# <u>ANNUAL PROGRESS REPORT – 2012-13</u> (01.04.2012 TO 31.03.2013)

### 1. GENERAL INFORMATION ABOUT THE KVK

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

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

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

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

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

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

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

# 1.5. Staff Position (as on 1<sup>st</sup> March 2013)

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	37400-67000 G.P 9000	46400	16/02/2009	Permanent	General
2	Subject Matter Specialist	Mr. S.M.Chauhan	SMS	Plant Protection	15600-39100 G.P. – 6000	21600	10/1/2013	Permanent	General
3	Subject Matter Specialist	Dr. C. D. Pandya	SMS	Extension Education	15600-39100 G.P. – 6000	27060	29/07/2009	Permanent	General
4	Subject Matter Specialist	Dr. M. R.Gami	SMS	Agronomy	15600-39100 G.P 6000	21600	01/03/2013	Permanent	OBC
5	Subject Matter Specialist	Dr. Pravinkumar Modi	SMS	Horticulture	15600-39100 G.P. – 6000	21600	14/3/2013	Permanent	General
6	Subject Matter Specialist	Arti N. Soni	SMS	Home Science	15600-39100 G.P. – 6000	24320	04/04/2008	Permanent	General
7	Subject Matter Specialist	Dr. J. K. Raval	SMS	Veterinary Science	15600-39100 G.P. – 6000	22250	01/04/2011	Permanent	OBC
8	Programme Assistant	Mr. N.K.Gajre	Prog. Assi.	Plant Pathology	9300-34800 G.P 4400	10000 Fix	25/1/2012	Permanent	SC
9	Computer Programmer	Nisheeta R. Patel	Comp. Prog.		9300-34800 G.P 4400	10000 Fix	21/08/2008	Permanent	SC
10	Farm Manager	Mr. V. N. Parmar	Farm Manager		9300-34800 G.P 4400	13700	23/08/2007	Permanent	General
11	Accountant / Superintendent	Mr. A.N.Vanjaria	Acct. / Super.		9300-34800 G.P. 4200	16810	21/11/2011	Permanent	ST
12	Stenographer	Mr. K. R. Parmar	Steno.		5200-20200 G.P 2400	5300 Fix	18/08/2008	Permanent	General
13	Driver	Mr. C. I. Patel	Driver		5200-20200 G.P. 1900	5300 Fix	23/08/2007	Permanent	OBC
14	Driver		Driver		Vacant				
15	Supportingstaff		Supp. Staff		Vacant				
16	Supporting staff		Supp. Staff		Vacant				

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

S. No.	Item	Area (ha)
1	Under Buildings	2.50
2.	Under Demonstration Units	0.50
3.	Under Crops	5.23
4.	Orchard/Agro-forestry	0.80
5.	Others (specify)	

### 1.7. Infrastructural Development:

### A) Buildings

		Source	Stage					
S.	Name of	of		Complete			Incompl	ete
No.	building	funding	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	31/3/2011	516		1		
2	Farmers Hostel	ICAR	31/3/2011	248				
3	Staff Quarters (5)	ICAR	31/3/2011	348		1		
4	Demonstratio n 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	284241	Working
Tractor	2001	3,31225=00	5112	Working
Motorcycle	2011	48,816=00	2625	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
6	Store Well – Glass Door	1	30/3/2001	9259	Working
7	Slotted Angel Racks	4	30/3/2001	4900	Working

Sr.	Name of Equipments/		Date of		Brocont
No.	Instruments/	No.	Purchase	Price	Present Status
	Farm Machineries				
(2)	Mahindra Tractor model 575 DI	1	30/3/2001	3,31,225	Working
(0)	45 HP & Accessories	1	04/0/0004	4.4707.4	N
(3)	Photo Copier NP 7160	1	31/3/2001	117274	Not
(4)	Canon NPG-1				working
(4)	Furniture (Godrej) Table –T- 402	5	27/12/2002	24600	Marking
2	Comp. Table C-6	1	27/12/2002	5255	Working 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	1	30/12/2002	6450	Not
	Indian Longwise Proofing tools				Working
<b>(9)</b> 1	CD writer	1	28/12/2002	3025	Working
2	HP Scan jet 2300c Scanner	1	28/12/2002	3700	Not
					Working
<b>(10)</b> 1	Ceramic steel white writing	1	21/2/2003	9000	Working
	board 4'x6'				
2	Ceramic chalk writing board 4'x	1	21/2/2003	9000	Working
(11) 1	6' Over Head Projector	1	22/3/2003	27690	Working
<b>(11)</b> 1	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	'	21/3/2003	0330	vvoiking
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	<u> </u>	22/3/2003	_ · · · <b>-</b>	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	1	22/3/2003	1188	Working
	30 x T				
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

	Name of Equipments/				
Sr.	Instruments/	No.	Date of	Price	Present
No.	Farm Machineries		Purchase		Status
1	Power adapter	1	22/3/2003		Working
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	1	24/3/2003	38200	Working
	AC				
(19)	Education Exhibition Panel	1	25/3/2003	13500	Working
	System				
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	1	25/3/2003	4450	Working
	Acrylic Shutter				
(20)	Stainless steal Vessels	23	28/3/2003	19450	Working
(21)	Modem	1	31/3/2003	2020	Working
(22)	Laminated Charts with Plywood	5	12/3/2004	3000	Working
	Framing size 24"x30"				
(23)	Colour Enlargement charts	33	29/3/2004	24420	Working
(24)	Jeep Mahindra & Mahindra	1	2/12/2004	430500	Working
(OF)	Bolero D.I.		0/40/0004	04050	10/ 1:
(25)	Bolero Acessories		2/12/2004	21650	Working
(27)	Whirlpool freez	1	27/3/2006	15800	Working
(28) 1	Electronic Automatic Kel Pus	1	27/3/2006	88120	Working
(20)	Microprocessor based eight	ı	21/3/2000	00120	VVOIKING
	place macro block digestion				
	system model KES-08L				
2	Electronic Kel plus micro	1	27/3/2006	142300	Working
_	processor based Automatic		2176/2000	1 12000	Violiting
	Distillation system model distil				
	EM				
(29)	Double still with thermo sensor	1	27/3/2006	33924	Working
, ,	hr (All glass) cat No 2348				
(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		00/0/0555	0700	100
	(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	1	28/3/2006	31900	Working
(24)4	camber Size 100 x 50 mm	A	07/0/0000	24400	\\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \
(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

Sr. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
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	
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
<b>(36)</b> 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
<b>(39)</b> 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
<b>(41)</b> 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

Sr. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
(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	.000	Working
3	S/A/S Tope – 21"	1	24/3/2008		Working
4	S. S. Cover	2	24/3/2008		Working
<b>(50)</b> 1	Insect Display show cases	4	24/3/2008	17420	Working
2	Insect Display show cases  Insect Show cases cabinet		24/3/2008	17420	
		1		20050	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
<b>(58)</b> 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	1	25/3/2008	32025	Working
	Voltage stabilizer 3.0 KVA	1	25/3/2008	6630	
(61)	Double Pan Balance	1	24/3/2008	3640	Working
(62)	Analytical Weight Box Gas Cylinder, Regulator, Gas	1	13/3/2008	1930	Working
(02)	Stove	'	13/3/2000	1330	VVOIKING
(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
(68)	Panasonic Multifunctional Device Copy/Print/Scan/Fax	1	28/03/2010	14900	Working
(69)	Eco Display Unit Size : 6' x 2'	1	28/03/2010	9625	Working
(70)	DIM System size : 36" x 24"	2	28/03/2010	19250	Working
<b>(71)</b> 1	Podium	1	28/03/2010	4200	Working

Sr. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
2	Podium	1	28/03/2010	4200	Working
<b>(72)</b> 1	LCD Projector - Mo.D.832 Mx	1	06/01/2011	66305	Working
2	VIVITEK Dongel	1	06/01/2011	16910	Working
3	WALTOP 6" Interactive RF Pod	1	06/01/2011	14863	Working
4	Motorized Screen size – 5'x7'	1	06/01/2011	12905	Working
5	Impact 65 T (PA system)	1	06/01/2011	17800	Working
<b>(73)</b> 1	23" – LCD Computer	1	15/10/2010	33420	Working
2	Branded CPU E-Machine		15/10/2010	67	Working
3	Printer – Canon	1	15/10/2010	8500	Working
4	UPS – Umax 600 VA	1	15/10/2010	1850	Working
5	HP Scanner	1	15/10/2010	4500	Working
6	Q.H. Internet Security	1	15/10/2010	1150	Working
(74)	Crystal EPABX system set and accessories	1	11/02/2011	49219	Working
<b>(75)</b> 1	Power Tiller	1	18/02/2011	149430	Working
2	Multi crop Thresher	1	18/02/2011	23100	Working
		1	18/02/2011	26000	Working
3	Power Sprayer	1	18/02/2011	24850	Working
4	Winnower	1	18/02/2011	24150	Working
5	Seed cum Ferti. drill	1	18/02/2011	28880	Working
<b>(76)</b> 1	Steel Cupboard 18"X 36"X 78"	9	8/1/2011	58977	Working
2	Visitor Chair	25	8/1/2011	48475	Working
3	Rack- 6 X 3 X 1 foot	15	8/1/2011	43170	Working
4	Rivolving Chair	6	8/1/2011	21810	Working
* <b>(77)</b> 1	Gayatri two-way Leveller Heavy Duty	1	11/3/2011	12600	Working
2	Gayatri Cultivator Heavy Duty	1	11/3/2011	20700	Working
*(78)	Plough & Harrow	1	17/2/2011	19000	Working
* <b>(79)</b> 1	Rotavator- 5.25	1	13/3/2011	60380=95	Working
2	Hydrolic trailor	1	13/3/2011	102380=90	Working
(80)	Varoon Vinowing Monoblock Electric Fan	1	25/3/2011	6900	Working
(81)	Splender Pro Kick Spoke	1	31/3/2011	41860	Working
(82)	Sub-mersible pump set 2 H.P. with accessories	1	28/3/2011	14600	Working
(83) 1	Steel Cupboard	13	28/12/2012	71500	Working
2	Table (4 X 2.5) rek	10	28/12/2012	35000	Working
3	Steel Coat (6 X 3.5)	10	28/12/2012	40000	Working

Sr. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Price	Present Status
4	Sofa set- Tipoi	1	28/12/2012	17500	Working
		set			
5	Chair-Table-Tipoi	1	28/12/2012	7500	Working
		set			
6	News paper stand	3	28/12/2012	3150	Working
7	Computer Table-Chair	2	28/12/2012	12558	Working
8	Water cooler	2	28/12/2012	84000	Working
9	Post weigh balance	2	28/12/2012	2100	Working
10	Steel cupboard	2	28/12/2012	37000	Working
<b>84</b> 1	Sofa three seater waiting chair	20	13/1/2012	62980	Working
2	Fix Chair	10	13/1/2012	23090	Working
85	10 H.P. 4 stage falkan sub-	1	4/2/2012	64125	Working
	mersible pump set with accessesories	set			

<sup>\*77, 78</sup> and79 purchased from University Grant not from ICAR

# 1.8. A). Details SAC meeting\* conducted in the year 2012

SI.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
SI. No.	Date 2/9/2012	<ol> <li>Dr. A. R. Pathak         Vice Chancellor, NAU,Navsari</li> <li>Dr. M. S. Purohit         DEE, NAU, Navsari</li> <li>Dr. P. P. Rohilla         Representative, Hon. Zonal Project Director,         Zone-VI, ICAR, Jodhpur Rajasthan</li> <li>Dr. G.R. Patel         Representative, Director of Research, NAU,         Navsari</li> <li>Dr. V. J. Zinzala         District Agriculture Officer, Department of Agriculture,         District Panchayat, Vyara, Tapi</li> <li>Mr. N. G. Gamit         Deputy Director of Agriculture(Training),         Farmers Training Centre, Vyara</li> </ol>	1. Awareness programmes on drainage system should be done.  2. Awareness programmes about use of farm implements and machineries with the help of DAO, Tapi  3. Awareness programmes about packages of mango with the help of APMC, Vyara.  4. Plantation of Black Jamun, Stone apple, Pomegranate and Orange like fruits should be encouraged by KVK.  5. Workshop on Agro based Industry with collaboration of DIC, Vyara should be organized at KVK.	Followed Followed Followed Followed
		<ol> <li>Mr. Abhesingbhai M.Chaudhari Chairman, A. P. M. C., Market Yard, Vyara, Dist. Tapi</li> <li>Mr. C.M.Solanki Assistant Conservator of Forest, Vyara, Dist. Tapi</li> <li>Mr. Rabari Range Forest Officer, Vyara Range, Dist. Tapi</li> <li>Mr. K.R.Meena Branch Manager, Bank of Baroda, Surti Bazar, Vyara</li> <li>Mr. Dharmesh R. Parmar Dy. Commissionor of industry &amp; GM., DIC, Vyara</li> <li>Mr. R. M. Patel Depo Incharge, GSFC, Market Yard, Vyara, Dist. Tapi</li> </ol>	organized at KVK.	

13. Mr. Dinesh Ghelani	
Kendra Incharge, GNFC, Market Yard,	
Vyara, Dist. Tapi	
14. Mr. Ashutosh R. Kumtekar	
C/o. Anupbhai Bundela, Dr. Ambedkar Trust, 07,	
Mahadevnagar Society, Panwadi, Vyara	
15. Mr. Balvant Ahir	
Krushi Traders, Bahuri	
16.Mr. Nilesh Patel	
Krushi Agro Chemicals, 26,	
Mahendra Park, Nr. Satyadev Plaza, Jahangirpur,	
Surat	
17. Mr. Vipinbhai Chaudhari	
Secretary,Co-Operative Mandli, Vanskui, Ta- Vyara.	
18. Mr. K.B. Patel	
Project Co-ordinator, Food, Fat and Fertilizer co.,	
Vyara	
19. Smt.Induben Ramanbhai Gamit	
SHG, Leader, Tribal innovative woman and Member,	
KVK SHG, Kapura, Vyara, Dist. Tapi	
20. Dr. Ramkumar Singh	
Managing Trusty, Suruchi Vasahat, Bardoli	
21.Mr. Ravibhai R. Patel	
Secretary, Nizar taluka kharid-vechan sangh ltd.,	
Nizar, Ta. Nizar, Dist. Tapi	
22. Kiran Devjibhai Gamit	
Tribal innovator farm Woman, Gunkhadi, Ta-Songadh.	
23. Hetalben Chuadhari	
President of Self Help Group, Gomthi faliyu, Vanskui	
24.Mr. Piyush Patel	
Health Representative, Shri Gujarat Mahila Lok	

Swasthya Seva Sahakari Mandali Ltd.,	
10, Prasun Park, Dhuliya Road, Vyara	
25. Hemangini Chaudhari	
Health Representative, Shri Gujarat Mahila Lok	
Swasthya Seva Sahakari Mandali Ltd.,	
10, Prasun Park, Dhuliya Road, Vyara	
26. Mr. Ranjitbhai Gamit	
Farmer Representative, Unchamala	
27. Mrs. Mishulaben Gamit	
Executive Secratory, Hangati Mahila Trust, Mandal,	
Ta. Songadh	
28. Dr. N. M. Chauhan	
Programme Coordinator, Member Secretary	
K.V.K.,Vyara, Dist. Tapi	
29. Father Fransis	
Mandal, Ta. Songadh	
30. Mr. Sanjay Naik	
Traders, Fresh Frozen Fruit Pulp and Juice in All	
Season, 24, Desai Street, Gandeva, Via-Kharel, Dist.	
Navsari-390430	
31. Buyaben Gamit	
Small Tribal farmer representative, Jharali village, Ta.	
Songadh, Dist. Tapi	
32. Mr. Jitu Mistry	
Manufacturer, Krishna Power Tiller,	
C/o. Shanti Tractor, Haji Market, Valsad	
33. Mr. Kishor Kamani	
Site Manager, Consulting Services for Gujarat	
Forestry Development Project, 5th Floor, A Wing,	
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Gandhinagar	

34. Mr. Ghanshyambhai Shrirambhai Patel Progressive Young Farmer At. Po. Bahurupa, Ta. Nizar, Dist. Tapi 35. Dr. M.C.Patel Associate Research Scientist Regional Rice Research Station, NAU, Vyara 36. Linaben Gamit Women Worker, Hangati Mahila Trust 37. Smt.Jyotiben Rameshbhai Gamit Tribal Women representative, Hangati Mahila Mandal, Mandal village, Ta- Songadh 38. Arunaben Gamit Women Worker, Hangati Mahila Trust 39. Mr. Sharadbhai Patel Chairman, Nizar taluka kharid-vechan sangh ltd., Nizar, Ta. Nizar, Dist. Tapi 40. Mr. Amarsing Z. Chaudhari Vice Presedent, Surat District Central Co-op. Bank Ltd., Surat, C/o. Shaktinagar Society, Vyara 41. Mr. Babubhai M. Prajapati Assistant Director, (G.L.D.C.) Parsiwad, Vyara, Dist. Tapi 42. Smt. Ramaben R. Singh Managing Trusty, Suruchi Vasahat, Bardoli 43. Mr. Bhupendra Desai		
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Vyara, Dist. Tapi 42. Smt. Ramaben R.Singh Managing Trusty, Suruchi Vasahat, Bardoli 43. Mr. Bhupendra Desai		
42. Smt. Ramaben R.Singh Managing Trusty, Suruchi Vasahat, Bardoli 43. Mr. Bhupendra Desai	· · · · · · · · · · · · · · · · · · ·	
Managing Trusty, Suruchi Vasahat, Bardoli 43. Mr. Bhupendra Desai		
43. Mr. Bhupendra Desai	9	
Ou-operative Leader, valud	Co-operative Leader, Valod	
44. Mr. M.C.Chaudhari	·	
L.D.M., B.O.B., Vyara	L.D.M., B.O.B., Vyara	
45. Mr. Kamlesh N. Áhir, Buhari		

<sup>\*</sup> 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	<ul> <li>It consists of three talukas of Tapi district i.e. Songadh, Vyara and Valod taluka</li> <li>It has an intensive rainfall over 1500 to 2200 mm per annum</li> <li>Rain mostly received during month of July-August</li> <li>The zone has clyey soil with normal pH and Ec, medium organic carbon and phosphorous and high potash</li> </ul>
2.	South Gujarat Rainfall Zone-II	<ul> <li>It consists of two talukas i.e. Uchchhal and Nizar.</li> <li>Rainfall of the area varying between 1000 to 1500 mm per annum</li> <li>This zone has black soil of medium to heavy texture</li> <li>75 per cent of the area is rainfed.</li> </ul>

### 2. Agro-ecosystems

Sr. No	Agro ecological situation	Characteristics
1.	Situation I	<ul> <li>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</li> <li>Cultivated area is 15.29 per cent as it is a heavy rainfall situation</li> <li>5 per cent area is under doubled crop</li> <li>Major Field crops grown are paddy, minor millets, pulses, sorghum and oilseeds like ground nut and soybean.</li> </ul>
2.	Situation III	<ul> <li>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</li> <li>Cultivated area is 1.64 lakh ha.</li> <li>14.5 per cent area is under doubled crop. Soil of this situation is deep and fine Textured.</li> </ul>

### 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1.	Hilly Area – Light	Lateritic and eroded shallow soil with high	130023
	soil	infiltration rate	
2.	Plain area-	Heavy Black to medium black with medium to	208779
	Heavy Black soil	poor drainage, in some area it is water	
	-	logged and salt affected.	

# 2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (M.T.)	Yield (kg/ha)
Rabi-Su	mmer - 2011-12 (Estimated)			
1	Wheat	5392	15931	2980
2	Sorghum	3304	5387	1330
3	Gram	3592	2438	910
4	Indian Bean	1879	1826	855
5	Other Rabi crops	635	348	410
6	Rabi Maize	652	330	1270
7	Sugarcane	21489	1625136	76000
	TOTAL	36943	1651396	83755
Kharif -	2013 (Estimated)			
1	Rice irrigated	23254	65111	2800
2	Rice unirrigated	22389	26867	1200
3	Kharif jowar	16997	25496	1500
4	Kharif maize	1358	1901	1400
5	Other kharif cereals	327	343	1050
6	Kharif tur	14885	14885	1000
7	Kharif mung	1270	1016	800
8	Kharif udad	2619	2055	800
9	Other kharif pulses	354	212	600
10	Kharif groundnut	2062	3299	1600
11	Sesamum	27	21	800
12	Irrigated cotton (lint)	2953	2636	825
13	Unirrigated cotton (lint)	7288	4372	600
14	Soyabean	7055	11993	1700
	TOTAL	102838	160207	16675

**Horticultural Crops: (2011-2012)** 

Sr. No.	Crop	Area (Ha.)	Production (M.T.)	Productivity (M.T./Ha)
(A)	Fruits			
	Mango	4500	33750	7.50
	Chiku	72	869	12.07
	Citrus	18	198	11.00
	Banana	1800	104400	58.00
	Guava	9	99	11.00
	Papaya	1700	105400	62.00
	Custardapple	38	266	7.00
	Aonla	8	64	8.00
	Cashewnut	260	78	0.30
	Coconut	55	440	8.00

	Others	56	1680	30.00
	Total	8516	247244	29.03
В	Vegetables			
	Brinjal	3250	68250	21.00
	Cabbage	160	3520	22.00
	Okra	6700	80400	12.00
	Tomato	660	13860	21.00
	Cauliflower	410	7790	19.00
	Clusterbean	760	6080	8.00
	Cowpea	780	6240	8.00
	Cucurbits	2650	45050	17.00
	Others	414	16676	40.26
	Total	15784	247866	15.70
С	Spices			
	Chilli	2750	4125.00	1.50
	Coriander	40	480	12.00
	Ginger	55	1000	18.18
	Turmeric	750	15000	20.00
	Fenugreek	25	205	8.20
	Ajawan	110	66	0.60
	Total	3730	62126	16.66
D	Flower			
	Rose	120	1120	9.33
	Marigold	270	3105	11.50
	Mogra	5	20	4.00
	Lily	33	280	8.48
	Others	112	672	6.00
	Total	540	5197	9.62

Source: Directorate of Agriculture and Directorate of Horticulture, Gandhinagar

### 2.5. Weather data

Month	Rainfall	Tempe	rature <sup>0</sup> C	Relative Humidity
	(mm)	Maximum	Minimum	(%)
April-12		29.4	20.3	61.6
May-12		30.4	20.2	63.6
June-12	8.0	29.7	19.8	64.5
July-12	262.0	29.6	20.6	79.0
August-12	275.0	29.2	21.2	86.2
September-12	240.0	29.7	19.9	87.5
October-12	11.0	30.5	20.4	80.0
November-12		30.2	20.0	74.5
December-12		26.0	16.8	60.9
January-13		22.45	16.13	68.60
February-13		23.3	17.5	67.0
March-13		25.4	18.3	65.3

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

Category	Population	Production ('000 tones)	Productivity (kg/day)	
Cattle				
Crossbred	45123	69.83	7.391(Milk)	
Indigenous	169421	27.08	3.298(Milk)	
Buffalo	214544	92.23	4.215(Milk)	
Sheep	1000	1.08 metric tonnes	1.058 kg wool/sheep	
Goats	96599	2.90	0.298 (Milk)	
Pigs	2723			
Rabbits	1576			
Poultry		·		
Desi	428400	139.68 lakh egg	116 eggs per layer/year	
Improved	115700 264.59 lakh e		314 eggs per layer/year	
Donkey	1943			

<sup>\*</sup> **Source**: 29<sup>th</sup> survey report on estimates & major livestock products for the years 2011-12 Guj. State, Directorate of Animal Husbandry, Gandhinagar.

# 2.7 Details of Operational area / Villages (2012-13 to 2014-15)

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

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
4.	Vyara	Kalakawa	Kalakawa	Paddy, Ground nut, Okra, Sorghum, Pigeon pea, Pulses	<ul> <li>Frequent application of insecticides at higher doses in vegetables</li> <li>No management of powdery mildew</li> <li>High seed rate of paddy and other crops</li> <li>Imbalance use of fertilizers</li> <li>No use of organic manures</li> <li>Lack of dietary pattern of pregnant woman and nursing mothers</li> <li>Inadequate intake of fruits and vegetables</li> <li>Poor animal management</li> <li>Lower economic condition</li> </ul>	<ul> <li>Integrated Nutrient management in okra</li> <li>Integrated pest management in okra</li> <li>Crop production technology for field crops</li> <li>Increase area under vegetables</li> <li>Replacing drilled paddy with soybean</li> <li>Kitchen gardening</li> <li>Value addition in field crops</li> <li>Vermi-composting</li> <li>Income generation activities</li> </ul>
5.	Valod	Degama	Degama	Sugarcane, Paddy, Groundnut, Vegetable	<ul> <li>Lack of technological knowledge about crop production technology</li> <li>Lack of knowledge about fruits &amp; vegetable preservation</li> <li>Level of adoption in field crops &amp; vegetables are very low</li> <li>SHGs is not active</li> <li>No cooperative society</li> <li>Lack of knowledge about insect &amp; pest</li> <li>Lack of knowledge about Sugarcane &amp; vegetable</li> </ul>	<ul> <li>Crop production technology</li> <li>Value addition</li> <li>Income generating activities</li> <li>Activation of SHGs</li> <li>IPM in field crops &amp; vegetables</li> <li>INM in vegetables &amp; sugarcane</li> </ul>
6.	Songadh	Vadpada pra Umarda	Vadpada pra Umarda	Paddy, Pigeon pea, Sorghum, Groundnut, Sugarcane,Okra	<ul> <li>Low irrigation facility</li> <li>Erratic heavy rainfall</li> <li>Majority of area has light soil with undulated land</li> </ul>	<ul> <li>Increase area under drip irrigation</li> <li>Low-cost green house</li> <li>Storage of food grains</li> </ul>

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
				and Brinjal	<ul> <li>Low technological level among farmers</li> <li>Poor economic status</li> <li>Poor food grain storage</li> <li>Lack of awareness about health &amp; nutrition</li> </ul>	<ul> <li>High-value horticultural crop</li> <li>Increase area under pulses and oil seed crops in un-irrigated area</li> <li>Crop production technology</li> <li>Health and nutrition for vulnerable groups</li> <li>Kitchen gardening</li> <li>Income generation activities</li> </ul>
7.	Songadh	Borkuwa	Borkuwa	Paddy, Pigeon pea, Soybean, Sorghum, Sugarcane, Gram, Groundnut, Vegetables	<ul> <li>Lack of guidance about new agricultural technology</li> <li>Fear in adoption of new technology</li> <li>Low awareness about Agriculture and Animal Husbandry</li> <li>Poor animal management</li> <li>Equipments (Oil-engine) for irrigation is very less</li> <li>Poor food grain storage practices</li> <li>Lack of awareness about Health &amp; Nutrition</li> </ul>	<ul> <li>Introduction of soybean crop to replace drilled paddy</li> <li>ICM</li> <li>Dry land horticulture</li> <li>Advanced irrigation methods</li> <li>Organic farming</li> <li>Vermi – composting</li> <li>Balanced diet for animal</li> <li>Care of milch animal</li> <li>Kitchen gardening</li> <li>Replacing the paddy with vegetable in well drained soil</li> <li>Increase area under vegetable</li> <li>Food grain storage</li> <li>Health &amp; Nutrition for pregnant &amp; lactating mother &amp; children</li> <li>Increase area under drip irrigation</li> </ul>
8.	Songadh	Aamalgundi	Aamalgundi	Paddy, Ground nut, sorghum, Pigeon Pea, Gram	<ul> <li>Low irrigation facility</li> <li>Erratic heavy rainfall</li> <li>Use of local variety</li> <li>Use of high seed rate</li> <li>No seed treatment</li> </ul>	<ul> <li>Crop production technology (ICM in major crops)</li> <li>Integrated pest and disease management in paddy &amp; Ground nut</li> <li>Low cost green house</li> </ul>

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul> <li>No use of organic manures</li> <li>Unbalance use of fertilizers</li> <li>No weeding</li> <li>Low adoption level of farmers</li> <li>Poor live stock management</li> <li>Use of only chemical control of pest management in vegetables</li> <li>No supplementary feeding at right time to children</li> <li>Inadequate intake of fruits and vegetables</li> </ul>	<ul> <li>Modern method of irrigation</li> <li>Land configuration in ground nut and pigeon pea</li> <li>Marketing management</li> <li>Live stock management</li> <li>Dietary management of pregnant and nursing mother</li> <li>Kitchen gardening</li> </ul>
9.	Uchchhal	Bhadbhunja	Bhadbhunja	Paddy, Gram, Pigeon pea, Sorghum, Vegetable, Udad, Maize	<ul> <li>Lack of knowledge about scientific package of practices of different crops</li> <li>Lack of awareness about insects and pests &amp; diseases</li> <li>Lack of knowledge about soil analysis</li> <li>Lack of knowledge about balanced nutritional diet</li> <li>Lack of knowledge about fruits &amp; vegetable preservation</li> <li>Inadequate intake of fruits &amp; vegetables</li> <li>Disease management</li> </ul>	<ul> <li>Introduction of soybean crop to replace drilled paddy</li> <li>Crop production technology</li> <li>Awareness about insects, pests and diseases</li> <li>Short duration vegetable cultivation if Arid horticulture development</li> <li>Gobar gas plant</li> <li>Vermi composting</li> <li>Compost making</li> <li>Kitchen gardening</li> <li>Bucket drip</li> <li>Increase area under oil seed and pulse crops</li> <li>Fruit &amp; vegetable preservation</li> <li>Balanced diet from locally available food material</li> <li>Give demonstration of silage and urea treatment</li> <li>Training on vaccination and de-</li> </ul>

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
						worming
10.	Uchchhal	Dhaj	Dhaj	Paddy, Pigeon pea, Sorghum, Gram, Maize, Groundnut	<ul> <li>No facilities for irrigation after October</li> <li>Soil of this area is very light</li> <li>Uneven distribution of rainfall</li> <li>Socio-economic condition is very poor</li> <li>No knowledge of scientific agricultural production technology and animal husbandry</li> <li>Youth club is not active</li> <li>Poor livestock management</li> <li>Lack in dietary pattern of pregnant &amp; nursing mother and children</li> <li>Lack of awareness about health &amp; nutrition</li> <li>High mortality in calf</li> </ul>	<ul> <li>Increase area under Soybean</li> <li>Low cost production technology and drip irrigation</li> <li>Income generation activities and kitchen gardening</li> <li>Livestock management</li> <li>Disease management</li> <li>Initiating youth club activities</li> <li>Women and child care</li> <li>Low cost green house</li> <li>Calf rearing</li> </ul>
11.	Nizar	Bahurupa	Bahurupa	Cotton, Papaya, Banana, Wheat, Gram, Soybean, Castor, Sorghum	<ul> <li>High cost of cultivation in field crops</li> <li>Poor marketing</li> <li>Lack of availability of inputs</li> <li>Poor grain storage practices</li> <li>Lack of knowledge about insect &amp; pest in Cotton</li> <li>Poor Livestock management</li> </ul>	<ul> <li>Crop production technology</li> <li>IPM in Cotton</li> <li>Value addition, INM and IPM in Papaya and Banana</li> <li>Marketing management</li> <li>Food grain storage</li> <li>Livestock management</li> <li>Seed production in Wheat</li> </ul>
12.	Nizar	Piplod	Piplod	Cotton, Gram, Wheat, Sorghum, Soyabean, Papaya, Banana	<ul> <li>High cost of cultivation</li> <li>Information centre is far away from the village</li> <li>Poor marketing</li> <li>Lack of technological knowledge about crop production technology</li> <li>Lack of knowledge regarding IPM</li> <li>Highly dependent on Private Traders for agricultural</li> </ul>	<ul> <li>Crop production technology</li> <li>IPM in cotton</li> <li>Increase area under papaya crop</li> <li>Popularize maize crop</li> <li>Introduction of chemical weed control</li> <li>Value addition in soyabean and papaya</li> </ul>

Sr. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul> <li>information</li> <li>Weed management in black soil is a big problem</li> <li>High production cost due-to lift irrigation</li> </ul>	<ul> <li>Tissue culture banana.</li> <li>Value addition, INM and IPM in Papaya and Banana</li> <li>Seed production in wheat</li> </ul>

# 2.8 Priority/thrust areas

Crop/Enterprise	Thrust area
Paddy, Sorghum, Groundnut, Vegetables, Sugarcane,	Crop production management (ICM)
Oilseed crops & pulses	
Drumstick, Custard apple	Dry land horticulture
Vegetables, Soybean, Groundnut, Gram	Organic farming
Paddy, Sugarcane, Cotton, Groundnut	Integrated pest management
Paddy, Sorghum, Sugarcane, Cotton, Groundnut,	Integrated nutrient management
Vegetables	
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

### 3. TECHNICAL ACHIEVEMENTS

### 3. A. Details of target and achievements of mandatory activities by KVK during Rabi: 2011-12 and Kharif-12:

OFT	(Technology Asses	ssment and R	efinement)	FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)				
1				2				
Num	Number of OFTs		Number of Farmers		Number of FLDs (ha)		Number of Farmers	
Targets	Achievement	Targets	Targets Achievement		Achievement	Targets	Achievement	
5	5 4 60 55		Targets Achievement 145.6 145.6		614 614			

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)						Extension	Activities	
		3					4	
Num	ber of Course	es	Number	of Participants	Number	of activities	Number o	f participants
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	58	91	1160	2649	2020	7366	3109	38721
Rural youth	18	8	360	267				
Extn.	6	6	120	152				
Functionaries								
Total	82	105	1640	3068	2020	7366	3109	38721

Seed Pro	duction (Qtl.)	Planting material (Nos.)					
	5	6					
Target	Achievement	Target	Achievement				
5.00	417.94	1.00	1,23,900				

### 1. B. Abstract of interventions undertaken

						Inter	ventions		
Sr. No	Thrust area	Enterprise Problem		Title of OFT 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 Land configuration	Scientific Cultivation of major crops	Scientific cultivation of sugarcane and oilseed crops	Field days, khedut shibirs, News paper coverage, film show Radio talk Exhibitions, FLDs, OFTs etc.	Seeds of improved varieties paddy, ground nut, soybean Gram Pigeon pea, Wheat, Moong etc
2	Dry Land Horticulture	Drum stick Custard apple, Ber, guava,Jamun Vegetables	Due to rain fed area, and inadequate irrigation facility cultivated area under fruits and vegetable is very less and per capita consumption is also less		Low cost green house Vadi yojna	Arid horticulture development in rain fed area		Field days, khedut shibirs, News paper coverage, film show Exhibitions, FLDs, OFTs etc.	Seeds and seedlings of different vegetables and planting materials of mango, drum stick and custard apple
3	Organic farming	Vegetables, Groundnut, Gram, Soybean	High use of chemicals			Training on vermicompos t, FLDs, OFTs, Biofertilizers-Bio-compost and Recycling of Farm wastes.		khedut shibirs, News paper coverage, film show Exhibitions etc Vermi-compost demonstrations	Supply of Vermicompost , Biocompost and Biofertilizers.

						Inter	ventions		
Sr. No	Thrust area	Crop/ Enterprise	ldentified Problem	Title of OFT if any	any Training if any		Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
4	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	<del></del>	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 Vegetable s	Field days, khedut shibirs, News paper coverage, film show Exhibitions, FLDs, OFTs etc.	Pheromone traps, neem products, Microbial products Methyl eugenol traps,NPVs, Neembased pesticides etc
5	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 vegetable s & Cotton	Field days, khedut shibirs, News paper coverage, film show , FLDs, OFTs etc.	Bio compost & Chemical, Fertilizers, Potassium Nitrate
6	High tech Horticulture	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	
7	Soil & water conservation and water management	Pigeon pea, Ground nut, Gram	Heavy rainfall and water logging cause high mortality of plants	Land configura tion in pigeon pea	Growing ground nut and gram on raised bed	Land configuration in field crops	ł	Field days, khedut shibirs, News paper coverage, film show, Soil and Water sample analysis, Drip	Seeds, ground nut, Gram , pigeon pea and bio- fertilizer, saplings

						Inter	ventions		
Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
								irrigation, Exhibitions etc.	
8	Low Cost Green House	Major crops	Poor economic condition of farmers			Low cost green house		khedut shibirs, News paper coverage, film show, trainings Exhibitions etc	
9	Women empowermen t	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, FLDs, OFTs etc	Seeds for kitchen garden
10	Self employment to Rural youth and farm women	Mushroom Value addition & Sewing	Poor economic condition of farmers			Vocational training on Value addition, Masala Preparation		News paper coverage, film show, Method of demonstration	
11	Value addition	Fruits, Vegetables, Cereals & Pulses	Low price of the products			Training of Value Addition		Khedut shibir, News Paper Coverage, Method Demonstration	
12.	Management of Milch	management of dairy	Poor management of			Daily requirement		khedut shibirs, News paper	

						Inter	ventions		
Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
	animals	animal	dairy animals			of Nutrition in milch animal. Scientifically calf rearing		coverage, film show Demonstration units on campus	
13.	Health & Nutrition for Vulnerable groups	- Pregnant and Lactating women, Infant and children	Malnutrition		Kitchen Gardening	Health & Nutrition, Kitchen Gardening, Nutritional deficiencies& its management , Balance Diet from locally available food material		Mahila Shibir, News Paper coverage, Field Day, SHG Meeting, Film Show	Seeds & Seedling of vegetables
14.	Crop Diversificatio n	Soybean and Vegetables	Low yield of drilled paddy			Scientific cultivation of Soybean & Vegetables		Khedut Shibir, News paper Coverage, Field Day, Film Show, Popular Articles	
15.	Off-season cultivation	Okra, Tomato, Watermelon	Low Market Value			Scientific cultivation of Off-season crops		Field Day, Khedut Shibirs, Film Show, News Paper, Coverage, Popular Articles.	

#### 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
Integrated Crop	1		1							2
Management										
TOTAL	1		1							2

### A.1.1 Abstract of the number of technologies assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	Adolscent girls	TOTAL
Nutrition Management	1	-	-	-	-	-	-		1
Nutriton Management (Home Science)		-	-	-	-	-	-	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
SRI in paddy	1									1
TOTAL	1									

### A.2.1 Abstract on the number of technologies assessed in respect of livestock/enterprises :-

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Nutrition Management	1	-	-	-	-	-	-	1
TOTAL	1	-	-	-	-	-	-	1

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

#### 2. Technology Assessment

#### OFT: 1

1. Title : Low yield of Gram

2. Problem diagnose/defined : No irrigation at critical stages

3. Details of technologies selected : T<sub>1</sub>. No use of Phosphatic fertilizer (Farmers practices)

T<sub>2</sub> Basal dose of fertilizer + Biofertilizers + two irrigation at critical stages

T<sub>3</sub>. Basal dose of Phosphatic fertilizer + Biofertilizers + one irrigation at pod filling stage.

4. Season : Rabi-Summer -2011-12

5. Source of technology : NAU

**6. Production system thematic area** : Paddy – Sugarcane cropping system

7. Thematic area : ICM

8. Performance of the Technology : In this technology of Gram, we with performance indicators recommend land configuration in

recommend land configuration in Gram crop and giving life saving irrigation at critical stages and Phosphatic fertilizers as basal dose gave more number of Branches, Pods and increased seed yield than

traditional method.

**9. Final recommendation for micro** : One light irrigation at critical stage is

better than traditional method of

gram cultivation.

10. Constraints identified and : --

feedback for research

level situation

**11. Process of farmers participation** : Appreciate the technology and ready

and their reaction to adopt.

### **Results of On Farm Trials**

Cronl				No.			Da	ta on the pa	aramete	r	Results	
Crop/ enterpris e	Farming situatio n	Problem Diagnose d	Title of OFT	of trials	Technology refined	Para- meters	Plant Height (cm)	No. of Branches	No. of Pods/ Plant	Yield (q/ha)	of refinem- ent	Feedback from the farmer
1	2	3	4	5	6	7		8			9	10
Gram	Irrigated/ Unirrigat ed	No irrigation at critical stages	Low yield of Gram	5	T <sub>1</sub> . No use of Phosphatic fertilizer (Farmers practices)		33	6	38	1170	T <sub>3</sub> Basal dose of Phosphati c fertilizer	Land configuration in Gram crop and giving life saving irrigation at critical
		3			T <sub>2</sub> Basal dose of fertilizer + Biofertilizers + two irrigation at critical stages		37	11	56	1750	+ Biofertilize rs + one irrigation at pod	stages and Phosphatic fertilizers as basal dose gave more number of Branch, Pods and
					T <sub>3</sub> . Basal dose of Phosphatic fertilizer + Biofertilizers + one irrigation at pod filling stage.		39	14	91	1840	filling stage.	increased seed yield than traditional method. Farmers are very much interested because maintain soil health, maximum water use efficiency, in this technology.

<sup>\*</sup> No. of farmers

Technology Refined	*Production per unit (kg/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
No use of Phosphatic fertilizer (Farmers practices)	1170	34225	1:4.52
Basal dose of fertilizer + Biofertilizers + two irrigation at critical stages	1750	53780	1:6.54
Basal dose of Phosphatic fertilizer + Biofertilizers + one irrigation at pod filling stage.	1840	56825	1:6.85

OFT: 2

1. Title : Prevalence of Anemia among rural

tribal adolescent girls (16 to 18

yrs)

2. Problem diagnose/defined : 1.Low iron content in diet

2.Use of traditional diet

3.Lack of knowledge about nutritional

foods

4. Prevalence of infectious diseases

5. Poor socio-economic condition

3. Details of technologies selected : T1

for assessment /refinement

T1.Farmers practices(Traditional practices)-existing dietary pattern

T2.Recommended practices-iron tablet/day with existing dietary

pattern

T3.100gm roasted Bengal gram +
100gm roasted Rice flakes/day +
iron tablet/day with existing

dietary pattern

4. Season/Period : March – May'2012 ( 3 Months)

**5.** Source of technology : A text book of "Nutritive value of

Indian foods" by National Institute of

Nutrition, Hyderabad

6. Production system thematic area : ---

7. Thematic area : Nutrition Management

8. Performance of the Technology : -

with performance indicators

9. Final recommendation for micro

level situation

: Daily use of iron rich diet ( 100gm roasted Bengal gram + 100gm

roasted Rice flakes) and one iron tablet with existing dietary pattern increased Hb level and body

weight of tribal adolescent girls as compared to other treatment.

10. Constraints identified and : ---

feedback for research

11. Process of farmers participation

and their reaction

Appreciate the technology and ready

to adopt.

### **Results of On Farm Trials**

								Data on th					
Crop/ enterprise	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters		Hb leve (gm%)	ı	В	ody weigh (Kg.)	it	Results of assess-	Feedback from the
	Diagnoseu	OI OF I	uiais	Assesseu		Before	After	increase in Hb level	Before	After	Wt. gain	ment	farmer
1	2	3	4	5	6		•	•	7		•	8	9
Home Science	1.Low iron content in diet 2.Use of traditional diet	Prevalence of Anemia among rural tribal adolescent girls	5	T1.Farmers practices (Traditional practices)- existing dietary pattern	Hb level & Body weight for three months period	9.7	10.04	0.34	34.800	35.200	0.400	Daily use of 100gm roasted Bengal gram + 100gm	Hb level & body wt. of rural tribal adolescent girls increased
	3.Lack of knowledge about nutritional foods	g	5	T2.Recommended practices-iron tablet/day with existing dietary pattern		9.5	11.04	1.54	39.000	40.600	1.600	roasted Rice flakes + one iron tablet	by using iron rich diet and iron tablet daily with
	4.Prevalence of infectious diseases 5.Poor socio- economic condition		5	T3**.100gm roasted Bengal gram + 100gm roasted Rice flakes/day + iron tablet/day with existing dietary pattern		9.3	11.92	2.62	40.600	43.600	3.000	with existing dietary pattern gave better result to prevent Anemia	existing dietary pattern

<sup>\*</sup>No. of tribal adolescent girls (16 to 18 yrs)

<sup>\*\* 100</sup> gm Bengal gram contains 9.5 mg iron.

<sup>100</sup> gm Rice flakes contains 20.0 mg iron.

#### OFT: 3

Title : Low yield of paddy

2. Problem diagnose/defined : Use of higher and over age

seedlings for transplanting

3. **Details of technologies selected** : T<sub>1</sub>.Randomly transplanting of paddy

—Farmer practices

for assessment /refinement

T<sub>2</sub>. Line method of transplanting (20 X 15 cm)

T<sub>3</sub>. System of Rice Intensification

method (25 X 25 cm)

**4. Season :** Kharif-2012

**5. Source of technology** : NAU

**6. Production system thematic area** : Paddy – Sugarcane cropping system

7. Thematic area : System of Rice Intensification (ICM)

8. Performance of the Technology : The SRI technology of paddy had

with performance indicators required less seed rate and gave more number of tillers, filled grain

and increased seed yield than

traditional method.

**9. Final recommendation for micro** : SRI technology is better than

level situation traditional method of transplanting

paddy.

10. Constraints identified and : Time consuming

feedback for research

**11. Process of farmers participation** : Appreciate the technology and ready

and their reaction to adopt.

### **Results of On Farm Trials**

	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Para- meters	Data on the parameter				Results	
Crop/ enterprise							No. of Tillers/ hill	No. of filled grains/panicle	Panicle length (cm)	Yield (q/ha)	of refinem- ent	Feedback from the farmer
1	2	3	4	5	6	7	8		9	10		
Paddy	Irrigated	Use of higher and over age seedlings for transplanting	Low yield of paddy	5	T <sub>1</sub> .Randomly transplanting of paddy – Farmer practices T <sub>2</sub> . Line method of transplanting (20 X		10	97	20.5	49.50 58.95	T <sub>3</sub> . SRI In SRI technology of paddy (25x25) gave higher yield less seed rate and gave higher tillering, higher no. of filled grains & seed yield. Farmers are very much interested	
					15 cm)							because maintain
					T <sub>3</sub> . System of Rice Intensificat ion method (25 X 25 cm)		22	149	27.7	68.80		soil health, maximum water use efficiency, less water required in this technology.

<sup>\*</sup> No. of farmers

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio	
11	12	13	14	
Randomly transplanting of paddy –Farmer practices	49.50	31175	1 : 2.97	
Line method of transplanting (20 X 15 cm)	58.95	40153	1:3.53	
System of Rice Intensification method (25 X 25 cm)	68.80	50790	1:4.49	

#### **OFT - 4**

1. Title : Low milk production of Cow 2. **Problem** : 1. Lack of knowledge about urea treatment. diagnose/defined 2. Poor management of Dairy animal (breeding, feeding and management) 3. Poor knowledge of health & cost efficient livestock rearing. **Details of technologies** : T1. Farmers practice (Paddy straw without urea 3. selected for assessment treatment) /refinement T2. Paddy straw with urea treatment (6-8 kg daily) T3. Paddy straw with urea treatment + Mineral mixture (35 gm mineral mixture feeding daily) 4. Source of technology : Text book of Animal Husbandary- G.C.Benerji 5. **Production system** thematic area 6. Thematic area **Nutrition Management** 7. Performance of the **Technology with** performance indicators Final recommendation : Paddy straw treated with 4% urea and 35 gm for micro level situation mineral mixture feeding daily gaves higher milk production. 9. **Constraints identified** and feedback for research 10. Process of farmers Farmers appreciate the technology & ready to adopt. participation and their reaction

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters	Data on the parameter  Milk production (kg/day)		Results of assess-ment	Feedback from the farmer
							Before	After		
1	2	3	4	5	6	7	8		9	10
Animal Science	Low milk production in HF Cow	1. Low Milk Production 2. Lack of knowledge about urea treatment. 3. Poor manage- ment. 4. Poor knowledge of health & hygiene.	Low milk production in HF Cow	10	T1. (Farmers practices) Paddy straw without urea treatment T2. Paddy straw with urea treatment (6-8 kg daily) T3. Paddy straw with urea treatment treatment treatment treatment +	Milk production	5.510 5.840 6.120	6.470 6.810 7.162	Paddy straw with urea treatment + Mineral mixture (35 gm mineral mixture feeding daily)	Increase milk production after urea treated paddy straw along with mineral mixture feeding
		5. Lack of knowledge about feeding manageme nt.			Mineral mixtur e (35 gm mineral mixture feeding daily)					

Technology Assessed	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13
T1 - Farmers practice (Paddy straw without urea treatment)	85.10	1:1.78
T2 - Paddy straw with urea treatment	95.30	1:1.87
T3- Paddy straw with urea treatment + Mineral mixture (35 gm daily)	105.86	1:1.97

Result: T3: Urea treated paddy straw along with mineral mixture (35 gm mineral mixture feeding daily) can result in better milk yield and efficient fodder utilization as compared to T1 and T2.

#### 3.2 Achievements of Frontline Demonstration

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

List of technologies demonstrated during previous year and popularized during 2012-13 and recommended for large scale adoption in the district

				Details of	Horizonta	I spread of t	echnology
Sr. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	popularization methods suggested to the Extension system	No. of villages	No. of farmers	Area in ha
1	Paddy –NAUR-1	ICM	New variety	FLDs	55	350	154
2	Paddy –GNR-3	ICM	New variety	FLDs	10	62	40
3	Paddy – GAR-13	ICM	New variety	FLDs	15	70	45
4	Paddy – AAUR-1	ICM	New variety	FLDs	15	68	42
5	Paddy –NAUR-1	ICM	SRI technology	FLDs	25	170	81
6	Paddy –GNR-3	ICM	SIRA technology	FLDs	40	145	70
7	Sorghum – GJ-40	ICM	New variety	Other than FLDs	10	45	20
8	Nagli	ICM	New variety	Other than FLDs	5	38	8
9	Pigeon pea	Land Configuration	New Variety	FLDs	75	550	65
10	Gram	IDM	IDM	FLDs	45	300	185
11	Moong bean	ICM	New Variety	FLDs	20	315	175
12	Okra	INM	INM	FLDs	45	355	85
13	Brinjal	INM	INM	FLDs	25	312	55
14	Okra	IPM	IPM	FLDs	25	230	45
15	Brinjal	IPM	IPM	FLDs	15	256	46
16	Cucurbits	IPM	IPM	Other than FLDs	10	152	39

<sup>\*</sup> Thematic areas as given in Table 3.1 (A1 and A2)

# b. Details of FLDs implemented during Rabi-Summer-2011-12 & Kharif-2012 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

SI. No.	Crop	Thematic	Technology Demonstrated	Season and	Area (	(ha)		of farme		Reasons for shortfall in
NO.		area	Demonstrated	year	Proposed	Actual	SC/ST	Others	Total	achievement
Cere	eal crops									
1	Paddy –NAUR-1	ICM	New variety	Kharif-12	10	10	49		49	
2	Paddy –GNR-3	ICM	New variety	Kharif-12	5	5	24		24	
3	Paddy – GAR-13	ICM	New variety	Kharif-12	5	5	25		25	
4	Paddy – AAUR-1	ICM	New variety	Kharif-12	5	5	25		25	
5	Paddy –NAUR-1	ICM	SRI technology	Kharif-12	44	44	110		110	
6	Paddy –GNR-3	ICM	SIRA	Kharif-12	24	24	60		60	
			technology							
7	Sorghum – GJ-40	ICM	New variety	Kharif-12	4	4	6		6	
8	Nagli	ICM	New variety	Kharif-12	13.6	13.6	34		34	
Puls	ses									
1	Pigeon pea	ICM	New variety	Kharif-12	8	8	36		36	
2	Gram (IDM)	IDM	IDM	Rabi- 11-12	5	5	24		24	
3	Moong bean	ICM	New variety	Summer-12	20	20	10		10	
Hort	icultural Crops									
1	Okra	INM	INM	Rabi- 11-12	2.0	2	8		8	
2	Brinjal	INM	INM	Rabi- 11-12	2.0	2	8		8	
3	Okra	IPM	IPM	Rabi- 11-12	3	3	10		10	
4	Brinjal	IPM	IPM	Rabi- 11-12	3	3	10		10	
5	Cucurbits	IPM	IPM	Rabi- 11-12	2	2	5		5	

# **Details of farming situation**

		Farming		St	atus of	soil				Seaso	No. of
Crop	Season	situation (RF/ Irrigated)	Soil type	N	Р	К	Previous crop	Sowing date	Harvest date	-nal rainfal I (mm)	rainy days
Cereal Crops	S						•				
Paddy – NAUR-1	Kharif- 12	Irrigated	Medium Black	L	M	Н	Summer Groundnut	6 <sup>th</sup> June to 20 <sup>th</sup> June, 2012	28 <sup>th</sup> Oct. to 15 <sup>th</sup> Nov. 2012	796	50
Paddy – GNR-3	Kharif- 12	Irrigated	Medium Black	L	M	Н	Summer Groundnut	9 <sup>th</sup> June to 21 <sup>st</sup> June, 2012	25 <sup>th</sup> Oct. to 12 <sup>th</sup> Nov. 2012		
Paddy – GAR-13	Kharif- 12	Irrigated	Medium Black	L	M	Н	Summer Groundnut	9 <sup>th</sup> June to 21 <sup>st</sup> June, 2012	25 <sup>th</sup> Oct. to 12 <sup>th</sup> Nov. 2012		
Paddy – AAUR-1	Kharif- 12	Rainfed	Light soil medium black	L	M	Н	Fallow	6 <sup>th</sup> June to 15 <sup>th</sup> July, 2012	12 <sup>th</sup> Oct. to 20 <sup>th</sup> Nov. 2012		
Paddy – NAUR-1	Kharif- 12	Irrigated	Medium black	L	M	Н	Summer G'nut	9 <sup>th</sup> June to 20 <sup>th</sup> June, 2012	29 <sup>th</sup> Oct. to 15 <sup>th</sup> Nov. 2012		
Paddy – GNR-3	Kharif- 12	Irrigated	Medium black	L	M	Н	Fallow	11 <sup>th</sup> June, to 25 <sup>th</sup> June, 2012	29 <sup>th</sup> Oct. to 15 <sup>th</sup> Nov. 2012		
Sorghum – GJ-40	Kharif- 12	Rainfed	Light soil medium black	L	M	Н	Fallow	7 <sup>th</sup> July to 25 <sup>th</sup> July, 2012	18 <sup>th</sup> Oct. to 25 <sup>th</sup> Oct. 2012		
Nagli	Kharif- 12	Irrigated	Medium black	L	M	Н	Fallow	18 <sup>th</sup> June to 5 <sup>th</sup> July, 2012	15 <sup>th</sup> Oct. to 28 <sup>th</sup> Oct. 2012		

		Farming		St	atus of	soil				Seaso	No. of
Crop	Season	situation (RF/ Irrigated)	Soil type	N	Р	K	Previous crop	Sowing date	Harvest date	-nal rainfal I (mm)	rainy days
Pulses								•			
Pigeon pea	Kharif-12	Irrigated	Light soil and Light Shallow	L	M	Н	Fallow	29 <sup>th</sup> June to 10 <sup>th</sup> July, 2012	28 <sup>th</sup> Jan. to 15 <sup>th</sup> Feb. 2013		
Gram	Rabi- 11-12	Irrigated	Light soil and Light Shallow	L	M	Н	Paddy	3 <sup>rd</sup> Feb. to 19 <sup>th</sup> Feb., 2011	25 <sup>th</sup> April to 5 <sup>th</sup> May 2011		
Moongbean	Summe r-12	Irrigated	Light soil and Light Shallow	L	M	Н	Р	6 <sup>th</sup> Dec. to 22 <sup>nd</sup> Dec., 2011	15 <sup>th</sup> March to 25 <sup>th</sup> March 2011		
Horticultural	Crops										
Okra	Rabi- 11-12	Irrigated	Light shallow & Medium black	L	M	Н	Paddy	18 <sup>th</sup> Nov. to 20 <sup>th</sup> Nov., 2011	15 <sup>th</sup> April to 30 <sup>th</sup> April 2012		
Brinjal	Rabi- 11-12	Irrigated	Light shallow & Medium black	L	M	Н	Paddy	13 <sup>th</sup> Nov. to 26 <sup>th</sup> Nov., 2011	9 <sup>th</sup> May to 24 <sup>th</sup> May 2012		
Okra	Rabi- 11-12	Irrigated	Light shallow & Medium black	L	M	Н	Paddy	16 <sup>th</sup> Nov. to 28 <sup>th</sup> Nov., 2011	13 <sup>th</sup> April to 25 <sup>th</sup> April 2012		
Brinjal	Rabi- 11-12	Irrigated	Light shallow & Medium black	L	M	Н	Paddy	8 <sup>th</sup> Nov. to 25 <sup>th</sup> Nov., 2011	18 <sup>th</sup> May to 20 <sup>th</sup> May 2012		
Cucurbits (IPM)	Rabi- 11-12	Irrigated	Medium black	L	M	Н	Fallow	8 <sup>th</sup> Jan. to 20 <sup>th</sup> January 2012	26 <sup>th</sup> April to 11 <sup>th</sup> May 2012		

#### Performance of FLD

Sr. No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha		Check (%)		Data on parameter in relation to technology demonstrated		
						Н	L	Α	***		Demo	Local
1	2	3	4	5	6	7 8 9		10	11	12	13	
	eal Crops			T.		•						
1	Paddy	New Variety	NAUR-1	49	10	65.75	52.70	59.23	46.80	26.56	59.23	46.80
2	Paddy	New Variety	GNR-3	24	5	63.50	53.80	58.65	45.70	28.34	58.65	45.70
3	Paddy	New Variety	GAR-13	25	5	61.75	52.25	57.00	45.75	24.60	57.00	45.75
4	Paddy	New Variety	AAUR-1	25	5	16.25	13.30	14.78	11.75	25.79	14.78	11.75
5	Paddy	SRI	NAUR-1	110	44	67.80	54.25	61.03	46.80	30.41	61.03	46.80
6	Paddy	SIRA	GNR-3	60	24	65.70	54.75	60.23	46.80	28.70	60.23	46.80
7	Sorghum	New Variety	GJ-40	6	4	19.25	14.80	17.03	12.40	37.34	17.03	12.40
8	Nagli	New	Guj. Nagli-1	34	13.6	14.80	11.50	13.15	10.60	24.05	13.15	10.60
		variety/Introduction										
		of new crop										
Puls	es											
1	Pigeon pea	New variety	Vaishali	36	8	19.50	12.70	16.10	11.25	43.11	16.10	11.25
2	Gram	IDM	GG-2	24	5	20.80	11.7	16.25	11.55	40.70	16.25	11.55
3	Moong bean	New variety	Pusa Vishal	20	10	17.70	11.3	14.50	11.00	31.81	14.50	11.00
Hort	icultural Crop											
1	Okra	INM	Hybrid	8	2	196.7	118.50	157.6	105.5	49.38	157.6	105.5
2	Brinjal	INM	Surti ravaiya	8	2	212.8	168.60	190.7	155.3	23.00	190.7	155.3
3	Okra	IPM	Hybrid	10	3	181.80	130.50	156.15	104.03	50.10	156.15	104.03
4	Brinjal	IPM	Surti raviya	10	3	202.36	158.60	180.48	136.80	31.93	180.48	136.80
5	Cucurbits	IPM	Hybrid	5	2	123.00	82.00	102.50	81.35	26.00	102.50	81.35

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

Average Cost of c (Rs./ha)	ultivation	Average Gross Retu	urn (Rs./ha)	Average Net Retu (Rs./ha)		Benefit-Cost Ratio (Gross	
Demonstration	Local Check	Demonstration	Local Check	Demonstration	Local Check	Return /	st)
						Demo	Local
14	15	16	17	18	19	20	)
Cereal Crops							
15640	15850	56269	44460	40629	28610	1:3.60	1:2.80
15640	15850	58159	44558	42519	28708	1:3.72	1:2.81
15640	15850	57000	45750	41360	29900	1:3.64	1:2.89
7080	5570	12194	9694	5114	4124	1:1.72	1:1.74
14570	15850	57979	44460	43409	28610	1:3.98	1:2.81
14570	15850	58724	45630	44474	29780	1:4.12	1:2.89
8450	8300	34466	27280	26016	18980	1:4.08	1:3.23
8270	8050	26300	21200	18030	13150	1:3.18	1:2.63
Pulses					•		·
9225	7650	65205	45563	55980	37913	1:7.06	1:5.96
9150	8170	56875	40425	47725	32255	1:6.22	1:4.95
9270	8350	58000	44000	48730	35650	1:6.26	1:5.27
<b>Horticulture Crops</b>	•				·		·
57840	61480	197000	131875	139160	70395	1:3.41	1:2.15
41880	44500	143025	116475	101145	71975	1:3.42	1:2.62
57980	61450	197530	131598	139550	70148	1:3.41	1:2.14
41700	43600	144384	109440	102684	65840	1:3.46	1:2.51
29600	29850	82000	65080	52400	35230	1:2.77	1:2.18

# 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
Paddy –NAUR-1	Kharif-2012	ICM	Irrigated	59.23	46.80	26.56
Paddy –GNR-3	Kharif-2012	ICM	Irrigated	58.65	45.70	28.34
Paddy – GAR-13	Kharif-2012	ICM	Irrigated	57.00	45.75	24.60
Paddy – AAUR-1	Kharif-2012	ICM	Rainfed	14.78	11.75	25.79
Paddy –NAUR-1	Kharif-2012	ICM	Irrigated	61.03	46.80	30.41
Paddy –GNR-3	Kharif-2012	ICM	Irrigated	60.23	46.80	28.70
Sorghum – GJ-40	Kharif-2012	ICM	Rainfed	17.03	12.40	37.34
Nagli-Guj. Nagli-1	Kharif-2012	ICM	Irrigated	13.15	10.60	24.05
Pigeon pea-Vaishali	Kharif-2012	Land Configuration	Rainfed	16.10	11.25	43.11
Gram	Rabi- 11-12	IDM	Irrigated	16.25	11.55	40.70
Moong bean	Summer-12	New Variety	Irrigated	14.50	11.00	31.81
Okra	Rabi- 11-12	INM	Irrigated	157.6	105.5	49.38
Brinjal	Rabi- 11-12	INM	Irrigated	190.7	155.3	23.00
Okra	Rabi- 11-12	IPM	Irrigated	156.15	104.03	50.10
Brinjal	Rabi- 11-12	IPM	Irrigated	180.48	136.80	31.93
Cucurbits	Rabi- 11-12	IPM	Irrigated	102.50	81.35	26.00

# Technical Feedback on the demonstrated technologies

Sr. No	Technical Feed Back							
1	Reddening of leaves in Cotton.							
2	Value addition and marketing requirement of pulse crops in Uchchhal and Songadh taluka of Tapi district.							
3	Harvesting tool for okra fruits.							
4	YVM, fruit & shoot borer management technology require in Okra.							
5	Control of wilt complex in brinjal.							
6	Micronutrient requirement for okra, brinjal and cucurbits.							
7	Value addition and marketing requirement of Turmeric in Nizar							
8	Development of location specific pigeon pea variety for early <i>Summer</i> and <i>Kharif</i> for Tapi district.							
9	Require to develop high yielding hybrid rice suitable for this region.							
10	Short duration, early, dual purpose pigeon pea variety.							
11	Fertilizer dose for Hybrid rice and ratoon cotton.							
12	Require to develop Animal disease surveillance methods to prevent disease outbreak in Tapi district.							
13	Low cost high nutrient efficiency diet should be developed to prevent sickle cell anemia.							

# Farmers' reactions on specific technologies

Sr. No	Farmer's Feed Back
1	New variety of moong bean gave good results than old.
2	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.
3	The technology of INM increases yield and soil health and quality of fruits in brinjal and okra.
4	Land configuration in gram gives good results than local method.
5	NAUAR-1 and GNR-3 is better than local varieties of Paddy.
6	Vaishali is better than local cultivars of Tur.
7	SRI of Paddy is good because it requires less seeds, gave more tillers and less, pest problem. It also requires less water.
8	Development of crop modules for paddy
9	Vaishali variety is good but mature late, problem of flower drop and pod borer during this year
10	Tur on raised bed gave good result.
11	New variety of Paddy NAUR-1 gave higher yield as compare to other varieties.
12	New variety of Paddy NAUR-1 also good in eating and making <i>Rotla</i> purpose.

# **Extension and Training activities under FLD**

Sr. No.	Activity	No. of activities organized	Date	Number of participant s	Remarks
1	Field days				
	i. Oilseeds& Pulses				
	ii. Other than FLDs	5	3/4/2012, 8/5/2012, 9/5/2012, 23/10/2012 and 25/10/2012	139	
2	Farmers Trai	ning			
	i. Oilseeds & Pulses				
	ii. Other than FLDs	25	26/4/2012, 3/5/2012, 16/6/2012, 8/6/2012, 3/7/2012, 21/7/2012, 11/6/2012, 12/6/2012, 13/6/2012, 15/6/2012, 13/8/2012, 22/8/2012, 12-13/9/2012, 13/2/2013, 22/6/2012, 18/10/2012, 22/1/2013, 8/5/2012, 9/5/2012, 11/5/2012, 5/6/2012, 6/6/2012, 7/6/2012, 15/9/2012 and 15-17/1/2013	759	
3	Media covera	age			
	i. Oilseeds& Pulses		1	1	
	ii. Other than FLDs	2	1		
4	Training for e	extension for	unctionaries		
	i. Oilseeds& Pulses				
	ii. Other than FLDs				

c. Details of FLD – Discipline – Home Science:

(1) Result of FLD on feeding of POSHAK AAHAR to malnourished rural tribal children:

**Demonstration period:** December-2011 to March-2012 (4 months)

No. of Demonstration: 10

Village: Vanskui Taluka: Vyara

Critical input supplied: POSHAK AAHAR – Protein rich diet i.e. Mixture of wheat, jowar, rice, soybean and Bengal gram dal

(Cereals & pulses with 3:1 ratio)

Average weight gain of tribal children per month:

Age group	No. of tribal children	Avera	age body w	eight of tri	bal childre	n (Kg.)	Weight	Increase	*Feeding of
		Before					gain	in	POSHAK AAHAR
		demon.	First	Second	Third	Fourth	(Kg.)	Weight	to children
			month	month	month	month		(%)	(gm/day/child)
1-3 years	Malnourished	8.710	9.010	9.260	9.350	9.500	0.790	9.07	100 to 150
•	10								
	Healthy	10.020	10.200	10.290	10.350	10.500	0.480	4.79	
	10								

<sup>\*</sup> Recommended by WHO.

#### **Technical feedback:**

- 1. After feeding of POSHAK AAHAR to malnourished tribal children, the growth and development of children are better and the health and nutritional status are improved.
- 2. POSHAK AAHAR are the low cost protein rich diet and easily available in local market which are compatible for children due to lower economic status.

#### Mother's reaction on critical inputs:

- 1. POSHAK AAHAR are good in taste therefore children are eating POSHAK one to two times in a day. So that weight of children is increased & ultimately weakness of children is decreased.
- POSHAK AAHAR is cheaper and easily available at home.
   Recipes of POSHAK AAHAR can be prepared as per taste required.

#### (2) Result of Front Line Demonstration on Kitchen Gardening:

No. of Farm women: 60 No. of Demonstration: 60

Area: 1 Guntha/demo.

Season: Kharif-2012

Name of			Cro	p yield (Kg.) pe	er demonstrati	ion		
Enterprise	Tomato	Ridge gourd	Brinjal	Bottle gourd	Pigeon pea	Cluster bean	Bitter gourd	Sponge gourd
1	2	3	4	5	6	7	8	9
Kitchen Garden	15.7	5.3	21.6	10.7	8.9	3.4	3.5	4.9

	Crop yield (Kg	g.) per demo	nstration		Total	Average	Gro	ss return (₹)
Cucumber	Cow pea	Chilli	Snake gourd	Indian bean	Production (Kg.)	rate (₹/Kg)	Before FLD	After FLD
10	11	12	13	14	15	16	17	18
4.4	7.6	9.5	7.3	3.0	105.8	30	810=00	3174=00, along with domestic consumption

#### Farm women Reaction:

S. No	Feed Back
1	Before Demonstration, farm women were growing only two or three vegetable crops in their backyard but after demonstration
	they are growing different vegetable crops through kitchen gardening in scientific way.
2	Kitchen gardening gives continuous supply of fresh vegetables at lower cost which gives daily nutritious diet.
3	In kitchen gardening, farm women are not applying any agrochemicals so they produce organic vegetables.
4	We are utilized maximum backyard space and waste water.
5	Income is generated by selling extra vegetables grown in kitchen garden.
6	Farm women are attracted towards hybrid vegetables.

## (3) Result of FLD on Introduction of improved NAVEEN sickle for paddy harvesting:

Thematic area: Women drudgery reduction technology No. of Farm women: 30

Crop	Season & Year	No. of Demonstration	•	ty per labour a/h)	Increase in field	Labour red (man-l	•	E	Economics			
			Harvesting by NAVEEN	Harvesting by local sickle	capacity (%)	Demon	Local check	opera	Cost of operation * ₹/ ha / day			
			sickle					Demon	Local check			
Paddy	Kharif 2012	30	0.0076	0.0062	22.58	131	161	1600	2000	25.00		

<sup>\*</sup>Cost of operation is calculated as per Govt. rules.

#### **Technical feedback:**

- 1. Improved NAVEEN sickle reduces women drudgery in terms of time, efficiency and physical hazards (finger injuries, hand grip, muscle stress etc.)
- 2. During paddy harvesting, field capacity per farm woman is increased up to 22.58% by using NAVEEN sickle as compared to local sickle.
- 3. NAVEEN sickle saves 23% labour and 25% cost of operation as compared to local sickle.

#### Farm women's reaction:

- 3. NAVEEN sickle increases working efficiency in short period of time, i.e. it is cost saving and time saving.
- 4. NAVEEN sickle reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to local sickle.

<sup>\*\*</sup>NAVEEN sickle is recommended by CIAE, Bhopal.

#### d. Details of FLD – Animal Science:

#### (1) Mineral mixture feeding

	Thematic	Name of the	No. of	No.of	Major para	ameters	% change	Other par	ameter	*Econo	mics of de	monstratio	n (Rs.)	Ec	onomics o	Net Return         BCR           76.00         1:1.6	ls.)
Category	area	technology	Farmer	units	Demonst	Check	in major	Demons	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
	4.54	demonstrated		u	ration	Onook	parameter	ration	Onook	Cost	Return	Return	2017	Cost	Return	Return	Jon
Cow	Nutrition management	Mineral mixture feeding	20	20	Avg. milk yield lit per day 7.175	Avg. milk yield lit per day 6.200	15.73%			118.00	215.25	97.25	1:1.82	110	186.00	76.00	1:1.69

#### **Farmers Reaction:**

S	. No	Feed Back
	1	Use of mineral mixture results in better milk production and decrease chances of anoestrus in buffaloes.
	2	Use of mineral mixture decreases the chances of production associated diseases.

## (2) Bypass feeding to buffaloes

		Name of the	No. of	No.of	Major parameter	'S	% change in	Economics of demonstration (Rs.) Economics of check (Rs.)							
Category	Thematic area	technology demonstrated	Farmer	units	Fat % of milk		major parameter	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
	N1 4 70	5 ( ) ( ) ;			Demonstration	Check									
Buffaloes	Nutrition management	Bypass fat feeding to buffaloes	20	20 20	8.7	7.9	11.21	69	347.54	278.54 5.0	5.04	65	311.47	246.47	4.79

#### **Farmers Reaction:**

S. No	Feed Back
1	By pass fat feeding had resulted in better fat% of the milk

# (3) Urea treatment to paddy straw

Cotogony	Thematic	Name of the	No. of	No.of	Avg milk vield lit		% change	(RS.)				Economics of check (Rs.)				
Category	area	technology demonstrated	Farmer	units			in major parameter	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR	
Buffalo	Nutrition	Urea treatment to	20	20	Demonst ration	Check	21.96%	84	202.50	118.50	1:2.41	80	166.04	86.04	1:2.08	
	management	paddy straw	20	20	6.137	5.032	21.5070	07	202.30	110.50	1.2.41		100.04	00.04	1.2.00	

#### **Farmers Reaction:**

S. No	Feed Back
1	Use of Urea treatment make the paddy straw more palatable to the animals
2	Urea treated paddy straw efficient milk production and efficient fodder utilization

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

## A) ON CAMPUS

Thematic area	No. of	Participants									
	courses		Others			SC/ST			<b>Grand Total</b>		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women											
I Crop Production											
Weed Management	1	0	0	0	34	7	41	34	7	41	
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0	
Cropping Systems	0	0	0	0	0	0	0	0	0	0	
Crop Diversification	0	0	0	0	0	0	0	0	0	0	
Integrated Farming	0	0	0	0	0	0	0	0	0	0	
Water management	0	0	0	0	0	0	0	0	0	0	
Seed production	0	0	0	0	0	0	0	0	0	0	
Nursery management	0	0	0	0	0	0	0	0	0	0	
Integrated Crop Management	14	0	30	30	299	76	375	299	106	405	
Fodder production	0	0	0	0	0	0	0	0	0	0	
Production of organic inputs	0	0	0	0	0	0	0	0	0	0	
II Horticulture											
a) Vegetable Crops											
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0	
Off-season vegetables	7	0	29	29	96	34	130	96	63	159	
Nursery raising	0	0	0	0	0	0	0	0	0	0	
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0	0	0	
Export potential vegetables	0	0	0	0	0	0	0	0	0	0	
Grading and standardization	0	0	0	0	0	0	0	0	0	0	

D : :: : : : : : : : : : : : : : : : :		1	1			1	1	1	I	1
Protective cultivation (Green Houses, Shade Net etc.)	0	0	0	0	0	0	0	0	0	0
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
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g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	2	0	0	0	30	26	56	30	26	56
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management										
Dairy Management	1	0	0	0	16	4	20	16	4	20
Poultry Management	1	0	0	0	28	0	28	28	0	28
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Disease Management	2	0	0	0	34	40	74	34	40	74
Feed management	1	0	0	0	0	28	28	0	28	28
Production of quality animal products	1	0	0	0	3	20	23	3	20	23
V Home Science/Women empowerment										

Household food security by kitchen gardening and nutrition gardening	1	0	0	0	18	24	42	18	24	42
Design and development of low/minimum cost diet	2	0	0	0	7	56	63	7	56	63
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	1	0	0	0	0	20	20	0	20	20
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Income generation activities for empowerment of rural Women	3	0	0	0	0	84	84	0	84	84
Location specific drudgery reduction technologies	2	0	0	0	4	52	56	4	52	56
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	7	0	30	30	6	162	168	6	192	198
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0

Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	2	0	0	0	26	46	72	26	46	72
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases	1	0	0	0	25	0	25	25	0	25
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0

		1	1	1	1	T	I	I	ı	I
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	1	0	0	0	0	20	20	0	20	20
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	3	0	0	0	56	34	90	56	34	90
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
TOTAL	53	0	89	89	682	733	1415	682	822	1504
(B) RURAL YOUTH										
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0

Protected cultivation of vegetable crops	0	0		0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	1	0	0	0	21	0	21	21	0	21
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	2	0	0	0	31	29	60	31	29	60
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0

TOTAL	3	0	0	0	52	29	81	52	29	81
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	1	19	5	24	1	0	1	20	5	25
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	2	0	0	0	46	5	51	46	5	51
Care and maintenance of farm machinery and implements	1	0	0	0	23	3	26	23	3	26
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Women and Child care	1	0	0	0	0	28	28	0	28	28
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
TOTAL	5	19	5	24	70	36	106	89	41	130
Grand Total	61	19	94	113	804	798	1602	823	892	1715

# B) OFF Campus

Thematic area	No. of					Participants				
	courses		Others			SC/ST			<b>Grand Total</b>	
	<b> </b>	Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
										<u> </u>
I Crop Production										<u></u>
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	1	0	0	0	14	23	37	14	23	37
Water management	2	0	0	0	25	20	45	25	20	45
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	4	0	0	0	121	19	140	121	19	140
Fodder production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	3	0	0	0	42	32	74	42	32	74
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	17	17	0	17	17
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0

Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0

Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	2	0	0	0	55	10	65	55	10	65
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management										
Dairy Management	2	0	0	0	16	34	50	16	34	50
Poultry Management	3	0	0	0	48	27	75	48	27	75
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Disease Management	1	0	0	0	11	18	29	11	18	29
Feed management	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	1	0	0	0	0	20	20	0	20	20
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	3	0	0	0	0	88	88	0	88	88
Design and development of low/minimum cost diet	1	0	0	0	2	15	17	2	15	17

	,	•				1	1	,		,
Designing and development for high nutrient efficiency diet	3	0	0	0	0	100	100	0	100	100
Minimization of nutrient loss in processing	1	0	0	0	0	19	19	0	19	19
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	1	0	0	0	0	17	17	0	17	17
Value addition	0	0	0	0	0	0	0	0	0	0
Income generation activities for empowerment of rural Women	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	0	0	0	0	0	0	0	0	0	0
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	0	0		0	0	0	0	0	0	0
Integrated Disease Management	1	0	0	0	22	3	25	22	3	25

Bio-control of pests and diseases	0	0	0	0	0	0	0	0	0	0
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0

Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics										
Leadership development	4	0	0	0	112	121	233	112	121	233
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	1	0	0	0	0	23	23	0	23	23
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	3	0	0	0	21	50	71	21	50	71
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
TOTAL	38	0	0	0	489	656	1145	489	656	1145
(B) RURAL YOUTH										
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0

Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Value addition	2	0	0	0	1	108	109	1	108	109
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	2	0	0	0	42	0	42	42	0	42
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	0	0	0	6	29	35	6	29	35
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
TOTAL	5	0	0	0	49	137	186	49	137	186
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0

Grand Total	44	0	0	0	555	798	1353	555	798	1353
TOTAL	1	0	0	0	17	5	22	17	5	22
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	0	0	0	17	5	22	17	5	22
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0

# C) Consolidated table (ON and OFF Campus)

Thematic area	No. of					<b>Participants</b>				
	courses		Others			SC/ST		Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	0	0	0	34	7	41	34	7	41
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	1	0	0	0	14	23	37	14	23	37
Water management	2	0	0	0	25	20	45	25	20	45
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	18	0	30	30	420	95	515	420	125	545
Fodder production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	10	0	29	29	138	66	204	138	95	233
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	17	17	0	17	17
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0

Export potential fruits	0	0			0			0		0
• •		†	0	0	0	0	0	-	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	4	0	0	0	85	36	121	85	36	121
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0

Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and										
Management										
Dairy Management	3	0	0	0	32	38	70	32	38	70
Poultry Management	4	0	0	0	76	27	103	76	27	103
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Disease Management	3	0	0	0	45	58	103	45	58	103
Feed management	1	0	0	0	0	28	28	0	28	28
Production of quality animal products	2	0	0	0	3	40	43	3	40	43
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	4	0	0	0	18	112	130	18	112	130
Design and development of low/minimum cost diet	3	0	0	0	9	71	80	9	71	80
Designing and development for high nutrient efficiency diet	3	0	0	0	0	100	100	0	100	100
Minimization of nutrient loss in processing	2	0	0	0	0	39	39	0	39	39
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	1	0	0	0	0	17	17	0	17	17
Value addition	0	0	0	0	0	0	0	0	0	0
Income generation activities for empowerment of rural Women	3	0	0	0	0	84	84	0	84	84
Location specific drudgery reduction technologies	2	0	0	0	4	52	56	4	52	56
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	7	0	30	30	6	162	168	6	192	198
VI Agril. Engineering										
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0

Production of small tools and						1				
implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	2	0	0	0	26	46	72	26	46	72
Integrated Disease Management	1	0	0	0	22	3	25	22	3	25
Bio-control of pests and diseases	1	0	0	0	25	0	25	25	0	25
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0

Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax					0	<u> </u>	<u> </u>	0	- O	0
sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics										
Leadership development	4	0	0	0	112	121	233	112	121	233
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	2	0	0	0	0	43	43	0	43	43
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	6	0	0	0	77	84	161	77	84	161
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
TOTAL	91	0	89	89	1171	1389	2560	1171	1478	2649
(B) RURAL YOUTH										
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0

Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Value addition	2	0	0	0	1	108	109	1	108	109
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	3	0	0	0	63	0	63	63	0	63
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	2	0	0	0	31	29	60	31	29	60
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	0	0	0	6	29	35	6	29	35
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
TOTAL	8	0	0	0	101	166	267	101	166	267
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0

	105	19	94	113	1359	1596	2955	1378	1690	3068
TOTAL	6	19	5	24	87	41	128	106	46	152
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Women and Child care	1	0	0	0	0	28	28	0	28	28
Household food security	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	1	0	0	0	23	3	26	23	3	26
Capacity building for ICT application	3	0	0	0	63	10	73	63	10	73
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	1	19	5	24	1	0	1	20	5	25

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

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

					No.	of Partici	pants				Number of
Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	Male	Female	Total	Type of units	Number of units	Number of persons employed	persons employed else where
	22- 23/10/2012	Value addition in soybean	Value addition	2	1	26	27		Wor	k in progress -	-
Home Science	28- 29/12/2012	Value addition in fruits and vegetables	Value addition	2	0	82	82	Work in progress			
	22- 23/1/2013	Preparation of masala	Small Scale Processing	2	6	29	35	Work in progress			-

### (E) Sponsored Training Programmes

SI. No	Date	Title	Discipline	Thematic area	Duration (days)	Clientele	No. of courses	(	mbei othei	٢			nu	Tota mbe	r of	Sponsoring Agency	
								M	F	Т	M	F	Т	M	F	T	
1	29- 31/8/2012	New approaches and methods in Agril. Extension	Extension Education	Group Dynamics and farmers organization	3	E.F.	1	19	5	24	1	0	1	20	5	25	EEI, Anand
2	10- 11/9/2012	Agriculture business & its characteristics	Extension Education	Enterpreneurial development of farmers/youths	2	P.F.	1	0	0	0	29	0	29	29	0	29	ATMA- Navsari
3	12- 13/9/2012	Scientific cultivation of major kharif crops	Agronomy	ICM	2	F.W.	1	0	30	30	0	0	0	0	30	30	ATMA- Navsari
4	14- 15/9/2012	Scientific cultivation of vegetable crops under control condition	Horticulture	Off season vegetables	2	F.W.	1	0	29	29	0	0	0	0	29	29	ATMA- Navsari
5	17- 18/9/2012	Animal health management	Animal Science	Disease Management	2	P.F.	1	0	0	0	34	0	34	34	0	34	ATMA- Navsari
6	24- 25/9/2012	Health and nutrition for mother & child	Home Science	Women & Child Care	2	F.W.	1	0	30	30	0	0	0	0	30	30	ATMA- Navsari
7	28- 29/12/2012	Value addition in fruits & vegetables	Home Science	Value addition	2	R.Y.	1	0	0	0	0	82	82	0	82	82	ATMA-Tapi
8	15- 17/1/2013	Scientific Cultivation of groundnut	Agronomy	ICM	3	P.F.	1	0	0	0	30	0	30	30	0	30	NRCG- Junagadh
9	25/2/2013	Health and nutrition for pregnent & lactating women and children	Home Science	Women and child care	1	F.W.	1	0	0	0	0	26	26	0	26	26	NAIP-III NAU, Navsari

10	26/2/2013	Preparation of masala	Home Science	Income generation activities for empowerment of rural women	1	F.W.	1	0	0	0	0	26	26	0	26	26	NAIP-III NAU, Navsari
11	7/3/2013	Poultry production- Enterpreneurship approach & care during summer	Animal Science	Poultry Management	1	P.F.	1	0	0	0	28	0	28	28	0	28	NAIP-III NAU, Navsari
12	12/3/2013	Health and nutrition for pregnent & lactating women and children (Sponsored Training)	Home Science	Women and child care	1	F.W.	1	0	0	0	3	32	35	3	32	35	NAIP-III NAU, Navsari
13	13/3/2013	Preparation of masala	Home Science	Income generation activities for empowerment of rural women	1	F.W.	1	0	0	0	0	32	32	0	32	32	NAIP-III NAU, Navsari

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

		Participants											
	No. of	Fa	rmers (Othe	ers)	so	C/ST (Farme	rs)	Ext	ension Offic	ials		Grand Tota	
Nature of Extension Activity	activities	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	5	0	0	0	74	65	139	4	1	5	78	66	144
Kisan Mela	0	0	0	0	0	0	0	0	0	0	0	0	0
Kisan Ghosthi	3	25	0	25	10	16	26	4	0	4	39	16	55
Exhibition	3	0	0	0	3776	5909	9685	6	1	7	3782	5910	9692
Film Show	25	1	32	33	380	623	1003	3	1	4	384	656	1040
Method Demonstrations	8	0	0	0	533	306	839	2	1	3	535	307	842
Farmers Seminar	10	0	0	0	792	1344	2136	12	3	15	804	1347	2151
Workshop	0	0	0	0	0	0	0	0	0	0	0	0	0
Group meetings	77	1341	794	2135	3135	3279	6414	6	1	7	4482	4074	8556
Lectures delivered as resource persons	27	301	81	382	2452	1556	4008	6	1	7	2759	1638	4397
Newspaper coverage	10	0	0	0	0	0	0	0	0	0	0	0	0
Radio talks	0	0	0	0	0	0	0	0	0	0	0	0	0
TV talks	1	0	0	0	0	0	0	0	0	0	0	0	0
Popular articles	19	0	0	0	0	0	0	0	0	0	0	0	0
Extension Literature	6718	5	0	5	1343	5370	6713	4	1	5	1352	5371	6723
Advisory Services	21	18	2	20	141	165	306	3	1	4	162	168	330
Scientific visit to farmers field	83	2	1	3	142	204	346	6	1	7	149	193	342
Farmers visit to KVK	138	34	71	105	1073	1309	2382	5	1	6	1112	1381	2493
Diagnostic visits	41	3	0	3	54	9	63	8	0	8	65	9	74
Exposure visits	4	0	0	0	137	233	370	1	0	1	138	233	371
Ex-trainees Sammelan	7	0	0	0	23	234	257	6	1	7	29	235	264
Soil health Camp	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal Health Camp	2	0	0	0	342	185	527	9	1	10	351	186	537
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	1112	667	0	667	445	0	445	1	0	1	1113	0	1113

Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	14	0	0	0	0	265	265	1	1	2	1	266	267
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0	0	0	0
Celebration of important days (6)	6	59	4	63	52	172	224	8	2	10	119	178	297
Total	7366	1826	985	2811	14566	21231	35797	95	18	113	16487	22234	38721

# 3.5 Production and supply of Technological products SEED MATERIALS

Major	Crop	Variety	Quantity	Value	Provided to No. of
group/class	Стор	variety	(qtl.)	(Rs.)	Farmers
	Paddy	Gurjari	24.00	55200	96
	(Summer)				90
Cereals		Gurjari	70.00	1,60,000	Remaining seed will
	Paddy	GNR-3	18.00		be sold in May-
	(Kharif)	NAUR-1	21.00		2013 for next Kharif
		IR-28	18.50		
	Moong	Pusa	5.20	14400	104
D 1		Vishal			101
Pulses	Groundnut	GG-2	6.89	22810	90
	Gram	GG-2	1.20	3000	40
Sugarcane	Sugarcane	Co-5071	253.15	58305	10

### SUMMARY

Sr. No.	Major group/class	Quantity	Value	Provided to No. of
31. NO.	Wajor group/class	(qtl.)	(Rs.)	Farmers
	Paddy (Summer)-Gurjari	24.00	55200	96
	Paddy (Kharif)-Gurjari	70.00	1,60,000	Remaining seed
Cereals	Paddy (Kharif )- GNR-3	18.00		will be sold in May-2013
	Paddy (Kharif )- NAUR-1	21.00		for next Kharif
	Paddy (Kharif)- IR-28	18.50		
	Moong- Pusa Vishal	5.20	14400	104
Pulses	Groundnut- GG-2	6.89	22810	90
	Gram- GG-2	1.20	3000	40
Sugarcane	Sugarcane- Co-5071	253.15	38305	10
	TOTAL	417.94	293715	

### **PLANTING MATERIALS**

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Mango	Kesar			
	Mango	Dasheri			

### SUMMARY

SI. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS – MANGO			
	TOTAL	-		

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

KVK News Letter: - Regular news of KVK is published in NAU Spectrum, NAU Publication.

### (B) Literature developed/published

Item	Title	Authors name	Number of copies
Research papers	Tejetes:A novel source for value addition	Dr. S.T.Bhatt	Not applicable
	Increasing area and productivity of paddy in tribal belt of South	Dr. N.M.Chauhan	Not applicable
	Gujarat through effective TOT efforts: A success story	Dr. A.P.Patel	
	Consequence of nutrient management on growth and yield of		Not applicable
	lucerne (Medicago Sativa L.)- Paddy (Oryza Sativa L.) sequential cropping	Dr. N.M.Chauhan	
	Adoption of IPM technologies in cotton ecosystem of Tapi district	Dr. J.H.Rathod	Not applicable
	Trapian of it in the contrologica in action acceptation of rapidicalist	Dr. N.M.Chauhan	
	Telephone- A source of agro-technology information	Dr. Timbadia C.K.	Not applicable
		Dr. C.D.Pandya	Not applicable
	Impact and yield fissure inspection of gram through trainings and FLDs by KVK, Tapi in Gujarat	Nikulsinh M. Chauhan	Not applicable
	Execution of IPM technologies in cotton ecosystem of Tapi district	Nikulsinh M. Chauhan	Not applicable
	Livestock management practices followed by the dairy farmers of	Nikulsinh M. Chauhan	Not applicable
	Narmada district in Gujarat		
	Effect of different growth hormones on growth and flowering of	S.T.Bhatt, G.R.Patel	Not applicable
	dendrobium cr.senia 17. <i>Green Farming</i> , Vol 3(3):253-259.	and N.M.Chauhan	
	Contribution of the tribal farm women in livestock management	Nikulsinh M. Chauhan	Not applicable
	Constraints faced and suggestions offered by the programme	N.M.Chauhan & N.B.	Not applicable
	coordinators of KVKs' in India	Chauhan	N. 4 P. 1.1
	Information hungers of the rice growers	Nikulsinh M. Chauhan	Not applicable
	Yield gap analysis of okra production technology in Tapi district of	Patel G. R., Pandya C.	Not applicable
	South Gujarat	D. & Chauhan N. M.	NI ( P I )
	Prediction of variation caused by independent variables of tribal	G.R.Patel, C.D.Pandya	Not applicable
	farmers on extent of techno-economic change	& R.G.Patel	

Development and standardization of a scale to measure the socio- economic status of the farmers	C.D.Pandya and R.D.Pandya	Not applicable
Socio-economic change in tribal farm women through Self Help Groups	Arti N. Soni and C.D.Pandya	Not applicable
Impact of krishi mahotsav	Arti N. Soni and C.D.Pandya	Not applicable
Impact of training regarding package of practices on soybean growers	N.M.Chauhan and C.D.Pandya	Not applicable
Constraints faced by the mustard growers in adoption of recommended cultivation practices	M.P.Suthar, C.D.Pandya and K.F.Patel	Not applicable
Self reliance in paddy seed through seed village programme-success story	N.M.Chauhan and A.P.Patel	Not applicable
Revolutionary change in paddy production through effective TOT in tribal belt of South Gujarat	Nikulsinh M. Chauhan and A.P.Patel	Not applicable
Collision of linkages with tribal co operatives for effective TOT in tribal belt	Nikulsinh M. Chauhan	Not applicable
Profitable animal husbandary by thud guidance of KVK Tapi in tribal dominated villages	N.M.Chauhan and J.K.Raval	Not applicable
A scale to measure computer anxiety/nerviousness amongst agricultural students	N.M.Chauhan	Not applicable
Involvement of farm women in agriculture & animal husbandary activities	N.M.Chauhan and N.B.Chauhan	Not applicable
Effect of GAs and BA on growth and yield of Sonia cr17	S.T.Bhatt and N.M.Chauhan	Not applicable
Effect of growth hormones on rooting of African marigold (Tegetes erecta L.)	S.T.Bhatt N.M.Chauhan and G.D.Patel	Not applicable
Consequence of time of sowing on the growth and yield of okra, cv. OH-152	N.M.Chauhan and B.M.Tandel	Not applicable
Effect of auxin on rooting of African Merigold (Tegetes erecta L)	S.T.Bhatt and N.M.Chauhan	Not applicable
View point of farmers about ICT in Agriculture	N.M.Chauhan	Not applicable

	Managerial ability of the PCs of KVKs of India	N.M.Chauhan N.B.Chauhan	Not applicable
	Effect of IPM components on cucurbitaceous vegetables	J.H.Rathod N.M.Chauhan	Not applicable
	Women empowerment through SHGs	Arti N. Soni C.D.Pandya	Not applicable
	Knowledge and adoption of scientific practices of okra cultivation in Tapi district	C.D.Pandya G.R.Patel N.M.Chauhan	Not applicable
	Constraints in adoption of organic farming practices	Dr. C.D.Pandya Dr. R.D.Pandya	Not applicable
	Espousal and constraints in adoption of IPM technologies in cotton	N.M.Chauhan J.H.Rathod	Not applicable
	Information impalement of the rice growers	N.M.Chauhan N.B.Chauhan	Not applicable
	Impact and yield crack analysis of trainings and FLDs regarding scientific practices of gram	Nikulsinh M. Chauhan C.D.Pandya	Not applicable
	Impact of linkages with tribal co-operatives for effective TOT in tribal belt	N.M.Chauhan	Not applicable
	Automoney in paddy seed through seed village programme	N.M.Chauhan	Not applicable
T - ( - 1	Computer apprehension among the students of agriculture college	N.M.Chauhan	Not applicable
Total Technical reports	MPR, QPR, SAC report, FLD report, AAP, APR, MER, AGRESCO, ZREAC report, C-DAP Tapi	PC & All SMS	-
Popular articles	List of articles given in Annexure – III	PC & All SMS	
Leaflets/folders	KHETINE UDHDHYOG SAMKAKSHA BANAVAVA MATE "DAS MUDDANI SONERI SALAH	Dr. N.M.Chauhan	1000
	AGRICULTURE INFORMATION TECHNOLOGY	Dr. N.M.Chauhan	1000
	AADHUNIK KHETI ANE ATYADHUNIK BAHENO	Dr. N.M.Chauhan	1000
	TAKAU/CHIRANJIVI KHETI	Dr. N.M.Chauhan	1000
Total	4		4000

Book Published	Use of ICT in Agriculture Extension			
	Scientific cultivation of mashroom			
	Development of Socio-Economic Scale- Study on Organic Farmers			
	Management of Krishi Vigyan Kendras			

### (C) Details of Electronic Media Produced

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

### 3.7 SUCCESS STORIES / CASE STUDIES:

## 3.7.1 Entrepreneurship development of tribal women Self Help Group through preparation of Masala (Success story)

Krishi Vigyan Kendra, NAU, Vyara, Dist. Tapi has carried out women empowerment work in adopted villages through Self Help Groups. Tapi district is a tribal dominated district with poor economic condition of farmers. Farm women of this area are mostly engaged with daily wages work in farm, which is available in particular season. So, to generate the regular income it has been decided to organize different activities under tribal women Entrepreneurship Development programme.

Kalakava village is an adopted village of KVK. Shivshakti Self Help Group is an active and regular group of this village. Total 19 tribal women members in this SHG. The SHG has started since last two years. At present, total saving of SHG is about ₹ 75,920/-. Through SHG, all members come to know about saving account, some banking procedure, participation in meeting, maintain SHG registers, internal lending system and its interest calculation. They understood making of union and union power for internal help and confidence to overcome the socio-economic problems at their level through SHG with the help of KVK, Tapi. The president and secretary of SHG are Chaudhari Radhaben Dattubhai and Chaudhari Nutanben Pravinbhai respectively.

The members of SHG have economically poor and marginal land holding. Therefore, these tribal women were facing many difficulties for smooth maintenance of their family. Smt. Nutanben Chaudhari, Secretary of SHG, an active member decided to come out from the financial constraints. She heard that Krishi Vigyan Kendra, NAU, Vyara impart skill oriented vocational training to farmers and farm women. She contacted Smt. Artiben N. Soni, SMS (Home Science) and expressed their SHG experiences including financial constraints for meeting her day-to-day household needs. After hearing Nutanben, KVK Scientist came to know their problems and organized vocational training programme for Shivshakti Self Help Group on masala preparation from 1<sup>st</sup> Feb'2011 to 2<sup>nd</sup> Feb'2011. All members were actively participated in this programme.

After thorough followup of training programme, total **10** members of Shivshakti Self Help Group have started masala business as an entrepreneurs. Bank of Baroda (BOB, Kalakava) has sanctioned ₹ **50,000/-** for this vocation.

Then after for income generating activities, various materials/ equipments have purchased with the help of bank loan and internal lending thourhg SHG. Equipments like **Chakki** (Grinder for turmeric powder, **capacity**: **5 kg per hour**), **Pulverizer** for grinding masala (**capacity**: **15 to 20 kg per hour**), Mixer machine, Weighing balance, Sealing machine, Sieve, raw materials for masala preparation, plastic bags etc. Through masala business Shivshakti SHG is getting income of ₹ **14,000/- to** ₹ **16,000/- per month** and above ₹ **1,50,000/-** earned during season (Jan'12 to March'12). KVK, Vyara, Dist. Tapi has provided marketing arrangement for masala business by use of local market, other SHG / Sakhi mandal members, various Agri. Fair, tribal fair, social contact, etc. KVK, Tapi has given technical brand of their products.

Shivshakti SHG members have started masala business regularly although they are fully engaged in their household activities, farming and animal keeping. Shivshakti SHG has become an example and guide for other Self Help Group. As a result of this, Shivshakti Self Help Group members are self sufficient and the social status of the tribal women is raised through income generation from small scale masala business.

In short the details of masala business of Shivshakti Self Help Group are given as under:

1.	Name of SHG	:	Shivshakti Self Help Group
2.	Village	:	Kalakava
3.	Taluka & District	:	Vyara, Tapi
4.	Name of President & Secretary	:	President : Chaudhari Radhaben
	of SHG		Dattubhai
			Secretary : Chaudhari Nutanben
			Pravinbhai
5.	Total member of SHG	:	10 tribal farm women
6.	Month & Year of Vocational	:	1-2, February' 2011
	Training on Masala preparation		
7.	Group activity before training	:	Nil
8.	Bank loan for income generating	:	₹ 50,000/- Bank loan
	activities		₹ 10,000/- Internal lending through
			SHG
9.	Materials/ equipments	:	Chakki – Grinder for Turmeric
	purchased for Masala		powder (capacity:5 kg per 1 hour),
	preparation		Pulverizer for grinding masala
			(capacity:15 to 20 kg per hour),

			Mixer machine, Weighing balance,	
			Sealing machine, Sieve, raw	
			materials for masala preparation,	
			plastic bags etc.	
10.	Income generation of SHG	:	₹ 14,000/- to ₹ 16,000/- per month	
	through Masala products		and ₹ 1,50,000/- income during	
			season (Jan.to March)	
11.	Marketing arrangement	:	Use of local market/ social contact/	
			SHG/ sakhi mandal members/	
			various Agri fair, tribal fair etc.	

### 3.7.2 CASE STUDY: INCLUSION OF POULTRY REARING EXTENSION ACTIVITIES FOR RURAL LIVELIHOOD

#### INTRODUCTION

Poultry industry which provides cheap source of animal protein has taken a quantum leap in the last three decades evolving from a near backyard practice to a venture of industrial promotion. Poultry is one of the fastest growing segments of the agricultural sector in India today. While the production of agricultural crops has been rising at a rate of 1.5 to 2 percent per annum that of eggs has been rising at a rate of 8 percent per annum. India is on the world map as one of the top five egg producing countries with 55.6 billion eggs produced during 2008 (FAO).

In Tapi district there are about 5.44 lakh poultry and 5.26 lakh total livestock (29<sup>th</sup> survey report on estimates & major livestock products for the years 2011-12 Guj. State), among them improved breeds of poultry comprise only 115700. Most of the poultry farmers rear deshi breeds (about 428400 deshi poultry birds.) The egg production from deshi variety poultry is about 139.68 lakh eggs while that from improved variety is 264.59 lakh eggs. The egg productivity from improved breeds is 314 eggs per year while that from deshi birds is less than half of the improved variety (i.e 116 eggs per year).

Table 1. Total Poultry Taluka wise of Tapi district.

Taluka	No.
Vyara	150507
Valod	48743
Songadh	192098
Uchchhal	36221
Nizar	53072
Total	480641

The major thrust area for Poultry development is approach for commercial egg and meat production. That can be ensured by efficient managemental practices, introducing improved poultry varieties and creating awareness for poultry rearing .For introducing above practices, KVK Vyara has made many efforts. The care during egg hatching, rearing of chicks, disease prevention steps has been skilled to the farmers. The Trainings related with efficient and economic poultry house making, maintaining records, poultry care for summer and monsoon has been effectively trained to farmers via on campus and off campus

trainings. The farmers have been also taken for exposure visit to government poultry rearing practices so that hey can adapt the better practices. Moreover huge number of poultry keepers has participated in Poultry Shibirs organized by KVK.

During the year 2012, the poultry keepers of the villages adopted by Hagati mahila trust were trained at kvk as well as at their farms and significant results in terms of reduced poultry mortality was gained.

### **II. EFFORTS**

The following extension activities were conducted during year 2012.

### 1. TRAININGS

### **TABLE 2.OFF CAMPUS TRAININGS**

	17.D.1.2 21.01.1 07.11.11 00 11.7 11.1111.100				
Sr. No.	Title of the training programme	Type of Beneficiaries	Total No. of participants	Village	
1	Profitable poultry production and management alongwith dairy animal management	Practicing farmers	42	Bharadada	
2	Vaccination & its importance	Practicing farmers	29	Zarali	
3	Management practices of backyard poultry farming	Practicing farmers	31	Vadpada	
4	Care and management of poultry house during cold weather	Farm women	20	Amalgundi	
5	Care of Poultry during summer and vaccination care	RuralYouth	24	Madav Village	

### **TABLE 3: ON CAMPUS TRAININGS**

Sr. No.	Title of the training programme	Type of Beneficiaries	Total No. of participants	Village
1	Backyard Poultry care	Practicing farmers	30	FTC ,Vyara
2	Poultry enterpreneurship development through scientific approach	RuralYouth	40	Unchamala,Ghodchit and Vadpada
3	Care & hatching of eggs, processing of meat & marketing	RY	20	Madav and Unchamala
4	Poultry production- Enterpreneurship approach & care during summer (Sponsored training by NAIP-Navsari)	PF	28	Sarvar (Dang)

**TABLE 4: KISHAN GHOSTHI** 

Sr.N	VО	Place	Topic	Participants
1		Madav Village	Sharing experiences related with success, oppurtunity and failure events in poultry production practices	12

### **TABLE 5: FILM SHOW**

Sr.No	Place	Topic	<b>Participants</b>
1	KVK-Vyara	Backyard poultry development 2. Aadarsh Pashupalan	40
2	KVK-Vyara	Poultry- Livelihood ways	28

### **TABLE 6: DIAGNOSTIC VISITS**

Sr.No	Place	Advice given on Topic	Beneficiaries
1	Garvan	Wart like lesion on mouth of poultry	5
2	Garvan	Economic assistance information for poultry	10
3	Bhadbhunja	Guidance about egg cracks	12
4	Bhadbhunja	Guidance about lamness in poultry	8
5	Aamalgundi	Guidance about mortality in poultry chicks	6

### **TABLE 7: FARMERS VISIT TO KVK**

Sr.No	Place	Advice given on Topic	Beneficiaries
	Mandal	Information about source for goat and poultry	12
1	iviariuai	purchase	12
		Information about loan/financial assistance from Govt.	
2	Unai	for poulry set up	7
3	Madav	Sudden death in poultry	13
4	Madav	Presence of worms in intestine	5

### **TABLE 8: SCIENTISTS VISIT TO FARMERS FIELD**

Sr.No	Place	Advice given on Topic	Beneficiaries
1	Vadpada	Profitable Poultry Keeping	20
2	Songadh	Guidance about poultry egg	8
3	Aamalgundi	Guidance about vent picking in poultry	9

### **TABLE 9: FARMERS SCIENTIST INTERACTION**

Sr.No	Place	Topic	Beneficiaries
	Madav	Discussion & finding solution of poultry house related	8
1		problems	

#### TABLE 10: Parisanvad /Shibir

Sr.No	Place	Topic	Beneficiaries
1.	KVK Vyara	Profitable Poultry Farming Parisanvad	180

### **TABLE 11: EXPOSURE TOUR**

Sr.No	Place	Topic	Beneficiaries
1.	Intensive Poultry Development Project	Vyara	180

### **TABLE 12: TOPICS INCLUDED FOR TRAININGS**

### POINTS OF OF THE TRAININGS

### **I.Breeding**

- 1. Use breeding nest for poultry which can result in reduce egg lost
- 2. Selection of uncracked and untainted egg for hatching which can result improved hatching rate
- 3. Regular inspection during hatching which can result in reduced egg contamination
- 4. Adopting practice of keeping 6-8 eggs under one hen for hatching which can result improved hatching rate

### II.Feeding

- 1. Use of pallet feed/ grain for feeding which can result in low incidence of production diseases.
- 2. Use of keeping watering utensil which can result in low incidence of heat stress.

### III. Management

- 1. Deep litter system for rearing poultry which can result in better and convenient poultry husbandry operations
- 2. Selected dual purpose breeds for rearing which can result in economically efficient Poultry farming
- 3. Keeping records of production which can result in economically efficient Poultry farming
- 4. To place the eggs by large end of the egg upperside for hatching which can result in better hatching rate.
- 5. Keeping hygienic / sanitary measures for poultry meat processing which can result in obtaining safe meat

#### IV. Disease Care

- 1. Communication with animal health experts if disease out break suspected. which can result in low disease out break and public health hazards
- 2. Use of growth promoter in feed of poultry which can result in improved meat as well as egg production.
- 3. Preventive measures to avoid tick infestation in poultry, which can result in better production performance

Traditionally the tribal people are keeping poultry without following scientific methods, which can result in low or no effective income and employment generation. In this document it is emphasized that Scientific and technical intervention of veterinary professional through KVK can be made which can incorporate scientific poultry keeping methods. This can result in profitable poultry keeping and employment generation. Due to all above efforts many fruit full results in terms of commercial poultry keeping practices has been gained. The egg production from deshi variey poultry @ 145 eggs per year and average weight of 1.5 kg at 90 days can be attained as compared to previous 116 eggs and 1.2 kg body weight respectively. The Layer Poultry keeping practices can help in income generation to weaker section of the tribal farmers through selling of eggs and chickens. Moreover effective nutritious diet in the form of eggs can be attained to the tribal poultry keepers . The tribal farmers can be provided source of family income through selling of eggs and poultry meat .

# 3.7.3 <u>Case study</u>:- Dahyabhai Madaribhai Chaudhary, An Innovator of Dual purpose Pigeonpea (Var. Vaishali) production in Tribal area of Tapi Districts

Name of farmer	Dahyabhai Madaribhai Chaudhary
Village	Kalakava
Main crop	Paddy and sugarcane
Seeds given by KVK	Pigeonpea (Variety-Vaishali), (5 kg free under FLD)
Total area sown	0.48 ha
Season	Kharif 2012
Total production	500 kg
Insect pest	No, due to red flower pod borer attack was less.
infestation/disease, if any	
Insecticide/pesticide	No
applied, if any	
Market price	Rs.800/- per 20 kg
Total Income	Rs. 20000/-
	After harvesting of main crop, ratooning is taken and due to this
	in the next season they will get more pods as a vegetable
	purpose. Looking to the success of Mr. Dahyabhai surrounding 20-25 tribal farmers are ready to adopt Vaishali in next kharif and already taken the seed from Mr. Dahyabhai. Fragrance of Vaishali is
	also spread in surrounding villages.

# 3.7.4 <u>Case study</u>:- Pravinbhai Harishbhai Chaudhary, An Innovator for Scented Paddy (Var. PRH 10) production in Tribal area of Tapi Districts

Name of farmer	Pravinbhai Harishbhai Chaudhary
Village	Kalakava
Total area	8 acre
Main crop	Paddy and sugarcane
Seeds given by KVK	Paddy (PRH 10 –scented), 4 kg
Total area sown	0.24 ha
Sowing method	line sowing
Spacing	15 cm intra row
Season	Kharif 2012
Total production	1200 kg
Insect pest infestation/disease,	Normal stem borer infestation, no any disease
if any	
Insecticide applied, if any	Phorate 10G
•	whole paddy grain milled
Paddy selling rate	Rs.300/- per 20 kg (paddy whole)
After milling	farmer got market price @ Rs. 20 per kg in traditional variety,
	while in case of scented variety (PRH 10) he got @ Rs. 60 per
	kg
Straw production	Produced 25 % higher than the traditional variety.
	This scented rice variety introduced first time in this village by
	Mr. Pravinbhai. Whole village attracted towards this scented variety. Moreover, five tribal farmers collected seeds from Mr.
	Pravinbhai by barter method. About 20-25 farmers will adopt same variety in next season. This may be due to constant follow
	up and live contact of KVK Scientists.

# 3.7.5 <u>Case study</u>:- Ajitbhai Maganbhai Gamit, An Innovator for Paddy (Var. NAUR 1) production in Tribal area of Tapi Districts

Name of farmer	Ajitbhai Maganbhai Gamit
Village	Vadapada
Total area	1.2 ha
Irrigation source	Tube well
Seeds given by KVK	Paddy (NAUR 1), 2 kg
Total area sown	0.4 ha
Biocompost applied	1 tonn
Sowing method	SRI method
Spacing	25cm x 25cm spacing
Season	Kharif 2012
Weeding	weeding operation carried out by paddy weeder
Total production	2000 kg
Insect pest infestation/disease, if any	No
Insecticide applied, if any	No
Paddy selling with market price of	Rs.224/- per 20 kg
	In Vadapada village, the other neighboring farmers of Mr. Ajitbhai fascinated towards his field and made enquiry regarding name of the variety, sowing method, source from where he got seeds, cultivation practices and so. Like this, all farmers were satisfied and immediately made booking towards Mr. Ajitbhai regarding seeds of NAUR 1 variety for sowing in the next season in their own field.  By this way, in next season about 30-35 farmers will adopt NAUR 1 variety along with Biocompost and SRI method for planting in this village.
Farmers Feedback	Initially, when Mr. Ajitbhai planted NAUR 1 variety by SRI method, his mother was not satisfied regarding all the cultivation practices, due to one seedling per hill but after one month when she monitor the field; growth of the paddy crop, really she was impressed and satisfied. Her mother advised other farmers to adopt the same.

# 3.7.6 <u>Case study</u>:-Bhavik Natubhai Bhakta, An Innovator for mixed cropping

Name of	Bhavik Natubhai Bhakta
farmer  Village	Ambach
Age	27
Education	B. Com.
Total land	18 acres
Cropping system adopted	Mixed cropping
Total mix cropped area	4 acre
Crops	Cucumber, cowpea, brinjal and bitter gourd
Main crop	Brinjal
Intercrop	Cucumber
	He sown cow pea as gap filling in main crop brinjal
Planting Season/month	January 2012
Total Income	10 lakh
Cultivation practic	es
Bio-compost applied	
Fertilizers	Applied through fertigation
Irrigation	100 % drip irrigation
Mulching, if any	Plastic mulching
Trap cropping	Marigold and sweet corn
Plant protection	Neem oil spray, installed various types of pheromone traps, yellow
practices	sticky traps, fruit fly trap, spraying of NPV
Total Expenditure	5.0 lakh (from land preparation upto market)
	Due to mixed cropping and good post harvest management he got maximum profit. Out of 10 lakh he got maximum return of 3 lakh from bitter gourd which grown as intercrop. Due to sound post harvest management practices including grading, packing all vegetable produce becomes popular among traders in Sardar Market, Surat. Whole mass of labour also well trained for good post harvest management.
Ratooning of Brinjal	Mr. Bhakta has also taken brinjal ratooning in August month
Intercrops	In brinjal ratooning, he has also taken cucumber as intercrop
Cultivation practices	As per the main crop (in January to August)
Plant protection	as per the main crop (in January to August)

practices	
Total income	6.0 lakh (cucumber + brinjal)
Total expenditure	2.0 lakh
Net profit	9.0 lakh (from both main crop + ratooning)
	The whole technical guidance of mixed cropping, INM, IPM, post
	harvest management and value addition in ecofriendly manner was
	given by KVK, Vyara
	Mr. Bhakta has also taken care of his produce during
	transportation. He used wetted gunny bags during transportation to
	protect the fresh vegetable from sunlight and also well packed to
	protect it from dust. Due to wetted gunny bags the freshness of his
	vegetable produce was also maintained without loss of shining and
	quality of product.
	Mr. Bhakta is now became an innovator for the district regarding
	profitable mixed vegetable farming on scientific way. Looking to the success of Bhakta, youth farmers are attracted towards his
	visionary and profitable farming. Number of farmers has visited to
	farm of Mr. Bhakta. Quality of the produce, shining, and taste of all
	vegetable product are appreciated by all the visited farmers,
	internal traders as well as exporter traders in Surat market.
	Mr. Bhakta has created his own market chain by sound
	management and post harvest practices and he was able to get
	highest market price of his vegetable products. He is an innovative
	young farmer of Tapi and his success story is also printed in ICAR
	publication regarding SRI technology in Paddy. He got 10 tons
	paddy production/ha.
	Each and every corner of his farm along with roadside and hedges
	are also covered by vegetable crops. Bhakta is become an
	innovator among farming community of Tapi and using him in
	Krishi Mahotsav District administration also to motivate other
	farmers towards profitable vegetable cultivation.
	He also visited the progressive farmers of Gujarat and
	Maharashtra.
	All family members are also satisfied by his efforts and supported
	to him at each and every cultivation and post harvest practices
	including grading, packing and transportation. It is a unique example for other farmers to get higher income from unit area
	through mixed cropping in the lie of Mr. Bhakta.
	iniough mixeu cropping in the lie of Mi. Bhakta.

# 3.8 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 **Every 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° 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.	Jowar	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, eye to eye contact
- Rural Youth: Group discussion with youth, at the time of field visit.
- Inservice personnel: Discussion with extension workers, line department officials, field extension functionaries and NGOs staff.

### 3.11 Field activities

i. Number of villages adopted: - 12

ii. No. of farm families selected: 5357

iii. No. of survey/PRA conducted :- 12

### 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	1	88120

	Total	67	539780
26.	Voltas make water cooler	1	26500
25.	Burner maker type with stop coke	8	2000
24.	Micro kjeldahl Assembly	1	10700
23.	LG AC-15 ton	1	23740
22.	City weigh balance model ST-10 Cap- 10 kg	1	10640
21.	Automatic autoclave	1	21000
20.	CENTRO FIX – Muffle furnace	1	29500
19.	CENTRO FIX WATERBATH	1	10800
18.	Chemical Balance	1	75000
17.	Hot air oven	1	21200
(d)	Systronics make micro processor based conductivity meter	1	12800
(c)	Systronics make micro controller based PH meter	1	10900
(b)	Systronics make micro controller based flame photometer compressor model-128	1	35200
(a)	Micro controller based Digital spectrophotometer model -106	1	26800
16.	Systronics make	<u> </u>	
15.	Office chair	4	4000
14.	Partition racks	3	22500
13.	Steel racks	4	8600
12.	Steel cupboard storewel	4	14000
11.	Steel cupboard – storewel	4	19200
10.	Stools	12	5400
9.	Racks	6	9000
8.	Laboratory Table	4	34400
7.	Nova willy mill stain lese steel camber Size 100 x 50 mm	1	31900
	(b) Size 18" x 24"	1	11250
	NV-8535 stainless steel (a) Size 12" x 20"	1	8500
6.	Nova Hot plate Rectangular model		
	(b)Capacity 25 flasks of 250 ml	1	29750
	(a)Capacity 16 flasks of 250 ml	1	24500
5.	Nova Rotary shaking machine		
4.	Double still with thermo sensor hr (All glass) cat No 2348	1	38550
3.	Electronic Kel plus micro processor based Automatic Distillation system model distil EM	1	142300
	Microprocessor based eight place macro block digestion system model KES-08L		

### 3.13 Details of samples analyzed so far

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	1112	1112	38	222400
Water Samples	1	1	1	50
Total	1113	1113	39	222450

### 4.0 IMPACT

### 4.1. Impact of KVK activities

Name of specific	No. of	% of	Change in income (Rs.)	
technology/skill	participants	adoption	Before	After
transferred			(Rs./Unit)	(Rs./Unit)
Introduce new variety of	250	64.00	35000	55000
Moong bean				
Introduce new variety	376	88.00	21700	61800
(vaishali) in Tur				
IPM in cotton	424	82.00	35300	45645
Scientific package of	250	85.00	38700	78600
practices of okra				
INM in brinjal	173	76.00	62270	94870
Use of biofertilizer and	268	60.00	27840	42325
irrigation management in				
gram				
Mineral Mixture	150	77	10000	15400

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

### 4.2. Cases of large scale adoption

Sr.	Crop/	Thematic Area	Large scale adoption (%) i adopted villages	
No	Enterprise	Thematic Area	Before KVK	After KVK
1	Pigeon pea	New Variety	15	75
2	Gram,	Irrigation Management	10	83
3	Soybean	INM	12	88
4	Okra	IPM	18	62
5	Brinjal	IPM	18	55
6	Cotton	IPM	8	47
7	Kitchen Garden		20	73
8	Okra	INM	10	56
9	Paddy	ICM	24	74
10	Paddy Straw	Nutrition Management	15	60

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

### 4.3.1 Impact of training regarding scientific cultivation of okra

The Okra crop is becoming more and more popular in Tapi district. The considerable acreage area (4000 hectare) is under okra cultivation. Due to lack of knowledge regarding scientific package of practices tribal farmers are wasting huge budget behind crop production, indiscriminating use of agrochemical and loosing the health of soil, water and environment and also unable to get higher net return due to lack of knowledge regarding value addition and market management. To overcome this problem KVK, Tapi has started an integrated campaign. KVK, Tapi conducted 9 on campus and 7 off campus trainings, total number of beneficiaries of FLD is 124

covering 7 villages of Tapi district and other extension activities during last three year. The details regarding such innovated movement is presented here as an impact study.

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

Results of overall knowledge of scientific package of practices of Okra indicated that the medium and high level of knowledge before KVK was 35.00 per cent and 10.00 per cent, respectively, which was increased up to 50.00 per cent and 28.00 per cent after contact with of KVK (Table-1).

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

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

In case of knowledge regarding selected scientific innovations for okra cultivation medium and high level of knowledge was 35.00 per cent and 39.00 per cent, respectively in case of integrated nutrient management, Where as in integrated pest management was 61.00 per cent and 14.00 per cent, respectively. High knowledge level regarding plant growth regulators and value addition was 82.00 per cent and 78.00 per cent, respectively (Table-2).

Table 3:- Overall adoption of scientific package of practices of okra

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

The data presented in table 3 indicated that medium and high level adoption was 69.00 per cent and 17.00 before KVK where that of after conducted with KVK was 28.00 per cent and 68.00 per cent, respectively.

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, 82.00 per cent farmers adopted high yielding varieties and INM. 76.00 per cent farmers adopted recommended seed rate. In case of plant growth regulator and value adoption 73%.00 per cent and 77.00 per cent adoption was observed (Table-4). From the above discussion, it can be concluded that knowledge level and adoption level of the tribal farmer s were increased after imparting training and conducting FLD by KVK scientists. KVK, Vyara is working as a knowledge hub for latest agricultural technology in Tapi district.

### 4.3.2 Impact of training regarding scientific cultivation of brinjal

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 conducted 9 on campus and 7 off campus trainings, total number of beneficiaries of FLD is 97 covering 7 villages of Tapi district and other extension activities during last three year. Impact study results are present here.

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

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

Results of overall knowledge of scientific package of practices of Brinjal indicated that the medium and high level of knowledge before KVK was 28.00 per cent and 13.00 per cent, respectively, which was increased up to 51.00 per cent and 42.00 per cent after contact with KVK (Table-1).

Table 2:- Knowledge regarding selected scientific innovations for brinjal cultivation n=100

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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

In case of knowledge regarding selected scientific innovations for Brinjal cultivation medium and high level of knowledge was 26.00 per cent and 65.00 per cent, respectively in case of integrated nutrient management, Where as in pest and disease control was 59.00 per cent and 19.00 per cent, respectively. High knowledge level regarding plant growth regulators and value addition was 84.00 per cent and 81.00 per cent (Table-2).

Table 3:- Overall adoption of scientific package of practices of brinjal

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

The perusal of data presented Table 3 indicated that before contact with KVK, more than half (56.00 per cent) of the respondents had medium level of adoption followed by low (28.00 per cent) and high (16.00 per cent) level of adoption. But, after

contact with KVK, it was found that 72.00 per cent had high level of adoption followed by medium (22.00 per cent) and low (6.00 per cent) level of adoption.

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, 89.00 per cent farmers adopted INM, 92.00 per cent farmers adopted recommended spacing. In case of plant growth regulator and value adoption 82.00 per cent and 86.00 per cent adoption was observed. Pest and disease control & IPM 68% and 59% farmers adopted the technology (Table-4).

From the above discussion, it can be concluded that the impact of training conducted by KVK has beneficial effect on knowledge level and adoption level of the tribal farmers about scientific cultivation of brinjal. Among the Knowledge regarding selected scientific innovations for brinjal cultivation, majority (84.00 per cent) of the respondent had knowledge about plant growth regulator followed by value addition (81.00 per cent) and integrated nutrient management (65.00 per cent) after receiving training. In case of adoption of critical brinjal production technology, majority (92.00 per cent) of the respondents had adopted recommended spacing followed by integrated nutrient management (89.00 per cent), value addition (86.00 per cent) and plant growth regulator (82.00 per cent).

### 4.3.3 Impact of training regarding package of practices of soybean crop

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. 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. KVK conducted 8 on campus and 10 off campus trainings, total number of beneficiaries of FLD is 43 covering 7 villages of Tapi district and other extension activities during last three year. The 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

Results of overall knowledge of soybean indicated that the low, medium and high level of knowledge before contact with KVK was 89.00 per cent, 09.00 per cent & 02.00 per cent, respectively and it was increased up to 07.00 per cent, 14.00 per cent and 79.00 per cent after contact with KVK (Table-1).

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

In case of Knowledge regarding selected scientific innovations for soybean high knowledge regarding selected scientific innovations were found except seed rat.

Table 3:- Overall adoption of scientific cultivation of soybean

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

Data presented in table -3 indicated that majority of the farmer had low level of knowledge (75.00 per cent) before contact with KVK. After contact with KVK, 89.00 per cent of the farmers had high level of knowledge.

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 present in table 4 indicated that 92.00 per cent of the farmer had adopted new high yielding variety fallowed by INM (88.00 per cent).

From the above discussion, it could be inferred that after imparting training and other intensive approach by KVK, Tapi, majority (79.00 per cent) of the tribal farmers of these area had high the knowledge level and majority (89.00 per cent) of the tribal farmers of these area had high adoption level about package of practices of soybean crop. 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.

The study has acknowledged the knowledge level of the farmers towards profitable cultivation of the soybean. This study 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 study also reflects the role of KVKs in effective Transfer of Technologies (**TOTs**) at grass root level.

### 4.3.4 Impact of training regarding package of practices of gram crop

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. KVK, Tapi had done intensive effort on training about scientific cultivation, demonstration on new variety & land configuration. KVK conducted 6 on campus and 8 off campus trainings, total number of beneficiaries of FLD is 48

covering 7 villages of Tapi district and other extension activities during last three year. So impact study results are present replacing drill paddy.

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 78.00 per cent of the farmers had low level of knowledge which was increased (82.00 per cent) 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	80	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 87.00 per cent of the farmers had knowledge about new high yielding varieties followed by Integrated Nutrient management (83.00 per cent), Land configuration (81.00 per cent) and bio fertilizer (75.00 per cent).

Table 3:- Overall adoption of scientific cultivation of gram

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 76.00 per cent of the farmers had low level of adoption which was increased after contact with KVK (84.00 per cent).

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
6	Integrated Nutrient management	76

The data show in the table 4 indicated that 89.00 per cent of the farmers had new high yielding varieties which were followed by Land configuration (85.00 per cent), Seed rate (82.00 per cent) and Bio fertilizer (78.00 per cent).

From the above discussion, it could be said that overall knowledge level and adoption level of the tribal farmers about package of practices of gram had increased up to 82.00 per cent and 84.00 per cent, respectively after imparting training by KVK, Tapi.

### 4.3.5 Impact of training regarding package of practices of pigeon pea crop

Pigeon pea is the main pulse crop in South Gujarat. Tribal belt is preferring pigeon pea as a main leguminous food in their daily diet. Farmers grow very old variety and lack knowledge about improved variety, and scientific cultivation of pigeon pea. So they get very low production. KVK conducted 9 on campus and 12 off campus trainings, total number of beneficiaries of FLD is 73 covering 7 villages of Tapi district and other extension activities during last three year. So impact study results are present here.

Table 1:- Overall knowledge of package of practices of pigeon pea 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 74.00 per cent of the farmers had low level of knowledge which was increased (87.00 per cent) after contact with KVK.

Table 2:- Knowledge regarding selected scientific innovations for pigeon pea 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	80	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 88.00 per cent of the farmers had knowledge about seed rat followed by, Land configuration (86.00 per cent), INM (84.00 per cent) and bio fertilizer (76.00 per cent).

Table 3:- Overall adoption of scientific cultivation of pigeon pea

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 65.00 per cent of the farmers had low level of adoption which was increased after contact with KVK (87.00 per cent).

Table 4:- Adoption of critical pigeon pea 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 90.00 per cent of the farmers had land configuration which was followed by new high yielding varieties (88.00 per cent), Seed rate (84.00 per cent) and INM (84.00 per cent).

From the above discussion, it could be said that majority of the respondents had high level of knowledge and adopted all the pigeon pea production technology. These may be due to the proper guidance given by the KVK scientists, demonstration and constant follow up by KVK missionary.

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 thing looks like diminutive but its impact is of great magnitude.

## 4.3.6 Impact of training regarding *IPM components on Cucurbitaceous* vegetables

Cucurbitaceous vegetables *viz.*, bitter gourd, small gourds, cucumber etc. are infested by two species of fruit flies i.e. melon fruit fly, *Bactocera cucurbitae* (Coquilleti) and the Ethiopian fruit fly, *Dacus ciliatus* (Loew), which limits the economic returns to the farmers by their damage to the final product *i.e.*, fruits. The female fly insert its eggs in soft tender fruit tissue by piercing fruits with the ovipositor, as a result, a watery fluid oozes from the punctures which on hardening become resinous brown. The maggots emerged from the eggs, start feeding on pulp of the fruit. The secondary infection by microorganisms from site of egg laying cause rotting of the fruits rendered them unfit for the consumption. This reduces the market value of the produce. The infested fruits become distorted and drop. The mature maggots jumped out of the fruits and pupate inside the soil. The extent of loss reported to be varied from 30 to 100 per cent depending upon cucurbits species and the season.

As the maggot being an internal feeder, it is rather difficult to control the maggot. The only option is to manage the adult fruit flies and that too before they mat and female deposit eggs. The chemicals means i.e. using insecticides for managing fruit flies is no longer effective.

The melon fruit fly, *B. cucurbitae* can be effectively managed by Male Annihilation Technique by attracting large numbers of males through "Cue Lure", a pheromone of *B. cucurbitae*. But, the other species of fruit fly *i.e.*, *D. ciliatus* cannot be managed by Male Annihilation Technique as no pheromones/ Para pheromones are available. To manage this species, application of insecticides with baiting technique is useful. Therefore, to manage both the species integrate approach using field sanitation, large scale destruction of males by Male Annihilation Technique and application of insecticidal baits is effective. Recently, Navsari Agricultural University has developed a specialized **NAUROJI trap** using cue lure. In this trap a ply wood blocks of size 5cm x 5 cm x 1 cm impregnate with cue lure are used.

To popularize the integrated management technique as well as the trap developed by the university, front line demonstrations were given to the farmers of Khadaka chikhali village of Vyara taluka, Dist. Tapi during the year 2007-08 and 2008-09.

The village Khadka Chikhali is situated in Vyara block of Tapi district. It is situated 2 km away from Vyara town, the district place of Tapi and Krishi Vigyan Kendra, Vyara head quarter. Khadka Chikhali is a tribal dominated village with marginal farmers with limited land holdings.

Even though, the village is situated in vicinity of Vyara town; no extension agency was catering the need of the farmers. They have to rely on local pesticide dealer for their technical needs.

The main crops of the village are paddy, groundnut, sugarcane and vegetable. Being an advantage of having in vicinity of the town, the farmers with the limited land holdings grow vegetables and sell it to local market. Among different

vegetable crops, the farmers mostly depend on cucurbitaceous vegetables like bitter gourd, little gourd and cucumber. In cucurbits, the menace of fruit fly is one of the major constraints in the area. The farmers were unable to manage the fruit flies with chemical pesticides.

In the year 2008, Krishi Vigyan Kendra, Vyara has decided to demonstrate the technology for integrated management of Fruit fly in the village. The entry point visit was made by the scientists of the KVK, Vyara. Discussing with farmers, it was found that infestation of fruit flies is major limiting factor in production of cucurbitaceous vegetables. Considering the situation and dialogue with the farmers, plant protection specialist suggested implementation of integrated fruit fly management in cucurbitaceous vegetables and training as well as the demonstration was the need of the village. The interested farmers were given training with special emphasis on fruit fly species, their life cycle, nature of damage, and management strategies through power point presentations. During both the years, 20 farmers each with 0.2 ha land were given demonstrations under Bitter gourd crop. Among different farmers, **Kaushikbhai** acted as resource person for the village.

### The detailed components of IPM i.e.

- 1. Regular collection of damaged and fallen fruits and destruction with deep burying or by burning.
- 2. Installation of "Cue Lure" NAUROJI traps @ 10 per hectare.
- **3.** Application of bait using fermented water with jaggery and insecticide endosulfan applied as large droplets with broom, are demonstrated, constant follow up visits were made and field days were organized.
- 4. Table 1: Crop parameters from which impact gain measured

S. N.	Particulars	Year	Treated	Untreated	% increase/reduction
1.	Per cent infestation	2007-08	4.8 (3-6%)	18.75 (12-40%)	87.00
		2008-09	2.95 (0-6%)	23.55 (10-40%)	74.40
		Average	3.879	21.15	80.70
2.	Reduce in	2007-08	1	5	80
	number of	2008-09	1	5	80
	sprays	Average	1	5	80
3.	Yield t/ha	2007-08	10.54	9.62	9.56
		2008-09	10.19	8.31	22.12
		Average	10.365	8.965	15.84
4.	Income of	2007-08	94860	86580	8280
	the farmer	2008-09	101900	83100	18800
	Rs./ha.	Average	98380	84840	13540
5.	Expenditure	2007-08	1050	2500	1450
	/ha.	2008-09	1050	2500	1450
		Average	1050	2500	1450
6.	Net income	2007-08	93810	84080	9730
	of farmers	2008-09	100850	80600	20250
		Average	97330	82340	14990

Table: 1. Extension activities carried out in the village Khadka Chikhali.

S. N.	Name of activity	N0.	Beneficiaries
1	Training :On campus	One	20
	: Off campus	Two	37
2.	Visits to farmers	Eleven	97
3.	Field day cum impact study	One	20

Table: 2 Knowledge of fruit fly control in farmers of the village.

S. N.	Particulars	Before FLD	After FLD
1	Knowledge about insect pests of crop	Low	High
2.	Knowledge about fruit fly and its damage	Low	High
3.	Knowledge about fruit fly trap	Nil	High
4.	Knowledge about integrated management of frit fly	Nil	High

### RESEARCH STUDY:

Research Study:1- Participation of tribal farm women in breeding, feeding and management practices of milch animals of Tapi district of South Gujarat.

### Investigators:

- 1. Dr. C. D. Pandya, Subject Matter Specialist (Extension)
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- 4. Dr. N. M. Chauhan, Programme Coordinator

**Year of Commencement: 2011-12** 

### **INTRODUCTION:**

At present livestock is the fastest growing sector in agriculture and allied sectors, which contributing 5.21 per cent of total GDP and 15 per cent income from total income. Women play an important role in this sector. In India, women contribute 71 per cent of the total participation in livestock sector. That is estimated that about 75 million women engaged in livestock sector throughout the India. Gujarat occupies a place of pride in dairy development map of India, because of the impressive strides which have taken in organizing a chain of co-operative dairies in many parts of the states. Indian social system is largely a male dominant society as per the tradition woman have to depend on man in every aspects of life. Though agriculture as a whole and dairy in specific, the farm women play a vital responsibility. Keeping all these views in mind the research study, "Participation of farm women in breeding, feeding and management practices of milch animal" was undertaken with following specific objectives.

#### **OBJECTIVES:**

- (1) To study the personal profile of the respondents.
- (2) To know the participation of farm women in feeding, breeding and management practices.

### **RESEARCH METHODOLOGY:**

For the study all the five talukas of Tapi district were selected purposively. From each taluka, two villages were selected randomly. From each village, 20 respondents were selected making total sample size 200. The structural interview schedule was prepared. They were asked to state whether she was participated regularly, often, sometimes, occasionally or never in performing those practices. The score was given according to the nature of her participation in above practices. "One" score was assigned for no participation of farm women. "Two" score for rare participation, "Three"

score for occasional participation, "Four" score for recurrent participation and "Five" score was assigned for regular participation in each of the activities.

In all, the interview schedule consist 21 statements. On the basis of total participation score of an individual respondent, participation index was worked out. In order to know the level of participation of farm women in breeding, feeding and management they were grouped on the basis of their participation index.

The data was tabulated, analyzed and interpreted in the link of the objectives. The statistical measures namely frequency, percentage, mean and S.D. were used.

### **RESULT AND DISCUSSION**

### 5. To study the personal profile of the respondents:

The result of the study is given below:

### 6. Age

The data collected about their age are presented in table 1.

Table 1: Distribution of the farm women according to their age

n=200

Sr.	Categories	Frequency	Percentage
1	Young age	92	46.00
2	Middle age	80	40.00
3	Old age	28	14.00
	Total	200	100.00

The information presented in table 1 revealed that nearly half (46.00 per cent) of the farm women belonged to young age followed by 40.00 and 14.00 per cent belonged to middle age and old age categories.

#### 2. Education

The data collected about their educational level are presented in table 2.

Table 2: Distribution of the farm women according to their educational level n=200

Sr.	Categories	Frequency	Percentage
1	College/ post graduation	4	2.00
2	High school	29	14.50
3	Middle school	40	20.00
4	Primary school	24	12.00
5	Functionally literate	10	5.00
6	Illiterate	93	46.50
	Total	200	100

It is evident from the table 2 that majority (46.50 per cent) of the farm women were illiterate followed by middle school level of education (20.00 per cent), high school (14.50 per cent), primary school (12.00 per cent), functionally literate(5.00 per cent) and college / post graduate (02.00 per cent) level of education respectively.

### 7. Caste

The data collected about their caste are presented in table 3.

Table 3: Distribution of the farm women according to their caste

n = 200

			=00
Sr.	Categories	Frequency	Percentage
1	General	000	0.00
2	Other Backward Caste	005	2.50
3	Schedule Tribe	195	97.50
4	Schedule Caste	000	0.00
5	Migrating Caste	000	0.00
	Total	200	100

The data of table 3 indicated that great majority of the farm women (97.50 per cent) belonged to Schedule Tribe followed by 02.50.00 per cent belonged to OBC. While no one of them were found in general caste, schedule caste and migrating caste category.

### 8. Family size

The data collected about family size are presented in table 4.

Table 4: Distribution of the farm women according to their family size

n=200

Sr.	Categories	Frequency	Percentage
1	1 to 2 members	25	12.50
2	3 to 4 members	47	23.50
3	5 to 6 members	69	34.50
4	7 to 8 members	24	12.00
5	Above 8 members	35	17.50
	Total	200	100

The data depicted in table 4 revealed that majority (34.50 per cent) of the farm women possessed 5 to 6 members followed by 23.50, 17.50, 12.50 and 12.00 per cent had 3 to 4 members, above 8 members, 1 to 2 members and 7 to 8 members respectively.

### 9. Family type

The data collected about their family type are presented in table 5.

Table 5: Distribution of the farm women according to their family type

n=200

Sr.	Categories	Frequency	Percentage
1	Joint family	119	59.50
2	Nuclear family	81	40.50
	Total	200	100

The data portrayed in the table 5 indicated that more than half of the farm women had joint (59.50 per cent) followed by 40.50 per cent had nuclear family.

### 10. Occupation

The information on occupation of the respondents is depicted in table 6.

Table 6: Distribution of the farm women according to their occupation n=200

Sr.	Categories	Frequency	Percentage
1	Farming	57	28.50
2	Farming with service	2	1.00
3	Farming with other enterprise	2	1.00
4	Animal Husbandry	114	57.00
5	Agricultural Labour	25	12.50
	Total	200	100

The data presented in table 6 revealed that more than half (57.00 per cent) of the farm women had animal husbandry followed by farming (28.50 per cent) as their main occupation. While 12.50 per cent, 1.00 per cent and 1.00 per cent of them engaged in agricultural labour, farming with other enterprise and farming with service respectively.

### 11. Land holding

The information in this regards is presented in table 7.

Table 7: Distribution of the farm women according to their land holding n=200

Sr.	Categories	Frequency	Percentage
1	Big ( above 10 ha)	2	1.00
2	Medium (4.01 to 10 ha)	5	2.50
3	Semi medium (2.01 to 4 ha)	13	6.50
4	Small (1.01 to 2 ha)	39	19.50
5	Marginal (0.01 to1 ha)	115	57.50
6	Landless	26	13.00
	Total	200	100

The information presented in the table 7 revealed that more than half (57.00 per cent) of the farm women belonged to marginal land holding category followed by 19.50, 13.00, 6.50, 2.50 and 1.00 per cent were in small, landless, semi medium, medium and big land holding categories respectively.

#### 8. Herd size

The collected data are presented in table 8.

Table 8: Distribution of the farm women according to their herd size

n=200

Sr.	Categories	Frequency	Score value
1	1 to 2 animals	48	24.00
2	3 to 4 animals	69	34.50
3	Above 4 animals	83	41.50
	Total	200	100

It is evident from the table 8 that majority of the farm women (41.50 per cent) had possessed above 4 animals followed by 34.50 and 24.00 per cent of them possessed 3 to 4 animals and 1 to 2 animals respectively.

#### 9. Annual income

The information regarding annual income is presented in table 9.

Table 9: Distribution of the farm women according to their annual income n=200

Sr.	Categories	Frequency	Percentage
1	Above Rs. 2,00,000	2	1.00
2	Rs. 1,50,001 to 2,00,000	1	0.50
3	Rs. 1,00,001 to 1,50,000	23	11.50
4	Rs. 50,001 to 1,00,000	76	38.00
5	Up to Rs. 50,000	98	49.00
	Total	200	100

From the data presented in the table 9, it is clear that nearly half of the farm women (49.00 per cent) had annual income up to Rs. 50,000 followed by 38.00, 11.50, 1.00 and 0.50 per cent of them had Rs. 50,001 to 1,00,000, Rs. 1,00,001 to 1,50,000, above Rs. 2,00,000 and Rs. 1,50,000 to 2,00,000 annual income respectively.

#### 10. Material possession

The information regarding material possession is presented in table 10.

Table 10: Distribution of the farm women according to their material possession n=200

Sr.	Categories	Frequency	Score value
1	Low material possession	16	8.00
2	Medium material possession	162	81.00
3	High material possession	22	11.00
	Total	200	100

It is evident from the table 14 that more than three-fourth (81.00 per cent) of the farm women possessed medium level of material possession followed by 11.00 and 8.00 per cent of them possessed high and low level of material possession respectively.

#### 11. Socio-political participation

The data collected from the farm women are presented in table 11.

Table 11: Distribution of the farm women according to their socio-political participation

n=200

Sr.	Categories	Frequency	Percentage
1	No socio-political participation	9	4.50
2	Official position in socio-political committee	105	52.50
3	Official position in one or more socio-politica organizations	86	43.00
	Total	200	100

The information presented in table 11 revealed that more than half (52.50 per cent) of the farm women possessed official position in socio-political committees followed by 43.00 per cent of them had official position in one or more socio-political organizations. Only 4.50 per cent of the farm women had no socio-political participation.

#### 12. House holding

According to adopted scale the information is collected and presented in table 12.

Table 12: Distribution of the farm women according to their house holding n=200

Sr.	Categories	Frequency	Percentage
1	Concrete double storied	00	00
2	Concrete	10	5.00
3	Tiled and brick wall	32	16.00
4	Mud walled/Metal sheet roof	158	79.00
5	Thatched shed	00	00
	Total	200	100

The data portrayed in the table 12 revealed that more than three-fourth (79.00 per cent) of the farm women had mud walled/metal sheet roof house followed by 16.00 and 5.00 per cent of the them had tiled and brick wall house and concrete house respectively. While none of the respondents had concrete double storied house and thatched shed house.

#### 13. Personal achievement

The data collected from the farm women are presented in table 13.

Table 13: Distribution of the farm women according to their personal achievement

n=200

Sr.	Categories	Frequency	Percentage
1	No awards	200	100
2	One award	000	00
3	More than one award	000	00
	Total	200	100

The data presented in table 26 indicated that the entire farm women (100.00 per cent) had not awarded for any activity carried out by them.

#### 14. SES of farm women

The information in this regards is presented in table 14.

Table 14: Distribution of the farm women according to their SES

n=200

Sr.	Categories	Frequency	Percentage
1	Higher SES	3	1.50
2	Higher middle SES	13	6.50
3	Middle SES	176	88.00
4	Lower middle SES	8	4.00
5	Lower SES	00	00
	Total	200	100

The data presented in table 14 indicated that majority (88.00 per cent) of the farm women had middle level of SES followed by 6.50, 4.00 and 1.50 per cent had higher middle, lower middle and higher level of SES respectively. It is interesting to note that no one of the respondents had lower level of SES.

#### 15. Risk orientation

The data regarding this aspect is presented in table 15.

Table 15: Distribution of the farm women according to their risk orientation n=200

Sr.	Categories	Frequency	Percentage
1	Low risk orientation	3	1.50
2	Medium risk orientation	114	57.00
3	High risk orientation	83	41.50
	Total	200	100.00

The data presented in table 15 clearly indicated that more than half (57.00 per cent) of the farm women had medium level of risk orientation followed by 41.50 and 1.50 per cent had high and low level of risk orientation respectively.

#### 16. Scientific orientation

The data collected and depicted in table 16.

Table 16: Distribution of the farm women according to their scientific orientation

n=200

Sr.	Categories	Frequency	Percentage
1	Low scientific orientation	12	6.00
2	Medium scientific orientation	179	89.50
3	High scientific orientation	9	4.50
	Total	200	100.00

The data portrayed in table 16 revealed that great majority (89.50 per cent) of the farm women had medium level of scientific orientation followed by 6.00 and 4.50 per cent of them belonged to low and high level of scientific orientation categories respectively.

#### 17. Economic motivation

The data in this respect are depicted in table 17.

Table 17: Distribution of the farm women according to their economic motivation

n=200

Sr.	Categories	Frequency	Percentage
1	Low economic motivation	12	6.00
2	Medium economic motivation	163	81.50
3	High economic motivation	25	12.50
	Total	200	100.00

It can be seen from table 17 that majority (81.50 per cent) of the farm women had medium level of economic motivation followed by 12.50 and 6.00 per cent had high and low level of economic motivation respectively.

## 18. Management orientation

The data in this respect are depicted in table 18.

Table 18: Distribution of the farm women according to their management orientation

n=200

Sr.	Categories	Frequency	Percentage
1	Low management orientation	17	8.50
2	Medium management orientation	170	85.00
3	High management orientation	13	6.50
	Total	200	100.00

The information given in table 18 clearly indicated that majority (85.00 per cent) of the farm women had medium level of management orientation followed by 8.50 and 6.50 per cent had low and high level of management orientation respectively.

#### 19. Value orientation

The data in this respect are presented in table 19.

Table 19: Distribution of the farm women according to their value orientation n=200

Sr.	Categories	Frequency	Percentage
1	Low value orientation	18	9.00
2	Medium value orientation	137	68.50
3	High value orientation	45	22.50
	Total	200	100.00

From the perusal of data presented in table 19, it is revealed that majority (68.50 per cent) of the farm women had medium level of value orientation followed by 22.50 and 9.00 per cent had high and low level of value orientation respectively.

#### 20. Achievement motivation

The collected data of achievement motivation are presented in table 20.

Table 20: Distribution of the farm women according to their achievement motivation

n=200

Sr.	Categories	Frequency	Percentage
1	Low achievement motivation	18	9.00
2	Medium achievement motivation	162	81.00
3	High achievement motivation	20	10.00
	Total	200	100.00

It is obvious from the table 20 that majority (81.00 per cent) of the farm women had medium level of achievement motivation followed by 10.00 and 9.00 per cent had high and low level of achievement motivation respectively.

# (II) To know the participation of farm women in feeding, breeding and management practices

As per 18<sup>th</sup> livestock census of India (2007), total number of livestock in Tapi district is 513441, in which cows are 214554, buffaloes 176458 and total sheep-goats are 94465. There is a major stack of Tapi district in milk Procurement of the Sumul Dairy (Surat District Co-operative Milk Producers Union Ltd.). In tribal area milk production is important means of livelihood as well as supplementary employment.

It is a well known fact that women are playing major role in livestock raising at rural areas. They contribute most of the time in daily animal husbandry acts like bringing fodder, cleaning animal byres, milking of animals etc. But their participatory roles in

socio economic activities are less known through statically study. Hence, to know the extent of women's participation in dairy occupation and to study the level of participation of farm women in dairy occupation spastically, the above mentioned survey activity was conducted. The results of the study had indicated many facets of farm women's participation as bellows:

Table 1 Participation of the farm women in purchase and sale of dairy animals

Sr.	Particulars		Extent of Participation				Mean
No.		Regular	Recurrent	Occasional	Rare	Never	Score
Α	Selection of milch	animals					
1	Type of milch	135	31	12	8	14	4.04
	animals	(67.50)	(15.50)	(6.00)	(4.00)	(7.00)	
2	Selection of breed	140	24	16	10	10	4.12
		(70.00)	(12.00)	(8.00)	(5.00)	(5.00)	
В	Purchase and sale	of animals	S				
1	Purchase of	139	25	12	16	8	4.26
	improved / cross	(69.50)	(12.50)	(6.00)	(8.00)	(4.00)	
	breed animals						
2	Culling of	114	16	18	7	45	3.45
	uneconomic	(57.00)	(8.00)	(9.00)	(3.50)	(22.50)	
	animals						

In dairy enterprise, proper selection of dairy animals i.e cattle and buffalo taking care of milk yield capacity pays a vital role. Farm women even though being a lead player of running livestock enterprise, they play somehow secondary/ deprived role.

From the data of Table 1, it is apparent that 67.50 percent of the farm women were taking regular participation in activity of selection of type of the milch animals, while 70.00 per cent of the respondents were taking regular participation in activity of selecting breed of the dairy animals. These can be considered as large extent and huge involvement of farm women participation on regular basis. It is clear from the data that about 14.00 per cent farm women never participated in activity of selection of type of the milch animals and 10.00 had never participated in activity of selecting breed of the dairy animals.

Financial interactions are the core part of any enterprise. A diary occupation is no more exception. In the above survey it was observed that 69.50 per cent of respondents were taking participation in activity of purchase of improved / cross breed animals on regular basis (Mean score 4.26) and in the same way about half number (57.00 per cent) have shown regular involvement in activity of culling of uneconomic animals. The never participating approach was observed among farm women ranging from 8 to 45 per cent in such activities.

Table 2 Participation of the farm women in the activities of feeding of milch animals

Sr.	Particulars		Extent of Participation				Mean
No.		Regular	Recurrent	Occasional	Rare	Never	Score
1	Bringing fodder	187	8	5	0	0	4.27
		(93.50)	(4.00)	(2.50)	(0.00)	(0.00)	
2	Cutting fodder	133	5	2	28	32	3.44
		(66.50)	(2.50)	(1.00)	(14.00)	(16.00)	
3	Grazing animals	105	3	6	14	72	3.15
		(52.50)	(1.50)	(3.00)	(7.00)	(36.00)	
4	Feeding animals	190	3	1	4	2	4.73
		(95.00)	(1.50)	(0.50)	(2.00)	(1.00)	

5	Preparing feed	187	8	3	0	2	4.85
	mixtures	(93.50)	(4.00)	(1.50)	(0.00)	(1.00)	
6	Purchase of	142	16	10	2	30	3.93
	feeds	(71.00)	(8.00)	(5.00)	(1.00)	(15.00)	

The data presented in Table 2 indicated that majority (95.00 per cent) of farm women were taken participation in activities like feeding animals followed by 93.50 per cent, 71.00 per cent and 66.50 per cent of the farm women were taken participation regularly in activities like preparing feed mixtures, purchase of feeds bringing fodder and cutting fodder. Interestingly 72.00 per cent of farm women have indicated about their negligible participation in taking the animal in forest for grazing.

Table 3 Participation of farm women in breeding of milch animals

Sr.	Particulars .			of Participati			Mean
No.		Regular	Recurrent	Occasional	Rare	Never	Score
Α	Method of breeding						
1	Natural service	30	18	8	21	123	2.55
		(15.00)	(9.00)	(4.00)	(10.00)	(61.50)	
2	Artificial	168	9	12	5	6	4.88
	insemination	(84.00)	(4.50)	(6.00)	(2.50)	(3.00)	
В	Care at the time o	f calving					
1	Giving warm	181	6	9	3	1	4.63
	water bath	(90.50)	(3.00)	(4.50)	(1.50)	(0.50)	
2	Feeding cooked	169	9	11	1	10	4.25
	grains	(84.50)	(4.50)	(5.50)	(0.50)	(5.00)	
3	Giving warm	171	10	9	4	6	4.61
	water to drink	(85.50)	(5.00)	(4.50)	(2.00)	(3.00)	
С	Care of new born	calf					
1	Cleaning of calf,	137	28	14	6	15	4.19
	dehorning, cutting	(68.50)	(14.00)	(7.00)	(3.00)	(7.00)	
	navel cord and						
	hoof trimming						
2	Feeding	176	9	5	3	7	4.68
	colostrums	(88.00)	(4.50)	(2.50)	(1.50)	(3.50)	

Breeding the animals is a work requiring skill as well as some knowledge about genetic make up of the animals. The data portrayed in Table 3 indicated that artificial service option and natural service option was adopted by 84.00 per cent and 15.00 per cent respectively. About 90.50 per cent and 84.50 per cent women participated in the survey were observed to have daily participation in giving warm water to bath at calving and feeding cooked grains to dam respectively. 88.00 per cent women are taking contribution in feeding colostrums to the calf, while 3.50 per cent to 7.00 per cent were not participated in activities like care at the time of calving and newborn.

Table 4 Participation of the farm women in management of milch animals

Sr.	Particulars		Extent of Participation				
No.		Regular	Regular Recurrent Occasional Rare Never				Score
Α	Adopting veterina	ry aids					
1	Vaccinating	148	21	15	5	11	4.56
	animals	(74.00)	(10.50)	(7.50)	(2.50)	(5.50)	
2	Taking animals to	26	21	31	19	103	2.76
	veterinary doctors	(13.00)	(10.50)	(15.50)	(9.50)	(51.50)	

3	Treating animals	28	17	21	9	125	2.53
	with home made	(14.00)	(8.50)	(10.50)	(4.50)	(62.50)	
	medicines						
В	Care and Manager	nent					
1	Watering at	193	0	5	0	2	4.89
	proper time	(96.50)	(0.00)	(2.50)	(0.00)	(1.00)	
2	Grooming and	134	52	10	0	4	4.48
	bathing	(57.00)	(26.00)	(5.00)	(0.00)	(2.00)	
3	Brooming and	129	4	65	2	0	4.15
	cleaning the shed	(64.50)	(2.00)	(32.50)	(1.00)	(0.00)	
4	Preparing Gobar	18	13	3	5	161	1.74
	gas mixture	(9.00)	(6.50)	(1.50)	(2.50)	(80.50)	
5	Preparing	179	3	1	0	17	3.77
	compost	(89.50)	(1.50)	(0.50)	(0.00)	(8.50)	

From Table 4, it is revealed that 13.00 per cent to 74.00 per cent women have played the role in adopting veterinary aids like treating animals with homemade medicines, taking animals to veterinary doctors as well as vaccinating animals. About 96.50 per cent, 89.50 per cent, 64.50 per cent, 57.00 per cent and 9.00 per cent women have revealed their contribution in activities like watering at proper time to animals, preparing compost from dung, brooming and cleaning the shed, grooming and bathing and preparing gobar gas mixture respectively. While 5.50 per cent to 62.50 per cent never adopted the veterinary aids and 1.00 per cent to 80.50 per cent never adopted the care and management practices of milch animals.

Table 5 Participation of the farm women in financial activities

Sr.	Particulars			of Participation			Mean
No.		Regular		Occasional	Rare	Never	Score
Α	Taking loan for						
1	Purchase of	38	7	1	5	149	2.55
	animals	(19.00)	(3.50)	(0.50)	(2.50)	(74.50)	
2	Purchase of feed /	132	18	9	7	34	3.59
	fodder	(66.00)	(9.00)	(4.50)	(3.50)	(17.00)	
3	Construction of	8	4	8	1	179	1.64
	byres	(4.00)	(2.00)	(4.00)	(0.50)	(89.50)	
В	Marketing of milk						
1	House hold sale	67	17	11	3	102	3.10
	of milk	(33.50)	(8.50)	(5.50)	(1.50)	(51.00)	
2	Selling of milk	190	3	2	1	4	4.77
	through	(95.00)	(1.50)	(1.00)	(0.50)	(2.00)	
	cooperative						
	society						

The data presented in Table 5 indicated that majority (89.50 per cent) of the respondents were never taking loan for construction of byre followed by 74.50 per cent of the respondents were never taking loan for purchase of animals while, 66.00 per cent of the respondents were regularly taking loan for purchase of feed/fodder. In case of marketing of milk, majority (95.00 per cent) of the respondents were regularly sold milk through cooperative society while, 51.00 per cent of the respondents were never sold milk for household purpose.

Table 6 Participation of farm women in milking and preparing milk products

Sr.	Particulars -		Extent	of Participati	on	•	Mean
No.		Regular	Recurrent	Occasional	Rare	Never	Score
Α	Milking						
1	Milking the	186	5	3	2	4	4.57
	animal	(93.00)	(2.50)	(1.50)	(1.00)	(2.00)	
2	Cleaning milk	197	1	1	0	1	4.93
	vessels	(98.50)	(0.50)	(0.50)	(0.00)	(0.50)	
В	Preparation of mi	lk product	s				
1	Curd	34	2	3	5	156	3.12
		(17.00)	(1.00)	(1.50)	(2.50)	(78.00)	
2	Butter milk	6	4	3	9	178	2.24
		(3.00)	(2.00)	(1.50)	(4.50)	(89.00)	
3	Ghee	2	0	5	0	193	1.32
		(1.00)	(0.00)	(2.50)	(0.00)	(96.50)	
4	Mawa	0	0	0	0	200	1.00
		(0.00)	(0.00)	(0.00)	(0.00)	(100.00)	

From the data presented in Table 6 revealed that majority (98.50 per cent) of the respondents were regularly cleaning milk vessels while, 93.00 per cent of the respondents were milking the animal regularly. All the respondents were never prepared the mawa from milk followed by 96.50 per cent, 89.00 per cent and 78.00 per cent of the respondents were never prepared ghee, buttermilk and curd respectively.

#### CONCLUSION:

From the above discussion it could be concluded that majority of the farm women belonged to young age, were illiterate, belonged to schedule tribe, had 5 to 6 members in their family size, had joint family, had adopted animal husbandry as their main occupation for their livelihood, belonged to marginal land holding category, had possessed above 4 animals, had annual income up to Rs. 50,000, possessed medium level of material possession, holding the official position in committee or organizations of their jurisdiction, had mud walled/metal sheet roof house, had not awarded for any activity carried out by them, possessed middle level of SES, had medium level of risk orientation, had medium level of scientific orientation, had medium level of economic motivation, had medium level of management orientation, had medium level of value orientation, had medium level of achievement motivation, were taking regular participation in activity of selection and type of the milch animals, taking participation in Purchase of improved / cross breed animals on regular basis, taken participation regularly in activities like Bringing fodder, majority of the respondents were adopted Artificial Insemination on regular basis, have daily participation in giving warm water to bath at calving, taking contribution in feeding colostrums to the calf, adopting veterinary aids like vaccination, have revealed their contribution in activities like watering at proper time to animals, majority of the respondents were never taking loan for construction of byre, majority of the respondents were regularly sold milk through cooperative society, more than half of the respondents were never sold milk for household purpose, majority of the respondents were regularly cleaning milk vessels, were milking the animal regularly and all the respondents were never prepared the mawa, ghee, buttermilk and curd from milk.

#### 4.3.8 Linkages with stake holders and how has the KVK made it effective

#### 1. State Agricultural Universities

- a. Navsari Agricultural University, Navsari
- b. Anand Agricultural University, Anand
- c. Junagadh Agricultural University, Junagadh
- d. Sardar Krishinagar Agricultural University, Dantiwada
- e. ATMA Tapi District.
- f. DIC, Tapi.
- g. District Watershed Development Department, Tapi.
- h. NAIP Unit-III, NAU, Navsari.
- i. ATMA, Navsari and Dang.
- j. All Line Departments related to agriculture and Rural Development in the District.
- k. EEI, AAU, Anand for vperipetic trainings.

KVK Vyara (Tapi) linked with the all above universities for the getting latest recommendation on different crops and different aspects, utilizing them for giving FLD's and OFT's. KVK also collect feedback from farmers and again give it to University for further research.

When there is a need of any technical expertise, for training on newer topics, KVK made them available from above SAUs.

#### 2. Non Government Organizations:-

- Catholic Missionaries:-Mandal, Vyara
- Market Yards
- Agro service Centers
- Private Companies

SEWA Rural, Janseva Foundation, BAIF, Hangati Mahila Trust.

KVK linked with above NGOs for the arrangement of training programmes on need based aspects of farmers. Sometimes physical facilities are also available from the NGO's.

Line Department just transfer the technologies generated by SAUs. While KVK takes the research technology from SAU's, apply them on farmers field through FLDs and if it is not found suitable to the farmers KVK refined them on the farmers field through OFT's.

#### > Capacity utilization & economic performance of various training units

Krishi vigyan Kendra has been established nursery for vegetable crops like brinjal, onion etc. KVK is selling seedlings of such vegetables throughout the year for increasing vegetable area. KVK has also established mother orchard of mango variety-kesar and Dasheri. Graft of such varieties is sold to the farmers. KVK scientist guided the farmers for developing wadi yojana in Tapi districts.

KVK developed low cost of green house unit. Conducting training programmed on low cost green house, out of them 20 **LCGH** were made in tribal belt area of vyara taluka. one demonstration unit of vermin compost, two training programmed was conducted on vermin composting. Tribal farmers start vermin compost on small scale basis. They are use vermin compost on their own field. In plant health clinic, farmers are diagnosis perfectly of their infected plant sample. KVK scientist were gave perfect diagnostic service to farmers and save their money in insecticides and fungicides purchasing.

# A concise statement highlighting the most significant contributions made by the KVK.

This KVK has achieved all mandatory installation as per the directives given by ICAR lucratively. More over urbanized good linkages with all GOs, NGOs, Cooperatives, Line departments, SAUs, catholic Missionaries, ATMA, RKVY and all other agencies for effective and efficient TOT work. Covered each and every objectives of the KVK satisfactorily. In each and every mandatory works achievements are always higher than the targets. All of the extension activities also twice in a number than targets. Every extension activities completed by the KVK scientist covering more than 95% tribal population and participation of tribal farm women in all activities made by KVK team is higher than 80%. Sponsored training was also twice than the target. While Inservice training was thrice than the target. Obtained a huge amount of financial help from the RKVY scheme. Celebrated a grand festival of Technology Week and sent the detail technical report to the Council. The feedback from the 100 farmers had been collected and send to the Council ( DVD, VCD) form earlier. The VCD of 75 minutes was prepared entitled" KVK Vyara in the service of Tribal People" and sent to the council, earlier. Ten success stories, six Impact studies and 10 case studies had been sent to the council earlier. IPM block is developed for cotton in Nizer Block. Four villages had been decorated as seed villages for paddy and Tur. Successfully launched a NAU Wadi Yojna, Kitchen gardening, Bio village schemes in the selected villages. Rs.420.24 Lakh had been sanctioned under RKVY scheme to this KVK. The Mobile Plant Health and soil Health Clinic wane is working with this KVK.The STL along with Micro nutrient are working with KVK.10000 Soil samples are being analyzed for Soil Health Card in the State. The NHM has given Modern Plant Health Clinic to this KVK. Rs. 10.00 lakh had been sanctioned by Tribal Sub **Plan, Songadh** for different Projects of this KVK inTribal areas. The year round nursery for vegetable seedlings and mango-Chiku Graft is famous among the district. The Paddy seed supply is a big achievement of the KVK. Frequent visits of the Union Tribal Minister, Dr. Tushar Chaudhary, State Ministers and all Dignitaries from the State and SAUs as a whole is a grand success of the KVK seen by necked eyes. A regular agricultural column in the Gujarat Mitra, News paper is a another rock mounted

success of the KVK. In short the KVK is running on" **Information Super Highway for Tribal people of South Gujarat**."

# 5. LINKAGES

# 5.1 Functional linkage with different organizations

Sr. No.	Name of Organization	Nature of Linkage
1	Dept. of Agriculture	Participation
2	Dept. of Horticulture	Participation
3	ATMA	Participation
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, Krishi Mela, krishi mahotsav etc.
9	Govt. of Gujarat	Collaboration – Krishi Mahotsav, ATMA, RKVY, NFSCM, etc.
10	State Bank of India/Bank of Baroda	SHG work, SAC Meet.
11	Catholic Charch, Mandal	TOT, Seed village, Kitchen Garden, Vermicompost [ <b>52</b> Villages Network]
12	Integrated Child Development Sevices (ICDS)	Inservice training for Anganwadi workers and SHG activities, Nutritional FLDs etc
13	NGOs	Training, Demonstration, Extension Activities, FLDs, OFTs etc.
14	Department of Animal Husbandry	Animal Husbandry camps, shibirs, Exhibitions, Dairy related activities.
15	College of veterinary, NAU, Navsari	Animal Husbandry camp, Surgical camps, Pashupalan shibirs, Krishi Mela etc

16	N.M.College of Agriculture,	Participation	
	NAU, Navsari	Khedut Shibir	
		<ul> <li>Extension Activities,</li> </ul>	
17	SUMUL	Animal Husbandry related activities	

# 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
2. RKVY	Nov.'08	Govt. of Gujarat	109.71 lakhs (yr:2010-11)
3. Soil Health Card	Oct.'09	Govt. of Gujarat	4.50 lakhs
4. Mega seed project	Dec.'10	Govt. of Gujarat	2.32 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	Participation in  • Khedut Shibir/Mahila Shibir  • Extension Activities,  • FLDs, OFTS, FFS, Impact assessment of ATMA Activities AMC, AGB, ATMA Award, Field visits, Training programmes etc	Technical Support	

<sup>\*</sup> All technical support is given by KVK to ATMA

# 12. Give details of programmes implemented under National Horticultural Mission: -

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Plant Health Clinic	March 08	National Horticulture Mission	15.50 lakhs

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

KVK gives feedback to this department for FLDs, demonstrations, trainings.

# 6 PERFORMANCE OF INFRASTRUCTURE IN KVK

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

0. 11.	D	Year of		Det	ails of produc	ction	Amoun	t (Rs.)	
Sr. No.	Demo Unit	estt.	Area	Variety	Produce	Qty.	Cost of inputs	Gross income	Remarks
1	Small scale Nursery	2010	4 Gunthas				3.00 lakh(RKVY)		
2	Low cost green House	2010	1.00 Guntha				27000/- (RKVY)		
3.	Wadi Model	2010	1.00 ha						
4	Poly House	2011	500 sq.mt.						
5	Shade Net House	2011	2000 sq.mt.						

# 6.2 Performance of instructional farm (Crops) including seed production

Name	Date of	of		Detai	Is of produc	ction	Amour	nt (Rs.)	
of the crop	sowing	Date of harvest	Area (ha)	Variety	Type of Produce	Qty.(Kg)	Cost of inputs	Gross income	Remarks
Paddy (Summer)	27/1/2011	20/5/2012	0.37	Gurjari	Certified	2400	25000	55200	
Paddy (Kharif)	19-29/7/2012	29/10/2012 to 09/11/2012	2.29	Gurjari	Certified	7000	180000	160000	Remaining seed will be sold in
	18-20/7/2012	27-31/10/2012	0.70	GNR-3	Certified	1800			May-2013
	13-17/7/2012	23-29/10/2012	0.90	NAUR-1	Certified	2100			
	11-24/7/2012	15-18/10/2012	1.10	IR-28	Certified	1850			
Moong	2/3/2011	27/5/2011	0.50	Pusa Vishal	Certified	520	7000	14400	
Groundnut	8/2/2011	20-22/5/2011	0.65	GG-2	Certified	689	15700	22810	
Gram	7/1/2011	15/4/2011	0.34	GG-2	Certified	120	1250	3000	
Sugarcane	2/2/2011	15-18/2/2012	0.36	Co-5071	Certified	25315	26000	58750	
Okra	14/12/2011	8/2/2012 to 6/4/2012	0.30	Hybrid	General	10.94	9000	16000	
Brinjal	20/12/2011	8/3/2012 to 28/4/2012	0.24	Hybrid	General	5.71	2500	4200	

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

SI.	Name of the		Amou		
No.	Product	Qty	Cost of inputs	Gross income	Remarks
1	Vermicompost	56500		2,26,000	

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

SI.	Name	Details of production			Amou		
No	of the animal / bird / aquatics	Breed Type of Produce Qty.			Cost of inputs Gross income		Remarks
				NIL-			

## 6.5 Rainwater Harvesting: - --NIL-

Date	Title of the training course	raining course		No. of Pa	articipants inclu	iding SC/ST	No	o. of SC/STParticip	ants
Date	Title of the training course	Client (PF/RY/EF)	No. of Courses	Male	Female	Total	Male	Female	Total
			NI	L					

#### 6.6 Utilization of hostel facilities: -

Accommodation available (No. of beds): 32

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2012				
	Office Work	4	8	
Total		4	8	
May 2012	Educational Tour of Agri.Polytechnic, Deesa	8	16	
Total	-	8	16	
June 2012				
	Educational Purpose	4	8	
Total		4	8	
July 2012				
Total				
August 2012				
	New approaches and methods in Agril. Extension	8	16	
Total		8	16	

Contombor 2012				
September 2012	A suisculture levelinese and its also assisting	00	50	
	Agriculture business and its characteristics	29	58	
	Scientific cultivation of major kharif crops	30	60	
			58	
	Scientific cultivation of vegetable crops under control condition	29		
	Animal health management	34	68	
	Exposure Tour of ATMA-Deesa, Dist.Banaskantha	28	56	
	Health and nutrition for mother & child	30	60	
	Exposure Tour of ATMA-Rajasthan	15	30	
Total		195	390	
October 2012				
Total				
November 2012				
	For Inter-Polytechnic College Sports	9	25	
Total		9	25	
December 2012				
Total				
January 2013	For office work	4	4	
Total		4	4	
February 2013				
	Health and nutrition for pregnant & lactating women and children	26	52	
Total	·	26	52	
March 2013				
	Health and nutrition for pregnant & lactating women and children	32	64	
	Educational Tour of Agri. Polytechnic, SDAU, Sardar krushinagar	4	8	
	Educational Tour of Agri. Polytechnic, AAU, Anand	3	6	
Total	,	39	78	
Grand total		293	597	

5 X 25= 125 (Duration of the training course X No. of traininees)

# 13. FINANCIAL PERFORMANCE

#### 7.1 Details of KVK Bank accounts

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

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

	Releas	•	Expen	diture	Unanont balance as on 1 <sup>st</sup>	
Item	Kharif 2012- 13	Rabi 2012- 13	Kharif Rabi 2012- 2012- 13 13		Unspent balance as on 1 <sup>st</sup> April 2013	
Inputs		1				
Extension						
activities				NIL		
TA/DA/POL				IVIL		
etc.						
TOTAL						

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

	Released	l by ICAR	Exper	nditure	Unspent
Item	Kharif 2012-13	Rabi 2012–13	Kharif 2012-13	Rabi 2012-13	balance as on 1 <sup>st</sup> April 2013
Inputs					
Extension					
activities			NIL		
TA/DA/POL			INIL		
etc.					
TOTAL					

# 15. Utilization of funds under FLD on Cotton (Rs. in thousand)

	Released by ICAR	Expenditure	Unspent		
Item	Kharif 2012-13	Kharif 2012-13	balance as on 1 <sup>st</sup> April 2013		
Inputs					
Extension					
activities		NIL			
TA/DA/POL etc.					
TOTAL					

# 7.5 Utilization of KVK funds Year: 2012-13

1 2	curring Contingencies Pay & Allowances Traveling allowances	<b>265</b> 43.50	265			
2		<i>1</i> 3 50				
	Traveling allowances	45.50	43.50	43,13,080		
		1.00	1.00	46,672		
3	Contingencies	9.00	9.00	6,44,631		
а	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	3.60	3.60	2,65,630		
b	POL, repair of vehicles, tractor and equipments					
С	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	5.40	5.40	3,79,001		
d	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)					
е	Training of extension functionaries					
f	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)					
g	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)					
h	Maintenance of buildings	50 50 005		50.04.000		
	TOTAL (A)	53,50,265	53,50,265	50,04,383		
	n-Recurring Contingencies	Ţ		T		
1	Equipments and Furniture					
2	Works	0.00	0.00			
3	<b>Library</b> (Purchase of assets like books & journals)	0.00	0.00			
4	Vehicle (Motorcycle)	0.00	0.00			
	TOTAL (B)	0.00	0.00			
C. RE	VOLVING FUND					
	GRAND TOTAL (A+B+C)	53,50,265	53,50,265	50,04,383		

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> April of each year		
April 2010 to March 2011	110497	992494	614928	488063		
April 2011 to March 2012	488063	1002304	1073108	417259		
April 2012 to March 2013	417259	1327484	1134414	610329		

# 8.0 Please include information which has not been reflected above (write in detail).

#### 8.1 Constraints

#### (a) Administrative

1. The posst of Supporting staffs (2) & Driver (1) are vacant.

#### (b) Financial

- 1. Provision should be made for educational tour for farmers. Separate fund are required for technology week celebration, Extension activities, Fencing and Security staff.
- 2. Lack of tribal allowance for KVK Staff.
- 3. Lack of Pakka roads and drainage channels in campus.

#### (c) Technical

- 1. Lack of facility of Farm Godown, Fencing and Threshing floor and Impliment shed
- 2. Lack of facility of Minibus.
- 3. Lack of e-connectivity.

# **Summary of Annual Progress of KVK 2012-13**

# STAFF POSITION

KVK	PC SMS			PA ADMI		N	AX		SUPP		TOTAL										
NVN	S	F	٧	S	F	٧	S	F	٧	S	F	٧	S	F	٧	S	F	٧	S	F	٧
Vyara, Dist. Tapi	1	1	-	6	6	-	3	3	-	2	2	-	2	1	1	2	ı	2	16	13	3

S- Sanctioned

F- Filled

V- Vacant

## **REVOLVING FUND**

KVK	Opening Balance on 1.4.12 (Rs.)	Revenue Generated (Rs.)	Closing Balance on 31.3.13 (Rs.)
Vyara, Dist. Tapi	417259	1134414	610329

#### **SCIENTIFIC ADVISORY COMMITTEE**

KVK	No. of meetings conducted	Date of meeting
Vyara, Dist. Tapi	1	2/9/2012

## **ACTIVITIES OF KVK**

#### **TECHNOLOGY ASSESSMENT AND REFINEMENT**

Details of technologies assessed and refined

# Technologies assessed\*\*

Sr. No.	Enterprise	Crop/Anima I/ Species	Name of the technology**	Thematic Area		
1	Home	Adolescent	Use of iron rich diet to	Nutrition		
	Science	girls	prevent anemia	Management		
2	Pulses	Gram	ICM	Irrigation		
		Giaili	ICIVI	Management		

## Technologies refined\*\*

Sr. No.	Category	Crop/ Enterprise	Name of the technology**	Thematic Area		
1	Cereals	Paddy	SRI	SRI		
2		Livestock	Low milk production of cow	Nutrition Management		

## 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
Integrated Crop	1		1							2
Management										
TOTAL	1		1							2

## A.1.1 Abstract of the number of technologies assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	Adolscent girls	TOTAL
Nutrition Management	1	-	-	-	-	-	-		1
Nutriton Management (Home Science)		-	-	-	-	-	-	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
SRI in paddy	1									1
TOTAL	1		==							

## A.2.1 Abstract on the number of technologies assessed in respect of livestock/enterprises :-

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Nutrition Management	1	-	-	-	-	-	-	1
TOTAL	1	-	-	-	-	-	-	1

#### PERFORMANCE OF IMPORTANT TECHNOLOGIES

#### OFT: 1

1. Title : Low yield of Gram

2. Problem diagnose/defined : No irrigation at critical stages

3. Details of technologies selected : T<sub>1</sub>. No use of Phosphatic fertilizer (Farmers practices)

T<sub>2</sub> Basal dose of fertilizer + Biofertilizers + two irrigation at critical stages

T<sub>3</sub>. Basal dose of Phosphatic fertilizer + Biofertilizers + one irrigation at pod filling stage.

**4. Season** : Rabi-Summer -2011-12

5. Source of technology : NAU

**6. Production system thematic area** : Paddy – Sugarcane cropping system

7. Thematic area : ICM

8. Performance of the Technology : In this technology of Gram, we with performance indicators recommend land configuration in

Gram crop and giving life saving irrigation at critical stages and Phosphatic fertilizers as basal dose gave more number of Branches, Pods and increased seed yield than

traditional method.

9. Final recommendation for micro : One light irrigation at critical stage islevel situation : better than traditional method of

gram cultivation.

10. Constraints identified and : --

feedback for research

**11. Process of farmers participation** : Appreciate the technology and ready

and their reaction to adopt.

## **Results of On Farm Trials**

Cront				No.			Da	ta on the pa	aramete	r	Results	
Crop/ enterpris e	Farming situatio n	Problem Diagnose d	Title of OFT	of trials	Technology refined	Para- meters	Plant Height (cm)	No. of Branches	No. of Pods/ Plant	Yield (q/ha)	of refinem- ent	Feedback from the farmer
1	2	3	4	5	6	7		8			9	10
Gram	Irrigated/ Unirrigat ed	No irrigation at critical stages	Low yield of Gram	5	T <sub>1</sub> . No use of Phosphatic fertilizer (Farmers practices)		33	6	38	1170	T <sub>3</sub> Basal dose of Phosphati c fertilizer	Land configuration in Gram crop and giving life saving irrigation at critical
		3			T <sub>2</sub> Basal dose of fertilizer + Biofertilizers + two irrigation at critical stages		37	11	56	1750	+ Biofertilize rs + one irrigation at pod	stages and Phosphatic fertilizers as basal dose gave more number of Branch, Pods and
					T <sub>3</sub> . Basal dose of Phosphatic fertilizer + Biofertilizers + one irrigation at pod filling stage.		39	14	91	1840	filling stage.	increased seed yield than traditional method. Farmers are very much interested because maintain soil health, maximum water use efficiency, in this technology.

<sup>\*</sup> No. of farmers

Technology Refined	*Production per unit (kg/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
No use of Phosphatic fertilizer (Farmers practices)	1170	34225	1:4.52
Basal dose of fertilizer + Biofertilizers + two irrigation at critical stages	1750	53780	1:6.54
Basal dose of Phosphatic fertilizer + Biofertilizers + one irrigation at pod filling stage.	1840	56825	1:6.85

OFT: 2

1. Title : Prevalence of Anemia among rural

tribal adolescent girls (16 to 18

yrs)

2. Problem diagnose/defined : 1.Low iron content in diet

2.Use of traditional diet

3.Lack of knowledge about nutritional

foods

4. Prevalence of infectious diseases

5. Poor socio-economic condition

3. Details of technologies selected : T1.Farmers practices(Traditional

practices)-existing dietary pattern

T2.Recommended practices-iron tablet/day with existing dietary

pattern

T3.100gm roasted Bengal gram +

100gm roasted Rice flakes/day +

iron tablet/day with existing

dietary pattern

4. Season/Period : March – May'2012 ( 3 Months)

5. Source of technology : A text book of "Nutritive value of

Indian foods" by National Institute of

Nutrition, Hyderabad

6. Production system thematic area : ---

7. Thematic area : Nutrition Management

8. Performance of the Technology :

with performance indicators

for assessment /refinement

9. Final recommendation for micro : Da

level situation

Daily use of iron rich diet (100gm roasted Bengal gram + 100gm roasted Rice flakes) and one iron tablet with existing dietary pattern increased Hb level and body weight of tribal adolescent girls as

compared to other treatment.

10. Constraints identified and : ---

feedback for research

11. Process of farmers participation

and their reaction

: Appreciate the technology and ready

to adopt.

## **Results of On Farm Trials**

								Data on th	e parame	ter			
Crop/ enterprise	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters		Hb leve (gm%)	ı	В	ody weigh (Kg.)	t	Results of assess-	Feedback from the
	Diagnoseu	OI OF I	lilais			Before	After	increase in Hb level	Before	After	Wt. gain	ment	farmer
1	2	3	4	5	6				7			8	9
Home Science	1.Low iron content in diet 2.Use of traditional diet	Prevalence of Anemia among rural tribal adolescent girls	5	T1.Farmers practices (Traditional practices)- existing dietary pattern	Hb level & Body weight for three months period	9.7	10.04	0.34	34.800	35.200	0.400	Daily use of 100gm roasted Bengal gram + 100gm	Hb level & body wt. of rural tribal adolescent girls increased
	3.Lack of 5 T2.Re knowledge about tab exists	T2.Recommended practices-iron tablet/day with existing dietary pattern	practices-iron tablet/day with existing dietary		11.04	1.54	39.000	40.600	1.600	roasted Rice flakes + one iron tablet	by using iron rich diet and iron tablet daily with		
	4.Prevalence of infectious diseases 5.Poor socio- economic condition		5	T3**.100gm roasted Bengal gram + 100gm roasted Rice flakes/day + iron tablet/day with existing dietary pattern		9.3	11.92	2.62	40.600	43.600	3.000	with existing dietary pattern gave better result to prevent Anemia	existing dietary pattern

<sup>\*</sup>No. of tribal adolescent girls (16 to 18 yrs)

<sup>\*\* 100</sup> gm Bengal gram contains 9.5 mg iron.

<sup>100</sup> gm Rice flakes contains 20.0 mg iron.

#### OFT: 3

Title : Low yield of paddy

2. Problem diagnose/defined : Use of higher and over age

seedlings for transplanting

3. Details of technologies selected :

for assessment /refinement

: T<sub>1</sub>.Randomly transplanting of paddy

-Farmer practices

T<sub>2</sub>. Line method of transplanting (20

X 15 cm)

T<sub>3</sub>. System of Rice Intensification

method (25 X 25 cm)

**4. Season :** Kharif-2012

5. Source of technology : NAU

**6. Production system thematic area** : Paddy – Sugarcane cropping system

7. Thematic area : System of Rice Intensification (ICM)

8. Performance of the Technology : The SRI technology of paddy had

with performance indicators required less seed rate and gave

more number of tillers, filled grain

and increased seed yield than

traditional method.

Time consuming

9. Final recommendation for micro

level situation

SRI technology is better than

traditional method of transplanting

paddy.

10. Constraints identified and

feedback for research

11. Process of farmers participation

and their reaction

: Appreciate the technology and ready

to adopt.

## **Results of On Farm Trials**

							D	ata on the	paramete	r	Results	
Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Para- meters	No. of Tillers/ hill	No. of filled grains/panicle	Panicle length (cm)	Yield (q/ha)	of refinem- ent	Feedback from the farmer
1	2	3	4	5	6	7		8	3		9	10
Paddy	Irrigated	Use of higher and over age seedlings for transplanting	Low yield of paddy	5	T <sub>1</sub> .Randomly transplanti ng of paddy – Farmer practices  T <sub>2</sub> . Line method of transplanti ng (20 X 15 cm)		10	97	24.4	49.50 58.95	T <sub>3</sub> . SRI method (25x25) gave higher yield	In SRI technology of paddy cultivation used less seed rate and gave higher tillering, higher no. of filled grains & seed yield. Farmers are very much interested
					T <sub>3</sub> . System of Rice Intensificat ion method (25 X 25 cm)		22	149	27.7	68.80		because maintain soil health, maximum water use efficiency, less water required in this technology.

<sup>\*</sup> No. of farmers

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Randomly transplanting of paddy –Farmer practices	49.50	31175	1 : 2.97
Line method of transplanting (20 X 15 cm)	58.95	40153	1:3.53
System of Rice Intensification method (25 X 25 cm)	68.80	50790	1 : 4.49

#### **OFT - 4**

1. Title : Low milk production of Cow 2. **Problem** : 1. Lack of knowledge about urea treatment. diagnose/defined 2. Poor management of Dairy animal (breeding, feeding and management) 3. Poor knowledge of health & cost efficient livestock rearing. **Details of technologies** : T1. Farmers practice (Paddy straw without urea selected for assessment treatment) /refinement T2. Paddy straw with urea treatment (6-8 kg daily) T3. Paddy straw with urea treatment + Mineral mixture (35 gm mineral mixture feeding daily) Source of technology : Text book of Animal Husbandary- G.C.Benerji 4. 5. **Production system** thematic area 6. Thematic area **Nutrition Management** 7. Performance of the **Technology with** performance indicators Final recommendation : Paddy straw treated with 4% urea and 35 gm for micro level situation mineral mixture feeding daily gaves higher milk production. 9. **Constraints identified** and feedback for research 10. Process of farmers Farmers appreciate the technology & ready to adopt. participation and their reaction

Farming	g Problem	Title	No. of	Technology	_	Data on th	e parameter	Results of	Feedback from the
situation	Diagnosed	of OFT	trials*	Assessed	Parameters	Milk production (kg/day)		assess-ment	from the farmer
						Before	After		
2	3	4	5	6	7	8		9	10
Low milk production in HF Cow	1. Low Milk Production 2. Lack of knowledge about urea treatment. 3. Poor manage- ment. 4. Poor knowledge of health & hygiene. 5. Lack of knowledge about feeding	Low milk production in HF Cow	10	T1. (Farmers practices) Paddy straw without urea treatment T2. Paddy straw with urea treatment (6-8 kg daily) T3. Paddy straw with urea treatment + Mineral mixtur e (35 gm mineral mixture	Milk production	5.510 5.840 6.120	6.470 6.810 7.162	Paddy straw with urea treatment + Mineral mixture (35 gm mineral mixture feeding daily)	Increase milk production after urea treated paddy straw along with mineral mixture feeding
	2 Low milk production	2 3  Low milk production in HF Cow 2. Lack of knowledge about urea treatment. 3. Poor management. 4. Poor knowledge of health & hygiene. 5. Lack of knowledge about	2 3 4  Low milk production in HF Cow 2. Lack of knowledge about urea treatment. 3. Poor management. 4. Poor knowledge of health & hygiene. 5. Lack of knowledge about feeding manageme	Situation Diagnosed of OFT trials*  2 3 4 5  Low milk production in HF Cow 2. Lack of knowledge about urea treatment. 3. Poor management. 4. Poor knowledge of health & hygiene. 5. Lack of knowledge about feeding manageme	Situation  Diagnosed  of OFT  trials*  Assessed   1. Low Milk production in HF Cow  2. Lack of knowledge about urea treatment. 3. Poor manage- ment. 4. Poor knowledge of health & hygiene. 5. Lack of knowledge about feeding manageme  of OFT  trials*  Assessed  10  T1. (Farmers practices) Paddy straw without urea treatment 10  T2. Paddy straw with urea treatment (6-8 kg daily)  T3. Paddy straw with urea treatment + Mineral mixtur e (35 gm mineral mixture feeding daily)	Situation Diagnosed of OFT trials* Assessed Parameters  2 3 4 5 6 7  Low milk production in HF Cow Production in HF Cow knowledge about urea treatment. 3. Poor management. 4. Poor knowledge of health & hygiene. 5. Lack of knowledge about feeding manageme management.	Parameters   Parameters   Parameters   Milk production   Parameters   Parameters   Milk production   Parameters   Pa	Situation Diagnosed of OFT trials* Assessed Before After  2 3 4 5 6 7 8  Low milk production in HF Cow In HF Cow Milk Production in HF Cow Moved about urea treatment.  3. Poor management.  4. Poor knowledge of health & hygiene.  5. Lack of knowledge about feeding management feeding manageme feeding daily)  Assessed Farameters Milk production (kg/day)  Before After  7 8  5.510 6.470  Farameters Milk production (kg/day)  After  7 8  5.510 6.470  Farameters Milk production (kg/day)  6.470  Farameters Milk production (kg/day)	Situation Diagnosed of OFT bitrials* of OFT bitrials* Assessed Parameters

Technology Assessed	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13
T1 - Farmers practice (Paddy straw without urea treatment)	85.10	1:1.78
T2 - Paddy straw with urea treatment	95.30	1:1.87
T3- Paddy straw with urea treatment + Mineral mixture (35 gm daily)	105.86	1:1.97

Result: T3: Urea treated paddy straw along with mineral mixture (35 gm mineral mixture feeding daily) can result in better milk yield and efficient fodder utilization as compared to T1 and T2.

# **FRONTLINE DEMONSTRATIONS**

Crop/enterprise	No. of demonstrations	Area (ha)
Pulses	80	23
Cereals	333	110.6
Vegetable crops	41	12
POSHAK AAHAR	10	
Kitchen Gardening	60	
Women drudgery reduction – NAVEEN Sickle for paddy harvesting	30	
Mineral mixture feeding	20	
By pass fat fedding	20	
Urea treatment to paddy straw	20	
Total	614	145.6

## **PULSES**

					Perf	ormance of	technology	on differen	t parameter	s*	
Crop	Season	Name of technology	No. of farmers	Area (ha)	Yield (q	t./ha.)	No. of Po	od / Plant	No. of E		Result **
		teermology		(114)	Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
Pigeon pea	Kharif- 12	New variety	36	8	16.10	11.25	635.75	460.60	14-17	5-11	Performance of new variety of pigeon pea gave higher yield than local variety
Moong bean	Summer -2012	New variety	20	10	14.50	11.00	55-65	35-45	12-14	6-10	New variety gave higher yield than local variety
Gram	Rabi-11- 12	INM	24	5	16.25	11.55	64.25	43.65	7-10	3-5	Use of bio fertilizer in gram gave higher yield than local variety

# CEREALS, HORTICULTURE AND OTHER CROPS

					F	Performan	ce of technolo	gy on differe	Performance of technology on different parameters*								
Crop	Season	Name of technology	No. of farmers	Area (ha)	Yield (	qt./ha.)	Test	wt.		oductive plant	Result **						
		technology	iailleis		Demon.	Local Check	Demon.	Local Check	Demon.	Local Check							
Paddy NAUR-1	Kharif-12	New Variety	49	10	59.23	46.80	33gm/1000	24gm/1000	18-20	6-11	Performance of new variety and its yield is better than local variety						
Paddy GNR-3	Kharif-12	New Variety	24	5	58.65	45.70	31gm/1000	24gm/1000	14-17	6-11	Performance of new variety and its yield is better than local variety						
Paddy GAR-13	Kharif- 12	New Variety	25	5	57.00	45.75	31gm/1000	24gm/1000	15-17	7-10	Performance of new variety and its yield is better than local variety						
Paddy AAUR-1	Kharif- 12	New Variety	25	5	14.78	11.75	33gm/1000	24gm/1000	17-20	6-10	Performance of new variety and its yield is better than local variety						
Paddy NAUR-1	Kharif- 12	SRI	110	44	61.03	46.80	33gm/1000	24gm/1000	27-30	6-11	This technology of T.P. gave higher yield than local method and save water,						

					F	ers*					
Crop	Season	Name of	No. of	Area		qt./ha.)	Test		No. of p	roductive /plant	Result **
-		technology	farmers	(ha)	Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
											seed & ecofriendly
Paddy GNR-3	Kharif- 12	SIRA	60	24	60.23	46.80	31gm/1000	24gm/1000	14-17	6-11	This technology of T.P. gave higher yield than local method and save water, seed & ecofriendly
Sorghum GJ-40	Kharif- 12	New Variety	6	4	17.03	12.40	28- 30gm/1000	15- 18gm/1000	1-3	1-2	Performance of new variety and its yield is better than local variety
Nagli Guj. Nagli-1	Kharif- 12	New variety/Introduction of new crop	34	13.6	13.15	10.60	2.56- 2.70gm/1000	24gm/1000	3-4	1-2	Performance of new variety and its yield is better than local variety
Okra	Rabi-11- 12	INM	8	2	157.6	105.5	21 fruit/plant	12 fruit/plant	202g.	103g.fruit/ plant	INM in okra gave higher yield and also maintain the quality of okra this technology control on imbalance use

		Performance of technology on different parameters*									
Crop	Season	Name of	No. of farmers	Area (ha)	Yield (	qt./ha.)	Test	wt.		roductive /plant	Result **
		technology	technology		Demon.	Local Check	Demon.	Local Check	Demon.	Local Check	
											of fertilizer
Brinjal	Rabi-11- 12	INM	8	2	190.7	155.3	43.25 fruit/plant	26.47 fruit/plant	2.403 fruit/plant	2.345 fruit/plant	INM gave higher yield and also maintain the quality of brinjal this technology control on imbalance use of fertilizer
Okra	Rabi-11- 12	IPM	10	3	156.15	104.03					INM gave higher yield and also maintain the quality of brinjal this technology control on imbalance use of fertilizer
Brinjal	Rabi-11- 12	IPM	10	3	180.48	136.80					
Cucurbits	Summer- 12	IPM	5	2	102.50	81.35					

#### **Details of FLD – Discipline – Home Science:**

(1) Result of FLD on feeding of POSHAK AAHAR to malnourished rural tribal children:

**Demonstration period :** December-2011 to March-2012 (4 months)

No. of Demonstration: 10

Village: Vanskui Taluka: Vyara

Critical input supplied: POSHAK AAHAR – Protein rich diet i.e. Mixture of wheat, jowar, rice, soybean and Bengal gram dal

(Cereals & pulses with 3:1 ratio)

Average weight gain of tribal children per month:

Age group	No. of tribal children	Avera	age body v	veight of tri	bal childre	Weight	Increase	*Feeding of	
		Before		After dem	onstration	gain	in	POSHAK AAHAR	
		demon.	First month	Second month	Third month	Fourth month	(Kg.)	Weight (%)	to children (gm/day/child)
1-3 years	Malnourished 10	8.710	9.010	9.260	9.350	9.500	0.790	9.07	100 to 150
	Healthy 10	10.020	10.200	10.290	10.350	10.500	0.480	4.79	

<sup>\*</sup> Recommended by WHO.

#### **Technical feedback:**

- 1. After feeding of POSHAK AAHAR to malnourished tribal children, the growth and development of children are better and the health and nutritional status are improved.
- 2. POSHAK AAHAR are the low cost protein rich diet and easily available in local market which are compatible for children due to lower economic status.

## Mother's reaction on critical inputs:

- 1. POSHAK AAHAR are good in taste therefore children are eating POSHAK one to two times in a day. So that weight of children is increased & ultimately weakness of children is decreased.
- 2. POSHAK AAHAR is cheaper and easily available at home.
- 3. Recipes of POSHAK AAHAR can be prepared as per taste required.

# (2) Result of Front Line Demonstration on Kitchen Gardening:

No. of Farm women: 60 No. of Demonstration: 60

Area: 1 Guntha/demo.

Season: Kharif-2012

Name of		Crop yield (Kg.) per demonstration													
Enterprise	Tomato	Ridge gourd	Brinjal	Bottle gourd	Pigeon pea	Cluster bean	Bitter gourd	Sponge gourd							
1	2	3	4	5	6	7	8	9							
Kitchen Garden	15.7	5.3	21.6	10.7	8.9	3.4	3.5	4.9							

	Crop yield (Kg	g.) per demo	nstration	Total	Average	Gross return (`)			
Cucumber	Cow pea	Chilli	Snake gourd	Indian bean	Production (Kg.)	rate (`/Kg)	Before FLD	After FLD	
10	11	12	13	14	15	16	17	18	
4.4	7.6	9.5	7.3	3.0	105.8	30	810=00	3174=00, along with domestic consumption	

## Farm women Reaction:

S. No	Feed Back
1	Before Demonstration, farm women were growing only two or three vegetable crops in their backyard but after demonstration
	they are growing different vegetable crops through kitchen gardening in scientific way.
2	Kitchen gardening gives continuous supply of fresh vegetables at lower cost which gives daily nutritious diet.
3	In kitchen gardening, farm women are not applying any agrochemicals so they produce organic vegetables.
4	We are utilized maximum backyard space and waste water.
5	Income is generated by selling extra vegetables grown in kitchen garden.
6	Farm women are attracted towards hybrid vegetables.

# (3) Result of FLD on Introduction of improved NAVEEN sickle for paddy harvesting:

Thematic area: Women drudgery reduction technology No. of Farm women: 30

Crop	Season & Year	No. of Demonstration	•	ty per labour n/h)	Increase in field	Labour red (man-l	quirement n / ha)	Economics			
			Harvesting Harvesting by by local NAVEEN sickle		capacity (%)	Demon	Local check	Cos opera `/ ha	tion *	Saving cost (%)	
			sickle					Demon	Local check		
Paddy	Kharif 2012	30	0.0076	0.0062	22.58	131	161	1600	2000	25.00	

<sup>\*</sup>Cost of operation is calculated as per Govt. rules.

#### **Technical feedback:**

- 1. Improved NAVEEN sickle reduces women drudgery in terms of time, efficiency and physical hazards (finger injuries, hand grip, muscle stress etc.)
- 2. During paddy harvesting, field capacity per farm woman is increased up to 22.58% by using NAVEEN sickle as compared to local sickle.
- 3. NAVEEN sickle saves 23% labour and 25% cost of operation as compared to local sickle.

## Farm women's reaction:

- 1. NAVEEN sickle increases working efficiency in short period of time, i.e. it is cost saving and time saving.
- 2. NAVEEN sickle reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to local sickle.

<sup>\*\*</sup>NAVEEN sickle is recommended by CIAE, Bhopal.

## d. Details of FLD – Animal Science:

# (1) Mineral mixture feeding

	Thematic Name of the No. of No.		No.of	Major parameters		% change	Other parameter		*Economics of demonstration (Rs.)				Economics of check (Rs.)				
Category	area	technology	Farmer	units	Demonst	Check	in major	Demons	Check	Gross	Gross	Net	BCR	Gross	Gross	Net	BCR
	alea	demonstrated	i aiiiiei	uiilo	ration	CHECK	parameter	ration	CHECK	Cost	Return	Return	BCK	Cost	Return	Return	BCK
Cow	Nutrition management	Mineral mixture feeding	20	20	Avg. milk yield lit per day 7.175	Avg. milk yield lit per day 6.200	15.73%			118.00	215.25	97.25	1:1.82	110	186.00	76.00	1:1.69

#### **Farmers Reaction:**

S. No	Feed Back
1	Use of mineral mixture results in better milk production and decrease chances of anoestrus in buffaloes.
2	Use of mineral mixture decreases the chances of production associated diseases.

# (2) Bypass feeding to buffaloes: Kharif 2012

		Name of the	No. of	No.of	Major parameters  Fat % of milk		% change in	Economics of demonstration (Rs.)				Economics of check (Rs.)			
Category	Thematic area	technology demonstrated	Farmer	units			% change in major parameter	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					Demonstration	Check									
Buffaloes	Nutrition management	Bypass fat feeding to buffaloes	20	20	8.7	7.9	11.21	69	347.54	278.54	5.04	65	311.47	246.47	4.79

## **Farmers Reaction:**

S	S. No	Feed Back
1		By pass fat feeding had resulted in better fat% of the milk

# (3) Urea treatment to paddy straw (Rabi- Summer-2011)

Cotogory	Thematic	Name of the	No. of	No.of	Majo parame		% change	Econ	omics of (R		ration	Eco	nomics o	f check (	Rs.)
Category	area	technology demonstrated	Farmer	units	Avg. milk per d	•	in major parameter	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Buffalo	Nutrition	Urea treatment to	20	20	Demonst ration	Check	21.96%	84	202.50	118.50	1:2.41	80	166.04	86.04	1:2.08
	management	paddy straw	20	20	6.137	5.032	21.5070	0-7	202.00	110.00	1.2.71		100.04	00.04	1.2.00

### **Farmers Reaction:**

S. No	Feed Back
1	Use of Urea treatment make the paddy straw more palatable to the animals
2	Urea treated paddy straw efficient milk production and efficient fodder utilization

# Training (including Vocational, Sponsored and FLD Training)

Thematic area	No. of					Participants				
	courses		Others			SC/ST			<b>Grand Total</b>	
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	1	0	0	0	34	7	41	34	7	41
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	1	0	0	0	14	23	37	14	23	37
Water management	2	0	0	0	25	20	45	25	20	45
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	18	0	30	30	420	95	515	420	125	545
Fodder production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Il Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	10	0	29	29	138	66	204	138	95	233
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables like Broccoli	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation (Green Houses, Shade Net etc.)	1	0	0	0	0	17	17	0	17	17
b) Fruits										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0

Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
III Soil Health and Fertility										
Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Soil and Water Conservation	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	4	0	0	0	85	36	121	85	36	121
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0

Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management										
Dairy Management	3	0	0	0	32	38	70	32	38	70
Poultry Management	4	0	0	0	76	27	103	76	27	103
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Disease Management	3	0	0	0	45	58	103	45	58	103
Feed management	1	0	0	0	0	28	28	0	28	28
Production of quality animal products	2	0	0	0	3	40	43	3	40	43
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	4	0	0	0	18	112	130	18	112	130
Design and development of low/minimum cost diet	3	0	0	0	9	71	80	9	71	80
Designing and development for high nutrient efficiency diet	3	0	0	0	0	100	100	0	100	100
Minimization of nutrient loss in processing	2	0	0	0	0	39	39	0	39	39
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	1	0	0	0	0	17	17	0	17	17
Value addition	0	0	0	0	0	0	0	0	0	0
Income generation activities for empowerment of rural Women	3	0	0	0	0	84	84	0	84	84
Location specific drudgery reduction technologies	2	0	0	0	4	52	56	4	52	56
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	7	0	30	30	6	162	168	6	192	198
VI Agril. Engineering										

						ı	ı		1	1
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	2	0	0	0	26	46	72	26	46	72
Integrated Disease Management	1	0	0	0	22	3	25	22	3	25
Bio-control of pests and diseases	1	0	0	0	25	0	25	25	0	25
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site	_									
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0

Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics										
Leadership development	4	0	0	0	112	121	233	112	121	233
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	2	0	0	0	0	43	43	0	43	43
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	6	0	0	0	77	84	161	77	84	161
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
TOTAL	91	0	89	89	1171	1389	2560	1171	1478	2649
(B) RURAL YOUTH										
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0

Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Value addition	2	0	0	0	1	108	109	1	108	109
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	3	0	0	0	63	0	63	63	0	63
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	2	0	0	0	31	29	60	31	29	60
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Para vets	0	0	0	0	0	0	0	0	0	0
Para extension workers	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	0	0	0	6	29	35	6	29	35
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
TOTAL	8	0	0	0	101	166	267	101	166	267
(C) Extension Personnel										
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0

	105	19	94	113	1359	1596	2955	1378	1690	3068
TOTAL	6	19	5	24	87	41	128	106	46	152
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Women and Child care	1	0	0	0	0	28	28	0	28	28
Household food security	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	1	0	0	0	23	3	26	23	3	26
Capacity building for ICT application	3	0	0	0	63	10	73	63	10	73
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	1	19	5	24	1	0	1	20	5	25
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0

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

# (D) Vocational training programmes for Rural Youth

					No.	of Partici	oants	Self	employed aft	er training	Number of	
Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	Male	Female	Total	Type of units	Number of units	Number of persons employed	persons employed else where	
	22- 23/10/2012	Value addition in soybean	Value addition	2	1	26	27		Woi	k in progress		
Home Science	28-29/12/2012	Value addition in fruits and vegetables	Value addition	2	0	82	82	Work in progress				
	22- 23/1/2013	Preparation of masala	f Small Scale Processing 2		6	6 29 35 Work in progress						

# (E) Sponsored Training Programmes

SI. No	Date	Title	Discipline	Thematic area	Duration (days)	Clientele	No. of courses		nber other icipa	•		mbe		nu	Tota mbei ticipa	r of	Sponsoring Agency
1	29- 31/8/2012	New approaches and methods in Agril. Extension	Extension Education	Group Dynamics and farmers organization	3	E.F.	1	<b>M</b> 19	<b>F</b> 5	<b>T</b> 24	<b>M</b>	<b>F</b> 0	<b>T</b>	<b>M</b> 20	<b>F</b> 5	<b>T</b> 25	EEI, Anand
2	10- 11/9/2012	Agriculture business & its characteristics	Extension Education	Enterpreneurial development of farmers/youths	2	P.F.	1	0	0	0	29	0	29	29	0	29	ATMA- Navsari
3	12- 13/9/2012	Scientific cultivation of major kharif crops	Agronomy	ICM	2	F.W.	1	0	30	30	0	0	0	0	30	30	ATMA- Navsari
4	14- 15/9/2012	Scientific cultivation of vegetable crops under control condition	Horticulture	Off season vegetables	2	F.W.	1	0	29	29	0	0	0	0	29	29	ATMA- Navsari
5	17- 18/9/2012	Animal health management	Animal Science	Disease Management	2	P.F.	1	0	0	0	34	0	34	34	0	34	ATMA- Navsari

6	24- 25/9/2012	Health and nutrition for mother & child	Home Science	Women & Child Care	2	F.W.	1	0	30	30	0	0	0	0	30	30	ATMA- Navsari
7	28- 29/12/2012	Value addition in fruits & vegetables	Home Science	Value addition	2	R.Y.	1	0	0	0	0	82	82	0	82	82	ATMA-Tapi
8	15- 17/1/2013	Scientific Cultivation of groundnut	Agronomy	ICM	3	P.F.	1	0	0	0	30	0	30	30	0	30	NRCG- Junagadh
9	25/2/2013	Health and nutrition for pregnent & lactating women and children	Home Science	Women and child care	1	F.W.	1	0	0	0	0	26	26	0	26	26	NAIP-III NAU, Navsari
10	26/2/2013	Preparation of masala	Home Science	Income generation activities for empowerment of rural women	1	F.W.	1	0	0	0	0	26	26	0	26	26	NAIP-III NAU, Navsari
11	7/3/2013	Poultry production- Enterpreneurship approach & care during summer	Animal Science	Poultry Management	1	P.F.	1	0	0	0	28	0	28	28	0	28	NAIP-III NAU, Navsari
12	12/3/2013	Health and nutrition for pregnent & lactating women and children (Sponsored Training)	Home Science	Women and child care	1	F.W.	1	0	0	0	3	32	35	3	32	35	NAIP-III NAU, Navsari
13	13/3/2013	Preparation of masala	Home Science	Income generation activities for empowerment of rural women	1	F.W.	1	0	0	0	0	32	32	0	32	32	NAIP-III NAU, Navsari

### **Extension activities**

							Partic	ipants					
Nature of Extension	No. of	Fa	rmers (Othe	ers)	so	C/ST (Farme	rs)	Ext	ension Offic	ials		Grand Total	
Activity	activities	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	5	0	0	0	74	65	139	4	1	5	78	66	144
Kisan Mela	0	0	0	0	0	0	0	0	0	0	0	0	0
Kisan Ghosthi	3	25	0	25	10	16	26	4	0	4	39	16	55
Exhibition	3	0	0	0	3776	5909	9685	6	1	7	3782	5910	9692
Film Show	25	1	32	33	380	623	1003	3	1	4	384	656	1040
Method Demonstrations	8	0	0	0	533	306	839	2	1	3	535	307	842
Farmers Seminar	10	0	0	0	792	1344	2136	12	3	15	804	1347	2151
Workshop	0	0	0	0	0	0	0	0	0	0	0	0	0
Group meetings	77	1341	794	2135	3135	3279	6414	6	1	7	4482	4074	8556
Lectures delivered as resource persons	27	301	81	382	2452	1556	4008	6	1	7	2759	1638	4397
Newspaper coverage	10	0	0	0	0	0	0	0	0	0	0	0	0
Radio talks	0	0	0	0	0	0	0	0	0	0	0	0	0
TV talks	1	0	0	0	0	0	0	0	0	0	0	0	0
Popular articles	19	0	0	0	0	0	0	0	0	0	0	0	0
Extension Literature	6718	5	0	5	1343	5370	6713	4	1	5	1352	5371	6723
Advisory Services	21	18	2	20	141	165	306	3	1	4	162	168	330
Scientific visit to farmers field	82	2	1	3	141	191	332	6	1	7	149	193	342
Farmers visit to KVK	138	34	71	105	1073	1309	2382	5	1	6	1112	1381	2493
Diagnostic visits	41	3	0	3	54	9	63	8	0	8	65	9	74
Exposure visits	4	0	0	0	137	233	370	1	0	1	138	233	371
Ex-trainees Sammelan	7	0	0	0	23	234	257	6	1	7	29	235	264
Soil health Camp	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal Health Camp	2	0	0	0	342	185	527	9	1	10	351	186	537
Agri mobile clinic	0	0	0	0	0	0	0	0	0	0	0	0	0
Soil test campaigns	1112	667	0	667	445	0	445	1	0	1	1113	0	1113

Farm Science Club Conveners meet	0	0	0	0	0	0	0	0	0	0	0	0	0
Self Help Group Conveners meetings	14	0	0	0	0	265	265	1	1	2	1	266	267
Mahila Mandals Conveners meetings	0	0	0	0	0	0	0	0	0	0	0	0	0
Celebration of important days (6)	6	59	4	63	52	172	224	8	2	10	119	178	297
Total	7366	1826	985	2811	14566	21231	35797	95	18	113	16487	22234	38721

# Production and supply of quality seed and planting material

### **SEED MATERIALS**

Major	Crop	Variety	Quantity	Value	Provided to No. of
group/class	Стор	Vallety	(qtl.)	(Rs.)	Farmers
	Paddy	Gurjari	24.00	55200	96
	(Summer)				90
Cereals		Gurjari	70.00	1,60,000	Remaining seed will
	Paddy	GNR-3	18.00		be sold in May-
	(Kharif)	NAUR-1	21.00		2013
		IR-28	18.50		
	Moong	Pusa	5.20	14400	104
D 1		Vishal			101
Pulses	Groundnut	GG-2	6.89	22810	90
	Gram	GG-2	1.20	3000	40
Sugarcane	Sugarcane	Co-5071	253.15	58305	10

### SUMMARY

Sr. No.	Major group/class	Quantity	Value	Provided to No. of
31. 140.	Wajor group/class	(qtl.)	(Rs.)	Farmers
	Paddy (Summer)-Gurjari	24.00	55200	96
	Paddy (Kharif)-Gurjari	70.00	1,60,000	Remaining seed
Cereals	Paddy (Kharif )- GNR-3	18.00		will be sold in May-2013
	Paddy (Kharif )- NAUR-1	21.00		
	Paddy (Kharif)- IR-28	18.50		
	Moong- Pusa Vishal	5.20	14400	104
Pulses	Groundnut- GG-2	6.89	22810	90
	Gram- GG-2	1.20	3000	40
Sugarcane	Sugarcane- Co-5071	253.15	58305	10
	TOTAL	417.94	313715	

### **PLANTING MATERIALS**

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Mango	Kesar			
	Mango	Dasheri			

### SUMMARY

SI. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS – MANGO			
	TOTAL			-

### **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, CDAP-Tapi	-
Technical bulletins	-	-
Popular articles	List of articles given in Annexure – III	-
Extension literature	4	4000
Research Paper	41	
Book Published	4	40
DVD released		

### **SOIL AND WATER TESTING**

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	1112	1112	38	2,22,400
Water Samples	1	1	1	50
Total	1113	1113	39	2,22,450

### SUCCESS STORIES/ CASE STUDY

- 1. Entrepreneurship development of tribal women Self Help Group through preparation of Masala
- 2. Inclusion of poultry rearing extension activities for rural livelyhood
- 3. Dahyabhai Madaribhai Chaudhary, An innovator of dual purpose pigeonpea (var. vaishali) production in tribal area of Tapi districts
- 4. Pravinbhai Harishbhai Chaudhary, An innovator for scented paddy (Var. PRH 10) production in tribal area of Tapi districts
- 5. Ajitbhai Maganbhai Gamit, An innovator for paddy (Var. NAUR 1) production in tribal area of Tapi districts
- 6. Bhavik Natubhai Bhakta, An Innovator for mixed cropping

#### **IMPACT STUDIES**

- 1. Impact of training regarding scientific cultivation of okra
- 2. Impact of training regarding scientific cultivation of brinjal
- 3. Impact of training regarding package of practices of soybean crop
- 4. Impact of training regarding package of practices of gram crop
- 5. Impact of training regarding package of practices of pigeon pea crop
- 6. Impact of training regarding IPM components on Cucurbitaceous vegetables

### **RESEARCH STUDY**

**Title:** Participation of tribal farm women in breeding, feeding and management practices of milch animals of Tapi district of South Gujarat.

### **Investigators:**

- 5. Dr. C. D. Pandya, Subject Matter Specialist (Extension)
- 6. Dr. J. K. Raval, Subject Matter Specialist (Animal Science)
- 7. Arti N. Soni, Subject Matter Specialist (Home Science)
- 8. Dr. N. M. Chauhan, Programme Coordinator

**Year of Commencement:** 2011-12

### Annexure - I

# Proceeding of Ninth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Vyara held on 02/09/2012 at 9:30 am at Training Hall , KVK, NAU, Vyara

### ♦ List of the members remained present in the meeting :

Sr. No.	Name	Members/ Invitees	Designation
1	Dr. A. R. Pathak	Chairman	Vice Chancellor Navsari Agricultural University, Navsari
2	Dr. M. S. Purohit	Member	Director of Extension Education Navsari Agricultural University, Navsari
3	Dr. P. P. Rohilla	Member	Representative Hon. Zonal Project Director Zone-VI, ICAR, Jodhpur Rajasthan
4	Dr. G.R. Patel	Member	Representative Director of Research Navsari Agricultural University, Navsari
5	Dr. V. J. Zinzala	Member	District Agriculture Officer Department of Agriculture, District Panchayat, Vyara, Tapi
6	Mr. N. G. Gamit	Member	Deputy Director of Agriculture(Training) Farmers Training Centre, Vyara
7	Mr. Abhesingbhai M.Chaudhari	Member (Co-Op)	Chairman A.P. M. C., Market Yard Vyara, Dist. Tapi
8	Mr. C.M.Solanki	Member	Assistant Conservator of Forest Vyara. Dist. Tapi
9	Mr. Rabari	Member	Range Forest Officer Vyara Range, Dist. Tapi
10	Mr. K.R.Meena	Member	Branch Manager Bank of Baroda, Surti Bazar, Vyara
11	Mr. Dharmesh R. Parmar	Member	Dy. Commissionor of industry & GM.,DIC, Vyara
12	Mr. R. M. Patel	Member	Depo Incharge GSFC, Market Yard, Vyara, Dist. Tapi

13	Mr. Dinesh Ghelani	Member	Kendra Incharge GNFC, Market Yard, Vyara, Dist. Tapi
14	Mr. Ashutosh R. Kumtekar	Member NGO	C/o. Anupbhai Bundela Dr. Ambedkar Trust, 07, Mahadevnagar Society, Panwadi, Vyara
15	Mr. Balvant Ahir	Member (Trader)	Krushi Traders, Bahuri
16	Mr. Nilesh Patel	Member (Trader)	Krushi Agro Chemicals, 26, Mahendra Park, Nr. Satyadev Plaza, Jahangirpur, Surat
17	Mr. Vipinbhai Chaudhari	Member	Secretary,Co-Operative Mandli, Vanskui, Ta- Vyara.
18	Mr. K.B. Patel	Member	Project Co-ordinator, Food, Fat and Fertilizer co., Vyara
19	Smt.Induben Ramanbhai Gamit	Member	SHG, Leader, Tribal innovative woman and Member, KVK SHG, Kapura, Vyara, Dist. Tapi
20	Dr. Ramkumar Singh	Member (Farm Mechinery)	Managing Trusty Suruchi Vasahat, Bardoli
21	Mr. Ravibhai R. Patel	Member	Secretary, Nizar taluka kharid- vechan sangh ltd., Nizar, Ta. Nizar, Dist. Tapi
22	Kiran Devjibhai Gamit	Member	Tribal innovator farm Woman, Gunkhadi, Ta- Songadh.
23	Hetalben Chuadhari	Member	President of Self Help Group Gomthi faliyu, Vanskui
24	Mr. Piyush Patel	Member SEWA	Health Representative, Shri Gujarat Mahila Lok Swasthya Seva Sahakari Mandali Ltd., 10, Prasun Park, Dhuliya Road, Vyara
25	Hemangini Chaudhari	Member SEWA	Health Representative, Shri Gujarat Mahila Lok Swasthya Seva Sahakari Mandali Ltd., 10, Prasun Park, Dhuliya Road, Vyara
26	Mr. Ranjitbhai Gamit	Member	Farmer Representative Unchamala
27	Mrs. Mishulaben Gamit	Member	Executive Secratory, Hangati Mahila Trust, Mandal, Ta. Songadh

28	Dr. N. M. Chauhan	Member (Secretary)	Programme Coordinator  Member Secretary  K.V.K.,Vyara, Dist. Tapi
29	Father Fransis	Member	Mandal, Ta. Songadh
30	Mr. Sanjay Naik	Member Cottage Industry	Traders, Fresh Frozen Fruit Pulp and Juice in All Season, 24, Desai Street, Gandeva, Via- Kharel, Dist. Navsari-390430
31	Buyaben Gamit	Member	Small Tribal farmer representative Jharali village, Ta. Songadh, Dist. Tapi
32	Mr. Jitu Mistry	Member Farm Machinery	Manufacturer, Krishna Power Tiller, C/o. Shanti Tractor, Haji Market, Valsad
33	Mr. Kishor Kamani	Member <b>GFDP</b>	Site Manager Consulting Services for Gujarat Forestry Development Project 5th Floor, A Wing, Aranya Bhawan, Near CH-3 Circle, Sector 10/A, Gandhinagar
34	Mr. Ghanshyambhai Shrirambhai Patel	Member Adopted vilaage	Progressive Young Farmer At. Po. Bahurupa, Ta. Nizar, Dist. Tapi
35	Dr. M.C.Patel	Member	Associate Research Scientist Regional Rice Research Station, NAU, Vyara
36	Linaben Gamit	Member	Women Worker Hangati Mahila Trust
37	Smt.Jyotiben Rameshbhai Gamit	Member	Tribal Women representative, Hangati Mahila Mandal, Mandal village, Ta- Songadh
38	Arunaben Gamit	Member	Women Worker Hangati Mahila Trust
39	Mr. Sharadbhai Patel	Member Cooperative Leader	Chairman, Nizar taluka kharid- vechan sangh ltd., Nizar, Ta. Nizar, Dist. Tapi
40	Mr. Amarsing Z. Chaudhari	Member Cooperative Leader	Vice Presedent Surat District Central Co-op. Bank Ltd., Surat, C/o. Shaktinagar Society, Vyara
41	Mr. Babubhai M. Prajapati	Member	Assistant Director (G.L.D.C.) Parsiwad, Vyara, Dist. Tapi
42	Smt. Ramaben R.Singh	Invitee (Farm	Managing Trusty Suruchi Vasahat, Bardoli

		Machinery)	
43	Mr. Bhupendra Desai	Invitee	Co-operative Leader, Valod
44	Mr. M.C.Chaudhari	Invitee	L.D.M., B.O.B., Vyara
45	Mr. Kamlesh N. Ahir	Invitee	Buhari

# ♦ List of members who could not remain present in meeting :

Sr. No.	Designation	Members/ Invitees
1	Director, District Rural Development Agency, Vyara, Dist. Tapi	Member
2	Deputy Director of Horticulture, Farmers Training Centre, Panwadi, Vyara	Member
3	Branch Manager, Gujarat State Seed Corporation, Apna Bazar, Vyara, Dist. Tapi	Member
4	Project Administrator, Integrated Tribal Development Project, Songadh, Dist. Tapi	Member
5	Deputy Director of Animal Husbandary District Panchayat, Tapi	Member
6	Assistant Director (Fisheries) Near CRPF Campus, Ukai, Dist. Tapi	Member
7	Executive Engineer, Ukai Kakrapar Irrigation Project, Tapi	Member
8	Social Welfare Officer, Market Yard, Vyara, Dist Tapi	Member
9	Officer Incharge, All India Radio, Bhatar Road, Surat	Member
10	Programme Director, Prasarbharti, Bhatar Road, Surat	Member
11	Information Officer, Information & Broadcasting Dept., Chowk Bazar, Surat	Member
12	Joint Director of Agriculture, Lal Banglow, Athwalines, Surat	Member
13	District Registrar, A.P.M.C. office, Market Yard, Vyara	Member

<sup>\*</sup> Due to Sunday the above mentioned officers were remained absent.

The Ninth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Vyara was structured to review the progress made by KVK from 10/08/2011 to 31/08/2012 and to discuss the action plan for the next year (i.e. April-2012 to March-2013) at training hall of KVK, Vyara on 2<sup>nd</sup> September, 2012. The meeting was inaugurated by Dr. A. R. Pathak, Honorable Vice Chancellor, NAU, Navsari and Chairman of SAC Meet. Dr. N. M. Chauhan, Member Secretary & Programme Co-ordinator, Krishi Vigyan Kendra, NAU, Vyara welcomed dignitaries, committee members, farmers, invitees and remained present in the SAC Meet. Dr. N. M. Chauhan, Programme Coordinator, KVK has made a presentation on Annual Progress Report of the last year along with impact studies, success stories, case studies and publications. The presentation was appreciated by house and all have given the positive and flattering remarks. The Action Plan for the next year was also presented by Dr. Chauhan including all mandatory activities keeping in mind the need based, area specific and demand based extension activities. The achieved dreams were also presented by Programme Co-ordinator. The vision for the next year was also presented with power point appearance and all of the thrust areas were also incorporated. The suggestions along with feedback from farmers/farm women, GOs, NGOs, Co-operative sectors and from higher authorities were accepted and approved by the House. The overall discussion made during the meet was really unique, distinctive, productive and resultant. The remarkable suggestions and feedback emerged out from each and every member inside the house. It was a good sign for future betterment of this KVK. During discussion, Dr. P. P. Rohilla, Senior Scientist, ZPD Unit, Jodhpur gave few good suggestions for further betterment of this KVK. He said that this KVK will be e-linked in XII plan. He was also impressed by the progress made by this KVK in each and every mandatory works, extension activities, impact studies, success stories, case studies and publications of this KVK. He blessed and expressed his all of good wishes for the "National Best KVK Award" to this KVK in next year. During the meeting one book "Use of ICT in Agricultural Extension" written by Dr. N.M. Chauhan, Programme Co-ordinator, KVK, Vyara and six folders written by SMSs of KVK, Vyara were released by the dignitaries. Honorable Vice Chancellor, Dr.

A. R. Pathak in his concluding remarks congratulated Programme Co-ordinator and his team of scientists for colourful, result oriented and impactful TOT activities made by KVK, Tapi and suggested that number of soil sample analysis in adopted villages should be increased and training on rain water harvesting structure would be planned. Vote of thanks was presented by Dr. C. D. Pandya, Subject Matter Specialist (Extension), KVK, NAU, Vyara. The SAC Meet was in authenticity a unique in healthy and constructive environment, which would be resulted in real road map of KVK as a "Real knowledge and Resource Centre" as well "Information Hub" for tribes farming community of KVK District.

### 9.1 Approval of minutes of Eighth Scientific Advisory Committee.

The action taken on the minutes of Eighth Scientific Advisory Committee Meeting of KVK, Vyara held on 9<sup>th</sup> August, 2011 was presented by Programme Co-ordinator was approved by the house.

# 9.2 Progress made by KVK during August-2011 (from 10/08/2011) to August 2011 (up to 31/08/2012).

Programme Co-ordinator, KVK, NAU, Vyara presented the report on progress made by KVK, Vyara for the period of August-2011 to August-2012 (from 10/08/2011 to 31/08/2012). Following suggestions were made by the house.

9.2.1	Awareness programmes on drainage system should be done.
	- Deputy Director Agriculture, FTC, Vyara
9.2.2	Awareness programmes about use of farm implements and
	machineries with the help of DAO, Tapi
	- District Agriculture Officer, Tapi
9.2.3	Awareness programmes about packages of mango with the help
	of APMC, Vyara.
	- Mr. Sanjay Naik, Progressive Farmers, Gandeva
9.2.4	Plantation of Black Jamun, Stone apple, Pomegranate and
	Orange like fruits should be encouraged by KVK.
	- Mr. Sanjay Naik, Progressive Farmers, Gandeva
9.2.5	Workshop on Agro based Industry with collaboration of DIC,
	Vyara should be organized at KVK.
	- Dy. Commissioner of industry & GM., DIC, Vyara

### 9.3 Action plan for the period of April-2012 to March-2013.

Discussion was made on the Action Plan for the period of April-2012 to March-2013 presented by Programme Co-ordinator, KVK, NAU, Vyara which was approved with following suggestions.

9.3.1	Demonstration on SRI technology should be increased.
	- Hon. Vice Chancellor, NAU, Navsari
9.3.2	Trainings on Soybean value addition are included in Action Plan.
	- Father Fransis, Mandal
9.3.3	Training on value addition of ginger and turmeric should be
	conducted.
	- Mr. Ghanshyambhai Patel, Progressive Farmer, Nizar
9.3.4	Effort should be made to improve the farm implements (small
	tools) made by Suruchi, Bardoli with the help of SURUCHI.
	- Mr. Ramkumar Singh, SURUCHI, Bardoli
9.3.5	Number of FLDs on moong should be increased.
	- Hon. Vice Chancellor, NAU, Navsari
9.3.6	Training should be given on Water Management in Nizar area.
	- Mr. Sharadbhai Patel, Progressive Farmer, Nizar
9.3.7	Training on fisheries, poultry and forestry should be given to
	farmers of Ukai catchment area.
	- Dr. P. P. Rohilla, Senior Scientist, ZPD, Zone-VI,
	Jodhpur

# Annexure – II

### **Details of Training programmes:**

Date	Clientele	Title of the training	Discipline	Thematic area	Durat- ion in	Venue (Off / On	C	mber other icipa	•	N	umbe SC/S			al nur of rticipa	
		programme			days	Campus)	M	F	T	M	F	T	M	F	Т
12/4/2012	F.W.	Minimization of nutrient loss in processing	Home Science	Minimization of nutrient loss in processing	1	ON	0	0	0	0	20	20	0	20	20
13/4/2012	F.W.	Drudgery reduction technologies for farm women	Home Science	Location Specific Drudgery reduction technologies	1	ON	0	0	0	0	20	20	0	20	20
16/4/2012	R.Y.	Housing of animals	Animal Science	Dairying	1	OFF	0	0	0	20	0	20	20	0	20
26/4/2012	P.F.	Water and fertilizer management in sugarcane	Agronomy	INM	1	ON	0	0	0	30	0	30	30	0	30
3/5/2012	F.W.	Deworming and its benefit	Animal Science	Disease Management	1	ON	0	0	0	0	40	40	0	40	40
3/5/2012	P.F.	Off season vegetable crop production	Horticulture	Off season veg. production	1	ON	0	0	0	19	0	19	19	0	19
3/5/2012	P.F.	Scientific cultivation of paddy	Agronomy	ICM	1	ON	0	0	0	90	0	90	90	0	90
3/5/2012	F.W.	Scientific storage of food grain	Home Science	Storage loss minimization techniques	1	OFF	0	0	0	0	17	17	0	17	17
8/5/2012	P.F.	Water management in groundnut & cultivation practices of kharif crops	Agronomy	Water Management	1	OFF	0	0	0	20	0	20	20	0	20
8/5/2012	P.F.	Insect, pest & disease management in groundnut & other pulses	Plant Protection	IDM	1	OFF	0	0	0	22	3	25	22	3	25

9/5/2012	P.F.	Water management in groundnut & sugarcane	Agronomy	Water Management	1	OFF	0	0	0	5	20	25	5	20	25
11/5/2012	P.F.	Land Management	Agronomy	Integrated Farming	1	OFF	0	0	0	14	23	37	14	23	37
23/5/2012	F.W.	scientific cultivation of vegetable under shadenet house	Horticulture	Protective cultivation	1	OFF	0	0	0	0	17	17	0	17	17
30/5/2012	F.W.	Preparation of masala	Home Science	Income generation activities for empowerment of rural women	1	ON	0	0	0	0	26	26	0	26	26
5/6/2012	P.F.	INM in vegetables	Horticulture	INM	1	OFF	0	0	0	20	10	30	20	10	30
5/6/2012	P.F.	Scientific cultivation of paddy	Agronomy	ICM	1	OFF	0	0	0	29	11	40	29	11	40
6/6/0212	P.F.	SRI technology in paddy	Agronomy	ICM	1	OFF	0	0	0	25	0	25	25	0	25
7/6/2012	P.F.	Scientific cultivation of paddy	Agronomy	ICM	1	OFF	0	0	0	37	8	45	37	8	45
8/6/2012	P.F.	SRI technology in paddy	Agronomy	ICM	1	ON	0	0	0	35	0	35	35	0	35
11/6/2012	P.F.	Kharif crop production technology (FLD training)	Agronomy	ICM	1	ON	0	0	0	14	1	15	14	1	15
12/6/2012	P.F.	Kharif crop production technology (FLD training)	Agronomy	Weed Management	1	ON	0	0	0	34	7	41	34	7	41
12/6/2012	P.F.	Feed management in dairy animals	Animal Science	Dairy Management	1	ON	0	0	0	16	4	20	16	4	20
13/6/2012	P.F.	Scientific cultivation of paddy (FLD training)	Agronomy	ICM	1	ON	0	0	0	18	2	20	18	2	20
13/6/2012	F.W	Anemia & its management	Home Science	Women and child care	1	ON	0	0	0	0	20	20	0	20	20
15/6/2012	P.F.	Kharif crop	Agronomy	ICM	1	ON	0	0	0	14	1	15	14	1	15

		production technology (FLD training)													
16/6/2012	P.F.	SRI technology in paddy	Agronomy	ICM	1	ON	0	0	0	14	2	16	14	2	16
18/6/2012	F.W.	Integrated pest & disease management in paddy	Plant Protection	IPM	1	ON	0	0	0	10	12	22	10	12	22
19/6/2012	P.F.	Production technology of off season vegetables	Horticulture	Off season vegetables	1	ON	0	0	0	17	2	19	17	2	19
20/6/2012	F.W.	Nutritional deficiency diseases in children & their management	Home Science	Women and child care	1	ON	0	0	0	0	30	30	0	30	30
20/6/2012	P.F.	Characteristics of a leader	Extension Education	Leadership Development	1	OFF	0	0	0	58	36	94	58	36	94
22/6/2012	F.W.	SIRA technology in paddy	Agronomy	ICM	1	ON	0	0	0	6	19	25	6	19	25
28/6/2012	E.F.	Use of ICT in agriculture	Extension Education	Capacity building for ICT application	1	OFF	0	0	0	17	5	22	17	5	22
29/6/2012	P.F.	Agriculture business and its characteristics	Extension Education	Enterpreneurial development for farmers/youths	1	ON	0	0	0	25	1	26	25	1	26
29/6/2012	F.W.	Clean milk production	Animal Science	Production of quality animal products	1	ON	0	0	0	3	20	23	3	20	23
30/6/2012	R.Y.	A.I. & its importance in dairy animal	Animal Science	Dairying	1	ON	0	0	0	21	0	21	21	0	21
30/6/2012	E.F.	Use of ICT in agriculture	Extension Education	Capacity building for ICT application	1	ON	0	0	0	28	5	33	28	5	33
2/7/2012	E.F.	Use of ICT in agriculture	Extension Education	Capacity building for ICT application	1	ON	0	0	0	18	0	18	18	0	18

3/7/2012	P.F.	Scientific cultivation of nizer	Agronomy	ICM	1	ON	0	0	0	24	1	25	24	1	25
4/7/2012	P.F.	Biological control of sugarcane pests and diseases	Plant Protection	Bio-control of pests & diseases	1	ON	0	0	0	25	0	25	25	0	25
4/7/2012	F.W.	Anemia & its management	Home Science	Women & child care	1	ON	0	0	0	0	25	25	0	25	25
4/7/2012	P.F.	Vaccination & its importance	Animal Science	Disease Management	1	OFF	0	0	0	11	18	29	11	18	29
14/7/2012	P.F.	Vegetable production technology & vermi composting technology	Horticulture	Off season vegetable	1	ON	0	0	0	17	0	17	17	0	17
16/7/2012	F.W.	Urea treatment & its importance	Animal Science	Feed Management	1	ON	0	0	0	0	28	28	0	28	28
17/7/2012	F.W.	Production technology of Vegetable	Horticulture	Off season vegetable	1	ON	0	0	0	3	25	25	3	25	28
21/7/2012	P.F.	Kharif crop production technology	Agronomy	ICM	1	ON	0	0	0	18	0	18	18	0	18
23/7/2012	F.W.	Nutrition gardening (FLD training)	Home Science	Household food security by kitchen gardening & nutrition gardening	1	ON	0	0	0	18	24	42	18	24	42
24- 25/7/2012	E.F.	Health & nutrition for mother & child	Home Science	Women & Child care	2	ON	0	0	0	0	28	28	0	28	28
8/8/2012	F.W.	Kitchen Gardening (FLD training)	Home Science	Household food security by kitchen gardening & nutrition gardening	1	OFF	0	0	0	0	30	30	0	30	30
9/8/2012	F.W.	Nutrition Gardening (FLD training)	Home Science	Household food security by kitchen gardening	1	OFF	0	0	0	0	31	31	0	31	31

				& nutrition gardening											
13/8/2012	P.F.	Skill of leader	Extension Education	Leadership Development	1	OFF	0	0	0	20	6	26	20	6	26
13/8/2012	P.F.	Scientific cultivation practices of Ragi (FLD training)	Agronomy	ICM	1	ON	0	0	0	18	2	20	18	2	20
14/8/2012	F.W.	Nutrition Gardening (FLD training)	Home Science	Household food security by kitchen gardening & nutrition gardening	1	OFF	0	0	0	0	27	27	0	27	27
17/8/2012	P.F.	A.I. and its importance	Animal Science	Dairy Management	1	OFF	0	0	0	16	12	28	16	12	28
22/8/2012	F.W.	Clean milk production	Animal Science	Production quality animal products	1	OFF	0	0	0	0	20	20	0	20	20
22/8/2012	P.F.	Scientific cultivation of sorghum	Agronomy	ICM	1	ON	0	0	0	9	30	39	9	30	39
29- 31/8/2012	E.F.	New approaches and methods in Agril. Extension (Sponsored Trg.)	Extension Education	Group Dynamics and farmers organization	3	ON	19	5	24	1	0	1	20	5	25
7/9/2012	F.W.	Preparation of low cost protein rich diet for children	Home Science	Designing & development for high nutrient efficiency diet	1	OFF	0	0	0	0	40	40	0	40	40
7/9/2012	F.W.	Marketing of agriculture products	Extension Education	Enterpreneurial development of farmers/youths	1	OFF	0	0	0	0	35	35	0	35	35
7/9/2012	F.W.	Management pracctices of backyard poultry farming	Animal Science	Poultry Management	1	OFF	0	0	0	31	0	31	31	0	31
10- 11/9/2012	P.F.	Agriculture business & its characteristics (Sponsored training	Extension Education	Enterpreneurial development of farmers/youths	2	ON	0	0	0	29	0	29	29	0	29

		by ATMA-Navsari)													
12- 13/9/2012	F.W.	Scientific cultivation of major kharif crops (Sponsored training by ATMA-Navsari)	Agronomy	ICM	2	ON	0	30	30	0	0	0	0	30	30
14- 15/9/2012	F.W.	Scientific cultivation of vegetable crops under control condition (Sponsored by ATMA-Navsari)	Horticulture	Off season vegetables	2	ON	0	29	29	0	0	0	0	29	29
15/9/2012	P.F.	Scientific cultivation of sugarcane	Agronomy	INM	1	OFF	0	0	0	35	0	35	35	0	35
15/9/2012	P.F.	Scientific cultivation of okra	Horticulture	Off season vegetables	1	OFF	0	0	0	35	0	35	35	0	35
17- 18/9/2012	P.F.	Animal health management (Sponsored by ATMA-Navsari)	Animal Science	Disease Management	2	ON	0	0	0	34	0	34	34	0	34
21/9/2012	R.Y.	Poultry enterpreneurship development through scientific approach	Animal Science	Poultry production	1	ON	0	0	0	23	17	40	23	17	40
24- 25/9/2012	F.W.	Health and nutrition for mother & child (Sponsored by ATMA-Navsari)	Home Science	Women & Child Care	2	ON	0	30	30	0	0	0	0	30	30
11/10/2012	P.F.	Marketing of Agriculture produces	Extension Education	Enterpreneurship development of farmers/youth	1	OFF	0	0	0	8	9	17	8	9	17
11/10/2012	F.W.	Scientific cultivation of okra	Horticulture	Off season vegetables	1	OFF	0	0	0	0	22	22	0	22	22
12/10/2012	E.F.	Care & maintenance of farm machinery & implements	Extension Education	Care & maintenance of farm machinery & implements	1	ON	0	0	0	23	3	26	23	3	26

12/10/2012	P.F.	Scientific cultivation of vegetables	Horticulture	Off season vegetables	1	ON	0	0	0	25	7	32	25	7	32
17/10/2012	F.W.	Women drudgery reduction technology of Naveen sickle for paddy harvesting (FLD training)	Home Science	Location specific drudgery reduction technology	1	ON	0	0	0	4	32	36	4	32	36
17/10/2012	R.Y.	Deworming & its benefits	Animal Science	Dairying	1	OFF	0	0	0	22	0	22	22	0	22
18/10/2012	F.W.	Scientific cultivation of rabi crops	Agronomy	INM	1	ON	0	0	0	0	26	26	0	26	26
20/10/2012	P.F.	Skill of leader	Extension Eduacation	Leadership development	1	OFF	0	0	0	22	6	28	22	6	28
22- 23/10/2012	R.Y.	Value addition in soybean (Vocational training)	Home Science	Value addition	2	OFF	0	0	0	1	26	27	1	26	27
23/10/2012	P.F.	Scientific cultivation of okra	Horticulture	Off season vegetables	1	ON	0	0	0	23	13	36	23	13	36
20/11/2012	F.W.	Role of artificial insemination in breed improvement	Animal Science	Dairy Management	1	OFF	0	0	0	0	22	22	0	22	22
22/11/2012	F.W.	Formation & management of SHGs	Home Science	Formation & management of SHGs	1	ON	0	0	0	0	20	20	0	20	20
26/11/2012	R.Y.	Care for hatching of eggs, processing of meat & marketing	Animal Science	Poultry Production	1	ON	0	0	0	8	12	20	8	12	20
14/12/2012	F.W.	Care and management of poultry house during cold weather	Animal Science	Poultry Management	1	OFF	0	0	0	1	19	20	1	19	20
18/12/2012	P.F.	Scientific cultivation of okra	Horticulture	Off season vegetables	1	OFF	0	0	0	7	10	17	7	10	17
21/12/2012	F.W.	Book keeping system in Self Help Group	Home Science	Formation & management of SHGs	1	OFF	0	0	0	0	23	23	0	23	23

28- 29/12/2012	R.Y.	Value addition in fruits & vegetables (Vocational Training sponsored by ATMA-Tapi)	Home Science	Value addition	2	OFF	0	0	0	0	82	82	0	82	82
8/1/2013	F.W.	Low cost iron rich diet from locally available food material	Home Science	Design & development of low/minimum cost diet	1	ON	0	0	0	3	28	31	3	28	31
15- 17/1/2013	P.F.	Scientific Cultivation of groundnut (Sponsored Training)	Agronomy	ICM	3	OFF	0	0	0	30	0	30	30	0	30
16/1/2013	F.W.	Preparation of protein and energy rich diet for malnourished children (FLD training)	Home Science	Designing & development for high nutrient efficiency diet	1	OFF	0	0	0	0	39	39	0	39	39
19/1/2013	F.W.	Anemia & its management	Home Science	Women & Child Care	1	ON	0	0	0	3	29	32	2	29	32
22- 23/1/2013	R.Y.	Preparation of masala	Home Science	Small Scale Processing	2	OFF	0	0	0	6	29	35	6	29	35
22/12013	F.W.	Sciientific cultivation practices of moong bean (FLD training)	Agronomy	ICM	1	ON	0	0	0	10	18	28	10	18	28
24/1/2013	F.W.	Balanced diet from locally available food material	Home Science	Design & development of low/minimum cost diet	1	ON	0	0	0	4	28	32	4	28	32
29/1/2013	F.W.	Minimization of nutrient loss in processing	Home Science	Minimization of nutrient loss in processing	1	OFF	0	0	0	0	19	19	0	19	19
30/1/2013	F.W.	Identification & management of insect & pest in	Plant Protection	IPM	1	ON	0	0	0	16	34	50	16	34	50

		moongbean (FLD training)													
11/2/2013	F.W.	Kheduto Udhyog sahasik bano	Extension Education	Enterpreneurial development of farmers/youth	1	ON	0	0	0	2	33	35	2	33	35
13/2/2013	P.F.	Scientific cultivation practices of groundnut (FLD training-NRCG- Junagadh)	Agronomy	ICM	1	ON	0	0	0	29	0	29	29	0	29
16/2/2013	F.W.	Balanced diet from locally	Home Science	Design and development of low/minimum cost diet	1	OFF	0	0	0	2	15	17	2	15	17
19/2/2013	F.W.	Skill of leader	Extension Education	Leadership Development	1	OFF	0	0	0	12	73	85	12	73	85
25/2/2013	F.W.	Health and nutrition for pregnent & lactating women and children (Sponsored Training)	Home Science	Women and child care	1	ON	0	0	0	0	26	26	0	26	26
26/2/2013	F.W.	Preparation of masala (Sponsored Training)	Home Science	Income generation activities for empowerment of rural women	1	ON	0	0	0	0	26	26	0	26	26
26/2/2013	P.F.	Marketing of agriculture produce	Extension Education	Enterpreneurial development of farmers/youth	1	OFF	0	0	0	13	6	19	13	6	19
7/3/2013	P.F.	Poultry production- Enterpreneurship approach & care during summer (Sponsored training)	Animal Science	Poultry Management	1	ON	0	0	0	28	0	28	28	0	28
12/3/2013	F.W.	Health and nutrition for pregnent &	Home Science	Women and child care	1	ON	0	0	0	3	32	35	3	32	35

		lactating women and children (Sponsored Training)													
13/3/2013	F.W.	Preparation of masala (Sponsored Training)	Home Science	Income generation activities for empowerment of rural women	1	ON	0	0	0	0	32	32	0	32	32
13/3/2013	R.Y.	Care of poultry during summer & vaccination scheudle	Animal Science	Poultry Management	1	OFF	0	0	0	16	8	24	16	8	24
22/3/2013	F.W.	Preparation of iron rich diet from locally available food material (OFT training)	Home Science	Designing & development for high nutrient efficiency diet	1	OFF	0	0	0	0	21	21	0	21	21

# <u> Annexure - III</u>

# • List of Popular Articles

1	Dr. N.M.Chauhan. (2012). BHAUGOLIK MAHITI SEVA (GIS) ANE JALSTRAV
	VYAVSTHAPAN
2	Arti N. Soni (2012). SVASTHA DRISHTI MATE VITAMIN-A
3	Dr. C.D.Pandya (2012). MANUSHYANO JANI DUSHMAN-UNDAR
4	Dr. N.M.Chauhan and Shri B.M.Tandel. (2011). BHINDANI NIKAS DWARA VIDESHI HUNDIYAMAN
5	<b>Dr. N.M.Chauhan (2012).</b> KHETINE UDHYOG SAMKASKHA BANAVAVA MATE "DAS MUDDANI SONERI SALAH"
6	Dr. N.M.Chauhan (2012). CHIRANJIV KRISHI VIKAS
7	Arti N.Soni (2012). AAROGYANI DRASHTIE VIRUDHDHA AAHAR
8	Dr. J.K.Rawal and Dr. N.M.Chauhan (2012). PASHUOMA DUDHA UTPADAN JALVI RAKHAVA JAROORI POSHANKSHAM AAHAR
9	Dr. N.M.Chauhan (2012). MODEL AGRI POLYCLINICS
10	Dr. N.M.Chauhan (2012). ADHUNIK KHETI ANE ATYADHUNIK BAHENO
11	Dr. N.M.Chauhan (2012). MODERN AGRI-INFORMATICS ANE AGRI-
	POLYCLINICS
12	Arti N. Soni (2012). BALKO ANE PRADUSHAN
13	Dr. J.K.Rawal and Dr. N.M.Chauhan (2012). IMU FARMING-NAVTAR VYAVSAY
14	<b>Dr. N.M.Chauhan (2012).</b> KRISHIMA MULYAVARDHANNO ANIVARYA ABHIGAM
15	<b>Programme Coordinator (2012).</b> KRISHI VISTARANNO AADHUNIK ABHIGAM-TECHNOLOGY SAPTAH
16	Arti N. Soni (2012). AADAVASI MAHILAONO SILAE UDHYOG
17	Dr. C.D.Pandya (2012). SRI PADHDHATI DWARA DANGARNU UTTPADAN
18	Dipal N. Soni and Arti N. Soni (2013). SVASTHA DRISHTI MATE VITAMIN-A
19	Dr. N.M.Chauhan (2012). KHETINE UDHYOG SAMKAKSHA BANAVAVA
	DASH MUDDANI SONERI SALAH

# <u>Annexure – IV</u> <u>District Profile</u>

# General census Information regarding District villages and Population

Taluka	No. of villages	Population (2001)							
Taluka		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	9116		
Vegetables	18505		
Spices &	3480		
condiments			

3. Agro climatic zone : As per Table no. 2.2.14. 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 – V

### 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 explores 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. 2.7
- 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. 2.8
- **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 II

### **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	INM	Gram		NAU, Navsari	-
2	New Variety	Pigeon pea, Moong bean		NAU, Navsari	-
3	SRI, SIRA, New Variety	Paddy		NAU, Navsari	-
4	Nutrition Management	Animal Science	-	Text book of Animal Husbandary-G.C.Benerji	-
5	Nutrition Management	Home Science	-	A text book of "Nutritive value of Indian foods" by National Institute of Nutrition, Hyderabad	-

### 3. Activity Chart

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

Gram	Low productivity	Use of local variety and not applied use of irrigation at critical stages	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
Paddy	Low productivity	They are not sowing of Green manure before TP of planting	Balance use of fertilizer	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
Home Science	Mal nutrition in women and children, women drudgery, poor economic condition of tribal farmers	Lack of knowledge about health and nutrition, poor economic status, inadequate intake of friuts and vegetables	Use of balance diet from locally available food materials, introduction of kitchen garden, fruits & vegetables preservation, use of NAVEEN sickle, women empowerment	Conducted FLD,OFT, training, awareness programme, In service training, Mahila shibir, vocational training etc.	Recommended by WHO and A text book of "Nutritive value of Indian foods" by National Institute of Nutrition, Hyderabad, CIAE, Bhopal
Animal Science	Poor animal nutrition and low productivity of milk	Inefficient use of dry fodder and poor knowledge of scientific animal feeding practices	Application of urea treatment to paddy straw and use of mineral mixture in animal feeding	Conducted FLD on urea treatment to paddy straw and use of mineral mixture in animal feeding, awareness programme.	Text book of Animal Husbandary- G.C.Benerji

# 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.
Gram (Rabi )	Irrigation Management	Research Scientist, Pulses Crop, Navsari	Giving life saving irrigation at critical stages and Phosphatic fertilizers as basal dose gave more number of Branch, Pods and increased seed yield than traditional method.	GG-2 Bold size seeds with reddish colure also suitable for dalia. It is god variety for inter culturing with sugarcane.
Paddy (TP)	SRI	Research Sct. NARP, NAU, Navsari	The SRI technology of paddy had required less seed rate and gave more number of tillers, filled grain and increased seed yield than traditional method.	NAUR-1 (Midlate maturing-120 day) Medium grain, good cooking quality, Tolerant to grain discoloration, blight, blast & hoppers, stem borer and high yielding compared to hybrid.
Home Science	Use of iron rich diet to prevent anemia	A text book of "Nutritive value of Indian foods" by National Institute of Nutrition, Hyderabad	Daily use of iron rich diet (100gm roasted Bengal gram + 100gm roasted Rice flakes) and one iron tablet with existing dietary pattern increased Hb level and body weight.	
Animal Science	Nutrition Management	Text book of Animal Husbandary- G.C.Benerji	Paddy straw treated with 4% urea and 35 gm mineral mixture feeding daily gaves higher milk production.	
Okra	INM	Vegetable Research Unit, NAU, Navsari	Imbalance use of fertilizer & not using FYM.	