PROFORMA FOR ANNUAL REPORT – 2008-09.
(01.10.2008 TO 30.09.2009)

1. GENERAL INFORMATION ABOUT THE KVK

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

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

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Nikulsinh M. Chauhan	-	9427868668	nikulsinh_m@yahoo.in

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

1.5. Staff Position (as on 30th September 2009)

Sr. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Dr. N. M. Chauhan	PC	Extension Education	12000-420-18300	12000	16/02/2009	Permanent	General
2	Subject Matter Specialist	Dr. A. P. Patel	SMS	Agronomy	8000-275-13500	8000	10/07/2009	Permanent	ST
3	Subject Matter Specialist	Mr. B. M. Tandel	SMS	Horticulture	8000-275-13500	8825	03/07/2006	Permanent	OBC
4	Subject Matter Specialist	Dr. J. H. Rathod	SMS	Plant Protection	8000-275-13500	10475	31/07/2009	Permanent	General
5	Subject Matter Specialist	Mr. C. D. Pandya	SMS	Extension Education	8000-275-13500	9375	29/07/2009	Permanent	General
6	Subject Matter Specialist	Arti N. Soni	SMS	Home Science	8000-275-13500	8275	04/04/2008	Permanent	General
7	Subject Matter Specialist	Dr. J. M. Patel	-	Veterinary Science	8000-275-13500	8000	21/01/2008	Permanent	General
8	Programme Assistant	Nital N. Patel	Prog. Assi.	Home Science	5500-175-9000	4500	18/08/2008	Permanent	OBC
9	Computer Programmer	Nisheeta R. Patel	Comp. Prog.	-	5500-175-9000	4500	21/08/2008	Permanent	SC
10	Farm Manager	Mr. V. N. Parmar	Farm Manager	-	5500-175-9000	4500	23/08/2007	Permanent	General
11	Accountant / Superintendent	Mrs. I. G. Chaudhari	Acct. / Super.	-	5000-150-8000	7100	26/10/1977	Permanent	ST
12	Stenographer	K. R. Parmar	Steno.	-	4000-100-6000	3500	18/08/2008	Permanent	General
13	Driver	Mr. A. C. Chaudhari	Driver	-	3050-75-3950-80-4590	3725	25/02/2000	Permanent	ST
14	Driver	Mr. C. I. Patel	Driver	-	3050-75-3950-80-4590	2500	23/08/2007	Permanent	OBC
15	Supporting staff	-	Supp. Staff	-	2550-55-2660-60-3200	Vacant	-	-	-
16	Supporting staff	-	Supp. Staff	-	2550-55-2660-60-3200	Vacant	-	-	-

1.6. Total land with KVK (in ha) :

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

1.7. Infrastructural Development:

A) Buildings

S. 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	174160	Working
Tractor	2001	3,31225=00	3972 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-9	4	30/3/2001	26636	Working
2	Table T-104	1	30/3/2001	8515	Working
3	Chair CH-18C	20	30/3/2001	43300	Working
4	Chair PCH-700 B	1	30/3/2001	8168	Working
5	Chair CH-7 B	4	30/3/2001	5692	Working

Sr.No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
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	9330	Working
4	Store Well Plane	2	27/12/2002	16000	Working
5	Chair CHR-7B	15	27/12/2002	22350	Working
6	Chair PCH-5000 2 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	Not working
(8)	MSXP standard edition with Indian Longwise Proofing tools	1	30/12/2002	6450	Working
(9) 1	CD writer	1	28/12/2002	3025	Working
2	HP Scan jet 2300c Scanner	1	28/12/2002	3700	Not Working
(10) 1	Ceramic steel white writing board 4'x6'	1	21/2/2003	9000	Working
2	Ceramic chalk writing board 4'x 6'	1	21/2/2003	9000	Working
(11) 1	Over Head Projector	1	22/3/2003	27690	Working
2	Plastic screen with tripod stand	1	22/3/2003	4500	Working
(12) 1	LG 29 CA Color TV 29"	1	21/3/2003	26990	Working
2	Thomson 5 in 1 VCD player	1	21/3/2003	6990	Working
(13)	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		Working
	ALD 101 x LR	1	22/3/2003	1140	Working
	ATP 20 M	1	22/3/2003	489	Working
	WM 201	1	22/3/2003	1615	Working
5	Unit Horn Combination UHC 30 x T	1	22/3/2003	1188	Working
6	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
(14)	A.V. Trolly	1	22/3/2003	4132	Working
(15)	Laminated Chart with wooden Frame size 20" x 30"	33	22/3/2003	24420	Working
(16)	Sony Digital Handy cam	1	22/3/2003	32750	Working
1	Power adapter	1	22/3/2003		Working

Sr.No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
2	Battery	1	22/3/2003		Working
3	Remote Control	1	22/3/2003		Working
4	AV Connecting Cable	1	22/3/2003		Working
5	Belt shoulder strap	1	22/3/2003		Working
6	Handy Cam Recording Caset	1	22/3/2003		Working
(17)	Automatic slide Projector	1	22/3/2003	13695	Working
(18)	Portable Generator EXK 2000 AC	1	24/3/2003	38200	Working
(19)	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
(20)	Stainless steal Vessels	23	28/3/2003	19450	Working
(21)	Modem	1	31/3/2003	2020	Working
(22)	Laminated Charts with Plywood Framing size 24”x30”	5	12/3/2004	3000	Working
(23)	Colour Enlargement charts	33	29/3/2004	24420	Working
(24)	Jeep Mahindra & Mahindra Bolero D.I.	1	2/12/2004	430500	Working
(25)	Bolero Acessories		2/12/2004	21650	Working
(27)	Whirlpool freez	1	27/3/2006	15800	Working
(28) 1	Electronic Automatic Kel Pus Microprocessor based eight place macro block digestion system model KES-08L	1	27/3/2006	88120	Working
2	Electronic Kel plus micro processor based Automatic Distillation system model distil EM	1	27/3/2006	142300	Working
(29)	Double still with thermo sensor hr (All glass) cat No 2348	1	27/3/2006	33924	Working
(30)	Nova Rotary shaking machine				
1	(a)Capacity 16 flasks of 250 ml	1	28/3/2006	24500	Working
2	(b)Capacity 25 flasks of 250 ml	1	28/3/2006	29750	Working
3	Nova Hot plate Rectangular model NV-8535 stainless steel				
	(a) Size 12” x 20”	1	28/3/2006	8500	Working
	(b) Size 18” x 24”	1	28/3/2006	11250	Working
4	Nova willy mill stain lese steel camber Size 100 x 50 mm	1	28/3/2006	31900	Working
(31)1	Laboratory Table	4	27/3/2006	34400	Working
2	Racks	6	27/3/2006	9000	Working
3	Stools	12	27/3/2006	5400	Working
4	Steel cupboard storewell	4	27/3/2006	19200	Working
5	Steel cupboard storewel	4	27/3/2006	14000	Working
6	Steel racks	4	27/3/2006	8600	

Sr.No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
7	Partition racks	3	27/3/2006	22500	Working
8	Office chair	4	27/3/2006	4000	Working
(32)	Systronics make				
1	Micro controller based Digital spectrophotometer model -106	1	27/3/2006	26800	Working
2	Systronics make micro controller based flame photometer compressor model-128	1	27/3/2006	35200	Working
3	Systronics make micro controller based PH meter	1	27/3/2006	10900	Working
4	Systronics make micro processor based conductivity meter	1	27/3/2006	12800	Working
(33)	Hot air oven	1	27/3/2006	21200	Working
(34) 1	Chemical Balance	1	27/3/2006	75000	Working
2	CENTRO FIX WATERBATH	1	27/3/2006	10800	Working
3	CENTRO FIX – Muffle furnace	1	27/3/2006	29500	Working
4	Automatic autoclave	1	27/3/2006	21000	Working
(35)	City weigh balance model ST-10 Cap- 10 kg	1	27/3/2006	10640	Working
(36) 1	LG AC-15 ton	1	31/3/2006	23740	Working
2	Micro kjeldahl Assembly	1	31/3/2006	10700	Working
(37)	Burner maker type with stop coke	8	31/3/2006	2000	Working
(38)	Voltas make water cooler	1	31/3/2006	26500	Working
(39) 1	Soft Pin up Board	25	29/11/2007	96250	Working
2	Single Pole Stand	26	29/11/2007	35360	Working
(40)	Microscope for Computer	1	17/3/2008	294028	Working
(41) 1	SDZ – TR – PL – HL Microscope controlled Transformer	1	15/3/2008	209444	Working
2	OP – 150 R Fibre Optic Illumivater	1	15/3/2008		Working
3	GMTV – 33 H High Resolution Coloured CCTV system	1	15/3/2008		Working
(42)	Colony Counter – MSW – 408	1	15/3/2008	5668	Working
(43)	Oven Universal – MSW – 213	1	15/3/2008	65788	Working
(44)	Insect Rating Case	5	17/3/2008	14000	Working
(45)	LG A/C machine 2.0 Ton Split AC with Remote	2	17/3/2008	58680	Working
(46)	LG Refrigeration–280 Lit. Model - 295TMG4	1	25/3/2008	18000	Working
(47)	Phillips Grinder – 1618	2	25/3/2008	6000	Working
(48)	Sony Cyber Shot – DSC – W 90	1	25/3/2008	14800	Working
(49) 1	Pressure Cooker – 8 lit.	1	24/3/2008	4500	Working
2	S/A/S Tope – 17''	1	24/3/2008		Working
3	S/A/S Tope – 21''	1	24/3/2008		Working

Sr.No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
4	S. S. Cover	2	24/3/2008		Working
(50) 1	Insect Display show cases	4	24/3/2008	17420	Working
2	Insect Show cases cabinet	1	24/3/2008		Working
(51) 1	Compaq Computer – 3250 IL	1	25/3/2008	28950	Working
2	MS XP Professional Vista License Copy	1	25/3/2008	6000	Working
(52)	Top Loading Balance – BH 200 H	1	19/3/2008	28120	Working
(53)	Digital Conductivity TDS Meter Model - 307	1	24/3/2008	11648	Working
(54)	Digital PH meter Model - 802	1	24/3/2008	7006	Working
(55)	Distillation Apparatus (J – sil)	1	24/3/2008	15912	Working
(56)	H/P Laser Jet Printer - 1022	1	25/3/2008	10990	Working
(57)	Steel Rack KV-110 78''x36''x15''	5	25/3/2008	9844	Working
(58) 1	Steel Cupboard – 78''x36''x19''	2	23/3/2008	11100	Working
2	Computer Table	1	23/3/2008	3300	Working
3	Computer Chair	2	23/3/2008	5200	Working
(59)	Shaking Incubator – 24 BL	1	25/3/2008	95387	Working
(60)	CentriFuge – R – 24 Voltage stabilizer 3.0 KVA	1 1	25/3/2008 25/3/2008	32025 6630	Working
(61)	Double Pan Balance Analytical Weight Box	1 1	24/3/2008	3640	Working
(62)	Gas Cylinder, Regulator, Gas Stove	1	13/3/2008	1930	Working
(63)	B.O.D. Incubator - 270	1	22/3/2008	90534	Working
(64)	KLENZFLO Horizontal laminar clean air work station – 1500c	1	28/3/2008	138320	Working
(65)	Crompton Greaves Fans	4	28/3/2008	6800	Working
(66)	Humidifier (S.S. Body)	1	30/3/2008	11034	Working
(67)	ASPEE Tractamount Bloover fro Intranational	1	30/3/2008	99960	Working

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

Sl. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	06/07/09	1. Dr. H. C. Pathak, I/C. Vice Chancellor and Director of Research, NAU, Navsari 2. Dr. M. K. Mandape, Zonal Project Director, ZC Unit-6, Jodhpur, Rajasthan 3. Dr. R. B. Patel, Director of Extension Education, NAU, Navsari 4. Shri D. Z. Patel, Joint Director of Agriculture and Deputy Director of Agril. & Horticulture, Surat 5. Shri S. M. Modi, Project Administrator, Integrated Tribal Development Project, Songadh Dist. Tapi 6. Shri R. K. Gavli, Representative of District Agriculture officer, District Panchayat, Vyara 7. Shri P. R. Chaudhari, Deputy Director of Agriculture (Training), FTC, Vyara & A.D.A. (TV), Surat 8. Shri K. K. Bhatt, Representative of Director, District Rural Development Agency, Vyara 9. Shri K. B. Tandel, Assistant Director (Fisheries), Near CRPF Campus, Ukai, Dist. Tapi 10. Shri D. G. Gamit, Divisional Forest Officer, Vyara, Dist. Tapi 11. Shri I. L. Mahyavanshi, Range Forest Officer, Vyara Range, Dist. Tapi 12. Shri K. D. Verma, Representative of Lead Bank Officer, Regional Office, B.O.B., Surat 13. Shri H. N. Mevada, General Manager, District Industrial Centre, Dist. Tapi 14. Dr. H. B. Kharecha, Lokseva Trust, At. Moti Bhamti, Ta. Vansada, Dist. Navsari 15. Shri Dilipbhai Gamit, Farmer Representative, At.	1. The number of On Farm Testing should be increased…. 2. Impact assessment of mandatory activities of KVK should be made. 3. Prepare and publish FAQs data base for different crops and value added products. 4. Prepare an action plan to popularize the organic farming in the area and organize demonstration on organic farming incorporating all elements of NCF. 5. The number of Vocational trainings pertaining to income generation by farm women should be increased. 6. Efforts should be made to make a seed village by KVK, Vyara. 7. Arrange exposure tour for progressive farmers. 8. The KVK Scientists should be given more exposures for HRD. 9. Efforts should be made to enhance value added products from turmeric and ginger. 10. Find out specific thrust areas and resource inventory of newly formed Tapi district and	Increased – 4 no. Completed for 3 years Ext. work. Prepared for paddy & Okra Conducted trainings & FLDs on organic farming Already increased 2 seed village (Paddy & Tur) - Followed Started value addition followed

		& Po. Gadat, Ta. Vyara, Dist. Tapi 16. Smt. Premlataben A. Gavit, Farm Women Representative, At. & Po. Bhitkhurd-1, Ta. Uchhal, Dist. Tapi 17. Smt. Induben R. Gamit, Farm Women Representative, At. Po. Kapura, Ta. Vyara,Dist. Tapi 18. Dr. H. D. Mehta, Associate Research Scientist, Regional Rice Research Station, NAU, Vyara 19. Dr. N. M. Chauhan, Programme Coordinator, KVK, NAU, Vyara 20. Shri R. S. Bhamre, Dist. deputy Manager, NABARD, Surat 21. Shri N. G. Gamit, Seed Officer, G.S.S.C., Vyara 22. Shri T. M. Gamit, Assi. Director of Agri.(Ext.), Songadh, DIst. Tapi 23. Shri Bhupendra R. Desai, Progressive Farmer, Valod, Dist. Tapi 24. Shri B. J. Saraliya, GNFC Ltd., Vyara 25. Shri R. M. Patel, GSFC Ltd., Vyara 26. Dr. A. P. Patel, I/c. Programme Coordinator, K.V.K., Navsari 27. Shri I. R. Rathva, Extesion Officer of Agriculture, Vyara 28. Father Fransis Desoza, Mandal, Po. Kikakani, Ta. Songadh 29. Shri Rajubhai Jantraniya, Progressive Farmer, Vyara 30. Shri B. G. Aahir, Khedut Agro, Buhari, Ta. Valod 31. Shri D. G. Gamit, Assistant Conservator of Forest, Vyara	incorporate all of the elements in Action Plan in the form of all four mandates of the KVK.	

**** Attach a copy of SAC proceedings along with list of participants :-*** **Annexure - I**

2. DETAILS OF DISTRICT

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

S. 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)

1. Agro-climatic zones

S. No	Agro-climatic Zone	Characteristics
1.	South Gujarat Heavy Rainfall Zone-I	• It consists of three talukas of Tapi district i.e. Songadh, Vyara and Valod 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 two talukas i.e. 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.

2. Agro-ecosystems

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 type/s

S. No	Soil type	Characteristics	Area in ha
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

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-08	5.55	31.00	22.0	92
November-08	-	32.00	20.0	80
Decenber-08	-	31.00	16.0	78
January-09	-	30.00	13.0	69
February-09	-	31.00	14.0	70
March-09	-	32.00	18.0	76
April-09	-	35.00	20.0	73
May-09	-	36.00	21.0	73
June-09	7 mm	34.00	20.0	76
July-09	29.5 mm	32.00	19.0	96
August-09	29.00	30.00	19.0	93

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

2.6 Details of Operational area / Villages (2008-09)

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 of major crops Crop protection – IPM in major crops 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 cost green house Increase conscious on health and hygiene Marketing management

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 awareness about health and sanitation Inadequate intake of fruits and vegetables Poor economic condition	Kitchen gardening 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 (ICM in major crops) Integrated pest and disease management in paddy & Ground nut Low cost green house Modern method of irrigation

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	Land configuration in ground nut and pigeon pea Marketing management 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 (ICM in major crops) 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.	Mandavi	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	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

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 Inadequate intake of fruits and vegetables	Low cost production technology Animal husbandry Change in dietary pattern
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 awareness about health and hygiene Inadequate intake of fruits and vegetable	Soil and water management Increase area under 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

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
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 Lack of awareness about health and sanitation Inadequate intake of fruits and vegetables Marketing problem Poor economic condition	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 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 Especially of Banana, Papaya & Vegetables.
Note: One village each from remaining districts of surat district is also selected for extensive approach where awareness programmes are being conducted.						

2.7 Priority/thrust areas

Crop/Enterprise	Thrust area
Paddy, Ground nut, Sugarcane, Cotton, Soybean, Gram, Pigeon pea	Crop production management (ICM)
Pigeon pea, Ground nut, Gram	Soil & water conservation and water management
Drum stick, Custard apple, Ber, guava, Vegetables	Arid horticulture development
Brinjal, Okra	Integrated nutrient management
Brinjal, Okra, Cotton, Mango, cucurbits	Integrated pest management
Major crops	Low cost technology
Vegetables, Groundnut, Gram, Soybean	Organic farming
Sewing work, Value addition	Self employment to Rural youth and farm women
Formation of Self Help Groups	Women empowerment
Management of dairy animal	Management of dairy animals
Green house technology, Drip irrigation, High value crops	High tech agriculture

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2008-09

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs (ha)		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
3	3	15	20	116	116	232	289

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	50	112	1000	4019	966	1901	47500	220835
Rural youth	14	9	280	219				
Extn.Functionaries	5	7	100	197				
Total	**69**	**128**	**1380**	**4435**	**966**	**1901**	**47500**	**220835**

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	**Achievement**	**Target**	**Achievement**
25	25	304000	513338

3.B. Abstract of interventions undertaken

Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1.	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 and bio-fertilizer, saplings
3.	Arid horticulture development	Drum stick Custard apple Ber, guava	Due to rain fed area, and inadequate irrigation facility	--	Low cost green house Vadi yojna	Arid horticulture development in rain fed	--	Field days, khedut shibirs, News paper coverage, film	Seeds of different vegetables and

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.
		Vegetables	cultivated area under fruits and vegetable is very less and per capita consumption is also less			area		show Exhibitions etc.	planting material of mango, drum stick and custard apple
4.	Integrated Nutrient Management	Brinjal, Okra, Cotton	Imbalance use of fertilizers farmers are unable to harvest good crop	--	INM in Brinjal INM in Okra Nutrient management in Cotton	INM in vegetables & Cotton	INM in vegetables & Cotton	Field days, khedut shibirs, News paper coverage, film show , etc.	Bio compost & Chemical, Fertilizers, Potassium Nitrate
5.	Integrated Pest Management	Brinjal, Okra, Cotton, Mango cucurbits	Farmers are unable to manage disease and insect pest eventhogh frequent application of insecticides at higher doses	--	IPM of Brinjal fruit and shoot borer IPM of okra fruit and shoot borer IPM in cotton Integrated management of fruit flies in mango and cucurbits	IPM in vegetables IPM in cotton Management of fruit flies	IPM in Vegetables	Field days, khedut shibirs, News paper coverage, film show Exhibitions etc.	Pheromone 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	--

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.
7.	Organic farming	Vegetables, Groundnut, Gram, Soybean	High use of chemicals	--	--	Training on vermicompost	--	khedut shibirs, News paper coverage, film show Exhibitions etc Vermi-compost demonstrations	--
8.	Self employment to Rural youth and farm women	Mushroom Value addition & Sewing	Poor economic condition of farmers	--	--	Vocational training on sewing work, Value addition	--	News paper coverage, film show, Method of demonstration	Cloth sewing material
9.	Women empowerment	Formation of Self Help Groups	Poor socio-economic condition of farm women	--	Kitchen Gardening	Health & Nutrition Fruits & Vegetable preservation, SHG formation, Income generation activities	--	khedut shibirs, News paper coverage, film show, Mahila Shibir, Pashupalan shibir	--
10.	Management of dairy animals	management of dairy animal	Poor management of dairy animals	--	--	Daily requirement of Nutrition in milch animal. Scientifically calf rearing	--	khedut shibirs, News paper coverage, film show Demonstration units on campus	--

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.
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	--

3.1 Achievements on technologies assessed and refined

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	--	1	--	--	--	--	--	--	--	1
Integrated Crop Management	--	--	--	--	1	--	--	--	--	1
TOTAL	**--**	**1**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**2**

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Crop Management	--	--	1	--	--	--	--	--	--	1
TOTAL	--	--	**1**	--	--	--	--	--	--	**1**

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

A. Technology Assessment

Trial 1

1.	**Title**	**:**	Refinement of Sowing time in okra
2.	**Problem diagnose/defined**	**:**	Low yield, growing during off season (rabi)
3.	**Details of technologies selected for assessment /refinement**	**:**	T1. Date of sowing 15th November (Farmers practices) T2. Date of sowing 15th October T3. Date of sowing 30th October
4.	**Source of technology**	**:**	Main Vegetable Research Station, Anand
5.	**Production system thematic area**	**:**	Paddy – Okra base cropping system, Time of Sowing
6.	**Thematic area**	**:**	Integrated crop management
7.	**Performance of the Technology with performance indicators**	**:**	Results showed that 15th October sowing date recorded higher yield (23.821 t/ha), No. of pods per plant (21.36/plot) as compared to farmers practices and date of sowing at 30th October.
8.	**Final recommendation for micro level situation**	**:**	Farmers of Tapi district should grow okra in month of 15th October. It is the best time for higher yield
9.	**Constraints identified and feedback for research**	**:**	Research on fertilizer management & spacing in hybrid okra.
10.	**Process of farmers participation and their reaction**	**:**	Farmers appreciate the technology & ready to adopt.

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11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Data on the parameter					Results of assess-ment	Feedback from the farmer
						No. of branches/ main stem	No. dules / main stem	No. of fruit / plant	Yield / plant	Yield / kg/ha		
1	2	3	4	5	6	7					8	9
Okra	Irrigated	Low yield growing during rabi season	Refinement of sowing time in okra	6	T1. Date of sowing at 15th Nov. (Farmers practices)	0.2	8.5	8.7	87.36	9707	15th Oct. sowing of okra gave higher yield	Selection of early maturing variety for 15th October okra sowing which got better income
					T2. Date of sowing at 15th Oct.	**2.06**	**19.03**	**21.36**	**214.4**	**23821.6**		
					T3. Date of sowing at 30th Oct.	0.73	13.46	14.46	144.7	16077.3		

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
10	11	12	13
1. Date of sowing at 15th October	23.821	136605.5	**3.3**
2. Date of sowing at 15th November (Farmers practices)	9.707	30750	0.76

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

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

Trial 2

1.	**Title**	**:**	Varietal evaluation of Groundnut
2.	**Problem diagnose/defined**	**:**	Low productivity of nondescript and old groundnut varieties grown in summer season of Tapi district.
3.	**Details of technologies selected for assessment /refinement**	**:**	T1. J-11 (Farmers practices) T2. GG-20 T3. GG-2 T4. GG-6 T5. TG-37A
4.	**Source of technology**	**:**	NRCG, Junagadh
5.	**Production system thematic area**	**:**	Paddy groundnut base cropping system
6.	**Thematic area**	**:**	Integrated crop management
7.	**Performance of the Technology with performance indicators**	**:**	Result indicated that variety GG-6 recorded higher yield (2348 kg / ha), No. of pod per plant (22.7 g/plant), wt. of dry pod per plant (20.65 g/plant) followed by TG-37 A, GG-2, J-11 and GG-20 respectively.
8.	**Final recommendation for micro level situation**	**:**	Groundnut variety GG-6 may be grown in place of variety TG-37A, GG-2, G-20, J-11 in summer season of Tapi district.
9.	**Constraints identified and feedback for research**	**:**	Developed suitable variety of late rabi season for this region. Developed duel purpose (fodder+kernal) variety.
10.	**Process of farmers participation and their reaction**	**:**	Farmers are ready to adopt this variety

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11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Data on the parameter				Results of assessment	Feedback from the farmer
						No. of branches/ plants	No. of pods / plants	wt. of dry pods/plant (g/plant)	Dry pod yield kg/ha		
1	2	3	4	5	6	7				8	9
Ground-nut	Irrigated	Low productivity of non descript and old groundnut varieties	Varietal evaluation	7	T1. J-11	5.29	16.43	13.56	1232	Among five variety Cv.GG-6 gave higher yield followed by TG 37A than other Groundnut variety	Groundnut cv. GG-6 have more number of pod than older one & also get higher yield than other variety.
					T2. GG-2	4	14.43	13.79	1720		
					T3. GG-20	6.14	6.14	7.2	958		
					T4. GG-6	5.14	22.71	20.66	2348		
					T5. TG –37A	4.71	9.42	10.66	2138		

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
10	11	12	13
1. J-11	1232	10614	0.61
2. GG-2	1720	21838	1.2
3. GG-6	**2348**	**33934**	**1.9**

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

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

B. Technology Refinement

Trial 1

1.	**Title**	**:**	Land configuration in Pigeon pea
2.	**Problem diagnose/defined**	**:**	Low yield, High rainfall, Poor plant population
3.	**Details of technologies selected for assessment /refinement**	**:**	T1 Flat bed sowing (Farmers practices) T2 Sowing on raised bed / broad bed furrow T3 Ridge and furrow
4.	**Source of technology**	**:**	Research scientist, Pulse crop, NAU, Navsari
5.	**Production system thematic area**	**:**	Drill Paddy + pigeon pea cropping system
6.	**Thematic area**	**:**	Land configuration (ICM)
7.	**Performance of the Technology with performance indicators**	**:**	The refined technology ridges and furrow sowing of pigeon pea had more no. of branches per plant (14.43/plant) and no. of pods per plant (573.4/plant) at harvest and higher yield (1346 kg/ha) as compared to other treatment of land configuration.
8.	**Final recommendation for micro level situation**	**:**	Ridges and furrow system found better for higher pigeon pea yield.
9.	**Constraints identified and feedback for research**	**:**	Developed resistant variety for Tur against pod fly.
10.	**Process of farmers participation and their reaction**	**:**	Appreciate the technology and ready to adopt ridge and furrow system

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter				Results of refinem-ent	Feedback from the farmer
							No. of branches/ plants	No. of pods / plants	Seed wt./plant (dry) gm	seed yield / ha (kg/ha)		
1	2	3	4	5	6	7	8				9	10
Pigeon pea	Irrigated	Low yield, high rain fall, poor plant population	Land configuration in pigeon pea	7	T1. Flat bed sowing - Farmer practices	133.57	9	508.57	27.34	1011	Ridges & furrow method of sowing gave good yield	It is difficult to prepare raised bed so adoption of ridges & furrow is better
					T2. Raised bed	171.57	12.43	532.71	29.63	1095		
					T3. Ridges & furrow	178.56	14.42	573.42	36.4	1346		

**** No. of farmers***

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15
Flat bed sowing	1011	18043	2.49
Ridge & furrow	**1346**	**26418**	**3.65**

3.2 Achievements of Frontline Demonstrations

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

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

Sr. No	Crop/ Enterprise	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	Groundnut	ICM	Land configuration, seed treatment, use of bio-fertilizer	FLDs	4	20	10
2	Soybean	INM	Balance use of fertilizer, manure & Bio fertilizer.	FLDs	3	28	108
3	Paddy(GR-5)	ICM	New variety	FLDs	2	4	2
4	Paddy(GR-8)	New Variety	New variety	FLDs	2	12	5
5	Paddy(GR-9)	New Variety	New variety	FLDs	2	14	5
6	Paddy	Green Manure	Green manuring before planting.	FLDs	1	12	5.0
7	Cotton	IPM	Integrated pest management.	FLDs	2	100	100
8	Cotton	INM	Potassium nitrate	FLDs	1	10	5
9	Pigeon pea	Introduction of New Variety	Performance of improved variety.	FLDs	5	116	32
10	Sorghum	New Variety	Performance of improved variety.	FLDs	3	15	5
11	Gram	New variety Land Configuration	New variety Land configuration	FLDs	4	92	29
12	Okra	INM	Integrated pest management.	FLDs	4	26	19
13	Brinjal	INM	Integrated pest management.	FLDs	4	48	26

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

b. Details of FLDs implemented during 2008-09 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. 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	
Oilseed crop										
1	Groundnut	ICM	Land configuration, seed treatment, use of bio-fertilizer	Kharif-2008	10	10	20	-	20	--
2	Soybean	INM	Balance use of fertilizer, manure & Bio fertilizer.	Kharif-2008	5	5	14	-	14	--
Cereals crop										
1	Paddy (GR-5)	ICM	New variety	Kharif-2008	2	2	4	-	4	--
2	Paddy (GR-8)	New Variety	New variety	Kharif-2008	5	5.2	12	-	12	--
3	Paddy (GR-9)	New Variety	New variety	Kharif-2008	5	4.8	14	-	14	--
4	Paddy	Green Manure	Green manuring before planting.	Kharif-2008	5	5	11	1	12	--
5	Sorghum	New Variety	Performance of improved variety.	Kharif-2008	5	5	15	-	15	--
Pulses										
1	Pigeon pea	Introduction of New Variety	Performance of improved variety.	Kharif-2008	5	5	19	1	20	--
2	Gram	Land Configuration	Use of bio- fertilizer Land configuration.	Rabi-2008	5	5	22	-	22	--
Cotton										
1	Cotton	IPM	Integrated pest	Kharif-2008	50	50	-	50	50	--

Sl. 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	
			management.							
2	Cotton	INM	Potassium nitrate	Kharif-2008	5	5	-	10	10	--
Horticultural crops										
1	Okra	INM	Integrated Nutrient management.	Rabi-2008	2	2	8	-	8	--
2	Brinjal	INM	Integrated Nutrient management.	Rabi-2008	2	2	8	-	8	--
3	Cucurbits	IPM	Integrated pest management.	Summer-09	5	5	20	-	20	--
4	Mango	IPM	Integrated pest management.	Summer-09	5	5	10	-	10	--

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					
Oilseed crop											
Groundnut	Kharif-2008	Rainfed	Light soil Light shallow	L	M	H	Gram	16th to 26th June 2008	17th to 29th Oct. 2008	1825	61
Soybean	Kharif-2008	Rainfed	Light soil Light shallow	L	M	H	Fallow	14th to 18th June 2008	14th to 18th Oct. 2008		
Cereals crop											
Paddy (GR-5)	Kharif-2008	Rainfed	Light soil Light shallow	L	M	H	Fallow	28th June to 3rd July 2008	5th 15th Oct. 2008	1825	61
Paddy (GR-8)	Kharif-2008	Rainfed	Light soil Light shallow	L	M	H	Fallow	28th June to 3rd July 2008	1st to 14th Oct. 2008		
Paddy	Kharif-	Rainfed	Light soil	L	M	H	Fallow	29th June to2nd	12th to 15th Oct.		

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					
(GR-9)	2008		Light shallow					July 2008	2008		
Paddy	Kharif-2008	Irrigated	Medium black	M	H	H	Sugarcane	GM.: 23rd to 15th may2008 T.P.: 21st June 3rd July 2008	10th to 14th Nov. 2008		
Sorghum	Kharif-2008	Rainfed	Light soil Medium black	L	M	H	Drill Paddy	4th Aug. to 10th Sept. 2008	23rd to 29th Dec. 2008		
Pulses											
Pigeon pea	Kharif-2008	Irrigated	Light soil Light shallow	L	M	H	Fallow	16th to 18th June 2008	23rd Janu.. to 4th Febu.2009	1825	61
Gram	Rabi-2008	Irrigated	Light soil Light shallow	L	M	H	Paddy	20th Nov. to 14th Dec. 2008	9th to 15th March. 2009		
Cotton											
Cotton	Kharif-2008	Irrigated	Black soil	M	H	H	Fallow	14th to 26th May 2008	29th Oct to 9th Nov. 2008	1825	61
Cotton	Kharif-2008	Irrigated	Black soil	M	H	H	Fallow	15th to 24th May 2008	29th Oct to 9th Nov. 2008		
Horticultural crops											
Okra	Rabi-2008	Irrigated	Light soil Medium black	L	M	H	Paddy	23rd Oct to 15th Nov. 2008	10th to 31st March 2009	--	
Brinjal	Rabi-2008	Irrigated	Light soil Medium black	L	M	H	Fallow	23rd Aug. to 2nd Sept. 2008	2nd to 28th February 2009	--	

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					
Cucurbits	Summer-09	Irrigated	Light soil Medium black	L	M	H	Paddy	1st jan. to 16th January 2009	16th April to 29th April 2009	--	--
Mango	Summer-09	Irrigated	Light soil Medium black	L	M	H	--	12th April 2009	--	--	--

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
Oilseed crop												
1	Groundnut	Land configuration, seed treatment, use of bio-fertilizer	GG-20	20	10	18.4	15.4	16.63	13.47	24	16.63	13.47
2	Soybean	Balance use of fertilizer, manure & Bio fertilizer.	GS-2	14	5	20.2	17.4	18.74	15.05	25	18.74	15.05
Cereals crop												
1	Paddy (GR-5)	New variety	GR-5	4	2	19.8	16.8	18.63	11.13	62	18.63	11.13

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
2	Paddy (GR-8)	New Variety	GR-8	12	5	15.65	13.4	14.19	9.14	27	14.19	9.14
3	Paddy (GR-9)	New Variety	GR-9	14	5	11.8	9.4	10.53	9.14	15	10.53	9.14
4	Paddy	Green manuring before planting	Gurjari	12	5	65.6	47.7	52.59	43.77	20	52.59	43.77
5	Sorghum	Performance of improved variety	GJ-38	15	5	12.4	10.4	11.36	7.86	44	15.36	7.86
Pulses												
1	Pigeon pea	Performance of improved variety	Vaishali	20	5	20.60	8.40	12.48	7.40	33	12.48	7.40
2	Gram	Use of bio-fertilizer Land configuration	GG-2	22	5	24.2	18.1	20.78	14.77	40	20.78	14.77
Cotton												
1	Cotton	IPM	Bt-cotton	50	50	30	17.5	22.15	19.75	12	22.15	19.75
2	Cotton	Potassium nitrate	Bt-cotton	10	5	29.0	17.0	23.00	19.00	21.05	23.00	19.00
Horticultural crops												
1	Okra	INM	Hybrid	8	2	167.8	153.8	161.7	112.5	35	161.7	112.5
2	Brinjal	INM	Surti Ravaiya	8	2	218	198	208.1	148.25	42	208.1	148.25
3	Cucurbits	IPM	Hybrid	20	5	125.0	80.0	101.9	83.1	22	101.9	83.1
4	Mango	IPM	Kesar	10	5	Due to very low fruit setting IPM component demo was failed.						

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	
Oilseed crop							
14400	14200	39912	32328	25512	18128	1.77	1.2
8126	8025	31858	25585	23732	17560	2.9	2.1
Cereals crop							
5823	4150	13041	7791	7218	3641	1.2	0.87
5225	3850	9933	7791	4708	3641	1.1	0.87
2823	3150	8424	6398	4601	3248	1.2	1.0
101400	13240	4733	39393	35931	26153	3.1	1.97
6260	4940	14768	9432	8508	4492	2.35	1.9
Pulses							
8140	7232	49938	29600	41798	22368	5.1	3.09
8898	8362	47794	33971	38896	25609	4.30	3.06
Cotton							
17500	20150	59805	53325	42305	33175	2.4	1.6
17500	20150	57811.5	53325	40311.5	33175	2.31	1.64
Horticultural crop							
42052	46820	113190	78750	71138	32030	2.69	1.68
40784	39739	104050	73125	63266	33386	2.55	1.84
27560	27640	76425	58170	48865	30530	2.77	2.10
--	--	--	--	--	--	--	--

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

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
1. Seed/Variety						
Paddy (GR-5)	Kharif-2008	Seed/ Variety	Rainfed	18.63	11.13	62
Paddy (GR-8)	Kharif-2008		Rainfed	14.19	9.14	27
Paddy (GR-9)	Kharif-2008		Rainfed	10.53	9.14	15
Sorghum	Kharif-2008		Rainfed	11.36	7.86	44
Pigeon pea	Kharif-2008		Rainfed	12.48	7.40	33
2. Bio-fertilizer						
Groundnut	Kharif-2008	Bio fertilizer	Rainfed	16.63	13.47	24
Gram			Irrigated	20.78	14.77	40
3. Fertilizer management						
Soybean	Kharif-2008	O.M. & Chemical Fertilizer	Rainfed	18.74	15.05	25
Cotton	Kharif-2008		Irrigated	23.00	19.00	21.05
Okra	Rabi-2008		Irrigated	161.7	112.5	35
Brinjal	Rabi-2008		Irrigated	208.1	148.25	42
4. Plant Protection						
Cotton	Kharif-2008	IPM	Irrigated	22.15	19.75	12
Cucurbits	Summer-2009	Methyle Eugenol Trap	Irrigated	101.9	83.1	22
5. Combination of components (Please specify)						
Paddy	Kharif-2008	Greeen manuring+ Paddy seed	Irrigated	52.59	43.77	20

Technical Feedback on the demonstrated technologies

Sr. No	Feed Back
1	Suitable variety in soybean for this region
2	Required to developed farm machinery and threshing equipments for groundnut
3	Farmers require small grain and high yielding variety of Gram & Paddy
4	Unavailability of raised bed former
5	Require to develop high yielding hybrid rice suitable for this region
6	Weed management in Drill Paddy, cotton and other crops
7	Wilt and fruit & shoot borer management technology require in Brinjal
8	YVM and fruit& shoot borer management technology require in Okra
9	To study on fertigation in papaya and watermelon
10	Required to study on date of sowing (Late Kharif season) in Hybrid watermelon
11	Land configuration (spacing) in oil seeds and pulse crops.

Farmers' reactions on specific technologies

Sr. No	Feed Back
1	Raised bed methods in Pigeon pea gave really good results. Appreciate the variety of Pigeon pea like Vaishali. This variety gives good results under bio-fertilizer treated plot.
2	Appreciated the Soybean crop as it performing well and gives more returns than drill paddy.
3	Green manuring in paddy t.p. gave good results it maintain soil health &gave more yield than traditional method.
4	New variety of Paddy, gram and groundnut gave good results than old.
5	Large scale adoption of IPM technology should be made and more concentration should be given to collection and destruction of fallen fruits in brinjal, okra, cotton and cucurbits crops.
6	The technology of INM increases yield and soil health and quality of fruits in brinjal and okra.
8	Land configuration in gram and pigeon pea gives good results than local method.

Extension and Training activities under FLD

Sr. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	**Field days**				
	i. Oilseeds& Pulses	9	2-10-2008, 19-1-2009, 28-1-2009, 1-5-2009, 6-5-2009, 14-9-2009, 15-9-2009, 16-9-2009	410	-
	ii. Other than FLDs	7	27-11-2008, 30-12-2008, 16-7-2009, 15-9-2009, 16-9-2009	301	-
2	**Farmers Training**				
	i. Oilseeds& Pulses	4	23-10-2008, 23, 24-1-2009, 9-6-2009, 10-6-2009,	88	-
	ii. Other than FLDs	7	26-10-2008, 5-11-2008, 8-12-2008, 4-5-2009, 4-6-2009, 8-6-2009, 22-6-2009	185	-
3	**Media coverage**				
	i. Oilseeds& Pulses	5	10-6-2009, 31-8-2009, 18-9-2009, 22-9-2009	-	-
	ii. Other than FLDs	1	28-6-2009	-	-
4	**Training for extension functionaries**				
	i. Oilseeds& Pulses	2	23,24-1-2009, 30, 31-7-2009	53	-
	ii. Other than FLDs	4	15-10-2008, 29-12-2008, 18-4-2009, 29,29-7-2009	96	-

c. Details of FLD – Home Science:

Result of Demonstration on Kitchen Gardening during year- 2008 **Season:- Rabi: 2008**

Name of Enterprise	No. of Farm women	No. of Demon.	Area	Crop yield (Kg)										Total Prod-uction	Average rate (Rs/kg)	Gross return (Rs.)	
				Okra	Tomato	Brinjal	Cabbage	Cauliflower	Chillies	Bitter gourd	Bottle gourd	Ridge gourd	Palakh			Before FLD	After FLD
Kitchen Garden	50	50	1 Guntha/ farm women	13.3	11.4	18.86	2.8	3.04	5.06	3.56	6.5	5.26	1.58	71.1	13	Not done kitchen garden	924.3, along with domestic consumption

Critical inputs applied:- Seeds : Okra- 60 gm, Palakh-25 gm

Seedling : Brinjal- 15, Chillies-15, Cauliflower-15, Bottle gourd- 1, Tomato-15, Cabbage-15, Bittergourd-1, Ridge gourd-1,

Technical Feed Back of Kitchen Garden:

S. No	Feed Back
1	Before Demonstration farm women were not growing vegetable crops in their backyard but after demonstration they are growing different vegetable crops through kitchen gardening in scientific way.
2	Farm women get continuous supply of fresh vegetables at low cost which gives daily nutritious diet.
3	Farm women are utilized maximum backyard space and waste water.
4	In kitchen gardening, farm women are not applying any agrochemicals so they produce organic vegetables.
5	Farm women are attracted towards vegetable hybrids.

Farm women Reaction:

S. No	Feed Back
1	Kitchen gardening makes available fresh, cheap and chemical free vegetables over a long period of time which improve our daily diet.
2	Income is generated by selling extra vegetables grown in kitchen garden.
3	We are utilized our spare time through kitchen gardening. i.e. kitchen gardening is the profit making leisure time activity.

3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):

A) ON Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Resource Conservation Technologies	2	-	-	-	16	21	37	16	21	37
Cropping Systems	3	-	-	-	66	22	88	66	22	88
Crop Diversification	2	-	-	-	28	15	43	28	15	43
Integrated Farming	1	-	-	-	12	-	12	12	-	12
Water management										
Seed production	1	-	-	-	7	5	12	7	5	12
Nursery management										
Integrated Crop Management	1	-	-	-	19	-	19	19	-	19
Fodder production										
Production of organic inputs	1	-	-	-	14	-	14	14	-	14
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	7	-	-	-	141	135	276	141	135	276
Off-season vegetables	3	-	-	-	109	22	131	109	22	131
III Livestock Production and Management										
Dairy Management	2	-	-	-	15	25	40	15	25	40
IV Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	-	-	-	-	108	108	-	108	108
Design and development of low/minimum cost diet	1	-	-	-	-	45	45	-	45	45
Value addition	2	-	-	-	-	56	56	-	56	56
Women and child care	3	-	-	-	-	91	91	-	91	91

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
V Plant Protection										
Integrated Pest Management	3	-	-	-	62	48	110	62	48	110
Integrated Disease Management	1	25	-	25	-	-	-	25	-	25
VI Capacity Building and Group Dynamics										
Formation and Management of SHGs	2	-	-	-	1	67	68	1	67	68
VII Others										
Side effect of insecticides & their solutions	1	-	-	-	63	-	63	63	-	63
TOTAL	**38**	**25**	**-**	**25**	**553**	**660**	**1213**	**578**	**660**	**1238**
(B) RURAL YOUTH										
Integrated farming	1	-	-	-	19	-	19	19	-	19
Protected cultivation of vegetable crops	4	-	-	-	66	-	66	66	-	66
TOTAL	**5**	**-**	**-**	**-**	**85**	**-**	**85**	**85**	**-**	**85**
(C) Extension Personnel										
Productivity enhancement in field crops	1	19	-	19	5	-	5	24	-	24
Integrated Pest Management	1	10	-	10	18	-	18	28	-	28
Integrated Nutrient management	1	20	-	20	-	-	-	20	-	20
Protected cultivation technology	1	44	-	44	-	-	-	44	-	44
Formation and Management of SHGs	1	-	2	2	-	27	27	-	29	29
How to conduct demonstration	1	4	-	4	10	-	10	14	-	14
SRI	1	38	-	38	-	-	-	38	-	38
TOTAL	**7**	**135**	**2**	**137**	**33**	**27**	**60**	**168**	**29**	**197**

B) OFF Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	-	-	-	27	-	27	27	-	27
Cropping Systems	3	-	-	-	12	152	164	12	152	164
Seed production	2	-	-	-	20	30	50	20	30	50
Integrated Crop Management	3	57	-	57	2	22	24	59	22	81
Production of organic inputs	3	-	-	-	71	64	135	71	64	135
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	8	-	-	-	62	243	305	62	243	305
Off-season vegetables	1	-	-	-	51	3	54	51	3	54
Protective cultivation (Green Houses, Shade Net etc.)	2	-	-	-	18	50	68	18	50	68
b) Fruits										
Layout and Management of Orchards	1	-	-	-	43	30	73	43	30	73
Cultivation of Fruit	3	22	-	22	62	37	99	84	37	121
Plant propagation techniques	1	-	-	-	-	37	37	-	37	37
III Livestock Production and Management										
Dairy Management	8	-	-	-	127	169	296	127	169	296
Feed management	1	-	-	-	1	31	32	1	31	32
IV Home Science/Women empowerment										
Design and development of low/minimum cost diet	1	-	-	-	-	22	22	-	22	22
Value addition	2	-	25	25	-	40	40	-	65	65
Income generation	2	-	20	20	-	26	26	-	46	46

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
activities for empowerment of rural Women										
Women and child care	2	-	-	-	-	71	71	-	71	71
V Agril. Engineering										
Production of small tools and implements	1	-	-	-	-	49	49	-	49	49
VI Plant Protection										
Integrated Pest Management	24	558	-	558	220	50	270	778	50	828
Integrated Disease Management										
Bio-control of pests and diseases	2	-	-	-	48	-	48	48	-	48
VII Others										
Marketing of farm produce	1	-	-	-	50	-	50	50	-	50
Importance of FLD	1	-	-	-	24	74	98	24	74	98
Scientific cultivation of Rose	1	-	-	-	54	7	61	54	7	61
TOTAL	**74**	**637**	**45**	**682**	**892**	**1207**	**2099**	**1529**	**1252**	**2781**
(B) RURAL YOUTH										
Planting material production	1	-	-	-	41	-	41	41	-	41
Repair and maintenance of farm machinery and implements	1	-	-	-	17	-	17	17	-	17
Tailoring and Stitching	1	-	-	-	-	33	33	-	33	33
IPM	1	-	-	-	42	1	43	42	1	43
TOTAL	**4**	**-**	**-**	**-**	**100**	**34**	**134**	**100**	**34**	**134**

C) Consolidated table (ON and OFF Campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	-	-	-	27	-	27	27	-	27
Resource Conservation Technologies	2	-	-	-	16	21	37	16	21	37
Cropping Systems	6	-	-	-	78	174	252	78	174	252
Crop Diversification	2	-	-	-	28	15	43	28	15	43
Integrated Farming	1	-	-	-	12	-	12	12	-	12
Water management										
Seed production	3	-	-	-	27	35	62	27	35	62
Integrated Crop Management	4	57	-	57	21	22	43	78	22	100
Production of organic inputs	4	-	-	-	85	64	149	85	64	149
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	15	-	-	-	203	378	581	203	378	581
Off-season vegetables	4	-	-	-	160	25	185	160	25	185
Protective cultivation (Green Houses, Shade Net etc.)	2	-	-	-	18	50	68	18	50	68
b) Fruits										
Layout and Management of Orchards	1	-	-	-	43	30	73	43	30	73
Cultivation of Fruit	3	22	-	22	62	37	99	84	37	121
Plant propagation techniques	1	-	-	-	-	37	37	-	37	37
III Livestock Production and Management										
Dairy Management	10	-	-	-	142	194	336	142	194	336
Feed management	1	-	-	-	1	31	32	1	31	32
IV Home Science/Women empowerment										

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Household food security by kitchen gardening and nutrition gardening	2	-	-	-	-	108	108	-	108	108
Design and development of low/minimum cost diet	2	-	-	-	-	67	67	-	67	67
Value addition	4	-	25	25	-	96	96	-	-121	121
Income generation activities for empowerment of rural Women	2	-	20	20	-	26	26	-	46	46
Women and child care	5	-	-	-	-	162	162	-	162	162
V Agril. Engineering										
Repair and maintenance of farm machinery and implements	1	-	-	-	-	49	49	-	49	49
VI Plant Protection										
IPM	27	558	-	558	282	98	380	840	98	938
Integrated Disease Management	1	25	-	25	-	-	-	25	-	25
Bio-control of pests and diseases	2	-	-	-	48	-	48	48	-	48
VII Capacity Building and Group Dynamics										
Formation and Management of SHGs	2	-	-	-	1	67	68	1	67	68
VIII Others										
Side effects of insecticides & their solutions	1	-	-	-	63	-	63	63	-	63
Marketing of farm produce	1	-	-	-	50	-	50	50	-	50
Importance of FLD	1	-	-	-	24	74	98	24	74	98
Scientific cultivation of Rose	1	-	-	-	54	7	61	54	7	61
TOTAL	112	662	45	707	1445	1867	3312	2107	1912	4019
(B) RURAL YOUTH										
Integrated farming	1	-	-	-	19	-	19	19	-	19
Planting material production	1	-	-	-	41	-	41	41	-	41

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Protected cultivation of vegetable crops	4	-	-	-	66	-	66	66	-	66
Repair and maintenance of farm machinery and implements	1	-	-	-	17	-	17	17	-	17
Tailoring and Stitching	1	-	-	-	-	33	33	-	33	33
IPM	1	-	-	-	42	1	43	42	1	43
TOTAL	**9**	**-**	**-**	**-**	**185**	**34**	**219**	**185**	**34**	**219**
(C) Extension Personnel										
Productivity enhancement in field crops	1	19	-	19	5	-	5	24	-	24
IPM	1	10	-	10	18	-	18	28	-	28
Integrated Nutrient management	1	20	-	20	-	-	-	20	-	20
Protected cultivation technology	1	44	-	44	-	-	-	44	-	44
Formation and Management of SHGs	1	-	2	2	-	27	27	-	29	29
How to conduct demonstration	1	4	-	4	10	-	10	14	-	14
SRI	1	38	-	38	-	-	-	38	-	38
TOTAL	**7**	**135**	**2**	**137**	**33**	**27**	**60**	**168**	**29**	**197**
GRAND TOTAL	**128**	**797**	**47**	**844**	**1663**	**1928**	**3591**	**2460**	**1975**	**4435**

Note: Details of above training programmes given in the proforma as Annexure-IV

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
					Male	Female	Total	Type of units	Number of units	Number of persons employed	
Home Science	Jan.'09 to Mar.'09	Sewing work	Income generation	3 months	-	33	33	-- Work in progress --			

(E) Sponsored Training Programmes

Sl. No	Date	Title	Discip-line	Thematic area	Dur-ation (days)	Client (PF/ RY/EF)	No. of cou-rses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								M	F	T	M	F	T	M	F	T		
1	10//11/08 to 03/12/08	Micro Irrigation maintenance & repairs	Ext. Edu.	Micro irrigation	24	RY	1	-	-	-	17	-	17	17	-	17	FTC GGRC	-
2	05/01/08	Management of mealy bugs in cotton	Pl. Prot.	IPM	1	PF	1	32	-	32	-	-	-	32	-	32	RKVY	13000
3	05/01/09	Management of mealy bugs in cotton	Pl. Prot.	IPM	1	PF	1	15	-	15	-	-	-	15	-	15	RKVY	
4	20/01/09	Integrated management of mealy bugs	Pl. Prot.	IPM	1	PF	1	-	-	-	32	-	32	32	-	32	RKVY	
5	20/01/09	Integrated management of mealy bugs	Pl. Prot.	IPM	1	PF	1	-	-	-	29	-	29	29	-	29	RKVY	

6	21/01/09	Integrated management of mealy bugs	Pl. Prot.	IPM	1	PF	1	13	-	13	-	-	-	13	-	13	RKVY	
7	21/01/09	Integrated management of mealy bugs	Pl. Prot.	IPM	1	PF	1	36	-	36	-	-	-	36	-	36	RKVY	
8	22/01/09	Integrated management of mealy bugs	Pl. Prot.	IPM	1	PF	1	-	-	-	42	-	42	42	-	42	RKVY	
9	22/01/09	Integrated management of mealy bugs	Pl. Prot.	IPM	1	PF	1	-	-	-	36	-	36	36	-	36	RKVY	
10	21/03/09	Integrated management of mealy bugs in Cotton	Pl. Prot.	IPM	1	PF	1	28	-	28	-	-	-	28	-	28	RKVY	
11	21/03/09	Integrated management of mealy bugs in cotton	Pl. Prot.	IPM	1	PF	1	39	-	39	-	-	-	39	-	39	RKVY	
12	04/09/09	Planning for Rabi Veg.	Horti.	Off season vegetables	1	PF	1	-	-	-	36	20	56	36	20	56	RKVY	
13	22/02/09	Scientific cultivation of Groundnut	Ext. Edu.	Cropping Systems	1	FW	1	-	-	-	12	32	44	12	32	44	ATMA	-
14	26/02/09	Scientific cultivation of Okra	Ext. Edu.	Production of low volume & high value crops	1	FW	1	-	-	-	13	50	63	13	50	63	ATMA	-
15	2/03/09 to 6/03/09	Scientific cultivation of Vegetables	Ext. Edu.	Production of low volume & high value crops	5	FW	1	-	-	-	-	28	28	-	28	28	ATMA	-

16	02/03/09	Scientific cultivation of Okra	Ext. Edu.	Production of low volume & high value crops	1	FW	1	-	-	-	-	32	32	-	32	32	ATMA	-
17	03/03/09	Scientific cultivation of Okra	Ext. Edu.	Production of low volume & high value crops	1	FW	1	-	-	-	-	26	26	-	26	26	ATMA	-
18	05/03/09	Scientific cultivation of Okra	Ext. Edu.	Production of low volume & high value crops	1	PF	1	-	-	-	26	40	66	26	40	66	ATMA	-
19	06/03/09	Scientific cultivation of Okra	Ext. Edu.	Production of low volume & high value crops	1	FW	1	-	-	-	-	27	27	-	27	27	ATMA	-
20	18/04/09	Paddy cultivation through “SRI”	Agro.	SRI	1	EF	1	38	-	38	-	-	-	38	-	38	ATMA	-
21	22/03/09 to 28/03/09	Scientific cultivation of Vegetables	Ext. Edu.	Production of low volume & high value crops	7	FW	1	-	-	-	-	40	40	-	40	40	ATMA	-
22	26/03/09	Training for Agricultural equipment	Ext. Edu.	Production of small tools & equipments	1	FW	1	-	-	-	-	49	49	-	49	49	ATMA	-
23	29/03/09 to 04/04/09	Hitech green house	Ext. Edu.	Protective cultivation	7	PF	1	-	-	-	18	-	18	18	-	18	ATMA	-
							Total	**201**	**-**	**201**	**261**	**344**	**605**	**462**	**344**	**806**		**13000**

3.4. Extension Activities (including activities of FLD programmes)

Sl. No.	Nature of Extension Activity	Purpose/ topic and Date	No. of activities	Participants											
				Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension officials (III)			Grand Total (I+II+III)		
				M	F	T	M	F	T	M	F	T	M	F	T
1.	Field Day	Groundnut 02.10.08	1	-	-	-	48	-	48	1	-	1	49	-	49
2.	Field Day	Brinjal 27.11.08	1	-	-	-	28	-	28	2	-	2	30	-	30
3.	Field Day	Cotton (IPM) 30.12.08	1	20	-	20	-	-	-	1	-	1	21	-	21
4.	Field Day	Gram 19.01.09	1	-	-	-	22	17	39	2	-	2	24	17	41
5.	Field Day	Gram 28.01.09	1	-	-	-	25	-	25	2	-	2	27	-	27
6.	Field Day	Okra 24.02.09	1	-	-	-	23	14	37	1	-	1	24	14	38
7.	Field Day	Groundnut (Summer) 01.05.09	1	-	-	-	26	5	31	4	-	4	30	5	35
8.	Field Day	Groundnut (OFT) 01.05.09	1	-	-	-	43	5	48	2	-	2	45	5	50
9.	Field Day	Groundnut (OFT) 06.05.09	1	-	-	-	39	3	42	2	-	2	41	3	44
10.	Field Day	Cotton (IPM) 16.07.09	1	35	-	35	15	-	15	3	-	3	53	-	53
11.	Field Day	Veg. & Pulses 14.09.09	1	-	-	-	8	126	134	8	-	8	16	126	142
12.	Field Day	Paddy, Tur, Brinjal (Summer) 15.09.09	1	-	-	-	32	10	42	2	-	2	34	10	44
13.	Field Day	Soybean 16.09.09	1	-	-	-	14	42	56	2	-	2	16	42	58

14.	Field Day	Brinjal, Soybean, Indian Bean 16.09.09	1	-	-	-	47	23	70	2	-	2	49	23	72
15.	Field Day	Cotton 16.09.09	1	60	-	60	-	-	-	8	-	8	68	-	68
16.	Field Day	Kitchen Garden 17.09.09	1	-	-	-	19	51	70	5	-	5	24	51	75
	Total		**16**	**115**	**-**	**115**	**389**	**296**	**685**	**47**	**-**	**47**	**551**	**296**	**847**
17.	Kisan Mela	Krishi Mahotsav 22-23.05.09	1	273	112	385	-	-	-	5	-	5	278	112	390
18.	Kisan Mela	FTC, Vyara 25-26.05.09	1	55	30	85	815	2100	2915	10	2	12	880	2132	3012
19.	Kisan Mela	Krishi Mahotsav 26-28.05.09	1	650	515	1165	121	284	405	4	-	4	775	799	1574
20.	Kisan Mela	Krishi Mahotsav 30.05.09	1	204	195	399	98	94	192	3	-	3	305	289	594
21.	Kisan Mela	Krishi Mahotsav 1-3.06.09	1	17000	3000	20000	23000	41000	64000	28	10	38	40028	44010	84038
	Total		**5**	**18182**	**3852**	**22034**	**24034**	**43478**	**67512**	**50**	**12**	**62**	**42266**	**47342**	**89608**
22.	Kisan Ghosthi	Vill. Maypur 25.02.09	-	-	-	-	76	22	98	3	-	3	79	22	101
23.	Exhibition	Krishi Mela, Khedut Din, Krishi Mahotsav	18	21946	6004	27950	33183	51425	84608	67	17	84	55196	57446	112642
24.	Film Show	SHG, Management of Mealy bugs, IPM	12	176	2	178	102	94	196	8	5	13	286	101	387

25.	Method Demonstrations	Seed Treatment	3	-	-	-	24	12	36	2	-	2	26	12	38
		Use of Pheromone Trap	3	-	-	-	26	22	48	2	-	2	28	22	50
		Root Deeping treatment of veg.	2	-	-	-	52	36	88	2	-	2	54	36	90
		Methyl Eugenol trap	2	-	-	-	26	-	26	2	-	2	28	-	28
		Fruits & Veg. preservation	5	-	45	45	-	82	82	-	2	2	-	129	129
	Total		**15**	**-**	**45**	**45**	**128**	**152**	**280**	**8**	**2**	**10**	**136**	**199**	**335**
26.	Self Help Group meetings	For Activation of Existing Groups	15	-	51	51	-	295	295	-	20	20	-	366	366
27.	Lectures delivered as resource persons	ATMA, FTC, Vyara	26	468	36	504	976	1137	2113	28	1	29	1472	1174	2646
28.	Newspaper coverage	KVK activities	35	-	-	-	-	-	-	6	1	7	6	1	7
29.	Radio talks	Activities for Tribal Women & ATMA Project	2	-	-	-	-	-	-	1	1	2	1	1	2
30.	TV talks	Green House, Women in Agril. day, Wadi yojana, Paddy cultivation	8	-	-	-	-	-	-	10	1	11	10	1	11
31.	Popular articles	-	71	-	-	-	-	-	-	6	1	7	6	1	7
32.	Extension Literature	Leaflet	20	-	-	-	-	-	-	6	1	7	6	1	7
		Book on Vermicompost	1	-	-	-	-	-	-	2	-	2	2	-	2

		Bulletin Rice intensification	1	-	-	-	-	-	-	3	-	3	3	-	3
33.	Scientific visit to farmers field	-	127	122	143	265	355	165	520	42	5	47	519	313	832
34.	Farmers visit to KVK	-	556	193	87	280	516	295	811	47	6	53	756	388	1144
35.	Diagnostic visits	-	12	7	2	9	5	1	6	16	-	16	28	3	31
36.	Exposure visits (PF,FW)	Visit at Krishi Mela, NAU, AAU, JAU	10	60	-	60	221	137	358	11	-	11	292	137	429
37.	Ex-trainees Sammelan	For Impact Assessment	4	-	-	-	91	50	141	6	2	8	97	52	149
38.	Animal Health Camp	797 Animals	3	-	-	-	-	-	-	7	-	7	7	-	7
39.	Celebration of Women in Agril. Day	Agriculture, Nutrition and Health 04.12.08	1	-	-	-	8	101	109	5	1	6	13	102	115
40.	Khedut Shibir	Cereals, Pulses, Veg., & other crops	20	210	43	253	1185	902	2087	45	1	46	1440	946	2386
41.	Mahila Shibir	Health & Nutrition, SHG, Women Empowerment, Animal Husbandry	6	13	2	15	65	609	674	14	5	19	92	616	708
42.	Farmers' Meeting	FIG, ATMA, RKVY, FLD	13	14	-	14	348	429	777	8	1	9	370	430	800
43.	Farmers Day	Paddy crop symposium	2	151	22	173	1030	1915	2945	28	5	33	1209	1942	3151
44.	Formation of SHGs	-	4	-	24	24	-	29	29	-	2	2	-	55	55
45.	Telephone Helpline	-	865	186	38	224	512	130	642	6	1	7	704	169	873

46.	Guidance through letter	-	2	2	-	2	-	-	-	2	-	2	4	-	4
47.	**Celebration of Technology Week**	**14.09.09 to 20.09.09 Khedut shibir, Mahila shibir, Ani.Hus. Shibir, Field day, Farmers day, Cotton Day, Agril. Exhibition**	**11**	**349**	**-**	**349**	**739**	**803**	**1542**	**51**	**2**	**53**	**1139**	**805**	**1944**
48.	Scientist Farmers Interaction	-	1	-	-	-	350	680	1030	5	1	6	355	681	1036
49.	Formation of FIG	-	1	-	-	-	43	-	43	2	-	2	45	-	45
50.	FLD visit	-	18	7	-	7	62	56	118	27	3	30	96	59	155
Grand Total			**1901**	**42201**	**10351**	**52552**	**64418**	**103201**	**167619**	**567**	**97**	**664**	**107186**	**113649**	**220835**

3.5 Production and supply of Technological products

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	Jaya	25	38680	89

SUMMARY

Sr. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	25	38680	89
TOTAL		**25**	**38680**	**89**

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Mango	Kesar	800	36000	56
	Mango	Dasheri	200	9000	13
SPICES	Onion	White Onion	75425	10304	22
	Chilli	G-4	19800	2970	8
VEGETABLES	Brinjal	Surti Ravaiya	377720	56763	64
	Cauliflower	Mahalaxmi	28750	5363	16
	Cabbage	Early Kuwari	2450	368	5
	Tomato	S-22	7770	1183	9
	Drumstick	BKM-1	213	2130	62
	Bitter Gourd	Hybrid	70	140	35
	Bottle Gourd	Hybrid	70	140	35
	Ridge Gourd	Hybrid	70	140	35

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	1000	45000	69
2	VEGETABLES	417113	66227	261
3	SPICES	95225	13274	30
	TOTAL	**513338**	**124501**	**360**

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

(A) KVK News Letter :- --Nil—

(B) Literature developed/published

Item	Title	Authors name	Number of copies
Research papers	Judgment of the farmers regarding use of Internet technology in changing Agricultural scenario in India	Dr. N. M. Chauhan	Not applicable
	Decision making pattern of Tribal farm women in changing Agri-rural environment	Dr. N. M. Chauhan	Not applicable
	Contribution of the Tribal farm women in crop husbandry in changing scenario of Agri-rural environment	Dr. N. M. Chauhan	Not applicable
	Technique to measure Computer Nervousness amongst the students of Agriculture college	Dr. N. M. Chauhan	Not applicable
	Farmers prospects about Community Internet center(CIC) at village level	Dr. N. M. Chauhan	Not applicable
	Krishi Mahotsav–2007 a new TOT tools in Gujarat at village level (Published in 3 journals)	Dr. N. M. Chauhan	Not applicable
	Opinions and expectations of the farmers towards ICT in Agriculture at village level	Dr. N. M. Chauhan	Not applicable
	Velda village : A success story	Dr. J. J. Pastagia & Dr. N. M. Chauhan	Not applicable
	Modus operandi to measure computer nervousness amongst the students of agriculture college	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable
	Decision making in tribal farm women with participatery approach	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable
	Crop husbandry with participation of the tribal farm women	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable
	Participation of the tribal farm women in Animal husbandry	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable
	Computer jumpiness among Agricultural student	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable

	Information needs of the Rice growers with participatory extension management.	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable
	Prospects of the farmers towards ICT in agriculture at village level	Dr. N. M. Chauhan & Dr. N. B. Chuahan	Not applicable
	Expectations and Opinions of the farmers towards ICT in agriculture at village level	Dr. N. M. Chauhan	Not applicable
	Information needs of the rice growers for sustainable agriculture development	Dr. N. M. Chauhan	Not applicable
	Information seeking behavior of the rice growers.	Dr. N. M. Chauhan	Not applicable
	Socio-economic change in rural tribal women through self help groups.	Arti N. Soni	Not applicable
Total	**20**		
Technical reports	MPR, QPR, SAC report, FLD report, AAP, APR, MER, AGRESCO, ZREAC report	PC & All SMS	-
Popular articles	List of articles given in Annexure – V	PC & All SMS	72
Leaflets/folders	Krishi Vigyan Kendra	-	1000
	Krishi Vigyan Kendra (Colorful)	-	2000
	Low cost green house	Shri B. M. Tandel & Dr. N. M. Chauhan	1000
	Mashroom cultivation	Dr. J. J. Pastagia & Dr. N. M. Chauhan	1000
	Integrated pest management in Sugarcane	Dr. J. J. Pastagia & Dr. N. M. Chauhan	1000
	Mango grafting selection & planting	Shri B. M. Tandel & Dr. N. M. Chauhan	1000
	Scientific cultivation of Okra	Shri B. M. Tandel & Dr. N. M. Chauhan	2000
	Scientific cultivation of Soybean	Dr. H. M. Virdia & Dr. N. M. Chauhan	2000
	SRI method used in Paddy	Dr. H. M. Virdia & Dr. N. M. Chauhan	1000
	Integrated diseases management in paddy	Dr. J. J. Pastagia & Dr. N. M. Chauhan	1000

	High Income generating crop : cultivation of Watermelon	Shri B. M. Tandel & Dr. N. M. Chauhan	1000
	Cleaned milk production	Dr. J. M. Patel & Dr. N. M. Chauhan	1000
	Criteria for selection of dairy animals	Dr. J. M. Patel & Dr. N. M. Chauhan	1000
	Importance of Mineral mixture in animal feed	Dr. J. M. Patel & Dr. N. M. Chauhan	1000
	Scientific method of calf rearing	Dr. J. M. Patel & Dr. N. M. Chauhan	1000
	Some important suggestions for profitable animal husbandry	Dr. J. M. Patel & Dr. N. M. Chauhan	1000
	Method of Bio-compost	Dr. H. M. Virdia & Dr. N. M. Chauhan	1000
	Formation of Self Help Groups & its important	Arti N. Soni & Dr. N. M. Chauhan	2000
	To provide balance diet for maintain milk production	Dr. J. M. Patel & Dr. N. M. Chauhan	1000
	Value addition – an indispensable concept in agriculture	Dr. N. M. Chauhan	2000
Total	**21**		**25000**

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number
1	DVD	KVK in the service of Tribal People	2

3.7. Success Stories :

3.7.1 KVK for Reaching the Unreached- A Success study.
(Accepted in Indian Farming)

The village Chakra is a tribal dominated village with 99% per cent tribal population, situated in Umarpada block of Surat district. It is located 18 km away from block place, 180 km from district place and 75 km from Krishi Vigyan Kendra, NAU, Vyara. The total population of the village is around 1300 with 650 male and 450 female. The total geographical area of the village is about 100 ha. Out of which net cultivated area is about 80 ha (80%). The irrigated area of village is 40 ha (50%) which is mostly irrigated by tube wells. **Rajubhai Vasava** is a **sarpanch** of village. **Kamleshbhai Patel** is a **Talati** while **Thakarbhai** is serving as **VLW**.

The main crops of the village are drilled Paddy, Cotton, Groundnut, Tur and Vegetables in *kharif* while Wheat, Chickpea and Maize in *rabi*. One co-operative society is working in village which helps the farmers for marketing of their agricultural products.

In the year 2007, KVK, Vyara has adopted the village Chakra for its intensive activities of Transfer of Technologies related to agriculture for increasing agricultural production there by raise the standard of living of farmers. The entry point visit was made by team of Subject Matter Specialist of KVK, Vyara. To find out the technological adoption gap as well as to identify the thrust areas for the village, a PRA was made.

During PRA, interacting with farmers, it was found that there is an ample scope for short duration orchard / horticultural crop which will give higher net return with limited irrigation facility.

Considering the situation, dialogues with farmers, the Subject Matter Specialist (Horticulture) has suggested cultivation of hybrid Papaya to the farmers. A group of interested farmers were invited to KVK, Vyara and they were given On Campus training in which detailed emphasis was given to cultivation of Papaya, economic use of irrigation water, post harvest technology, value addition, marketing and ways to produce quality products through video show & power point presentations. The farmers were also motivated to visit the papaya orchards and interact with papaya growers of South Gujarat area.

Among trained farmers, **Mr. Alpeshbhai Kashinathbhai Patel**, a resident of Chakra is a school drop out after ninth standard and presently involved in farming took keen interest in Papaya cultivation. He has two brothers and both of them are working in

private company. His father, Kashinathbhai is also a farmer and engaged in farming for last 25 years. He is migrated Chakra from Maharashtra. He has 13 acres of cultivated land. Previously, due to lack of irrigation facility they had to depend on rainfall and were able to cultivate sorghum and maize in *kharif* and wheat and gram in *rabi* on conserved soil moisture. From all the available resources, he was able to earn **net return of** only **Rs. 25000**.

With availability of irrigation water through tube well, for 4 acres of land led him cultivation of irrigated wheat and gram in initial years, then he started cultivation of chilli and brinjal as that has been grown successfully by farmers of neighboring state, Maharashtra. By cultivating chilli and brinjal he was able to earn **40-45 thousands** from 4 acres of land.

As a school drop out Mr. Alpeshbhai had no option other than farming for his livelihood. He has taken interest in his farming. He was eager to know incredible newer developments in agriculture. He has great impatience and curiosity to know recent innovations in agriculture. But as he is residing at remote place, he was unable to get latest information regarding development in agriculture. He was in search of an organization which can cater his need for newer technologies in the field of agriculture.

Fortunately, **KVK** has adopted **Chakara as a satellite village** and during training, he came in contact with KVK scientist and he has been innovated to cultivate hybrid papaya. He made repeated interaction with KVK scientist. The Subject Matter Specialist (Horticulture) **Mr. B. M. Tandel** suggested him to go for drip irrigation for an economic use of available irrigation water. As an innovated farmer, he immediately accepted the idea given by KVK scientist and installed drip irrigation system in nine acres of land. He has taken advantage of subsidy on drip system by Government of Gujarat.

As he decided to go for cultivation of hybrid papaya, he has been provided with detailed information on land preparation, purchase of papaya seedlings to the marketing by SMS (Horticulture).

He planted papaya in month of April. As he has limited water, he managed to irrigate newly planted papaya by digging a small pond near bore well lined with plastic. He stored the water pumped through 1 HP electric motor during whole day in the pond. The collected water then was utilized through drip system and was able to survive young plantlets in summer. During cultivation of papaya, he was in constant touch with KVK scientist for any doubts. The KVK scientists had made frequent visits to his field and guided him accordingly for plant protection, fertilizer application and other operations.

Due to adoption of scientific approach in papaya cultivation he obtained a bumper yield of papaya. He received total income of **Rs. 2.5 Lakhs** from 2 acres of land. The total cost of cultivation was **Rs. 50000 /-**.The net profits was **Rs. 2.00 lakhs**. This led him higher income and also raised his standard of living with better social status. Previously he had to borrow money from others for his social expenses. At present he is in a position to land money to others. Cultivation of good quality papaya attracted the merchants towards Chakra village and made an annual contract for papaya purchasing. The traders them selves harvested papaya and sent to the Delhi and Northern part of the country. The farmers of near by area also visited his farm frequently for papaya cultivation and guidance.

Now, Mr. Alpeshbhai is become an **innovator** for other farmers for papaya cultivation in the region. Under his guidance total **23 farmers** having irrigation facility started papaya cultivation in same village. He has also adopted intercropping of papaya in mango orchards.

The world is shifting very rapidly and agriculture is not an exception of it. Technologies of today become outdated tomorrow. People are enthusiastic and become more anxietious to know what is happening around him in the field of agriculture for acclimatization with changing scenario of agriculture at global level and to compete with open global market. People want exact, quick, authentic and cheap information regarding their agriculture day to day. To disseminate agricultural technology quickly at grass root the KVK is the best institute. It is mainly engaged with **Technology Generation, Technology assessment, Technology evaluation and Technology dissemination** in the field of agricultural extension. No institution is competing with KVK if it is functioning as per the mandate given to them by ICAR. The next phase of green revolution can only be possible by effective Transfer of agricultural Technologies from source to sink, lab to land and from research system to the farming system. In that line we can say confidently that this KVK is functioning successfully for the effective TOT at village level. For that the dynamic and visionary leadership of the university, enthusiastic and highly qualified staff of the KVK and better response of the farming community itself is responsible. If this situation will sustain alive, KVK will be a **MODEL FOR ZONE IN TOT SYSTEM.**

Implications:-

This success story will be a guideline for other extension workers to perform better in their field. It leads toward effectively, efficiently, as well as result and impact oriented work in the field of Agricultural extension. This is a mile stone work for the effective TOT in the Tribal dominated interior region of the south Gujarat. It will be eye opening for

disseminating any recently released innovative agricultural technology successfully among illiterate and poor participants. At the outset of the concluding we can say KVK Vyara is becoming really an **information hub** for farming communities. Our efforts are to make this KVK Farmers friendly, farmers centric, farmers leading and the overall agricultural development on sustainable basis. Precision farming and Eco friendly development of the region is our prime Motto. The **Research-Extension-Farmer-Market** Linkage Extension approach is a current need of the time to get better agricultural output. The **next phase of Green Revolution** can only be possible through integration of all above said approaches.

A popular demand from different villages to arrange the programme at their villages by KVK is the testimony of the important role of the KVK in their development in general and agriculture particular quiet well. We all have to run on **information super highway**. May I request you to make a **KVK e-linked**?

3.7.2 VELDA-IPM VILLAGE, A SUCCESS STORY

(Printed in Kisan World)

The village Velda is situated in Nizar block of Tapi district. It is located 5 km from block place, 105 km from district place and Krishi Vigyan Kendra headquarter, Vyara. The total population of village is around 8008 with 4019 male and 3989 female. Considering caste wise distribution, maximum population is of schedule caste (4528) followed by schedule tribe (3645), OBC (902) and general / others (2206), clearly indicating dominance of SC and ST. The total area of village is 2396 ha. out of which net cultivable area is 1730 ha. (72%). Nearly 50 per cent cultivated land having irrigation facility which is mostly irrigated through tube well and water lifted from the river Tapi. **Limjibhai Padvi** is a surpanch, **Kashinathbhai Patel** is a Talati while **Chhotalal Gorakh** is working as VLW in the village. The Nizer block of Tapi district is far away from district place as well as from NAU research station, therefore it is the most neglected block and up till now no any extension agency is available to cater the need of farmers regarding agricultural technology.

The main crops of the village are Cotton, Chilli, Tur in *Kharif* and Wheat, Chickpea, Sugarcane and gram in *Rabi*. One agricultural co-operative and milk co-operative are functioning in the village, helping the farmers for marketing of their products.

Cotton is an important cash crop and plays an important role in **Indian economy.** In Gujarat cotton is grown in about 16 lakh ha area. Cotton is highly susceptible to several pests. About 166 different species of pests and diseases are reported to attack cotton at

various stages of its growth. Amongst these, the cotton bollworm *Helicoverpa armigera*, the white fly *Bemisia tabaci*, Jassids, *Amrasca biguttula bigutttula* and the pink bollworm *Pectinophora gossypiella* have been causing economic damage to cotton crop all over the country. With introduction of Bt cotton, the incidence of sucking pests *viz.*, Jassids, Thrips, whiteflies, mealy bugs, mites *etc.* has increased tremendously. Increased use of pesticides resulted in several sour effects like development of resistance in insect pests to insecticides, pest resurgence, pesticides residues, health hazards, destruction of natural fauna, ecological disturbances and environmental pollution, besides increased cost of production.

In the year 2007, **KVK, Vyara** has adopted village **Velda** as a **Satellite village** for its intensive activities of Transfer of Technologies related to agriculture for increasing agricultural production there by raising standard of living of the farmers.

The entry point visit to the village was made by the team of Subject Matter Specialists. To find out the technological adoption gaps and to identify the thrust areas for the agricultural development, a PRA was made. During PRA, interacting with the farmers it was found that the farmers were unable to manage the insect pests and diseases even though applying higher doses of insecticides in mixtures. One of the major thrust area identified as reduce the load of pesticide in cotton ecosystem through Integrated Pest Management. The farmers were spending huge amount for the pest management. Even with the adoption of Bt-cotton, farmers were frustrated with cotton cultivation as they were unable to manage the pests. As no extension agency was targeting these farmers, they had to rely on private pesticides dealers. The over loaded use of pesticides has resulted in degradation of soil, water and environment. It also affected the quality of Cotton.

Considering the situation and dialogues with farmers, Subject Matter Specialist (Plant-Protection) suggested implementation of Integrated Pest Management in Cotton and the training as well as demonstrations on IPM were the need of village for profitable cultivation of cotton. The interested farmers were given on campus as well as off campus training with special emphasis on identification of insect pests and diseases of cotton, components of IPM, bio-control, use of pesticides on threshold level, use of neem based pesticides, economic use of irrigation water, ways to produce quality products, etc. through video show and power point presentations. The farmers were also motivated to visit and interact with the farmers who have adopted this technology.

Fortunately, with financial assistance under Cotton Technology Mission from Main Cotton Research Station, NAU, Surat, KVK Vyara was able to give demonstrations in 100 ha. [50 ha. in the year 2007-08 and 50 ha. in the year 2008-09] benefiting 83 farmers. The

detailed components of IPM were demonstrated, constant follow up visits, Ex trainee visits, sammelans, field days, farmers days and other extension activities have been concentrated. Initially, farmers were hesitating in adopting need based application of single pesticides and other IPM component but with constant encouragement, KVK scientists are successful in building up confidence in them. The major achievement of the demonstrations is that farmers were successful in keeping off the mealy bug incidence from their field with the advanced guidance provided by KVK scientists. The farmers from neighboring villages were also attracted and associated with the KVK for adopting their village under IPM scheme. ***The Velda village is now became a model for IPM in the Block***. The surrounding villages *Viz.,* Sarwala, Adada, Khorda, Vanka, Chichoda, Devala, Pisavar, Vyaval, Piplod, Nizer and many more villages are in a cylinder for adopting IPM in cotton. The total IPM aids costing **Rs.-68000**, were supplied to them on free of cost. The constant follow up and monitoring of the IPM practices made them habitant with IPM practices and whole villagers are flattering conversant regarding ***sour results of the agro chemicals in relation to soil, water, environment and health point of view.***

Initially, total 12 innovated farmers were trained for the same. Among them , the trained farmers *viz* :- **Mr. Prahladbhai Jaganbhai, Patel, Pareshbhai, Ishvarbhai, Sureshbhai, Kashinathbhai, Bhupendrabhai and Vinodbhai Patel** residing at Velda village are working as a resource person for whole village as well as surrounding villages. This year IPM kits along with Maize (Sweet corn) seed, Castor seed and Biocontrol aids will be given to 10 selected villages and constant follow up will be maintained by KVK scientists and at grand growth period of the crop a big farmers day will be arranged **including dignitaries of the NAU: Hon. Vice Chancellor, Director of Extension Education, State department of the agriculture and all GOs, /NGOs of the region**. **Simultaneously the farmer shibir on IPM will be conducted for mass multiplication of the IPM messages**.

Table-1 : Comparison of economics of IPM demonstration plot and control plot in cotton crop.

Particulars	IPM Demonstration Plot	Control Plot (Non IPM Plot)
Number of spray	5	9
Cost of Plant Protection (Rs/ha)	4500	7500
Average Yield (Qt/ha)	31.36	21.08
Income from maize crop(Grown as inter crop), (Rs/ha)	2000.00	00
Gross income	89808.00	58800.00

(Rs/ha)		
Net profit (Rs/ha)	85308.00	51300.00

Table-2: Adoption of IPM Technology N=100

Characteristics	Number	Percentage
Overall knowledge level		
Low	10	10.00
Medium	75	75.00
High	15	15.00
Total	**100**	**100.00**
Head wise knowledge Level		
Cultural practices		
Low	15	15.00
Medium	60	60.00
High	25	25.00
Total	**100**	**100.00**
Mechanical practices		
Low	17	17.00
Medium	68	68.00
High	15	15.00
Total	**100**	**100.00**
Biological practices		
Low	20	20.00
Medium	55	55.00
High	25	25.00
Total	**100**	**100.00**

Conclusion:

IPM is a full fledged technology which not only reduces the cost of plant protection, but also promises higher yield. IPM also helps in reducing the pesticide use and thus, prevents/delays development of pesticide resistance, reduces residues in soil, water, food and definite role in the prevention of environment imbalance. Majority of the respondents gained medium level of the overall knowledge and adopted cultural, mechanical and biological practices for pest control. The adoption of IPM in cotton, the total income of the farmers has been increased by **66%** and the cost of cultivation decreased to the tune of **40 %**(**Table-1**). The knowledge level of the farmers regarding IPM in cotton has increased (**Table-2**). This may be due to the proper guidance given by KVK scientists, Demonstrations and constant follow up by KVK missionary.

Implication: The study has acknowledged the knowledge level of the cotton growers towards IPM technology. This story can be guideline for other extension worker to implement this way of extension technology for their clients on IPM .On this foundation the extension personnel may locate clients for training and also those who can be used as

counselors to other farmers. The study is also useful for effective propagation of the IPM technology in other regions for eco friendly and sustainable agricultural development.

3.7.3 Replacement of the Pigeon pea variety through FLD, a success story

(Accepted in NAU Spectrum)

Introduction:

Agriculture is the strength of the country and seed is the back bone of crop production. Among all the agricultural inputs, only seed had inbuilt potential, where as other inputs like nutrients, irrigation and plant protection chemicals, contribute to the production potential of the seed. If potential of the seed is poor, optimum yield is not possible in spite of judicious use of inputs. Research findings reveal that 10-12 percent increase in yield is attributed to good quality seed. Pigeon pea (Tur) is the main pulse crop in south Gujarat. Tribal belt is preferring tur as a main leguminous food in their daily diet.

Profile of the village:

The village Gatadi is situated in Songadh block of Tapi district. It is located 24 km from block place, 17 km from district place cum Krishi Vigyan Kendra, Vyara. The total population of village is around 650 with 335 male and 315 female. Considering caste wise distribution, cent per cent population is of Schedule Tribe (650), clearly indicating dominance of ST.

The total area of village is 230.95 ha, out of which net cultivable area is 194.30 ha,(84%). Nearly 40 per cent cultivated land having irrigation facility which is mostly irrigated through tube well, well, water lifted from the river and check dams. **Amrutbhai Gamit** is a surpanch, **Aknathbhai Chaudhary** is a Talati, while **Ganpatbhai** is working as VLW in the village. The Gatadi village of Tapi district is tribal dominated and it is the most neglected village and up till now no any extension agency is available to cater the need of farmers regarding agricultural technology.

The main crops of the village are paddy, sorghum and tur in *Kharif* and Sugarcane, vegetables and gram in *Rabi*. A small pocket of the village is covered under groundnut in summer. Only milk co-operative is functioning in the village, helping the farmers for marketing of their livestock products.

Tur is an important pulse crop and plays an important role in **improvement of the soil through improving soil microbial activities.** In Gujarat tur is grown about 2651 ha

with production 2942 in year 2007-08 kharif. Among this Surat district covers 326 ha under tur crop.

In the year 2007, **KVK, Vyara** has adopted village **Gatadi** as a **Satellite village** for its intensive activities of Transfer of Technologies related to agriculture for increasing agricultural production there by raising standard of living of the farmers.

The entry point visit to the village was made by the team of Subject Matter Specialists. To find out the technological adoption gaps and to identify the thrust areas for the agricultural development, a PRA was made. During PRA, interacting with the farmers it was found that the farmers were unable to harvest the tur crop due to unavailability as well as no knowledge regarding improved varieties of the Tur. Sowing of local varieties with high seed rate on flat bed without knowing scientific cultivation practices of tur. One of the major thrust areas identified as to introduce the high yielding early variety of the tur in the village. Even though using higher seed rate, farmers were frustrated with tur cultivation as they were unable to get better yield from the Tur. As no extension agency was targeting these farmers, they had to rely on private traders for seed. The traditional cultivation of crops makes agriculture costly but they did not get the remunerative yield from the pigeon pea crop.

Considering the situation and dialogues with farmers, Subject Matter Specialists (Agronomy, Horticulture) suggested implementation of land configuration and INM in tur with introduction of the high yielding variety .The training as well as demonstrations on high yielding early variety of the tur Vaishali was the need of village for profitable cultivation of Tur. The interested farmers were given on campus as well as off campus training with special emphasis on identification of insect- pests and diseases of tur, components of INM, economic use of irrigation water, ways to produce quality products, etc. through video show and power point presentations. The farmers were also aggravated to visit and interact with the farmers who have adopted this technology.

Fortunately, with financial assistance of the ICAR under National Pulse Development Scheme, KVK Vyara was able to give demonstrations of Vaishali variety FLD in 10 ha. [5 ha. in the year 2007-08 and 5 ha. in the year 2008-09] benefiting **19 farmers** of the Gadat, Gatadi and champawadi villages of Songadh block during 2007-08 and **26 farmers** of the Gadat, Gatadi, Bhitkhurd and Bhitbudrak villages in year 2008-09. New Pigeon pea variety **"Vaishali"** along with INM & land configuration was demonstrated, constant follow up visits, ex trainee visits, khedut and mahila Sammelans, field days, farmer's days and other extension activities have been concentrated. Initially, farmers were vacillating in adopting newly released variety of the pigeon pea and land

configuration but with constant encouragement, KVK scientists are successful in building up confidence in them. The major achievement of the demonstrations is that farmers were booming in getting higher production of the tur. The advanced guidance provided by KVK scientists. The farmers from neighboring villages were also attracted and associated with the KVK for adopting their *village under FLD scheme*. Based on two main pillars of the extension education" **Seeing is Believing**" and "**Learning by Doing**" , the idea was spread and the adoption was increased to the remarkable level.

The farmers of such villages had sold the green pods of the pigeon pea as well as also harvested seed from the demonstrated variety. The farmers were able to get a net profit of **Rs.50, 000/ha.** The increase in yield was to the tune of **33-68%;** the field days were organized at demonstrated plots and got wide publicity of the new variety. The farmers from the neighboring villages were also attracted towards new variety of the tur and demanded for seed of the Vaishali variety. The spread of the said variety was in surrounding villages and the FLD villages were became **seed centres** for the same. Next year the same FLD was taken in surrounding villages and the whole cluster had been shifted from conventional variety to the Vaishali variety. The replacement of the seed was-15%. The crop was ready earlier up to the tune of 2-3 months as compared with conventional varieties. Farmers were able to take a next crop after tur on same piece of the land. As, it was matured earlier than traditional varieties by 45-60 days. The feed back from the farmers were collected and the results had been analyzed and presented in the following Tables.

The Gatadi village is now became a model for Vaishali variety in the Block. The surrounding villages of Songadh, Vyara and Uchchhal taluka had also adopted vaishali to the tune of 22% and many more villages are in a cylinder for adopting Vaishali variety of the tur. The total seed of the said variety was supplied to them on free of cost. The constant follow up and monitoring of the package of practices made them habitant with scientific cultivation of the tur. The whole villagers are flattering conversant regarding ***better results of the new variety in relation to yield, income, soil, water, environment and health point of view.***

Initially, total 6 innovated farmers were trained for the same. Among them , the trained farmers *viz* :- **Mr. Maganbhai Gamit, Girishbhai Gamit, Rakeshbhai Gamit, Vineshbhai Chaudhari, Thakorbhai Gamit and Panjibhai Gamit** residing at Gatadi village are working as a resource persons for whole village as well as surrounding villages. Last year the seed produced by those villagers were sold to other farmers of the region and they were able to get higher price of the seed as compared with market saling. The

same variety will be given to 10 selected villages and constant follow up will be maintained by KVK scientists and at grand growth period of the crop a big farmers day will be arranged **including dignitaries of the NAU: Hon. Vice Chancellor, Director of Extension Education, State department of the agriculture and all GOs, /NGOs of the region**. **Simultaneously the big farmer's day on Tur will be conducted for mass multiplication of the advantages of the Vaishali variety and our sincere efforts will be towards whole block conversion in to seed block for Vaishali variety within 2-3 years.**

Table-1: Training programmes organized on tur production.

Subject	Title of the trainings	Duration (Days)	No. of participants		
			Male	Female	Total
Crop production	Oil seeds & pulse production technology	2	49	36	85
	Importance of bio fertilizer in oilseeds & pulses crop.	1	18	-	18
	Land preparation for major crops of the area.	1	34	50	84
	Improved production technology for pigeon pea cultivation	2	22	0	22
	FLD training on Tur	1			
	Integrated weed management in Tur	1	34	0	34
	Important post sowing/ plant agro technologies for more return in kharif crop.	1	21	17	38
	Package of practices of major kharif crop	2	28	23	52
	Importance of land preparation for kharif crop	1	0	19	19

Table-2 Comparison of economics of Vaishali demonstration plot and control plot in tur crop.

Sr.No.	Name of The village	Yield(Qt/ha) Demon.	Yield(Qt/ha) Local Cheque	Increase in yield (%)	Net profit (Rs/ha) Demon.	Net profit (Rs/ha) Localcheque.
1	**Year Khari 2007**					
	Gatadi &	8.84	6.62	33.5	10609	7332
	Champawadi					
2	**Year Kharif 2008**					
	Gatadi	12.48	7.40	68	46538	26600
	Gadat					
	Bhitkhurd					
	Bhitbudrak					

Price-Pigeon pea grain (2007)-Rs.12/kg grain.

Pigeon pea grain (2008)-Rs.40/kg grain.

Table-3 Adoption of Vaishali variety N=100

Characteristics	Number	Percentage
Overall knowledge level		
Low	11	11.00
Medium	74	74.00
High	15	15.00
Total	**100**	**100.00**
Head wise knowledge Level		
Cultural practices		
Low	15	15.00
Medium	61	61.00
High	24	24.00
Total	**100**	**100.00**
Fertilizer Management		
Low	15	15.00
Medium	70	70.00
High	15	15.00
Total	**100**	**100.00**
Irrigation management		
Low	20	20.00
Medium	57	57.00
High	23	23.00
Total	**100**	**100.00**
Marketing of Green pod		
Low	22	22.00
Medium	55	55.00
High	23	23.00
Total	**100**	**100.00**

Farmer's reactions:

1. Vaishali variety is better than habitual/local cultivars in the villages.
2. Variety is suitable for vegetable as well as for grain/seeds.
3. During the year 2008 only this variety gave substantial yield in this region, all other traditional varieties failed at all.
4. Sowing on ridges allowed all plants to stay alive and produce even in high rainfall area successfully.
5. Vaishali variety gave good economic returns as compared with traditional varieties grown in the province.
6. INM including recommended dose of fertilizers (RDF) +FYM + Rhizobium inoculation) crop was found better than only use chemical fertilizer**.**
7. Seed production along with green pod marketing gave higher net homecoming as compared with only grain production.
8. No menace against failure of the crop due to early maturing and less pest attacks at maturity stage, due to short duration variety.

Conclusion:

Higher yielding and improved varieties is the one of the most important component to get higher yield in agriculture crop production machinery, which technology promises higher yield. INM & land configuration also helps in improving yield. Majority of the respondents gained medium level of the overall knowledge and adopted all cultural practices of the tur production, the knowledge level of the farmers regarding scientific cultivation of tur was increased remarkably, (**Table-4**). This may be due to the proper guidance given by KVK scientists, Demonstrations and constant follow up by KVK missionary. The yield was increased to the tune of **33-68% and the net profit was increased to the tune of 30.68%.**

Implication: The study has acknowledged the knowledge level of the tur growers towards improved technology. This story can be guideline for other extension worker to implement this way of extension technology for their clients. On this groundwork the extension personnel may locate clients for training and also those who can be used as counselors to other farmers. The study is also useful for effective propagation of the improved technology in other regions for eco friendly and sustainable agricultural development.

Suggestions :- Based on this study we can suggest our other extension workers as well as to the policy makers to take a keen interest in the matter and do needful for great publicity of such technologies in their respective areas of working for successful journey towards next phase of Green Revolution on sustainable basis. This study is also eye opening for the persons working in the field of extension education. This thing looks like diminutive but its impact is of great magnitude.

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3.7.4 Replacement of drilled paddy through high recurring Soybean crops in tribal belt of South Gujarat, a success story.

(Printed in NAU Spectrum)

Introduction

Traditional agriculture characterized with age old cropping system with an aim to fulfill need of the family. Most of the tribal areas of the country, including our state have a similar trend of living. They live in nature and find their livelihood from nature. They are doing agriculture, but these abscond on god's blessings. The eastern tribal hilly region of South Gujarat including Tapi, Surat and Dang districts, they cultivate their land during *kharif* season only. The rainfed crops grown by these tribal farmers are drilled paddy, sorghum, pigeon pea and other pulses either single crop, mixed or intercrops. They grow paddy to fulfill food need of the family as rice is the staple food of this people.

Profile of the Village

The village Gadat is situated in Vyara block of Tapi district. It is situated on Vyara - Vansda state road, nearly 17 km from Vyara town. Vyara is a district head quarter of Tapi district where this Krishi Vigyan Kendra is situated. The village is divided in 14 faliyas. The total population of village is around **4546** with **2344** male and **2202** female. This village is tribal dominated except few family of kotwalia. The total area of village is 1174 ha out of which net cultivated area is1127 ha (95%). Nearly 250 ha i.e.**21%** cultivated land having irrigation facility which is mostly irrigated through tube wells, wells and water lifted from the natural water Ravines. Abhesingbhai Gamit is a Sarpanch, B.N. Solanki is a Talati and Girishbhai Chaudhary is working as VLWin the village. The agriculture of this tribal village is longstanding, still today they grow traditional paddy varieties like Tichun (T.N-1), Dodiu, Dhanhar, Sathi, kada,Kalitapki, etc.age old varieties.

In the year 2007, KVK Vyara has adopted village Gadat as a satellite village for its intensive activities of Transfer of Technologies (**TOTs**) related to agriculture for increasing agricultural production and net return to improve over all living standard of villagers.

Initially the entry point visit was made to villagers by team of Subject Matter specialist (**SMSs**). To find out the technological adoption gaps and to identify the thrust areas for the agricultural development, a PRA was made. During PRA survey of the village, interacting with the farmers it was found that the farmers were unable to get economical homecoming from their land holdings. As they grow drill paddy with old varieties, which is having very low yielding capacity. Further, this rain fed drilled paddy anguish with poor field management such as high seed rate, improper spacing, imbalance

use of fertilizer, no use of organic matter, high weed infestation, unavailability/poor facilities of lifesaving irrigation at critical crop growth stages. All these factors collectively resulted in uneconomical agriculture of the village. The farmers of this tribal belt were unable toward adopting new ideas / technologies /crops and recent innovations in agriculture. So, some time they left their field without crop for a year or more. As no external help, information was reach to the farmers they were frustrated with agriculture. This was resulted in migration for livelihood security as well as decreasing interest of the rural youth towards modern high-tech agriculture.

Considering the situation and with frequent, live contacts as well as discussion with farmers. Subject Matter Specialists (Agronomy, Horticulture) of KVK suggested replacing drill paddy with another more remunerative economical crop. The survey of possible other alternate crops and their marketing facilities in the region, it was decided to replace drill paddy with introduction of soybean crop. Soybean is a pulse cum oil seed crops, have good yield in hilly region of nearby area, soil improvement through increasing microbial activities in the soil and have been easily sold and purchased in APMC, Vyara as soybean is becoming an important food crop day by day. This crop has immense capacity to improve soil condition by adding huge amount of organics in the form of leaves and deep tap root systems, ***Rhizobium*** bacterial activity. Further, Soybean has fast growing system create smoothering effect on weeds by early covering on land surface.

KVK scientists had selected few interested young farmers and invited them to KVK for detail discussion about ***replacement of drill paddy with soybean crop***. The detail package of practices of new introducing Soybean crop was taught to them. The trainings (ON/OFF campus) total **11, (Table-1)**,including scientific package of practices, Integrated management of pest & diseases, PHT, Value addition, economic importance of soybean was given to them by KVK scientists. The detail training was given to them based on two main pillars of extension education, "**Seeing is Believing**" and "**Learning by Doing**" with power point presentation along with constant follow up time by time. After successful training and change in mindset of farmers for soybean, this new crop was introduced under **FLD Oilseed** of soybean variety Gujarat Soybean-2 (G.S-2) on 5.0 ha area of the village covering 14 beneficiaries, **Table-2**. Through out the crop season constant visit of FLD plots were made and required information provided to them for successful soybean cultivation. At maturity stage of the soybean **Field days** were also organized on soybean demonstration plots for mass dissemination of the demonstrated technology. The feed back were collected from the FLD farmers to generate production data as well as to collect the reaction of the farmers. The same FLD was again conducted on 5.00 ha land during

the year 2008, covering 29 farmers to check the consistency of the results. Again training, visit, follow up visit and field days were organized to popularize this challenging new crop in consign of **low yielding drilled paddy, Table-4**.

Initially, farmers were wavering in adopting new crops, but with constant encouragement, KVK scientists are successful in replacement of this crop. The major achievement of the demonstration is that farmers them self realize the economic yield of soybean and its positive effect on **soil health**.

The soybean growing farmers came forward with open dialogue that, they got higher net return from soybean crop as compared with drilled paddy. In addition to that, one more opinion as per their perception that there is labour saving in soybean cultivation due to less weeds, less fertilizer, disease, pest and equipment management. They also opinioned that soybean crop improves soil condition. Hence, next crop in the same field in succession is also performs well without much investment on fertilizer due to soil enrichment through soil microbial activities. The farmers were able to get more net return than drilled paddy. The increase in income over drilled paddy was **Rs.17-20 thousands** per hectare. The net profit was increased up to the tune of **58.00 per cent(Table-3)** on average of two years. Further, KVK scientists also informed to use soybean in daily diet as protein supplement. Now they started to use this golden bean in their daily diet. This year about 35 per cent of the villagers will be adopting soybean instead of drill paddy.

Conclusion: - The soybean cultivation is highly profitable in tribal dominated areas of the Surat and Tapi district. This crop is also advisable to the farmers for improvement of the soil physical, chemical and biological health. The human health point of view this crop is highly advisable to the people of the tribal region to control the diseases related to the mal nutrition and deficiency syndromes. At the end we can suggest this crop in the region to increase the income of the farmers and also to improve their own, family as well as soil health.

Implication: The study has acknowledged the knowledge level of the farmers towards profitable cultivation of the soybean. This story can be guideline for other extension worker to implement this way of extension technology for their clients in their respective area of operation for TOT. On this foundation the extension personnel may locate clients for training and also those who can be used as counselors to other farmers. The study is also useful for effective propagation of the new technology in other regions for eco friendly and sustainable agricultural development. The story also reflects the role of KVKs in effective Transfer of Technologies (**TOTs**) at grass root level.

Related datamatric information to the story.

Table-1 Comparison of economics of Soybean demonstration plot and Drilled paddy.

Sr. No.	Name of village	Yield (Qt/ha) Demon. Soybean	Yield (Qt/ha) Drilled paddy	Net Return (Rs/ha) Soybean	Net profit (Rs/ha) Drilled paddy	Net profit (Rs/ha) In Soybean over drilled paddy.	% increase over drilled paddy
1	**Year Khari 2007**						
	Gadat	11.64	13.75	11662	6475	4187	**35.90%**
2	**Year Kharif 2008**						
	Gadat	18.74	11.13	23732	4641	19091	**80%**

**** Average increase from 2 year data-58%**

Give details of innovative methodology/technology developed and used for Transfer of Technology 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

S. 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.
5.	Pulse crops	Use of ash for storage of Tur, Beans, Gram	To control storage gram pests
6.	Jower	Use of dry neem leaves for sorghum storage	To control storage gram pests
7.	Animal	Use of wild plants with sand and pest it on neck of the animal	To control HAEMORRHAGIC SEPTICEMIA

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

- Identification of courses for farmers / farm women :– PRA and group discussion
- Rural Youth :– Group discussion with youth
- Inservice personnel :– Discussion with extension workers and their superiors

3.11 Field activities

i. Number of villages adopted :- 10

ii. No. of farm families selected :- 5638

iii. No. of survey/PRA conducted :- 10

3.12 Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Working (under ICAR)

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
12.	Steel cupboard storewel	4	14000
13.	Steel racks	4	8600
14.	Partition racks	3	22500
15.	Office chair	4	4000
16.	Systronics make		
(a)	Micro controller based Digital spectrophotometer model -106	1	26800
(b)	Systronics make micro controller based flame photometer compressor model-128	1	35200
(c)	Systronics make micro controller based PH meter	1	10900
(d)	Systronics make micro processor based conductivity meter	1	12800
17.	Hot air oven	1	21200
18.	Chemical Balance	1	75000
19.	CENTRO FIX WATERBATH	1	10800
20.	CENTRO FIX – Muffle furnace	1	29500
21.	Automatic autoclave	1	21000
22.	City weigh balance model ST-10 Cap- 10 kg	1	10640
23.	LG AC-15 ton	1	23740
24.	Micro kjeldahl Assembly	1	10700
25.	Burner maker type with stop coke	8	2000
26.	Voltas make water cooler	1	26500
	Total	**67**	**539780**

3. Details of samples analyzed so far :

Details	**No. of Samples**	**No. of Farmers**	**No. of Villages**	**Amount realized**
Soil Samples	278	120 (158 - Farm sample)	36	55600
Water Samples	25	25	19	1250
Total	**303**	**145**	**55**	**56850**

4.0 IMPACT

4.1. Impact of KVK activities

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Introduce new variety (Vaishali) in Tur	248	96.00	19600	59700
Introduce new crop – Soybean to replaced drilled paddy	114	86.84	4641	19091
IPM in Cotton	443	83.80	33175	42305*
Scientific package of practice of Okra (Time of sowing & INM)	178	84.00	36000	76000
INM in Brinjal	127	82.00	60000	96000
Use of Bio-fertilizer in Gram	236	84.32	25609	38896

* Decrease in spraying by 40% and use of cultivation by 25%.

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

4.2. Cases of large scale adoption (Detail success stories attached – 3.7)

1. KVK for Reaching the Unreached- A Success study
2. Velda-IPM Village, a Success Story
3. Replacement of the Pigeon pea variety through FLD, a success story
4. Replacement of drilled paddy through high recurring Soybean crops in tribal belt of South Gujarat, a success story

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

4.3.1 Impact of scientific cultivation of Okra in Tapi district

In Tapi district farmers were getting very low yield in okra. Low productivity of okra was due to lack of knowledge about scientific cultivation, poor nutrient management and lack of knowledge in IPDM. KVK conducted trainings, FLDs and doing extension activity during last three year. Impact study results are presented here.

Table 1:- Overall knowledge of scientific package of practices of Okra.

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of knowledge	55	16
Medium level of knowledge	35	56
High level of knowledge	10	28

Table 2:- Knowledge regarding selected scientific innovations for okra cultivation

N=100

Sr.No.	Selected scientific innovations	Low	Medium	High
1	New high yielding varieties	16	28	56
2	Seed rate	11	16	73
3	Integrated Nutrient management	26	35	39
4	Integrated Pest Management	25	61	14
5	Knowledge regarding yellow mosaic virus/ powdery mildew	26	43	31
6	Plant growth regulator	7	11	82
7	Value addition	6	16	78

Results of overall knowledge of scientific package of practices of Okra indicated that the medium and high level of knowledge before KVK was 35% and 10% respectively, which was increased up to 50% and 28% after contact with of KVK (Table-1). In case of knowledge regarding selected scientific innovations for okra cultivation medium and high level of knowledge was 35% and 39% respectively in case of integrated nutrient management , Where as in integrated pest management was 61% and 14% respectively. High knowledge level regarding plant growth regulators and value addition was 82% and 78%(Table-2).

Table 3:- Overall adoption of scientific package of practices of Okra .(percentage)

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of adoption	14	4
Medium level of adoption	69	28
High level of adoption	17	68

Table 4:- Adoption of critical okra production technology(%).

N= 100

Sr. No.	Name of technology	Adoption(%)
1	New high yielding varieties	82
2	Seed rate	76
3	Integrated Nutrient management	82
4	Integrated Pest Management	61
5	Knowledge regarding yellow mosaic virus/ powdery mildew	72
6	Plant growth regulator	73
7	Value addition	77

Adoption of okra production technology, 82% farmers adopted high yielding varieties and INM. 76% farmers adopted recommended seed rate. In case of plant growth regulator and value adoption 73% and 77% adoption was observed (Table-4). Where in table-3 medium and high level adoption was 69% and 17% before KVK where that of after conducted with KVK was 28% and 68% respectively.

4.3.2 Impact of scientific cultivation of brinjal in Tapi district

In Tapi district farmers were obtaining very low yield in brinjal. Low productivity of brinjal was due to lack of knowledge about scientific cultivation, poor nutrient management and lack of knowledge in IPDM. KVK conduct trainings, FLDs and doing extension activity during last three year. Impact study results are present here.

Table 1:- Overall knowledge of scientific package of practices of brinjal.

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of knowledge	59	7
Medium level of knowledge	28	51
High level of knowledge	13	42

Table 2:- Knowledge regarding selected scientific innovations for brinjal cultivation

N=100

Sr.No.	Selected scientific innovation	Low	Medium	High
1	Integrated Nutrient management	9	26	65
2	Pest and disease control	22	59	19
3	IPM	29	55	16
4	Plant growth regulator	4	12	84
5	Recommended spacing	6	38	56
6	Value addition	5	14	81

Results of overall knowledge of scientific package of practices of brijal indicated that the medium and high level of knowledge before KVK was 28% and 13% respectively, which was increased up to 51% and 42% after contact with KVK (Table-1). In case of knowledge regarding selected scientific innovations for brinjal cultivation medium and high level of knowledge was 26% and 65%, respectively in case of integrated nutrient management , Where as in pest and disease control was 59% and 19% respectively. High knowledge level regarding plant growth regulators and value addition was 84% and 81 %(Table-2).

Table 3:- Overall adoption of scientific package of practices of Brinjal .(percentage)

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of adoption	28	6
Medium level of adoption	56	22
High level of adoption	16	72

Table 4:- Adoption of critical Brinjal production technology(%).

N= 100

Sr. No.	Name of technology	Adoption(%)
1	Integrated Nutrient management	89
2	Pest and disease control	68
3	IPM	59
4	Plant growth regulator	82
5	Recommended spacing	92
6	Value addition	86

The adoption of brinjal production technology, 89% farmers adopted INM. 92% farmers adopted recommended spacing. In case of plant growth regulator and value adoption 82% and 86% adoption was observed. Pest and disease control & IPM 68% and 59% farmers adopted the technology (Table-4). Where in table-3 medium and high level adoption was 56% and 16% before KVK, after KVK was 22% and 72% respectively.

4.3.3. Impact of package of practices of soybean crop in satellite villages of Tapi district

Farmers of Tapi district growing rainfed drill paddy but its produce very low yield so it's get very low remunerative. In place of drill paddy soybean crop earn more net profit then drill paddy ,So KVK intensive effort by training, demonstration and other extension activity during last three year to replacing drill paddy. So impact study results are present here.

Table 1:- Overall knowledge of package of practices of soybean crop.

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of knowledge	89	07
Medium level of knowledge	09	14
High level of knowledge	02	79

Table 2:- Knowledge regarding selected scientific innovations for soybean crop.

N=100

Sr.No.	Selected scientific innovation	Low	Medium	High
1	New high yielding varieties	10	5	85
2	Seed rate	13	74	13
3	Bio fertilizer	11	16	73
4	Weeding	23	8	69
5	Integrated Nutrient management	09	13	78

Results of overall knowledge of soybean indicated that the low, medium and high level of knowledge before contact with KVK was 89%,09% & 02% respectively. Which was increased up to 07%, 14% and 79% after contact with KVK(Table-1). In case of

Knowledge regarding selected scientific innovations for soybean high knowledge except seed rat but medium knowledge 74% in seed rat.

Table 3:- Overall adoption of scientific cultivation of soybean .(percentage)

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of adoption	75	05
Medium level of adoption	13	06
High level of adoption	12	89

Table 4:- Adoption of critical soybean production technology(%).

N= 100

Sr. No.	Name of technology	Adoption(%)
1	New high yielding varieties	92
2	Seed rate	87
3	Bio fertilizer	73
4	Weeding	70
5	Integrated Nutrient management	88

Data presented in table -3 indicated that majority of the farmer had low level of knowledge(75%) before contact with KVK. After contact with KVK , 89% of the farmers had high level of knowledge.

Data present in table 4 indicated that 92% of the farmer had adopted new high yielding variety(92%) fallowed by INM(88%).

4. Impact of package of practices of gram crop in satellite villages of Tapi district

Tribal area of Tapi district grow gram on moisture conserve or in light irrigation, but they get very low yield due to use of low yielding variety, poor knowledge about scientific cultivation of gram. After contact with KVK intensive effort by training on scientific cultivation, demonstration on new variety & land configuration and other extension activity during last three year . So impact study results are present replacing drill paddy. So impact study results are present here.

Table 1:- Overall knowledge of package of practices of gram crop.

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of knowledge	78	08
Medium level of knowledge	16	10
High level of knowledge	06	82

Data depicted in table 1 indicated that 78% of the farmers had low level of knowledge which was increased (82%) after contact with KVK.

Table 2:- Knowledge regarding selected scientific innovations for gram crop.

N=100

Sr.No.	Selected scientific innovation	Low	Medium	High
1	New high yielding varieties	08	05	87
2	Land configuration	06	13	81
3	Seed rate	14	08	78
4	Bio fertilizer	19	06	75
5	Weeding	17	12	71
6	Integrated Nutrient management	07	10	83

Data show in the table 2 indicated that 87% of the farmers had knowledge about New high yielding varieties followed by Integrated Nutrient management (83%) ,Land configuration(81%) and bio fertilizer (75%).

Table 3:- Overall adoption of scientific cultivation of gram. (percentage)

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of adoption	76	04
Medium level of adoption	18	12
High level of adoption	06	84

Data presented in table-3 indicated that 76 % of the farmers had low level of adoption which was increased after contact with KVK(84%).

Table 4:- Adoption of critical gram production technology(%).

N= 100

Sr. No.	Name of technology	Adoption(%)
1	New high yielding varieties	89
2	Land configuration	85
3	Seed rate	82
4	Bio fertilizer	78
5	Weeding	72
	Integrated Nutrient management	76

The data show in the table 4 indicated that 89% of the farmers had New high yielding varieties which was fallowed by Land configuration (85%), Seed rate (82%) and Bio fertilizer(78%).

5. Impact of package of practices of Tur crop in satellite villages of Tapi district

Farmers of Tapi district growing tur as a mixed crop with paddy and sorghum. Farmers grow very old variety and lack knowledge about improved variety , and scientific cultivation of tur. So they get very low production ,So KVK intensive effort by training, demonstration and other extension activity during last three year to replacing old variety and new technology of sowing.. So impact study results are present here.

Table 1:- Overall knowledge of package of practices of Tur crop.

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of knowledge	74	06
Medium level of knowledge	21	07
High level of knowledge	05	87

Data depicted in table 1 indicated that 74% of the farmers had low level of knowledge which was increased (87%) after contact with KVK.

Table 2:- Knowledge regarding selected scientific innovations for Tur crop.

N=100

Sr.No.	Selected scientific innovation	Low	Medium	High
1	New high yielding varieties	06	12	82
2	Land configuration	07	07	86
3	Seed rate	04	08	88
4	Bio fertilizer	18	06	76
5	Weeding	11	11	78
6	Integrated Nutrient management	10	06	84

Data show in the table 2 indicated that 88% of the farmers had knowledge about seed rat followed by ,Land configuration(86%) , INM (84%) and bio fertilizer (76%).

Table 3:- Overall adoption of scientific cultivation of Tur .(percentage)

N=100

Category	Before contact with KVK(%)	After contact with KVK(%)
Low level of adoption	65	05
Medium level of adoption	16	08
High level of adoption	09	87

Data presented in table-3 indicated that 65 % of the farmers had low level of adoption which was increased after contact with KVK(87%).

Table 4:- Adoption of critical Tur production technology(%).

N= 100

Sr. No.	Name of technology	Adoption(%)
1	New high yielding varieties	88
2	Land configuration	90
3	Seed rate	84
4	Bio fertilizer	78
5	Weeding	75
6	Integrated Nutrient management	84

The data show in the table 4 indicated that 90% of the farmers had land configuration which was fallowed by New high yielding varieties(88%), Seed rate (84%) and INM(84%).

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, ATMA, RKVY, SRI techniques
2	Dept. of Horticulture	Participation • Khedut Shibir • Extension Activities, NHB & NHM
3	ATMA	Participation • Khedut Shibir/Mahila 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 IPM Mission in Nizar block
6	Main Water Management Research Unit, NAU, Navsari	Collaboration-FLD on soil & water management, Greenhouse
7	Research Stations, NAU	Participation-Farmers day, Seed-FLDs, etc.
8	FTC, Vyara	Joint implementation- Farmers visit and expert lectures, Farmer's Fair
9	Govt. of Gujarat	Collaboration – Krishi Mahotsav, ATMA, RKVY, NFSCM, etc.
10	State Bank of India/Bank of Baroda	SHG work
11	Catholic Charch, Mandal	TOT, Seed village, Kitchen Garden, Vermicompost [52 Villages Network]
12	Integrated Child Development Sevices (ICDS)	Inservice training for Anganwadi workers

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** / No

Sr. No.	Programme	Nature of linkage	Remarks
1	Training Programmes – 10 no.	Implementing agency	367 Participants

5.4 Give details of programmes implemented under National Horticultural Mission :- --NIL--

5.5 Nature of linkage with National Fisheries Development Board :- --NIL--

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm)

Sr. No.	Demo Unit	Year of estt.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost	2006	400 sq. m.	-	Compost	9850 kg	10000	29550	

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	
Cereals									
Rice	2nd week of July	1st Week of November	1.0	Jaya	Certified	25 qtl	20000	38680	
Rice	3rd week of July	-	2.0	Jaya	Certified	Crop is standing			

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

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

-- NIL--

6.5 Rainwater Harvesting :- --NIL--

6.6 Utilization of hostel facilities :- No Hostel facility available at KVK

7. FINANCIAL PERFORMANCE

7.1 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

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2009
	Kharif 2008-09	Rabi 2008–09	Kharif 2008-09	Rabi 2008-09	
Inputs	-	50000	-	50907	-907
Extension activities	-	-	-	-	-
TA/DA/POL etc.	-	-	-	-	-
TOTAL	**-**	**50000**	**-**	**50907**	**-907**

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1st April 2009
	Kharif 2008-09	Rabi 2008–09	Kharif 2008-09	Rabi 2008-09	
Inputs	-	50000	-	23780	26220
Extension activities	-	-	-	-	-
TA/DA/POL etc.	-	-	-	-	-
TOTAL	**-**	**50000**	**-**	**23780**	**26220**

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

Item	Released by ICAR	Expenditure	Unspent balance as on 1st April 2009
	Kharif 2008-09	Kharif 2008-09	
Inputs	290000	289169	831
Extension activities	-	-	-
TA/DA/POL etc.	-	-	-
TOTAL	**290000**	**289169**	**831**

7.5 Utilization of KVK funds Year: 2008-09

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	28.00	28.00	1896910
2	**Traveling allowances**	1.00	1.00	71872
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	2.50	2.50	150000
B	POL, repair of vehicles, tractor and equipments	1.90	1.90	90000
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.70	1.70	70000
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.80	0.80	80000
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.10	2.10	110000
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.60	0.60	26350
G	Training of extension functionaries	0.40	0.40	28512
H	Maintenance of buildings	0.20	0.20	17662
I	Establishment of Soil, Plant & Water Testing Laboratory	-	-	-
J	Library	-	-	-
TOTAL (A)		**39.20**	**39.20**	**2541306**
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)		**39.20**	**39.20**	**2541306**

Year: 2009-10 (upto August,2009)

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	28.00	28.00	926341
2	**Traveling allowances**	1.00	1.00	48772
3	**Contingencies**	6.00	6.00	195515
TOTAL (A)		**35.00**	**35.00**	**1170628**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	41.00	41.00	-
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0.15	0.15	-
4	**Library** (Purchase of assets like books & journals)	0.10	0.10	2375
TOTAL (B)		**41.25**	**41.25**	**2375**
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		**76.25**	**76.25**	**1173003**

7.5 Status of revolving fund (Rs. in lakhs) 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 2006 to March 2007	141018	19159	140450	19727
April 2007 to March 2008	19727	202831	206603	15955
April 2008 to March 2009	15955	251000	191914	75041

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

8.1 Constraints

(a) Administrative

1. The post of supporting staffs (2) are vacant.

(b) Financial

1. Provision should be made for educational tour for farmers.

(c) Technical

1. Lack of facility of administrative building, staff quarters and farmers hostel.
2. Lack of LCD and Laptop.
3. Lack of facility of Minibus.
4. Lack of Motorcycle (two wheeler).

Summary of Annual Progress of KVK 2008-09

STAFF POSITION

KVK	PC			SMS			PA			ADMN			AX			SUPP			TOTAL		
	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V	S	F	V
Vyara, Dist. Tapi	1	1	-	6	6	-	3	3	-	2	2	-	2	2	-	2	-	2	16	14	2

S- Sanctioned F- Filled V- Vacant

REVOLVING FUND

KVK	Opening Balance on 1.4.08 (Rs. in lakhs)	Revenue Generated (Rs. in lakhs)	Closing Balance on 31.3.09 (Rs. in lakhs)
Vyara, Dist. Tapi	15955	59086	75041

SCIENTIFIC ADVISORY COMMITTEE

KVK	No. of meetings conducted	Date of meeting
Vyara, Dist. Tapi	1	06/07/2009

ACTIVITIES OF KVK

TECHNOLOGY ASSESSMENT AND REFINEMENT

Details of technologies assessed and refined

Technologies assessed**

Sr. No.	Enterprise	Crop/Animal/Species	Name of the technology**	Thematic Area
1	Vegetable	Okra	ICM (Time of sowing)	Paddy – Okra base cropping system
2	Oilseeds	Groundnut	Varietal evaluation	Paddy-Groundnut base cropping system

Technologies refined**

Sr. No.	Category	Crop/ Enterprise	Name of the technology**	Thematic Area
1	Pulses	Pigeon pea	Land Configuration	Drill paddy + Pigeon pea cropping system

Abstract on the number of technologies assessed in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	--	1	--	--	--	--	--	--	--	1
Integrated Crop Management	--	--	--	--	1	--	--	--	--	1
TOTAL	**--**	**1**	**--**	**--**	**1**	**--**	**--**	**--**	**--**	**2**

Abstract on the number of technologies refined in respect of crops/ enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Crop Management	--	--	1	--	--	--	--	--	--	1
TOTAL	--	--	**1**	--	--	--	--	--	--	**1**

Abstract on the number of technologies assessed in respect of livestock/enterprises :- -- NIL --

Abstract on the number of technologies refined in respect of livestock/ enterprises :- -- NIL --

PERFORMANCE OF IMPORTANT TECHNOLOGIES

A. Technology Assessed

Trial 1

1.	**Title**	**:**	Refinement of Sowing time in okra
2.	**Problem diagnose/defined**	**:**	Low yield, growing during off season (rabi)
3.	**Details of technologies selected for assessment /refinement**	**:**	T1. Date of sowing 15th November (Farmers practices) T2. Date of sowing 15th October T3. Date of sowing 30th October
4.	**Source of technology**	**:**	Main Vegetable Research Station, Anand
5.	**Production system thematic area**	**:**	Paddy – Okra base cropping system, Time of Sowing
6.	**Thematic area**	**:**	Integrated crop management
7.	**Performance of the Technology with performance indicators**	**:**	Results showed that 15th October sowing date recorded higher yield (23.821 t/ha), No. of pods per plant (21.36/plot) as compared to farmers practices and date of sowing at 30th October.
8.	**Final recommendation for micro level situation**	**:**	Farmers of Tapi district should grow okra in month of 15th October. It is the best time for higher yield
9.	**Constraints identified and feedback for research**	**:**	Research on fertilizer management & spacing in hybrid okra.
10.	**Process of farmers participation and their reaction**	**:**	Farmers appreciate the technology & ready to adopt.

:

:

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Data on the parameter					Results of assess-ment	Feedback from the farmer
						No. of branches/ main stem	No. dules / main stem	No. of fruit / plant	Yield / plant	Yield / kg/ha		
1	2	3	4	5	6	7					8	9
Okra	Irrigated	Low yield growing during rabi season	Refinement of sowing time in okra	6	T1. Date of sowing at 15th Nov. (Farmers practices)	0.2	8.5	8.7	87.36	9707	15th Oct. sowing of okra gave higher yield	Selection of early maturing variety for 15th October of Okra sowing which got better income
					T2. Date of sowing at 15th Oct.	**2.06**	**19.03**	**21.36**	**214.4**	**23821.6**		
					T3. Date of sowing at 30th Oct.	0.73	13.46	14.46	144.7	16077.3		

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
10	11	12	13
3. Date of sowing at 15th October	23.821	136605.5	**3.3**
4. Date of sowing at 15th November (Farmers practices)	9.707	30750	0.76

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

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

Trial 2

1.	**Title**	**:**	Varietal evaluation of Groundnut
2.	**Problem diagnose/defined**	**:**	Low productivity of nondescript and old groundnut varieties grown in summer season of Tapi district.
3.	**Details of technologies selected for assessment /refinement**	**:**	T1. J-11 (Farmers practices) T2. GG-20 T3. GG-2 T4. GG-6 T5. TG-37A
4.	**Source of technology**	**:**	NRCG, Junagadh
5.	**Production system thematic area**	**:**	Paddy groundnut base cropping system
6.	**Thematic area**	**:**	Integrated crop management
7.	**Performance of the Technology with performance indicators**	**:**	Result indicated that variety GG-6 recorded higher yield (2348 kg / ha), No. of pod per plant (22.7 g/plant), wt. of dry pod per plant (20.65 g/plant) followed by TG-37 A, GG-2, J-11 and GG-20 respectively.
8.	**Final recommendation for micro level situation**	**:**	Groundnut variety GG-6 may be grown in place of variety TG-37A, GG-2, G-20, J-11 in summer season of Tapi district.
9.	**Constraints identified and feedback for research**	**:**	Developed suitable variety of late rabi season for this region. Developed duel purpose (fodder+kernal) variety.
10.	**Process of farmers participation and their reaction**	**:**	Farmers are ready to adopt this variety

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11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Data on the parameter				Results of assessment	Feedback from the farmer
						No. of branches/ plants	No. of pods / plants	wt. of dry pods/plant (g/plant)	Dry pod yield kg/ha		
1	2	3	4	5	6	7				8	9
Ground-nut	Irrigated	Low productivity of non descript and old groundnut varieties	Varietal evaluation	7	T1. J-11	5.29	16.43	13.56	1232	Among five variety Cv.GG-6 gave higher yield followed by TG 37A than other Groundnut variety	Groundnut cv. GG-6 have more number of pod than older one and also get higher yield than other variety.
					T2. GG-2	4	14.43	13.79	1720		
					T3. GG-20	6.14	6.14	7.2	958		
					T4. GG-6	5.14	22.71	20.66	2348		
					T5. TG –37A	4.71	9.42	10.66	2138		

**** No. of farmers***

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
10	11	12	13
4. J-11	1232	10614	0.61
5. GG-2	1720	21838	1.2
6. GG-6	2348	33934	1.9

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

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

B. Technology Refinement

Trial 1

1.	**Title**	**:**	Land configuration in Pigeon pea
2.	**Problem diagnose/defined**	**:**	Low yield, High rainfall, Poor plant population
3.	**Details of technologies selected for assessment /refinement**	**:**	T1 Flat bed sowing (Farmers practices) T2 Sowing on raised bed / broad bed furrow T3 Ridge and furrow
4.	**Source of technology**	**:**	Research scientist, Pulse crop, NAU, Navsari
5.	**Production system thematic area**	**:**	Drill Paddy + pigeon pea cropping system
6.	**Thematic area**	**:**	Land configuration (ICM)
7.	**Performance of the Technology with performance indicators**	**:**	The refined technology ridges and furrow sowing of pigeon pea had more no. of branches per plant (14.43/plant) and no. of pods per plant (573.4/plant) at harvest and higher yield (1346 kg/ha) as compared to other treatment of land configuration.
8.	**Final recommendation for micro level situation**	**:**	Ridges and furrow system found better for higher pigeon pea yield.
9.	**Constraints identified and feedback for research**	**:**	Developed resistant variety for Tur against pod fly.
10.	**Process of farmers participation and their reaction**	**:**	Appreciate the technology and ready to adopt ridge and furrow system

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter				Results of refinem-ent	Feedback from the farmer
							No. of branches/ plants	No. of pods / plants	Seed wt./plant (dry) gm	seed yield / ha (kg/ha)		
1	2	3	4	5	6	7	8				9	10
Pigeon pea	Irrigated	Low yield, high rain fall, poor plant population	Land configuration in pigeon pea	7	T1. Flat bed sowing (Farmer practices)	133.57	9	508.57	27.34	1011	Ridges & furrow method of sowing gave good yield	It is difficult to prepare raised bed so adoption of ridges & furrow is better
					T2. Raised bed	171.57	12.43	532.71	29.63	1095		
					T3. Ridges & furrow	178.56	14.42	573.42	36.4	1346		

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	**13**	**14**	**15**
Flat bed sowing	1011	18043	2.49
Ridge & furrow	**1346**	**26418**	**3.65**

FRONTLINE DEMONSTRATIONS

Crop/enterprise	No. of demonstrations	Area (ha)
Oilseeds	34	15
Pulses	42	10
Cereals	57	22
Vegetable crops	36	09
Fruit crops	10	05
Kitchen Gardening	50	00
Cotton	60	55
Total	**289**	**116**

OILSEEDS

Crop	Season	Name of technology	No. of farmers	Area (ha)	Performance of technology on different parameters*						Result **
					Yield (qt./ha.)		No. of Pod / Plant		No. of Branch / Plant		
					Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
Groundnut	Kharif-08	Land Configuration Seed treatment Use of Bio-fertilizer	20	10	16.63	13.47	50-60	35-45	8-10	5-7	This technology performed in groundnut gave higher yield than local practices
Soybean	Kharif-08	Balance use of ferti., manure and Bio-fertilizer	14	5	18.74	15.05	40-55	30-40	7-10	4-6	New variety and use of Biofertilizers gave better yield than local practices and this technology maintain the soil health.

PULSES

Crop	Season	Name of technology	No. of farmers	Area (ha)	Performance of technology on different parameters*						Result **
					Yield (qt./ha.)		No. of Pod / Plant		No. of Branch / Plant		
					Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
Pigeon pea	Kharif-08	Performance of improved variety	20	5	12.48	7.40	60-70	40-50	12-15	5-8	Performance of new variety and land configuration in pigeon pea gave higher yield than local variety
Gram	Rabi-08	-Use of Bio-fertilizer -Land configuration	15	5	20.78	14.77	55-60	40-45	3-4	2-3	Performance of new variety, land configuration and use of bio fertilizer in gram gave higher yield than local variety

Cotton

Crop	Season	Name of technology	No.of farmers	Area (ha)	Performance of technology on different parameters*						Result **
					Yield (qt./ha.)		No. of Ball		Ball Wt. (gram/ball)		
					Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
Cotton	Kharif-08	IPM	50	50	22.15	19.75	30-45	20-35	3.5-3.9	2.0-2.5	Efficacy of new technology of IPM in cotton gave better results.
Cotton	Kharif-08	INM (KNO3)	10	5	23.00	19.00	30-45	25-35	3.5-3.9	2.0-2.5	INM in cotton gave higher yield and this technology control on imbalance use of fertilizer

CEREALS, HORTICULTURE AND OTHER CROPS

Crop	Season	Name of technology	No. of farmers	Area (ha)	Performance of technology on different parameters*						Result **
					Yield (qt./ha.)		Test wt.		No. of productive tiller/plant		
					Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
Paddy GR-5	Kharif-08	New variety	4	2	18.63	11.13	28 g./1000 seed	18	4-6	2-4	Performance of new variety and its yield is better than local variety
Paddy GR-8	Kharif-08	New variety	12	5	14.19	9.14	28 g./1000 seed	18	4-6	2-4	
Paddy GR-9	Kharif-08	New variety	14	5	10.53	9.14	28 g./1000 seed	18	3-5	2-4	
Paddy Gurjari	Kharif-08	GM before T.P.	12	5	52.59	43.77	30 g./1000 seed	20	7-11	5-7	Green manuring before T.P. of Paddy maintain soil health and its residual effect on Paddy gave higher grain yield
Sorghum	Kharif-08	New variety	15	5	11.36	7.86	3.39 g./ 100 seed	0.1	Panicle length 25-29 cm	18-20	New variety of sorghum well performed in rainfed condition and gave better yield than local variety

Crop	Season	Name of technology	No. of farmers	Area (ha)	Performance of technology on different parameters*						Result **
					Yield (qt./ha.)		Test wt.		No. of productive tiller/plant		
					Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
Okra	Rabi-08	INM	8	2	161.7	112.5	18.60 pod/plant	12.40	192 g.yield/plant	122	INM in okra gave higher yield and also maintain the quality of okra this technology control on imbalance use of fertilizer
Brinjal	Rabi-08	INM	8	2	208.1	148.25	18.2 fruit/plant	13.3	1123 g. yield/plant	800	INM gave higher yield and also maintain the quality of brinjal this technology control on imbalance use of fertilizer
Cucurbits	Summer-09	IPM	20	5	101.9	83.10	No. of fruit infest. 2.95 %	-	-	-	Methyl Euginol trap effective control of fruit fly
Mango	Summer-09	IPM	10	5	Due to very low fruit setting this component demo. was failed.						

Training (including Vocational, Sponsored and FLD training)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	-	-	-	27	-	27	27	-	27
Resource Conservation Technologies	2	-	-	-	16	21	37	16	21	37
Cropping Systems	6	-	-	-	78	174	252	78	174	252
Crop Diversification	2	-	-	-	28	15	43	28	15	43
Integrated Farming	1	-	-	-	12	-	12	12	-	12
Water management										
Seed production	3	-	-	-	27	35	62	27	35	62

Integrated Crop Management	4	57	-	57	21	22	43	78	22	100
Production of organic inputs	4	-	-	-	85	64	149	85	64	149
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	15	-	-	-	203	378	581	203	378	581
Off-season vegetables	4	-	-	-	160	25	185	160	25	185
Protective cultivation (Green Houses, Shade Net etc.)	2	-	-	-	18	50	68	18	50	68
b) Fruits										
Layout and Management of Orchards	1	-	-	-	43	30	73	43	30	73
Cultivation of Fruit	3	22	-	22	62	37	99	84	37	121
Plant propagation techniques	1	-	-	-	-	37	37	-	37	37
III Livestock Production and Management										
Dairy Management	10	-	-	-	142	194	336	142	194	336
Feed management	1	-	-	-	1	31	32	1	31	32
IV Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	-	-	-	-	108	108	-	108	108
Design and development of low/minimum cost diet	2	-	-	-	-	67	67	-	67	67
Value addition	4	-	25	25	-	96	96	-	-121	121
Income generation activities for empowerment of rural Women	2	-	20	20	-	26	26	-	46	46
Women and child care	5	-	-	-	-	162	162	-	162	162
V Agril. Engineering										
Repair and maintenance of farm machinery and	1	-	-	-	-	49	49	-	49	49

implements										
VI Plant Protection										
IPM	27	558	-	558	282	98	380	840	98	938
Integrated Disease Management	1	25	-	25	-	-	-	25	-	25
Bio-control of pests and diseases	2	-	-	-	48	-	48	48	-	48
VII Capacity Building and Group Dynamics										
Formation and Management of SHGs	2	-	-	-	1	67	68	1	67	68
VIII Others										
Side effects of insecticides & their solutions	1	-	-	-	63	-	63	63	-	63
Marketing of farm produce	1	-	-	-	50	-	50	50	-	50
Importance of FLD	1	-	-	-	24	74	98	24	74	98
Scientific cultivation of Rose	1	-	-	-	54	7	61	54	7	61
TOTAL	112	662	45	707	1445	1867	3312	2107	1912	4019
(B) RURAL YOUTH										
Integrated farming	1	-	-	-	19	-	19	19	-	19
Planting material production	1	-	-	-	41	-	41	41	-	41
Protected cultivation of vegetable crops	4	-	-	-	66	-	66	66	-	66
Repair and maintenance of farm machinery and implements	1	-	-	-	17	-	17	17	-	17
Tailoring and Stitching	1	-	-	-	-	33	33	-	33	33
IPM	1	-	-	-	42	1	43	42	1	43
TOTAL	**9**	**-**	**-**	**-**	**185**	**34**	**219**	**185**	**34**	**219**
(C) Extension Personnel										
Productivity enhancement in field crops	1	19	-	19	5	-	5	24	-	24

IPM	1	10	-	10	18	-	18	28	-	28
Integrated Nutrient management	1	20	-	20	-	-	-	20	-	20
Protected cultivation technology	1	44	-	44	-	-	-	44	-	44
Formation and Management of SHGs	1	-	2	2	-	27	27	-	29	29
How to conduct demonstration	1	4	-	4	10	-	10	14	-	14
SRI	1	38	-	38	-	-	-	38	-	38
TOTAL	**7**	**135**	**2**	**137**	**33**	**27**	**60**	**168**	**29**	**197**
GRAND TOTAL	**128**	**797**	**47**	**844**	**1663**	**1928**	**3591**	**2460**	**1975**	**4435**

Vocational training programmes

Vocation	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
		Male	Female	Total	Male	Female	Total
Sewing work	1	-	33	33	-	33	33

Sponsored Training Programmes

Thematic Area	Client (PF/RY/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
			Male	Female	Total	Male	Female	Total
Repairs & maintenance of farm machinery & implements	RY	1	17	-	17	17	-	17
Integrated Pest Management	PF	10	302	-	302	302	-	302
Cropping system	FW	1	12	32	44	12	32	44
Production of low volume & high value crop	FW	6	13	203	216	13	203	216
Production of low volume & high value crop	PF	1	26	40	66	26	40	66
SRI	EF	1	38	-	38	-	-	-

Production of small tools & implements	FW	1	-	49	49	-	49	49
Protective cultivation	PF	1	18	-	18	18	-	18
Off season vegetables	PF	1	36	20	56	36	20	56
Total		**23**	**462**	**344**	**806**	**261**	**344**	**605**

Extension activities

Nature of Extension Activity	No. of activities	Participants											
		Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
		M	F	T	M	F	T	M	F	T	M	F	T
Field Day	16	115	-	115	389	296	685	47	-	47	551	296	847
Kisan Mela	5	18182	3852	22034	24034	43478	67512	50	12	62	42266	47342	89608
Kisan Ghosthi	-	-	-	-	76	22	98	3	-	3	79	22	101
Exhibition	18	21946	6004	27950	33183	51425	84608	67	17	84	55196	57446	112642
Film Show	12	176	2	178	102	94	196	8	5	13	286	101	387
Method Demonstrations	15	-	45	45	128	152	280	8	2	10	136	199	335
Self Help Group meetings	15	-	51	51	-	295	295	-	20	20	-	366	366
Lectures delivered as resource persons	26	468	36	504	976	1137	2113	28	1	29	1472	1174	2646
Newspaper coverage	35	-	-	-	-	-	-	6	1	7	6	1	7
Radio talks	2	-	-	-	-	-	-	1	1	2	1	1	2
TV talks	8	-	-	-	-	-	-	10	1	11	10	1	11
Popular articles	71	-	-	-	-	-	-	6	1	7	6	1	7
Extension Literature	20	-	-	-	-	-	-	6	1	7	6	1	7
	1	-	-	-	-	-	-	2	-	2	2	-	2
	1	-	-	-	-	-	-	3	-	3	3	-	3
Scientific visit to	127	122	143	265	355	165	520	42	5	47	519	313	832

farmers field													
Farmers visit to KVK	556	193	87	280	516	295	811	47	6	53	756	388	1144
Diagnostic visits	12	7	2	9	5	1	6	16	-	16	28	3	31
Exposure visits (PF,FW)	10	60	-	60	221	137	358	11	-	11	292	137	429
Ex-trainees Sammelan	4	-	-	-	91	50	141	6	2	8	97	52	149
Animal Health Camp	3	-	-	-	-	-	-	7	-	7	7	-	7
Celebration of Women in Agril. Day	1	-	-	-	8	101	109	5	1	6	13	102	115
Khedut Shibir	20	210	43	253	1185	902	2087	45	1	46	1440	946	2386
Mahila Shibir	6	13	2	15	65	609	674	14	5	19	92	616	708
Farmers' Meeting	13	14	-	14	348	429	777	8	1	9	370	430	800
Farmers Day	2	151	22	173	1030	1915	2945	28	5	33	1209	1942	3151
Formation of SHGs	4	-	24	24	-	29	29	-	2	2	-	55	55
Telephone Helpline	865	186	38	224	512	130	642	6	1	7	704	169	873
Guidance through letter	2	2	-	2	-	-	-	2	-	2	4	-	4
Celebration of Technology Week	**11**	**349**	**-**	**349**	**739**	**803**	**1542**	**51**	**2**	**53**	**1139**	**805**	**1944**
Scientist Farmers Interaction	1	-	-	-	350	680	1030	5	1	6	355	681	1036
Formation of FIG	1	-	-	-	43	-	43	2	-	2	45	-	45
FLD visit	18	7	-	7	62	56	118	27	3	30	96	59	155
Grand Total	**1901**	**42201**	**10351**	**52552**	**64418**	**103201**	**167619**	**567**	**97**	**664**	**107186**	**113649**	**220835**

Production and supply of quality seed and planting material

SEED MATERIALS

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS	Paddy	Jaya	25	38680	89

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	25	38680	89
TOTAL		**25**	**38680**	**89**

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Mango	Kesar	800	36000	56
	Mango	Dasheri	200	9000	13
SPICES	Onion	White Onion	75425	10304	22
	Chilli	G-4	19800	2970	8
VEGETABLES	Brinjal	Surti Ravaiya	377720	56763	64
	Cauliflower	Mahalaxmi	28750	5363	16
	Cabbage	Early Kuwari	2450	368	5
	Tomato	S-22	7770	1183	9
	Drumstick	BKM-1	213	2130	62
	Bitter Gourd	Hybrid	70	140	35
	Bottle Gourd	Hybrid	70	140	35
	Ridge Gourd	Hybrid	70	140	35

SUMMARY

Sr. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	1000	45000	69
2	VEGETABLES	417113	66227	261
3	SPICES	95225	13274	30
	TOTAL	**513338**	**124501**	**360**

PUBLICATIONS

Type of Publication	No. of Items/topics	Number copies
News Letter	-	-
Technical reports	MPR, QPR, SAC report, FLD report, AAP, APR, MER, AGRESCO, ZREAC report	-
Technical bulletins	-	-
Popular articles	List of articles given in Annexure – V	72
Extension literature	21	25000
Electronic media	KVK in the service of Tribal People – DVD	2

SOIL AND WATER TESTING

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	278	120 (158 – Farm sample)	36	55600
Water Samples	25	25	19	1250
Total	**303**	**145**	**55**	**56850**

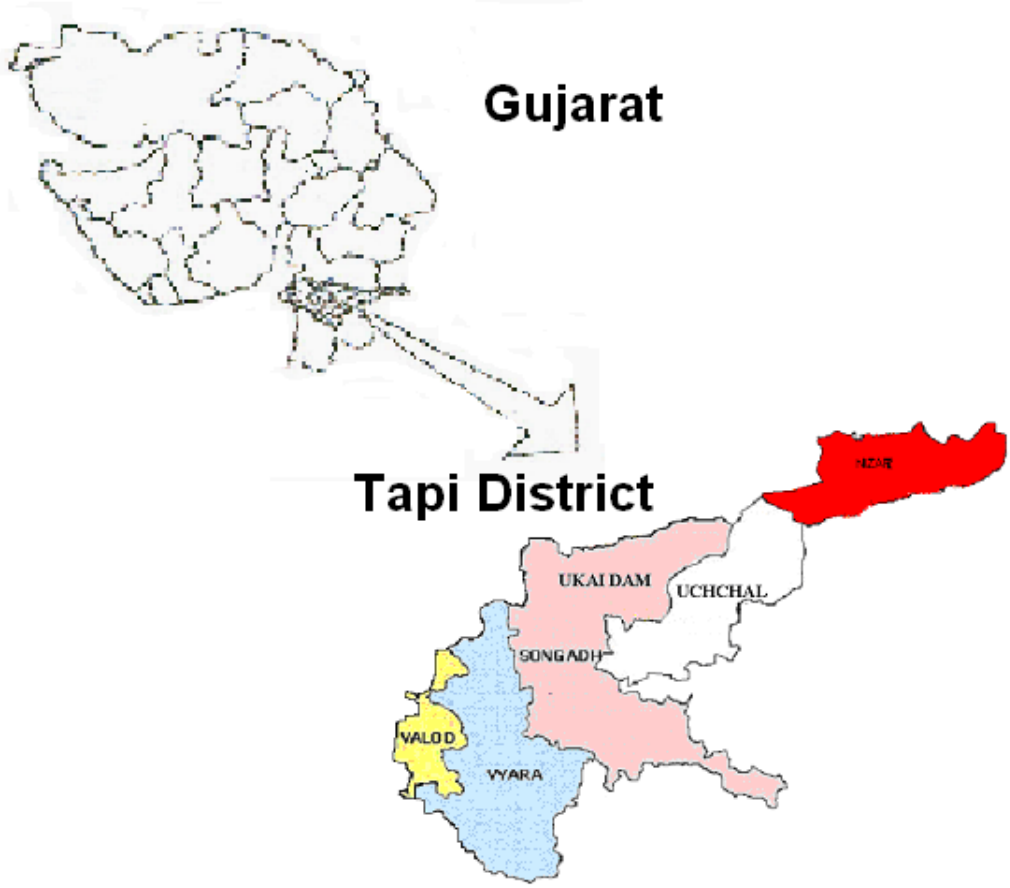
ANNUAL ACTION PLAN

2009-10

(October 2009 to September 2010)

KRISHI VIGYAN KENDRA

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



Crop/Enterprise	Thrust area
Paddy, Sorghum, Groundnut, Vegetables, Sugarcane, Oilseed crops & pulses	Crop production management (ICM)
Drumstick, Custard apple	Dry land horticulture
Organic farming	Vegetables, Soybean, Groundnut, Gram
Paddy, Sugarcane, Cotton, Groundnut	Integrated pest management
Paddy, Sorghum, Sugarcane, Cotton, Groundnut, Vegetables	Integrated nutrient management
Green house technology, Drip irrigation, High value crops	High tech horticulture
Soybean, Sorghum, Pigeon pea	Soil and Water conservation
Sugarcane, Paddy, Vegetables, Maize	Water management
Low cost green house	Low cost green house
Formation of Self Help Groups	Women empowerment
Sewing & Preservation	Self employment to farm women and rural youth
Fruits, Vegetables, Cereals & pulses	Value addition
Dairy management	Management of milch animals
Health & Nutrition	Health & nutrition for vulnerable groups.
Soybean & Vegetables	Introduction of Soybean & Vegetables instead of drilled paddy (Crop diversification)
Okra, Tomato, Watermelon	Off-season cultivation

Details of Operational area / Villages (2009-10)

Sr.No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Vyara	Mirpur	Mirpur	Paddy, Groundnut, Gram, Vegetable, Sorghum	▪ Productivity of major crops is very low ▪ Majority of the area is un-irrigated ▪ No scope for other crops due to erratic heavy rainfall ▪ Lack of technology knowledge in farmers ▪ Poor food grain storage practices ▪ Inadequate intake of fruits & vegetables ▪ Poor economic condition ▪ Poor livestock management & disease management	▪ Crop production technology ▪ IPM in field crops and vegetables ▪ Storage of fruit grains ▪ Health & nutrition for vulnerable groups ▪ Introduction of soybean crop to replace drilled paddy ▪ Livestock management ▪ Kitchen gardening ▪ Income generating activities ▪ Crop diversification
2.	Vyara	Vanskui	Vanskui	Paddy, Sugarcane, Groundnut, Vegetables	▪ Lack of technological knowledge among farmers ▪ Poor drainage of soil ▪ Adoption level of farmers is very low ▪ Lack of Knowledge about scientific method of fruit & vegetable preservation ▪ Low milk production ▪ Lack of knowledge about inter cropping ▪ High mortality rate in calf	▪ IPM in field crops ▪ Land configuration ▪ High value horticulture crop cultivation ▪ Short duration vegetable crops ▪ Milch animal management ▪ Calf rearing ▪ Fruits & vegetable preservation ▪ Practices of inter crops in sugarcane
3.	Songadh	Ghodchit	Ghodchit	Paddy, Pigeon pea, Soybean,	▪ Low awareness about Agriculture and Animal	▪ Organic farming ▪ Introduction of soybean crop to

Sr.No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
				Sorghum, Sugarcane, Gram, Groundnut	Husbandry ▪ Fear in adoption of new technology ▪ Lack of guidance about new agricultural technology ▪ Poor animal management ▪ Equipments (Oil-engine) for irrigation is very less ▪ Poor food grain storage practices ▪ Lack of awareness about Health & Nutrition	replace drilled paddy ▪ Dry land horticulture ▪ Advanced irrigation methods ▪ Vermi – composting ▪ Balanced diet for animal ▪ Care of milch animal ▪ Kitchen gardening ▪ Replacing the paddy with vegetable in well drained soil ▪ Increase area under vegetable ▪ Food grain storage ▪ Health & Nutrition for pregnant & lactating mother & children ▪ Increase area under drip irrigation
4.	Songadh	Nishana (Amji)	Nishana (Amji)	Paddy, Pigeon pea, Sorghum, Groundnut, Watermelon and Brinjal	▪ Low irrigation facility ▪ Erratic heavy rainfall ▪ Majority of area has light soil with undulated land ▪ Low technological level among farmers ▪ Poor economic status ▪ Poor food grain storage ▪ Lack of awareness about health & nutrition	▪ Increase area under drip irrigation ▪ Low-cost green house ▪ Storage of food grains ▪ High-value horticultural crop ▪ Increase area under pulses and oil seed crops in un-irrigated area ▪ Crop production technology ▪ Health and nutrition for vulnerable groups ▪ Kitchen gardening ▪ Income generation activities

Sr.No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
5.	Uchchhal	Bhadbhunja	Bhadbhunja	Paddy, Gram, Pigeon pea, Sorghum, Vegetable, Udad, Maize	▪ Lack of knowledge about scientific package of practices of different crops ▪ Lack of awareness about insects and pests & diseases ▪ Lack of knowledge about soil analysis ▪ Lack of knowledge about balanced nutritional diet ▪ Lack of knowledge about fruits & vegetable preservation ▪ Inadequate intake of fruits & vegetables ▪ Disease management	▪ Introduction of soybean crop to replace drilled paddy ▪ Crop production technology ▪ Awareness about insects, pests and diseases ▪ Short duration vegetable cultivation if Arid horticulture development ▪ Gobar gas plant ▪ Vermi composting ▪ Compost making ▪ Kitchen gardening ▪ Bucket drip ▪ Increase area under oil seed and pulse crops ▪ Fruit & vegetable preservation ▪ Balanced diet from locally available food material ▪ Give demonstration of silage and urea treatment ▪ Training on vaccination and de-worming
6.	Uchchhal	Selud	Selud	Paddy, Pigeon pea, Sorghum, Gram, Maize, Groundnut	▪ No facilities for irrigation after October ▪ Soil of this area is very light ▪ Uneven distribution of rainfall ▪ Socio-economic condition is very poor ▪ No knowledge of scientific agricultural production	▪ Increase area under Soybean ▪ Low cost production technology and drip irrigation ▪ Income generation activities and kitchen gardening ▪ Livestock management ▪ Disease management

Sr.No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					technology and animal husbandry ▪ Youth club is not active ▪ Poor livestock management ▪ Lack in dietary pattern of pregnant & nursing mother and children ▪ Lack of awareness about health & nutrition ▪ High mortality in calf	▪ Initiating youth club activities ▪ Women and child care ▪ Low cost green house ▪ Calf rearing
7.	Valod	Kanjod	Kanjod	Paddy, Sugarcane, Groundnut, Okra	▪ Low production in field crops ▪ Lack of knowledge about scientific production technology ▪ High doses of insecticides ▪ Youth club is not active ▪ Poor facilities of rural bank ▪ Low productivity of okra ▪ Lack of knowledge about off season cultivation of vegetable.	▪ Crop production technology ▪ Increase area under vegetable crops ▪ Increase area under oil seed crops ▪ Drip irrigation ▪ Initiating youth club activities ▪ Value addition ▪ INM in vegetable ▪ Off season cultivation
8.	Valod	Degama	Degama	Sugarcane, Paddy, Groundnut, Vegetable	▪ Lack of technological knowledge about crop production technology ▪ Lack of knowledge about fruits & vegetable preservation ▪ Level of adoption in field crops & vegetables are very low ▪ SHGs is not active ▪ No cooperative society	▪ Crop production technology ▪ Value addition ▪ Income generating activities ▪ Activation of SHGs ▪ IPM in field crops & vegetables ▪ INM in vegetables & sugarcane

Sr.No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					▪ Lack of knowledge about insect & pest ▪ Lack of knowledge about Sugarcane & vegetable	
9.	Nizar	Sarvala	Sarvala	Cotton, Gram, Wheat, Sorghum, Soyabean, Papaya, Banana	▪ High cost of cultivation ▪ Information centre is far away from the village ▪ Poor marketing ▪ Lack of technological knowledge about crop production technology ▪ Lack of knowledge regarding IPM ▪ Highly dependent on Private Traders for agricultural information ▪ Weed management in black soil is a big problem ▪ High production cost due-to lift irrigation	▪ Crop production technology ▪ IPM in cotton ▪ Increase area under papaya crop ▪ Popularize maize crop ▪ Introduction of chemical weed control ▪ Value addition in soyabean and papaya
10.	Nizar	Mubarakpur	Mubarakpur	Cotton, Papaya, Banana, Wheat, Gram, Soybean, Castor, Sorghum	▪ High cost of cultivation in field crops ▪ Poor marketing ▪ Lack of availability of inputs ▪ Poor grain storage practices ▪ Lack of knowledge about insect & pest in Cotton ▪ Poor Livestock management	▪ Crop production technology ▪ IPM in Cotton ▪ Value addition ▪ Marketing management ▪ Food grain storage ▪ Livestock management

ANNUAL ACTION PLAN –2009-10

Quarter wise summary of Annual Action plan KVK, Vyara for the year-2009-10

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	1	1	1	2	2	2	1	-	2	1	1	1	-	-	-	1	2	1	1	1	3	3	2	3	**16**
2	Horticulture	2	2	2	2	-	-	-	-	2	1	2	-	1	-	-	-	2	1	1	2	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	1	-	1	1	-	1	-	-	-	1	1	-	1	-	-	-	1	1	1	-	-	1	1	2	**07**
5	Home Science	-	-	-	-	3	3	4	3	-	-	1	-	1	-	-	-	1	1	2	1	2	2	4	2	**15**
6	Animal Science	1	1	1	1	2	2	1	-	-	-	1	2	-	-	-	-	1	1	1	1	2	2	2	2	**12**
7	Sponsored	1	1	-	-	-	1	1	-	-	-	-	1	-	-	-	-	1	1	1	1	-	1	-	-	**05**
	Total	**8**	**8**	**7**	**7**	**8**	**9**	**6**	**4**	**4**	**4**	**6**	**6**	**3**	**1**	**-**	**1**	**9**	**8**	**8**	**8**	**11**	**14**	**12**	**13**	**83**

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-2010	Groundnut	5	10
			Soybean	10	20
		Summer-2010	Groundnut	15	30
		Kharif-2010	Castor	5	10
2	FLD on Pulses	Kharif-2010	Pigeon pea	5	10
		Rabi-2010	Gram	5	10
3	Cereal crops	Kharif-2010	Paddy-Irri	10	20
		Kharif-2010	Paddy-Rainfed	5	10
		Kharif-2010	Maize	15	30
4	Vegetable crops	Rabi-2009-10	Brinjal	2	8
		Rabi-2009-10	Okra	2	8
		Late kharif-2010	Cauliflower	3	10
5	Plant Protection	Rabi-2009-10	Okra	3	10
			Brinjal	3	10
			Cucurbits	2	5
			Gram	5	10
		Summer-10	Mango	5	10
		Kharif-2010	Cotton	50	50
		Kharif -2010	Paddy	5	10
6	Home Science	Rabi-2010	Introduction of improved sickle	20	20
		Summer-2010	Feeding of POSHAK to malnourished rural tribal children	10	10
		Kharif-2010	Kitchen gardening	50	50
7	Animal Science	Rabi-2010	Mineral mixture	50	50
			UMMB	50	50
			Urea treatment	20	20
			Silage	10	10
			Total	**365**	**491**

3. On Farm Testing

(i) Land configuration in pigeon pea

(ii) Varietal performance of groundnut variety

(iii) Low milk production of Cow.

(iv) Refinement of sowing time in okra

4. Extension Activities

Sr. No.	Name of Activities	Proposed No.
1.	Field day	8
2.	Farmers day	1
3.	Agril. Exhibition	5
4.	Awareness programmes	3
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.	Day's celebration	3
11.	Diagnostic services	
	(i) Farmers visit to KVK	500
	(ii) Scientist visit to farmers field	120
12.	Lectures to be delivered in other programmes	As per need
13.	Distribution of seed on cost basis	8 tons
14.	Soil & water sample analysis	100
15.	Publication - Calendar-Toran (Slogan)	2
16.	Leaflet/ Folders	4
17.	Poster	2
18.	Booklet	1
19.	Guidance through mail	4
20.	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 -- 1000 no.

- Vegetable Seedling -- 3.00 Lakhs

- Paddy seed production – 2.00 ha.

6. SAC meeting proposed. (Sept.-2010)

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	Scientific production technology of oil seed crops	Nov.-09	2	20	FW
	Integrated weed management in groundnut and soybean	Oct-09	2	20	RY
Horticulture	Use of drip irrigation in watermelon cultivation	Oct-09	2	20	RY
Plant protection	Integrated pest management in vegetables	Oct-09	2	20	PF
Home science	Health & Nutrition for vulnerable groups	Nov.09	2	20	FW
Extension Education	Value addition in farm produce	Nov.o9	2	20	PF
Animal Science	Calf rearing	Dec.-09	2	20	FW
II Quarter					
Crop production	Seed production technology in sugarcane and paddy	Jan-10	2	20	PF
Horticulture	High Value vegetable crops cultivation (Water melon, cauliflower)	Feb-10	2	20	RY
Plant protection	Integrated pests and diseases management in field crops	Feb-10	2	20	RY
Home science	Value addition in fruits & vegetables	Jan-10	2	20	FW
Extension Education	Contract farming	Jan-10	2	20	FW

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
Animal Science	Management of pregnant animal.	March-10	2	20	FW
III Quarter					
Crop production	Importance of land preparation in paddy/sugarcane/cotton based cropping sequence	May-10	2	20	RY
Horticulture	High Value vegetable crops cultivation (Banana, Papaya)	April-10	2	20	PF
Plant protection	Integrated pest management in cotton	April-10	2	20	PF
Home science	Formation and management of Self Help Groups	April-10	2	20	FW
Extension Education	Agricultural development programme of tribal farmer	April-10	2	20	RY
Animal Science	Urea treatment and its importance.	April-10	2	20	PF
IV Quarter					
Crop production	Integrated nutrient and water management in major crops (sugar cane)	Aug-10	2	20	PF
Horticulture	Integrated Nutrient Management in Okra & Brinjal	July-10	2	20	PF
Plant protection	Integrated pests and diseases management in vegetables	July-10	2	20	RY
Home Science	Anemia & its management	Aug-10	2	20	FW
Animal Science	Important infections disease and it’s prevention and control	July-10	2	20	RY

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	Organic farming cultivation of field crops	Oct-09	1	20	FW
	Production technology of gram & wheat cultivation	Nov-09	1	20	PF
	Scientific package & practices of summer paddy cultivation	Dec-09	1	20	RY
Horticulture	Short duration vegetable crop cultivation (Watermelon, cauliflower)	Oct-09	1	20	PF
	Short duration vegetable crop cultivation (Watermelon, cabbage)	Oct-09	1	20	PF
Plant protection	Integrated pest management in okra	Oct-10	1	20	FW
	Integrated management of mango pests	Dec-09	1	20	PF
Home Science	Importance of fruits vegetables in a daily diet	Nov-09	1	20	FW
	Processing & preservation of tomato ketchup and papaya jam	Dec-09	1	20	FW
Animal Science	Silage making and it's importance	Nov. -09	1	20	PF
	Mineral mixture feeding and it's important in health and milk production.	Dec.- 09	1	20	FW
II Quarter					
Crop production	Improvement in summer crop cultivation	Jan-10	1	20	RY
	Importance of organic farming and its input	Feb-10	1	20	FW
Horticulture	Scientific cultivation of vine crop	Jan-10	1	20	PF
	Arid horticulture development	Feb-10	1	20	PF
Plant protection	Management of groundnut pests and diseases	Jan-10	1	20	PF
	Integrated pest management in field crops	Feb-10	1	20	PF
	Integrated pest management in cotton	Mar-10	1	20	PF
Home science	Preparation of low cost nutritious diet for children	Feb-10	1	20	FW

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
	Nutrition deficiency diseases in women & children and its management	Mar-10	1	20	FW
Extension Education	Information of fruits and vegetables market	Jan-10	1	20	RY
Animal Science	Use of urea block in feeding	Jan-10	1	20	FW
	Dairy record keeping	Feb.-10	1	20	PF
III Quarter					
Crop production	Weed management in cotton based cropping system	April-10	1	20	PF
	Green manuring	June-10	1	20	FW
Horticulture	Care & management of mango orchard	April-10	1	20	PF
	Planning & management of kharif vegetable	May-10	1	20	RY
	Soil & water management for kharif vegetable crop cultivation	May-10	1	20	RY
Plant protection	Integrated pest management in paddy	June-10	1	20	PF
Home science	Preparation of masala	May-10	1	20	FW
	Maternal health and child care	June-10	1	20	FW
Extension Education	Incentives for Agriculture Business	April-10	1	20	PF
Animal Science	Deworming and it's benefit	April-10	1	20	FW
	Housing of an animal.	June-10	1	20	RY
IV Quarter					
Crop production	Scientific cultivation of castor & maize	Aug-10	1	20	PF
	Importance of soil & water conservation technology for rain fed cultivation	July-10	1	20	FW
Horticulture	Scientific cultivation of turmeric & ginger crop	Aug-10	1	20	RY
Plant protection	Integrated pest management in vegetables	July-10	1	20	FW
	Integrated pest management in sugarcane	Aug-10	1	20	PF
Home science	Anemia & its management	July-10	1	20	FW
	Balanced diet from locally available food material	Sep-10	1	20	FW

Subject	Title of training	Month	Duration (days)	No. of Parti.	Type of Parti.
Extension Education	WTO and rural farmers	Sep-10	1	20	PF
Animal Science	Vaccination and it's importance.	July-10	1	20	PF
	Role of artificial insemination in breed improvement.	July-10	1	20	RY

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	Aug-10	2	20	VLWs/ sugar factory field staff	Dist. Panchayat, Tapi
Horticulture	High tech horticulture	July-10	2	20	VLWs	Dist. Panchayat, Tapi
Plant protection	Integrated pest management in vegetables	July-10	2	20	VLWs	Dist. Panchayat, Tapi
Home Science	Formation and management of Self Help Groups	April-10	2	20	Anganwadi workers	ICDS
Extension Education	Recent trends in agriculture	Nov-09	2	20	Agri.teacher of Uttarbuniyadi school, Tapi	Dist. Panchayat, Tapi

1.4 Vocational Training Programme

Title of training	Discipline	Month	Duration (days)	No. of parti.	Type of parti
Vegetable nursery raising & seed production of vegetable crop	Horticulture	Oct-09	15	20	RY
Preparation of vermicompost and their use in field crops	Agronomy	Feb'10	8	20	FW
Mushroom cultivation	Plant Protection	Aug-10	30	20	RY
Value addition in fruits & vegetables	Home Science	April-10	7	20	FW
Preparation of Agarbatti and candle	Home Science	May-10	05	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	5	30	- Use old variety & tradition cultivation.	Biofertilizer Performance of improve variety.	Seeds , Bio fertilizer,	Summer (Jan–10)
G'nut	Land configuration	GG-20	Irrigated	15	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-10)
Soybean	Integrated nutrient management	G.S.-2	Rainfed	10	20	-Use of local variety -No use of FYM -Inadequate use of fertilizer.	Balance use of fertilizer, manure & Bio fertilizer.	Seeds Rhizobium & Reco.fertilizer.	Kharif (June-10)
Castor	Introduction of new crop.	GCH-4/6	Rain fed	5	10	Low productive cropping system	To replace low out put crops (Jowar,Mung,Urid)	Seed	Kharif (June-10)
Pulses									
Gram	Land	GG-2	Irrigated	5	10	-Lack of knowledge	- Use of bio-	Seeds,	Rabi-2009-

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Specific technology	Critical inputs	Remarks
	configuration.					about use of bio fertilizer& imbalance use of fertilizer. - Growing in flat bed.	fertilizer - Land configuration.	Bio-fertilizer.	10
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-10)

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.	Jaya	Irrigated	5	10	No green manuring	Green manuring before planting.	Seeds,	Kharif-2010
	Popularize new variety	NAUR-1	Irrigated	5	10	Use of low yielding disease susceptible variety	New variety	Seeds	Kharif 2010
	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 2010
Maize	Popularize new variety	QPM, Baby corn, Signal cross hybrid	Irrigated	15	30	Use of local variety and low quality protein maize.	Popularize newly maize variety	Seeds	Kharif 2010
B. Vegetable Production									

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Proposed technology	Critical inputs	Remarks
Brinjal	Integrated nutrient management.	Surtiravaiya	Irrigated	2	8	-Imbalance use of fertilizer. - No use of organic matter.	- Balance use of fertilizer. - Use of organic matter.	O.M., Chemical Fertilizer	Rabi-2009-10
Okra	Integrated nutrient management	Hybrid	Irrigated	2	8	-Imbalance use of fertilizer. - No use of organic matter.	- Balance use of fertilizer. - Use of organic matter.	O.M., Chemical Fertilizer	Rabi-2009-10
Cauliflower	Introduction of new high value crop	Pusa early	Irrigated	3	10	- Cultivation of low out put crops	- To replace low out put crops (paddy)	Seedling	Late Kharif-2010
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-2009-10
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-2009-10
Cucurbits	To manage fruit fly	Improved	Irrigated	2	5	Un –know about P.P. measures	Mass trapping	Pheromone trap	Rabi-2009-10
Chick pea	Management of wilt	GG-2	Irrigated	5	10	Unable to manage wilt	Application of *Trichoderma*	*Trichoderma*	Rabi 2009-10
Mango	Control fruit fly	--	Irrigated	5	10	Un –know about fruit fly control.	To popularize Methyl eugenol trap	Methyl eugenol trap	Summer-2010
Cotton	IPM	--	Irrigated	50	50	Un –know about P.P. measures	Integrated pest management.	Pheromone trap, Bio pesticide	Kharif-2010
Paddy	IPM	Improved	Irrigated	5	10	Unknown about management	IPM module by N.A.U.	Chemicals/ seed treatments	Kharif-2010

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Proposed technology	Critical inputs	Remarks
D. Home Science									
Introduction of improved Sickle	- To reduce drudgery of weeding - To increase working efficiency in short period of time - To create awareness among farm women about improved tools/technology	-	Irrigated	-	20	Use of traditional sickle	Use of improved sickle	Improved sickle	Rabi-2010
Feeding of POSHAK to malnourished rural tribal children	To overcome malnutrition in rural tribal children	-	-	-	10	Unknown about balanced diet Use of traditional diet	Protein rich diet with locally available food material	POSHAK (Mixture of cereals & pulses with 3:1 ratio)	Summer-2010
Kitchen gardening	- To create awareness regarding kitchen gardening in encouraging balance nutrition at low cost - To improve health & nutritional status of family	-	Irrigated	-	50	They are growing single one or two vegetables in backyard	Layout of kitchen garden and techniques of sowing & planting	Seed and Seedling	Kharif-2010
E. Animal Science									
Mineral	Important of	-	-	-	50	They not give	-	Mineral	Rabi-

Title of Demon.	Objective	Variety	Farming situation	Area (ha)	No. of farmers	Existing technology	Proposed technology	Critical inputs	Remarks
Mixture	mineral mixture in milk production and animal health					mineral mixture in animal feeling		mixture bay or break (mineral salt brick)	2009-10
UMMB	Introduce farmer for use of UMMB	-	-	-	50	Farmers are not using this type of feeling block	-	UMMB block	Rabi-2009-10
Urea treatment on paddy traw	Increase nutritive value of paddy straw so it helping increase milk production	-	-	-	20	Farmers fed paddy straw without any treatment	-	Plastic, urea molasses	Rabi-2009-10
Silage making	Supply of green feed in milling animal	-	-	-	10	Farmers not know this type of treatment	-	Plastic self molasses	Rabi-2009-10

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

2.4 Demonstration Unit

1	Crop museum
2	Vermicompost
3	Mushroom production
4	Bio control Laboratory
5	Calf rearing unit
6	Drip irrigation
7	Low cost greenhouse
8	Kitchen Garden
9	Nursery Unit
10	Seed Production Unit
11	Farm Forestry

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.

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

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 yields as compared to this older one but farmers are not adopting these new varieties. To sow the performance of newly released varieties, in this region OFT is proposed.

Reasons 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:-

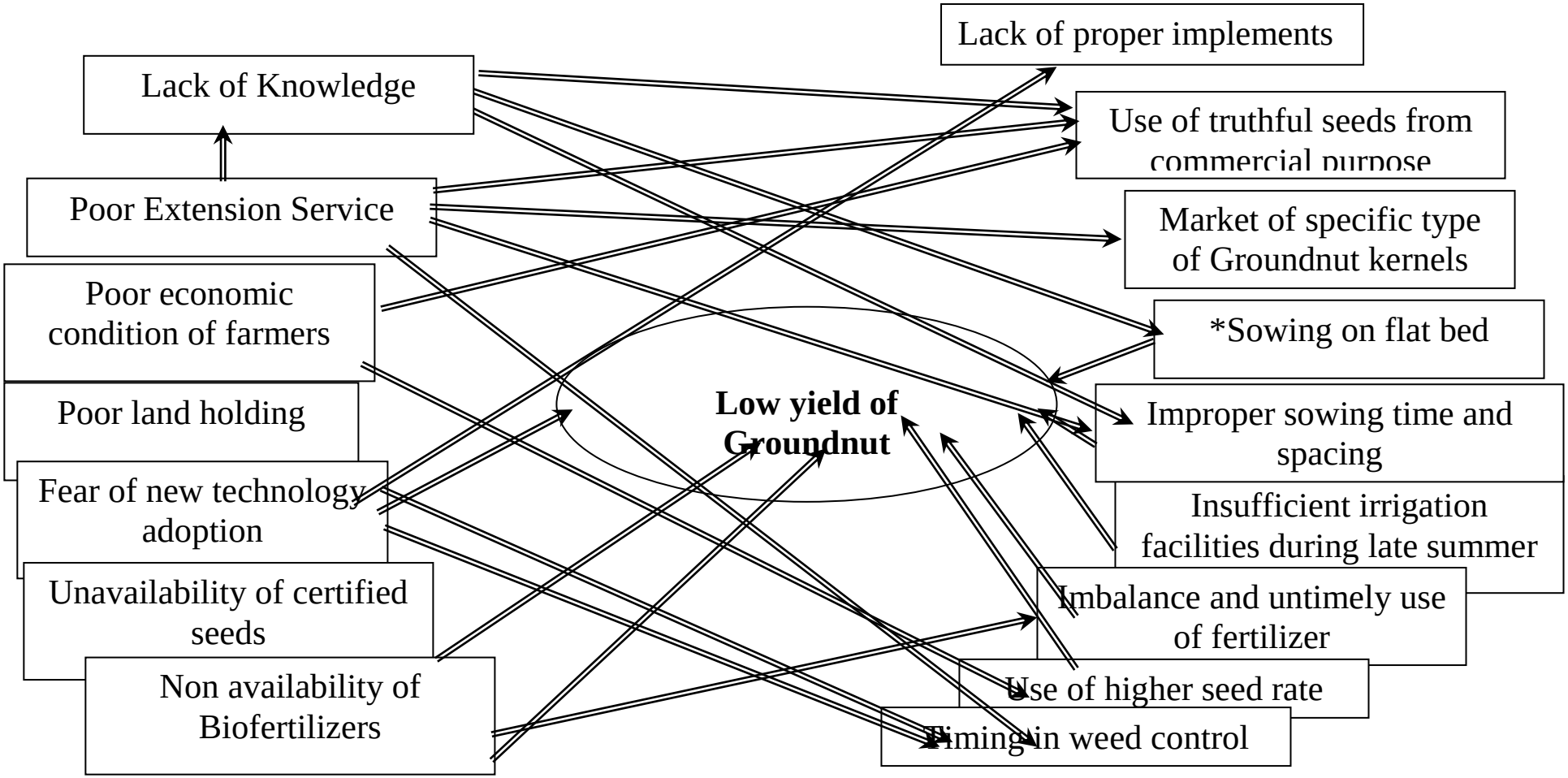
High yielding variety.

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
Non availability of Biofertilizers
Use of higher seed rate
Timing in weed control

3.3 Title: - Low milk production of Cow. (New)

Farmers are giving paddy straw to animal without any treatment. In this area, majority of farmers growing paddy during kharif season. But paddy straw is less digestible and less nutritive, too. To convert the paddy straw in more digestible as well as to reduce the fodder loss this OFT on urea treatment is proposed.

Reasons of low productivity:-

1. Lack of knowledge about urea treatment.
2. Poor management.
3. Poor knowledge of health & hygiene.
4. Lack of knowledge about feeding management.

Intervention point:-

1. Urea treated paddy straw for higher milk production.
2. Effect of mineral mixture on milk production and health.

Technology intervention:-

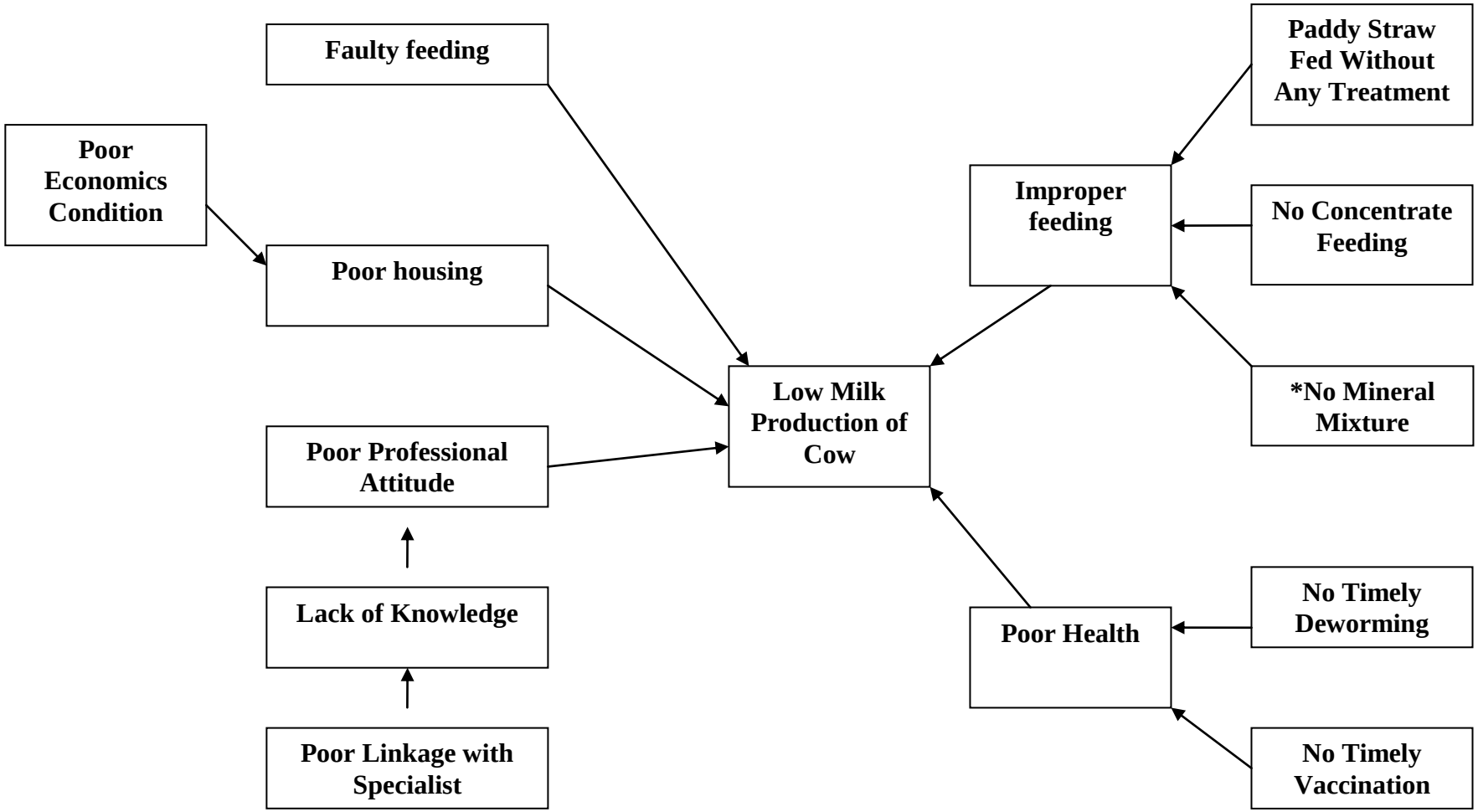
Effect of Balanced feeding on milk production.

Treatment

1. Farmers practice (Paddy straw without urea treatment)
2. Paddy straw with urea treatment
3. Paddy straw with urea treatment + Mineral mixture

(No. of Demo.)-5 **No. of Farmers**: -5

Critical input to be supplied: . (Urea, Mineral Mixtures)



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 in summer. 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: Hybrid

Treatment

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

Plot size: - 0.20 ha **NO. Of farmers**: - 6

Critical input to be supplied: - Chemical fertilizer

4. EXTENSION ACTIVITIES

Sr. No.	Name of Activities	Quarter				Total
		I	II	III	IV	
1.	Field day	2	2	2	2	8
2.	Farmers day	1	-	-	-	1
3.	Agril exhibitions	1	2	2	-	5
4.	Awareness Programmes	1	1	1	-	3
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.	Day's celebration	2	1	-	-	3
11.	Diagnostic service					
	(i) Farmers visit to KVK	125	125	125	125	500
	(ii) Scientist visit to farmers field	30	30	30	30	120
12.	Lectures to be delivered in other programmes	-As per need-				
13.	Distribution of seed on cost basis	-	-	8 ton	-	8 ton
14.	Soil & water sample analysis	25	25	25	25	100
15.	Publication - Calendar- Toran (slogan)	-	1	1	-	2
16.	Leaflet/Folders	1	1	1	1	4
17.	Poster	1	-	1	-	2
18.	Booklet	1	-	-	-	1
19.	Guidance through mail	1	1	1	1	4
20.	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 -- 1000 no.
- Vegetable seedling - 3 lakhs
- Paddy seed production -- 2 ha.

6. SAC meeting proposed. (Sep-2010)

Annexure - I

Proceeding of Sixth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, N.A.U., Vyara held on 06/07/2009 at 10:00 am at Vyara

❋ **List of the members remained present in the meeting :**

Sr. No	Name	Members/ Invitees	Designation
1	Dr. H. C. Pathak	Chairman	I/c. Vice Chancellor and Director of Research, Navsari Agricultural University, Navsari
2	Dr. M. K. Mandape	Member	Zonal Project Director, Zone-VI, I.C.A.R., Jodhpur, Rajasthan
3	Dr. R. B. Patel	Member	Director of Extension Education, Navsari Agricultural University, Navsari
4	Shri D. Z. Patel	Member	Joint Director of Agriculture and Deputy Director of Agril. and Horticulture, Lal Bunglow, Athwalines, Surat
5	Shri S. M. Modi	Member	Project Administrator, Integrated Tribal Development Project, Songadh Dist. Tapi.
6	Shri R. K. Gavli	Member	Representative of District Agriculture officer, District Panchayat, Vyara,Tapi.
7	Shri P. R. Chuadhari	Member	Deputy Director of Agriculture (Training), FTC, Vyara and A.D.A. (TV), Surat
8	Shri K. K. Bhatt	Member	Representative of Director, District Rural Development Agency, Ramkabir Society, Vyara, Dist. Tapi.
9	Shri K. B. Tandel	Member	Assistant Director (Fisheries), Near CRPF Campus, Ukai, Dist. Tapi.
10	Shri D. G. Gamit	Member	Divisional Forest Officer, Vyara, Dist. Tapi.
11	Shri I. L. Mahyavanshi	Member	Range Forest Officer, Vyara range, Dist. Tapi.
12	Shri K. D. Verma	Member	Representative of Lead Bank Officer, Regional Office, B.O.B., Dutch Garden, Surat.
13	Shri H. N. Mevada	Member	General Manager, District Industrial Center, Dist. Tapi
14	Dr. H. B. Kharecha	Member	Lokseva Trust,At. Moti Bhamti, Ta. Vansada, Dist. Navsari
15	Shri Dilipbhai Gamit	Member	Farmer Representative, At & Po.Gadat, Ta. Vyara, Dist.Tapi
16	Smt. Premlataben A. Gavit	Member	Farm Women Representative, At & Po. Bhitkhurd-1,

			Ta.Uchhal, Dist. Tapi
17	Smt. Induben R. Gamit	Member	Farm Women Representative, At.Po. Kapura, Ta.Vyara, Dist. Tapi
18	Dr. H. D. Mehta	Member	Associate Research Scientist Regional Rice Research Station, N.A.U., Vyara, Dist. Tapi
19	Dr. N. M. Chauhan	Member	Programme Coordinator Krishi Vigyan Kendra, N.A.U.,Vyara, Dist. Tapi
20	Shri R. S. Bhamre	Invitees	Dist. Deputy Manager, NABARD, Surat
21	Shr N. G. Gamit	Invitees	Seed Officer, G.S.S.C., Vyara
22	Shri T. M. Gamit	Invitees	Assi. Director of Agri.(Ext.), Songadh, Dist. Tapi
23	Shri Bhupendra R. Desai	Invitees	Progressive Farmer, Valod, Dist. Tapi
24	Shri B. J. Saraliya	Invitees	GNFC Ltd., Vyara
25	Shri R. M. Patel	Invitees	GSFC Ltd., Vyara
26	Dr. A. P. Patel	Invitees	I/c. Programme Coordinator, Krishi Vigyan Kendra, Navsari
27	Shri I. R. Rathva	Invitees	Extension Officer of Agriculture, Vyara
28	Father Fransis Desoza	Invitees	Mandal, Po. Kikakani, Ta. Songadh
29	Shri Rajubhai Jantraniya	Invitees	Progressive Farmer, Vyara
30	Shri B. G. Aahir	Invitees	Khedut Agro, Buhari,Ta. Valod
31	Shri D. G. Gamit	Invitees	Assistant Conservator of Forest, Vyara

❋ **List of members who could not remain present in meeting :**

Sr. No.	Designation	Members/ Invitees
1	Deputy Director (Animal Husbandry), District Panchayat, Vyara, Tapi.	Member
2	Executive Engineer, Ukai Kakrapar Irrigation Project, Vyara, Dist.Tapi.	Member
3	Social Welfare Officer, District Panchayat, Vyara, Dist. Tapi	Member
4	Office Incharge, All India Radio, Bhatar Road, Surat.	Member
5	Information Officer, Information and Broadcasting Dept., Chawk Bazar, Surat.	Member
6	Assistant Director, GLDC, Parsiwad, Vyara, Dist. Tapi	Member
7	Principal, Gandhi Vidyapith, Vedachhi, Valod, Dist. Tapi	Member

The Sixth Scientific Advisory Committee meeting of Krishi Vigyan Kendra, NAU, Vyara was organized to review the progress made by KVK during October-2006 to May-2009 and to discuss the action plan for 2009-10. The SAC meeting was held in training hall of KVK, Vyara on 6th July, 2009. The meeting was inaugurated by Dr. H.C. Pathak, Honorable Vice Chancellor, N.A.U., Navsari. Dr. N.M. Chauhan, Programme Coordinator, KVK, Vyara welcomed dignitaries, committee members, farmers and invitees. Dr. M.K. Mandape, Zonal Project Director, Zone-VI, Jodhpur in his speech emphasised the importance of OFT, technical feedback from farmers, value addition and women

empowerment. Dr. R.B. Patel, Director Of Extension Education, NAU, Navsari explained the satellite village concept adopted in KVKs of Navsari Agricultural University. Honorable Vice- Chancellor, Dr. H. C. Pathak in his concluding remarks congratulated Programme Coordinator and his team of scientists and suggested to publish FAQs data base for the major crops of the area. The thorough discussion made during the meet was really unique culminating into a number of remarkable suggestions and feedback which can be utilized for future betterment of the KVK. Vote of thanks was presented by Dr. C. K. Timbadia, Subject Matter Specialist (Extension Education) KVK, Vyara

6.1	Approval of minutes of fifth Scientific Advisory Committee. The action taken report on the minutes of Fifth Scientific Advisory Committee meeting of KVK, Vyara held on 14th October, 2006 was presented by programme Coordinator and approved by the house.
6.2	Progress made by KVK during October 2006 to May 2009. Programme Coordinator, KVK, Vyara presented the report on progress made by KVK, Vyara for the period of October, 2006 to May 2009. Following suggestions were made by the house.

6.2.1	The number of On Farm Testing should be increased.
6.2.2	Impact assessment of mandatory activities of KVK should be made.
6.2.3	Prepare and publish FAQs data base for different crops and value added products.

6.3	Action plan for the period of July 2009 to September 2010. The Action Plan for the period of July 2009 to September 2010 was presented by Programme Coordinator, KVK, Vyara which was thoroughly discussed and approved with following suggestions.

6.3.1	Prepare an action plan to popularize the organic farming in the area and organize demonstration on organic farming incorporating all elements of NCF.
6.3.2	The number of Vocational trainings pertaining to income generation by farm women should be increased.
6.3.3	Efforts should be made to make a seed village by KVK, Vyara.
6.3.4	Arrange exposure tour for progressive farmers.
6.3.5	The KVK Scientists should be given more exposures for HRD.
6.3.6	Efforts should be made to enhance value added products from turmeric and ginger.
6.3.7	Find out specific thrust areas and resource inventory of newly formed Tapi district and incorporate all of the elements in Action Plan in the form of all four mandates of the KVK.

Annexure – II

District Profile

Include the details of

1. General census

Information regarding District villages and Population

Taluka	No. of villages	Population (2001)				
		Male	Female	Total	SC	ST
Vyara	149	125082	124724	249810	2629	211611
Valod	40	441333	42994	87127	953	64112
Nizar	87	52098	53287	105385	1878	83843
Uchchal	68	36125	36827	73042	193	71084
Songadh	177	101335	101335	204270	2732	170464
Total	**521**	**358863**	**359167**	**719634**	**8385**	**601114**

2. Agricultural and allied census

-Classification of Land

Taluka	Forest	Uncultivated	Total cultivated	Irrigated Area	Unirrigated	Fallow land	Pasture	Total geographical area	Cultivated land (%)
Vyara	18495	2210	54225	22858 (42.15)	31367	220	1575	81260	66.73
Valod	0	239	17978	16383 (91.13)	1595	282	421	20228	88.88
Nizar	332	16151	21561	10181 (47.22)	11380	61	1587	40079	53.8
Uchchal	23447	23325	8468	1937 (22.87)	6531	33	356	66500	12.73
Songadh	31751	3726	61891	12037 (19.45)	49854	29	4969	135404	45.71
Total	**74025**	**45651**	**164123**	**63396 (38.63)**	**112974**	**625**	**8908**	**343471**	**47.78**

Area under fruit crops, vegetables and spices & condiments :

Crop	Area (Ha.)
Fruit crops	1378
Vegetables	1785
Spices & condiments	2080

3. Agro climatic zone **:** As per Table no. 2.2.1

4. Agro eco system **:** As per Table no. 2.2.2

5. **Major and micro-farming systems** **:** As per Table no. 2.1

6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc. :

Rice – Gram, Rice – Groundnut, Rice – Sugarcane, Rice – Okra, Rice – Brinjal, Rice + Pigeon pea + Sorghum

Cotton – Wheat, Soybean – Gram, Soybean – Wheat, Soybean – Okra, Sugarcane – Green Gram

7. Major agriculture and allied enterprises :

Sugar factory, Rice based industry, Groundnut based factory, Dairy industries, Cold storage

Annexure – III

Agro-ecosystem analysis of the focus / target area

1. **Names of villages, focus area, target area etc. :** As per Table no. 2.6
2. **Survey methods used (survey by questionnaire, PRA, RRA, etc.) :** PRA
3. **Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.**

   Various techniques used are given below:

   Social Map: It seeks to explore the spatial dimensions of people's realities. The focus here is on the depiction of habitation pattern and the nature of housing, social infrastructure: roads, drainage system, schools, drinking water facilities etc. It develops a comprehensive understanding of the physical and social aspects of village life. It is made by local people and not by experts. It is not drawn to scale. It depicts what the local people believe to be relevant and important for them. Thus it reflects their perception of the social dimensions of their reality with a high degree of authenticity.

Resource Map: It focuses on the natural resources in the locality and depicts land, hills, rivers, fields, vegetation etc. It is not drawn to scale and not done by the experts but by the local people. The resource map drawn by the local people is considered to be accurate and detailed because the local people have in-depth knowledge about their surroundings.

Mobility Map: It explore the movement pattern of an individual, a group or a community. The focus is on where people go and for what. It reflects the people's perception of movement patterns and reasons thereof.

Time line : It is used to explore the temporal dimensions from a historical perspective. It captures the chronology of events as recalled by local people. It is drawn as a sequential aggregate of past events. The important points is that it is not the history as such but the events of past as perceived and recalled by the local people themselves.

Venn diagram: It is used to study institutional relationship and is sometimes also referred to as institutional diagram. It is however popularly known as "Chapati diagram" as it uses circles of various sizes to represent institutions or individuals. The bigger the circle, the more important is the institute/individual as perceived by the local people.

Pair-wise Ranking Method: It helps in arriving at people's priorities and preferences. In this method, two items, attributes, factors etc, are compared at a time. This process of comparing of two at a time is carried on till each item has been compared with the other.

The frequency of how many times each of the items have been preferred is ascertained. This frequency gives an idea of preferences of the people.

4. **Analysis and conclusions : --**
5. **List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem :** As per Table no. 2.6
6. **Matrix ranking of problems**

   Matrix Ranking : It makes the comparision of various of various items on the basis of different criteria. It helps in arriving at a comparative understanding of the items, based on certain characteristics or criteria and thereby making an informed choice.
7. **List of location specific thrust areas :** As per Table no. 2.7
8. **List of location specific technology needs for OFT and FLD :** As per Table no. 3.B
9. **Matrix ranking of technologies : --**
10. **List of location specific training needs :** As per Annexure - IV

Annexure - IV

Details of Training programmes :

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
10/10/08	FW	Kitchen gardening	Home Science	Kitchen gardening	1	On	-	-	-	-	53	53	-	53	53
21/10/08	FW	Anemia & its control	Home Science	Design and development of low/minimum cost diet	1	Off	-	-	-	-	19	19	-	19	19
23/10/08 to 24/10/08	RY	Cultivation of high value vegetable crops	Horticulture	Protected cultivation of vege.crops	2	On	-	-	-	25	-	25	25	-	25
23/10/08	PF	Scientific cultivation of Gram	Agronomy	Cropping system	1	Off	-	-	-	21	-	21	21	-	21
24/10/08	RY	Land preparation & planting tech. of Rabi/Summer crops	Agronomy	Planting material production	1	On	-	-	-	41	-	41	41	-	41
26/10/08	RY	Okra cultivation	Horticulture	Protected cultivation of vege.crops	1	On	-	-	-	8	-	8	8	-	8
08/11/08	PF	Recent Advances in Sugarcane cultivation	Agronomy	IPM	1	On	-	-	-	19	-	19	19	-	19
15/10/08	RY	National Horticulture Mission (Low cost tech.)	Multi disciplinary	NHM	1	On	44	-	44	-	-	-	44	-	44
05/11/08	FW	Okra	Extension Education	Production of low volume and high value crops	1	On	-	-	-	21	49	70	21	49	70
10/11/08	RY	Drip irrigation	Extension Education	Protected cultivation of vege.crops	1	On	-	-	-	17	-	17	17	-	17

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
10/11/08 to 03/12/08	RY	Micro irrigation maintenance & repairs	Extension Education (GGRC)	Repair and maintains of farm machinery and implements	24	Off	-	-	-	17	-	17	17	-	17
24/11/08	FW	Preparation of Masalas	Home Science	Income generation activities for women empowerment	1	Off	-	20	20	-	-	-	-	20	20
25/11/08	FW	Preparation of Masalas	Home Science	Income generation activities for women empowerment	1	Off	-	-	-	-	26	26	-	26	26
25/11/08 to 26/11/08	FW	Integrated Pest Management in vegetables	Plant Protection	IPM	2	On	-	-	-	-	39	39	-	39	39
27/11/08	PF	Integrated Pest Management in vegetables	Plant Protection	IPM	1	Off	-	-	-	19	01	20	19	01	20
08/12/08	FW	Cultivation practices of Rabi vegetables (Brinjal, Tomato, Chillies)	Horticulture	Production of low volume and high value crops	1	On	-	-	-	05	20	25	05	20	25
10/12/08	PF	INM in Rabi vegetables (Brinjal, Tomato, Okra, Chillies)	Horticulture	Production of low volume and high value crops	1	On	-	-	-	33	-	33	33	-	33
16/12/08 to 17/12/08	FW	Value addition in fruits & vegetables	Home Science	Value addition	2	On	-	-	-	-	25	25	-	25	25
22/12/08	PF	Weed management in	Agronomy	Weed managment	1	Off	-	-	-	27	-	27	27	-	27

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		Rabi crops													
26/12/08	PF	IPM in vegetables	Plant Protection	IPM	1	Off	2	-	2	17	01	18	19	01	20
29/12/08	PF	Cultivation practices of short duration rabi vege.	Horticulture	Production of low volume and high value crops	1	Off	-	-	-	23	-	23	23	-	23
30/12/08	FW	Preparation of Tomato ketchup	Home Science	Value addition	1	Off	-	25	25	-	-	-	-	25	25
01/01/09	RY	Low cost green house cultivation and maintenance	Horticulture	Protected cultivation of vege.crops	1	On	-	-	-	16	-	16	16	-	16
05/01/09	PF	Management of Mealy bugs in cotton (RKVY)	Plant Protection	IPM	1	Off	32	-	32	-	-	-	32	-	32
05/01/09	PF	Management of Mealy bugs in cotton (RKVY)	Plant Protection	IPM	1	Off	15	-	15	-	-	-	15	-	15
06/01/09	FW	Improvement in summer groundnut cultivation	Agronomy	Integrated crop managment	1	Off	-	-	-	-	22	22	-	22	22
07/01/09	RY	Scientific cultivation of rabi crops	Agronomy	Integrated farming	1	On	-	-	-	19	-	19	19	-	19
09/01/09	FW	Balanced diet from locally available food material	Home Science	Design and development of low/minimum cost diet	1	On	-	-	--	-	45	45	-	45	45
29/12/09	VLWS	How to conduct demostration	Ext.Edu.	FLD	1	On	4	-	4	10	-	10	14	-	14
22/12/09	PF	Marketing of farm produce	Ext.Edu.	Marketing	1	Off	-	-	-	50	-	50	50	-	50
20/1/09	PF	Integrated management of	Plant Protection	IPM	1/2	Off	-	-	-	32	-	32	32	-	32

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		mealy bugs													
20/01/09	PF	Integrated management of mealy bugs	Plant Protection	IPM	1/2	Off	-	-	-	29	-	29	29	-	29
21/01/09	PF	Integrated management of mealy bugs	Plant Protection	IPM	1/2	Off	13	-	13	-	-	-	13	-	13
21/01/09	PF	Integrated management of mealy bugs	Plant Protection	IPM	1/2	Off	36	-	36	-	-	-	36	-	36
22/01/09	PF	Integrated management of mealy bugs	Plant Protection	IPM	1/2	Off	-	-	-	42	-	42	42	-	42
22/01/09	PF	Integrated management of mealy bugs	Plant Protection	IPM	1/2	Off	-	-	-	36	-	36	36	-	36
22/01/09	PF	Cultivation practices of high value fruit crop	Horticulture	Cultivation Of Fruits	1	Off	22	-	22	-	-	-	22	-	22
23/01/09 24/01/09	VLWS	Oilseed production technology	Agronomy	Productivity enhancement in field crops	2	On	19	-	19	5	-	5	24	-	24
27/01/09	RY	Integrated management in field crops	Plant Protection	IPM	1	Off	-	-	-	42	1	43	42	1	43
10/02/09	FW	Nutrition for mother and child	Home Science	Design and development of low/minimum cost diet	1	On	-	-	-	-	20	20	-	20	20
10/02/09 11/02/09	FW	Green house technology	Ext.Edu.	Protected cultivation (green house, shadnet etc)	2	Off	-	-	-	-	50	50	-	50	50
20/02/09	PF	INM in vegetable crops	Horticulture	Production of low volume and	1	On	-	-	-	4	22	26	4	22	26

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
				high value crops											
26/02/09	PF	Artificial Insemination & its benefit	Vety.Science	Dairy mamagement	1	On	-	-	-	15	-	15	15	-	15
17/02/09	FW	Importance of Front Line Demonstration	Ext.Edu.	FLD	1	Off	-	-	-	24	74	98	24	74	98
19/02/09	FW	Scientific cultivation of groundnut	Ext.Edu.	Cropping system	1	Off	-	-	-	-	50	50	-	50	50
22/02/09	FW	Scientific cultivation of groundnut	Ext.Edu.	Cropping system	1	Off	-	-	-	12	32	44	12	32	44
26/02/09	FW	Scientific cultivation of Okra	Ext.Edu.	Production of low volume and high value crops	1	Off	-	-	-	13	50	63	13	50	63
2-6/03/09	FW	Scientific cultivation of vegetables	Ext.Edu.	Production of low volume and high value crops	5	Off	-	-	-	-	28	28	-	28	28
02/03/09	FW	Scientific cultivation of Okra	Ext.Edu.	Production of low volume and high value crops	1	Off	-	-	-	-	32	32	-	32	32
03/03/09	FW	Scientific cultivation of Okra	Ext.Edu.	Production of low volume and high value crops	1	Off	-	-	-	-	26	26	-	26	26
05/03/09	FW	Scientific cultivation of Okra	Ext.Edu.	Production of low volume and high value crops	1	Off	-	-	-	26	40	66	26	40	66
06/03/09	FW	Scientific cultivation of Okra	Ext.Edu.	Production of low volume and high value crops	1	Off	-	-	-	-	27	27	-	27	27
09/03/09	FW	Preparation of low cost nutritious diet for children	Home Science	Design and development of low/minimum cost diet	1	Off	-	-	-	-	22	22	-	22	22
13/03/09	FW	Importance of	Agronomy	Production of	1	Off	-	-	-	1	24	25	1	24	25

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		organic farming and its input		organic inputs											
18/03/09	FW	IPM in vegetables	Plant Protection	IPM	1	Off	-	-	-	-	48	48	-	48	48
19/03/09	PF	Management of fruit flies in cucurbeats	Plant Protection	Biocontrole of pests and disease	1	Off	-	-	-	22	-	22	22	-	22
19/03/09	PF	Management of fruit flies in crop	Plant Protection	Biocontrole of pests and disease	1	Off	-	-	-	26	-	26	26	-	26
21/03/09	PF	IPM in cotton	Plant protection	IPM	1	Off	77	-	77	-	-	-	77	-	77
21/03/09	PF	Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	28	-	28	-	-	-	28	-	28
21/03/09	PF	Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	39	-	39	-	-	-	39	-	39
25/03/09	PF	IPM in field crop	Plant Protection	IPM	1	On	-	-	-	43	9	52	43	9	52
30/03/09	FW	Importance of land preparation for important kharif crops	Agronomy	Resource conservation technologies	1	On	-	-	-	-	19	19	-	19	19
08/04/09	FW	Nutritional deficiency diseases and their management	Home Science	Design and development of low/minimum cost diet	1	Off	-	-	-	-	52	52	-	52	52
31/03/09	PF	Animal vaccination & its advantages	Ani.Sci.	Dairy mamagement	1	Off	-	-	-	40	5	45	40	5	45
01/04/09	FW	Daily nutrition requirement in	Ani. Sci.	Feed management	1	Off	-	-	-	1	31	32	1	31	32

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		milking animals													
04/04/09	FW	Scientific calf rearing & its importance	Ani. Sci.	Dairy mamagement	1	Off	-	-	-	-	32	32	-	32	32
13/04/09	PF	IPM in field crops	Plant Protection	IPM	1	Off	21	-	21	-	-	-	21	-	21
17/03/09	PF	Arid horticulture development	Horticulture	Cultivation Of Fruits	1	Off	-	-	-	58	15	73	58	15	73
17/03/09	PF	Planning for kharif vegetables cultivation	Horticulture	Off season vegetables	1	Off	-	-	-	51	3	54	51	3	54
18/03/09	PF	Mango orchad development	Horticulture	Layout and management of orchards	1	Off	-	-	-	43	30	73	43	30	73
19/3/2009	FW	Arid horticulture development	Horticulture	Cultivation Of Fruits	1	Off	-	-	-	4	22	26	4	22	26
28/3/2009	PF	INM in vegetables	Horticulture	Production of low volume and high value crops	1	On	-	-	-	38	7	45	38	7	45
6/4/2009	FW	Scientific cultivation of brinjal & Indian bean	Horticulture	Production of low volume and high value crops	1	On	-	-	-	16	25	41	16	25	41
Jan-09 to Mar-09	RY	Sewing work	Home Science	Tailoring and stitching		Off	-	-	-	-	33	33	-	33	33
22/4/2009	FW	Capacity building of Self Help Groups	Home Science	Formation and management of SHGs	1	On	-	-	-	1	22	23	1	22	23
18/4/2009	EF	Paddy cultivation through SRI	Agronomy	SRI	1	On	38	-	38	-	-	-	38	-	38
20/4/2009	PF	Scientific cultivation of Paddy. Important	Agronomy	Resource conservation technology	1	On	-	-	-	16	2	18	16	2	18

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		points and care and Importance of land preparation in summer													
2/5/2009	FW	Scientific cultivation of paddy & other kharif crops	Agronomy	Cropping system	1	Off	-	-	-	-	70	70	-	70	70
22/3/2009 to 28/3/2009	FW		Ext.Edu.	Production of low volume and high value crops	7	Off	-	-	-	-	40	40	-	40	40
26/3/2009	FW	Training for agricultural equipment	Ext.Edu.	Production of small tools and implements	1	Off	-	-	-	-	49	49	-	49	49
29/3/2009 to 4/4/2009	PF	High tech green house	Ext.Edu.	Protective cultivation (green house, shadnet etc)	7	Off	-	-	-	18	-	18	18	-	18
4/5/2009	FW	Anemia & its management	Home Science	Women and child care	1	On	-	-	-	-	26	26	-	26	26
4/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	44	-	44	-	-	-	44	-	44
4/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	30	-	30	-	-	-	30	-	30
4/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	28	-	28	-	-	-	28	-	28

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
5/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	56	-	56	-	-	-	56	-	56
11/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	40	-	40	-	-	-	40	-	40
11/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	28	-	28	-	-	-	28	-	28
21/4/2009	PF	Filling of compost pit	Agronomy	Production of organic inputs	1	Off	-	-	-	27	18	45	27	18	45
22/4/2009	PF	Filling of compost pit	Agronomy	Production of organic inputs	1	Off	-	-	-	43	22	65	43	22	65
20/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	34	-	34	-	-	-	34	-	34
20/5/2009	PF	IPM in cotton and Integrated management of mealy bugs in cotton	Plant Protection	IPM	1	Off	-	-	-	30	-	30	30	-	30
29/5/2009	PF	Cultivation of vegetable crops in monsoon	Horticulture	Production of low volume and high value crops	1	On	-	-	-	24	12	36	24	12	36
30/5/2009	PF	Planning for vegetable crops and their cultivation in	Horticulture	Off season vegetables	1	On	-	-	-	28	2	30	28	2	30

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		monsoon													
30/5/2009	PF	IPDM in rice	Plant Protection	Integrated disease management	1	On	25	-	25	-	-	-	25	-	25
28/5/2009	FW	Nutritional deficiencies & their management	Home Science	Women and child care	1	On	-	-	-	-	45	45	-	45	45
16/6/2009	FW	Value addition in soyabean and demonstration of different soyabean products	Home Science	Value addition	1	Off	-	-	-	-	40	40	-	40	40
8/6/2009	FW	Mango graft planting techniques, design & management	Horticulture	Plant propagation techniques	1	Off	-	-	-	-	37	37	-	37	37
4/6/2009	PF	-Land preparation and treatment for vegetable crops in monsoon -Profitable management of Animal Husbandary	Horticulture	Off season vegetables	1	On	-	-	-	45	-	45	45	-	45
4/6/2009	PF	Green manuring in paddy	Agronomy	Production of organic inputs	1	On	-	-	-	14	-	14	14	-	14
8/6/2009	PF	SRI technology in paddy	Agronomy	Integrated farming	1	On	-	-	-	12	-	12	12	-	12
9/6/2009	PF	FLD on soyabean	Agronomy	Crop diversification	1	On	-	-	-	15	7	22	15	7	22

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
10/6/2009	PF	FLD/OFT on pegionpea	Agronomy	Crop diversification	1	On	-	-	-	13	8	21	13	8	21
19/6/2009	PF	-Scientific cultivation of cotton -IPM in cotton	Agronomy	Integrated crop management	1	Off	42	-	42	2	-	2	44	-	44
20/6/2009	FW	Preparation of tomato ketchup & potato wafer	Home science	Value addition	1	On	-	-	-	-	31	31	-	31	31
20/6/2009	FW	Calf rearing	Animal Science	Dairy management	1	Off	-	-	-	12	17	29	12	17	29
20/6/2009	FW	Sowing method, planning and lay out for kitchen garden	Horticulture	Kitchen gardening	1	On	-	-	-	-	55	55	-	55	55
20/6/2009	FW	FLD training on sorghum	Agronomy	Cropping systems	1	On	-	-	-	2	20	22	2	20	22
22/6/2009	PF	FLD training on paddy GR-9	Agronomy	Seed production	1	On	-	-	-	7	5	12	7	5	12
10/7/2009	PF	Scientific cultivation of drill paddy	Agronomy	Seed production	1	Off	-	-	-	16	13	29	16	13	29
16/7/2009	PF	IPM in cotton	Plant protection	IPM	1	Off	35	-	35	15	-	15	50	-	50
16/7/2009	PF	Scientific cultivation of paddy	Agronomy	Integrated crop management	1	Off	15	-	15	-	-	-	15	-	15
27/7/2009	PF	-Scientific cultivation of castor -Importance of soil and its analysis	Agronomy	Cropping systems	1	On	-	-	-	43	2	45	43	2	45
28-29/7/2009	EF	Integrated Pest and disease management	Plant protection	IPM	2	On	10	-	10	18	-	18	28	-	28

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
30-31/7/2009	EF	Book keeping system in SHGs	Home Science	Formation and management of SHGs	2	On	-	2	2	-	27	27	-	29	29
31/7/2009	PF	Scientific cultivation in rose	Horticulture	Scientific cultivation of rose	1	Off	-	-	-	54	7	61	54	7	61
3/8/2009	PF	IPM in paddy	Plant protection	Production of low volume and high value crops	1	On	-	-	-	15	-	15	15	-	15
8/8/2009	FW	-Cultivation practices of paddy (drill & T.P.) -Care & management against pest, insect & diseases	Agronomy	Seed production	1	Off	-	-	-	4	17	21	4	17	21
1/9/2009	FW	-Formation & management of SHGs	Home Science	Formation and management of SHGs	1	On	-	-	-	-	45	45	-	45	45
4/9/2009	PF	Planning for rabi vegetable	Horticulture	Off seasons vegetables	1	On	-	-	-	36	20	56	36	20	56
5/9/2009	PF	-Side effects of insecticides & their solutions -How to purchase insecticides	Ext.Edu.	Side effects of insecticides & their solutions -How to purchase insecticides	1	On	-	-	-	63	-	63	63	-	63
22/9/2009	FW	AI and its importance in dairy animals	Animal Science	Dairy management	1	On	-	-	-	-	25	25	-	25	25
23/9/2009	PF	Important point to be considered by farmer in dairy	Animal Science	Dairy management	1	Off	-	-	-	21	38	59	21	38	59

Date	Clientele	Title of the training programme	Discipline	Thematic area	Durat-ion in days	Venue (Off / On Campus)	Number of other participants			Number of SC/ST			Total number of participangs		
							M	F	T	M	F	T	M	F	T
		animal during whole day													
24/9/2009	FW	Scientifically calf rearing	Animal Science	Dairy management	1	Off	-	-	-	1	64	65	1	64	65
25/9/2009	PF	AI and its importance in dairy animals	Animal Science	Dairy management	1	Off	-	-	-	16	4	20	16	4	20
24-25/09/2009	EF	INM	Horticulture	INM	2	on	20	-	20	-	-	-	20	-	20
26/9/2009	PF	Important point to be considered by farmer in dairy animal during whole day	Animal Science	Dairy management	1	Off	-	-	-	19	6	25	19	6	25
26/9/2009	FW	Important point to be considered by farmer in dairy animal during whole day	Animal Science	Dairy management	1	Off	-	-	-	18	3	21	18	3	21

Annexure - V

- **List of Popular Articles**

1.	Shri B.M. Tandel and Shri V.N. Parmar(2008) " GREEN HOUSE MA CAPSICUM MARCHA NI KHETI PADHHATI" Gujarat Mitra, Date-13th October'2008.
2.	Arit N. Soni (2008) "SWA SAHAY JUTHO- GRAM VIKAS NI EK GURU CHAVI" Gujarat Mitra, Date-20th October'2008.
3.	Shri B.M. Tandel (2008) " OIL PAM NI KHETI" Krushi Jivan, October'2008.
4.	Dr. H.M. Viradia and Dr. H.D. Mehta (2008) "OCHHA KHARCHE VADHU AAVAK AAPTO PAK: DIVELA" Krushi Jivan, October'2008.
5.	Dr. J.J. Pastagia (2008) "BHINDANI JIVATO ANE TENU SANKLIT NIYANTRAN" Gujarat Mitra, Date-3rd November'2008.
6.	Dr. J.J. Pastagia (2008) "RINGAN NI JIVATO ANE TENU SANKLIT NIYANTRAN" Gujarat Mitra, Date-10th November'2008.
7.	Arti N. Soni (2008) "KHETI MA KARYA KARTI MAHILAAO MATE POSHAK AAHAAR" Gujarat Mitra, Date- 17th November'2008.
8.	Dr.J.J. Pastagia (2008) " VELAWALA SHAKBHAJI NI JIVATO ANE TENU SANKLIT NIYANTRAN" Gujarat Mitra, Date- 24th November'2008.
9.	Arti N. Soni (2008) "BAALAKONA SUYOGYA UCHHER MATE KETLIK BABATO NO AMAL KARO" Krushi Govidya, November'2008.
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12.	Arti N.Soni (2008) "BHARAT NA GRAMYA SAMAAJ MA STRIONI STHITI" Gujarat Mitra, Date- 1st December'2008.
13.	Dr. J.J. Pastagia (2008) " KOBIJ ANE KOBI FLOWER NI JIVATO ANE TENU SANKLIT NIYANTRAN" Gujarat Mitra, Date- 15th December'2008.
14.	Dr. H.M. Viradia (2008) "GHAUNU UTPADAN VADHARVANI CHAVIO" Gujarat Mitra, Date-22nd December'2008.
15.	Arti N. Soni (2008) "GRAMIN BAALAKO MATE OCHHA KHARCHE POSHANYUKTA VIVIDH VANGIO BANAVO" Gujarat Mitra, Date-29th December'2008.
16.	Arti N. Soni (2008-09) "SWA SAHAAY JUTH : UDYOG SAHSI KTAA SATE SWA ROJGAAR" Techno economic letter. Vol. 156, year' 2008-09 (Total 18 Articles).
17.	Dr. J.J. Pastagia (2009) "AAMBAWADIYA MA PAK SANRAKSHAK ROG NIYANTRAN" Gujarat Mitra, Date- 5th January'2009.
18.	Arti N. Soni (2009) "KHETI KSHETRE MAHILAO" Gujarat Mitra, Date- 12th January'2009.
19.	Dr. H.M. Viradia and Dr. H.D. Mehta (2009) " UNALU DANGAR NI KHETI PADHHATI" Gujarat Mitra, Date- 12th and 19th January'2009.
20.	Shri B.M. Tandel and Shri V.N. Parmar (2009) " GREEN HOUSE MA CAPSICUM MARCHA NI KHETI PADHHATI" Krushi Govidya, January'2009.
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22.	Arti N. Soni (2009) " GRAMIN MAHILAAO GHARE BETHA FAL ANE SHAKBHAJI PARI RAKSHAN VISHE JAANO" Gujarat Mitra, Date- 2nd February'2009.
23.	Dr. H.M. Viradia (2009) "MUL VISTAR NU VATAVARAN ANE PAK UTPADAN" Gujarat Mitra, Date- 9th and 16th February'2009.

24.	Shri B.M. Tandel (2009) " UNAALU RINGAN NI AADHUNIK KHETI PADHHATI APPNAVO" Krushi Govidya, February'2009.
25.	Dr. J.J. Pastagia and Dr. H.D. Mehta (2009) " PHEROMONE TRAPE TECHNOLOGY- KITAK NIYANTRAN NI ANOKHI TECHNOLOGY" Krushi Govidya, February'2009.
26.	Shri B.M. Tandel (2009) "UNNALU RINGAN NI AADHUNIK KHETI PADHHATI" Champion Agro World, February'2009.
27.	Arti N. Soni (2009) "GRAMYA STRIO NU SASHAKTI KAARAN" Champion Agro World, February'2009.
28.	Arti N. Soni (2009) "GRAMYA GARIBO MAATE AASHIRWAD RUP MICROFINANCE" Champion Agro World, February'2009.
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33.	Arti N. Soni (2009) "MAHILAA KUEDUTO NA SASHAKTI KARAN MATE NI VYUH RACHANA" Champion Agro World, March' 2009.
34.	Arti N. Soni (2009) " SWA SAHAY JUTHO- GRAM VIKAS NI GURU CHAAVI" Champion Agro. World March'2009.
35.	Arti N. Soni (2009) " KHETI KSHETRE MAHILAAO" Gram Swaraj, March'2009.
36.	Arti N. Soni (2009) "SOYA FLOUR" Kheti Aadharit Udyogo, A.A.U., Anand, March'2009.
37.	Dr. H.M. Viradia (2009) "UNAALA MA MAGFALI NU DODH THI BE GHANU UTPADAN MELAVO" Divya Bhaskar, Date- 6th April'2009.
38.	Dr. N.M. Chauhan (2009) " AGRI INFORMATICS ANE AGRI POLICLINIC NA KARYAKSHETRO" Gujarat Mitra, Date- 6th April'2009.
39.	Dr. J.J. Pastagia (2009) "TAMETAA MA PAK SANARAKSHAN" Gujarat Mitra, Date-13th April'2009.
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44.	Dr. J.J. Pastagia (2009) "SHAKBHAJI PAAKO RINGAN ANE BHINDAMA ROG NIYANTRAN" Gujarat Mitra, Date- 11th May'2009.
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46.	Shri B.M. Tandel (2009) "PARVAL, TINDOLA ANE KANKODA NI AADHUNIK KHETI PADHHATI APNAAVO" Krushi Govidya, May'2009.
47.	Dr. H.D. Mehta, Dr. H.M. Viradia and Dr. P.M. Misty (2009) " DAKSHIN GUJARAT MA DANGAR NI VAIGYANIK KHETI" Krushi Mela'2009 Smarnika, N.A.U., May'2009.
48.	Dr. H.D. Mehta, Dr. H.M. Viradia and Dr. P.M. Misty (2009) " DANGAR UTPADAN NI 'SRI' PADHHATI (System of Rice Intensification)" Krushi Mela-2009 Smarnika,

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51.	Dr. N.M. Chauhan (2009) " KRUSHI MA MULYAVRUDHHI NO ANIVARYA ABHIGAM" Krushi Mela-2009 Smarnika, N.A.U., May'2009.
52.	Dr. N.M. Chauhan (2009) " TAKAAU / CHIRANJIVI KHETI" Krushi Mela-2009 Smarnika, N.A.U., May'2009.
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54.	Dr. J.J. Pastagia (2009) "PHUL PAAKO MA PAK SANRAKSHAN" Pak Sanrakshan, A.A.U., Anand , May'2009.
55.	Dr. J.M. Patel (2009) " SWACHHA DUDH UTPADAN: DUDH NA UTPADAN MATE GAY/BHENS NI PASNDGI" Gujarat Mitra, Date- 1st June'2009.
56.	Arti N. Soni (2009) " KHETI MA KARYA KARTI MAHILAAO MATE POSHAK AAHAR" Gujarat Mitra, Date- 8th June'2009.
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61.	Shri B.M. Tandel (2009) "PARVAL, TINDOLA ANE KANKODA NI AADHUNIK KHETI PADHHATI APNAVO" Champion Agro World, June'2009.
62.	Dr. J.M. Patel (2009) " SASLA PALAN EK UBHARTO VYAVSAY" Gujarat Samachar, Date- 3rd July' 2009.
63.	Dr. J.M. Patel (2009) " VAIGYANIK PADHHATITHI VACHHARDANO UCHHER" Godarshan Guide, Date-5th July'2009.
64.	Dr. N.M. Chauhan (2009) " JANINIK GUNDHARAMA SUDHARNA LABH KE ABHISHAP? EK VIHANGAAVLOKAN" Gujarat Mitra, Date- 20th and 27th July'2009.
65.	Shri B.M. Tandel (2009) ""OCHHA KHARCHE VADHU NAFO AAPTO PAAK FUDINO" Divya Bhaskar, Date- 27th July'2009.
66.	Dr. J.J. Pastagia (2009) " KAPAAS MA KHETI KHARCH GHATAADVANA UPAYO" Gujarat Mitra, Date- 3rd August'2009.
67.	Dr. N.M. Chauhan (2009) "AADHUNIK KHETI ANE ATYADHUNIK BAHENO" Gujarat Mitra, Date- 24th August'2009.
68.	Dr. J.M. Patel (2009) "PASHUOMA PAROPJIVIOTHI THATA ROGO NI SARVAR TATHA ATKAAVAVANA UPAYO" Gujarat Samachar, Date- 25th August'2009.
69.	Dr. J.M. Patel (2009) "DUDHJANYA ROGONE ATKAVAVAANA UPAYO" Gujarat samachar, Date. 27th August'2009.
70.	Arti N. Soni (2009) " GULAABNA PHULMATHI BANATI VIVIDH BANAVATO: GULABNA PHULOMATHI VIVIDH BANAVATO BANAVI KRUSHI AAVAK VADHARO" Champion Agro World, August '2009.
71.	Dr. J.M. Patel (2009) "MIX FARMING SYSTEM ANE TEMA CHHANNU MAHATVA" Gujarat Samachar Date- 17th September'2009.
72.	Dr. J.M. Patel (2009) "NECESSORY NUTRITION PROVIDE TO MAINTAIN MILK PRODUCTION" Gujarat Samachar, Date- 23rd September'2009.

Annexure - VI

TECHNOLOGY INVENTORY AND ACTIVITY CHART- III

Include

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

Sr. No.	Technology	Crop/enterprise	Year of release or recommendation of technology	Source of technology	Reference/ citation
1	Introduction of new variety	Pigeon pea – Vaishali	2007-08	Pulse Res. Station, NAU, Navsari	-
2	New variety & land configuration	Groundnut – GG-20	1991	NRCG, Junagadh	-
3	New variety & land configuration	Groundnut – GG-6	1996	NRCG, Junagadh	-
4	New variety & land configuration	Gram – GG-2	1994	Pulse Res. Station, NAU, Navsari	-

3. Activity Chart

Crop/ Enterprise	Problem	Cause	Solution	Activity	Reference of technology
Cotton	Low productivity of cotton under rainfed black soil	1. Imbalance use of fertilizer application. 2. Pest and disease occurrence	1. Application of RD of fertilizer. 2. IPM	1. Conduct component FLD to demonstrate on farmers field on RD of fertilizer 2. Training, awareness and FLD programme on IPM of cotton.	Main cotton research station, NAU., Surat

Soybean	Low productivity of soybean	1.Use of imbalance fertilizer 2. No use of Bio fertilizer.	1. An application of RD of fertilizer and biofertilizer	Conducted FLD training and awareness programme	
Ground nut	Low productivity of groundnut	No use of biofertilizer and imbalance use of RD of fertilizer	1. An application of RD of fertilizer and biofertilizer	Conducted FLD training and awareness programme	
Pigeon pea	Low productivity of pigeon pea	Use of local variety and sowing on flate land	1. Introduce new variety of Pigeon pea like Vaishali 2.Land configuration, 3. Use of bio fertilizer and RD of fertilizer	Conducted FLD and OFT on Pigeon pea and training programme	Director of Research and Pulse research station NAU, Navsari
Gram	Low productivity	Use of local variety	1.Introduce new variety 2.use of Bio fertilizer and RD of fertilizer	Conducted FLD and training , awareness programme	Director of Research and Pulse research station NAU, Navsari
Drill Paddy (GR-5,8,9)	Low productivity	Use of local variety	Introduce new variety	Conducted FLD and training programme	Rice research Station, NAU, Vyara
Paddy	Low productivity	They are not sowing of Green manure before TP of planting	Imbalance use of fertilizer and	1.Introduce Green manure and conducted FLD and training programme on Paddy 2. Use of RD of ferilizer 3. Use of improved variety	Director of Research,m Rice Research Station,NAU, Vyara

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

Crop	Name of technology	Recommended by Whom	Reason of selection	Characteristics of variety.
Groundnut (Kharif)	Land configuration	Research Scientist, Oil seeds, Junagadh	Growing G'nut on flat bed There is possibility of water stagnation during heavy rain which affect groundnut plant.& use old variety.	**GG-20** Virginia bunch type, Erect pod bold, thick, oil content 54.9 %, protein 25.1 %.
Pigeon pea (Kharif)	Introduction of new variety	Research Scientist, Pulses Crop, Navsari	Use Local variety which give low yield & susceptible to wilt.	**Vaishali** Seed are white & red, more branches in plant, pod number high, tolerant to wilt, SMD, phytophtera, maturity days 150-160.
Soybean (Kharif)	INM	Research Scientist, Nizer Res. Sta. NAU, Vansda	Farmers grown non productive drilled paddy which is not remunerative. To replace drill paddy to introduce with agronomic practices.	**Guj. Soy.- 2** Yellow, Bold seeded, Suitable to heavy rainfall area.
Gram (Rabi)	Land configuration	Research Scientist, Pulses Crop, Navsari	Use Local variety & growing on flat bed.	**GG-2** Bold size seeds with reddish colure also suitable for dalia. It is god variety for inter culturing with sugarcane.
Paddy (TP)	ICM	Research Sct. NARP, NAU, Navsari	To introduction of new variety for transplant and drill paddy.	**GR-7** (Early maturing-115 day) Medium grain, good cooking quality, Tolerant to grain discoloration ,blight, blast & hoppers, stem borer **GR-12** Medium duration ,fine long slender grain. Tolerant to grain discoloration ,blight, blast & hoppers, stem borer
Drill Paddy	ICM	Research Sct. MRRS,AAU, Navagam	To introduction of new variety for drill paddy	**GR-8,GR-9** Early maturing, course grain, suitable to hilly region, non lodging type.
Brinjal	INM	Vegetable Research Unit, NAU, Navsari	Imbalance use of fertilizer & not using FYM.	--
Okra	INM	Vegetable Research Unit, NAU, Navsari	Imbalance use of fertilizer & not using FYM.	--