Publication - Calendar- Toran (slogan)	-	1	1	-	2
18.	Leaflet/Folders	1	1	1	1	4
19.	Poster	1	-	1	-	2
20.	Booklet	1	1	-	1	3
21.	Guidance through mail	1	1	1	1	4
22.	Communication media					
	(i) Radio talk	As per AIR allotment				
	(ii) TV /Film show	5	5	5	5	20
	(iii) News paper coverage	5	5	5	5	20
	(iv) Subscription to farm Magazine	12	13	13	12	50

5. Proposed plan of work for instructional farm.

- Graft -- 4000 no.
- Vegetable seedling - 20 lakhs
- Paddy seed production -- 1 ha.

6. SAC meeting proposed. (Sep-2009)

Appendix-1

Research Papers

1.	B.M. Solia, Timbadia C.K., Savani N.G. and R.G. Patil "Transfer of Plasticulture based Technologies in some Horticultural Crops Under South Gujarat Conditions". A paper is accepted and presented in a seminar on Interventions for Environmental Moderation organized by ASPEE college of Horticulture and Forestry, Navsari Agricultural University held at Navsari dated on 8-10th January'2008 Seminar Souvenir PP.82
2.	Experiences of Farmers about Drip Irrigation in Gujarat-A Survey. A paper is accepted for publication in Indian society of Water Management.
3.	Pastagia J.J. and Patel M.B. (2008) Feasibility of rearing of Indian honeybee Apis cerana F. in South Gujarat. A poster paper presented in National seminar on an Environmental Moderation organized by N.A.U., Navsari on 8-10 January, 2008 and have been awarded third best poster presentation.
4.	Pastagia J.J. and Patel M.B.(2008) Feasibility of rearing Apis cerana F. in South Gujarat, a paper presented in Gujarat Association of Agril Sciences, At Ahmedabad on 18/09/2008.

Appendix - 2
Popular Articles

1.	Dr. H.M. Viradia(2007), “SHERADINI SUDHAREL KHETI PADDHATI” Gujarat Mitra, Date- 8th October’2007
2.	Dr. C.K.Timbadia(2007) “GUJARATNI GAYONI OLAD” Gujarat Mitra, Date- 15th October’2007
3.	Dr. C.K.Timbadia(2007) “DANGI OLAD” Gujarat Mitra, Date- 22th October’2007
4.	Dr. H.M. Viradia(2007), “ANAJNI KHADH PURVA VAIGYANIK KHETI PADDHATI THI GHAUN NU UTPADAN VADHARIEA” Gujarat Mitra, Date- 29th October’2007
5.	Dr. H.M. Viradia(2007), “ANAJNI KHADH PURVA VAIGYANIK KHETI PADDHATI THI GHAUN NU UTPADAN VADHARIEA” Gujarat Mitra, Date- 5th November’2007
6.	Dr. H.M. Viradia(2007), “PANI ANE KHARCH KARYA VAGARNO SAKTI VARDHAK SIYALU PAK CHANA” Gujarat Mitra, Date- 19th November’2007
7.	Dr. H.M. Viradia(2007), “DANGAR PACHHI OCCHA PANIEA SARI AVAK APTO PAK DIVELA” Gujarat Mitra, Date- 26th November’2007
8.	Dr. H.M. Viradia(2007), “CHANA NI VADHU NAFAKARAK KHETI” Narmada Kisan, November’2007
9.	Dr. H.M. Viradia(2007), “GHAUN NI VAIGYANIK KHETI PADDHATI” Narmada Kisan, November’2007
10.	Dr. H.M. Viradia(2007), “UNADU PIYAT NI ACHHAT THI DANGAR PACHHI DIVELA UGADI VADHU AVAK MEDAVO” Gujarat Mitra, Date- 26th November’2007
11.	Dr. H.M. Viradia(2007), “TEL NU UTPADAN VADHARVA UNADU MAGFALI NU VAVETAR KARIEA” Gujarat Mitra, Date- 17th December’2007
12.	Dr. J.J. Pastagia(2007), “KED MA SANKLIT JIVAT NIYANTRAN” Gujarat Mitra, Date- 7th December’2007
13.	Dr. J.J. Pastagia(2007), “KED MA SANKLIT JIVAT NIYANTRAN” Gujarat Mitra, Date- 24th December’2007

14.	Dr. J.J. Pastagia(2008), “AMBAVADIYA MA SANKLIT JIVAT NIYANRAN ” Gujarat Mitra, Date- 7th January’2008
15.	Dr. H.M. Viradia(2008), “SENDRIYA KHATAR/ VARMI COMPOST BANAVAT ANE MAHTVA” Gujarat Mitra, Date- 18th January’2008
16.	Shri B.M. Tandel(2008), “ UNADU RINGAN NI VAIGYANIK KHETI PADDHATI ” Gujarat Mitra, Date- 11th February’2008
17.	Shri B.M. Tandel(2008), “ PAPAIYA NI ADHUNIK KHETI” Gujarat Mitra, Date- 25th February’2008
18.	Shri B.M. Tandel(2008), “ TUKA GADANA SAKBHAJI NI KETHI” Gujarat Mitra, Date- 18th February’2008
19.	Dr. H.M. Viradia(2008), “SENDRIYA KHATAR / VARMI COMPOST BANAVAT” Gujarat Mitra, Date- 21th January’2008
20.	Dr. H.M. Viradia(2008), “SENDRIYA KHATAR / VARMI COMPOST BANAVAT” Gujarat Mitra, Date- 28th January’2008
21.	Dr. H.M. Viradia(2008), “SENDRIYA KHATAR / VARMI COMPOST BANAVAT” Gujarat Mitra, Date- 4th February’2008
22.	Dr. H.M. Viradia(2008), “SENDRIYA KHATAR / VARMI COMPOST BANAVAT” Jangi Gujarat, 26th January’ 2008
23.	Dr. H.M. Viradia(2008), “UNADU MAG NU VADHU UTAPADAN” Krishi Jivan, February’ 2008
24.	Shri B.M. Tandel(2008), “ PAPAIYA NI KHETI PADDHATI” Narmada Kisan Parivar, April’2008
25.	Shri B.M. Tandel(2008), “ VELAVADI SAKBHAJI NI KETHI” Narmada Kisan Parivar, April’2008
26.	Dr. H.M. Viradia(2008), “JAMIN NE ODAKHI PAK UTPADAN VADHARVA JAMIN PANI PRUTTHAKARAN NU MAHATVA” Gujarat Mitra, Date- 24th March’2008
27.	Dr. H.M. Viradia(2008), “PAK NO DUSMAN NUMBAR-1 NINDAN, NINDAN NIYNTARN VYAVASTHAPAN” Gujarat Mitra, Date- 31th March’2008
28.	Dr. H.M. Viradia(2008), “KSHARIYA BHASMIK JAMIN : KARANO ANE SUDHARANA NA PAGLA” Narmada Kisan Parivar Patra, April’2008
29.	Shri B.M. Tandel(2008), “ KHETAR NA SEDHE-PADE ANE NAKAMI JAMIN MA SUKA PARDESH MA FAL ZAD NO UCHHER” Gujarat Mitra, Date- 7th

	April'2008
30.	Dr. H.M. Viradia(2008), "KSHARIYA BHASMIK JAMIN : KARANO ANE SUDHARANA NA PAGALA" Narmada Kisan Parivar Patra, April'2008
31.	Dr. H.M. Viradia(2008), "SENDRIYA KHETIMA POSHAK TATVO NU VYAVASTHAPAN " Narmada Kisan Parivar Patra, April'2008
32.	Arti N. Soni(2008), " ANEMIYA(LOH TATVA NI UNAP) ANE GRAMYA STREE NU SVASTHAYA" Gujarat Mitra, Date- 28th April'2008
33.	Dr. J.J. Pastagia(2008), "KRUSHI MA VAPRATI DAVAO ANE TENI AAD ASARO" Gujarat Mitra, Date- 12th May'2008
34.	Arti N. Soni(2008), " KERI MA MULYA VRUDDHI" Gujarat Mitra, Date- 19th May'2008
35.	Dr. H.M. Viradia(2008), "ASITOBECTOR CULTURE NI SHERDI NA TUKDA NI MAVJAT, Savdesh Savpan Saptahik, 27th May'2008
36.	Dr. J.J. Pastagia(2008), "JANTU NASAK DAVA NA AVASHESHO NI KHORAK MA HAJARI ANE TENE NIVARVANA UPAYO" Gujarat Mitra, Date- 26th May'2008
37.	Arti N. Soni(2008), " GRUHINIO ANAJ SANGRAH NI GHARGATTHU KALA JANI LO" Gujarat Mitra, Date- 2th June'2008
38.	Dr. H.M. Viradia(2008), "CHOMASU DANGAR MA DHARU UCHHER " Narmada Kisan Parivar Patra, June'2008
39.	Dr. H.M. Viradia(2008), "BIJ ANE BIJ NI MAVAJAT" Gujarat Mitra, Date- 9th June'2008
40.	Dr. H.M. Viradia(2008), "BIJ ANE BIJ NI MAVAJAT" Gujarat Mitra, Date- 16th June'2008
41.	Arti N. Soni(2008), " TANDURAST BALAK TANDURAST RASHTRA" Krushi Govitha, July'2008
42.	Shri B.M. Tandel(2008), " AMBA NE KALAM NI PASNDGI" Gujarat Mitra, Date- 1st June'2008
43.	Dr. H.M. Viradia(2008), "FANGAVEL BIJ THI DANGAR NI ROPANI" Gujarat Mitra, Date- 7th July'2008
44.	Dr. H.M. Viradia(2008), "RASAYANIK PADDHATI THI NINDAN NIYANTRAN " Narmada Kisan Parivar Patra, July'2008
45.	Dr. J.J. Pastagia(2008), "DANGAR NI JIVATO NI OLAKH ANE TENU

	NIYANTRAN" Gujarat Mitra, Date- 14th July'2008
46.	Dr. J.J. Pastagia(2008), "DANGAR NA ROG NIYATRAN NA UPAYO" Gujarat Mitra, Date- 14th July'2008
47.	Dr. H.M. Viradia(2008), "PAK NO DUSMAN NUMBAR-1 NINDAN, NINDAN NIYNTARN VYAVASTHAPAN" Krshi Jivan, July'2008
48.	Dr. H.M. Virdia(2008), "PAK NO DUSMAN NUMBAR-1 NINDAN, NINDAN NIYNTARN VYAVASTHAPAN" narda Kisan, August'2008
49.	Arti N. Soni(2008), " GRAMYA STREE SASHAKTI KARAN" Gujarat Mitra, Date- 4th August'2008
50.	Shri B.M. Tandel(2008), " OILPAM NI KHETI- LAMBA GADA SUDHI NIYAMIT AVAK AAPTI EK BAGAYATI KHETI" Gujarat Mitra, Date- 11th August'2008
51.	Dr. H.M. Viradia, H.D. Mehta(2008), "SHERDI VAVETAR MA SU KALAJI RAKHASHO" Gujarat Mitra, Date- 8th September'2008
52.	Arti N. Soni(2008), " SOYABEAN MATHI BANTI VIVIDH BANAVTO DWARA UDHYOG SAHSIKTA VIKAS, Date- 15th September'2008
53.	Shri B.M. Tandel(2008) "HITECH AGRICULTURE" Narmada Kisan Parivar Patra, September'2008
54.	Dr. C.K. Timbadia(2008) "NANA KHEDUTO NE ARTHIK RITE PARAVADE TEVA OCHHA KHARCHAD (LOW COST) GREEN HOUSE MA KHETI", Gujarat Mitra, Date- 22th September'2008

Appendix-3

Leaflet / Folders

1.	Krishi Vigyan Kendra
2.	Scientific cultivation of summer groundnut
3.	Diseases of sugarcane and its management
4.	Mango grafting selection & planting
5.	Integrated pest management in sugarcane
6.	High income generating crop : Cultivation of Banana
7.	Arid fruit crop
8.	Cultivation of Rose
9.	Scientific cultivation of Castor
10.	Commercial crop : Cultivation of crop
11.	Integrated disease control in paddy
12.	Scientific cultivation of Green gram
13.	Storage grain pest and its control
14.	Cultivation of paddy through spouted seeds
15.	Integrated pest management in paddy
16.	Profitable cultivation practices of paddy
17.	Cultivation of drill paddy
18.	Scientific cultivation of Pigeon pea
19.	Fruit and vegetable preservation
20.	Importance of vegetable in food
21.	Nutritive foods for pregnant woman and mother
22.	Anemia (deficiency of Iran) and health of women
23.	Care of children