

ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVK, VYARA,
NAU, TAPI-2017-18
(1st April-2017-31st March-2018)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra Navsari Agricultural University Bhenskatri Road, Panvadi Vyara, Dist. Tapi, Gujarat- 394 650	(02626) 221869	--	kvkvyara@nau.in kvkvyara@yahoo.co.in	Website address: tapi.kvk6.in No. of visitors: 56431

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

Address	Telephone		E mail	Website address
	Office	FAX		
Director of Extension Education Navsari Agricultural University Navsari	(02637) 282026	(02637) 282706	dee@nau.in	nau.in

1.3. Name of the Senior Scientist and Head with phone & mobile no.

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. P.D.Verma	-	7575011107	drverma@nau.in

1.4. Year of sanction: 2004 (As ZARS KVK – 2000), Full fledged KVK in the year 2006.

1.5. Staff Position (as on March 31, 2018)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
					Current Pay Band	Current Grade Pay	Date of joining	
1	Programme Coordinator	Dr.P.D.Verma	Senior Scientist & Head	Extension Education	23230	8000	7/11/2016	Temporary
2	Subject Matter Specialist	Dr. C. D. Pandya	Scientist	Extension Education	25520	7000	29/07/2009	Temporary
3	Subject Matter Specialist	Prof. Arti N. Soni	Scientist	Home Science	22220	6000	04/04/2008	Temporary
4	Subject Matter Specialist	Dr. J. K. Movaliya	Scientist	Veterinary Science	16920	6000	1/11/2016	Temporary
5	Subject Matter Specialist	Dr. S.M.Chavan	Scientist	Plant Protection	18320	6000	10/01/2013	Temporary
6	Subject Matter Specialist	Dr. M. R.Gami	Scientist	Agronomy	18320	6000	01/03/2013	Temporary
7	Subject Matter Specialist	Prof. Pravinkumar Modi	Scientist	Horticulture	18320	6000	14/03/2013	Temporary
8	Programme Assistant	Mr. N.N.Makani	Prog. Assi.	--	9300-34800- G.P.-4000	38090 Fix	13/07/2015	Temporary
9	Computer Programmer	Nisheeta R. Patel	Comp. Prog.	--	44900	--	21/08/2008	Temporary
10	Farm Manager	Mr. V. N. Parmar	Farm Manager	--	46200	--	23/08/2007	Temporary
11	Accountant / Superintendent	Vacant	Acct. / Super.	--	9300-34800 G.P. 4200	--	--	--
12	Stenographer	Vacant	Steno.	--	5200-20200 G.P. — 2400	--	--	--
13	Driver	Mr. C. I. Patel	Driver	--	23800	--	23/08/2007	Temporary
14	Driver	Vacant	Driver	--	5200-20200 G.P. 1900	--	--	--
15	Supporting staff	Vacant	Supp. Staff	--	4440-7400 G.P.-1400	--	--	--
16	Supporting staff	Vacant	Supp. Staff	--	4440-7400 G.P.-1400	--	--	--

1.6 Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	2.50
2	Under Demonstration Units	0.45
3	Under Crops	4.23
4	Horticulture	2.23
5	Pond	0
6	Others (specify),	0

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	31/3/2011	516	--	--	--	--
2	Farmers Hostel	ICAR	31/3/2011	248	--	--	--	--
3	Staff Quarters (5)	ICAR	31/3/2011	348	--	--	--	--
4	Demonstration Units -9	ICAR	--	--	876014=00	--	--	--
5	Fencing	--	--	--	--	--	--	--
6	Rain Water harvesting system	--	--	--	--	--	--	--
7	Threshing floor	--	--	--	--	--	--	--
8	Farm godown	--	--	--	--	--	--	--
9	ICT lab	--	--	--	--	--	--	--
10	Other	--	--	--	--	--	--	--

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2004	4,30,500=00	3,53,751	Sold
Tractor	2001	3,31,225=00	4120 hrs.	Working
Motorcycle	2011	48,816=00	14928	Working

C) Equipments & AV aids

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	Present Status
(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-186	20	30/3/2001	43300	Working
4	Chair PCH-7000 D	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
(2)	Mahindra Tractor model 575 DI 45 HP & Accessories	1	30/3/2001	3,31,225	Working
(3)	Photo Copier NP 7160 Canon NPG-1	1	31/3/2001	117274	Not working
(4)	Furniture (Godrej)				
1	Table –T- 402	5	27/12/2002	24600	Not good
2	Comp. Table C-6	1	27/12/2002	5255	Working
3	Store Well – Glass Door	1	27/12/2002	9330	Working
4	Store Well Plane	2	27/12/2002	16000	Working
5	Chair CHR-7B	15	27/12/2002	22350	1-Not good
6	Chair PCH-5000 2 T	2	27/12/2002	7230	1-Not good
7	Filing Cabinet	1	27/12/2002	7900	Working
(5)	Computer & Peripherals	1	28/12/2002	51850	Working
(6)	3 KVA on line UPS	1	28/12/2002	38000	Not working
(7)	HP Laser Jet 1200 Printer	1	28/12/2002	20600	Not working
(8)	MSXP standard edition with Indian Longwise Proofing tools	1	30/12/2002	6450	Not Working
(9) 1	CD writer	1	28/12/2002	3025	Working
2	HP Scan jet 2300c Scanner	1	28/12/2002	3700	Not Working
(10) 1	Ceramic steel white writing board 4'x6'	1	21/2/2003	9000	Working
2	Ceramic chalk writing board 4'x 6'	1	21/2/2003	9000	Working
(11) 1	Over Head Projector	1	22/3/2003	27690	Working
2	Plastic screen with tripod stand	1	22/3/2003	4500	Not 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	Not Working
(13)	P.A. System				
1	Amplifier SSA 250	1	22/3/2003	9400	Working
2	Eco Mixture DMX 40	1	22/3/2003	3249	Working
3	Full Range Speaker SRX 250 D	4	22/3/2003	24472	Working
4	Microphone				
	ALD 101 x LR	1	22/3/2003	1140	Not Working
	ATP 20 M	1	22/3/2003	489	Not Working
	WM 201	1	22/3/2003	1615	Not Working
5	Unit Horn Combination UHC 30 x T	1	22/3/2003	1188	Not Working
6	Micro Phone Stand		22/3/2003		Working
	DGN	1	22/3/2003	456	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	Present Status
	DGT	1	22/3/2003	285	Working
	ATS:5	1	22/3/2003	100	Working
(14)	A.V. Trolley	1	22/3/2003	4132	Working
(15)	Laminated Chart with wooden Frame size 20" x 30"	33	22/3/2003	24420	Not good
(16)	Sony Digital Handy cam	1	22/3/2003	32750	Not Working
1	Power adapter	1	22/3/2003		Not Working
2	Battery	1	22/3/2003		Not Working
3	Remote Control	1	22/3/2003		Not Working
4	AV Connecting Cable	1	22/3/2003		Not Working
5	Belt shoulder strap	1	22/3/2003		Not Working
6	Handy Cam Recording Caset	1	22/3/2003		Not Working
(17)	Automatic slide Projector	1	22/3/2003	13695	Working
(18)	Portable Generator EXK 2000 AC	1	24/3/2003	38200	Working
(19)	Education Exhibition Panel System	1	25/3/2003	13500	Working
1	News Paper Stand	1	25/3/2003	3500	Working
2	Displayer/Book/ Magazine Stand	1	25/3/2003	3500	Working
3	Notice Writing Board with Acrylic Shutter	1	25/3/2003	4450	Working
(20)	Stainless steal Vessels	23	28/3/2003	19450	Working
(21)	Modem	1	31/3/2003	2020	Working
(22)	Laminated Charts with Plywood Framing size 24"x30"	5	12/3/2004	3000	Not good
(23)	Colour Enlargement charts	33	29/3/2004	24420	Not good
(24)	Jeep Mahindra & Mahindra Bolero D.I.	1	2/12/2004	430500	Working
(25)	Bolero Accessories		2/12/2004	21650	Working
(27)	Whirlpool freeze	1	27/3/2006	15800	Working
(28) 1	Electronic Automatic Kel Pus Microprocessor based eight place macro block digestion system model KES-08L	1	27/3/2006	88120	Not Working
2	Electronic Kel plus micro processor based Automatic Distillation system model distil EM	1	27/3/2006	142300	Not Working
(29)	Double still with thermo sensor hr (All glass) cat No 2348	1	27/3/2006	33924	Working
(30)	Nova Rotary shaking machine				
1	(a)Capacity 16 flasks of 250 ml	1	28/3/2006	24500	Not Working
2	(b)Capacity 25 flasks of 250 ml	1	28/3/2006	29750	Not Working
3	Nova Hot plate Rectangular model NV-8535 stainless steel				
	(a) Size 12" x 20"	1	28/3/2006	8500	Not Working
	(b) Size 18" x 24"	1	28/3/2006	11250	Not Working
4	Nova willy mill stain lese steel camber Size 10.0 x 50 mm	1	28/3/2006	31900	Not Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	Present Status
(31)1	Laboratory Table	4	27/3/2006	34400	Working
2	Racks	6	27/3/2006	9000	Working
3	Stools	12	27/3/2006	5400	Working
4	Steel cupboard storewell	4	27/3/2006	19200	Working
5	Steel cupboard storewel	4	27/3/2006	14000	Working
6	Steel racks	4	27/3/2006	8600	Working
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	Not Working
2	Systronics make micro controller based flame photometer compressor model-128	1	27/3/2006	35200	Not Working
3	Systronics make micro controller based PH meter	1	27/3/2006	10900	Not Working
4	Systronics make micro processor based conductivity meter	1	27/3/2006	12800	Not 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	Not Working
3	CENTRO FIX – Muffle furnace	1	27/3/2006	29500	Not Working
4	Automatic autoclave	1	27/3/2006	21000	Working
(35)	City weigh balance model ST-10 Cap- 10 kg	1	27/3/2006	10640	Working
(36) 1	LG AC-1.5 ton	1	31/3/2006	23740	Not Working
2	Micro kjeldahl Assembly	1	31/3/2006	10700	Not Working
(37)	Burner maker type with stop coke	8	31/3/2006	2000	Not Working
(38)	Voltas make water cooler	1	31/3/2006	26500	Working
(39) 1	Soft Pin up Board	25	29/11/2007	96250	6-not good
2	Single Pole Stand	26	29/11/2007	35360	Working
(40)	Microscope for Computer	1	17/3/2008	294028	Working
(41) 1	SDZ – TR – PL – HL Microscope controlled Transformer	1	15/3/2008	209444	Working
2	OP – 150 R Fibre Optic Illumivater	1	15/3/2008		Working
3	GMTV – 33 H High Resolution Coloured CCTV system	1	15/3/2008		Working
(42)	Colony Counter – MSW – 408	1	15/3/2008	5668	Working
(43)	Oven Universal – MSW – 213	1	15/3/2008	65788	Working
(44)	Insect Rating Case	5	17/3/2008	14000	Working
(45)	LG A/C machine 2.0 Ton Split AC with Remote	2	17/3/2008	58680	Not Working
(46)	LG Refrigeration–280 Lit. Model -295TMG4	1	25/3/2008	18000	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	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		Working
3	S/A/S Tope – 21’’	1	24/3/2008		Working
4	S. S. Cover	2	24/3/2008		Working
(50) 1	Insect Display show cases	4	24/3/2008	17420	1-Not Working
2	Insect Show cases cabinet	1	24/3/2008		Working
(51) 1	Compaq Computer – 3250 IL	1	25/3/2008	28950	Working
2	MS XP Professional Vista License Copy	1	25/3/2008	6000	Working
(52)	Top Loading Balance – BH 200 H	1	19/3/2008	28120	Working
(53)	Digital Conductivity TDS Meter Model - 307	1	24/3/2008	11648	Working
(54)	Digital PH meter Model - 802	1	24/3/2008	7006	Working
(55)	Distillation Apparatus (5 – Lit)	1	24/3/2008	15912	Not Working
(56)	H/P Laser Jet Printer - 1022	1	25/3/2008	10990	Working
(57)	Steel Rack KV-110 78’’x36’’x15’’	5	25/3/2008	9844	Working
(58) 1	Steel Cupboard – 78’’x36’’x19’’	2	23/3/2008	11100	Working
2	Computer Table	1	23/3/2008	3300	Working
3	Computer Chair	2	23/3/2008	5200	Not Working
(59)	Shaking Incubator – 24 BL	1	25/3/2008	95387	Working
(60)	CentriFuge – R – 24 Voltage stabilizer 3.0 KVA	1 1	25/3/2008 25/3/2008	32025 6630	Working
(61)	Double Pan Balance Analytical Weight Box	1 1	24/3/2008	3640	Working
(62)	Gas Cylinder, Regulator, Gas Stove	1	13/3/2008	1930	Working
(63)	B.O.D. Incubator - 270	1	22/3/2008	90534	Not 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	1-Not 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
(71) 1	Podium	1	28/03/2010	4200	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	Present Status
2	Podium	1	28/03/2010	4200	Working
(72) 1	LCD Projector - Mo.D.832 Mx	1	06/01/2011	66305	Not Working
2	VIVITEK Dongel	1	06/01/2011	16910	Not Working
3	WALTOP 6'' Interactive RF Pod	1	06/01/2011	14863	Not 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
(73) 1	23'' – LCD Computer	1	15/10/2010	33420	Working
2	Branded CPU E-Machine		15/10/2010	“	Working
3	Printer – Canon	1	15/10/2010	8500	Working
4	UPS – Umax 600 VA	1	15/10/2010	1850	Not 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
(75) 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
(76) 1	Steel Cupboard 18''X 36''X 78''	9	8/1/2011	58977	Working
2	Visitor Chair	25	8/1/2011	48475	2-Not Working
3	Rack- 6 X 3 X 1 foot	15	8/1/2011	43170	Working
4	Rivolving Chair	6	8/1/2011	21810	3-Not Good
*(77)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
*(79)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

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	Present Status
4	Sofa set- Tipoi	1 set	28/12/2012	17500	Working
5	Chair-Table-Tipoi	1 set	28/12/2012	7500	Working
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
(84)1	Sofa three seater waiting chair	20	13/01/2012	62980	Working
2	Fix Chair	10	13/01/2012	23090	Working
(85)	10 H.P. 4 stage falkan sub- mersible pump set with accessories	1 set	04/02/2012	64125	Working
(86) 1	Electronics media Microprocessor – PH meter model - 1012	1	23/03/2012	13000	Working
2	Electronics media Microprocessor – Spectrophoto meter model – 2305	1	23/03/2012	33950	Working
3	NOVA fermentor (Digital Microprocessor Pid control)	1	23/03/2012	360000	Working
4	Swisser Table top balance model – swit – 105 10 kg	1	23/03/2012	8775	Working
5	NOVA digital hot air oven 24"x24"x36"	1	23/03/2012	36900	Not Working
(87) 1	HD Handy cam (video camera)	1	27/03/2012	71025	Working
2	Digital Camera HD (15-30 mega pixel)	1	27/03/2012	66660	Working
3	Double distilled water RO plant for lab use	1	27/03/2012	24860	Working
4	Refrigerator 310 lit with stb 1 KVA	1	27/03/2012	29035	Working
(88)	2 HP 8 Stage Neck Motor	1	20/12/2014	8500	Working
(89)	Photocopier machine (Digital Colour Multi function office machine (Richo) MP (2004SP))	1	21/3/2017	1,50,000	Working
(90)	AVECO E-GURU Interactive white Board- Model-1R80, size- 1816mmX1410X36mm, Projection Size-656mmX1250mm, Aspect Ratio:4:3	1	24/3/2017	41,975	Working
(91)	Voltas AC-1.5 tonType-Split	2	18/3/2017	72,000	Working
(92)	Carrier Split AC-2.0 ton- 3 star, Model-24 k Superia	2	24/3/2017	84,000	Working
(93)	Chaff cutter power operated,	1	17/3/2017	22491	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	No.	Date of Purchase	Cost (Rs.)	Present Status
	BKV2HPCFAT, 3 Blades, 1440 RPM, 50H, 220V, 12A				
(94)	Information Kiosk thin client based free standing-Type Model SK-19-T	1	10/3/2017	90250	Working
(95)	Lenovo Computer-All in One	2	14/03/2017	92398	Working
(96)	Paddy Thresher with Motor	1	20/03/2017	23500	Working
(97)	RO with water cooler -50 LPH with 100 litre LPH SS storage	1	02/03/2017	79000	Working
(98)	Laser Printer-Brother Model No. 2321 D	2	21/03/2017	14760	Working
(99)	Colored Laser Printer-CP 1025	1	21/03/2017	18000	Working
(100)	Scanner-Canon	2	21/03/2017	8476.20	Working
(101)	Maize Dhusker cum sheller-1000 kg/cobs/hour capacity	2	14/03/2017	182000	Working
(101)	7.5 HP Motor	1	24/03/2017	18200	Working
(102)	1.5 HP 10 stage motor ISI with accessories	1	24/03/2017	19688	Working
(103)	Winnowing Fan	1	24/03/2017	35000	Working
(104)	Haier Deep Freezer-588 litre capacity	2	24/03/2017	66000	Working
(105)	Pulvarizer Machine	1	24/03/2017	35675	Working
(106)	Soyabean Processing Unit	1	24/03/2017	325248	Working
(107)	PKV Custard Apple pulper Machine-0.5 HP Single Phase Motor-Capacity 70 kg/hour	1	24/03/2017	78775	Working
(106)	PKV Mini Dall Mill	1	28/03/2017	93000	Working

***77, 78 and 79 purchased from University Grant not from ICAR**

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

Date	Name and Designation of Participants	Salient Recommendations	Action taken
12/03/2018	<ol style="list-style-type: none"> 1. Dr. C. J. Dangaria, Chairperson, Hon. Vice Chancellor, Navsari Agricultural University, Navsari 2. Dr. G. R. Patel, Member, Director of Extension Education, Navsari Agricultural University, Navsari 3. Dr. P.D.Verma, Member Secretary & Senior Scientist & Head, KVK, Vyara 4. Dr. Anilbhai, Principal Scientist & Head, Indian Soil Salinity Institute, ICAR-Bharuch 5. Dr. V. P. Patel, Member, Associate Research Scientist, Regional Rice Research Station, Navsari Agricultural University, Vyara 6. Mr. Jigar Gohil, , Member, Assistant Professor, (Horticulture Expert), Polytechnic in Agril., NAU, Vyara 7. Dr. N. B. Patel, Member, Associate Professor, Vetyary College Navsari Agricultural University, Navsari 8. Mr. Prafulbhai R. Chaudhari, Member, Project Director, ATMA-Tapi 9. Mr. S.B.Gamit, Member, District Agriculture Officer, Department of Agriculture, District Panchayat, Vyara, Tapi 10. Mr Nikunj Patel, Member, Deputy Director of Horticulture, Tapi district, Vyara 11. Mr. Santish Parilkar, Assistant, Member, GLDC Ltd., Vyara 12. Dr. C. M. Rana, Member, Deputy Director of Animal Husbandry, District Panchayat, Tapi District, Vyara 13. Mr. K. R. Patani, Member, Assistant Director (Fisheries), Near CRPF Campus, Ukai, Dist. Tapi 14. Mr. Ghanshyam S. Patel, Member, Progress farmer, At & Po. Bahurupa Ta. Kukarmunda 15. Jayaben Mahendrabhai Chaudhari, Member, Progress farm women, At & Po. Unchchamala Ta. Vyara 16. Mr. Kantibhai Desai, Member, Agri-Entrepreneur, Sardar Agro Centre, APMC, Vyara 17. Rubinaben Somabhai Gamit, Invitee Member, President, SHG, At & Po. Zankhari Ta. Vyara 	<ol style="list-style-type: none"> 1. Diffusion of new varieties of Paddy released from NAU. 2. More number of local varieties / traditional seed / germ plasma available in the tribal areas need to be protected under PPV & FRA by registration. 3. Awareness programme of Cashew nut in collaboration with Agriculture/Horticulture/ BIAF foundation should be organised. 4. Training Programme on goat should be organized. 5. More programme should be organized on Bee Keeping. 6. FLDs on Indian Bean (variety-NPS-1) should be organized under Adaptive Trial programme. 7. Awareness programmes on the new variety which gives higher yield should be organized. 	<p>Incorporate in Annual Action Plan:2018-19</p>

Date	Name and Designation of Participants	Salient Recommendations	Action taken
	<p>18. Mr. D.T.Desai, Invitee Member, Patidar Agro Centre, APMC, Vyara</p> <p>19.. Mr. D.K.Patel, Invitee Member, BIAF Foundation, Vyara</p> <p>20. Mr. Dharmesh Vani, Invitee Member, Press Reporter-Gujarat Raksha, Vyara</p> <p>21. Mr. Anup Bhatt, Invitee Member, Press Reporter-Dhabkar & Sandesh News TV</p> <p>22. Mr. Tulsibhai Mavani, Invitee Member, Ambedkar Vanavasi Kalyan Trust-Surat</p> <p>23. Mr. Ramkumar Sinh, Invitee Member, Suruchi Vasahat Trust, Bardoli</p> <p>24. Smt. Lilaben Gamit, Invitee Member, Progressive Women Farmer, Member of GSSC Ltd., Gandhinagar, Extension Council-NAU, Navsari, At. Bedi, Ta. Songadh, Dist. Tapi</p> <p>25. Mr. Gumanbhai Narsibhai Chaudhari, Invitee Member, Progress Farmer & Resource Person-KVK, At & Po. Bedvan-pra-Bhesrot, Ta. Songadh</p> <p>26. Sister Jona, Invitee Member, Jivandeep Co.op.Soc Village :Baradipada Ta.Dolavan</p> <p>27. Mr. Kishorbhai Dholakiya, Invitee Member, Ambedkar Vanavasi Kalyan Trust, Surat</p> <p>28. Gamit Kamlaben P., Invitee Member, Hangati Mahila Trust, At & Po. Mandal Ta. Songadh</p> <p>29. Mr. Dipakbhai D. Chaudhari, Invitee Member, Gujarat Matikam Kalakari Ane Rural Technology, Bajipura</p> <p>30. Dr.C.D.Pandya, Special invitee, Scientist (Extension), KVK,Vyara</p>		

Date	Name and Designation of Participants	Salient Recommendations	Action taken
	31. Smt. A.N.Soni, Special invitee, Scientist (Home Science), KVK, Vyara 32. Dr.S.M.Chavan, Special invitee, Scientist (Plant Protection), KVK, Vyara 33. Dr.P.K.Modi, Special invitee, Scientist (Horticulture), KVK, Vyara 34. Dr. J. K. Movaliya, Special invitee, Scientist (Animal Science), KVK, Vyara 35. Dr. M.R.Gami, Special invitee, Scientist (Crop Production), KVK, Vyara 36. Dr. V.N.Parmar, Special invitee, Farm Manager, KVK, Vyara 37. Shri N.N.Makani, Special invitee, Programme Assistant, KVK, Vyara 38. Smt. Ramilaben Gamit, SWACHCHA SHAKTI Awardee, At & Post-Taparwada Dist. Songadh		

** Copy of SAC proceedings along with list of participants is attached in -Annexure-I*

2. DETAILS OF DISTRICT (2016-17)

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

S. No.	Farming system/enterprise
1.	Agriculture and Animal Husbandry along with an 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 style="list-style-type: none">• It consists of three talukas of Tapi district i.e. Songadh, Vyara and Valod taluka• It has an intensive rainfall over 1500 to 2200 mm per annum• Rain mostly received during month of July- August• The zone has clay soil with normal pH and EC, medium organic Carbon and phosphorous and high in potash
2.	South Gujarat Rainfall Zone-II	<ul style="list-style-type: none">• It consists of two talukas i.e. Uchchhal and Nizar.• Rainfall of the area varying between 1000 to 1500 mm per annum• This zone has black soil of medium to heavy texture• 75 per cent of the area is rainfed.

2. Topography

Sr. No.	Agro ecological situation	Characteristics
1.	Situation I	<ul style="list-style-type: none">• The total geographical area is about 5.57 lack ha. Which is 58 per cent of the zone and of which 53 Per cent is under forest• Cultivated area is 15.29 per cent as it is a heavy rainfall situation• 5 per cent area is under doubled crop• Major Field crops grown are paddy, minor millets, pulses, sorghum and oilseeds like ground nut and soybean.
2.	Situation III	<ul style="list-style-type: none">• The total geographical area is about 2.22 lack ha, which is 25.21 per cent of the zone and 59.3 Per cent is under cultivation• Cultivated area is 1.64 lakh ha.• 14.5 per cent area is under doubled crop. Soil of this situation is deep and fine Textured.

2.3: Soil types

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

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

Sl. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
Rabi-Summer-2016-17				
1	Wheat	4756	14506	30.50
2	Rabi Sorghum	2227	3341	15.00
3	Maize	725	1350	18.62
4	Gram	2009	2109	10.50
5	Sugarcane	25803	211263	81.87
6	Indian bean (Val)	799	759	9.50
7	Castor	200	180	9.00
Kharif – 2017				
1	Irrigated Paddy	32537	100865	31.00
2	Un-irrigated Paddy	20946	41892	20.00
3	Kharif – Sorghum	10098	12522	12.40
4	Kharif – Maize	1219	1646	13.50
5	Soybean	14479	16651	11.50
6	Kharif – Pigeon pea	19941	19044	9.55
7	Kharif – Green gram	422	338	8.00
8	Black gram	1100	605	5.50
9	Kharif Groundnut	317	507	16.00
10	Irrigated Cotton	1233	3267	26.50
11	Un-irrigated Cotton	6975	8789	12.60

Source: District Agriculture Department – Tapi

Horticultural Crops: (2016-2017)

Sl. No	Crop	Area (ha)	Production (MT.)	Productivity (MT/ha)
A	Fruits			
	Mango	5550	51282	9.24
	Sapota	110	1226.5	11.15
	Lemon	30	339.9	11.33
	Ber	3	12.99	4.33
	Banana	1550	93000	60.00
	Guava	22	223.3	10.15
	Pomegranate	51	510	10.00
	Date palm	7	0	0.00
	Papaya	2080	127920	61.50
	Custard apple	45	371.7	8.26
	Aonla	19	139.08	7.32
	Cashew nut	275	470.25	1.71
	Coconut	62	510.88	8.24
Others	335	2683.35	8.01	
B	Vegetables			
	Brinjal	3720	69378	18.65
	Cabbage	135	3138.75	23.25
	Okra	9930	135544.5	13.65
	Tomato	655	15065	23.00
	Cauliflower	330	6402	19.40
Cluster bean	720	6840	9.50	

Sl. No	Crop	Area (ha)	Production (MT.)	Productivity (MT/ha)
	Cowpea	785	6272.15	7.99
	Cucurbits	3790	67196.7	17.73
	Others	2265	29445	13.00
C	Creepers			
	Bottle gourd	585	13405	22.91
	Bitter gourd	525	8175	15.57
	Muskmelon	185	4155	22.46
	Smooth gourd	185	1915	10.35
	Ridge gourd	125	1575	12.60
	Cucumber	135	2206.10	16.34
	Ponited gourd	735	12157.21	16.54
	Watermelon	275	8770.60	31.89
	Pumpkin	120	2745	22.88
	Ivy gourd	610	8271.5	13.56
	Indian bean	125	1474.5	11.80
	Broad bean	115	1681.64	14.62
	Spine gourd	70	665.15	9.50
D	Spices			
	Chilli-Dry	1150	1840	1.60
	Ginger	35	694.40	19.84
	Turmeric	70	1438.50	20.55
	Fenugreek	110	210	1.91
	Ajawain	80	60	0.75
D	Flowers			
	Rose	60	540	9.00
	Marigold	262	2593.8	9.90
	Mogra	75	653	8.71
	Lily	11	88	8.00
	Others	135	1181.25	8.75

Source: District Horticulture Department — Tapi

2.5: Weather data

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April-2017	0	26.5	24.3	75.2	55.3
May-2017	0	26.2	24.3	84.4	62.9
June-2017	120	28.7	23.3	83.0	57.9
July-2017	608	27.8	24.6	93.0	76.0
August-2017	188	30.6	25.8	91.4	73.1
September-2017	110	32.2	24.5	91.7	69.9
October-2017	61*	34.8	22.9	86.6	57.8
Nov-2017	00	34.2	15.6	92.8	36.0
Dec.2017	65.5**	29.8	16.7	81.8	43.5
Jan.-2018	0	32.9	14.7	79.5	37.4
Feb.-2018	0	33.9	15.5	74.3	47.3

March-2018	0	39.1	22.0	84.0	96.4
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Source: Regional Rice Research Station, NAU, Vyara

* Delay in harvesting of *Kharif* crops

** Okhi Cyclon

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

Category	Population	Production ('000 tones)	Productivity (kg/day)
Cattle			
<i>Crossbred</i>	54700	112.41	5.63 (Milk)
<i>Indigenous</i>	34800	33.86	2.66 (Milk)
Buffalo	91200	107.43	3.22 (Milk)
Sheep	1000	1.17 metric tones	1.090 kg wool/sheep
Goats	46000	3.90	0.232(Milk)
Pigs	2723	--	--
Rabbits	1576	--	--
Poultry			
<i>Desi</i>	143100	150.70 lakh egg	118 eggs per layer/year
<i>Improved</i>	107100	332.53 lakh egg	356 eggs per layer/year
Donkey	1943	--	--

Source: 34th Survey Report of Estimates of major Livestock Products for Year:2016-17, Gujarat State

2.7 Details of Operational area / Villages (2015-16)

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Vyara	Vyara	Dolara	Paddy, Sugarcane, Gram, Groundnut, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about scientific package of practices among farmers/ Farm women • Lack of awareness about organic farming • Lack of irrigation facility • Lack of Knowledge about value addition of Agril. produce • Low milk production • Poor livestock management • Drudgery among farm women during Agril. practices • Lack of knowledge about Health & Nutrition • Sickle cell Anemia 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM) and precision Farming • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Crop diversification • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Low cost green house and small scale Nursery Management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
2			Zankhari	Paddy, Sugarcane, Gram, Groundnut, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about scientific package of practices among farmers/ Farm women • Lack of awareness about organic farming • Lack of irrigation facility • Lack of Knowledge about value addition of Agril. produce • Low milk production • Poor livestock management • Drudgery among farm women during Agril. practices • Lack of knowledge about health & nutrition • Sickle cell Anemia 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM) and precision Farming • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
						<ul style="list-style-type: none"> • Low cost green house and small scale Nursery Management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
3	Dolvan	Dolvan	Bardipada	Paddy, Sugarcane, Gram, Groundnut, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge(ICM, INM,IPDM) among farmers/ Farm women • Lack of awareness towards animal disease management • Lack of Knowledge about value addition of Agril. produce • Undulated land and poor fertility status of soil • Drudgery among farm women during Agril. practices • Lack of knowledge about health & nutrition • Sickle cell Anemia • Low milk production per animal 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Low cost green house and small scale Nursery Management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
4			Jamaliya	Paddy, Sugarcane, Gram, Groundnut, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge(ICM, INM,IPDM) among farmers/ Farm women • Undulated land and poor fertility status of soil • Lack of awareness towards animal disease management • Poor economic condition • Lack of Knowledge about value addition of Agril. produce • Drudgery among farm women during Agril. practices • Lack of knowledge about health & nutrition • Sickle cell Anemia 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul style="list-style-type: none"> • Low milk production 	<ul style="list-style-type: none"> • Breeding, Feeding & Dairy management of milch animals • Low cost green house and small scale Nursery Management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
5	Valod	Valod	Kaher	Paddy, Sugarcane, Gram, Pigeon pea, Okra, Brinjal, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge about crop production • Injudicious use of pesticides in vegetables • Lack of awareness about organic farming • Lack of knowledge about fruits & vegetable preservation • Lack of knowledge about insect – pest identification & their management • Poor animal management • Drudgery among farm women during Agril. practices • Lack of knowledge about health & nutrition 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Low cost green house and small scale Nursery Management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
6			Kalamkui	Paddy, Sugarcane, Gram, Pigeon pea, Okra, Brinjal, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge about crop production • Injudicious use of pesticides in vegetables • Lack of awareness about organic farming • Lack of knowledge about fruits & vegetable preservation • Lack of knowledge about insect – pest identification & their management • Poor animal management • Drudgery among farm women during Agril. practices 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul style="list-style-type: none"> • Lack of knowledge about Health & Nutrition • Poor food grain storage 	<ul style="list-style-type: none"> • women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Low cost green house and small scale Nursery Management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
7	Songadh	Songadh	Ukhalda	Paddy, Sugarcane, Sorghum, Gram, Groundnut, Pigeon pea, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about new agricultural technology • Lack of awareness about scientific rearing of Animal Husbandry & poultry • Scarcity of water • Lack of awareness about organic farming • Poor food grain storage practices • Lack of awareness about Health & Nutrition • Drudgery among farm women during Agril. practices • Lack of Knowledge about value addition of Agril. produce • Sickle cell Anemia • Poor economic condition 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals & poultry management • Off-season cultivation of high valued crops • Capacity building and Group dynamics
8			Bedvan-pra-Bhensrot	Paddy, Sugarcane, Sorghum, Gram, Groundnut, Pigeon pea, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about new agricultural technology • Low adoption of new technology • Lack of awareness about scientific rearing of Animal Husbandry • Scarcity of water • Lack of awareness about organic farming • Poor food grain storage practices • Lack of awareness about Health & Nutrition • Drudgery among farm women during Agril. practices 	<ul style="list-style-type: none"> • Integrated Crop Management (ICM) and precision Farming • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul style="list-style-type: none"> • Lack of Knowledge about value addition of Agril. produce • Poor economic condition 	<ul style="list-style-type: none"> • women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Off-season cultivation of high valued crops • Capacity building and Group dynamics
9	Uchchhal	Uchchhal	Mohini	Paddy, Sugarcane, Cotton, Sorghum, Pigeon pea, Soybean, vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about scientific package of practices of different crops • Lack of knowledge about insects — pests & diseases • Injudicious use of chemical pesticide in cotton • Lack of awareness about organic farming • Scarcity of water • Poor food grain storage practices • Lack of awareness about Health & Nutrition • Drudgery among farm women during Agril. practices • Lack of Knowledge about preservation of Agril. produce • Inadequate intake of fruits & vegetables • Sickle cell Anemia • Poor livestock management • Poor economic condition 	<ul style="list-style-type: none"> • Integrated Crop Management(ICM) and precision Farming • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Dry land horticulture • Capacity building and Group dynamics
10			Vadgam	Paddy, Sugarcane, Cotton, Sorghum, Pigeon pea, vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about scientific package of practices of different crops • Lack of knowledge about insects — pests & diseases • Injudicious use of chemical pesticide in cotton • Lack of awareness about organic farming • Scarcity of water • Poor food grain storage practices • Lack of awareness about Health & Nutrition • Drudgery among farm women during Agril. practices 	<ul style="list-style-type: none"> • Integrated Crop Management(ICM) and precision Farming • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul style="list-style-type: none"> • Lack of Knowledge about preservation of Agril. produce • Sickle cell Anemia • Poor livestock management • Poor Socio-economic condition 	<ul style="list-style-type: none"> • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Dry land horticulture • Capacity building and Group dynamics
11	Kukarmunda	Kukarmunda	Kelni	Paddy, Sugarcane, Wheat, Cotton, Sorghum, Pigeon pea, vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge(ICM, INM,IPDM) among farmers/ Farm women • Lack of knowledge about insect — pest identification & their management • Injudicious use of chemical pesticides • Lack of awareness about organic farming • Poor marketing facility • Lack of availability of Agril. inputs • Poor grain storage practices • Lack of Knowledge about preservation of Agril. produce • Poor Livestock management 	<ul style="list-style-type: none"> • Integrated Crop Management(ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of milch animals • Dry land horticulture • Capacity building and Group dynamics
12	Nizar	Nizar	Laxmikheda	Paddy, Wheat, Cotton, Castor, Sorghum, Pigeon pea, vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Poor marketing facility • Lack of technological knowledge about crop production practices • Injudicious use of chemical pesticide/ fertilizers • Lack of awareness about organic farming • Viral disease problem in fruits & vegetables • Weed management in black soil is a big problem • High production cost due-to lift irrigation • Poor grain storage practices • Lack of Knowledge about preservation of Agril. produce • Poor Livestock management 	<ul style="list-style-type: none"> • Integrated Crop Management(ICM and precision Farming) • Organic farming • Integrated Nutrient Management • Integrated Pest and Disease Management • Soil and Water conservation • Women empowerment and self reliability through Entrepreneurial development • Health & Nutrition for vulnerable groups, Malnutrition and Sickle cell anemia awareness • Drudgery reduction technology for farm women • Value addition in Agricultural crops • Breeding, Feeding & Dairy management of

Sl. No.	Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
					<ul style="list-style-type: none"> • Sickle cell anemia 	milch animals <ul style="list-style-type: none"> • Dry land horticulture • Capacity building and Group dynamics

2.8 Priority/thrust areas

1. Introduction of improved variety
2. Balanced fertilizers and ecofriendly pest and disease management
3. Ration balancing for dairy animals
4. Health & Nutrition for vulnerable groups among farm women
5. Drudgery reduction technology for farm women
6. Women/youth empowerment through Entrepreneurial development

3. TECHNICAL ACHIEVEMENTS

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

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		No. of farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	3	39	21	77	88.4	594	656

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of programmes		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	25	44	630	1817	408	1400	4585	67962
Rural youth	4	15	95	486				
Extn. Functionaries	4	2	90	60				
Total	33	61	815	2363				

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
275.70	238.65	400800	104760

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
0	0	0	0

3.1. B. Operational areas details during 2017-18

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
1	Paddy, Sugarcane, Gram, Groundnut, Okra, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about scientific package of practices among farmers/ Farm women • Lack of awareness about organic farming • Lack of irrigation facility • Lack of Knowledge about value addition of Agril. produce • Low milk production • Poor livestock management • Drudgery among farm women during Agril. practices • Lack of knowledge about Health & Nutrition • Sickle cell Anemia 		Dolara, Zankhari, Bardipada, Jamaliya	Intervention is given below
2	Paddy, Sugarcane, Gram, Pigeon pea, Okra, Brinjal, Cucurbitaceous vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge about crop production • Injudicious use of pesticides in vegetables • Lack of awareness about organic farming • Lack of knowledge about fruits & vegetable preservation • Lack of knowledge about insect – pest identification & their management • Poor animal management • Drudgery among farm women during Agril. practices • Lack of knowledge about health & nutrition 		Kaher, Kalamkui	
3	Paddy, Sugarcane, Sorghum, Gram,	<ul style="list-style-type: none"> • Lack of knowledge about new 		Ukhalda, Bedvan-pra-	

	Groundnut, Pigeon pea, Okra, Cucurbitaceous vegetables, Animal Husbandry	<p>agricultural technology</p> <ul style="list-style-type: none"> • Lack of awareness about scientific rearing of Animal Husbandry & poultry • Scarcity of water • Lack of awareness about organic farming • Poor food grain storage practices • Lack of awareness about Health & Nutrition • Drudgery among farm women during Agril. practices • Lack of Knowledge about value addition of Agril. produce • Sickle cell Anemia • Poor economic condition 		Bhensrot	
4	Paddy, Sugarcane, Cotton, Sorghum, Pigeon pea, Soybean, vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge about scientific package of practices of different crops • Lack of knowledge about insects — pests & diseases • Injudicious use of chemical pesticide in cotton • Lack of awareness about organic farming • Scarcity of water • Poor food grain storage practices • Lack of awareness about Health & Nutrition • Drudgery among farm women during Agril. practices • Lack of Knowledge about preservation of Agril. produce • Inadequate intake of fruits & vegetables • Sickle cell Anemia • Poor livestock management • Poor economic condition 		Uchchal, Mohini	

	Paddy, Sugarcane, Wheat, Castor, Cotton, Sorghum, Pigeon pea, vegetables, Animal Husbandry	<ul style="list-style-type: none"> • Lack of technological knowledge(ICM, INM,IPDM) among farmers/ Farm women • Lack of knowledge about insect — pest identification & their management • Injudicious use of chemical pesticides • Lack of awareness about organic farming • Poor marketing facility • Lack of availability of Agril. inputs • Poor grain storage practices • Lack of Knowledge about preservation of Agril. produce • Poor Livestock management • Viral disease problem in fruits & vegetables • Weed management in black soil is a big problem 		Kelni, Laxmikheda	
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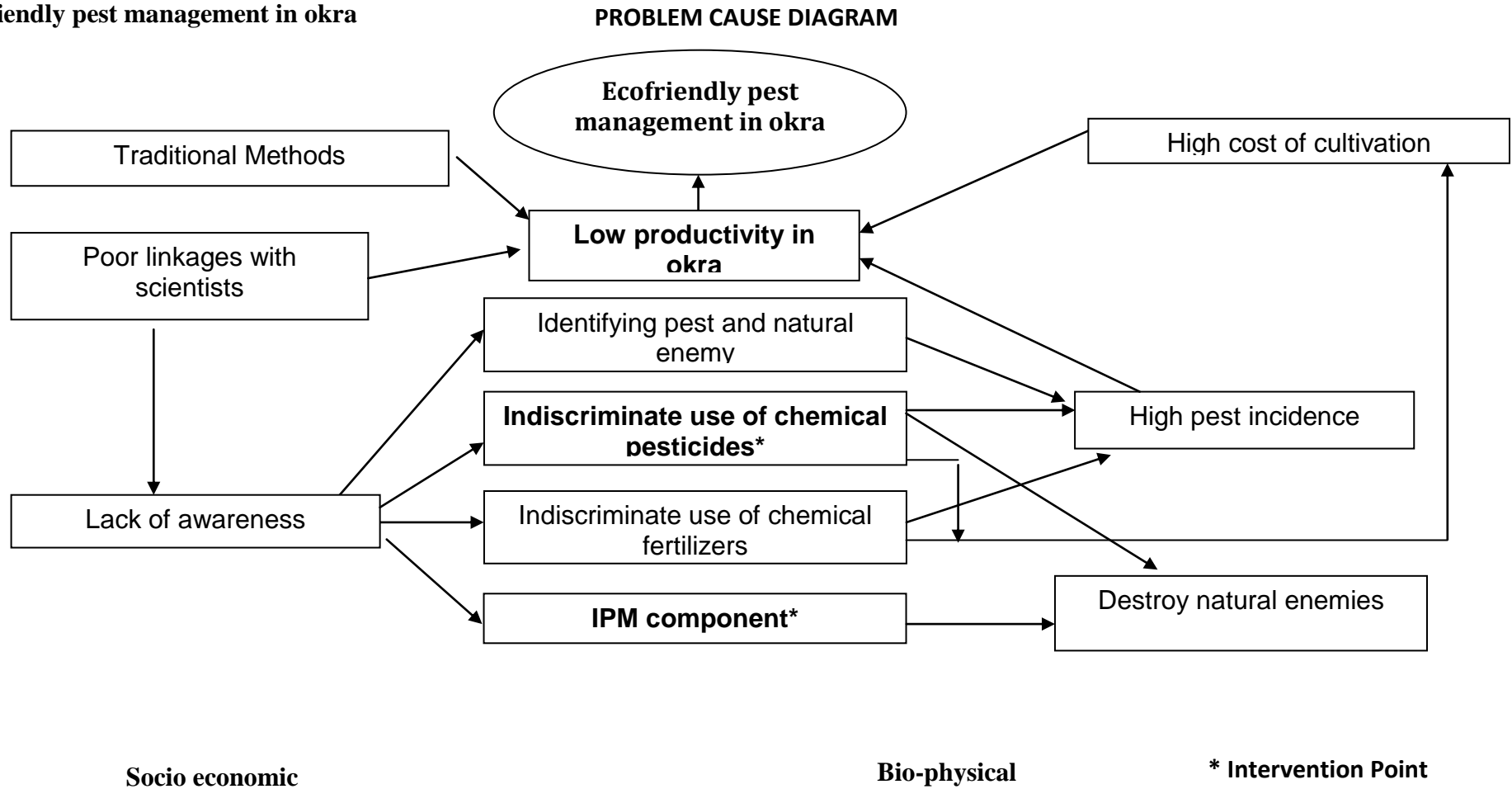
* Support with problem-cause and interventions diagram

Interventions: ON FARM TESTING

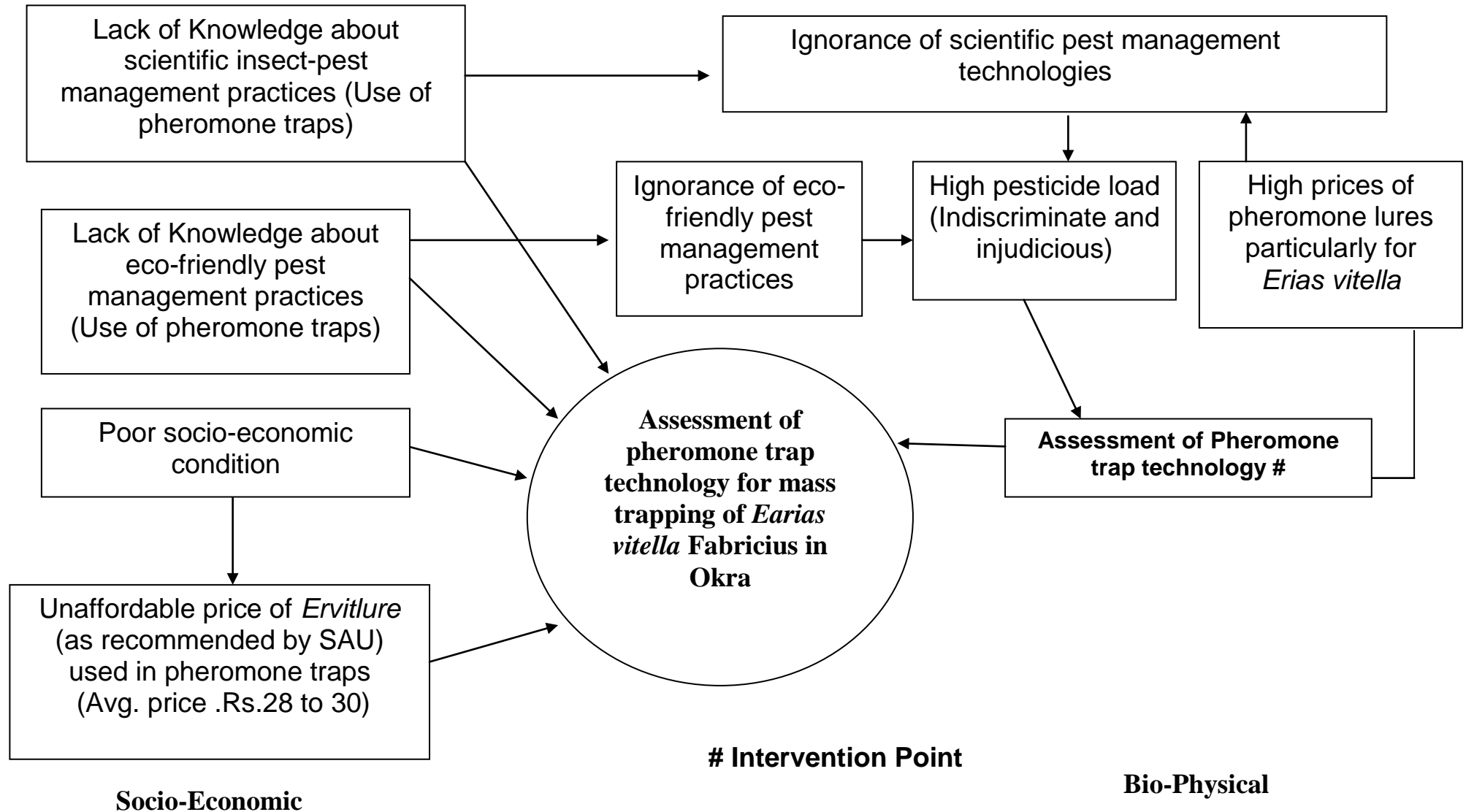
S.N.	Particulars	Technology Intervention
1	Eco-friendly pest management in okra	Incorporation of IPM component and need based and judicious use of bio-pesticides
2	Assessment of pheromone trap technology for mass trapping of <i>Earias vitella</i> Fabricius in Okra	Use of pheromone traps (@ 60 traps/ha) for mass trapping of <i>Earias vitella</i> male adults
3	Plant geometry in okra	Distance: 45X30 cm
4	Assessment of chick pea variety	Variety: GG-3
5	Effect of Compound cattle feed on milk production of buffalo	Use of compound cattle feed and area specific minerals mixture
6	Assessment of okra varieties in Tapi district	High yielding variety and Scientific cultural practices
7	Assessment of foliar application of different organic inputs on mango	Use of organic inputs and Scientific cultural practices

Interventions: (PROBLEM CAUSE DIAGRAM)

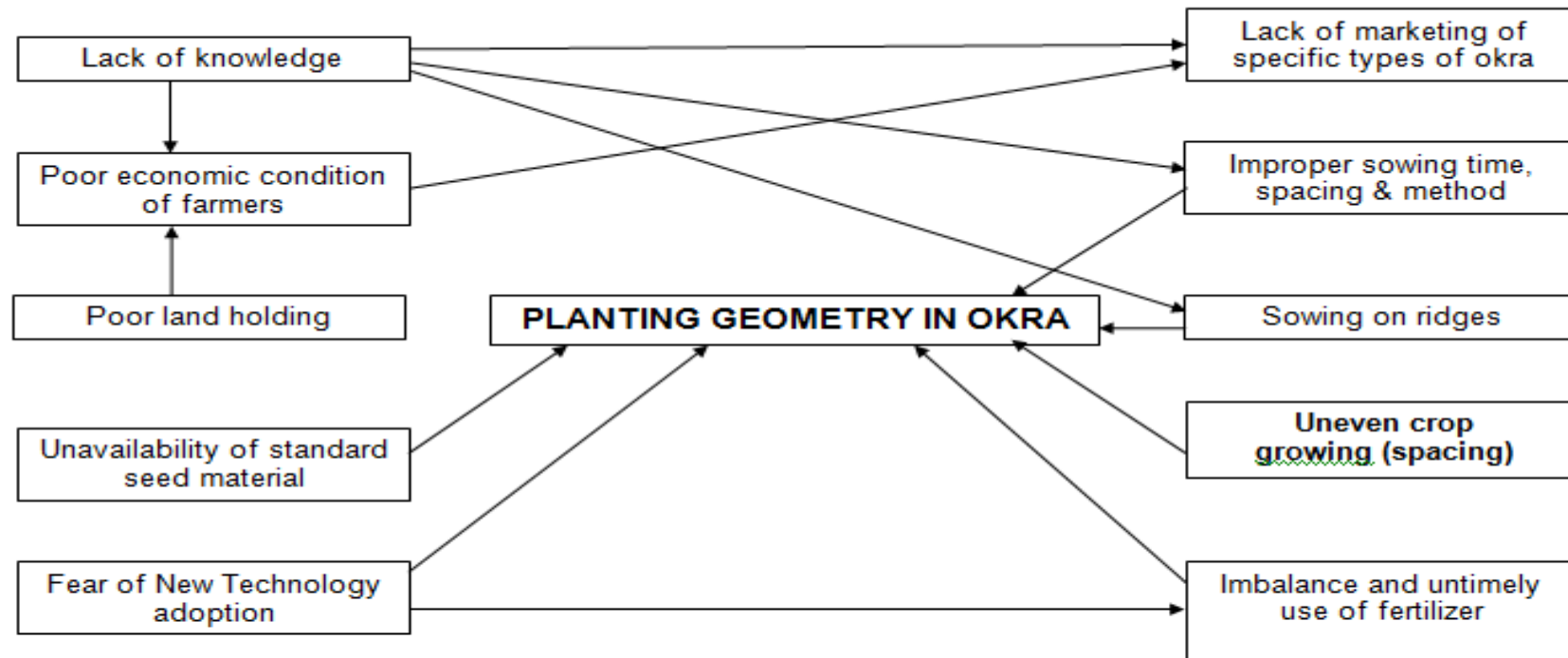
1. Eco-friendly pest management in okra



**2. Assessment of pheromone trap technology for mass trapping of *Earias vitella* Fabricius in Okra
Problem Cause Diagram**



3. Plant geometry in okra

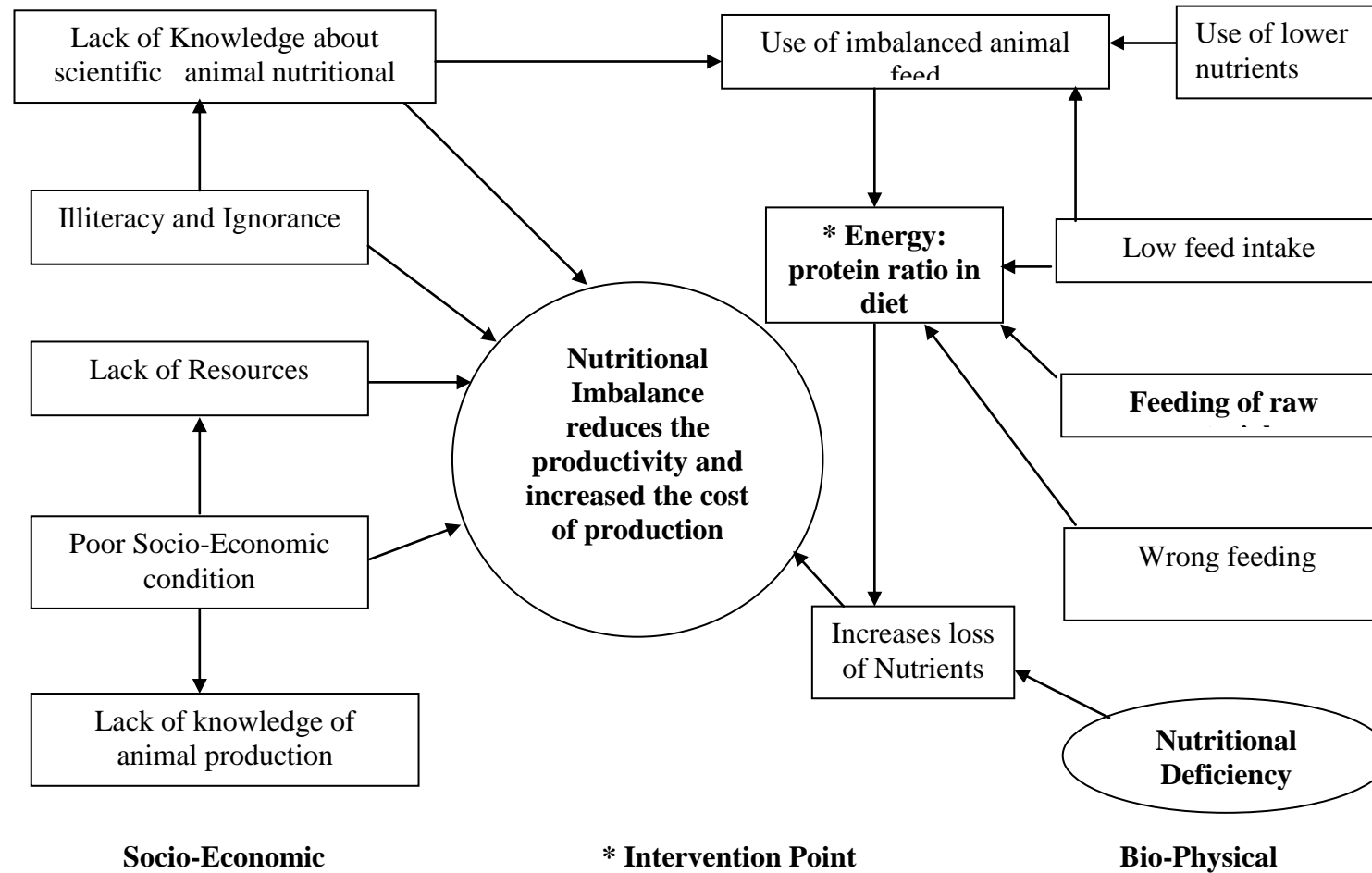


PROBLEM CAUSE DIAGRAM

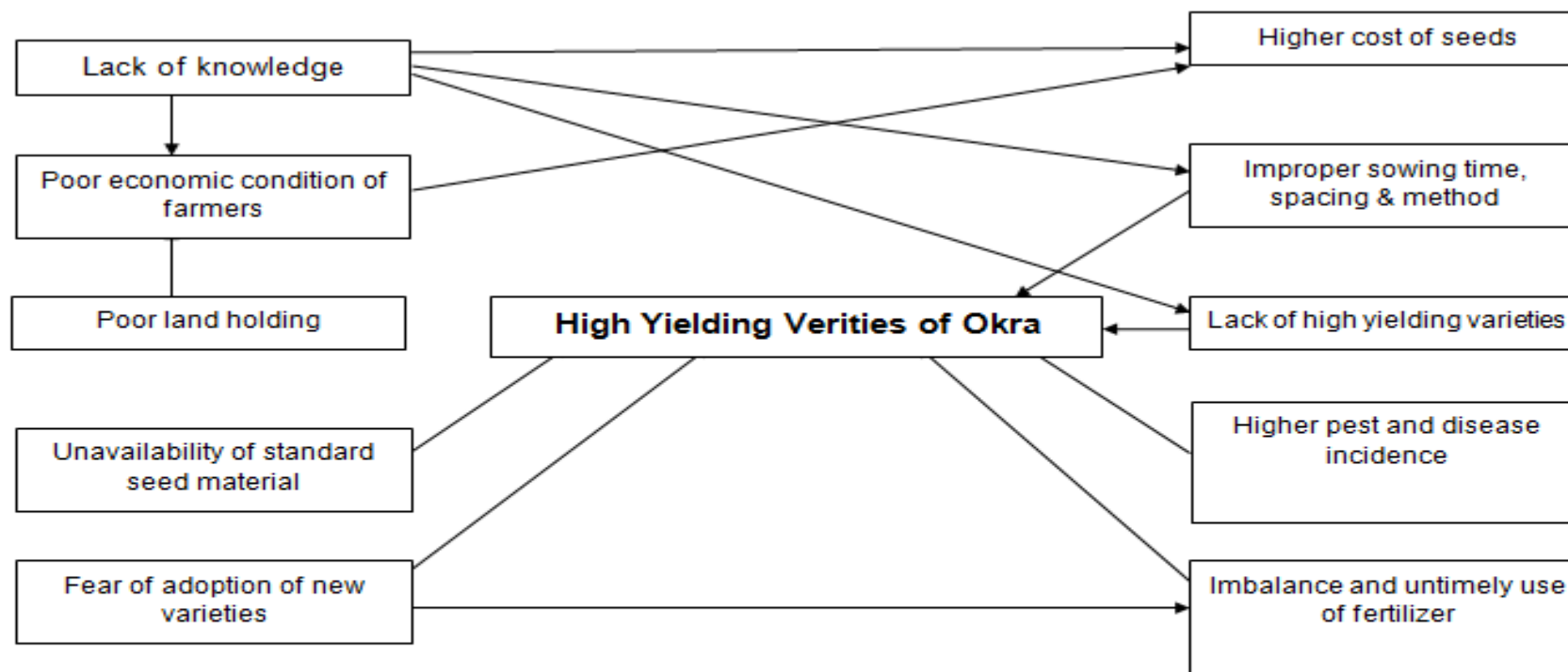
4. Assessment of chick pea variety

5. Effect of Compound cattle feed on milk production of buffalo

PROBLEM CAUSE DIAGRAM



6. Assessment of okra varieties in Tapi district



PROBLEM CAUSE DIAGRAM

3.2. Technology Assessment and Refinement

A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Varietal Evaluation	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	-	-	-	-	1	-	-	-	-	1
Integrated Crop Management	-	-	-	-	1	-	-	-	-	1
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-	-	-	-	-	-
Farm Machineries	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Drudgery Reduction										
Storage Technique	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	2	-	-	-	-	2

A2. Abstract on the number of technologies refined in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Varietal Evaluation										

Integrated Pest Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	-	-	-	-	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-	-	-	-	-	-
Small Scale Income Generation Enterprises	-	-	-	-	-	-	-	-	-	-
Weed Management	-	-	-	-	-	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-	-	-	-	-	-
Farm Machineries	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Seed / Plant production	-	-	-	-	-	-	-	-	-	-
Value addition	-	-	-	-	-	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-	-	-	-	-	-
Storage Technique	-	-	-	-	-	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-

A3. Abstract on the number of technologies assessed in respect of livestock enterprises

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

A4. Abstract on the number of technologies refined in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	-	-	-	-	-	-

Nutrition Management	-	-	-	-	-	-
Disease of Management	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-
Small Scale income generating enterprises	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-

B. Achievements on technologies Assessed and Refined

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	--	--	--	--	--
	--	--	--	--	--
Varietal Evaluation	--	--	--	--	--
	--	--	--	--	--
Integrated Pest Management	Okra		5	5	1
	--	--	--	--	--
Integrated Crop Management	Okra		6	6	1.5
	--	--	--	--	--
Integrated Disease Management	--	--	--	--	--
	--	--	--	--	--
Small Scale Income Generation Enterprises	--	--	--	--	--
	--	--	--	--	--
Weed Management	--	--	--	--	--
	--	--	--	--	--
Resource Conservation Technology	--	--	--	--	--

Farm Machineries	--	--	--	--	--
	--	--	--	--	--
Integrated Farming System	--	--	--	--	--
	--	--	--	--	--
Seed / Plant production	--	--	--	--	--
	--	--	--	--	--
Value addition	--	--	--	--	--
	--	--	--	--	--
Drudgery Reduction	--	--	--	--	--
	--	--	--	--	--
Storage Technique	--	--	--	--	--
	--	--	--	--	--
Mushroom cultivation	--	--	--	--	--
	--	--	--	--	--
Total	-	-	11	11	2.5

B.2. Technologies Refined under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Nutrient Management	--	--	--	--	--
	--	--	--	--	--
Varietal Evaluation	--	--	--	--	--
	--	--	--	--	--
Integrated Pest Management	--	--	--	--	--
	--	--	--	--	--
Integrated Crop Management	--	--	--	--	--
	--	--	--	--	--
Integrated Disease Management	--	--	--	--	--
	--	--	--	--	--
Small Scale Income Generation Enterprises	--	--	--	--	--

Weed Management	--	--	--	--	--
	--	--	--	--	--
Resource Conservation Technology	--	--	--	--	--
	--	--	--	--	--
Farm Machineries	--	--	--	--	--
	--	--	--	--	--
Integrated Farming System	--	--	--	--	--
	--	--	--	--	--
Seed / Plant production	--	--	--	--	--
	--	--	--	--	--
Value addition	--	--	--	--	--
	--	--	--	--	--
Drudgery Reduction	--	--	--	--	--
	--	--	--	--	--
Storage Technique	--	--	--	--	--
	--	--	--	--	--
Mushroom cultivation	--	--	--	--	--
	--	--	--	--	--
Total	--	--	--	--	--

B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	--	--	--	--
Nutrition management	--	--	--	--
Disease management	--	--	--	--
Value addition	--	--	--	--
Production and management	--	--	--	--
Feed and fodder	--	--	--	--
Small scale income generating enterprises	--	--	--	--
Total			--	-

B.4. Technologies Refined under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Evaluation of breeds	--	--	--	--
Nutrition management	--	--	--	--
Disease management	--	--	--	--
Value addition	--	--	--	--
Production and management	--	--	--	--
Feed and fodder	--	--	--	--
Small scale income generating enterprises	--	--	--	--
Total	--	--	--	--

C1. Results of Technologies Assessed

1. Results of On Farm Trial

1. Eco-friendly pest management in okra (Conclude)

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Tech.ogy Assessed	Parameters of assessment	Data on Parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Okra	Irrigated	Injudicious use of health hazardous agro chemicals	Ecofriendly pest management in okra	5	T1 T2	Insect pest population, Per cent damage by SFB and natural enemy population	#	T-2 found to be best technology for ecofriendly pest management in okra.	IPM is an ecofriendly pest management approach and effectively manage sucking pests by conserving natural enemies	-	-

Contd....

Technology Assessed	Source of Technology	Production (q/ha)	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18

T1 – Farmers Practices i.e. Repeated applications of insecticides i.e. imidacloprid 70% WS or Acetamiprid 20 % SP @ 10-15 ml in 10 ltr of water and costly newer insecticides viz. chlorantraniliprole 18.5 SC, injudiciously.	Farmers Practices	103.4	Q/ha	191613.3	1.9
T2- Mechanical control of infested shoots at early infection + Use of yellow sticky traps (20 traps/acre) + Installation of pheromone traps (24 traps/acre) with <i>Ervit-lure</i> + Spraying of neem seed kernel extract 5% + Spraying of <i>Bacillus thuringiensis</i> powder @ 1kg/ha+ need based application of chemicals	SAU	116.6	Q/ha	254280.0	2.6

Data on insect-pest parameter

Technology Assessed	Data on insect-pest parameter					Population of natural enemies	
	No. of aphids/ leaf	No. of jassids/ leaf	No. of white fly/leaf	% damaged shoots	% damaged fruits	LBB (grub & adult/plant)	Sirphid fly (Larva/plant)
T1	8.5	9.8	9.2	11.4	16.2	2.5	2.0
T2	5.9	6.6	6.2	8.8	11.3	4.1	3.1

C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1	Title of Technology Assessed	Eco-friendly pest management in okra
2	Problem Definition	Injudicious use of health hazardous agro chemicals
3	Details of technologies selected for assessment	T1 –Farmers Practices i.e. Repeated applications of insecticides i.e. imidacloprid 70% WS or Acetamiprid 20 % SP @ 10-15 ml in 10 ltr of water and costly newer insecticides viz. chlorantraniliprole 18.5 SC, injudiciously. T2- Mechanical control of infested shoots at early infection + Use of yellow sticky traps (20 traps/acre) + Installation of pheromone traps (24 traps/acre) with <i>Ervit-lure</i> + Spraying of neem seed kernel extract 5% + Spraying of <i>Bacillus thuringiensis</i> powder @ 1kg/ha
4	Source of technology	SAU
5	Production system and thematic area	IPM
6	Performance of the Technology with	Technology gave higher BC ratio (1:2.6)

	performance indicators	
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	IPM is an ecofriendly pest management approach and effectively manage sucking pests by conserving natural enemies
8	Final recommendation for micro level situation	Use of IPM technology is an ecofriendly pest management technology in okra
9	Constraints identified and feedback for research	-
10	Process of farmers participation and their reaction	Appreciate the technology and ready to adopt

3. Results of On Farm Trial: (2nd Year)

1. Assessment of pheromone trap technology for mass trapping of *Earias vitella* Fabricius in Okra

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Tech.ogy Assessed	Parameters of assessment	Data on Parameter		Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
							% damaged shoots	% damaged fruits				
1	2	3	4	5	6	7	8		9	10	11	12
Okra	Irrigated	Injudicious use of health hazardous agro chemicals	Assessment of pheromone trap technology for mass trapping of <i>Earias vitella</i> Fabricius in Okra	5	T1	Per cent damage by SFB, Yield	14.5	16.3	T-2 found to be best technology for ecofriendly pest management in okra.	Pheromone trap technology is an ecofriendly pest management component and effectively manage the shoot & fruit borer	-	-
					T2		10.8	11.7				

Contd....

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
T1 – Farmers practices as injudicious and indiscriminate use of chemical pesticides	Farmers Practices	110.4	Q/ha	232700	2.36
T2- Installation of pheromone traps @ 60 traps/ha	AAU	115.4	Q/ha	256700	2.87

C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

1	Title of Technology Assessed	Assessment of pheromone trap technology for mass trapping of <i>Earias vitella</i> Fabricius in Okra
2	Problem Definition	Injudicious use of health hazardous agro chemicals
3	Details of technologies selected for assessment	T1 – Farmers practices as injudicious and indiscriminate use of chemical pesticides
4	Source of technology	T2- Installation of pheromone traps @ 60 traps/ha
5	Production system and thematic area	IPM
6	Performance of the Technology with performance indicators	Technology gave higher BC ratio (1:2.87)
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Pheromone trap technology is an eco-friendly pest management component and effectively manage the shoot & fruit borer
8	Final recommendation for micro level situation	-
9	Constraints identified and feedback for research	There is need to maintain the quality of pheromone lures.
10	Process of farmers participation and their reaction	Appreciate the technology.

D1. Results of Technologies Refined

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology refined	Parameters of refined t	Data on the parameter	Results of refinement	Feedback from the farmer	Details of refinement done
1	2	3	4	5	6	7	8	9	10	11
--	--	--	--	--	--	--	--	--	--	--

Contd..

Technology Refined	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
--------------------	--	------------	---	-----------------------------------	----------

12	13	14	15	16	17
Technology Option 1 (best performing Technology Option in assessment)	--	--	--	--	--
Technology Option 2 (Modification over Technology Option 1)	--	--	--	--	--
Technology Option 3 (Another Modification over Technology Option 1)	--	--	--	--	--

D.2. Details of each On Farm Trial for refinement to be furnished in the following format separately as per the following details:

1. Title of Technology refined : --
2. Problem Definition : --
3. Details of technologies selected for refinement: --
4. Source of technology : --
5. Production system and thematic area : --
6. Performance of the Technology with performance indicators : --
7. Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques : --
8. Final recommendation for micro level situation : --
9. Constraints identified and feedback for research : --
10. Process of farmers participation and their reaction:--

3.3 FRONT LINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2016-17 and recommended for large scale adoption in the district

Sl. No.	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Gram (Rabi-15-16)	HYV	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	50	235	101
2	Gram (Rabi-15-16)	ICM	New variety	FLDs, training, Khedut shibir, News paper coverage	50	235	101
3	Gram (Rabi-16)	ICM	HighYielding variety	FLDs, training, Khedut shibir, News paper coverage	50	235	101
4	Green gram (Rabi-15-16)	INM	Seed and biofertilizer (<i>rhizobium</i> and P.S.B)	FLDs, training, Khedut shibir, News paper coverage	55	247	115
5	Pigeonpea (Kharif-16)	INM	Seed and biofertilizer (<i>rhizobium</i> and P.S.B)	FLDs, training, Khedut shibir, News paper coverage	53	208	109
6	Soybean (Kharif-16)	INM	Seed and biofertilizer (<i>rhizobium</i> and P.S.B)	FLDs, training, Khedut shibir, News paper coverage	55	278	152
7	Greengram (Rabi 16-17)	ICM	Seed	FLDs, training, Khedut shibir, News paper coverage	55	247	115
8	Paddy- Jaya (Kharif-16)	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	69	418	167
9	Paddy- GNR-3 (Kharif-16)	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	67	218	159
10	Paddy- Gurjari (Kharif-16)	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	58	287	136
11	Paddy- NAUR-1 (Kharif-16)	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	45	206	91
12	Paddy- Purna (Kharif-16)	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	59	310	185
13	Wheat - Lok-1 (Rabi-15-16)	INM	Seed and biofertilizer (<i>Rhizobium</i> and P.S.B)	FLDs, training, Khedut shibir, News paper coverage	48	312	64
14	Wheat-GW-496 (Rabi-15-16)	INM		FLDs, training, Khedut shibir, News paper coverage	46	289	58
15	Wheat -Lok-1	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	48	312	64

Sl. No.	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
	(Rabi-16)						
16	Wheat-GW-496 (Rabi-16)	ICM	High yielding variety	FLDs, training, Khedut shibir, News paper coverage	46	289	58
17	Brinjal (Rabi 2015-16)	INM	Novel organic liquid fertilizer	FLDs, training, Khedut shibir, News paper coverage	50	450	30
18	Okra (Rabi 2015-16)	INM		FLD's, FLD visit, field visit, farmers scientist interaction, training, khedut shibir	65	850	55
19	Watermelon (Rabi 2015-16)	INM		FLD's, FLD visit, field visit, farmers scientist interaction, training, khedut shibir	10	100	20
20	Indian Bean-NPS-1 (Kharif-2016)	ICM	Seeds of New variety	FLD's, FLD visit, field visit, farmers scientist interaction, training, khedut shibir	10	50	5
21	Okra(Rabi 2016-17)	INM	Azotobactor, PSB and Potash mobilizer) and novel organic liquid fertilizer	FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers-Scientist interaction, Khedut Shibir, Newspaper coverage	80	900	65
22	Brinjal (Rabi 2016-17)	INM		FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	80	1200	85
23	Watermelon (Rabi 2016-17)	INM		FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	15	200	25
24	Mango(Summer 2017)	INM	Novel organic liquid fertilizer	FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	15	120	15
25	Okra (Rabi:2016-17)	IPM	Pheromone traps, Azadirachtin 1500 ppm, Metarhizium anisoplea, <i>Lecanicillium lacani</i> , <i>Trichoderma</i>	FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	22	186	70
26	Brinjal (Rabi:2016-17)	IPM		FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	24	130	48
27	Cotton	IPM	Pheromone traps, Pectinolure, Azadirachtin 1500 ppm, <i>Pseudomonas</i>	FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	34	130	58
28	Paddy-NAUR-1 (Kharif-16)	IPM	Pheromone traps, <i>Pseudomonas</i> , Propargite	FLDs, Training, FLD visit, Field Visit, Diagnostic	58	180	78

Sl. No.	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
				visit, Method Demonstration, Farmers			
29	Okra (Rabi:2015-16)	IPM	Pheromone traps, Azadirachtin 1500 ppm, <i>Metarhizium anisoplaea</i> , <i>Lecanicillium lacani</i> , <i>Trichoderma</i>	FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	22	175	65
30	Brinjal (Rabi:2015-16)	IPM		FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	21	123	42
31	Cucumber (Rabi:2015-16)	IPM	Fruit fly trap	FLDs, Training, FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Farmers	18	44	28

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

b. Details of FLDs implemented during Rabi:2016-17 and Kharif-2017 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
	Cereals									
1	Wheat – Lok-1	ICM	High yielding variety	<i>Rabi-16</i>	5	5	13	-	13	-
2	Wheat- GW-496	ICM	High yielding variety	<i>Rabi-16</i>	5	5	13	-	13	-
3	Paddy- GNR-3	ICM	Improved Seed	<i>Kharif-2017</i>	5	5	39	-	39	-
4	Paddy- NAUR-1	ICM	Improved Seed	<i>Kharif-2017</i>	5	5	13	-	13	-
5	Paddy- Purna	ICM	Improved Seed	<i>Kharif-2017</i>	5	5	13	-	13	-
6	Paddy -Hybrid (6444,312,Kabir)	IPM	Pheromone Trap, Scirpolure, Ethion, <i>Becillus Thuriengensis</i> , Monocrotophos, Mancozeb	<i>Kharif-2017</i>	5	5	14	-	14	-
	Pulses									
7	Gram-GG3	ICM	HighYielding variety	<i>Rabi-16</i>	5	5	13	-	13	-
8	Greengram- Co-4	ICM	Seed	<i>Rabi 16-17</i>	5	5	13	-	13	-
9	Soybean- NRC-37	ICM	Improved Seed	<i>Kharif-2017</i>	5	5	13	-	13	-
10	Gram-GG-2	IPM	Trichoderma	<i>Rabi-2017-18</i>	4	4	16	-	16	-
	Horticultural crops									
11	Okra-Hybrid	INM	Azotobactor, PSB and Potash mobilizer) and novel organic liquid fertilizer	<i>Rabi 2016-17</i>	2	2	10	-	10	-
12	Brinjal -Hybrid	INM		<i>Rabi 2016-17</i>	2	2	10	-	10	-
13	Watermelon-	INM		<i>Rabi 2016-17</i>	2.5	2.5	10	-	10	-

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
	Hybrid									
14	Mango- Kesar	INM	Novel organic liquid fertilizer	Summer 2017	2	2	8	-	8	-
15	Okra -Hybrid	IPM	Pheromone traps, Azadirachtin 1500 ppm, Metarhizium anisoplea, <i>Lecanicillium lacani</i> , <i>Trichoderma</i>	Rabi 2016-17	3	3	15	-	15	
16	Brinjal-Hybrid	IPM		Rabi 2016-17	3	3	12	-	12	
17	Ridge gourd-Hybrid (Pallavi-Sangrow)	IPM	NAUROJI fruit fly trap, <i>Trichoderma</i> , <i>Becillus Thuriengensis</i>	Kharif-2017	2	2	7	-	7	
18	Brinjal- Hybrid	IPM	Pheromone trap, Leucinlure, <i>Trichoderma</i> , <i>Becillus Thuriengensis</i> , Spinosad	Kharif-2017	4	4	16	-	16	
19	Indian Bean-NPS-1	ICM	Improved Seeds	Late Kharif-2017	2	2	50	-	2	
20	Vegetable & Fruit crops	Organic Kitchen gardening	Seeds & seedling of vegetables & fruit plant	Late Kharif-2017	0.4	0.4	20	-	20	
21	Watermelon-Patanegra	INM	Azatobacter, PSB, PMB, Novel organic liquid fertilizer	Rabi-2017	2.2	2.2	11	-	11	
22	Okra- Hybrid	IPM	Pheromone Trap, Ervitlure, Spinosad, <i>Becillus Thuriengensis</i> , <i>Beaveria bassiana</i>	Rabi-2017	4	4	16	-	16	
23	Brinjal- Gulabi Palitana	INM	Azotobacter, PSB,KMB, Novel organic liquid fertilizer	Rabi-2017	2.4	2.4	12		12	-

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
24	Okra- Private Hybrid (Taj, Sultan, Shivani)	INM	Azotobacter, PSB,KMB, Novel organic liquid fertilizer	<i>Rabi-2017</i>	2.4	2.4	12	-	12	-
	Sugarcane									
25	Sugarcane- Co-13073 & Co-5072	ICM	Sets	<i>Rabi-2017</i>	1.5	1.5	7		7	
	Cotton									
26	Cotton- G.Cot.Hy-8 (BG-II)	IPM	Pheromone traps, Pectinolire, Trichoderma, <i>Becillus Thuriengensis</i> , Mencozeb 75% WP, Spinosad	<i>Kharif-2017</i>	4	4	10	-	10	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Wheat – Lok-1	<i>Rabi-16</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. to 15 th Nov.,2016	21 st Feb. to 25 th March, 2017	1087	76 days
Wheat- GW-496	<i>Rabi-16</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. to 15 th Nov.,2016	21 st Feb. to 25 th March, 2017		
Paddy- GNR-3	<i>Kharif-2017</i>	Irrigated	Medium black	L	M	H	Fallow	15 th June to 15 th July, 2017	15 th Sept. to 10 th Oct.,2017		
Paddy- NAUR-1	<i>Kharif-2017</i>	Irrigated	Medium black	L	M	H	Paddy	15 th June to 30 th July,2017	15 th Sept. to 10 th Oct.,2017		
Paddy- Purna	<i>Kharif-2017</i>	Irrigated	Medium black	L	M	H	Fallow	15 th June to 15 th July, 2017	15 th Sept. to 10 th Oct.,2017		
Paddy -Hybrid (6444,312,Kabir)	<i>Kharif-2017</i>	Irrigated	Medium black	L	M	H	Fallow	15 th June to 15 th July, 2017	15 th Sept. to 10 th Oct.,2017		
Gram-GG3	<i>Rabi-16</i>	Irrigated	Medium black	L	M	H	Fallow	15 th Nov. to 15 th Dec.,2016	10 th March to 25 th March,2017		
Greengram-Co-4	<i>Rabi 16-17</i>	Irrigated	Medium black	L	M	H	Fallow	15 th Nov. to 15 th Dec.,2016	10 th March to 25 th March,2017		
Soybean-NRC-37	<i>Kharif-2017</i>	Irrigated	Black	M	M	M	Paddy	15 th July to 25 th July,2017	15 th Oct. to 25 th Oct,2017		
Gram-GG-2	<i>Rabi-2017-18</i>	Rainfed	Medium black	L	M	H	Paddy	15 th Nov. to 15 th Dec.,2016	15 th Feb., to 15 th March, 17		
Okra-Hybrid	<i>Rabi 2016-17</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. 2016 to 15 th Nov.,2016	15 th Jan., to 15 th March, 17		

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Brinjal - Hybrid	<i>Rabi 2016-17</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. 2016 to 10 th Nov.,2016	15 th Dec., 15 th April, 17		
Watermelon-Hybrid	<i>Rabi 2016-17</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. 2016 to 30 th Oct.,2016	15 th Feb., 25 th Feb, 17		
Mango- Kesar	<i>Summer 2017</i>	Irrigated	Medium black	L	M	H	-	--	15 th May to 15 June,2017		
Okra -Hybrid	<i>Rabi 2016-17</i>	Irrigated	Light shallow & Medium black	L	M	H	Paddy	15 th October-15 th November 2016	5 th Dec. to 30 th March, 2017		
Brinjal-Hybrid	<i>Rabi 2016-17</i>	Irrigated	Light shallow & Medium black	L	M	H	Paddy	10 th Nov. to 15 th Nov.,2016	20 th Jan. to 20 th April-2017		
Ridge gourd-Hybrid (Pallavi-Sangrow)	<i>Kharif-2017</i>	Irrigated	Light to Medium Black Soil	L	M	H	Fallow	15 th June to 10 th July, 2017	5 th August 20 th Oct.,2017		
Brinjal-Hybrid	<i>Kharif-2017</i>	Irrigated	Light shallow & Medium black	L	M	H	Fallow	15 th June to 15 th July, 2017	25 August 20 th Nov.,2017		
Indian Bean-NPS-1	<i>Late Kharif-2017</i>	Irrigated	Light shallow & Medium black	L	M	H	Paddy	15 th Sep. -15 th Oct., 2017	Nov.-2017-March,2018		
Watermelon-Patanegra	<i>Rabi-2017</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. 2017 to 30 th Oct.,2017	15 th Feb., 25 th Feb, 18		
Okra- Hybrid	<i>Rabi-2017</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. 2017	15 th Jan., to 15 th		

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
								to 15 th Nov.,2017	March, 18		
Brinjal-Gulabi Palitana	<i>Rabi-2017</i>	Irrigated	Medium black	L	M	H	Paddy	15 th Oct. 2017 to 10 th Nov.,2017	15 th Dec., 15 th April, 18		
Okra- Private Hybrid (Taj, Sultan, Shivani)	<i>Rabi-2017</i>	Irrigated	Light shallow & Medium black	L	M	H	Paddy	15 th October-15 th November 2017	5 th Dec. to 30 th March, 2018		
Sugarcane-Co-13073 & Co-5072	<i>Rabi-2017</i>	Irrigated	Heavy Black Soil	L	M	H	Fallow		Continue		
Cotton-G.Cot.Hy-8 (BG-II)	<i>Kharif-2017</i>	Rainfed	Heavy Black Soil	L	M	H	Fallow	15 th May to 15 st June, 2016	25 th Nov. to 15 th Jan, 2017		

Technical Feedback on the demonstrated technologies

Sr. No.	Technical Feedback
1	Recommendation should be made on herbal plant pesticide
2	Okra is the major vegetable crop in Tapi district & farmers use chemical pesticide injudiciously and indiscriminately. So, research should be made on Non-pesticidal module against pest and diseases in this ecosystem.
3	New variety of Indian Bean NPS-1 higher yield and quality as well as high returns compare to local varieties
4	Awsame result in growth, yield and quality of watermelon, brinjal and okra by the foliar application of novel organic liquid fertilizer and drenching of Biofertilizers (azotobactor, PSB & potash mobilizer)
5	Research should be initiate against brinjal little leaf disease
6	There is urgent need to release recommendations on herbal plant pesticides for management of pest and diseases in relation to organic

	farming
7	Gall like symptoms found in okra.

Farmers' reactions on specific technologies

Sr. No.	Farmer's Feedback
1	Good quality pheromone lures are not available in market,
2	Severe infection of viral disease in cucurbits mainly bitter-gourd.
3	Twin wheel hoe weeder increases working efficiency in short period of time i.e. time saving.
4	Twin wheel hoe weeder reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to local sickle.
5	Additional benefit of earthing up with weeding by use of Twin wheel hoe weeder as compared to local sickle.
6	Application of novel organic liquid fertilizer and drenching of Biofertilizers (azotobactor, PSB & potash mobilizer) in watermelon reduce nutritional deficiency as well as disease & pest attack
7	NPS-1 variety of Indian bean gave higher number of tillering (10-12) and no. of pods per tiller (15-18)
8	Foliar application of novel organic liquid fertilizer reduce flower drop and increase yield in chilli, brinjal, okra and creeper vegetables
9	Lack of availability of quality seeds of high yielding varieties of watermelon, muskmelon, brinjal, chilli, okra and cucurbitaceous crops
10	Utilizing of bio-fertilizers improve the soil health.
11	Severe incidence of Blast disease and sheath mite was observed in paddy which results in low yield
12	Pigeonpea flowering severely affected by <i>Okhi</i> cyclone
13	Good quality Pheromone lures for cotton pink bollworm and paddy yellow stem borer are not available in market.
14	Indian bean Cv. NPS-1 (GHJB-D1) gave good result in terms of yield and quality as well as price compare to KATARGAN papadi variety.
15	Novel organic liquid fertilizer application two time at flowering and fruit setting stage gave high fruit setting and yield in mango
16	Gall midge and shoot borer infestation in mango.
17	Novel organic liquid fertilizer increased yield and quality in too old (6 months) plants of brinjal.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	20	4/4/2017, 25/4/2017, 11/5/2017, 12/5/2017, 20/5/2017, 16/9/2017, 25/9/2017, 27/9/2017, 4/10/2017, 6/10/2017, 21/12/2017, 2/1/2018, 6/1/2018, 6/1/2018, 6/1/2018, 21/1/2018, 30/1/2018, 16/2/2018, 16/2/2018, 19/2/2018	1143	-
2	Farmers Training	07	7/9/2017, 8/9/2017, 27/11/2017, 03/01/2018, 4/1/2018, 17/2/2018, 26/3/2018	388	-
3	Media coverage	06	7/8/2017, 7/8/2017, 14/1/2017, 22/1/2017, 5/2/2018, 26/2/2018	-	-
4	Training for extension functionaries	02	24-25/7/2017, 26-27/7/2017	60	-

C. Performance of Frontline demonstrations

Cluster Frontline Demonstrations on oilseed crops (NFSM & NMOOP)- As per page No. 89-90

Front Line demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
						High	Low	Average										
Gram (Rabi-16)	ICM	High Yielding variety	GG-3	13	5	11.50	7.50	9.69	7.89	22.81	17500	37558	20058	2.15	15500	31560	16060	2.04
Greengram (Rabi 16-17)	ICM	Seed	Co-4	13	5	9.0	6.50	7.69	6.2	24.03	15200	40181	24981	2.64	13500	32395	18895	2.40
Soybean (Kharif-2017)	ICM	Improved Seed	NRC-37	13	5	20.8	11	16.58	9.80	69.18	13000	41450	28450	3.19	12000	23030	11030	1.92
Gram Rabi-2017-18	IPM	Trichoderma	GG-3	16	4	13.5	9.5	10.59	8.2	29.15	18000	42360	24360	2.35	16000	32800	16800	2.05

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					High	Low	Average												
Cereals																			

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo					Demo	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					High	Low	Average												
Coarse Rice																			
Paddy Kharif-2017	ICM	Improved Seed	39	5	36.70	21	29.66	19.6	51.33	--	--	20000	48250	28250	2.41	18000	33970	15970	1.89
Paddy Kharif-2017	ICM	Improved Seed	13	5	32.5	17	26.11	15.6	67.37	--	--	20000	45500	25500	2.28	18000	28500	10500	1.58
Paddy Kharif-2017	ICM	Improved Seed	13	5	24	13	20.17	11.20	80.09	--	--	13500	32500	19000	2.41	11000	20440	9440	1.86
Paddy (Kharif-2017)	IPM	Pheromone Trap, Scirpolure, Ethion, <i>Becillus Thuriengensis</i> , Monocrotophos, Mancozeb	14	5	39.4	32.5	35.1	30.5	15.08	--	--	32200	47404	15204	1.47	30900	41175	10275	1.33
Wheat																			
Wheat – Lok-1 (Rabi-16)	ICM	High yielding variety	13	5	24.3	19.7	18.9	15.30	23.53	--	--	17550	28823	11273	1.64	18500	23333	4833	1.26
Wheat- GW-496 (Rabi-16)	ICM	High yielding variety	13	5	25.2	20.1	19.6	16.56	18.36	--	--	17550	29890	12340	1.70	18500	25254	6754	1.37
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horticulture																			
Vegetables																			
Okra(Rabi 2016-17)	INM	Azotobactor, PSB and Potash mobilizer) and novel organic liquid fertilizer	10	2	120	105	111.54	90.00	23.93	--	--	97500	390373	292873	4.00	93500	315000	2,21500	3.37
Brinjal (Rabi 2016-17)	INM		10	2	180	165	172.06	150.00	14.71	--	--	90000	344120	254120	3.82	86000	300000	214000	3.49
Watermelon (Rabi 2016-17)	INM		10	2.5	280	200	234.40	202.00	16.04	--	--	52000	164080	112080	3.16	50000	132310	82310	2.65
Mango(Summer 2017)	INM	Novel organic liquid fertilizer	8	2	105	84	92.59	77.4	19.63	--	--	50000	277780	227780	5.56	48000	232200	184200	4.84
Indian Bean-NPS-1 Late (Kharif-2017)	ICM	Improved Seeds	50	2	90	23	38.59	27.5	40.33	--	--	51872	135085	83213	2.60	40000	96250	56250	2.41
Brinjal	INM	Azotobacter,	12	2.4	197.4	156.8	178.8	150	19.20	--	--	90000	268192	178192	2.98	87500	225000	137500	2.57

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo					Demo	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					High	Low	Average												
(Rabi:2017-18)		PSB,KMB, Novel organic liquid fertilizer																	
Okra (Rabi:2017-18)	INM	Azotobacter, PSB,KMB, Novel organic liquid fertilizer	12	2.4	157.5	117.25	135.71	110	23.37	--	--	97500	407130	309630	4.18	95000	330000	235000	3.47
Watermelon Patanegra- (Rabi:2017-18)	INM	Azatobacter, PSB, PMB, Novel organic liquid fertlizer	11	2.2	240	160	202.8	150	35.20	--	--	52000	121680	69680	2.34	50000	90000	40000	1.8
Okra (Rabi:2016-17)	IPM	Pheromone traps, Azadirachtin 1500 ppm,	15	3	111.5	96.8	106.8	95.5	11.83	--	--	80400	213600	133200	2.66	87800	191000	103200	2.18
Brinjal (Rabi:2016-17)	IPM	Metarhizium anisoplea, <i>Lecanicillium lacani</i> , <i>Trichoderma</i>	12	3	225.2	204.3	214.7	184.5	16.37	--	--	76800	214700	137900	2.80	83400	184500	101100	2.21
Ridge gourd (Kharif-2017)	IPM	NAUROJI fruit fly trap, <i>Trichoderma</i> , <i>Becillus Thuriengensis</i>	7	2	368.3	428.6	395.3	340.8	15.99	--	--	140000	462000	322000	3.30	160000	408960	248960	2.56
Brinjal (Kharif-2017)	IPM	Pheromone trap, Leucinlure, <i>Trichoderma</i> , <i>Becillus Thuriengensis</i> , Spinosad	16	4	228.4	196.6	216.0	188.5	14.59	--	--	82500	259000	176700	3.14	85000	226200	141200	2.66
Okra-Hybrid-Rabi-2017	IPM	Pheromone Trap, Eruitlure, Spinosad, <i>Becillus Thuriengensis</i> , <i>Beaveria bassiana</i>	16	4	155.5	120.6	135.4	110.4	22.64	--	--	97100	406256	309156	4.18	101500	331200	229700	3.26
Sugarcane																			
Sugarcane-Co-13073 5072- Rabi-	ICM	Sets	7	1.5	--Continue--														

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)			% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)				
					Demo				Check	Demo	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					High	Low	Average												
2017-18																			
Cotton																			
Cotton (Kharif-2017)	IPM	Pheromone traps, Pectinolire, Trichoderma, <i>Becillus Thuriengensis</i> , Mencozeb 75% WP, Spinosad	10	4	18.4	14.0	15.8	12.4	27.41	--	--	29800	72680	42880	2.44	28500	61640	33140	2.16

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmers	No. of Units (Animals/Poultry/Birds, etc)	Major parameters		% change in major parameter	Major parameters		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Reduction in anoestrus period (days)			Dem on	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					Dem on	Check											
Goat	Disease Management	Triclabendazole Tablet as Anthelmintic	10	100	0.7	2.2	32.07			16000	25000	9000	1.56	15000	22500	7500	1.50
Buffalo	Nutrition management	Bypass fat @ 50 gm /day for 60 days (Oral route)	20	20	7.3	8.5	15.43			80.35	336.24	255.89	4.18	71.35	290.06	218.71	4.07
Buffalo	Fertility management	Garbhamin bolus, Clomilhen tabl	25	25	158	52	82.66			4666.16	7579.00	2912.84	1.62	12245.16	7579.00	-4666.16	0.62
Oat – Kent	Fodder Management	10 Kg Oat – Kent Seeds	15	15	7.3	8.5	15.43			80.35	336.24	255.89	4.18	71.35	290.06	218.71	4.07

FLD on Fisheries –Nil–

FLD on Other enterprises –Nil–

FLD on Women Empowerment –Nil--

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farm women	Area (ha)	Major parameters	Field observation (output/man hour)		% change in major parameter	Labor reduction (man days) (man-h/ha)				Cost reduction** (Rs./ha/day)	
						Demo	Check		Harvesting		Weeding		Labour	
									Demo	Check	Demo	Check	Demo	Check
Twin wheel hoe weeder*	Vegetables (Rabi: 2016-17)	Women drudgery reduction	50	-	-Field observation (ha/hr) -Labour requirement (Man hours/ha) -Cost of operation	0.014	0.0093	50.53	-	-	72	108	1602	2492
Okra plucker	Okra (Rabi: 2017-18)	Women drudgery reduction	100	-	-Field observation (ha/hr) -Labour requirement (Man hours/ha) -Cost of operation	--- Continue ---								
Twin wheel hoe weeder	Vegetables (Rabi: 2017-18)	Women drudgery reduction	50	-	-Field observation (ha/hr) -Labour requirement (Man hours/ha) -Cost of operation	--- Continue ---								

*Twin wheel hoe weeder is recommended by CIAE, Bhopal

**Cost of operation is calculated as per university labour wages

Technical Feedback on the demonstrated technologies

Sr. No.	Technical Feedback
1	Twin wheel hoe weeder reduces women drudgery in terms of time, efficiency and physical hazards.
2	During weeding, field capacity per farm woman is increased upto 50.53% by using Twin wheel hoe weeder as compared to local sickle.
3	Twin wheel hoe weeder saves 50% labour and 55.55% cost of operation as compared to local sickle.

Farmers' reactions on specific technologies

Sr. No.	Farmer's Feedback
1	Twin wheel hoe weeder increases working efficiency in short period of time i.e. time saving.
2	Twin wheel hoe weeder reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to local sickle.
3	Farm women like Twin wheel hoe weeder because it avoids the bending/squatting posture that is generally adopted in traditional method of weeding.

4	Additional benefit of earthing up with weeding by use of Twin wheel hoe weeder as compared to local sickle.
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FLD on Other Enterprise: Kitchen gardening (Late Kharif: 2017-18)

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farm women	No. of Units	Average Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./demon.)				Economics of check (Rs./demon.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					Seeds & seedlings of vegetables alongwith Vermicompost, Fruit fly trap & yellow sticky trap	Household food security by kitchen gardening		Organic Kitchen garden	20	20	92	49	87.75	-	-	550	2760

Area per Demonstration: 200 sq.ft.

Seeds & seedlings of vegetables and fruit crop: Tomato, Brinjal, Chilli, Cluster bean, Okra, Cow pea, Indian bean, Bottle gourd, Bitter gourd, Ridge gourd, Little gourd, Cucumber, Palakh, Fenugreek, Coriander, Turmeric, Beetroot

Technical Feedback on the demonstrated technologies

Sr. No.	Technical Feedback
1	To design kitchen garden for 5 to 6 family members, about 2000 square feet area is required to grow enough seasonal vegetables with fruit plants throughout the year.

Farmers' reactions on specific technologies

Sr. No.	Farmer's Feedback
1	Before Demonstration, tribal farm women were growing only three to four vegetable crops in their backyard but after demonstration they are growing different types of 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	Tribal farm women are not applying any chemical fertilizers and pesticides in kitchen garden, so they produce organic vegetables.

FLD on Demonstration details on crop hybrids --Nil--

3.4 Training Programmes

Farmers' Training including sponsored training programmes (On campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
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	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	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	1	58	0	58	0	0	0	58	0	58
Soil & water conservatiion	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl specify) PPV & FRA	1	0	0	0	3	57	60	3	57	60
Total	2	58	0	58	3	57	60	61	57	118
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	1	0	0	0	16	32	48	16	32	48
Nursery raising	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	2	0	0	0	63	53	116	63	53	116
Grading and standardization	0	0	0	0	0	0	0	0	0	0

Protective cultivation	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify) Organic Farming	1	0	0	0	2	52	54	2	52	54	
Total (a)	4	0	0	0	81	137	218	81	137	218	
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	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total (b)	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	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total (c)	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	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total (d)	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	

Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (e)	0	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	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (f)	0	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	0
Production and management technology	0	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (g)	0	0	0	0	0	0	0	0	0	0	0
GT (a-g)	4	0	0	0	81	137	218	81	137	218	
III Soil Health and Fertility Management											
Soil fertility management	0	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	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	0
Management of Problematic soils	0	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	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management											
Dairy Management	3	0	0	0	42	63	105	42	63	105	
Poultry Management	0	0	0	0	0	0	0	0	0	0	0

Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
Disease Management	0	0	0	0	0	0	0	0	0	0
Feed & fodder technology	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
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	42	63	105	42	63	105
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	2	18	20	2	18	20
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	2	0	0	0	34	19	53	34	19	53
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	7	0	17	17	18	164	182	18	181	199
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	2	0	0	0	3	87	90	3	87	90
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
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	12	0	17	17	57	288	345	57	305	362
VI Agril. Engineering										
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro	0	0	0	0	0	0	0	0	0	0

irrigation systems											
Use of Plastics in farming practices	0	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	0
Repair and maintenance of farm machinery and implements	0	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	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0
VII Plant Protection											
Integrated Pest Management	6	0	0	0	67	122	189	67	122	189	
Integrated Disease Management	0	0	0	0			0	0	0	0	
Bio-control of pests and diseases	2	0	0	0	28	45	73	28	45	73	
Production of bio control agents and bio pesticides	0	0	0	0			0	0	0	0	
Others (pl specify) Mushroom Cultivation	3	0	0	0	62	28	90	62	28	90	
Total	11	0	0	0	157	195	352	157	195	352	
VIII Fisheries											
Integrated fish farming	0	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	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	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	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	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	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	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	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	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	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	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	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	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	0
Group dynamics	0	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	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	0	0	0	0	50	50	0	50	50	
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify) Gender Sensitization	2	0	0	0	0	52	68	120	52	68	120

Total	3	0	0	0	52	118	170	52	118	170
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
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	35	58	17	75	392	858	1250	450	875	1325

Farmers' Training including sponsored training programmes (Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
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	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	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	1	0	0	0	15	4	19	15	4	19
Soil & water conservatiion	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	15	4	19	15	4	19
II Horticulture										
a) Vegetable Crops										

Production of low value and high valume crops	0	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	1	0	0	0	8	5	13	8	5	13	
Nursery raising	0	0	0	0	0	0	0	0	0	0	
Exotic vegetables	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	0	0	0	0	0	0	0	0	0	0	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total (a)	1	0	0	0	8	5	13	8	5	13	
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	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total (b)	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	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total (c)	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (d)	0	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	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (e)	0	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	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (f)	0	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	0
Production and management technology	0	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (g)	0	0	0	0	0	0	0	0	0	0	0
GT (a-g)	1	0	0	0	8	5	13	8	5	13	
III Soil Health and Fertility Management											
Soil fertility management	0	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	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	0
Management of Problematic soils	0	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	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0

Total	0	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management											
Dairy Management	0	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	1	0	0	0	23	7	30	23	7	30	
Disease Management	0	0	0	0	0	0	0	0	0	0	0
Feed & fodder technology	1	0	0	0	30	30	60	30	30	60	
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	53	37	90	53	37	90	
V Home Science/Women empowerment											
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	124	52	176	124	52	176	
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0	0
Processing and cooking	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0	0
Value addition	1	0	0	0	0	36	36	0	36	36	
Women empowerment	0	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	1	0	0	0	0	70	70	0	70	70	
Rural Crafts	0	0	0	0	0	0	0	0	0	0	0
Women and child care	1	0	0	0	0	28	28	0	28	28	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0

Total	4	0	0	0	124	186	310	124	186	310
VI Agril. Engineering										
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	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	0
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
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
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	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	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	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	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	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	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	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	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics											
Leadership development	1	0	0	0	30	30	60	30	30	60	60
Group dynamics	0	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	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0	0

WTO and IPR issues	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	30	30	60	30	30	30	60
XI Agro-forestry											
Production technologies	0	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	9	0	0	0	230	262	492	230	262	492	

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants									
		Others			SC/ST			Grand Total			
		Male	Female	Total	Male	Female	Total	Male	Female	Total	
I Crop Production											
Weed Management	0	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	0	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	2	58	0	58	15	4	19	73	4	77	
Soil & water conservatiion	0	0	0	0	0	0	0	0	0	0	
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0	
Production of organic inputs	0	0	0	0	0	0	0	0	0	0	
Others (pl specify)	1	0	0	0	3	57	60	3	57	60	
Total	3	58	0	58	18	61	79	76	61	137	
II Horticulture											

a) Vegetable Crops											
Production of low value and high valume crops	0	0	0	0	0	0	0	0	0	0	0
Off-season vegetables	2	0	0	0	24	37	61	24	37	61	
Nursery raising	0	0	0	0	0	0	0	0	0	0	0
Exotic vegetables	0	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	2	0	0	0	63	53	116	63	53	116	
Grading and standardization	0	0	0	0	0	0	0	0	0	0	0
Protective cultivation	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	1	0	0	0	2	52	54	2	52	54	
Total (a)	5	0	0	0	89	142	231	89	142	231	
b) Fruits											
Training and Pruning	0	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	0
Cultivation of Fruit	0	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	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0	0
Export potential fruits	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	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (b)	0	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	0
Management of potted plants	0	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	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (c)	0	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	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (d)	0	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	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (e)	0	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	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (f)	0	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	0
Production and management technology	0	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total (g)	0	0	0	0	0	0	0	0	0	0	0
GT (a-g)	5	0	0	0	89	142	231	89	142	231	
III Soil Health and Fertility Management											
Soil fertility management	0	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	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	0
Management of Problematic soils	0	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	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0	0

Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management											
Dairy Management	3	0	0	0	42	63	105	42	63	105	
Poultry Management	0	0	0	0	0	0	0	0	0	0	
Piggery Management	0	0	0	0	0	0	0	0	0	0	
Rabbit Management	0	0	0	0	0	0	0	0	0	0	
Animal Nutrition Management	1	0	0	0	23	7	30	23	7	30	
Disease Management	0	0	0	0	0	0	0	0	0	0	
Feed & fodder technology	1	0	0	0	30	30	60	30	30	60	
Production of quality animal products	0	0	0	0	0	0	0	0	0	0	
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	
Total	5	0	0	0	95	100	195	95	100	195	
V Home Science/Women empowerment											
Household food security by kitchen gardening and nutrition gardening	2	0	0	0	126	70	196	126	70	196	
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0	
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0	
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0	
Processing and cooking	0	0	0	0	0	0	0	0	0	0	
Gender mainstreaming through SHGs	2	0	0	0	34	19	53	34	19	53	
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0	
Value addition	8	0	17	17	18	200	218	18	217	235	
Women empowerment	0	0	0	0	0	0	0	0	0	0	
Location specific drudgery reduction technologies	3	0	0	0	3	157	160	3	157	160	
Rural Crafts	0	0	0	0	0	0	0	0	0	0	
Women and child care	1	0	0	0	0	28	28	0	28	28	

Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	16	0	17	17	181	474	655	181	491	672
VI Agril. Engineering										
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
Integrated Pest Management	6	0	0	0	67	122	189	67	122	189
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases	2	0	0	0	28	45	73	28	45	73
Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	3	0	0	0	62	28	90	62	28	90
Total	11	0	0	0	157	195	352	157	195	352
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	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	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	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	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	0
Planting material production	0	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	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	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	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	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics											
Leadership development	1	0	0	0	30	30	60	30	30	30	60
Group dynamics	0	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	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of	1	0	0	0	0	50	50	0	50	50	50

farmers/youths										
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	2	0	0	0	52	68	120	52	68	120
Total	4	0	0	0	82	148	230	82	148	230
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
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	44	58	17	75	622	1120	1742	680	1137	1817

Training for Rural Youths including sponsored training programmes (On campus)

Nursery Management of Horticulture crops	3	0	0	0	56	12	68	56	12	68
Training and pruning of orchards	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
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	2	0	0	0	102	44	146	102	44	146
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	2	0	0	0	60	6	66	60	6	66
Mushroom Production	5	0	0	0	63	68	131	63	68	131
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	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
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	0	0	0	9	11	20	9	11	20
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	1	0	0	0	0	30	30	0	30	30
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	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
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	14	0	0	0	290	171	461	290	171	461

Training for Rural Youths including sponsored training programmes (Off campus)

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
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
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
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	1	0	0	0	8	17	25	8	17	25
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0

Sericulture	0	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	0
Value addition	0	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	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	0
Dairying	0	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	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	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	8	17	25	8	17	25	

Training for Rural Youths including sponsored training programmes - CONSOLIDATED (On + Off campus)

Nursery Management of Horticulture crops	3	0	0	0	56	12	68	56	12	68	
Training and pruning of orchards	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	

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	2	0	0	0	102	44	146	102	44	146
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	3	0	0	0	68	23	91	68	23	91
Mushroom Production	5	0	0	0	63	68	131	63	68	131
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	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
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	1	0	0	0	9	11	20	9	11	20
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	1	0	0	0	0	30	30	0	30	30
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	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
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0

TOTAL	15	0	0	0	298	188	486	298	188	486
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Training programmes for Extension Personnel including sponsored training programmes (on campus)

Productivity enhancement in field crops	1	12	0	12	8	10	18	20	10	30
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
Production and use of organic inputs	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
Gender mainstreaming through SHGs	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
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	12	0	12	8	10	18	20	10	30
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
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	2	24	0	24	16	20	36	40	20	60

Training programmes for Extension Personnel including sponsored training programmes (off campus)

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	0
Protected cultivation technology	0	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	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	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	0
Women and Child care	0	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	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	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	0
Household food security	0	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0

Training programmes for Extension Personnel including sponsored training programmes – CONSOLIDATED (On + Off campus)

Productivity enhancement in field crops	1	12	0	12	8	10	18	20	10	30
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
Production and use of organic inputs	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
Gender mainstreaming through SHGs	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
Women and Child care	0	0	0	0	0	0	0	0	0	0

Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	1	12	0	12	8	10	18	20	10	30
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
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	2	24	0	24	16	20	36	40	20	60

Table. Sponsored training programmes

Area of training	No. of	No. of Participants								
	Courses	General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop production and management										
Increasing production and productivity of crops	0	0	0	0			0	0	0	0
Commercial production of vegetables	0	0	0	0			0	0	0	0
Production and value addition										
Fruit Plants	0	0	0	0	0	0	0	0	0	0
Ornamental plants	0	0	0	0	0	0	0	0	0	0
Spices crops	0	0	0	0	0	0	0	0	0	0
Soil health and fertility management	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site	6	0	0	0	203	149	352	203	149	352
Methods of protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (IPM and mushroom cultivation)	2	0	0	0	22	73	95	22	73	95
Total	8	0	0	0	225	222	447	225	222	447
Post harvest technology and value addition										
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Farm machinery										
Farm machinery, tools and implements	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Livestock and fisheries										
Livestock production and management	1	0	0	0	16	34	50	16	34	50
Animal Nutrition Management	0	0	0	0	0	0	0	0	0	0
Animal Disease Management	0	0	0	0	0	0	0	0	0	0
Fisheries Nutrition	0	0	0	0	0	0	0	0	0	0
Fisheries Management	0	0	0	0	0	0	0	0	0	0

Others (pl. specify) Feed Management	1	0	0	0	30	30	60	30	30	60
Total	2	0	0	0	46	64	110	46	64	110
Home Science										
Household nutritional security	0	0	0	0	0	0	0	0	0	0
Economic empowerment of women	0	0	0	0	0	0	0	0	0	0
Drudgery reduction of women	0	0	0	0	0	0	0	0	0	0
Others (pl. specify) Value Addition and Gender Sensitization	3	0	17	17	22	66	88	22	83	105
Total	3	0	17	17	22	66	88	22	83	105
Agricultural Extension										
Capacity Building and Group Dynamics	1	0	0	0	30	30	60	30	30	60
Others (pl. specify) Gender Sensitization	2	0	0	0	51	68	119	51	68	119
Total	3	0	0	0	81	98	179	81	98	179
GRAND TOTAL	16	0	17	17	374	450	824	374	467	841

Name of sponsoring agencies involved: ATMA-Tapi, ATMA-Dangs, Dikshin Guj.Vikas Sanstha-Kanpura, DAO-Tapi, FTC-Vyara, Gender Resource Centre-Ahmedabad, Gujarat Matikam Kalakari Ane Rural Technology, Bajipura

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Crop production and management										
Commercial floriculture	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Commercial vegetable production	3	0	0	0	56	12	68	56	12	68
Integrated crop management	0	0	0	0	0	0	0	0	0	0
Organic farming	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	56	12	68	56	12	68
Post harvest technology and value addition										
Value addition	0	0	0	0	0	0	0	0	0	0
Others (pl. specify) Small Scale Processing	1	0	0	0	9	11	20	9	11	20

Total	1	0	0	0	9	11	20	9	11	20
Livestock and fisheries										
Dairy farming	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Poultry farming	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Income generation activities										
Vermicomposting	0	0	0	0	0	0	0	0	0	0
Production of bio-agents, bio-pesticides, bio-fertilizers etc.	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
Rural Crafts	1	0	0	0	0	30	30	0	30	30
Seed production	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
Nursery, grafting etc.	0	0	0	0	0	0	0	0	0	0
Tailoring, stitching, embroidery, dying etc.	0	0	0	0	0	0	0	0	0	0
Agril. para-workers, para-vet training	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	30	30	0	30	30
Agricultural Extension										
Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	5	0	0	0	65	53	118	65	53	118

3.5 Extension Programmes

Activities	No. of programmes	No. of farmers			No. of Extension Personnel	TOTAL
		Male	Female	Total		
Advisory Services	666	349	492	841	0	841
Diagnostic visits	43	90	36	126	0	126
Field Day	20	391	714	1105	38	1143
Group discussions	61	1314	1845	3159	25	3184
Kisan Ghosthi	7	130	107	237	09	246
Film Show	34	583	1595	2178	13	2191
Self Help Groups	3	0	69	69	0	69
Kisan Mela	1	137	205	342	16	358
Exhibition	6	14072	22560	36632	184	36816
Scientists' visit to farmer's field	52	108	116	224	08	232
Plant health camps	63	86	04	90	0	90
Animal health camps	1	13	22	35	6	41
Farm Science Club	0	0	0	0	0	0
Ex-trainees Sammelan	7	4	208	212	07	219
Farmers' seminar/workshop	0	0	0	0	0	0
Method Demonstrations	80	1284	1566	2850	12	2862
Celebration of important days						
1. World Yoga Divas	1	10	25	35	02	37
2.VAN MAHOTSAV	1	30	02	32	03	35
3.World Environment Day	1	178	122	300	01	301
4.ICAR Foundation Day	1	06	64	70	0	70
5.International Adivasi Divas	1	40	110	150	14	164
6.World Honey Bee Day	1	74	117	191	05	196
7. Sankalp Se Sidhdhi under New India Manthan	1	38	958	996	19	1015
8. Swachha Bharat Pakhwada	1	388	406	794	15	809
9. ICAR-Farm Mechanization Day	1	49	54	103	01	104
Special day celebration	9			2671		
1.World Food Day	1	4	61	65	02	67
2. Mahila Kisan Divas	1	14	92	106	03	109
3. Agriculture Education Day	1	32	66	98	03	101
4. World Soil Day	1	50	46	96	07	103
5. Farmers' Day	1	25	140	165	04	169
6.International Women's Day	1	52	261	313	06	319
Exposure visits	3	26	10	36	00	36
TOTAL	1062	19577	32073	51650	403	52055
Others (pl. specify)						
Guest lecture	56	2787	7450	10237	112	10349
Farmer's visit to KVK	114	1048	1589	2521	78	2599
<i>Khedut shibir</i>	8	285	258	643	15	658
<i>Mahila shibir</i>	2	27	68	95	02	97
<i>Pashupalan shibir</i>	0	0	0	0	0	0
Farmers-Scientists Interaction	7	230	390	620	06	626
<i>Krishi Mahotsav</i> programme	0	0	0	0	0	0
Extension literature distributed	41	574	981	1555	23	1578
Total	228	4951	10736	15671	236	15907
GRAND TOTAL	1290					67962

Details of other extension programmes

Particulars	Number
Electronic Media (CD/DVD)	0
Extension Literature (Folder)	03
News paper coverage	28
Popular articles	14
Radio Talks	0
TV Talks	03
Animal health camps (Number of animals treated)	35
Others (pl. specify)	
Book chapter	09
Research papers	09
Research paper abstracts	09
Total	110

(Annexure –II is attached)

: Mega Event :**Farmers-Scientist Interaction**

Farmers-Scientists Interaction on “Productivity of Kharif crops” was organised at KVK-Tapi in collaboration with ATMA-Tapi on 21/07/2017. Shri Manoj Dakshini-DDO, Tapi and total 110 farmers were remained present.

Dr. P.D.Verma, Senior Scientist & Head given the importance of the programme. Shri P.R.Chaudhari, DAO-Tapi has given the lecture on kharif crops area and productivity in Tapi. Shri Manoj Dakshini-DDO, Tapi said that crop productivity is less due-to lack of knowledge. So, farmers should use the technical know-how given by the KVK scientists. He also emphasized on use of scientific cultivation practices of all crops. He gave the information about MNERGA Scheme.

Dr. M.R.Gami, Scientist (Crop Production) gave the lecture on “reasons for low productivity and how to overcome them”. Dr. P.K.Modi, Scientist (Horti.) gave the detailed information about scientific cultivation of horticultural crops. Dr. S.M.Chavan, Scientist (Plant Protection) said about the problems and control measures of crop production. At last, questions-answers session was also organised. Vote of thanks was given by Dt. C.D.Pandya, Scientist (Extension).

World Honey Bee Day celebration

'World Honey Bee Day' celebration was organized at KVK, Tapi in collaboration with ATMA, Tapi on August 19th, 2017 at KVK, Vyara. During the programme, different sessions viz., Importance of Honey bee in Agriculture and allied sciences, Apiculture technology etc. were organized. One session on Interaction with progressive farmer Shri. Ashokbhai Patel, Village-Soldhara, Dist. Navsari who involved in Apiculture was also arranged. During Programme method demonstration on identification of different castes of honey bees (worker, soldier, queen), care and maintenance of Honey Bee Hive, Installation of bee frame, Handling of bee frame with bees, honey extraction etc were also carried out. Total 150 farmers and farm women were actively participated.

Sankalp se Sidhhi Programme

The programme has inaugurated under the presence of MP & MLAs on 30/08/2017. Sankalp of doubling farmer income has been taken by all the farmers a part of New India Manthan. Technical informations have been delivered by experts to farmers. Dr. C. J. Dangaria was presided the programme. Shri Prabhubhai Vasava, Hon'ble M.P-23 Bardoli, Shri Kantibhai Gamit, Hon'ble MLA-Nizar, Shri Mohanbhai Dhodiya, Hon'ble MLA-Valod, Collector-Tapi, DDO-Tapi, DRDA Director, Deputy Director-Horticulture-Tapi, Deputy Director-Animal Husbandry-Tapi, DAO-Tapi were remained present.

Ex-trainee Sammelan

KVK, Tapi has organised ex-trainee sammelan on dated 6th Oct.'17 regarding skill development training on 'preparation of decorative articles from coconut fibres, preparation of doormats and Eco-friendly bag making'. Senior Scientist and Scientist (Home Science) delivered the lecture on 'entrepreneurial activities for women empowerment'. Shri. Harshadbhai Trivedi, Centre in-charge and all technical staff, Gujarat Matikam Kalakari Ane Rural Technology Institute, Govt. of Gujarat, Bajipura centre were remain present and gave valuable guidance. Total 65 tribal farm women were actively participated in programme. In addition, training kit like sewing machine with accessories and doormate frame were distributed to 60 trainees by all Scientists and dignitaries.

Celebration of 'World Food Day'

KVK, Tapi has celebrated 'World Food Day' (16th October) at KVK campus on 6th Oct.'17. Senior Scientist and Scientist (Home Science) delivered the lecture on 'importance of World Food day and scientific storage of food grain'. Shri. Harshadbhai Trivedi, Centre in-charge and all technical staff, Gujarat Matikam Kalakari Ane Rural Technology Institute, Govt. of Gujarat, Bajipura centre were remain present and gave valuable guidance to all participants in the programme. Total 65 tribal farm women were actively participated in programme.

Celebration of 'MAHILA KISAAN DIVAS'

Krishi Vigyan Kendra, Tapi has celebrated 'MAHILA KISAAN DIVAS' on 15th October, 2017 at KVK campus, Vyara. Senior Scientist & head and all scientists of KVK, Tapi gave the technical guidance on 'Importance of MAHILA KISAAN DIVAS and Role of women in Agriculture'. Total 106 tribal farm women and tribal farmers of Tapi district were actively participated in the programme. In addition, Debate competition was also organized for tribal farm women. Theme of Debate competition was 'Role of women in Agriculture'. Total 11 tribal farm women were participated in competition. Lastly, Twin wheel hoe weeders as prize were given to three tribal women and also two books in local language namely

‘MULYAVARDHAN DWARA MAHILAONO UDYOG SAHASIKATA VIKAS and BAL AAROGYA ANE POSHAN’ were also distributed to all the participants as appreciation.

Agriculture Education Day

The celebration of "Agriculture Education Day" was celebrated at KVK-Tapi on 4th December, 2017. Total 98 students from Shri J.B. & S.A. Sarvajanik High School and Shri Dakshinapath Vividhlakshi High School- Vyara were actively participated. Shri Ashok Patel, District Education Officer-Tapi, 5 teachers from both school and Smt. Lilaben Gamit, Progressive Farmer, Village-Bedi, Taluka-Songadh were remained present. Dr. C. D. Pandya, Scientist (Extension) has given the importance of the programme. Dr. P. D. Verma, Senior Scientist & Head welcomed all the participants and dignitaries. Dr. P. K. Modi, Scientist (Horticulture) gave the information about tissue culture, green house, propagation methods in horticultural crops. The programme was ended with vote of thanks given by Dr. C. D. Pandya, Scientist (Extension).

World Soil Day

KVK-Tapi has celebrated "World Soil Day" at training hall KVK-Vyara on 5th December, 2017. One day seminar on "Management of Soil fertility" was organized. Dr. P.D.Verma, Seniro Scientist & Head has welcomed the dignitaries. Dr. C. D. Pandya, Scientist (Extension) has explained the importance of the programme. Shri C. K. Sonvane-CCF-Surat Circle, Dr. G. R. Patel has given the detailed guidance about the forest and soil health respectively. Total 53 Soil Health Cards were distributed. Question Answer session was also organized. Dr. G. R. Patel, DEE, NAU, Navsari has presided the function. CCF-Surat circle, DCF-Tapi, DFO-Tapi & Surat and RFO-Tapi, 52 Foresters and 44 farmers of Tapi district were remained present. Vote of Thanks was given by Dr. C.D.Pandya.

Celebration of ‘International Women’s Day’

KVK, Tapi has celebrated ‘International Women’s day’ on 8th March’2018 at Arts and Commerce College, Vyara. Total 313 farmers, farm women, college students and professors were actively participated in programme. The theme of the programme was ‘**Role of women in doubling the farmer’s income**’. Senior Scientist and Scientist (Home Science) delivered the technical lecture on 'importance of International Women’s day and role of farm women in doubling the farmer’s income’. Shri. Arunaben, Brahmakumaries, Vyara and Principal, Arts and Commerce college, Vyara were remain present and gave valuable guidance to all participants in the programme. Smt.Ramilaben Gamit, village: Taparvada (Award winner (2017)- ‘*SWACHCHHA SHAKTI RASHTRIYA AWARD*’ and Smt.Induben Gamit, village: Kapura (leader of *MAHILA SANGATHAN*) gave own feedback in said programme. Lastly, members of ‘JEEVANDEEP AADIVASI MAHILA BACHAT ANE DHIRAN SAHAKARI MANDALI’, Bardipada and SHG members of Degama village were presented different types of tribal dance in programme.

3.6 PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs.)	Number of farmers
Cereals	Paddy (Summer-17)	Gurjari	--	49	138700	49
		Jaya	--	52	144500	14
	Paddy (Kharif-17)	Gurjari	--	31.50	35040	14
		GAR-13	--	21.7	0	--

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs.)	Number of farmers
Cereals	Paddy (Summer-17)	Gurjari	--	49	138700	49
		Jaya	--	52	144500	14
		GNR-3	-	15.25	44530	32
		Jaya	-	29.40	29200	--
		GNR-6	-	10.50	0	
		NAUR-1	-	20.30	0	
Oilseeds	-	-	-	-	-	-
Pulses	Green Gram (Summer-16-17)	Meha	-	4.5	39690	
	Green Gram (Rabi-Summer-16-17)	Co-4	-	4.5	40500	
Commercial crops	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	-	-	-	-	-	-
Total				238.65	472160	109

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial	-	-	-	-	-	-
Fruits & Vegetable seedlings	Brinjal	Sungrow-143,MAHY-Neelam		43436	32577	205
	Tomato	Arka Rakshak, Abhinav		25270	25270	212
	Chilli	VNR-22		3650	3450	171
	Bittergourd	Nunhemp-Racer and Sungrow-Vivek		15061	60276	158
	Bottle gourd	Nunhemp-Alokik		1256	4393	158
	Cauliflower	Hybrid		160	160	4
	Ridge gourd	Mahy-7		1132	3962	154
	Drumstick			98	1470	21

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
	Cucumber	Deshi-Naylon		130	395	22
	Pointed gourd	GNPG-1		280	2800	4
	Little gourd	GNLG-1		6750	67500	255
	Papaya			60	600	20
	Brocoli			6670	6670	7
	Mango	Sonpari-Approach Grafting		200	11500	50
		Kesar-Approach Grafting		400	44000	50
		Rajapuri-Approach Grafting		50	5500	50
		Dasheri-Approach Grafting		50	5500	50
		Softwood Grafting		107	3745	7
	Total			104760	279768	1598
Ornamental plants						
Medicinal and Aromatic	-	-	-	-	-	-
Plantation	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	-	-	-	-	-	-
Total				104760	279768	1598

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers	<i>Azotobactor</i>	120 lit	14400	168
	Posphorus Solubilizing Bacteria	120 lit	14400	166
	Potash Mobilizing Bacteria	105 lit	12600	163
	Novel Organic banana sap	694 lit.	78520	461
Bio-pesticide	Pseudomonas	37 lit	2590	36
Bio-fungicide	-	-	0	0
Bio Agents	-	-	0	0
Others	Vermicompost	12371 Kg		162

Total	122510	1156
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Table: Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Cows	-	-	-	-
Buffaloes	-	-	-	-
Calves	-	-	-	-
Others (Pl. specify)	-	-	-	-
Poultry				
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-
Emu	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
Piggery				
Piglet	-	-	-	-
Others (Pl. specify)	-	-	-	-
Fisheries				
Indian carp	-	-	-	-
Exotic carp	-	-	-	-
Total	-	-	-	-

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers-09			
Technical reports-22			
News letters- 00			
Technical bulletins-0			
Popular articles-14			
Extension literature (Folder)-03			
Others (Pl. specify)			
Research paper abstracts-09			
Book chapter-09			
Newspaper coverage-28			
TOTAL	94		

Note: Details of Publications are given in *Annexure-II*

C. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
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D. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

SUCCESS STORIES:

Name of KVK: Tapi, Gujarat

1. Profitability through oilseed crop-Groundnut

Situation Analysis

Area of oilseeds in India during the year-2015-16 was 38379.23(000 ha) with total production of 55255.79 (000 MT). Among the oilseed crops, the area of groundnut was 4506.33 (000 ha) with total production of 6733.33 (000 MT) and productivity was 1465 kg/ha. Groundnut has the lion's share of Gujarat's oil seed production. During the year, 2016-17 was across an area of 34.87 lakh hectare which was slightly higher than the current average sowing area. In Tapi district, the area of summer groundnut was 3807 ha during the year, 2016-17 with productivity of 1750 kg/ha. In Tapi district, most of the area is covered under *Rabi* pulses. When KVK started working with these villages, the farmers of these villages were growing *Rabi* pulses but not groundnut. So, KVK has organized FLD in Dolara, Zankhari, Nani Chikhali, Bedi, Lakhali, Kaher, Dhat, Bardipada, Jamaliya, Mohini, Panvadi, Dolvan villages in Tapi district.

Technology, Implementation and Support

The KVK-Tapi had organized FLDs on "ICM in groundnut" in these villages in 20 ha area covering 50 farmers. The farmers were provided the improved seeds of TAG-37 A along with liquid bio-fertilizers *rhizobium* and PSB. The farmers were trained about packages of practices and application of critical inputs. The KVK scientists monitored the demonstration plots regularly and issued advisories to the farmers. The extension activities like on campus training, field visit, field day were also organized.

Uptake, spread and Benefits

The performance of TAG-37 A variety of groundnut along with other components were found good and yield of demonstration was 20.5 q/ha as compared to local check i.e. 13.2 q/ha. This resulted in net return of Rs. 56,859/- in demonstration plot as compared to local check i.e. Rs. 38,000/-. The yield of improved variety was 37.04 per cent higher than local check. Looking into possible demand in future, scientists advised the villagers to keep the seeds of this variety to supply to other farmers.

This intervention not only fetches good income and quality but also made seeds locally available to to make the crop more popular in these villages in *rabi-summer* crop. After seeing the performance of this crop in these villages, 75 farmers of nearby villages of those villages convinced to adopt groundnut cultivation in the next season. They really enjoy the profit of selling of groundnut with the support of KVK-Tapi.

2. Improved Varieties of Rice: A viable option to fight against famine in tribal area

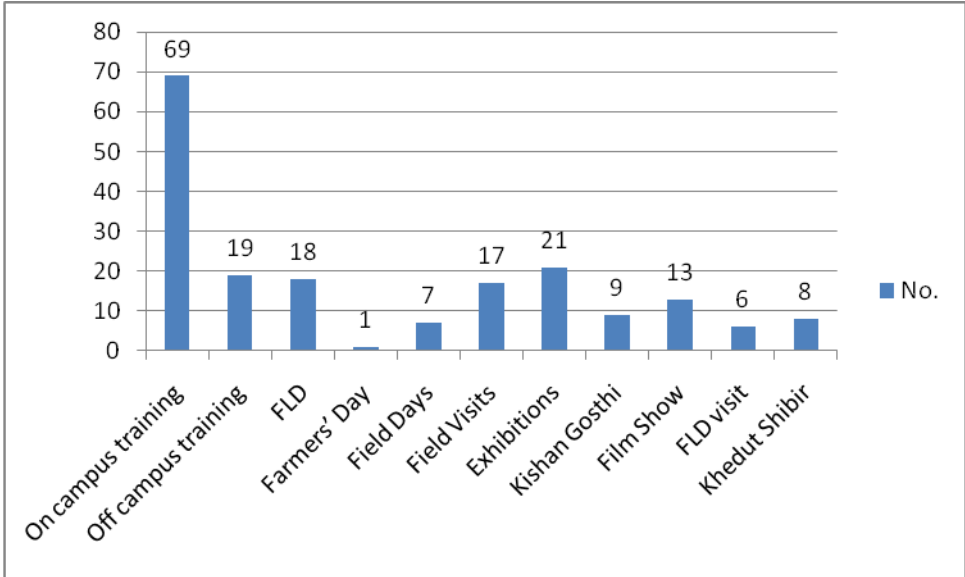
Situation Analysis

The ‘Green Revolution’ is the name given to the dramatic increase in cereal crop yields through modern agricultural inputs – irrigation, fertilizers, improved seeds, and pesticides – in the 1960s. For rice, the revolution began with the release by IRRI of the high- yielding semi dwarf variety IR8 in 1966. The world average rice yield in 1960, the product of thousands of years of experience, was about 2 t/ha. Astonishingly, in mere 40 years, as the Green Revolution spread, it doubled, reaching 4 t/ha in 2000. Global rice production more than tripled between 1961 and 2010, with a compound growth rate of 2.24% per year (2.21% in rice- producing Asia). The production of *Kharif* rice in India during the year 2014-15 was 91.39 million tonnes. The rice varieties and technologies developed during the Green Revolution have increased yields in some areas to 6–10 t/ha.

The western tribal hilly region of Gujarat including Tapi, Surat and Dang districts, where traditional agriculture is characterized with age old cropping system mainly mono cropping which reflects the low productivity of various crops. The rainfed crops grown by the tribal farmers are drilled paddy, sorghum, pigeon pea and other pulses either single crop, mixed or intercrops. Paddy is the dominated crop in the area as rice is the staple food in the region. In Tapi district, the total acreage of rice is about one-third of total cultivation with a productivity of 18 qtl/ha drilled paddy and 28 qtl/ha transplanted paddy is low as compared to untapped yield potential. It has been observed that introduction of suitable improved varieties is still lacking in the area.

Technology, Implementation and Support

In view of the above situation, Krishi Vigyan Kendra decided to organise Front Line Demonstrations in adopted villages of Tapi district. There were six varieties *namely* NAUR-1, GNR-3, GAR-13, GR-7, IR-28, Gurjari selected under FLDs from the year 2012-13 to 2016-17. The farmers’ preferred varieties like *improved & hybrid* were considered as check plots to compare the yield potential of variety under FLDs. These demonstrations were organised in an area of 85 ha. with the involvement of 305 farmers. The selected farmers were trained for the scientific cultivation of paddy prior to conduct the FLD. As in tribal areas, the technical know -how of the farmers was very low. Therefore, it was decided to conduct method demonstration about the scientific nursery raising and simultaneously other concepts were included time to time in the training and other activities. Besides, regular visit of farmers’ field were also arranged. The detailed information on activities carried out by KVK Tapi and support in building farmers’ skills in adoption of these varieties are shown below.



Uptake, Spread and Benefits

The yield of these varieties in demonstrated plots were 28.5 to 59.23 q/ha compared to local check i.e. 20.60 to 47.75 q/ha from the year 2012-13 to 2016-17. However, the highest yield was observed in NAUR-1 (59.23 qtl/ha) followed by 58.00 qtl in GNR-3. It was interesting to note that our old variety namely IR-28 and Gurjari also performed well (about 51.00 qtl/ha) which clearly indicated the superiority and suitability of not only new released variety but also the old varieties i.e. IR-28 and Gurjari still very much preferred by the farmers of Tapi district. The CBR was also higher .It was in the tune of 1:1.53 to 1:4.55 in demonstrated plots during those year as compared 1:1.24 to 1:1.64 local check. As a result, these varieties horizontally spread in 447 villages covering 2201 farmers in 1313 ha during these years. The farmers were benefitted economically as the cost of seed was reduced by using the improved seed. Simultaneously, farmers fetched more prices in the market as compared to hybrid variety. Not only that, farmers became aware about the characteristics of hybrid seed and the improved varieties which demonstrated under the FLDs. This information stopped farmers to reuse their own field hybrid seeds. The encouraging results of that varieties lead to motivate the farmers to reduce their dependency on agro dealers about improved seeds. The farmers are also using other scientific methods in paddy cultivation *like* INM and IPM as they all are regularly associated with KVK. Not only that, farmers observed few specific characters of the varieties in the form of feedback as: infestation of stem borer was low in all the varieties, new variety of Paddy NAUR-1 also good in eating and making **Rotla purpose**, required less water and having early maturity, higher fodder yield as compared to local variety; GNR-3 is preferred for *POUWA* purpose, *GAR-13 is preferred for eating purpose*. In nutshell, the tribal farmers have become aware about the quality of rice as compared to hybrid varieties for both purpose i.e. eating and marketing.

3. Successful Women Entrepreneur in Mushroom cultivation

1	Name	Kamlaben Dilipbhai Gamit
2	Address	Village -Mandal, Block: Songadh, <i>Faliu</i> : Savar
3	Education	11 th Pass
4	Mobile No.	9898625123
5	Age	42
6	Total land	5 bigha
7	Crops Cultivated	Paddy, Sugarcane, Ground nut, Brinjal
8	Situation analysis/Problem statement:	Mushrooms can play an important role in contributing to the livelihoods of rural & peri-urban dwellers, through food security & income generation. Mushroom cultivation can represent a valuable small-scale enterprise option This post is about a simple village woman, Kamlaben D. Gamit, of Mandal village (Block Songadh) in Tapi district. She was just a farm women support to his family in earning, but today she is a successful farmer . She was just a housewife but when she turned to mushroom farming after she was taught the skill from Krishi Vigyan Kendra, Vyara, she made it. Her success brought her recognition.
9	Plan, Implement and Support:	KVK, Vyara took up a Training programme on oyster mushroom cultivation and production unit. As mushroom cultivation doesn't require access to land the KVK, Vyara exhibited a lot of interest during the trainings. Description of Technology Use of quality spawn, specific method of substrate sterilization and mushroom bed preparation, harvesting techniques Dissemination process Training, method demonstration, establishment of small scale mushroom production unit, monitoring & feedback She decided to initiate the mushroom cultivation at available

		resources/low cost. She prepared mushroom house (size: 15' x10'x10') with the help of local resources viz., bamboo stick, gunny bags etc. All the inputs viz., spawn (mushroom seed), polythene bags, seeds and chemicals (Carbendazim & formalin) were supplied by KVK, Vyara. Follow up visit, diagnostic visit was also made by Scientist (Plant Protection).
10	Outcomes:	She had invested Rs.6345.00 for preparation of mushrooms which yielded her 50 kg fresh oyster mushroom from 15 kg spawn. For market she already contacted with the persons who are in search of mushroom. For that she contacted with the societies in Vyara city and started to supply there. Moreover, one farmer also helps her for selling mushroom at villages. She sold out 15 kg mushroom @ Rs. 320/- per kg and 35 kg mushroom @ Rs.400/- per kg. Finally she got net profit of Rs. 12455.
11	Impact:	Her earnest effort to promote mushroom cultivation as a livelihood activity among the people in tribal belt of Tapi district of South Gujarat is motivation for many people in Gujarat state. Mrs. Kamlaben also trained 25 neighboring farm women. Now, she is confident to cultivate mushroom her selves Other neighboring farmers also visited to her mushroom unit. She also feels delighted when other farmers in the area visit their home to see their endeavor.

SN	Cost of Cultivation (Rs.)		Total Production	Gross Income	Net Income
A	Non recurring expenditure				
1	Mushroom house (bamboo for making racks, gunny bags)	1500	50 kg	18800 (15 kg Rs.320/kg) & 35 kg Rs. 400/kg	12455
2	Tubs and drums	600			
	Total	2100			
B	Recurring expenditure (cost of raw material)				
1	Paddy straw	1025			
2	Polythene bags no.15 (20"x48") (Rs.20 per bag)	300			
3	Spawn	1800			
4	Formaline	500			
5	Carbendazim	120			
6	Other	500			
7	Total	4245			
	Total Production cost (A+B)	6345			

4. Successful Women Entrepreneur in Mushroom cultivation

1	Name	Anjanaben Nileshbhai Gamit
2	Address:	Village:Nani Chikhali, Block: Vyara
3	Education	Diploma (Civil Engineering)
4	Mobile no.	9898916768
5	Age	31
6	Total land	6 bigha
7	Crops Cultivated	Sugarcane, Brinjal, Mango, Watermelon

8	Situation analysis/Problem statement:	Smt. Anjanaben Gamit, a Diplomatic Civil Engineer, and building/construction is her occupation. She is extremely talented, hard worker & skilled lady. She wanted to do something on her own. She wanted to be independent and carve out and identify for herself. Mushrooms can play an important role in contributing to the livelihoods of rural & peri-urban dwellers, through food security & income generation. Mushroom cultivation can represent a valuable small-scale enterprise option. Consequently, Anjanaben read a popular article entitled-Cultivation technology of Oyster Mushroom” published in <i>Agro Sandesh</i> by KVK, Vyara. Immediately she visited to KVK, Vyara regarding training about mushroom cultivation and joining KVK, proved to be a boon for her.
10	Plan, Implement and Support:	<p>KVK, Vyara took up a Training programme on oyster mushroom cultivation and production unit. As mushroom cultivation doesn't require access to land the KVK, Vyara exhibited a lot of interest during the trainings.</p> <p>Description of Technology Use of quality spawn, specific method of substrate sterilization and mushroom bed preparation, harvesting techniques</p> <p>Dissemination process Training, method demonstration, establishment of small scale mushroom production unit, monitoring & feedback</p> <p>She joined 4 days skill development training and decided to initiate the mushroom cultivation at available resources/low cost. Consequently, near his home there is parking shed for vehicle and she decided to do mushroom production at small scale in this parking shed. KVK, Vyara has chaff cutter demonstration unit and also supported him for cutting of paddy straw.</p> <p>All the inputs viz., spawn (mushroom seed), polythene bags, seeds and chemicals (Carbendazim & formalin) were supplied by KVK, Vyara. Follow up visit, diagnostic visit was also made by Scientist (Plant Protection).</p>
11	Outcomes:	She had invested Rs.11040.00 for preparation of mushrooms which yielded her 140 kg fresh oyster mushroom from 30 kg spawn. For market she already contacted with the persons who are in search of mushroom. For that she contacted with the societies in Vyara city and started to supply there. Moreover, one farmer also helps her for selling mushroom at villages. She got Rs. 200/- per kg. Finally she got net profit of Rs. 16960 in 2.5 months.
12	Impact:	Now, she is confident to cultivate mushroom her selves and she is became a role model to other women in the village as well as other village. Other neighboring farmers also visited to her mushroom unit. She also feels delighted when other farmers in the area visit their home to see their endeavor.

SN	Cost of Cultivation (Rs.)	Total Production	Gross Income	Net Income
A	Non recurring expenditure			
1	Mushroom house (bamboo for making racks, gunny bags)	2500	140 kg 28000 (Rs.200/kg)	16960
2	Spray pump	2000		

3	Tubs and drums	600			
	Total	5100			
B	Recurring expenditure (cost of raw material)				
1	Paddy straw	800			
2	Sugarcane Bagas	300			
3	Polythene bags (Rs.4 per bag)	420			
4	Spawn	2900			
5	Formaline	520			
6	Carbendazim	200			
7	Other	800			
8	Total	5940			
	Total Production cost (A+B)	11040			

CASE STUDIES:

Name of KVK: Tapi, Gujarat

1. Front Line demonstration (ICM) on new variety of Indian bean cv. NPS-1 (GNIB-21)

This variety of Indian bean demonstrates on total 47 farmer's field of Dolvan, Songarh, Vyara and Uchchal block of Tapi district under KVK B.H. 2704-1 (ICAR). By this technology farmers get higher yield as well as good quality as compare to Katargam Papdi. In NPS-1 (GNIB-21) variety started yield 45-50 days after planting and continues flowers and pods produced on that. From this variety farmers taking price in the market maximum Rs. 1100/ 20 kg and minimum Rs. 600/ 20kg. Only from 1 kg of seeds of this variety some farmers get Rs. 20,000 only in three month (area 0.05 ha) and till now crop in standing in good condition. As per view of farmers that's variety will give more yield but due to *Ookhi Tufan* and Rainfall crop physiology is disturb and reduce the yield but now crop standing in well condition.

2. Mushroom Cultivation- A Low cost enterprise adopted by tribal people in Tapi district

Situation analysis/Problem statement:

Diversification in any farming system imparts sustainability. Mushrooms are one such component that not only impart diversification but also help in addressing the problems of quality food, health and environment related issues. One of the major areas that can contribute towards goal of conservation of natural resources as well as increased productivity is recycling of agro-wastes including agro industrial waste. Paddy is the major food grain crop in India as well as in Gujarat. So, large amount of paddy straw has also been produced. During PRA survey it was found that, farmer's mainly using paddy straw as food for animals. Utilizing these wastes for growing mushrooms can enhance income and impart higher level of sustainability in this region as well as in whole country.

The demand is good and the conditions for growing mushroom, including weather, are ideal but the number of persons engaged in the cultivation of mushroom is very few. This has become a source of concern to farm observers in general and horticulturists in particular here. Experts are of the view that the South Gujarat is one of the best places in India for the cultivation of *Pleurotas sajor-kaju*, popularly known as the Oyster mushroom. Pointing out that the Oyster mushroom was the most popular variety all over the world. The two major requirements for mushroom cultivation are paddy/wheat straw and spawn and if proper care is taken in their preparation one could be more or less certain of achieving optimum yields with financially satisfying results.

Plan, Implement and Support:

By considering the present situation, Krishi Vigyan Kendra, Vyara have been made an effort to disseminate mushroom cultivation technology through various extension activities in different villages of Tapi district. Scientist (Plant Protection) gave technical guidance through training programmes (on/off) to increase awareness about “**Mushroom cultivation**” among farmers. During training programme, he mainly gave emphasis on judicious use of paddy straw to sustain productivity, scope of mushroom cultivation in Gujarat etc. Film show on mushroom cultivation technology (oyster, milky and button), success stories of mushroom growers were also carried out. Method demonstration on selection of paddy straw, cutting of paddy straw and sterilization of paddy straw were carried out during training. Demonstration unit of Mushroom cultivation was also established at KVK, Vyara. After acquiring training from KVK, Vyara, the kit consisting of mushroom spawn, sterilizing chemical-formalin, fungicide-Carbendazim were also supplied to interested trainees. About 280 kg spawn, 50 lit formalin were supplied to farmers by KVK. Constant follow up visits to farmer’s cultivation unit have been conducted.

Initially, farmers were hesitating in adopting this technology due to non-availability of market. But with constant encouragement, Scientists (Plant Protection) is successful in building up confidence in them.

Table 1: Details of extension activities concern to mushroom cultivation in Tribal belt of Tapi district

SN	Activity	No.	Participants
1	Training Programmes	08	201
2	Method demonstrations	16	280
3	Film show	22	223
4	Farmers visit to Demonstration Unit at KVK	31	283
5	Diagnostic visit	04	04
6	Follow up visit (field visit & Scientist visit to farmers field)	05	26

Table 2: Training evaluation of the participants

Sr. No.	Date of Training	Participants	Pre-training evaluation	Post training evaluation
1	12-15/04/2017	30	34.70	80.58
2	18-21/04/2017	27	49.47	79.38
3	17-18/07/2017	47	37.8	85.50
4	19-22/09/2017	22	48.0	93.75
5	26-29/09/2017	22	35	73.12
6	16-17/01/2018	33	47.14	90.71
7	26-27/02/2018	20	66.66	90.0

Table:3 Details of mushroom kit supplied to farmers

SN	Mushroom kit (Inputs)	Quantity
1	Mushroom spawn	280 kg
2	Formalin	50 lit
3	Carbendazim	4 kg
4	Plastic bags	1040

Output:

Total 201 farmers, farm women and rural youths were trained for mushroom cultivation. Sixteen method demonstration viz. paddy straw cutting of and its sterilization, plastic bag filling with sterilized paddy straw and inoculation of spawn (mushroom seed); pre and post practices of care and maintenance during cultivation were also carried out during each training programme. Total 22 films viz., scope of mushroom cultivation in Gujarat, introduction of the apex institute-Project Directorate on Mushroom, Scientific cultivation of oyster, milky and button mushroom technology, success stories of mushroom growers etc were showed during training programmes. Two hundred and eighty three farmers (including ATMA, different NGO's) were visited to mushroom demonstration unit at KVK.

Outcome:

About 53 farmers were started to grow mushroom for their own consumption and also for commercial. Local marketing channel were established by grower themselves at village level. Rs. 200 to 400 per kg of mushroom is the selling price at village level.

Table:4 Horizontal Spread of Mushroom cultivation technology

Year	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology	
			No. of villages	No. of farmers
2017-18	Mushroom cultivation	Training, Diagnostic visit, Field visit, Method demonstrations, Film show, supply of mushroom growing kit	27	335

Impact:

All the farmers visited to demonstration unit at KVK, have got an idea about feasibility of mushroom cultivation technology in Tapi district. By the principle '*Seeing is Believing*', most of the farmers adopt this technology without any hesitation. **By the co-operation of mushroom growers at village level** this technology was spreads horizontally over 27 villages, wherein 335 farmers were get benefitted with this technology.

Annexure I: Details Of Farmers Started Growing Mushroom

SN	Name Of Farmer	Village	Block	Mobile No.	Spawn used (Kg)
1	Sureshchandra Mana Chaudhari	Vyara	Vyara	9427586822	5
2	Vatsalkumar Konkani	Degama	Valod	7698897979	5
3	Mukeshbhai Chaudhari	Golan	Vyara	9537232336	4
4	Rameshbhai Motilal Gamit	Ghodchit	Songadh	7874465283	11
5	Kiranbhai Babubhai Chaudhari	Dolvan	Dolvan	9724794922	1
6	Shaileshbhai Chaudhari	Chikhli	Vyara	9638072320	2
7	Chiragbhai Chaudhari	Vyara	Vyara	9624481567	2
8	Sundarben Gamit	Dhat	Vyara	8141250277	5
9	Pinakinbhai B Chaudhari	Golan	Vyara	9925717637	1
10	Vatsalkumar Konkani	Degama	Valod	7698897979	5
11	Mehulbhai Chaudhari	Vyara	Vyara	9879591986	11
12	Thaganyabhai Gamit	Amalgundi	Vyara	-	2

SN	Name Of Farmer	Village	Block	Mobile No.	Spawn used (Kg)
13	Mitulkumar Yogesh Chaudhari	Haldawa	Songadh	8469188849	4
14	Rameshbhai Motilal Gamit	Ghodchit	Songadh	7874465283	5
15	Minaben Gamit	Khodtalav	Songadh	8758950667	5
16	Laksubhai Ukhediyabhai Konkani	Karanjkhed	Dolvan	9925674836	14
17	Dipeshbhai Vinodbhai Chaudhari	Regankachh	Dolvan	8238166563	5
18	Bhavinbhai Mistri	Surat	Surat	9924067998	20
19	Anjanaben Gamit	Nanichikhali	Vyara	9898916768	23
20	Chimubhai Patel	Dudiya	Chorasi Surat	9879652599	5
21	Navlinben Gamit	Tokarva	Songadh	9979581423	5
22	Tejas Jadhav	Navsari	Navsari	9426592994	1
23	Sunilbhai Jagubhai Gamit	Ghodchit	Songadh	9638698206	1
24	Dipakbhai V Gamit	Nanichikhali	Vyara	8320368593	15
25	Sunitaben Navinbhai Gamit	Tokarva	Songadh	8758505442	10
26	Kanubhai Konkani	Karanjkhed	Dolvan	9714223349	5
27	Rajeshbhai Chaudhari	Ucchamala	Vyara	8000898202	1
28	Ishvarbhai Patel	Surat	Surat	9586853576	5
29	Mohammad Ushan Farukhbhai	Veraval	Somnath	9979350413	1
30	Ishvarbhai Gamit	Zankhari	Vyara	9726006645	15
31	Kamalaben Gamit	Mandal	Vyara	9898625123	7
32	Niteshbhai Konkani	Karanjkhed	Dolvan	9712368659	10
33	Lalgibhai R Konkani	Karanjkhed	Dolvan	9924598083	10
34	Lalsingh Vanjibhai Chaudhari	Ucchamala	Vyara	9426697485	1
35	Shashikant J Chaudhari	Ucchamala	Vyara	7698756670	1
36	Hetalben Manij Gamit	Dhat	Vyara	8141230187	2
37	Sangitaben Sureshbhai Vasava	Nindvada	Songadh	7874854104	1
38	Sumitraben Ganeshbhai Gamit	Kukadzar	Songadh	-	6
39	Arunaben Rajesh Gamit	Kukadzar	Songadh	9913027283	5
40	Limbuben Jayeshbhai Gamit	Kukadzar	Songadh	9727593004	1
41	Lalitaben Manubhai Gamit	Kukadzar	Songadh	-	1
42	Ranjanben Vinodbhai Gamit	Kukadzar	Songadh	-	1
43	Suvaraben Dhulgi Gamit	Kukadzar	Songadh	-	1
44	Emuben Sajyabhai Gamit	Kukadzar	Songadh	-	1
45	Jesintaben Sanjaybhai Gamit	Kukadzar	Songadh	9913313019	5
46	Kajalben Ravjibhai Gamit	Kukadzar	Songadh	8758328953	2
47	Subhashbhai Kanjibhai Gamit	Zarali	Songadh	9638032973	2
48	Navneetbhai Chaudhari	Vyara	Vyara	7874699232	1
49	Dhirubhai J Konkani	Karanjkhed	Dolvan	-	2
50	Pravin Konkani	Karanjkhed	Dolvan	-	13
51	Yogeshkumar Lalgibhai Konkani	Karanjkhed	Dolvan	9558393585	10
52	Rajeshbhai Samabhai Gamit	Kukadzar	Songadh	9913232451	2

3. Entrepreneurship development of tribal farm woman through preparation of Herbal hair oil

1. Name of Tribal Farm woman : Gamit Induben Ramanbhai
2. Village : Kapura
3. Block, District & State : Vyara, Tapi, Gujarat
4. Age : 50 yrs
5. Membership details : Self Help Group, Shivshakti Trust, Khedut Co-operative society, ATMA
6. Activities of Tribal Farm woman : Works regarding Agriculture & Animal Husbandry, Household work
7. Family income (Annual) : Rs.90000/-
8. Month & Year of Vocational Training on preparation of Herbal Hair Oil : 16-18, March'2018
9. Training and technical guidance : Krishi Vigyan Kendra, NAU, Vyara, Tapi
10. Materials/ raw materials used for Herbal Hair Oil preparation : Coconut oil, Gingelly seed oil, Castor oil, Amla, Bottle gourd, *Bhrungraj*, *Brahmi*, various Ayurvedic *Churan* (*Jatamasi*, *Vaj*, *Nagarmoth*, *Jethimadh*, *Anantmul*,), *Jaran*, Alovera, Jasmine, Neem leaves, Henna leaves *etc.*
11. Supplementary income by selling Herbal hair oil : Rs. 11000/- (starting on Jan.'18 to continue...)
12. Marketing arrangement : Use of local market/ religious contact/ social contact/ SHG members

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

F. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1.	All crops	3 kg of Jathropa leaves is taken in 20 liters of water and boiled at a temperature of 60 to 70 ⁰ C until it becomes 5 liters. Take 250 ml and add it to 15 liters and spray.	For controlling sucking pests
2.	All crops	Farmers are using mixture of cow dung, urine and buttermilk for the control of sucking pest.	For controlling sucking pests
3.	Cotton	One farmer used black ants for the control of cotton insect pests. For the purpose, the used to put jaggery at the base of plant (5-10) grams) and release black ants which are reared in tank.	To control cotton pests

4.	Okra	Growing okra in winter with high seed rate and closer spacing	To get more number of tender fruits per plant which fetch more prices in market.
5.	Pulse crops	Use of ash for storage of Tur, Beans, Gram	To control storage gram pests
6.	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 (HS)

5.1. Indicate the specific training need analysis tools/methodology followed for

A. Practicing Farmers

- a) PRA
- b) group discussion
- c) eye to eye contact and eye observation

B. Rural Youth

- a) Group discussion with youth at the time of field visit
- b) Feed back from Agricultural schools
- c) Feed back from BRS/MSW/MRS Colleges
- d) Feed back from NGOs

C. In-service personnel

- a) Discussion with extension workers, line department officials, field extension functionaries and NGOs staff along with feedback of SAC, ZREAC and Scientific community.

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

- i) PRA
- ii) Problem identified from Matrix
- iii) Field level observations
- iv) Farmer group discussions

For FLD:

- i) New variety/technology
- ii) Poor yield at farmers level
- iii) Existing cropping system

5.3. Field activities

- i. Name of villages identified/adopted with block name (from which year) – **As per Serial No. 2.7**
- ii. No. of farm families selected per village : **25**
- iii. No. of survey/PRA conducted : **12**
- iv. No. of technologies taken to the adopted villages: **8 (As per Serial No. 3.3-B)**
- v. Name of the technologies found suitable by the farmers of the adopted villages: **8 (As per Serial No. 3.3-B)**

- vi. Impact (production, income, employment, area/technological– horizontal/ vertical): **Impact is given in Serial No. 13.C**
- vii. Constraints if any in the continued application of these improved technologies: --
-NIL-

6. LINKAGES

A. Functional linkage with different organizations

Sr. No.	Name of Organization	Nature of Linkage
1	Dept. of Agriculture	Participation * Khedut Shibir * Soil Health Card & In-service Trg. * Extension Activités, ATMA, RKVY, SRI techniques
2	Dept. of Horticulture	Participation * Khedut Shibir * Extension Activités, NHB & NHM
3	ATMA-Tapi	Participation * Khedut Shibir / Mahila Shibir * Extension Activités * Training Programmes, FLDs, FFS,OFT, Field visits, Joint visits, Krishi melas and exhibitions, Convergence
4	DRDA,Tapi	For Training Programmes, Extension activities & technical support
5	Main Rice Res. Station, AAU, Nawagam	Collaboration – FLD on Paddy
6	Main Cotton Res. Station, NAU, Surat	Collaboration – FLD on Cotton IPM Mission in Nizar block, RKVY Project, Mealy bug campaign
7	Main Water Management Research Unit, NAU, Navsari	Collaboration – FLD on Soil & Water management, Greenhouse, Drip Irrigation
8	Research Stations, NAU	Participation – Farmers Day, Seed – FLDs
9	FTC, Vyara	Joint implementation – Farmers visit and expert lectures, Farmer’s Fair, Trainings, Krishi Mela
10	Govt. of Gujarat	Collaboration – Krishi Mahotsav, ATMA, RKVY, NFSCM, etc., Convergence
11	State Bank of India / Bank of Baroda	SHG work – Finance for entrepreneurship-development
12	Hangati Mahila Trust, Mandal	TOT, Kitchen Garden, Vermi-compost, Co-op. management [89 Villages Network]
13	Integrated Child Development Services,Tapi	Organizing In-service training for Anganwadi workers & Taluka coordinators & Supervisors
14	ATMA- Navsari, Narmada, Kheda, Vadodara, Valsad	For sponsored trainings to farmers, farm women and Rural youth of ATMA villages of Navsari District.
15	NAU, Navsari	For Technical products, technical guidance and supports.
16	SEWA-Vyara	For Training Programmes, Extension activities & technical support
17	Jeevandeep Trust-Bardipada	For FLDs, Training Programmes, Extension activities

Sr. No.	Name of Organization	Nature of Linkage
18	Forest Department	For Training programmes
19	GUJARAT MATIKAM KALAKARI ANE Rural Technology Institute, Bajipura	For Training programmes on income generation activities (Vocational training)
20	Seed Science & tech.dept., AAU, Anand	For Training programmes on seed production
21	NCRI, Hyderabad	For Training programmes
22	Udaybhansinhji Regional Institute of Co-operative Management, Gandhinagar,	For Training programmes
23	DRG-Junagadh,	For FLDs, Training Programmes, Extension activities & technical support
24	Dr. Ambedkar Vanvasi Kalyan Trust, Surat	Trainings, FLD, Seed Production
25	Shakti Trust-Centre for Human Rights & People's Empowerment –Songadh	Participation * Khedut Shibir / Mahila Shibir * Extension Activities * Training Programmes, technical supports to thier groups

B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Adaptive Trials	2013-14	State	327000
Cluster FLDs on Oil Seeds	2015-16	ICAR	272250
Cluster FLDs on Pulses	2015-16	ICAR	482409
FLS Under TSP-DGR, Junagadh	2015-16	ICAR	40112
Sub Mission on Agriculture Mechanization		State	90911
Seed Hub Project	2015-16	ICAR	8100000
TSP-Mega Seed	2015-16	State	40000
PMFBY	2015-16	ICAR	46223
Sankalp se Sidhdhi	2017-18	ICAR	80000

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

If yes, role of KVK in preparation of SREP of the district?

- **KVK provides full technical support for preparing SREP as and when necessary.**

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
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01	Meetings	Review meeting of KVK-ATMA, Planning for Krishi Mela, Preparation of C-DAP, Planning for Training, extension activities	6	4	
02	Research projects	--	--	--	
03	Training programmes	Training on Scientific cultivation of Kharif & Rabi crops, IPDM, Value addition in fruits & vegetables, Organic farming	2	9	--
04	Demonstrations	--	--	--	--
05	Extension Programmes				
	KisanMela	Doubling farmers' income	1	0	
	Technology Week	-	1	0	
	Exposure visit	NAU, Navsari, RRRS farm, Vyara	2	0	
	Exhibition	In Kishan Mela	1	0	
	Soil health camps	--	0	0	
	Animal Health Campaigns	--	0	0	
	Others (Pl. specify)	--	-0	0	
06	Publications				
	Video Films		0	0	
	Books		0	0	
	Extension Literature		0	0	
	Pamphlets		0	0	
	Others (Pl. specify)		0	0	
07	Other Activities (Pl. specify)				

	Watershed approach		0	0	
	Integrated Farm Development		0	0	
	Agri-preneurs development		0	0	

D. Give details of programmes implemented under National Horticultural Mission-NIL-

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any

E. Nature of linkage with National Fisheries Development Board –NIL-

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

F. Details of linkage with RKVY –NIL-

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks

7. Convergence with other agencies and departments:

8. Innovator Farmer's Meet

Sl.No.	Particulars	Details
	Have you conducted Farm Innovators meet in your district?	Yes/ No
	Brief report in this regard	--NIL--

9. Farmers Field School (FFS)

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Brief report
	-NIL-	-NIL-	-NIL-	-NIL-

10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed:

Sr. No.	Farmer's Feedback
1	Good quality pheromone lures are not available in market,
2	Severe infection of viral disease in cucurbits mainly bitter-gourd.
3	Twin wheel hoe weeder increases working efficiency in short period of time i.e. time saving.
4	Twin wheel hoe weeder reduces fatigue, muscle stress, wrist pain and pain in shoulders

	as compared to local sickle.
5	Additional benefit of earthing up with weeding by use of Twin wheel hoe weeder as compared to local sickle.
6	Application of novel organic liquid fertilizer and drenching of Biofertilizers (azotobactor, PSB & potash mobilizer) in watermelon reduce nutritional deficiency as well as disease & pest attack
7	NPS-1 variety of Indian bean gave higher number of tillering (10-12) and no. of pods per tiller (15-18)
8	Foliar application of novel organic liquid fertilizer reduce flower drop and increase yield in chilli, brinjal, okra and creeper vegetables
9	Lack of availability of quality seeds of high yielding varieties of watermelon, muskmelon, brinjal, chilli, okra and cucurbitaceous crops
10	Utilizing of bio-fertilizers improve the soil health.
11	Severe incidence of Blast disease and sheath mite was observed in paddy which results in low yield
12	Pigeonpea flowering severely affected by <i>Okhi</i> cyclone
13	Good quality Pheromone lures for cotton pink bollworm and paddy yellow stem borer are not available in market.
14	Indian bean Cv. NPS-1 (GHJB-D1) gave good result in terms of yield and quality as well as price compare to KATARGAN papadi variety.
15	Novel organic liquid fertilizer application two time at flowering and fruit setting stage gave high fruit setting and yield in mango
16	Gall midge and shoot borer infestation in mango.
17	Novel organic liquid fertilizer increased yield and quality in too old (6 months) plants of brinjal.
18	Deworming reduce the incidence of diarrhea in goat.
19	No. of eggs laid more due to concentrate feeding in poultry.
20	Due to higher milk fat, farmers getting more milk price.
21	Compound cattle feed reduce the feeding cost.
22	Twin wheel hoe weeder increases working efficiency in short period of time i.e. time saving.
23	Twin wheel hoe weeder reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to local sickle.
24	Farm women like Twin wheel hoe weeder because it avoids the bending/squatting posture that is generally adopted in traditional method of weeding.
25	Additional benefit of earthing up with weeding by use of Twin wheel hoe weeder as compared to local sickle.
26	Before Demonstration, tribal farm women were growing only three to four vegetable crops in their backyard but after demonstration they are growing different types of vegetable crops through kitchen gardening in scientific way.
27	Kitchen gardening gives continuous supply of fresh vegetables at lower cost which gives daily nutritious diet.
28	Tribal farm women are not applying any chemical fertilizers and pesticides in kitchen garden, so they produce organic vegetables.

10.2. Technical Feedback from the KVK Scientists (Subject wise) to the research institutions/universities:

Horticulture:

Sr. No.	Technical Feedback
1	New variety of Indian Bean NPS-1 higher yield and quality as well as high returns compare to local varieties
2	Awsame result in growth, yield and quality of watermelon, brinjal and okra by the foliar application of novel organic liquid fertilizer and drenching of Biofertilizers (azotobactor, PSB & potash mobilizer)
3	Gall like symptoms found in okra.

Plant Protection:

Sr. No.	Technical Feedback
1	Recommendation should be made on herbal plant pesticide
2	Okra is the major vegetable crop in Tapi district & farmers use chemical pesticide injudiciously and indiscriminately. So, research should be made on Non-pesticidal module against pest and diseases in this ecosystem.
3	Research should be initiate against brinjal little leaf disease
4	There is urgent need to release recommendations on herbal plant pesticides for management of pest and diseases in relation to organic farming

Animal Science:

Sr. No.	Technical Feedback
1	Deworming reduce the mortality in goat.
2.	Concentrate feeding increase the production in back yard poultry.
3	Rumen by-pass fat supplementations increase the milk fat percentage in dairy animals.
4	Feeding of compound cattle feed increase the productivity of dairy animals.

Home Science:

Sr. No.	Technical Feedback
1	Twin wheel hoe weeder reduces women drudgery in terms of time, efficiency and physical hazards.
2	During weeding, field capacity per farm woman is increased upto 50.53% by using Twin wheel hoe weeder as compared to local sickle.
3	Twin wheel hoe weeder saves 50% labour and 55.55% cost of operation as compared to local sickle.
4.	To design kitchen garden for 5to 6 family members, about 2000 square feet area is required to grow enough seasonal vegetables with fruit plants throughout the year.

11. Technology Week celebration during 2017-18 Yes/No, If Yes

Period of observing Technology Week: From _____ to _____

Total number of farmers visited _____ :

Total number of agencies involved _____ :

Number of demonstrations visited by the farmers within KVK campus: _____

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies			
Lectures organized			
Exhibition			
Film show			
Fair			
Farm Visit			
Diagnostic Practicals			
Supply of Literature (No.)			
Supply of Seed (q)			
Supply of Planting materials (No.)			
Bio Product supply (Kg)			
Bio Fertilizers (q)			
Supply of fingerlings			
Supply of Livestock specimen (No.)			
Total number of farmers visited the technology week			

12. Interventions on drought mitigation (if the KVK included in this special programme)

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
---	--	--	--

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	--	--
Pulses	--	--
Cereals	--	--
Vegetable crops	--	--
Tuber crops	--	--
Total	--	--

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No.of participants
--	--	--	--
Total	--	--	--

D. Animal health camps organized

State	Number of camps	No.of animals	No.of farmers
--	--	--	--
Total	--	--	--

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage	Number
-------	-------	----------------	----------	--------

			of area (ha)	of farmers
--	--	--	--	--
Total	--	--	--	--

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
--	--	--	---
Total	---	--	--

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
--	--	--	---	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--	--

13. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Reduction of infertility in cases in cattle by use of Estrus synchronizing Hormone (Prostaglandin F2 alpha) and mineral mixture	100	70	400.00	2320.00
Bypass fat feeding to buffaloes for increasing fat% in milk	150	80	32.50	89.00
Better growth rate of calves by concurrent use of mineral mixture and deworming.	90	80	282.00	412.00
IPM in Cotton	325	70	48850	61300
IPM in Paddy	250	65	28560	37985
IPM in Okra	300	60	243940	313610
IPM in Brinjal	140	65	164495	232655
INM in Brinjal	200	60	195000	260000
INM in Okra	220	65	220000	280000
New Crop Cauliflower	50	50	135000	155000
Plant geometry in okra	100	50	220000	246000
INM through Fertigation in papaya	50	45	308000	355000
Preparation of <i>Masala</i> for domestic consumption			Market Price	Homemade cost
1. <i>Tea Masala</i>	110	85.00	Rs. 1100/kg	Rs. 700/kg
2. <i>Garam Masala</i>	110	80.00	Rs. 600/kg	Rs. 450/kg

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

B. Cases of large scale adoption

Sr. No.	Crop/ Enterprise	Thematic Area	Large scale adoption (%) in adopted villages	
			Before KVK	After KVK
1	Pigeon pea	New Variety	15	85
2	Gram	Irrigation Management	10	87
3	Groundnut	Land Configuration	12	65
4	Paddy	ICM	18	83
5	Soybean	INM	18	88
6	Okra	INM	8	58
7	Brinjal	INM	20	79
8	Tomato	New Variety (ICM)	10	44
9	Cauliflower	New crop	00	4
10	Cotton	IPM	37	55
11	Paddy	IPM	35	67
12	Kitchen Garden	Household food security by kitchen garden	25	78
13	Urea treatment to Paddy Straw	Nutrition Management	20	67
14	By pass fat feeding	Feed Management	15	62

C. Details of impact analysis of KVK activities carried out during the reporting period**1. Usefulness of FLD and OFT in transfer of technology in Tapi district****Research methodology:**

Ex-post-facto research design was followed. FLDS and OFTs were given in 14 villages of 7 talukas of Tapi district. Among these 7 talukas, 5 talukas and 10 villages were selected purposively. From these 10 villages, 10 respondents of various FLDs & OFTs were selected randomly making the total of 100 respondents. The scale developed by Pandya (2010) for measuring the personal profile was used with slight modification. The structured scales were developed for measuring usefulness of FLDs & OFTs. Both scales were comprised of 18 statements in which 14 were positive and 4 were negative. The response against each statement had been recorded on three point continuum by assigning the score 3 for fully agree, 2 for partially agree and 1 for disagree for positive statements and vice-versa for negative statements. Scores obtained by individual respondents were worked out. By using the Mean and S.D., the respondents were classified into low, medium and high usefulness of FLDs & OFTs. The data was tabulated and analyzed in light of the objectives. The statistical measures *like* frequency, percentage, Mean and S.D. were used.

Duration of project / programme: One year

Result and Discussion:**1. Personal Profile of the respondents:**

Table 1: Distribution of Respondents according to their personal characteristics**n=100**

Sr. No.	Personal Characteristics	No. of respondents	Per cent
1	Age group		
a	Young (Below 35 years)	26	26
b	Middle (35 to 50 years)	50	50
c	Old (Above 50 years)	23	23
2	Caste		
a	General	00	00
b	OBC	00	00
c	ST	100	100
d	SC	00	00
e	Migrating Cast	00	00
3	Level of Education		
a	Illiterate	15	15
b	Primary school	30	30
c	High school	45	45
d	College/Post graduation	10	10
4	Land Holding		
a	Big (above 10 ha)	00	00
b	Medium (4.01to 10 ha)	01	01
c	Semi medium (2.01to 4 ha)	12	12
d	Small (1.01 to 2 ha)	42	42
e	Marginal (0.01 to 1 ha)	45	45
5	Annual income		
a	Above Rs. 2,00,000	03	03
b	Rs. 1,50,001 to 2,00,000	04	04
c	Rs. 1,00,001 to 1,50,000	11	11
d	Rs. 50,001 to 1,00,000	47	47
e	Up to Rs. 50,000	35	35
6	Occupation		
a	Farming	19	19
b	Farming + Subsidiary	69	69
c	Farming + Subsidiary + Other sources	12	12
7	Material possessions (Mean-4.01 S.D.-0.50)		
a	Low material possession	02	02
b	Medium material possession	91	91
c	High material possession	07	07
8	Extension Contact		
a	KVK	100	100
b	Gramsevak	59	59
c	Agril. Officer	25	25
d	Extension Officer	38	38
e	Bank Officer	30	30
9	Extension Participation		
a	No Participation	00	00
b	Participation in one activity	00	00
c	Participation in more than one activity	100	100
10	Socio participation		

Sr. No.	Personal Characteristics	No. of respondents	Per cent
a	No participation	10	10
b	Participation in one social activity	39	39
c	Participation in more than one social activity	51	51
11	Mass media exposure (Mean-15.43 S.D.-2.75)		
a	Low mass media exposure (< 12)	06	06
b	Medium mass media exposure (12-18)	79	79
c	High mass media exposure (> 18)	15	15
12	Economic Motivation (Mean-13.93 S.D.-1.33)		
a	Low economic motivation (< 13)	13	13
b	Medium economic motivation (13-15)	71	71
c	High economic motivation (> 15)	16	16
13	Risk Orientation (Mean-12.47 S.D.-1.79)		
a	Low risk orientation (< 10)	02	02
b	Medium risk orientation (10-14)	90	90
c	High risk orientation (> 14)	08	08
14	Scientific Orientation (Mean-29.48 S.D.-2.41)		
a	Low scientific orientation (< 12)	12	12
b	Medium scientific orientation (27-31)	73	73
c	High scientific orientation (> 31)	15	15

A perusal of the data presented in Table 1.1 showed that half (50.00 per cent) of the respondents belonged to middle age group followed by 26.00 and 23.00 per cent belonged to young age and old age categories.

The information presented in Table 1.2 revealed that majority (100.00 per cent) of the respondents belonged to Schedule Tribe.

It is evident from the Table 1.3 that majority (45.00 per cent) of the respondents were having high school level of education followed by primary school (30.00 per cent), illiterate (15.00 per cent) and college/ post graduation (10.00 per cent).

The information presented in the Table 1.4 revealed that majority (45.00 per cent) of the respondents belonged to marginal land holding category followed by 42.00, 12.00, 1.00 per cent belonged to small, semi medium and medium land holding categories respectively. While none of the respondent belonged to big land holding categories.

From the data portrayed in Table 1.5, it is clear that majority (47.00 per cent) of the respondents had annual income between Rs. 50,001/- to 1,00,000/-. While 35.00 per cent, 11.00 per cent, 4.00 per cent, 3.00 per cent of them had up to Rs. 50,000/-, Rs. 1,00,001/- to 1,50,000/-, Rs. 1,50,001/- to 2,00,000/- and above Rs. 2,00,000/- respectively.

The data depicted in Table 1.6 revealed that majority (69.00 per cent) the respondents had farming + Animal Husbandry as main source of income. While only 19.00 and 12.00 per cent of them had farming and farming+ Animal Husbandary + other sources as source of income respectively.

It is evident from the Table 1.7 that majority (91.00 per cent) of the respondents possessed medium level of material possession followed by 7.00 and 2.00 per cent and 3.50 and 12.00 per cent of them possessed high and low level of material possession respectively.

The data presented in Table 1.8 revealed that all the respondents contacted KVK for latest agricultural technology and various development schemes followed by 59.00 per cent,

38.00 per cent, 30.00 per cent and 25.00 per cent of the respondents contacted Gramsevak, Extension Officer, Bank Officer and Agriculture Officer respectively.

The data portrayed in the Table 1.9 indicated that all respondents had participated in more than one extension activities.

It is evident from the Table 1.10 that majority (51.00 per cent) of the respondents had participated in more than one social activities followed by 39.00 and 10.00 per cent of them had participated in one social activity and no participation in any social activity respectively.

The information presented in Table 1.11 revealed that majority (79.00 per cent) of the respondents had medium level of mass media exposure followed by 15.00 and 6.00 per cent of them had high and low level of mass media exposure respectively.

The data presented in Table 1.12 indicated that majority (71.00 per cent) of the respondents had medium level of economic motivation followed by 16.00 and 13.00 per cent of them had high and low level of economic motivation respectively.

A perusal of the data presented in Table 1.13 showed that majority (90.00 per cent) of the respondents had medium level of risk orientation followed by 8.00 per cent and 2.00 per cent of them had high and low level of risk orientation respectively.

The data portrayed in the Table 1.14 revealed that majority (73.00 per cent) of the respondents had medium level of scientific orientation followed by 12.00 and 15.00 per cent of them had high and low level of scientific orientation respectively.

Table 2: Usefulness of FLDs and OFT

n = 100

Sr.No.	Details of SHG members	No. of respondents	Per cent
A	Usefulness of FLDs		
	Low usefulness of FLDs	11	11
	Medium usefulness of FLDs	70	70
	High usefulness of FLDs	19	19
B	Usefulness of OFTs		
	Low usefulness of OFTs	12	12
	Medium usefulness of OFTs	83	83
	High usefulness of OFTs	05	05

The data presented in Table 2.A indicated majority (70.00 per cent) of the respondents had medium level of usefulness of FLDs followed by 19.00 and 11.00 per cent of them had high and low level of usefulness of FLDs.

The data portrayed in Table 2.B revealed that majority (83.00 per cent) of the respondents had medium level of usefulness of OFTs followed by 12.00 and 5.00 per cent of them had low and high level of usefulness of OFTs.

Conclusion:

From the above discussion, it could be concluded that half of the respondents belonged to middle age group, all were ST, having high school level of education, belonged to marginal land holding category, had annual income between Rs. 50,001/- to 1,00,000/-, had farming + Animal Husbandry as main source of income, possessed medium level of material possession, contacted KVK for latest agricultural technology and various development schemes, all respondents had participated in more than one extension activities, had participated in more than one social activities, had medium level of mass media exposure, had

medium level of economic motivation, medium level of scientific orientation, had medium level of risk orientation. Majority of the respondents had medium level of usefulness of FLDs and OFTS. So, we can say that FLDs and OFTs are very useful for transfer of technology among the rural people.

2. Adoption of fruits and vegetable preservation technology by tribal farm women of Tapi district

BACKGROUND INFORMATION:

India currently produces about 50 million tonnes of fruits and 90 million tonnes of vegetables. Only 2% of these fruits and vegetables are processed in against of 23% in China, 78% in Phillipines, 83% in Malaysia. The force of those engaged in agriculture are still illiterate and just 5% have completed higher secondary education. Even in 2004-05, around 60% of rural male workers and 85% of rural female workers are either illiterate or have been educated upto primary level. Besides, when we think about the tribal, they are generally resource poor and economically backward. Tapi district is a tribal dominated district with poor economic condition of farmers. Mainly paddy, sugarcane, pigeon pea and vegetables are grown in this area. During season, vegetables and fruits are cheap and easily available in local market. Majority of tribal farm women of Tapi district have lack of knowledge about processing and preservation technology i.e. value addition in fruits and vegetables. Due to poor economic condition, they are unable to purchase processed/preserved food products which are available in the market. Therefore, to give knowledge about preservation technology and to motivate the tribal farm women towards adoption of fruits and vegetable preservation technology, KVK, Tapi has decided to organize training programmes on 'fruits and vegetable preservation' for tribal farm women in adopted villages of Tapi district. Method demonstration on 'preparation of papaya jam and tomato ketchup' was also conducted by the Home Scientist during training programmes. The trainees were also enriched with proper literature in local language which was enough to prepare the product at their home.

OBJECTIVES:

1. To study the profile of the respondents.
2. To study the extent of adoption of fruits and vegetable preservation technology namely; Tomato ketchup, Papaya jam.
3. To examine the relationship between dependent & independent variables.
4. To study the constraints and seek suggestions to overcome the problems faced by tribal farm women in adoption of fruits and vegetable preservation technology.

RESEARCH METHODOLOGY:

KVK, Tapi had organized seven training programmes on 'Fruits and vegetable preservation' which benefitted to 217 tribal farm women from six adopted villages during the year 2008 to 2014. The study was conducted in adopted villages of Tapi district. For the study, four adopted villages namely Kapura, Vanskui, Unchamala and Degama were selected purposively. From each village, 15 tribal farm women were selected purposively from trained group by KVK, Tapi, making total size of 60 respondents. The knowledge and adoption were measured with the help of teacher's made interview schedule. The data was analyzed with appropriate statistical tools such as frequency, percentage, correlation co-efficient etc.

Variables:

1. **Dependent variable:** Adoption of fruits and vegetable preservation technology.
2. **Independent variables:** Age, Family education, Occupation, Family size, Cultivation of concerned fruits & vegetables, Knowledge, Source of information, Social participation

RESULTS AND DISCUSSION:

Profile of Respondents:

The profile of respondents is given below.

Table 1: Distribution of tribal farm women according to their characteristics

n=60

Sr.No.	Characteristics	No. of Respondents	Per cent
1.1	Age		
a	Young age (below 35 yrs)	19	32.00
b	Middle age (35 to 50 yrs)	34	57.00
c	Old age (above 50 yrs)	07	11.00
1.2	Education		
a	Illiterate	14	23.00
b	Functionally literate	01	02.00
c	Primary	18	30.00
d	Secondary	10	17.00
e	Higher Secondary	09	15.00
f	Diploma	00	00
g	Graduate	08	13.00
h	Post graduate	00	00
1.3	Family Education	(243)	
a	Illiterate	42	17.30
b	Functionally literate	01	00.41
c	Primary	99	40.74
d	Secondary	44	18.10
e	Higher Secondary	26	10.70
f	Diploma	03	01.23
g	Graduate	25	10.29
h	Post graduate	03	01.23
1.4	Family type		
a	Joint	34	57.00
b	Nuclear	26	43.00
1.5	Family size		
a	1 to 2 members	02	03.00
b	3 to 4 members	12	20.00
c	5 to 6 members	34	57.00
d	7 to 8 members	10	17.00
e	Above 8 members	02	03.00
1.6	Land holding		
a	Landless	15	25.00
b	Marginal (0.01 to 1 ha)	30	50.00
c	Small (1.01 to 2 ha)	13	22.00
d	Medium (2.01 to 4 ha)	02	03.00
e	Large (>4 ha)	00	00
1.7	Occupation		
a	Farming	16	27.00
b	Animal husbandry	28	47.00
c	Farming with service	04	07.00
d	Farming with service and other enterprise	03	05.00
e	Farming with other enterprise	07	11.00
f	Agricultural labour	02	03.00
1.8	Annual income		
a	Below Rs.50,000	32	53.00

Sr.No.	Characteristics	No. of Respondents	Per cent
b	Rs.50,001 to Rs.1,00,000	19	32.00
c	Rs.1,00,001 to Rs.1,50,000	05	08.00
d	Rs.1,50,001 to Rs.2,00,000	03	05.00
e	Above Rs.2,00,000	01	02.00
1.9	Cultivation of concerned fruits & vegetables		
a	Tomato	21	35.00
b	Papaya (in kitchen garden)	28	47.00

The data in Table 1.1 revealed that majority of tribal farm women (57.00 per cent) belonged to middle age group followed by 32.00 and 11.00 per cent belonged to young age and old age group respectively.

It is evident from Table 1.2 that 23.00 of the tribal farm women were illiterate and 30.00 per cent of the tribal farm women had education up to primary school, followed by secondary school (17.00 per cent), higher secondary school (15.00 per cent), graduate (13.00 per cent) and functionally literate (2.00 per cent).

The data of Table 1.3 indicated that 17.30 per cent of the family members were illiterate and majority (40.74 per cent) of the family members had education up to primary school followed by 18.10, 10.70, 10.29 per cent of them had education up to secondary school, higher secondary school and graduate respectively. While equal i.e. 1.23 per cent of family members had education up to diploma and post graduate.

The data portrayed in Table 1.4 indicated that more than half (57.00 per cent) of the respondents had joint family followed by 43.00 per cent had nuclear family.

The information presented in Table 1.5 revealed that majority (57.00 per cent) of the respondents possessed 5 to 6 members followed by 20.00 and 17.00 per cent had 3 to 4 members and 7 to 8 members respectively. While equal i.e. 3.00 per cent of them had 1 to 2 members and above 8 members in their families.

It is evident from Table 1.6 that majority (50.00 per cent) of the respondents belonged to marginal land holding category followed by 25.00, 22.00 and 3.00 per cent were in landless, small and semi medium land holding categories respectively. While none of them belonged to medium and big land holding categories.

The data presented in Table 1.7 revealed that majority (47.00 per cent) of the respondents had animal husbandry followed by farming (27.00 per cent) as their main occupation. While 11.00, 7.00, 5.00 and 3.00 per cent of them engaged in farming with other enterprise, farming with service, farming with service & other enterprise and agricultural labour respectively.

The data portrayed in Table 1.8 indicated that majority (53.00 per cent) of the respondents had annual income below Rs.50,000. While 32.00, 8.00, 5.00 and 2.00 per cent of them had Rs.50,000 to 1,00,000, Rs.1,00,001 to 1,50,000, Rs.1,50,001 to 2,00,000 and above Rs.2,00,000 annual income respectively.

From the data presented in Table 1.9, it is clear that 47.00 per cent of the respondents were grown papaya in kitchen garden while 35.00 per cent of the respondents were cultivated tomato crop in their farm as well as kitchen garden.

Table 2: Distribution of tribal farm women according to Social participation

n=60

Sr.No.	Categories*	No. of Respondents
1	Milk co-operative society	34
2	Farmers club	02
3	SEWA co-operative society	02
4	<i>Samaj Sangathan</i>	01
5	<i>Bhajan Mandal</i>	04
6	<i>Mahila Mandal</i>	21
7	<i>Sakhi Mandal/ Self Help Group</i>	39

Sr.No.	Categories*	No. of Respondents
8	Non-Govt. organization	01
9	No participation	03

***Multiple responses**

The data presented in Table 2 revealed that majority (39.00 and 34.00 per cent) of the respondents had participated in *Sakhi Mandal/ Self Help Group* and *Milk co-operative society* respectively. The data also indicated that 21.00 per cent of the respondents had participated in *Mahila Mandal* and very less participation (1.00 to 4.00 per cent) in *Bhajan Mandal*, *SEWA co-operative society*, *Farmers club* and *NGOs* whereas 3.00 per cent of them had no any type of social participation.

Table 3: Source of information about fruits and vegetable preservation technology other than KVK

n=60

Sr.No.	Source of information*	No. of Respondents
1	Farmers Training Centre	24
2	ATMA, Tapi	25
3	Agri. Research station, NAU, Navsari	11
4	District Agri.department	01
5	<i>Gram Panchayat</i>	02
6	Co-operative society	05
7	Folder/ Leaflet/ Poster/ Magazine/Book	48
8	Newspaper	16
9	Radio	04
10	Television	18
11	Progressive farmers/ farm women	09
12	Friends/ Neighbour	06

***Multiple responses**

The data portrayed in Table 3 indicated that majority (48.00 per cent) of the respondents gained information about fruits and vegetable preservation technology from Folder/ Leaflet/ Poster/ Magazine/Book followed by 25.00, 24.00, 18.00, 16.00 and 11.00 per cent were gained information from ATMA-Tapi, FTC, Television, Newspaper and Agri. Research station, NAU, Navsari respectively.

Knowledge and adoption of fruits and vegetable preservation technology (Namely Tomato ketchup and Papaya jam)

The results of the study were presented in following tables.

Table 4: Knowledge and Adoption of fruits and vegetable preservation technology by tribal farm women

n=60

Sr. No.	Practices	Knowledge		Adoption	
		No. of Respondents	Per cent	No. of Respondents	Per cent
1	Sorting and grading of fruits & vegetables	60	100.00	53	88.33
2	Washing/ Cleaning of fruits & vegetables	60	100.00	57	95.00
3	Ingredients with amount used for preparing tomato ketchup	55	91.66	24	40.00
4	Ingredients with amount used for preparing papaya jam	56	93.33	31	51.66
5	Processing:				
5.1	Juice extraction & filtration	60	100.00	35	58.33

Sr. No.	Practices	Knowledge		Adoption	
		No. of Respondents	Per cent	No. of Respondents	Per cent
5.2	Method used for adding spices & condiments in tomato juice	58	96.66	23	38.33
5.3	Cooking:				
5.3.1	Tomato ketchup: Spoon test for tomato ketchup (Juice is reduced to about 1/3 of its original volume)	53	88.33	24	40.00
5.3.2	Papaya jam: Setting test for jam (The quantity of jam prepared is about 2 times the wt. of sugar used)	54	90.00	31	51.66
5.3.3	Use of citric acid and essence in jam for flavour & taste purpose	53	88.33	24	40.00
6	Use of preservatives for better shelf life of products such as Vinegar, Sodium benzoate	45	75.00	04	06.66
7	Sterilization of glass bottles	47	78.33	19	31.66
8	Bottling of products	53	88.33	32	53.33
9	Storage of products	51	85.00	21	35.00

Knowledge of fruits and vegetable preservation technology by tribal farm women:

The data presented in Table 4 revealed that 100.00 per cent of the respondents had gained knowledge about sorting, grading, washing & cleaning of fruits and vegetables, juice extraction & filtration after participating in training programme. About 96.66, 93.33, 91.66, 90.00 per cent (majority) of the respondents had gained knowledge about method used for adding spices & condiments in tomato juice, ingredients with amount used for preparing papaya jam & the tomato ketchup and setting test for jam respectively. While equal i.e. 88.33 per cent of them had knowledge about spoon test for tomato ketchup, use of citric acid and essence in jam for flavour & taste purpose and bottling of products. The data also indicated that 85.00 per cent of the respondents had knowledge regarding storage of products followed by 78.33 and 75.00 per cent of them had knowledge regarding sterilization process and use of preservatives for better shelf life of products respectively.

Adoption of fruits and vegetable preservation technology by tribal farm women:

The data portrayed in Table 4 revealed that majority (95.00 per cent) of the respondents had adopted the technology regarding washing/ Cleaning of fruits & vegetables while 88.33 per cent of them had adopted the sorting and grading of fruits & vegetables after participating in training programme. About more than half (58.33, 53.33, 51.66 per cent) of the respondents had adopted the technology regarding juice extraction & filtration, bottling of products and equal i.e. ingredients with amount used for preparing papaya jam & setting test for jam respectively. It is evident from Table 4 that the same i.e. 40.00 per cent of the respondents had adopted the technology about ingredients with amount used for preparing tomato ketchup, Spoon test for tomato ketchup and use of citric acid and essence in jam for flavour & taste purpose followed by 38.33, 35.00 and 31.66 per cent of them had adopted the method used for adding spices & condiments in tomato juice, storage of the product and sterilization process respectively. Only 6.66 per cent of the respondents had adopted use of preservatives for better shelf life of products such as Vinegar, Sodium benzoate because the preservatives are not easily available in local market.

In short, the information presented in Table 4 indicated that great majority (90.38 per cent) of the tribal farm women had knowledge regarding preservation technology for tomato

ketchup and papaya jam while half (48.45 per cent) of them had adopted the preservation technology for tomato ketchup and papaya jam after participating in training programme. Because the tribal farm women are fully engaged in agriculture & animal husbandry work with responsibility of daily household work.

Table 5: Economic benefit of tribal farm women by preparing Tomato ketchup and Papaya jam for domestic utilization

n=60

Food Product	Adoption by tribal farm women		Quantity per year (Kg)	*Homemade cost (Rs.)	**Market Price (Rs.)	Economic benefit (Rs.)
	No.	Per cent				
Tomato ketchup	24	40.00	38	2090.00	5586.00	3496.00
Papaya jam	31	51.66	59	3835.00	15340.00	11505.00
Total				5925.00	20926.00	15001.00
*Homemade cost:				**Market Price:		
Tomato ketchup: Rs.55/kg				Tomato ketchup: Rs.147/kg (Maggi)		
Papaya jam: Rs.65/kg				Mix fruit jam: Rs.130/500 gm (Kissan)		

The information presented in Table 5 revealed that 40.00 per cent of the tribal farm women have prepared tomato ketchup while 51.66 per cent of the tribal farm women have prepared papaya jam for household consumption by using preservation technology. The tribal farm women have prepared 38 kg tomato ketchup and 59 kg papaya jam per year and they saved Rs.15001.00 as compared to market price, *i.e.* they saved Rs.92/kg for tomato ketchup and Rs.195/kg for papaya jam than market price by adopting preservation technology. The market cost of tomato ketchup and jam is approximately more than two times and four times as compared to homemade products respectively. No wonder that the kitchen of tribal farm women is filled with the fragrance of tomato ketchup and jam which they never prepared at home.

Table 6: Relationship between independent variables and dependent variables of the tribal farm women after training

n=60

Sr.No.	Independent variables	Correlation co-efficient (r)	
		Knowledge	Adoption
X ₁	Age	-0.3477*	-0.1471
X ₂	Education	0.5680*	0.1084
X ₃	Family type	0.1348	0.1365
X ₄	Family size	0.0026	-0.0032
X ₅	Occupation	0.1661	0.1650
X ₆	Annual income	0.2753*	0.2493
X ₇	Land holding	-0.0065	-0.0219
X ₈	Social participation	0.1413	0.0096
X ₉	Source of information	0.2806*	0.3732*
X ₁₀	Knowledge	-	0.5589*

* Significant at 5 per cent level of probability (0.2539)

The data portrayed in Table 6 indicated that age, education, annual income and source of information were significantly associated with the knowledge of the tribal farm women about fruits and vegetable preservation technology. However source of information and knowledge were significantly correlated with the adoption of preservation technology. This clearly indicated that the importance of knowledge and source of information in adoption of fruits and vegetable preservation technology.

Table 7: Distribution of Respondents according to level of knowledge and adoption

n=60

Type of Level	Knowledge		Adoption	
	No. of Respondents	Per cent	No. of Respondents	Per cent
Very low (0 to 20%)	0	0	25	41.67
Low (21 to 40%)	1	01.66	0	0
Medium (41 to 60%)	4	06.67	9	15.00
High (61 to 80%)	7	11.67	10	16.66
Very high (Above 81%)	48	80.00	16	26.67

The information presented in Table 7 revealed that majority (80.00 per cent) of the respondents had very high level of knowledge about preservation technology followed by 11.67, 6.67 and 1.66 per cent of them had high, medium and low level of knowledge respectively. Whereas majority (41.67 per cent) of the respondents had very low level of adoption regarding preservation technology followed by 26.67, 16.66 and 15.00 per cent of them had very high, high and medium level of adoption respectively.

CONCLUSION:

It is clearly indicated from the results of this study that majority of the tribal farm women having high level of knowledge and moderate level adoption of fruits and vegetable preservation technology. The independent variables namely age, education, annual income, source of information and knowledge were significantly correlated with adoption of fruits and vegetable preservation technology by tribal farm women.

Based on the above results the tribal farm women expressed their views about the importance of this type of training programmes in the form of feedback given below.

Feedback of the tribal farm women:

1. Homemade product is cheaper than market.
2. These products may be prepared when the fruits and vegetables available in the market at cheaper rate as well as available in backyard at home.
3. Products can be prepared as per taste and quantity required.
4. Products can be used during off season of fruits and vegetables.
5. To generate additional income, there is no extra time for preparing these products due to daily household work and agriculture-animal husbandry work.

3. Impact of Training programme on knowledge of tribal farm women:

3.1 Title of Training: Health and Nutrition for tribal farm women

Sr. No.	Health and Nutritional aspects	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
1	Functions of nutrients in our body	28	12	42.85	18	64.28
2	Nutritional deficiency diseases		14	50.00	21	75.00
3	Best food sources of important nutrients		14	50.00	16	57.14
4	Combination of cereals & pulses is rich source of complete protein		16	57.14	24	85.71
5	According to WHO, vitamin-C is an essential for adequate absorption of iron in body		6	21.42	21	75.00
6	During pregnancy period, pregnant woman can gain on an average 7 to 10		7	25.00	23	82.14

Sr. No.	Health and Nutritional aspects	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
	kg body wt.					
7	Healthy lactating mother should produce app. 600 to 800ml milk per day		3	10.71	17	60.71
8	Initial two to three days of mother's milk is known as 'Colostrum'		11	39.28	16	57.14
9	Normally lifespan of human Red Blood Cell is app.120 days		20	71.42	26	92.85
10	Probiotic foods		14	50.00	16	57.14
11	Causes of sickle cell anemia and prenatal testing for sickle cell disease during pregnancy		7	25.00	18	64.28
12	ORS is used to prevent diarrhoea/ dehydration		24	85.71	27	96.42
		Average		44.04		72.31

3.2 Title of Training: Drudgery reduction technologies for farmwomen in farm operations

Sr. No.	Details of major Drudgery reducing tools for farm women	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
1	NAVEEN sickle for paddy harvesting	30	3	10.00	26	86.66
2	Twin wheel hoe weeder for weeding		7	23.33	30	100.00
3	<i>Bhindi</i> plucker		0	0	30	100.00
4	<i>Dal</i> mill		10	33.33	28	93.33
5	Hand maize sheller		0	0	19	63.33
6	Manual Rice Transplanter		0	0	20	66.66
7	Groundnut Decorticator		0	0	21	70.00
8	Pedal paddy Thresher		0	0	25	83.33
9	NAVEEN Dibbler		0	0	16	53.33
10	Multifuel cooking stove		0	0	25	83.33
		Average		6.66		79.99

3.3 Title of Training: Kitchen gardening

Sr. No.	Technical practices	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
1	Daily requirement of vegetables in balanced diet	20	0	0	12	60.00

Sr. No.	Technical practices	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
2	Major nutrients available in vegetables		0	0	13	65.00
3	Citrus fruits & vegetables are rich source of Vitamin-C		1	5.00	10	50.00
4	Iron and Calcium are available in green leafy vegetables		3	15.00	15	75.00
5	Fruit fly trap is used for IPM in cucurbitaceous vegetables		2	10.00	18	90.00
6	Effect on human health by using excess amount of chemical fertilizers and pesticides in Agri. crops		1	5.00	12	60.00
7	Vitamin-A is essential for good vision		0	0	9	45.00
8	A deficiency of iron produces the Anemia disease in human beings		3	15.00	11	55.00
9	In addition to minerals & vitamins, protein is also available in drumstick as compared to other vegetables		0	0	7	35.00
		Average		5.55		59.44

3.4 Title of Training: Fruits and vegetable preservation

Sr. No.	Fruits & vegetable preservation technology practices	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
1	Sorting and Grading of fruits and vegetables		21	35.00	60	100.00
2	Washing and cleaning of fruits and vegetables		50	83.33	60	100.00
3	Processing for Tomato ketchup, Papaya jam & Lemon squash:					
3.1	Juice extraction and filtration		11	18.33	60	100.00
3.2	Cooking:					
	(i)Tomato ketchup: juice is reduced to about 1/3 of its original volume	60	0	0	50	83.33
	(ii)Papaya jam: The quantity of jam prepared is about 2 times the weight of sugar used		0	0	50	83.33
	(iii)Use of citric acid & essence in jam		0	0	47	78.33
	(iv)Lemon Squash: The quantity of sugar used is about double of the weight of lemon juice		0	0	57	95.00
4	Use of preservatives for better shelf life of products such as Vinegar, Sodium benzoate, Potassium metabisulphate			0	0	25

5	Sterilization of glass bottles		0	0	52	86.66
6	Bottling of products		0	0	60	100.00
7	Storage of products		0	0	60	100.00
		Average		12.42		88.02

3.5 Title of Training: Value addition in Fruits and vegetables

Sr. No.	Fruits & vegetable preservation technology practices	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Per cent	No.	Per cent
1	Sorting and Grading of fruits and vegetables	25	18	72.00	25	100.00
2	Washing and cleaning of fruits and vegetables		25	100.00	25	100.00
3	Processing for Tomato ketchup, Papaya jam & Lemon squash:		0	0	0	0
3.1	Juice extraction and filtration		15	60.00	25	100.00
3.2	Cooking:		0	0	0	0
	(i)Tomato ketchup: juice is reduced to about 1/3 of its original volume		0	0	21	84.00
	(ii)Papaya jam: The quantity of jam prepared is about 2 times the weight of sugar used		0	0	22	88.00
	(iii)Use of citric acid & essence in jam		0	0	20	80.00
	(iv)Lemon Squash: The quantity of sugar used is about double of the weight of lemon juice		0	0	23	92.00
4	Use of preservatives for better shelf life of products such as Vinegar, Sodium benzoate, Potassium metabisulphate		0	0	11	44.00
5	Preparation of Amla candy		0	0	22	88.00
6	Pulp extraction from custard apple for storage purpose		0	0	20	80.00
7	Sterilization of glass bottles		0	0	25	100.00
8	Bottling of products		0	0	25	100.00
9	Storage of products		0	0	25	100.00
		Average		17.84		88.92

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2017	7	9547	0
May	3	9547	0
June	2	9547	0
July	8	9547	0
August	6	9547	0
September	6	9547	0
October	0	9547	0
November	11	9547	0
December	1	9547	0
January 2018	2	9547	0
February	1	9547	0
March	0	0	0

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
KVK, NAU, Vyara, Dist.Tapi	Text only	17	5	--	--	9	16	47
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	Total Messages	17	5	--	--	9	16	47
	Total farmers Benefitted/Message	9547	--	--	--	--	--	-

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Plug Tray Nursery			Different variety of Vegetables & fruit crops		104760		279768	

B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals	31/1/17 to 1/2/17	20-30/5/17	0.81	Gurjari	TF	49	90500	138700	
	2-8/2/17	20-30/5/17	0.90	Jaya	TF	52	50000	144500	
	18/7/2017	18/10/17 to 7/11/17	0.90	Gurjari	Certified	31.50	36000	35040	
	4-6/7/17		0.64	GAR-13	Certified	21.7	26000	0	
	10-12/7/17		0.48	GNR-3	Certified	15.25	20000	44530	
	15-18/7/17		0.81	Jaya	Certified	29.40	32000	29200	
	21/7/17		0.25	GNR-6	TF	10.50	10000	0	
	1-3/7/17		0.53	NAUR-1	Certified	20.30	22000	0	
Pulses	7/2/17		15/5/17	0.48	Meha	TF	4.5	12000	39690
	16/11/16	24/3/17	0.54	Co-4	TF	4.5	12000	40500	
Oilseeds	--	--	--	--	--	--	--	--	--
Fibers	--	--	--	--	--	--	--	--	--
Spices & Plantation crops									
Floriculture	--	--	--	--	--	--	--	--	--
Fruits	2010-11	May-2017	2.0	Kesar, Rajapuri, Dasher, aameapali	Fruit	1850kg	150000	37500	--
Vegetables	--	--	--	--	--	--	--	--	--
Others (specify)									
	--	--	--	--	--	--	--	--	--

C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.)

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermi Compost	12371			

D. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
--NIL--							

E. Utilization of hostel facilities

Accommodation available (No. of beds): 32

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2017	0	0	--
May 2017	84	5	--
June 2017	0	0	--
July 2017	162	10	--
August 2017	33	30	--
September 2017	40	10	--
October 2017	0	0	--
November 2017	20	30	--
December 2017	8	15	--
January 2018	2	2	--
February 2018	158	6	--
March 2018	0	0	--

F. Database management

S. No	Database target	Database created

G. Details on Rain Water Harvesting Structure and micro-irrigation system

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute							
With KVK	State Bank of India	Vyara	0532	NAU KVK's A/c	10716339605	394002013	SBIN0000532
	State Bank of India	Vyara	0532	NAU KVK's Revolving Fund A/c	10716339616	394002013	SBIN0000532
	State Bank of India	Vyara	0532	Seed Hub DAC Funded Project	37145711223	394002013	SBIN0000532
	State Bank of India	Vyara	0532	Senior Scientist & Head, KVK, Vyara	37145729116	394002013	SBIN0000532

B. Utilization of KVK funds during the year 2017-18 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	8755000	8755000	7834579
2	Traveling allowances	150000	150000	124779
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1569000	1569000	1548522
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		1569000	1569000	1548522
B. Non-Recurring Contingencies				
1	Works	--	--	99686
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)		--	--	99686
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		10474000	10474000	9607566

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2015 to March 2016	82288	1514608	1543149	53747
April 2016 to March 2017	53747	1272574	1087909	238412
April 2017 to March 2018	238412	1454898	1215698	477612

17. Details of HRD activities attended by KVK staff during year

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr. C. D. Pandya	Scientist (Agri. Extension)	ICAR Sponsored Summer School 21 days training programme on "Empowering Rural Youth through Agri-Entrepreneurship"	BAU-Sabour (Bihar)	5-25/8/2017
Dr. P. K. Modi	Scientist (Horticulture)	ICAR Sponsored Summer School 21 days training programme on "production of Bio-CNG and Organic manure through Anerobic-Agro Waste-Decomposition Techniques"	DFRS-MPUAT-Bhilwara (Rajsthan)	10-30/8/2017
Dr. J. K. Movaliya	Scientist (Animal Science)	21 days Winter School training on "Livestock & climate changes:Contributory key factors and practical stretegies for amelioration	NIANP-Begalore	1-21/9/2017

Note: Another information on Seminar/Workshop/Meeting is given in Annexure-II

18. Please include any other important and relevant information which has not been reflected above (write in detail).

XVII. OTHER ADDITIONAL ACTIVITIES

1. Front Line demonstration under NFSM during *Rabi-Summer-2016-17*

Sr. No.	Season	Crop	Technology Demonstrated	Variety	Local Check	No. of farmers	Area (ha)	Average production(q/ha)		Percent increase
								Demon	Local Check	

1	Rabi-2016-17	Green gram	Bio-fertilizers	Co-4	Deshi	50	20	6.1	4.4	38.63
2	Summer-2017	Green gram	Seed and biofertilizer (<i>rhizobium</i> and P.S.B)	Meha	K-851	100	40	5.03	3.1	38.37

Sr. No.	Crop	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
1	Green gram	17500	31873	14373	1.82	16000	22990	6990	1.43
2	Green gram	13500	25779	12279	1.90	11500	15888	4388	1.40

2. FLD conducted under NFSM during Kharif-2017 and Rabi-Summer - 2017-18

Sr. No.	Season	Crop	Variety	Local variety	Thematic Area	No. of farmers	Area (ha)	Status
1	Kharif-2017	Pigeon pea	Vaishali	Deshi	ICM	50	20	At maturity stage
2	Rabi-Summer-2017-18	Chick pea	GG-3	Desha	ICM	50	20	At maturity stage

3. Front Line demonstration of oilseed under NMOOP (Rabi-2016-17)

Sr. No.	Season	Crop	Technology Demonstrated	Variety	Local Check	No. of farmers	Area (ha)	Average production (q/ha)		Percent increase
								Demon	Local Check	
1	Rabi-2016-2017	Sesame (Til)	Improved seed	Guj-Til-3	Deshi	50	20	5.02	3.5	30.28
2	Rabi-2016-2017	Groundnut	Improved seed	TAG 37A	GG-11	50	20	18.09	13.2	37.04

Sr. No.	Crop	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
1	Sesame (Til)	11500	25853	14553	2.24	13500	18025	4525	1.33
2	Groundnut	35400	92259	56859	2.61	34000	67320	33320	1.98

4. FLD conducted under NMOOP (Rabi-Summer -2017-18)

Sr. No.	Season	Crop	Variety	Local variety	Thematic Area	No. of farmers	Area (ha)	Status
1	Rabi-Summer - 2017-18	Mustard	GMD-4	Deshi	ICM	13	8	At maturity stage

5. FARMERS' FAIR & Awareness Programme on PRADHANMANTRI FASAL BEEMA YOJANA:

Date of PMFBY programme	04/04/2016
No. of participants (Farmers/ Farm women)	1080
No. of organizations in exhibition	7
	Name & designation details of guests
Chief Guest attended the programme	Shri Prabhubhai Vasava, Hon. Member of Parliament ,23-Bardoli Electorate area, Gujarat
Other guests attended the programme	Dr. G.R. Patel, Hon'ble Director of Extension Education, NAU, Navsari
	Shri B. K. Vasava, Director, District Rural Development Agency, Tapi
	Shri N. R. Damor, Project Administrator, Tribal Subplan, Songadh
	Shri N.H Gamit, Assistant Director of Agriculture (Soil Testing Laboratory), Vyara
	Shri Saaji Itty, Deputy Manager, Agriculture Insurance Company of India, Regional Office, Ahmedabad
	Shri Vilas Save, NABARD, Surat
	Shri P.R Chaudhari, District Agriculture Officer, Dist. Tapi

6. Celebration of Pre-Rabi Campaign:

Sr. No.	Date	Name of activity	Participants		
			Male	Female	Total
1	03/01/2017	Farmers Meeting on "Integrated Nutrient Management in Rabi crops"	17	43	60
2	09/01/2017	Farmers Meeting on "Role of Bio-fertilizers in Rabi crops"	63	27	90
3	11/01/2017	Khedut shibir on "Use of bio-fertilizers in Rabi crops"	43	83	126
4	26/1/2017	Kishan Gosthi on "Importance of Rabi crops in Agriculture" & <i>SANMAN SAMAROH</i>	72	163	235
TOTAL			195	316	511

7. Activities carried out under Protection of Plant Varieties and Farmers Rights

Programmes	Number	No. of Participants
Training cum awareness programme on Protection of plant varieties and farmers right	25/04/2017 26/03/2018	97
Exhibition	2	97
Village covered	Participate farmers of 3 villages of Vyara & Dolvan taluka i.e Jankhari, Lakhali, Dolara, Amaliya, Bardipada, Jamaliya	97
VIP's invited in programme		
Literature Distribution (folder)	1	97
How many times the photos / news events uploaded on the website	2	

8. Activities carried out under production of export oriented produce

Programmes	Number	No. of Participants
Farmers meeting on Production of export oriented produce on PPP mode	21/12/2017	40
Village covered	16 Villages of Songadh, Valod, Vyara blocks- Mandal, Nishana, kukadzar, chunawadi, beda raipura, andhatri, amarpada, gadat, ranveri, kelai, degama, gondla vaheer, nana bandharpada, ganchikua, jarali	40
VIP's invited in programme		
How many times the photos / news events uploaded on the website	1	40

9. Activities carried out under Sub Mission on Agricultural Mechanization

Programmes	Number	No. of Participants
Entrepreneurship development through post harvest management and value addition	14/02/2018 to 20/02/2018	20
Method demonstration	Potato Wafer, Lemon squash, papaya Jam, Lemon Juice, green gram frying, preparation of organic inputs	20
Exposure visit	-	-
Village Covered	Total- 3 villageIn songarh Block-Vazarda and Uchchal block-bhitkhurd and mohini	20
How many times the photos / news events uploaded on the website	1	20

10. Seed Hub programme: “Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India”

A. Financial details (Rs. in Lakh):-

Sl. No.	Items	2016-17		2017-18
i	Total fund allocation	80 lakh		-
ii	Separate Bank Account open for seed hub	Yes		-
iii	Date of bank account opened	07/09/2017		-
iv	Name of Bank	SBI, Surti Bazar Road, Vyara, Dist.Tapi		
v	Total Fund received by seed hub centre	75 lakh		-
vi	Date of fund Received by Seed hub	Rec.	20.09.16	Revalidated
		Non Rec	21.3.17	
B	Revolving Fund			
i	Allocation for revolving fund	30 lakh		-
ii	Fund received under Revolving fund	30 lakh		-
iii	Expenditure under revolving fund	-		2.39
iv	Fund received after sale of seed under revolving fund	-		seed to be sold during summer 2018
v	Amount available under revolving fund	30 lakh		27.61
C	Seed Processing plant and storage godown			
i	Fund allocation for seed processing plant and storage godown	50 lakh		-
ii	Fund received under seed processing plant and storage godown	45 lakh (35+10)		-
iii	Expenditure under seed processing plant and storage godown	-		Under progress
iv	Activities for which fund was utilized seed processing plant and storage godown	-		Under progress
v	Whether tendering was gone?	-		Yes
vi	Amount available under seed processing plant and storage godown	45 lakh (35+10)		45 lakh (35+10)
vii	Expected date of completion of work	June, 2018		
viii	Any problems faced under seed processing plant and storage godown	-		No

B. Physical Progress:

Crop	Variety (with) year of Release	2016-17		2017-18	
		Target (Qtls)	Achievement (Qtls)	Target (Qtls)	Achievement (Qtls)
1. Pigeonpea	Vaishali (2007)	150	178.5	300	Crop is harvested
2. Chickpea	GJG 3 (2010)	200	153.6	200	Maturity stage
3. Greengram	Meha (2007)	150	151.2	300	Under progress

C. Other details:

SN	Item	2016-17	2017-18
1	Whether seed was produced at own farm or out sourced-progressive farmers etc.	Out sourced tribal farmer	Out sourced tribal farmer
2	Quantity of seed produced at own farm	-	Chickpea-Maturity stage

			Green gram-Under progress
3	Area coverage at own farm under seed production programme	Greengram 0.8 ha	Chickpea 2 ha Greengram 2 ha
4	Quantity of seed produced at Farmers field 1. Pigeonpea 2. Chickpea 3. Greengram	178.5 Q 153.6 Q 147.0 Q	Maximum seeds will be produced at farmers field
5	Area coverage at farmers field under seed production programme 1. Pigeonpea 2. Chickpea 3. Greengram	20 ha 20 ha 20 ha	25 ha 23 ha 23 ha
6	No. of Farmers involved under seed production programme.	Pigeonpea 50 Chickpea 50 Greengram 27	Pigeonpea 40 Chickpea 41 Greengram 30
7	Whether seed produced was certified? If not, mention reason.	No. Due to delay in implementation	Yes
8	Whether seed produced under seed hub was utilized?	Yes	Will be utilized
9	Where it was utilized?	Grain and seed	Crop is standing

11. Adaptive trials:

PLAN SCHEME Annual Development Progress Report (Period: 01-04-2017 to 31-03-2018)

Name of the Scheme: Strengthening of Testing of University's technologies on farmers' fields through adaptive trials Phase-II, Navsari

DDO No: 40 **Budget Head:** 12306-B

Office: Krishi Vigyan Kendra, Vyara

(A) Financial Progress :					(Rs. Lakhs)
Sr. No.	Item	Total Grant Allotment for Year 2017-18	Expenditure 1-04-2017 to 31-03-2018	Puls (+) Minus (-)	Reason for Puls (+) Minus (-)
1	2	3	4	5	6
1	Pay	-	-	-	-
2	Recurring	3.27	3.26	+0.00780	-
3	Non-Recurring	-	-	-	-
4	Civil	-	-	-	-
	Total :	3.27	3.26	+0.00780	-

(B) Physical Progress and Achievement:	
Objectives of Scheme	Physical Progress / Achievement against each objective
1. To strengthen the university	- Improved seeds of different varieties of paddy, soybean, pigeonpea, ragi, vari, Indian bean, green gram were disseminated among tribal

	technologies	farmers of Tapi district (Total no. Of demonstrations 459) - Mango grafts of Kesar, Rajapuri, Sonpari, Dasherri with vermicompost were also distributed to 60 farmers - Different bio-fertilizers viz. Azospirillum, PSB, Potash mobilizer were also distributed to farmers (details as per below)			
(C) Detail information of Demonstrations:					
SN	Technology	Crop	Variety	No. of demon.	No. of Beneficiaries
1	Improved seed	Paddy	GAR 13	46	46
2	Improved seed	"	NAUR 1	12	12
3	Improved seed	"	Purna	26	26
4	Improved seed	"	GNR-H1	80	80
5	Improved seed	"	GNR 6	42	42
6	Improved seed	Soybean	NRC 37	50	50
7	Improved seed	Pigeon pea	Vaishali	127	127
8	Improved seed	Ragi	-	10	10
9	Improved seed	Vari	-	10	10
10	Improved seed	Indian bean	NPS-1	50	50
11	Improved seed	Greengram	Meha	06	06
12	Plantation of fruit crops	Mango graft with Vermicompost	Kesar	60	60
Rajapuri					
Sonpari					
Dasherri					
13	Biofertilizers -1.Azospirillum			204	204
	2.PSB			240	240
	3.Potash mobilizer			240	240
Total				1203	1203

Feedback:

1.	All the improved varieties of different crops performed best in farmer's field, however Adverse effect of <i>Okhi</i> cyclone in December was noticed in some crops which affect the crop yield
2.	Awareness among farmers regarding use of bio-fertilizers have been increased day by day.

➤ FLD on Groundnut-TSP-DGR-Jungadh

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)
Groundnut (Summer-2017)	INM	Improved variety & Bio-fertilizers	TAG 37 A	100	40
Groundnut (Kharif-2017)	INM	Improved variety & Bio-fertilizers	GG 20	50	20
Groundnut (Summer-2018)	ICM	Improved variety	TAG 37 A	100	40

12. Activities carried out in 'Aadarsh Sansad Gram-Chikhalvav, Block-Vyara, Dist.Tapi

Sr. no.	Programmes/ Activities	Number	No. of Participants
---------	------------------------	--------	---------------------

Sr. no.	Programmes/ Activities	Number	No. of Participants
1	On Campus Training programmes on Mushroom cultivation, Method demonstration on paddy straw cuttings and its chemical sterilization, Plastic bag filling with sterilized paddy straw cutting and mushroom spawn inoculation, preparation of Neem Seed Kernal Extract (NSKE), Film Show on “Oyster Mushroom cultivation”, “Button Mushroom cultivation”, “Preparation and use of biopesticides, biofertilizers	8	40
2	Extension workers/Local leader/VIPs invited/presented during activities	Sarpanch, Resource person, Dairy President and member of Grampanchayat etc	

13. Activities carried out under celebration of ‘Swachhata Bharat Pakhwada’ during 15/09/2017 to 02/10/2017

Name of KVK	Date	Activity in brief	No. of participants
Tapi	16/09/2017	Group meeting and taking Sapath at Mohini village, Block - Uchchhal	35
	18/09/2017	<i>Kisan Gosthi</i> and taking sapath at KVK, Vyara	32
	19/09/2017	Farmers meeting reg. <i>Swachchhata Abhiyan</i> and taking Sapath at KVK, Vyara	33
	20/09/2017	Cleaning of office building by KVK Staff	15
	21/09/2017	Group meeting regarding ‘ <i>Swachchhata Abhiyan</i> ’ at Primary School, Zankhari village and taking Sapath by Sarpanch, Committee members of Gram Panchayat, Students, Teachers, farmers and farm women. Lastly cleaning of school campus by farm women and also guided to manage agriculture waste.	265
	22/09/2017	Cleaning of KVK Farm by Farm labour (<i>SHRAMYOGI</i>), KVK Scientist, Farm Manager and taking sapath	18
	25/09/2017	Group meeting and taking Sapath at KVK – Vyara	54
	28/09/2017	Farmers’ Day and taking Sapath at Regional Rice Research Station, NAU, Vyara	342

14. Mera Gaon Mera Gaurav (MGMG)

Name of SAU/Institute: Navsari Agricultural University, KVK, Vyara(Tapi)

Table 1: Details of MGMG Team and status of benchmark survey of selected villages

Team	Name of scientists with discipline	Name of village	Name of block	Name of district	Benchmark survey Status
1	2	3	4	5	6
Team 33	1.Dr.C.D.Pandya (Ext.Edu.)	1.Dolara	Vyara	Tapi	Completed
	2.Prof.Arta N.Soni (Home	2.Zankhari	Vyara	Tapi	Completed

	Science.)	3.Bardipada	Dolvan	Tapi	Completed
	3.Dr.S.M.Chavan(Pl.Prot.)	4.Jamaliya	Dolvan	Tapi	Completed
	4.Dr.M.R.Gami(Crop Prod.)	5.Ukhaldia	Songadh	Tapi	Completed

Table 2: Activities carried out up to 31st March, 2017 in the selected villages

Team	Visit to village		Goshthis/ Interface meetings conducted		Demonstrations conducted		
	No. of visits	No. of farmers	No. of goshthis/ interface meetings	No. of farmers	Title of demonstration	No. of demon	No. of farmers
1	2	3	4	5	6	7	8
Team 33	42	1459	26	676	IPDM in okra	14	14
					Use of okra plucker to reduce women drudgery	100	100
					Use of twin wheel hoe weeder to reduce drudgery of farm women	50	50
					Total	164	164

Table 2 continue.....

Team	Trainings conducted		Mobile-based advisory		Literature support provided		Input support	
	No. of training	No. of farmers	No. of farmers	No. of advisories	No. of literature	No. of farmers	Area (ha)	No. of farmers
9	10	11	12	13	14	15	16	17
Team 33	7	190	227	47	6	258	5	164

Table 2 continue.....

Team	Linkages created with Other departments/ agencies (furnish name)	Problem diagnosed		Awareness created	
		General problem	Agriculture problem	Subject matter	No. of farmers
18	19	20	21	22	23
Team 33	-ATMA, Tapi -SEWA, Vyara -JEEVANDEEP MAHILA MANDAL, Bardipada -RSETI, Vyara -AAU, Anand -GUJARAT MATIKAM KALAKARI & Rural Tech. Insti., Bajipura	-Sickle cell anemia - Leptospirosis -Irregular supply of electricity	-Lack of knowledge about crop production, fruits & vege. preservation, insect-pest identification & their mgt. -Heavy load of pesticides in vege. -Low irrigation facility -Lack of awareness about organic farming -Drudgery of farm women in Agri.	-Mushroom cultivation -Rural Craft -Fruits & vegetable preservation -IPDM in Kharif crops - Value addition in fruits & vegetables - Drudgery reduction technologies for farm women during farm operations -Scientific cultivation of paddy & pulse	18 21 36 14 189 160 136

Team	Linkages created with Other departments/ agencies (furnish name)	Problem diagnosed		Awareness created	
		General problem	Agriculture problem	Subject matter	No. of farmers
			practices	crops - Use of bio-fertilizers in agriculture & preparation of Jeevamrut & Panchgavya	68

Table 3: Any other activity carried out up to 31st March, 2017

Team	Name of activity	No. of farmers
1	2	3
Team 33	Celebration of different days	683
	Animal Treatment Camp	35 cases
	Farmers visit to KVK	181
	Method demonstration paddy straw cuttings and its chemical sterilization, plastic bag filling with sterlized paddy straw and inoculation of oyster mushroom spawn, preparation of Neem Seed Kernal Extract (NSKE), Enrichment of 0.5 % NSKE, Enrichment of biopesticide through FYM, Preparation of Jeevamrut /Panchgavya, Preparation of papaya jam, lemon squash, tomato ketchup, Amla candy, Installation of pheromone traps & lures, Pulp extraction from custard apple in machine, Use of okra plucker to reduce women drudgery	276
	Diagnostic Visit	23
	Exposure visit of farmers	
	Sample diagnosed at PHC	

18. Awards:

Sr. No.	Details of Awards
1	PANDIT DEEN DAYAL UPADHYAY KRISHI VIGYAN PROTSHAHAN PURASKAR (Zonal) - 2016-17

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & Farm women	32	466	739	1205
Rural youths	06	73	66	139
Extension functionaries	02	40	20	60
Sponsored Training	16	374	467	841
Vocational Training	05	65	53	118
Total	61	1018	1345	2363

2. Front Line Demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	0	0	--
Pulses	55	19	--
Cereals	105	30	--
Vegetables	209	33.9	--
Other crops	17	5.5	--
Hybrid crops	0	0	--
Total	386	88.4	
Livestock & Fisheries	70	0	
Other enterprises (Home Science)	200	0	
Total	270	0	
Grand Total	656	88.4	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	6	57	57
Livestock	1	12	12
Various enterprises	0	0	0
Total	0	0	0
Technology Refined			
Crops	0	0	0
Livestock	0	0	0
Various enterprises	0	0	0
Total	0	0	0
Grand Total	7	69	69

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1290	67962
Other extension activities	110	--
Total	1400	67962

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
KVK, NAU, Vyara, Dist. Tapi	Text only	17	5	--	--	9	16	47
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	Total Messages	17	5	--	--	9	16	47
	Total farmers Benefitted/Message	9547	--	--	--	--	--	-

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	238.65	472160
Planting material (No.)	104760	279768
Bio-Products (kg)	1076 lit 12371 kg	122510
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	770	83600
Water	26	200
Plant	90	00
Total	886	83800

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	4
2	Conferences	1
3	Meetings	6
4	Trainings for KVK officials	3
5	Visits of KVK officials	2
6	Book published	0
7	Training Manual	0
8	Book chapters	9
9	Research papers	9
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	3
13	Proceedings	1
14	Award & recognition	1
15	On going research projects	4

Note: Details of HRD and Publications are given in Annexure-II

Annexure-I

Proceeding of Fifteenth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Vyara held on 12/03/2018 at 10:00 am at Training Hall, KVK, NAU, Vyara

◆ List of the members remained present in the meeting :

Sr. No.	Name	Members/ Invitees	Designation
1	Dr. C. J. Dangaria	Chairman	Hon. Vice Chancellor Navsari Agricultural University, Navsari
2	Dr. G. R. Patel	Member	Director of Extension Education Navsari Agricultural University, Navsari
3	Dr. P. D. Verma	Member Secretary	Senior Scientist and Head KVK, Vyara
4	Dr. Anilbhai	Member	Principal Scientist & Head Indian Soil Salinity Institute, ICAR-Bharuch
5	Dr. V. P. Patel	Member	Associate Research Scientist, Regional Rice Research Station, Navsari Agricultural University, Vyara
6	Mr. Jigar Gohil	Member	Assistant Professor (Horticulture Expert), Polytechnic in Agril. Navsari Agricultural University, Vyara
7	Dr. N.B.Patel	Member	Associate Professor, Veterinary College, NAU, Navsari
8	Mr. Prafulbhai R. Chaudhari	Member	Project Director, ATMA-Tapi, Vyara
9	Mr. S.B.Gamit	Member	District Agriculture Officer, Department of Agriculture, District Panchayat, and Project Director, ATMA-Tapi, Vyara.
10	Mr. Nikunj Patel	Member	Deputy Director of Horticulture, Tapi district, Vyara
11	Mr. Santosh Parulkar	Member	Assistant Director, GLDC, Vyara
12	Dr. C. M. Rana	Member	Deputy Director of Animal Husbandry, District Panchayat, Tapi District, Vyara
13	Mr. K. R. Patani	Member	Assistant Director (Fisheries), Near CRPF Campus, Ukai, Dist. Tapi
14	Mr. Ghanshyambhai S. Patel	Member Progress farmer	At & Po. Bahurupa Ta. Kukarmunda

15	Jayaben Mahendrabhai Chaudhari	Member Progress farm women	At & Po. Unchchamala Ta. Vyara
16	Mr. Kantibhai Desai	Member	Agri-Entrepreneur, Sardar Agro Centre, APMC, Vyara
17	Rubinaben Somabhai Gamit	Invitee Member	President, SHG, At & Po. Zankhari Ta. Vyara
18	Mr. D.T.Desai	Invitee Member	Patidar Agro Centre, APMC, Vyara
19	Mr. D.K.Patel	Invitee Member	BIAF Foundation, Vyara
20	Mr. Dharmesh Vani	Invitee Member	Press Reporter-Gujarat Raksha, Vyara
21	Mr. Anup Bhatt	Invitee Member	Press Reporter-Dhabkar & Sandesh News TV
22	Mr. Tulsibhai Mavani	Invitee Member	Ambedkar Vanavasi Kalyan Trust-Surat
23	Mr. Ramkumar Sinh	Invitee Member	Suruchi Vasahat Trust, Bardoli
24	Smt. Lilaben Gamit	Invitee Member	Progressive Women Farmer, Member of GSSC Ltd., Gandhinagar, Extension Council- NAU, Navsari At. Bedi, Ta. Songadh, Dist. Tapi
25	Mr. Gumanbhai Narsibhai Chaudhari	Invitee Member	Progress Farmer & Resource Person-KVK, At & Po. Bedvan- pra-Bhesrot, Ta. Songadh
26	Sister Jona	Invitee Member.	Jivandeep Co.op.Soc Village :Baradipada Ta.Dolavan
27	Mr. Kishorbhai Dholakiya	Invitee Member	Ambedkar Vanavasi Kalyan Trust, Surat
28	Gamit Kamlaben P.	Invitee Member	Hangati Mahila Trust, At & Po. Mandal Ta. Songadh
29	Mr. Dipakbhai D. Chaudhari	Invitee Member	Gujarat Matikam Kalakari Ane Rural Technology, Bajipura
30	Dr.C.D.Pandya	Special invitee	Scientist (Extension), KVK,Vyara
31	Smt. A.N.Soni	Special invitee	Scientist (Home Science), KVK,Vyara
32	Dr.S.M.Chavan	Special invitee	Scientist (Plant Protection), KVK,Vyara
33	Dr.P.K.Modi	Special invitee	Scientist (Horticulture), KVK,Vyara
34	Dr. J. K. Movaliya	Special invitee	Scientist (Animal Science), KVK,Vyara
35	Dr. M.R.Gami	Special invitee	Scientist (Crop Production), KVK,Vyara

36	Dr. V.N.Parmar	Special invitee	Farm Manager, KVK, Vyara
37	Shri N.N.Makani	Special invitee	Programme Assistant, KVK, Vyara
38	Smt. Ramilaben Gamit SWACHCHA SHAKTI Awardee	Special invitee	At & Post-Taparwada Dist. Songadh

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

Sr. No.	Name and Designation	Members/ Invitees
1	Hon. Director - ATARI, Zone-VIII, ICAR, Pune, Maharashtra	Member
2	Mr. Vilas Save, DDM, NABARD-Surat & Tapi	Member

Dr. P. D. Verma, Member Secretary and Senior Scientist & Head welcomed all the members of the house and agenda wise meeting was proceed with the permission of Chairman and Hon'ble Vice Chancellor Dr. C. J. Dangaria.

15.1	Approval of minutes of Fourteenth Scientific Advisory Committee.
	The action taken on the minutes of Fourteenth Scientific Advisory Committee Meeting of KVK, Vyara held on 4 th March, 2017 was presented by Senior Scientist and Head and approved by the house.
15.2	Progress made by KVK during 01-02-2017 to 28-02-2018.
	Dr. P. D. Verma, Senior Scientist and Head, KVK, NAU, Vyara presented the report on progress made by KVK, Vyara for the period of 01-02-2017 to 28-02-2018 and it was accepted by the house.
15.3	Action plan for the period of April-2018 to March-2019.
	Discussion was made on the Action Plan for the period of April-2018 to March-2019 presented by Senior Scientist and Head, KVK, NAU, Vyara which was approved with following suggestions.

15.3.1	Diffusion of new varieties of Paddy released from NAU.
15.3.2	More number of local varieties / traditional seed / germ plasma available in the tribal areas need to be protected under PPV & FRA by registration.
15.3.3	Awareness programme of Cashew nut in collaboration with Agriculture/Horticulture/BIAF foundation should be organised.
15.3.4	Training Programme on goat should be organized.
15.3.5	More programme should be organized on Bee Keeping.
15.3.6	FLDs on Indian Bean (variety-NPS-1) should be organized under Adaptive Trial programme.
15.3.7	Awareness programmes on the new variety which gives higher yield should be organized.

As no any more points remained to be discussed, with the permission of Chairman, the meeting was ended.

**Member Secretary
&
Senior Scientist & Head
Krishi Vigyan Kendra,
NAU, Vyara**

**Chairman
&
Vice Chancellor
Navsari Agricultural University
Navsari**

Annexure-II

1. Extension Literature (Folders)

Sr. No.	Subject	Name of Authors
1	VAIGYANIC PADHDHATI THI PADI/VACHHARDA UCHHER	Dr. H. C. Parmar, Dr. J. H. Rathod, Dr. J. K. Movalia
2	PASHU AAHAR	Dr. H. C. Parmar, Dr. J. H. Rathod, Dr. J. K. Movalia
3	Pradhan Mantri Fasal Beema Yojna	Dr. P. D. Verma, Dr. C. D. Pandya

2. News paper coverage

S.N.	Subject, News Paper & Date
1	VYARA KRISHI VIGYAN KENDRAMA MASHROOMNI KHETI VISHE KHEDUTONE TALIM APAY, SANDESH, Dated:17/04/2017
2	VYARA KRISHI KENDRAMA SAT GAMNA KHEDUTONE MASHROOM KHETINI TALIM, , SANDESH, Dated:1/05/2017
3	KVK VYARA KHATE DAIRY DEVELOPMENT & MANAGEMENT VISHAY UPAR TALIM YOJAY, GUJARAT RAKSHA, Dated: 10/7/2017
4	KUDRATNE MITRA BANAVISHU TO MOTABHAGNA PRASHNONU NIRAKARAN AAVI JASHE:Dr.Verma, SNADESH, Dated: 16/7/2017
5	KRISHI VIGYAN KENDRA VYARA DWARA VISHWA PARYAVARAN DIN NI UJAVANI KARAY: GUJARAT RAKSHA, Dated: 24/7/2017
6	HALNA SAMAYMA KRISHI KSHETRE ICT NO UPYOG KHUB J JARURI: Dr. Pandya, GUJARAT RAKSHA, Dated: 7/8/2017
7	KHARIF PAKONI UTPADAKTA VISHE KHEDUT-VAIGYANIK CHARCHA, GUJARAT RAKSHA, Dated:7/8/2017
8	VYARA KRISHI KENDRA KAHE KRISHI KSHETRE NAVI KSHITIJO BE DIVASIY TALIM YOJAY, SANDESH, Dated: 7/8/2017
9	DHARTIPUTRO (KHEDUTO) ABHINANDANNE PATRA CHHE: SHRI PRABHUBHAI VASAVA, GUJARAT RAKSHA, Dated: 18/9/2017
10	KRISHI VIGYAN KENDRA VYARA KHATE MUSHROOMNI KHETI VISHENI VYAVSAYIK TALIM YOJAY: GUJARAT RAKSHA, Dated: 26/9/2017
11	KHEDUTONI BAMNI AAVAK KARVA BAGAYATI PAKOMA TANTRIKTA APNAVAVI JARURI, SANDESH, Dated:9/10/2017
12	KRISHIVIGYAN KENDRA, VYARA KHATE BAGAYATI PAKO ANE TANTRIKTA THAKI KHEDUTONI BAMNI AAVAK VISHE VYAVSAYIK TALIM YOJAY, GUJARAT RAKSHA, Dated:9/10/2017
13	KRISHI KENDRA KENDRA, VYARA KHATE KAUSHALYA VIKAS TALIM ANTERGAT AADIVASI MAHILO MATE KIT VITARAN KARYAKRAM YAJAYO, GUJARAT RAKSHA, Dated:16/10/2017
14	TAPI JILLAMA KRISHI VIGYAN KENDRA, VYARA KHATE VISHWA JAMIN DIVASNI UJAVANI KARAY. GUJARAT RAKSHA Dated:18/12/2018
15	VYARA KRISHI VIGYAN KENDRA DWARA DOLARA GAME KSHETRIY DIVASNI UTSAHBHER UJAVANI THAY. SANDESH, Dated:16/01/2018
16	VYARAMA AAVAK VADHARVA MASUROOMNI KHETI DWARA UDHYOG SAHASIKTA VIKAS ANGE TALIM, SANDESH, Dated:22/01/2018
17	TAPI JILLANA KRISHI VIGYAN KENDRA, NAU, DWARA KSHETRA DIVAS ANE KHSETRIY TALIM KARYAKRAM DOLARA GAME YOJAYO. SANDESH, Dated:22/01/2018
18	KRISHI KENDRA KENDRA, VYARA DWARA JAMALIYA GAM KHATE "KATHOD PAKONI VAIGYANIK KHETI PADHDHATI" VISHAY UPAR

	KSHETRIY DIVAS NI UJANANI, GUJARAT RAKSHA, Dated:5/2/2018
19	KVK, VYARA DWARA UNCHCHAMALA GAME NMOOP KARYAKRAM HETHAL KSHETRIY TALIM NU AAYOJAN. GUARATA RAKSHA, Dated:19/2/2018
20	KRISHI VIGYAN KENDRA, VYARA KHATE "ROG-JIVAT NIYANTRANMA JAIVIK JANTUNASHAKO ANE PARBHAKSHI PAKSHIONU MAHATVA" VISHAY UPAR KHEDUT SHIBIR YOJAYO. GUJARAT RAKSHA, Dated:19/2/2018
21	VYARA MA JAIVIK JANTUNASHAKO ANE PARBHAKSHI PAKSHIONU MAHATVA ABGE KHEDUT SHIBIR YOJAY. SANDESH. Dated:19/2/2018
22	KRISHI VIGYAN KENDRA, VYARA KHATE NMOOP ANE NFSM KARYAKRAM HETHAL KSHETRIY DIN NI UJAVANI. GUJARAT RAKSHA, Dated:26/2/2018
23	VYARA KVK MA KAPNI PACHCHINU PRABANDHAN ANE MULYAVARDHAN VISHAY UPAR TALIM. SANDESH. Dated:28/2/2018
24	KRISHI KENDRA KENDRA, VYARA DWARA ARTS ANE COMMERCE COLLEGE, VYARA KHATE AANTARRASHTRİY MAHILA DIN UJAVYO. GUJARAT RAKSHA, Dated:12/3/2018
25	VYARA KRISHI KENDRA KENDRA MA VAIGYANIK SALAHKAR SAMITI NI BETHAK MALI, SANDESH, Dated:16/3/2018
26	KHEDUTO NI AAVAK BAMANI KARVA MATE KHETI AADHARIT ANYA UDHYOGO VIKSAVAVA ANE MUSHROOM MA MULYAVARDHAN KARVA MATE HIMAYAT. DHABKAR, Dated:17/3/2018
27	KRISHI KENDRA KENDRA, VYARA KHATE VAIGYNANIK SALAHKAR SAMITINI 15 MI BETHAK YOJAY. GUJARAT RAKSHA, Dated:19/3/2018
28	KHEDUTONI AAVAK BAMNI KARVA MATE SAJIV KHETI VISHAY UPAR TALIM YOJAY. GUJARAT RAKSHA, Dated:19/3/2018

3. Popular articles

S.N.	Subject, News Paper/Magazine, Date
1	S. M. Chavan, C. D. Pandya and G. R. Patel (2016). Pheromone trap for paddy yellow stem borer in tribal belt of Tapi district, Gujarat. <i>ICAR NEWS</i> :22(4):23, ISSN:2394-3270
2	Dr. S. M. Chavan, Dr. Pravin Modi. (2017). MAJURONI APRAPYATANE PAHOCHI VALVA MAGFALIMA YANTRIKARAN KHEDUTO MATE LABHAKARAK BANI SHAKE. <i>AGRO-SANDESH</i> , Dated:17/4/2017
3	Dipal N. Soni, Arti N. Soni and Rita R. Patel (2017). PARVALNU PAUSHTIK ANE AUSHADHIYA MULYA. <i>KRISHIGOVIDHYA</i> , May'2017, 70(1):48
4	Arti N. Soni, P. D. Verma, Dipal N. Soni (2017). FAL ANE SHAKBHAJI PARIKSHAN TECHNOLOGY DWARA AADIWASI MAHILA SHASHKTIKARAN, <i>KRISHIGOVIDHYA</i> , August-2017 Vo. 70 (4) pg-45-47
5	S. M. Chavan (2017). CHANA PAKMA NUKSHAN KARNAR ROGONI OLAKH TEMAJ NIYANTRAN MATENA UPAYO. <i>AGRO SANDESH</i> , Dated:6/11/2017
6	Dr. P. D. Verma, Dr. P. K. Modi, Dr. S. M. Chavan (2017). TARBUCHMA SAMANVIT KHATAR PRABANDHAN THAKI DOLARA GAM MA MITHAS NO PRAVAH. <i>GUJARAT RAKSHA</i> , Dated:13/11/2017
7	Arti N. Soni, P. D. Verma, Dipal N. Soni (2017). SITAFAL:AADIVASI SAMAJNU KALPVRUKSHA. <i>KRISHIGOVIDHYA</i> , Vol.70(7), pp.49-50
8	Dr. J. K. Movalia (2017). KRISHI VIGYAN KENDRA-KHEDUTO MATE AASHIRVAD SAMAN KRISHI MANDIR. guj.vikaspedia.com
9	Dr. J. K. Movaliya, Dr. P. D. Verma, Dr. H. C. Parmar (Nov.-2017). EK VISHESH KHORAKTHI PASHOMA DADHNU UTPADAN VADHARVA MATE-TOTAL MISHRIT RASHAN. guj.vikaspedia.com
10	Dr. J. K. Movaliya, Dr. P. D. Verma, Dr. H. C. Parmar (Nov.-2017). DUDHALA PASHUOMA 21 MI SADINO VAIGYANIK ABHIGAM. guj.vikaspedia.com
11	Dr. S. M. Chavan (Dec.2017). TUVARNA PAKMA VAVETAR SATHE SAMRAKSHAN MATE SAMAYSAR PAGLA LEVATHI SARU UTPADAN MAKI SAKE CHHE. <i>AGRO-SANDESH</i> , Dated: 4/12/2017
12	Dr. J. K. Movaliya, Dr. P. D. Verma, Dr. H. C. Parmar (Dec.-2017). GAY-BHENSMA POSHAN MATE PASHU. <i>KRISHI JIVAN</i> , 5(2017):27-28
13	Dr. S. M. Chavan (Jan.2017). KHEDUTO RASAYANIK DAVAONA VAPRASH CHHODI JAIVIK JANTINASHAKO JATE BANAVI UPYOG KARI SHAKE. <i>AGRO-SANDESH</i> , Dated: 4/12/2017
14	Dr. J. K. Movaliya, Dr. P. D. Verma, Dr. H. C. Parmar (Feb.-2018). DUDHALA PASHUOMA 21 MI SADINO VAIGYANIK ABHIGAM. <i>KRISHI JIVAN</i> , 5(2018):27-29

5. TV Talks

Sr. No.	Date	Place	Subject	Resource person
1	5/4/2017	DD-Girnar, Ahmedabad Doordarshan (20 Minutes)	KRISHI VIGYAN KENDRANI VIVIDHA PRAVRUTIO	Dr. C.D.Pandya
2	4/9/2017	Vande Gujarat Channel BISAG-Gandhinagar	Meadow orchard system in guava Jamrukha Mido orchard padhdhati	, Dr. P.K.Modi
3	12/3/2018	DD-Girnar, Ahmedabad Doordarshan (20 Minutes)	Success story of Organic farmer of Siker village of Valod taluka	Dr. C.D.Pandya Dr. P.K.Modi Dr. P.D.Verma

7. Chapters published in various local publications

Year	Name of Book	Subject/Chapter	Authors
2017	KRUSHI PAKOMA PROCESSING ANE MULYAVARDHAN	SOYA AADHARIT DAIRY BANAVATO	Dipal N. Soni Arti N. Soni
2017	TELIBIYA PAKONI VAIGYANIK KHETI	SOYBEANNI MULYAVARDHIT BANAVATO	Arti N. Soni Dipal N. Soni
2017	TELIBIYA PAKONI VAIGYANIK KHETI	TALNU KACHCHARIYU	Dipal N. Soni Arti N. Soni
2017	TELIBIYA PAKONI VAIGYANIK KHETI	SOYA AADHARIT DAIRY BANAVATO	Dipal N. Soni Arti N. Soni
2018	SYSTEM OF RICE INTENSIFICATION	System of Rice Intensification (SRI):Boon for Increasing Productivity and Ecological Security	S. M. Chavan C. D. Pandya P. P. Rohilla
2017	SOYABEANNI VAIGYANIK KHETI ANE MULYAVARDHAN	SOYABEANNI GHARGATHTHU BANAVATO	D. P. Patel N.N.Chaudhari D. N. Soni Arti N. Soni
2017	SOYABEANNI VAIGYANIK KHETI ANE MULYAVARDHAN	SOYABEANNI MULYAVARDHIT BANAVATO	A. N. Soni D. N. Soni D. P. Patel
2017	SOYABEANNI VAIGYANIK KHETI ANE MULYAVARDHAN	SOYA AADHARIT DAIRY BANAVATO	D. N. Soni A. N. Soni D. P. Patel
2017	Symbols of Success-Pathways in Prosperity. ISBN: 978-81-7164-175-8	IPM Technology- A Boon for Ecofriendly Pest Management in Brinjal.	Chavan S. M., Modi P. K. and Pandya C. D.

2017	PHOOLPAKO ISBN:978-81934018-6-6	GULABNI VIVIDH BANAVATO	Dipal N. Soni Arti N. Soni
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8. Research papers

1	Parmar H.C., Pastagiya J.J. and Movaliya J.K. (2017). Effect of urea treated local grass 'BHATHDU' (<i>Themeda Cymbaria</i>) on milk production of crossbreed cows. <i>International Journal of Science, Environment and Technology</i> , 6(2):1327-1334 ISSN:2278-3687(O), 2277-663X (P)
2	Arti N.Soni, C.D.Pandya and D.N.Soni. (2016). Impact of Front Line Demonstration on feeding of low cost high protein rich food (POSHAK AAHAR) to malnourished rural children. <i>Gujarat Journal of Extension Education</i> , 27(1):79-81, ISSN:2322-0678, NAAS;3.86
3	Dipal N.Soni, Arti N. Soni and C.K.Timbadia. (2016). Impact of training on knowledge level of participants regarding value addition in papaya. <i>Gujarat Journal of Extension Education</i> , 27(2):126-129, ISSN:2322-0678, NAAS;3.86
4	M.V.Davli and C.D.Pandya. (2016). Socio-Economic status of Maize Contract Farmers. <i>Gujarat Journal of Extension Education</i> , 27(2):126-129, ISSN:2322-0678, NAAS;3.86
5	Sushil Kumar, Chavan, S. and Prajapati V.M. (2017). New records of insect-pests and natural enemies on economically important forest trees in Dang District of Gujarat. <i>Journal of Tree Science</i> , 36(1):16-18 NAAS-3.51, ISSN-0970-7662
6	P.D.Verma, J.J.Pastagia, Arti N.Soni. (2018). Seed utilization behaviour of tribals in rainfed areas. <i>Gujarat Journal of Extension Education</i> , Vol. 28(2):252-256, NAAS rating-3.86, ISSN-2322-0678
7	Arti N.Soni, P.D.Verma, Dipal N.Soni. (2018). Impact of training on knowledge of tribal farm women regarding health and nutrition of mother and child. <i>Gujarat Journal of Extension Education</i> , Vol. 28(2):261-264, NAAS rating-3.86, ISSN-2322-0678
8	Arti N.Soni, P.D.Verma, Dipal N.Soni. (2018). Impact of training on adoption of fruits and vegetable preservation technology by tribal women. <i>Gujarat Journal of Extension Education</i> , Vol. 28(2):46-49, NAAS rating-3.86, ISSN-2322-0678
9	B.L.Raghunandan, P.H.Godhani, S.M.Chavan (2017). Tribal Sub Plan: A special reference to biological interventions to enhance crop production and productivity in tribal areas of Tapi district in Gujarat. <i>Trends in Biosciences</i> , 10(48):9646-9648

9. Research paper abstracts

1	M. V. Dalvi, C. D. Pandya and R. D. Pandya (April-2017). Constraints faced by farmers in contract farming. Abstract published in National Seminar on "Extension Plus: Expanding the Horizons of Extension for Holistic Agricultural Development" organised at SDAU, Sardarkrushinagar during 21-22, April-2017. Page No. 177
2	A. N. Soni, C. D. Pandya and D. N. Soni (April-2017). Impact of Front Line Demonstration on feeding of Low Cost High Protein Rich Food (Poshak Aahar) to Malnourished Rural Tribal Children. Abstract published in National Seminar on "Extension Plus: Expanding the Horizons of Extension for Holistic Agricultural Development" organised at SDAU, Sardarkrushinagar during 21-22, April-2017. Page No. 180
3	M. V. Dalvi and C. D. Pandya (April-2017). Socio-economic status of Maize contract farmers. Abstract published in National Seminar on "Extension Plus: Expanding the Horizons of Extension for Holistic Agricultural Development" organised at SDAU, Sardarkrushinagar during 21-22, April-2017. Page No. 220
4	Verma P. D. and Pastagia J. J. (April-2017). Bio-Diversity Awareness: Need of the hour for sustainable Agriculture. Abstract published in National Seminar on "Extension Plus:

	Expending the Horizons of Extension for Holistic Agricultural Development" organised at SDAU, Sardarkrushinagar during 21-22, April-2017. Page No. 158
5	P. D. Verma, Hitesh Parmer and Pastagia J. J. (April-2017). Reproductive performance of dairy animals in tribal areas. Abstract published in National Seminar on "Extension Plus: Expending the Horizons of Extension for Holistic Agricultural Development" organised at SDAU, Sardarkrushinagar during 21-22, April-2017. Page No. 189
6	Dipal.N. Soni A. N. Soni, K. B. Kamaliya and C. K. Timbadia. (April-2017). Impact of training on knowledge level of participants regarding value addition in papaya. Abstract published in National Seminar on "Extension Plus: Expending the Horizons of Extension for Holistic Agricultural Development" organised at SDAU, Sardarkrushinagar during 21-22, April-2017. Page No. 234
7	J. K. Movaliya, Ranjan Das and K. Srinivas (Feb.-2018). Growth and reproductive performance of in house pelleted feed in sprague dawley rats. Abstract published in compedium of National Conference organised by ANSI-2018 at JAU, Junagadh during 1-3 Feb.,2018.
8	P. K. Modi, P. D. Verma, R. M. Patel and Snajeew Kumar (Jan.2018). Effect of CO2 concentration and light on growth and yield of plants in protected conditions. Abstract published in abstract book of National Seminar on " Technologies and sustainability of protected cultivation for High- valued vegetable crops" during 1-3, Feb., 2018 at ACHF-NAU, Navsari. Page no.1
9	P. K. Modi, S. M. Chavan, B. B. Patel, B. M. Tandel and P. P. Bhalerao (Jan.2018). High-tech system for vegetable seedling. Abstract published in abstract book of National Seminar on " Technologies and sustainability of protected cultivation for High- valued vegetable crops" during 1-3, Feb., 2018 at ACHF-NAU, Navsari. Page No. 101-102

10. Workshop /Seminars/Conference/Meeting etc. attended

Sr.No.	Date	Place	Subject	Resource Person
1	21-22/4/2017	SDAU, Sardar krushinager	National Seminar on "Extension Plus: Expending the Horizons of Extension for Holistic Agricultural Development" organised by SEEG & SDAU-Sardarkrushinagar	Dr. C .D. Pandya
2	29/4/2017	AAU, Anand	Seminar on "Antimicrobial resisitance-From awareness to action"	Dr. J. K. Movaliya
3	13-14/5/2017	College of Forestry-Sirsi	Bio-resource conservation and utilization	Dr. S. M. Chavan
4	21-22/4/2017	SDAU, Sardar krushinager	National Seminar on "Extension Plus: Expending the Horizons of Extension for Holistic Agricultural Development" organised by SEEG & SDAU-Sardarkrushinagar	Arti N. Soni

5	2/6/2017	NAU-Navsari	Seminar on "Sustainable food value chain in Arena of climate change"	Dr. P. K. Modi
6	7-8/6/2017	NASC complex- New Delhi	National Seminar on "Empowering Farmers of tribal areas"	Dr. J. K. Movaliya
7	11-13/7/2017	ATIC-Navsari	Workshop on Communication skills for effective extension services	Dr. C. D. Pandya, Arti N. Soni
8	11-16/9/2017	EEI-Anand	Workshop on "Soft skills for personality development"	Arti N. Soni
9	1-3/2/2018	JAU-Junagadh	National Conference on "Nutritional challenges for raising animal productivity to improve farm economy" organised by ANSI-2018	Dr. J. K. Movaliya
10	1-3/2/2018	NAU-Navsari	National Seminar on "Technologies and sustainability of protected cultivation for high-valued vegetable crops"	Dr. P. K. Modi Dr. P. D. Verma Dr. S. M. Chavan
11	27/3/2018	NAU-Navsari	Workshop on "PPV & FRA"	Dr. P. K. Modi

11. On going research projects:

Sr. No.	Title of Research Study	Investigators
1	Attitude of Village Extension Workers towards ICT apparatus for exploring agricultural information	1. Dr. C. D. Pandya, Scientist (Extn), KVK, NAU, Vyara, Dist. Tapi 2. Dr. P. D. Verma, Senior Scientist & Head, KVK, NAU, Vyara, Dist. Tapi
2	Perception of the farmers towards plug tray nursery	1. Dr. P.D.Verma, Senior Scientist & Head, KVK, NAU, Vyara, Dist. Tapi 2. Dr. C.D.Pandya, Scientist (Extn), KVK, NAU, Vyara, Dist. Tapi 3. Dr. P.K.Modi, Scientist (Horticulture), KVK, NAU, Vyara, Dist. Tapi
3	Adoption of Novel organic liquid fertilizer in fruits and vegetable crops in Tapi district.	1. Dr. P.K.Modi, Scientist (Horticulture), KVK, NAU, Vyara, Dist. Tapi 2. Dr.S. M. Chavan, Scientist (Plant Protection), KVK, NAU, Vyara. Dist. Tapi 3. Dr. P.D.Verma, Senior Scientist & Head, KVK, NAU, Vyara, Dist. Tapi
4	Tribal women's Knowledge about different types of Anemia	1. Prof. Arti N.Soni, Scientist (Home Science),KVK,NAU,Vyara 2. Dr. P.D.Verma, Senior Scientist & Head, KVK, NAU, Vyara, Dist. Tapi

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