ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVK, VYARA, NAU, TAPI-2019
(1st January-2019-31st December-2019)

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:** 235429

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. C. D. Pandya	-	8780434557	akshaydhara@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 December 31, 2019)

Sl. No.	Sanctioned post	Name of the incumbent	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	Senior Scientist & Head	Dr. C. D. Pandya	Extension Education	89800-211500	--	29/07/2009	NA
2	Scientist	Dr. A. J. Dhodia	Extension Education	57700-182400	--	26/08/2019	NA
3	Scientist	Prof. Arti N. Soni	Home Science	57700-182400	--	04/04/2008	NA
4	Scientist	Dr. J. B. Butani	Animal Science	57700-182400	--	27/08/2019	NA
5	Scientist	Dr. S.M.Chavan	Plant Protection	68900-205500	--	10/01/2013	NA
6	Scientist	Prof. K. N. Rana	Agronomy	57700-182400	--	29/08/2019	NA
7	Scientist	Dr. Dharmishtha M. Patel	Horticulture	57700-182400	--	26/08/2019	NA
8	Programme Assistant	Mr. N. N. Makani	Seed Technolgy	38090 (Fix)	--	13/07/2015	NA

1.6 Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	0.86
2	Under Demonstration Units	0.38
3	Under Crops	4.33
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)	Expen-diture (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1	Administrative Building	ICAR	31/3/2011	516	--	--	--	--
2	Farmers Hostel	ICAR		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	3,31225=00	4806 hrs	Working
Motorcycle	2011	48,816=00	15826	Working

C) Equipments & AV aids

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
(1)	Furniture (Godrej)			
1	Table T-9	30/3/2001	26636	Working
2	Table T-104	30/3/2001	8515	Working
3	Chair CH-186	30/3/2001	43300	Working
4	Chair PCH-7000 D	30/3/2001	8168	Working
5	Chair CH-7 B	30/3/2001	5692	Working
6	Store Well – Glass Door	30/3/2001	9259	Working
7	Slotted Angel Racks	30/3/2001	4900	Working
(2)	Mahindra Tractor model 575 DI 45 HP & Accessories	30/3/2001	3,31,225	Working
(3)	Photo Copier NP 7160 Canon NPG-1	31/3/2001	117274	Not working
(4)	Furniture (Godrej)			
1	Table –T- 402	27/12/2002	24600	Not good
2	Comp. Table C-6	27/12/2002	5255	Working
3	Store Well – Glass Door	27/12/2002	9330	Working
4	Store Well Plane	27/12/2002	16000	Working
5	Chair CHR-7B	27/12/2002	22350	1-Not good
6	Chair PCH-5000 2 T	27/12/2002	7230	1-Not good
7	Filing Cabinet	27/12/2002	7900	Working
(5)	Computer & Peripherals	28/12/2002	51850	Working
(6)	3 KVA on line UPS	28/12/2002	38000	Not working
(7)	HP Laser Jet 1200 Printer	28/12/2002	20600	Not working
(8)	MSXP standard edition with Indian Longwise Proofing tools	30/12/2002	6450	Not Working
(9) 1	CD writer	28/12/2002	3025	Working
2	HP Scan jet 2300c Scanner	28/12/2002	3700	Not Working
(10) 1	Ceramic steel white writing board 4'x6'	21/2/2003	9000	Working
2	Ceramic chalk writing board 4'x 6'	21/2/2003	9000	Working
(11) 1	Over Head Projector	22/3/2003	27690	Working
2	Plastic screen with tripod stand	22/3/2003	4500	Not Working
(12) 1	LG 29 CA Color TV 29"	21/3/2003	26990	Working
2	Thomson 5 in 1 VCD player	21/3/2003	6990	Not Working
(13)	P.A. System			
1	Amplifier SSA 250	22/3/2003	9400	Working
2	Eco Mixture DMX 40	22/3/2003	3249	Working
3	Full Range Speaker SRX 250 D	22/3/2003	24472	Working
4	Microphone			
	ALD 101 x LR	22/3/2003	1140	Not Working
	ATP 20 M	22/3/2003	489	Not Working
	WM 201	22/3/2003	1615	Not Working
5	Unit Horn Combination UHC 30 x T	22/3/2003	1188	Not Working
6	Micro Phone Stand	22/3/2003		Working
	DGN	22/3/2003	456	Working
	DGT	22/3/2003	285	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
	ATS:5	22/3/2003	100	Working
(14)	A.V. Trolly	22/3/2003	4132	Working
(15)	Laminated Chart with wooden Frame size 20" x 30"	22/3/2003	24420	Not good
(16)	Sony Digital Handy cam	22/3/2003	32750	Not Working
1	Power adapter	22/3/2003		Not Working
2	Battery	22/3/2003		Not Working
3	Remote Control	22/3/2003		Not Working
4	AV Connecting Cable	22/3/2003		Not Working
5	Belt shoulder strap	22/3/2003		Not Working
6	Handy Cam Recording Caset	22/3/2003		Not Working
(17)	Automatic slide Projector	22/3/2003	13695	Working
(18)	Portable Generator EXK 2000 AC	24/3/2003	38200	Working
(19)	Education Exhibition Panel System	25/3/2003	13500	Working
1	News Paper Stand	25/3/2003	3500	Working
2	Displayer/Book/ Magazine Stand	25/3/2003	3500	Working
3	Notice Writing Board with Acrylic Shutter	25/3/2003	4450	Working
(20)	Stainless steal Vessels	28/3/2003	19450	Working
(21)	Modem	31/3/2003	2020	Working
(22)	Laminated Charts with Plywood Framing size 24"x30"	12/3/2004	3000	Not good
(23)	Colour Enlargement charts	29/3/2004	24420	Not good
(24)	Jeep Mahindra & Mahindra Bolero D.I.	2/12/2004	430500	Working
(25)	Bolero Accessories	2/12/2004	21650	Working
(27)	Whirlpool freeze	27/3/2006	15800	Working
(28) 1	Electronic Automatic Kel Pus Microprocessor based eight place macro block digestion system model KES-08L	27/3/2006	88120	Not Working
2	Electronic Kel plus micro processor based Automatic Distillation system model distil EM	27/3/2006	142300	Not Working
(29)	Double still with thermo sensor hr (All glass) cat No 2348	27/3/2006	33924	Working
(30)	Nova Rotary shaking machine			
1	(a)Capacity 16 flasks of 250 ml	28/3/2006	24500	Not Working
2	(b)Capacity 25 flasks of 250 ml	28/3/2006	29750	Not Working
3	Nova Hot plate Rectangular model NV-8535 stainless steel			
	(a) Size 12" x 20"	28/3/2006	8500	Not Working
	(b) Size 18" x 24"	28/3/2006	11250	Not Working
4	Nova willy mill stain lese steel camber Size 10.0 x 50 mm	28/3/2006	31900	Not Working
(31)1	Laboratory Table	27/3/2006	34400	Working
2	Racks	27/3/2006	9000	Working
3	Stools	27/3/2006	5400	Working
4	Steel cupboard	27/3/2006	19200	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
	storewell			
5	Steel cupboard storewel	27/3/2006	14000	Working
6	Steel racks	27/3/2006	8600	Working
7	Partition racks	27/3/2006	22500	Working
8	Office chair	27/3/2006	4000	Working
(32)	Systronics make			
1	Micro controller based Digital spectrophotometer model -106	27/3/2006	26800	Not Working
2	Systronics make micro controller based flame photometer compressor model-128	27/3/2006	35200	Not Working
3	Systronics make micro controller based PH meter	27/3/2006	10900	Not Working
4	Systronics make micro processor based conductivity meter	27/3/2006	12800	Not Working
(33)	Hot air oven	27/3/2006	21200	Working
(34) 1	Chemical Balance	27/3/2006	75000	Working
2	CENTRO FIX WATERBATH	27/3/2006	10800	Not Working
3	CENTRO FIX – Muffle furnace	27/3/2006	29500	Not Working
4	Automatic autoclave	27/3/2006	21000	Working
(35)	City weigh balance model ST-10 Cap- 10 kg	27/3/2006	10640	Working
(36) 1	LG AC-1.5 ton	31/3/2006	23740	Not Working
2	Micro kjeldahl Assembly	31/3/2006	10700	Not Working
(37)	Burner maker type with stop coke	31/3/2006	2000	Not Working
(38)	Voltas make water cooler	31/3/2006	26500	Working
(39) 1	Soft Pin up Board	29/11/2007	96250	6-not good
2	Single Pole Stand	29/11/2007	35360	Working
(40)	Microscope for Computer	17/3/2008	294028	Working
(41) 1	SDZ – TR – PL – HL Microscope controlled Transformer	15/3/2008	209444	Working
2	OP – 150 R Fibre Optic Illumivater	15/3/2008		Working
3	GMTV – 33 H High Resolution Coloured CCTV system	15/3/2008		Working
(42)	Colony Counter – MSW – 408	15/3/2008	5668	Working
(43)	Oven Universal – MSW – 213	15/3/2008	65788	Working
(44)	Insect Rating Case	17/3/2008	14000	Working
(45)	LG A/C machine 2.0 Ton Split AC with Remote	17/3/2008	58680	Not Working
(46)	LG Refrigeration–280 Lit. Model - 295TMG4	25/3/2008	18000	Working
(47)	Phillips Grinder – 1618	25/3/2008	6000	Working
(48)	Sony Cyber Shot – DSC – W 90	25/3/2008	14800	Working
(49) 1	Pressure Cooker – 8 lit.	24/3/2008	4500	Working
2	S/A/S Tope – 17''	24/3/2008		Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
3	S/A/S Tope – 21''	24/3/2008		Working
4	S. S. Cover	24/3/2008		Working
(50) 1	Insect Display show cases	24/3/2008	17420	1-Not Working
2	Insect Show cases cabinet	24/3/2008		Working
(51) 1	Compaq Computer – 3250 IL	25/3/2008	28950	Working
2	MS XP Professional Vista License Copy	25/3/2008	6000	Working
(52)	Top Loading Balance – BH 200 H	19/3/2008	28120	Working
(53)	Digital Conductivity TDS Meter Model – 307	24/3/2008	11648	Working
(54)	Digital PH meter Model - 802	24/3/2008	7006	Working
(55)	Distillation Apparatus (5 – Lit)	24/3/2008	15912	Not Working
(56)	H/P Laser Jet Printer - 1022	25/3/2008	10990	Working
(57)	Steel Rack KV-110 78''x36''x15''	25/3/2008	9844	Working
(58) 1	Steel Cupboard – 78''x36''x19''	23/3/2008	11100	Working
2	Computer Table	23/3/2008	3300	Working
3	Computer Chair	23/3/2008	5200	Not Working
(59)	Shaking Incubator – 24 BL	25/3/2008	95387	Working
(60)	CentriFuge – R – 24 Voltage stabilizer 3.0 KVA	25/3/2008 25/3/2008	32025 6630	Working
(61)	Double Pan Balance Analytical Weight Box	24/3/2008	3640	Working
(62)	Gas Cylinder, Regulator, Gas Stove	13/3/2008	1930	Working
(63)	B.O.D. Incubator – 270	22/3/2008	90534	Not Working
(64)	KLENZFLO Horizontal laminar clean air work station – 1500c	28/3/2008	138320	Working
(65)	Crompton Greaves Fans	28/3/2008	6800	1-Not Working
(66)	Humidifier (S.S. Body)	30/3/2008	11034	Working
(67)	ASPEE Tractamount Bloover fro Intranational	30/3/2008	99960	Working
(68)	Panasonic Multifunctional Device Copy/Print/Scan/Fax	28/03/2010	14900	Working
(69)	Eco Display Unit Size : 6' x 2'	28/03/2010	9625	Working
(70)	DIM System size : 36'' x 24''	28/03/2010	19250	Working
(71) 1	Podium	28/03/2010	4200	Working
2	Podium	28/03/2010	4200	Working
(72) 1	LCD Projector - Mo.D.832 Mx	06/01/2011	66305	Not Working
2	VIVITEK Dongel	06/01/2011	16910	Not Working
3	WALTOP 6'' Interactive RF Pod	06/01/2011	14863	Not Working
4	Motorized Screen size – 5'x7'	06/01/2011	12905	Working
5	Impact 65 T (PA system)	06/01/2011	17800	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
(73) 1	23'' – LCD Computer	15/10/2010	33420	Working
2	Branded CPU E-Machine	15/10/2010	''	Working
3	Printer – Canon	15/10/2010	8500	Working
4	UPS – Umax 600 VA	15/10/2010	1850	Not Working
5	HP Scanner	15/10/2010	4500	Working
6	Q.H. Internet Security	15/10/2010	1150	Working
(74)	Crystal EPABX system set and accessories	11/02/2011	49219	Working
(75) 1	Power Tiller	18/02/2011	149430	Working
2	Multi crop Thresher	18/02/2011	23100	Working
		18/02/2011	26000	Working
3	Power Sprayer	18/02/2011	24850	Working
4	Winnower	18/02/2011	24150	Working
5	Seed cum Ferti. drill	18/02/2011	28880	Working
(76) 1	Steel Cupboard 18"X 36"X 78"	8/1/2011	58977	Working
2	Visitor Chair	8/1/2011	48475	2-Not Working
3	Rack- 6 X 3 X 1 foot	8/1/2011	43170	Working
4	Rivolving Chair	8/1/2011	21810	3-Not Good
***(77)**1	Gayatri two-way Leveller Heavy Duty	11/3/2011	12600	Working
2	Gayatri Cultivator Heavy Duty	11/3/2011	20700	Working
***(78)**	Plough & Harrow	17/2/2011	19000	Working
***(79)**1	Rotavator- 5.25	13/3/2011	60380=95	Working
2	Hydrolic trailor	13/3/2011	102380=90	Working
(80)	Varoon Vinowing Monoblock Electric Fan	25/3/2011	6900	Working
(81)	Splender Pro Kick Spoke	31/3/2011	41860	Working
(82)	Sub-mersible pump set 2 H.P. with accessories	28/3/2011	14600	Working
(83) 1	Steel Cupboard	28/12/2012	71500	Working
2	Table (4 X 2.5) rek	28/12/2012	35000	Working
3	Steel Coat (6 X 3.5)	28/12/2012	40000	Working
4	Sofa set- Tipoi	28/12/2012	17500	Working
5	Chair-Table-Tipoi	28/12/2012	7500	Working
6	News paper stand	28/12/2012	3150	Working
7	Computer Table-Chair	28/12/2012	12558	Working
8	Water cooler	28/12/2012	84000	Working
9	Post weigh balance	28/12/2012	2100	Working
10	Steel cupboard	28/12/2012	37000	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
(84)1	Sofa three seater waiting chair	13/01/2012	62980	Working
2	Fix Chair	13/01/2012	23090	Working
(85)	10 H.P. 4 stage falkan sub-mersible pump set with accessesories	04/02/2012	64125	Working
(86) 1	Electronics media Microprocessor – PH meter model – 1012	23/03/2012	13000	Working
2	Electronics media Microprocessor – Spectrophoto meter model – 2305	23/03/2012	33950	Working
3	NOVA fermentor (Digital Microprocessor Pid control)	23/03/2012	360000	Working
4	Swisser Table top balance model – swit – 105 10 kg	23/03/2012	8775	Working
5	NOVA digital hot air oven 24"x24"x36"	23/03/2012	36900	Not Working
(87) 1	HD Handy cam (video camera)	27/03/2012	71025	Working
2	Digital Camera HD (15-30 mega pixel)	27/03/2012	66660	Working
3	Double distilled water RO plant for lab use	27/03/2012	24860	Working
4	Refrigerator 310 lit with stb 1 KVA	27/03/2012	29035	Working
(88)	2 HP 8 Stage Neck Motor	20/12/2014	8500	Working
(89)	Photocopier machine (Digital Colour Multi function office machine (Richo) MP (2004SP))	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	24/3/2017	41,975	Working
(91)	Voltas AC-1.5 tonType-Split	18/3/2017	72,000	Working
(92)	Carrier Split AC-2.0 ton- 3 star, Model-24 k Superia	24/3/2017	84,000	Working
(93)	Chaff cutter power operated, BKV2HPCFAT, 3 Blades, 1440 RPM, 50H, 220V, 12A	17/3/2017	22491	Working
(94)	Information Kiosk thin client based free standing-Type Model SK-19-T	10/3/2017	90250	Working
(95)	Lenovo Computer-All in One	14/03/2017	92398	Working
(96)	Paddy Thresher with Motor	20/03/2017	23500	Working
(97)	RO with water cooler -50 LPH with 100 litre LPH SS storage	02/03/2017	79000	Working
(98)	Laser Printer-Brother Model No. 2321 D	21/03/2017	14760	Working
(99)	Colored Laser Printer-CP 1025	21/03/2017	18000	Working
(100)	Scanner-Canon	21/03/2017	8476.20	Working
(101)	Maize Dhusker cum sheller-1000 kg/cobs/hour capacity	14/03/2017	182000	Working

Sl. No.	Name of Equipments/ Instruments/ Farm Machineries	Date of Purchase	Cost (Rs.)	Present Status
(101)	7.5 HP Motor	24/03/2017	18200	Working
(102)	1.5 HP 10 stage motor ISI with accessories	24/03/2017	19688	Working
(103)	Winnowing Fan	24/03/2017	35000	Working
(104)	Haier Deep Freezer-588 litre capacity	24/03/2017	66000	Working
(105)	Pulvarizer Machine	24/03/2017	35675	Working
(106)	Soyabean Processing Unit	24/03/2017	325248	Working
(107)	PKV Custard Apple pulper Machine-0.5 HP Single Phase Motor-Capacity 70 kg/hour	24/03/2017	78775	Working
(106)	PKV Mini Dall Mill	28/03/2017	93000	Working
(107)	Model; captain 250DI 4WD Regular Model (tyre Size 8×18)+Insurance charge	31/3/2019	381570	Working
	Tyre size 8.3×20 Extra Amount		20000	
	Power steering Extra Amount		20000	
	Oil immersed Brake Extra Amount		5800	
(108)	Rotavetor 3ft L type blade	31/3/2019	51480	Working
(109)	Reversible Plough	31/3/2019	23520	Working
(110)	land leveler	31/3/2019	18724	Working
(111)	Cultivator 7 tyn	31/3/2019	21346	Working
(112)	Seed cum fertilizer drill	31/3/2019	41664	Working
(113)	Multi crop Thresher (CS-01)	31/3/2019	214999	Working
(114)	Cultivator (LEW-9)	31/3/2019	33600	Working
(115)	Resersible MB Plough (Hydrulic, reversible-TAI-25)	31/3/2019	67200	Working
(116)	View Sonic Multimedia Projector	31/3/2019	115700	Working
(117)	Laptop-HP	31/3/2019	49999	Working
(118)	Paddy Thresher	31/3/2019	15000	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	1. Dr. Dr. G. R. Patel, Chairperson, Hon'ble Directorate of Extension Education, Navsari Agricultural University, Navsari 2. Dr. Ankush I. Kamble, Member, Scientist-ATARI, Zone-VIII, ICAR, Pune, Maharashtra 3. Dr. C. D. Pandya, Member Secretary & Senior Scientist & Head, KVK, Vyara 4. Dr. V. P. Patel, Member, Associate Research Scientist, Regional Rice Research Station, Navsari Agricultural University, Vyara 5. Mr. J. B. Vasave , Member, Assistant Professor, (Agronomy Expert), Polytechnic in Agril., NAU, Vyara 6. Dr. J. M. Patel, Member, Associate professor, Veterinary college, NAU, Navsari 7. Shri Prafulbhai R. Chaudhari, Member, Project Director, ATMA-Tapi 8. Shri S.B.Gamit, Member, District Agriculture Officer, Department of Agriculture, District Panchayat, Vyara, Tapi 9. Shri Nikunj Patel, Member, Deputy Director of Horticulture, Tapi district,Vyara 10. Dr. C. M. Rana, Member, Deputy Director of Animal Husbandry, District Panchayat,Tapi District, Vyara 11. Shri Samir Ardesana, Member, Assistant Director (Fisheries), Near CRPF Campus, Ukai, Dist. Tapi 12. Jayaben Mahendrabhai Chaudhari, Member, Progress farm-women, At & Po. Unchchamala Ta. Vyara 13. Mr. Kantibhai Desai, Member, Agri-Enterpreneur, Sardar Agro Centre, APMC, Vyara 14. Harshidaben S. Chaudhary, Member, RFO, Vyara, Dist. Tapi 15. Shri Sureshbhai M. Chaudhary, Member,Chairman of APMC, Vyara 16. Shri D. T. Desai, Invitee Member, Private Agro Dealer & Invitee Member, Patidar Agro Centre, APMC, Vyara	1. Sesame variety GT-5 released by JAU should be taken in Front Line Demonstration. 2. Green gram variety GM-6 also should be taken in Front Line Demonstration. 3. Varietal Front Line Demonstration on Paddy GNR-7 should be taken. 4. Procedure for accreditation of mango orchard should be initiated. 5. Varieties released by SAUs should be taken in Front Line Demonstrations of vegetable crops.	Incorporate in Annual Action Plan:2019-20

Date	Name and Designation of Participants	Salient Recommendations	Action taken
	17. Mr. Dharmesh Vani, Invitee Member,Press Reporter-Gujarat Raksha, Vyara 18. Shri Anup Bhatt, Invitee Member, Press Reporter- Dhabkar & Sandesh News TV 19. Shri Tulsibhai Mavani, Invitee Member, Ambedkar Vanavasi Kalyan Trust-Surat 20. Shri Ramkumar Sinh, Invitee Member, Suruchi Vasahat trust Bardoli 21. Shri Mansukhabhai S. Gamit, Progressive Farmer & Invitee Member, At & Po. Nani Chikhali, Ta. Vyara 22. Shri Nareshbhai B. Patel, Invitee Member, Aagakhan Foundation, Vyara 23. Shri N. M. Gajre, Invitee Member, IFFCO Bardoli, Vyara 24. Smt. Anjanaben N. Gamit, Invitee member, Progressive farmer –Mushrom grower at Nani Chikhli, Vyara 25. Shri Subhashbhai Bhagabhai Gamit, Invitee member, Progressive farmer, Dabari amba village, Kukarmunda 26. Shri Anandbhai Jikabhai Padvi, Invitee member, Progressive farmer, Dabariamba village, Kukarmunda 27. Smt. Rakshaben Jigneshbhai Chaudhary, Invitee member, Progressive farmer, Borakhadi village, Vyara 28. Smt. Hasumatiben Sanmukhbhai Gamit, Invitee member, Progressive farmer, Borakhadi village, Vyara 29. Smt. Shilaben Amrutbhai Chudhari, Invitee member, Progressive farmer, Borakhadi village, Vyara 30. Shri Ranjitbhai Hirjibhai Gamit, Invitee member, Progressive farmer, Unchamala village, Vyara 31. Shri Anandbhai Bhanabhai Gamit, Invitee member, Progressive farmer, Unchamala village, Vyara 32. Smt. Induben Gamit, Invitee member, Entrepreneur, Kapura village, Vyara 33. Dr. A. J. Dhodia, Special invitee, Scientist (Extension), KVK,Vyara		

Date	Name and Designation of Participants	Salient Recommendations	Action taken
	34. Shri. K. N. Rana, Special invitee, Scientist (Crop Production), KVK, Vyara 35. Dr. J. B. Butani, Special invitee, Scientist (Animal Science), KVK, Vyara 36. Dr. Dharmishtha M. Patel, Special invitee, Scientist (Horticulture), KVK, Vyara 37. Dr. S. M. Chavan, Special invitee, Scientist (Plant Protection), KVK, Vyara 38. Prof. A. N. Soni, Special invitee, Scientist (Home Science), KVK,Vyara		

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

2. DETAILS OF DISTRICT (2018-19)

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	• 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	• 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	• 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	• 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 (2019-20)

Sr. No	Crop	Area (ha)	Production (MT.)	Productivity (Qtl/ha)
Kharif – 2019				
1	Paddy	52371	162350	31.00
2	Kharif – Sorghum	11786	14966	13.50
3	Kharif – Maize	1678	2467	14.70
4	Soybean	14341	16492	11.50
5	Kharif – Pigeon pea	18489	20338	11.00
6	Kharif – Green gram	138	97	70.00
7	Black gram	1357	1018	75.00
8	Kharif Groundnut	1573	2831	18.00
9	Cotton	7269	18263	26.50
Rabi-Summer-2019-20				
1	Wheat	3560	10876	30.55
2	Rabi Sorghum	2402	3603	15.00
3	Maize	954	1288	13.50
4	Gram	2592	2722	10.50
5	Sugarcane	28108	2192424	780.00
6	Indian bean (Val)	385	366	09.50

Source: District Agriculture Department – Tapi

Horticultural Crops: (2018-19)

Sl. No	Crop	Area (ha)	Production (MT)	Productivity (kg/ha)
A	**Fruits**			
	Mango	5745	52854.00	9200
	Sapota	115	1288.00	11200
	Citrus	115	1322.00	11500
	Ber	5	22.00	4400
	Banana	1580	94500.00	59810
	Guava	25	255.00	10200
	Pomegranate	50	561.00	11220
	Date palm	7	27.00	3860
	Papaya	2090	129371.00	61900
	Custard apple	47	258.50	5500
	Aonla	20	147.00	7350
	Cashew nut	197	169.00	860
	Coconut	65	536.00	8250
	Others Fruits	340	2737.00	8050
B	**Vegetables**			
	Brinjal	3760	70124.00	18650
	Cabbage	126	2948.00	23400
	Okra	9960	135954.00	13650
	Tomato	665	15295.00	23000
	Cauliflower	331	6421.00	19400
	Cluster bean	780	7409.00	9500
	Cowpea	795	6352.00	7990
	Cucurbits	3830	63324.00	16530
	Others Vegetables	2305	30794.00	13360

Sl. No	Crop	Area (ha)	Production (MT)	Productivity (kg/ha)
C	**Creepers**			
	Bottle Gourd	543	9774.00	18000
	Bitter Gourd	513	5130.00	10000
	Muskmelon	173	3633.00	21000
	Sponge Gourd	183	2287.50	12500
	Ridge Gourd	123	1599.00	13000
	Cucumber	123	1537.50	12500
	Pointed Gourd	783	12528.00	16000
	Watermelon	276	8736.00	31650
	Pumpkin	168	4032.00	24000
	Little Gourd	643	9645.00	15000
	Spine Gourd	56	560.00	10000
	Any additional crop (Valod Papadi)	246	3862.00	15700
D	**Spices**			
	Chilli-Dry	1165	1980.00	1700
	Ginger	38	760.00	20000
	Turmeric	73	1503.00	20590
	Fenugreek	108	205.00	1900
	Ajawain	77	58.00	750
E	**Flowers**			
	Rose	50	450.00	9000
	Marigold	250	2475.00	9900
	Jasmine (Mogra)	73	635.00	8700
	Lily	10	83.00	8300
	Others	137	1201.00	8770

Source: District Horticulture Department — Tapi

2.5 Weather data (2019)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January-2019	0.0	31.8	10.8	84.0	77.0
February-2019	0.0	32.1	14.5	78.0	75.5
March-2019	0.0	38.6	19.6	83.0	81.1
April-2019	0.0	41.4	25.5	85.8	78.8
May-2019	0.0	40.6	27.6	90.6	84.1
June-2019	72.9	38.7	27.7	92.1	86.8
July-2019	585.1	33.3	25.5	95.7	94.5
August-2019	848.1	32.2	24.6	96.4	94.0
September-2019	413.0	32.5	24.6	96.9	91.5
October-2019	38.0	34.4	23.6	90.7	89.2
November-2019	41.0	34.2	20.8	91.6	83.9
December-2019	0.0	32.2	17.7	90.6	88.5

Source: Regional Rice Research Station, NAU, Vyara

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

Category	Population	Production ('000 tones)	Productivity (kg/day)
Cattle			
Crossbred	45123	92.28	6.780(Milk)
Indigenous	169421	25.72	2.500(Milk)
Buffalo	176458	98.02	4.910(Milk)
Sheep	1000	1.17 metric tones	1.090 kg wool/sheep
Goats	96599	3.13	0.450 (Milk)
Pigs	2723	--	--
Rabbits	1576	--	--
Poultry			
Desi	433300	147.76 lakh egg	118 eggs per layer/year
Improved	139600	303.71 lakh egg	324 eggs per layer/year
Donkey	1943	--	--

Source: *DISTIRCT INDUSTRIAL POTENTIALITY SURVEY REPORT OF TAPI DISTRICT 2016-17*

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

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Vyara	Vyara	Chhirama	After PRA survey, it will be decided		
		Malotha			
Dolvan	Dolvan	Chakdhara			
		Dholka			
Valod	Valod	Titva			
		Beldha			
Songadh	Songadh	Zadpati			
		Kelai			
Uchchhal	Uchchhal	Tokarva			
		Thuti			
Kukarmunda	Kukarmunda	Maulipada			
		Balambha			
Nizar	Nizar	Kherva			
		Vedapada			

2.8 Priority/thrust areas:

After PRA survvey, it will be decided

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		No. of farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
3	3	21	21	Crop based-65 ha	67	300	333
				Farm Implements-5 SHGs	5 SHGs	100	100
				Mushroom cultivation-1	1	25	25
				Animal Science-4	4	60	65
				Vermicomposting-1	1	10	10
				Kitchen gardening	1	20	20

Training					Extension Programmes			
3					4			
Number of Courses			Number of Participants		Number of programmes		Number of participants	
Targets		Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers-**25**		70	630	2775	408	702	18318	31857
Rural youth- **4**		08	95	275				
Extn. Functionaries- **4**		3	90	163				
Total	**33**	**81**	**815**	**3213**	**408**	**702**	**18318**	**48287**

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
200	208.7	As per farmers demand	184566

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 2020

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	• 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	• 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, Groundnut, Pigeon pea, Okra, Cucurbitaceous vegetables, Animal Husbandry	• 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	Ukhalda, Bedvan-pra-Bhensrot	
4	Paddy, Sugarcane, Cotton, Sorghum, Pigeon pea, Soybean, vegetables, Animal Husbandry	• 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	Uchchal, Mohini	

		• 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		
5	Paddy, Sugarcane, Wheat, Castor, Cotton, Sorghum, Pigeon pea, vegetables, Animal Husbandry	• 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	

* Support with problem-cause and interventions diagram

Interventions: ON FARM TESTING

S.N.	Particulars	Technology Intervention
1	**Assessment of foliar application of different organic inputs on Okra (New)**	Use of organic inputs and Scientific cultural practices
2	**Effect of Compound cattle feed on milk production of buffalo (Second Year)**	1 bag of 65 Kg CF and 1 kg MM
3	**Assessment of foliar application of different organic inputs on mango (Second Year)**	Use of organic inputs and Scientific cultural practices

1. Assessment of foliar application of different organic inputs on okra (New)

In Tapi district major cultivated fruit crop is okra. Foliar application of chemical fertilizers increase cost as well as increase incidence of pest but application of organic fertilizer reduces the cost, improve yield and quality as well as pest incidence in okra plant. Assessment of such organic inputs for check best performance in yield and quality characters, OFT is taken.

Reasons of low productivity:

1. Excess and uneven use of chemical fertilizers
2. Lack of awareness about time and methods of fertilizer application

Intervention Point:

1. Foliar application of organic inputs
2. Use of Recommended fertilizer dose
3. Time of nutrient application (every 15 days)

Technology Intervention:

1. Use of organic inputs
2. Scientific cultural practices

Treatments:

T_1 Farmers' practices- Use of chemical fertilizers (as soil application)

T_2 Novel organic liquid nutrient 1%

T_3 Novel organic liquid nutrient plus 1%

T_4 Waste decomposer 40 %

Plot size: - 0.10 ha **No. of farmers**: - 10

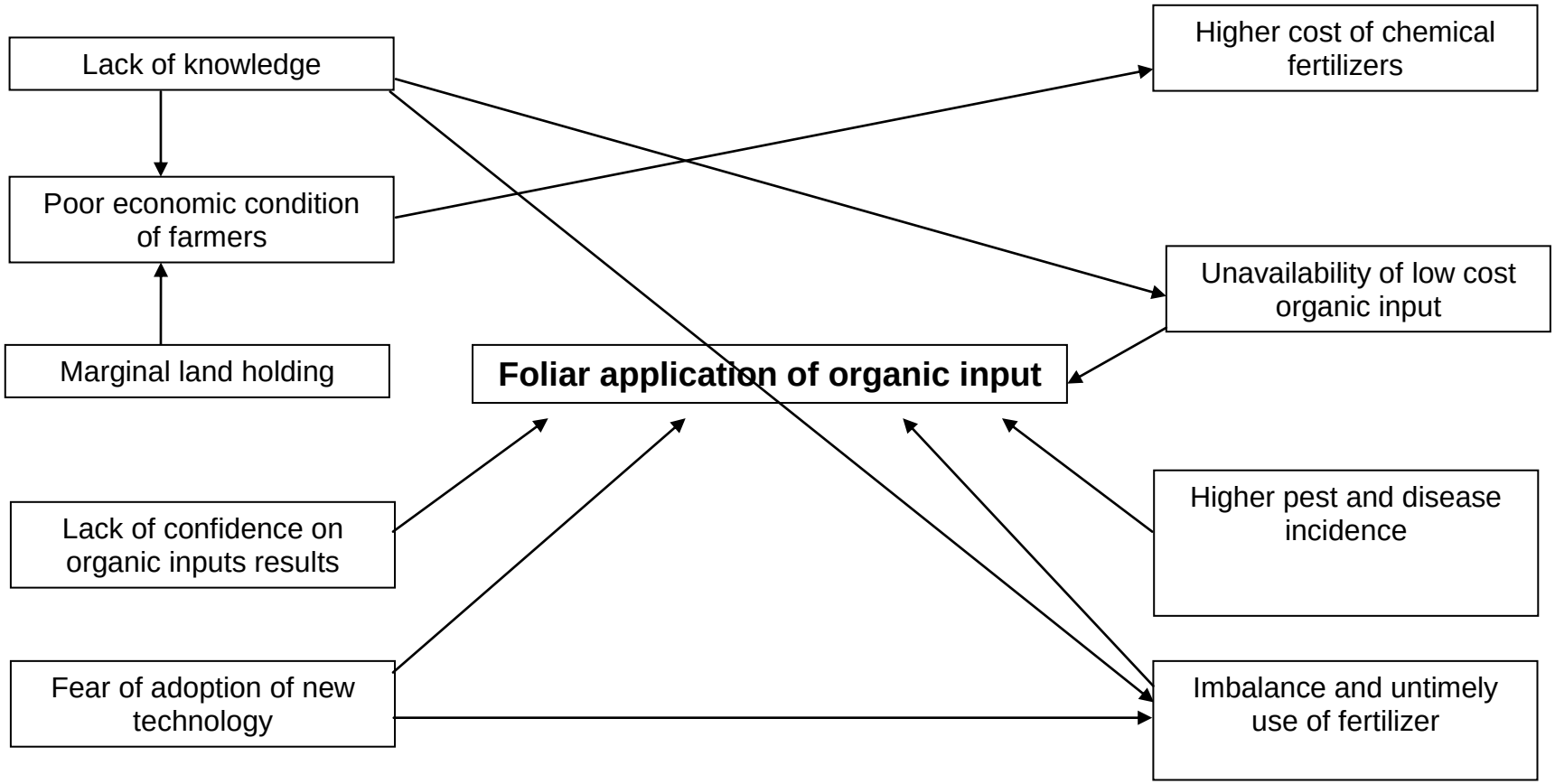
Critical input to be supplied: Organic inputs

Observations to be recorded:

1. Date of Ist flower initiation
2. No. of branches/plant
3. No. of picking/plant
4. Yield per hectare (Quintal)
5. Quality of pods (grade I, II, III)
6. Disease and pest infestation

Interventions: (PROBLEM CAUSE DIAGRAM)

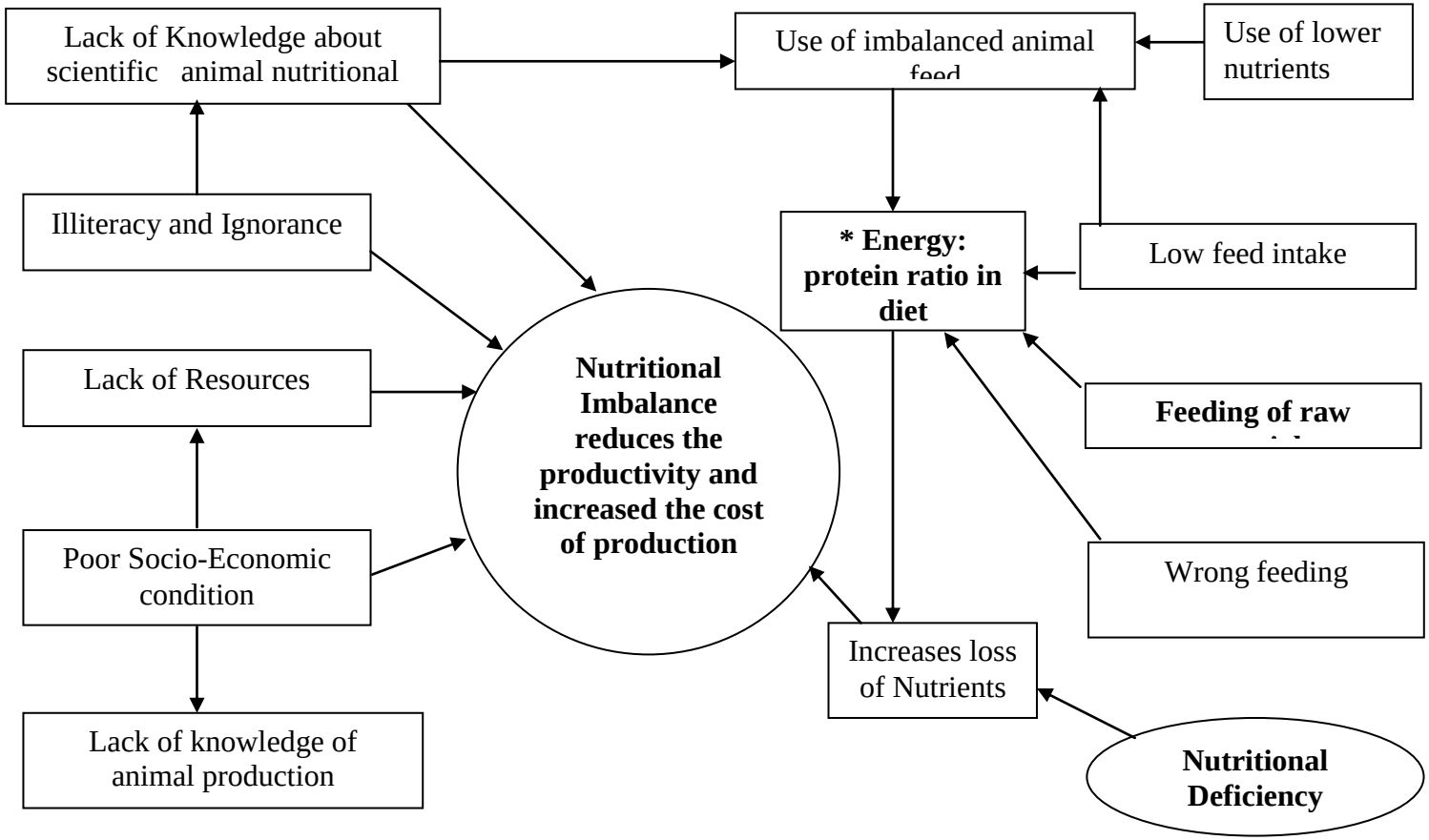
1. Assessment of foliar application of different organic inputs on okra (First Year)



PROBLEM CAUSE DIAGRAM

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

PROBLEM CAUSE DIAGRAM



***Interventions to be undertaken**

Sl. No	Crop/ Enterprise	Identified Problem	Interventions				
			Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities
1	Paddy, Pigeon pea, Sugarcane, Indian bean	Very less production in existing variety and lack of awareness in farmers, Unaware about scientific cultivation of different crops	Assessment of chickpea, Assessment of foliar application of different organic inputs on okra,	New Varieties of Padd, pigeon pea & sugarcane Indian bean,	Scientific cultivation of cereals, pulses, Vegetable crops,	Scientific cultivation of Okra, tomato, Indian bean, brinjal	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions, *etc*.
2	Paddy, Little gourd	High dose of chemical fertilizers, no use of bil-fertilizers	--	INM in paddy, Effect of Novel organic Liquid Fertilizer in little gourd	Integrated Nutrients management in major crops (Paddy, little hourd)	--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions, *etc*.
3	Mango	Low cost inputs for Organic farming	Foliar application of different organic inputs on mango	Effect of novel organic liquid nutrient in mango and little gourd	Preparation and use of different organic inputs and vermin-compost, Use of bio fertilizer	Preparation of different organic inputs, Scientific cultivation of different crops	Field visit, Field Day, diagnostic visit, fld visit, Khedut shibirs, News paper coverage, Film show, Exhibitions, *etc* .
4	Nursery management	Lack of availability of quality planting material	-	-	Nursery management	-	Method demo. and vocational training
5	Ber, custard apple, Jamun, dragon fruit. aloevera	Undulating and uneven soil, scarcity of water	-	-	Cultivation of fruit crops	-	Khedut shibir, group meeting, Field visits, Method demo., Film show, *etc*.
6	Horticultural crops	Lack of awareness about water management as well as post harvest management	-	-	Micro-irrigation system, grading and standardization, protected cultivation	-	Khedut shibir, group meeting, Field visits, Method demo., Film show, *etc*.
7	Okra, cluster bean, cucurbits, cowpea *etc.*	Less income in on-season	-	-	Off season vegetable cultivation	-	Group meeting, Field visit,, diagnostic visit, *etc*.

Sl. No	Crop/ Enterprise	Identified Problem	Interventions				
			Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities
8	Paddy, Cotton, Brinjal, Pigeonpea, Ridge goard, okra, gram	Injudious use of pesticides,	Assessment of pheromone trap technology for mass trapping of *Earias vitella* Fabricius in Okra	IPM & IDM in paddy, cotton, Brinjal, Pigeonpea, Ridge goard, okra, gram	Integrated Pest and Disease Management in Kharif crops (Paddy, Cotton, Pigeon pea), Integrated Pest and Disease management in Vegetables and fruits(Brinjal, Okra, Cucurbits, Mango), IPDM in *rabi* crops (Okra, Gram, Sugarcane) Ecofriendly use of Agrochemicals in Agriculture, Role of bio-agents and bio-pesticides in IPDM		Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*.
9	Mushroom Cultivation		--	Mushroom Cultivation	Mushroom Cultivation	--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*
10	Vegetables, Pulses, Fruits	No use of improved farm implements for women drudgery reduction, Lack of awareness regarding nutritional kitchen garden	--	Use of Twin Wheel Hoe weeder, paddy thresher and winnowing fan to reduce women drudgery, Kitchen gardening	Drudgery reduction technologies for farm women, Organic Kitchen gardening, Value addition in fruits and vegetables	--	Field visit, FLD visit, Field Day, Film show, FLD meeting, Farm women meeting, Publication, Agri.Exhibitions, Method demonstration, *etc*.
11	Farm women , rural youth (female) and children	Malnutrition, iron deficiency Anemia, Sickle cell Anemia, poor economic status	--	Kitchen gardening	Health & nutrition for vulnerable groups, Nutritional deficiencies & its control measures, Nutritional garden, Fruits & vege. preservation, Eco-	--	Mahila shibir, Field visit, FLD visit, Field Day, Film show, FLD meeting, Farm women meeting, Ex-trainee meeting, Publication, Agri.Exhibitions, Method demonstration , Newspaper coverage, Swachchhata Abhiyan, Celebration of days reg. farm women , Guest lecture *etc*.

Sl. No	Crop/ Enterprise	Identified Problem	Interventions				
			Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities
					friendly bag making		
12	Vermicompsoting	No use of vermicompost	--	Vermicomposting	--	--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*.
13	Goat	Infestation of parasites	--	Narrow-spectrum Anthelmentic for Fluke in goat	Management practices for higher milk production in dairy animals, Backyard Poultry and goattery, Management Prevention of infectious diseases in dairy animals, Feedsand fodder management in dairy animals	--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*
14	Buffalo	For ration balancing in cattle, repeat breeding due to mineral deficiency,	Effect of Compound cattle feed on milk production of buffalo	Infertility management in surati buffalo, Probiotic supplementation in dairy animals, Correction of negative energy balance in buffaloes		--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*.
15	Cattle	Mastitis due to bacterial infection, lower digestibility of feed & fodder		Saaf kit for prevention of mastitis in mikling animals		--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*
16	Backyard Poultry	Lower egg production	--	Scientific feeding by layer mash	Backyard Poultry Management	--	Field visit, Field Day, diagnostic visit, FLD visit, Khedut shibirs, News paper coverage, Exhibitions,Method Demonstration *etc*

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	-	-	-	-	1	1	-	-	-	2
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	**-**	**-**	**-**	**-**	**1**	**1**	**-**	**-**	**-**	**2**

A2. 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	1	-	-	-	-	1
Disease of Management	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-
Production and Management	-	-	-	-	-	-
Feed and Fodder	-	-	-	-	-	-

Small Scale income generating enterprises	-	-	-	-	-	-
TOTAL	**1**	**-**	**-**	**-**	**-**	**1**

B. Achievements on technologies Assessed

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	Mango	Foliar application of different organic inputs on mango (Second Year)	05	05	0.20
	Okra	Use of organic inputs in Okra (First Year)	10	10	--
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	**-**	**--**	**15**	**15**	**0.20**

B.2. 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	Buffalo	Compound cattle feed and Mineral Mixture	06	06
Disease management	--	--	--	--
Value addition	--	--	--	--
Production and management	--	--	--	--
Feed and fodder	--	--	--	--
Small scale income generating enterprises	--	--	--	--
		Total	**06**	**06**

C 2 Details of On Farm Trial for assessment

1.	**Title**	**:**	Assessment of pheromone trap technology for mass trapping of *Earias vitella* Fabricius in Okra
2.	**Problem diagnose/defined**	**:**	Injudicious use of health hazardous agro chemicals
3.	**Details of technologies selected for assessment /refinement**	**:**	T1– Farmers practices as injudicious and indiscriminate use of chemical pesticides .T2- Installation of pheromone traps @ 60 traps/ha
4.	**Season**	**:**	*Rabi* – 2018-19
5.	**Source of technology**	**:**	Anand Agril. University, Anand
6.	**Production system thematic area**	**:**	--
7.	**Thematic area**	**:**	IPM
8.	**Performance of the Technology with performance indicators**	**:**	Technology gave higher BC ratio (3.33)
9.	**Final recommendation for micro level situation**	**:**	Use of pheromone trap is an ecofriendly pest management technology in okra
10.	**Constraints identified and feedback for research**	**:**	--
11.	**Process of farmers participation and their reaction**	**:**	Appreciate the technology and ready to adopt

C1. Results of Technologies Assessed (Second Year)

Enterprise	Farming Situations	Problem definition	Title of OFT	No. of Trials	Technology Assessed	Parameters of Assessment	Data on Parameters		Results of Assessment	Feedback from the farmers	Any Refinement needed	Justification for refinement
							Milk Production	Daily Cost of feeding				
1	2	3	4	5	6	7	8		9	10	11	12
Livestock	Imbalanced feeding	Imbalanced feeding leads to increased cost of feeding with Lower Productivity	Effect of Compound cattle feed on milk production of buffalo	20 Farmers	T1	Milk production and Dairy feeding cost	5.6	134.87	T-2 Found Better results with Lower cost of feeding	Decreased the cost of feeding with increased the production	--	--
					T2		5.9	124.45				

Cont…

Technology assessed	Source of Technology	Productio	Unit	Net Return (Profit) in Rs. Per day	BCR ratio
13	14	15	16	17	18
T1 – It will consist of six animals and fed with farmer's practice (raw materials like cotton seed cake, guar bhardo and maize cake etc.)	Farmers Practices	5.6	Daily Milk production In liters	88.28	1.65
T2- It will consist of six animals and will be fed with concentrate (Sumul Dan) and mineral mixture as per recommendations on basis of milk production for ninety days.	ICAR & NDDB	5.9		110.30	1.89

Farmers Feedback:

- Milk production is increased with production of Cattle feed
- Milk production cost reduce and saved money

C2. Details of On Farm Trial for assessment:

1	Title of Technology Assessed	**Effect of Compound cattle feed on milk production of buffalo**
2	Problem Definition	Nutritional Imbalance reduces the productivity and increased the cost of production
3	Details of technologies selected for assessment	T1 –Six animals and fed with farmer's practice (raw materials like cotton seed cake, guar bhardo and maize cake etc.) T2- Six animals and will be fed with concentrate (Sumul Dan) and mineral mixture as per recommendations on basis of milk production for ninety days.
4	Source of technology	ICAR & NDDB
5	Production system and thematic area	Nutritional Management
6	Performance of the Technology with performance indicators	Milk production and Dairy feeding cost
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	This type of trial will help to promote compound cattle feed and ration balancing
8	Final recommendation for micro level situation	Balanced compound cattle feed increased nutritional balanced
9	Constraints identified and feedback for research	-NIL- and feedback for research is increased cost of feeding
10	Process of farmers participation and their reaction	Appreciate the technology and ready to adopt

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 2018-19 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	Paddy-GRH-2	ICM	Improved variety + Biofertilizers	FLDs Training, Field visit,Field day,Khedutshibir,Farmers scientist interaction, News paper coverage	25	47	21
2	Paddy-GNR-6	ICM	Improved variety	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	62	28	17
3	Paddy-Hybrid	IPDM	Pheromon trap + Biopesticide	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	51	20	06
4	Cotton-G. cot. Hy. 8 B	IPM	Pheromon trap	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	34	10	04
5	Elephant Foot Yam-Gajendra	ICM	New and high yielding variety	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	62	22	2
6	Sugarcane-CON-13073	ICM	New and high yielding variety	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	59	09	04
7	Brinjal-GAOB 2	ICM	New and high yielding variety	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	17	21	02
8	Tomato- Arka rakshak	ICM	Introduction of new variety	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction,News paper coverage	27	24	03
9	Mango-Kesar	INM	Effect of Novel organic Liquid nutrient and bio fertilizers in Mango	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction, News paper coverage	61	25	03
10	Pigeonpea-Vaishali	IPDM	Pheromone trape + Bio pesticide	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction, News paper coverage	82	26	06

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
11	Chick pea-GG 5	IPDM	Pheromone trape + Bio pesticide	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction, News paper coverage	11	29	19
12	Okra- Hybrid Lavan	IPDM	Pheromone trap, YST, Bio & Chemical pesticide	FLDs Training, Field visit,Field day,Khedutshibir, Farmers scientist interaction, News paper coverage	23	20	04
13	Ajwain-AA 93	ICM	New and high yielding variety of Ajwain	FLDs Training, Field visit,Field day, Khedutshibir,Farmers scientist interaction, News paper coverage	9	22	02
14	Greater Yam- Sree nilima	ICM	New and high yielding variety of Greater Yam	Front line demonstration, success story, popular article and field days as well as exposure vist	22	14	02
15	Indian bean- GNIB 21	ICM	New variety	FLDs Training, Field visit,Field day,Khedutshibir,Farmers scientist interaction, News paper coverage	44	68	04
16	Indian bean- GNIB 22	ICM	New variety	Training, FLDs,FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Scientist visit to farmers field, Plant health clinic, telephonic helpline etc	60	59	03
17	Little gourd- Deshi	INM	Effect of novel liquid nutrients	Training, FLDs,FLD visit, Field Visit, Diagnostic visit, Method Demonstration, Scientist visit to farmers field, Plant health clinic, telephonic helpline etc	39	29	03

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

B. Details of FLDs implemented during 2018-19 (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	Paddy-GRH-2	ICM	Improved Variety + Bio fertilizer	*Kharif*-2019	20	20	40	-	40	--
2	Paddy-GNR-6	ICM	Improved Variety	*Kharif*-2019	10	10	25	-	25	--
3	Paddy-Hybrid	IPDM	Pheromon trap and biopesticides	*Kharif*-2019	4	4	10	-	10	--
	Pulses									
4	Pigeonpea-Vaishali	IPM	Pheromon trap and biopesticides	*Rabi-2019*	4	4	10	-	10	--
5	Chickpea- GG 5	IPM	Pheromon trap and biopesticides	*Rabi-2019*	4	4	16		16	--
	Vegetable crops									
6	Brinjal-GAOB 2	ICM	New and high yielding variety	*Late – Kharif-2018*	2.0	2.0	37	0	37	--
7	Tomato- Arka rakshak	ICM	Introduction of new variety	*Rabi-2019*	2.0	2.0	09	01	10	--
8	Okra- Hybrid Lavan	IPDM	Pheromone trap, YST, Bio & Chemical pesticide	*Rabi-2019*	2.0	2.0	10	0	10	--
9	Indian bean- GNIB 21	ICM	New variety	*Kharif-2018*	4	4	10	-	10	--
14	Indian bean- GNIB 22	ICM	New variety	*Kharif-2018*	2	2	10	-	10	--
15	Little gourd- Deshi	INM	Effect of novel liquid nutrients	*Rabi-2018*	4	4	16	-	16	--
	Sugarcane									
16	Sugarcane-CON-13073	ICM	Improved Variety	Rabi-2017	1.5	1.5	7	-	7	--

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	
	Cotton									
17	Cotton	IPDM	Pheromone traps, Pectinolure, *Beauveria bassiana, Metarhizium anisoplea, Lecanicillium lacani,Pseudomonas*	*Kharif-2018*	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					
Paddy-GNR-6	Kharif-2018	Irrigated	Medium Black	L	M	H	Fallow	15th June to 15th July,2017	15th Sept. to 10th Oct.,2017	1998	85 days
Paddy-GAR-13	Kharif-2018	Irrigated	Medium Black	L	M	H	Fallow	15th June to 15th July,2017	15th Sept. to 10th Oct.,2017		
Paddy-NAUR-1	Kharif-2018	Irrigated	Medium Black	L	M	H	Fallow	15th June to 15th July,2017	15th Sept. to 10th Oct.,2017		
Paddy-GNRH-2	Kharif-2018	Irrigated	Medium Black	L	M	H	Fallow	15th June to 15th July,2017	15th Sept. to 10th Oct.,2017		
Paddy-Purna	Kharif-2018	Irrigated	Medium Black	L	M	H	Fallow	15th June to 15th July,2017	15th Sept. to 10th Oct.,2017		
Pigeonpea-Vaishali	Kharif-2018	Irrigated	Medium Black	L	M	H	Fallow	1st July to 20th July,2017	5th Dec. to 25th Jan.,2018		
Sugarcane-CON-13073	Rabi-2017	Irrigated	Medium Black	L	M	H	Paddy	15th Oct. to 15th Nov.,2017	15th Jan. to 15th Feb.,2018		
Indian bean cv. GNIB-21	*Late – Kharif-2018*	Irrigated	Medium black	L	M	H	Paddy	October-2018	Continue		
Mango cv. Kesar	*Rabi-2019*	Irrigated	Medium black	L	M	H	--	8-12 year old	Continue		
Little gourd cv. GNLG-1	*Rabi-2019*	Irrigated	Medium black	L	M	H	Paddy	March-2018	Continue		
Paddy - Hybrid (6444,312,Kabir)	*Kharif-2018*	Irrigated	Medium black	L	M	H	Fallow	15th June to 15th July, 2018	15th Sept. to 10th Oct.,2018		
Pigeonpea (Vaishali)	*Kharif-2018*	Rainfed	Medium Black	L	M	H	Fallow	15th July to 30th July, 2018	1st Jan. to 30th Jan., 2019		
Gram (GJG-3)	*Rabi-2018*	Rainfed	Medium Black	L	M	H	Paddy	15th Oct. to 15th Nov., 2018	15th Feb. to 15th Mar.,2019		
Brinjal-	*Kharif-2018*	Irrigated	Light shallow	L	M	H	Fallow	15th June to	15th Sept. 20th		

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					
(Hybrid-143)			& Medium black					15th July, 2018	Oct.,2018		
Ridge gourd-Hybrid (Pallavi-Sangrow)	*Kharif-2018*	Irrigated	Light to Medium Black Soil	L	M	H	Fallow	15th June to 10th July, 2018	5th August 20th Oct.,2018		
Okra- Hybrid	*Rabi-2018*	Irrigated	Medium black	L	M	H	Paddy	1st Dec. to 15th Dec..,2018	15th Jan., to 15th March, 19		
Cotton-G.Cot.Hy-8 (BG-II)	*Kharif-2018*	Rainfed	Heavy Black Soil	L	M	H	Fallow	15th May to 15st June, 2018	25th Nov.15th Dec, 2018		

Technical Feedback on the demonstrated technologies

Sr. No.	Feedback
1	GNRH-2 rice hybrid variety is high yielding new variety.
2	High yielding new variety of Sugarcane CON-13073 gave high return compare to old varieties
3	New variety of Indian Bean GNIB-21 gave 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	Tomato cv. Arka Rakshak gave higher yield in Tapi district
6	Gall like symptoms found in okra.

Farmers' reactions on specific technologies

Sr. No.	Feedback
1	Soybean: Pods are non shattering in nature clearly indicated the less post harvest losses, Pods are set in bunch type habit resulted higher productivity

2	Paddy: NAUR-1: Early maturity and lodging problems were also observed Purna: Suitable for drilled paddy. Also perform in TP, Less incidence of insect pest was observed. GNRH-2 : Good for dual purpose ie for Chapati and rice
3	Sugarcane variety CON-13073 gave higher yield as well as higher return compare to old varieties of sugarcane
4	Application of Novel Organic Liquid Nutrient and drenching of Biofertilizers (azotobactor, PSB & potash mobilizer) in watermelon reduce nutritional deficiency as well as disease & pest attack
5	GNIB-21 variety of Indian bean gave higher number of tillering (10-12) and no. of pods per tiller (15-18)
6	Foliar application of Novel Organic Liquid Nutrient reduce flower drop and increase yield in chilli, brinjal, okra and creeper vegetables
7	Lack of availability of quality seeds of high yielding varities of watermelon, muskmelon, brinjal, chilli, okra and cucurbitacous crops
8	Indian bean Cv. GNIB-21 gave good result in terms of yield and quality as well as price compare to KATARGAM papadi variety.
9	Novel organic liquid fertilizer application two time at flowering and fruit setting stage gave high fruit setting and yield in Mango.
10	Severe infection of viral disease in cucurbits
11	Pheromone trap technology in brinjal gave good results
12	'NAUROJI' Fruitfly traps produced by NAU, Navsari performed best at farmers field
13	Severe resurgence of whitefly in vegetables and pulse crops

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	17	4/1/2019, 8/1/2019, 17/1/2019, 13/2/2019, 13/2/2019, 19/2/2019, 19/2/2019, 7/3/2019, 14/5/2019, 15/5/2019, 17/5/2019, 11/10/2019, 16/10/2019, 19/10/2019, 21/10/2019, 17/12/2019, 17/12/2019	756	-
2	Farmers Training	04	16/01/2019, 12/07/2019, 30/12/2019, 30/12/2019	102	-
3	Media coverage	0	--	--	-
4	Training for extension functionaries	03	08/01/2019, 18-19/01/2019, 17-20/06/2019	163	-

C. Performance of Frontline demonstrations

Frontline Demonstrations on Oilseed 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										
Groundnut (*Summer-2019)*	ICM	Improved variety	TAG 37 A	50	20	20.4	14.00	19.20	11.00	42.22	39000	115200	76200	2.95	39000	66000	27000	1.69
Sesame (*Summer-2019)*	ICM	Improved variety	GT-4	25	10	4.95	3.15	3.30	--	--	14000	36300	22300	2.59	--	--	--	--

(Rs. 60/kg-Groundnut) (Check variety: J-11)

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										
Green gram (*Summer-2019)*	ICM	Improved seed	Meha	50	20	9.5	7.2	8.5	6.9	23.19	13000	51000	38000	3.92	13500	41400	27900	3.06
Pigeon pea (*Summer-*2019)	IPDM	IPDM	Vaishali	10	4	--continue--												
Chick pea (Rabi 2019)	IPDM	IPDM	GG 5	16	4													

(Rs. 110/kg-Seasame) (Check variety: Deshi)

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																			
Coarse Rice																			
Paddy-GRH-2	INM	Improved Variety + Bio fertilizer	40	20	68	40	58	50	16			38000	87000	49000	2.2	39000	75000	36000	1.9
Paddy-GNR-6	ICM	Improved Variety	25	10	43	29	36	34	7.3			32000	54000	22000	1.7	32000	51000	19000	1.6
Paddy-Hybrid	IPDM	IPDM	10	4	40.5	34	37.1	33.0	12.42			33350	51870	18370	1.55	31700	46200	14500	1.46
Millets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horticulture																			
Vegetables																			
Ajwain – AA 93 (*Kharif* 2019)	ICM	New and high yielding variety	10	01	----------Continue----------														
Elephant foot Yam-Gajendra (*Kharif*-2019)	ICM	New and high yielding variety	07	01															
Greater Yam-Sree nilima (*Kharif*-2019)	ICM	New and high yielding variety	07	01															
Indian bean-GNIB 21(*Kharif*-2019)	ICM	New and high yielding variety	54	2															
Indian bean-GNIB 21(*Kharif*-2019)	ICM	New and high yielding variety	52	2															
Brinjal-GAOB 2	ICM	New and high yielding variety	20	2															
Tomato-Arka	ICM	New and	20	2															

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												
rakshak		high yielding variety																	
Little gourd	INM	Effect of Novel organic Liquid Nutrient	10	2															
Mango cv. Kesar	INM	Effect of Novel organic Liquid Fertilizer in mango	10	2															
Okra-Hybrid-Lavanya/Navya (*Rabi-2019*)	IPDM	IPDM	16	4															
Vegetable seeds & seedling (*Rabi-2019*)	Nutritional Kitchen garden	Layout of Kitchen garden	50	0.68(1500 sq ft/demonstrattion)	--continue--														
Vegetable seeds & seedling (*Rabi-2019*)	Nutritional Kitchen garden	Layout of Kitchen garden	20	0.27 (1500 sq ft./ demon.)															
Commercial crops																			
Sugarcane-CoN-13073	ICM	Improved Variety	6	2	--CONTINUE--														
Cotton	IPM	IPM	10	4	16	13	14.3	13.2	8.33	--	--	31650	71375	39175	2.26	32500	66000	33500	2.03

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of farme	No. of Units (Animal/ Poultry/ Birds, etc)	Major parameters (Kg Body weight gain)		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demon.	Check		Demon.	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
Cattle																	
Prevention of mastitis in cow	Disease management	SAAF kit	20	20	8	7	14.29			220	316.58	96.58	1.439	205	275.84	70.84	1.345561
Incrrease in production performance of cattle	Nutrition management	Bypass fat @ 50 gm /day for 60 days (Oral route)	20	20	--continue--												
Buffalo																	
Buffalo	Nutrition management	Bypass fat @ 50 gm /day for 60 days (Oral route)	15	15	**8.3**	**7**	**18.57**			213.5	331.25	117.75	1.551522	205	278.2	73.2	1.357073
Buffalo	Disease management	Deworming Tablet	20	80	--continue--												
Buffalo Calf																	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dairy																	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Poultry																	
Adoption of scientific feeding by layer mash in poultry	feed management	Concenrated feed	10	100	--continue--												
Sheep & Goat																	

Narrow spectrum Anthelmentic for flukes in Goat	Disease Management	Deworming tabl	20	80	--continue--												
Vaccination																	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Feed back:

Dairy buffalo-Bypass fat • **Milk fat had been increased** • **Farmers get good sale rate at dairy**	**Probiotic powder for Cow** • **Milk fat & SNF was increased as well as milk production also** • **Farmers get good sale rate at dairy**
Narrowspectrum anthelmentic for Goat • **Reduce mortality rate** • **Due to faster growth rate goats were achieved early market weight**	**Fertility kit for buffalo** • **Service period was reduced** • **Reproduction cycle of animals became successfully maintained**

FLD on Fisheries –Nil—

FLD on Other Enterprises

Category	Name of the technology demonstrated	No. of Farmer	No.of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Oyster Mushroom																
Oyster Mushroom	Oyster Mushroom cultivation	25	25	--	--	--	--	--	400	2000	1600	5	--	--	--	--
Button Mushroom																
Apiculture																
Maize Sheller																

Value Addition																
Vermi Compost																
Vermicompost	Preparation of vermicompost with use of vermi bed	10	10	--	--	--	--	--	2250	19250	17000	8.56	--	--	--	--
Sericulture																
kitchen gardening																
kitchen gardening	Household food security by kitchen gardening	20	20													

FLD on Women Empowerment –Nil--

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonst-rated	No. of FW	Season	Major parameters	Field observation (output/man hour)		% change in major parameter	Labor reduction (man days) (man-h/ha)				Cost reduction (Rs./ha/day)	
									Threshing		Weeding		Labour***	
						Demo	Check		Demo	Check	Demo	Check	Demo	Check
Paddy Thresher*	Paddy	Women drudgery reduction	5 SHGs/ women Groups (50 FW)	2019-20	-Field observation -Labour requirement -Cost of operation	269 Kg	63.0 Kg	326.98% (4.26 times more)	4 man-h/ ton	16 man-h/ ton	-	-	365	1460
Twin wheel hoe weeder	Chick pea	Women drudgery reduction	50	*Summer:* 2020	-Field observation -Labour requirement -Cost of operation	0.013 ha	0.0082 ha							
Winnoving fan	Paddy	Women drudgery reduction	50	*Rabi-* 2019										

Stalk puller for uprooting crop stalks	concerned crops	Women drudgery reduction	50	*Rabi*-2019											
Twin wheel hoe weeder	Chick pea	Women drudgery reduction	25	*Rabi*-2019											
Winnoving fan	Paddy	Women drudgery reduction	50	*Rabi*-2019											
Rake for collecting garbage/harvesting	concerned crops	Women drudgery reduction	50	*Rabi*-2019											

*****Twin wheel hoe weeder is recommended by CIAE, Bhopal

**Paddy thresher is recommended by AAU, Anand

*** Cost of operation is calculated as per university labour wages and as per an average yield of paddy: 4100kg/ha.

Farm women's reaction:

1. Twin wheel hoe weeder and Paddy thresher increases working efficiency in short period of time i.e. time saving as compared to local sickle/ traditional method.
2. Twin wheel hoe weeder and Paddy thresher reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to local sickle/ traditional method.
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.
5. Paddy thresher increases working efficiency in short period of time i.e. time saving as compared to traditional method.
6. Paddy thresher reduces fatigue, muscle stress, wrist pain and pain in shoulders as compared to traditional method.

FLD on Demonstration details on crop hybrids --Nil—

D. Performance of Cluster Frontline Demonstrations (CFLD)

CFLD on Oilseed 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 (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut																		
Groundnut (*Kharif-2019*)	ICM	Improved seed	GG-22	48	9.6	21.1	13.1	17.5	15.3	14.4	32500	87500	55000	2.7	31200	76500	45300	2.5
Sesamum																		
Mustard																		
Niger																		
Linseed																		
Sunflower																		
Soybean																		
Soybean (*Kharif-2019*)	ICM	Improved seed	NRC-37	48	20	23.5	14.3	17.6	14.1	24.82	26000	61600	35600	2.4	25000	49350	24350	2.0
Castor																		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

CFLD 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 (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pigeonpea																		
Pigeon pea (*Kharif*-2019)	ICM	Improved seed	Vaishali	50	20	--continue--												
Blackgram																		
Greengram																		
Chickpea																		
Fieldpea																		
Lentil																		
Horsegram																		

* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.
** BCR= GROSS RETURN/GROSS COST

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	1	0	0	0	1	29	30	1	29	30
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	11	0	0	0	231	263	494	231	263	494
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	3	0	0	0	67	16	83	67	16	83
Production of organic inputs	1	0	0	0	25	26	51	25	26	51
Others (pl specify) PPV & FRA	0	0	0	0	0	0	0	0	0	0
Total	**16**	**0**	**0**	**0**	**324**	**334**	**658**	**324**	**334**	**658**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	3	0	0	0	94	46	140	94	46	140
Off-season vegetables	1	0	0	0	12	28	40	12	28	40
Nursery raising	1	0	0	0	15	15	30	15	15	30
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	1	0	0	0	3	24	27	3	24	27
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) Organic Farming	2	0	0	0	5	110	115	5	110	115
Total (a)	**8**	**0**	**0**	**0**	**129**	**223**	**352**	**129**	**223**	**352**
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	1	0	0	0	0	57	57	0	57	57
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)	**1**	**0**	**0**	**0**	**0**	**57**	**57**	**0**	**57**	**57**
c) Ornamental Plants										
Nursery Management	1	0	0	0	15	15	30	15	15	30
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)	**1**	**0**	**0**	**0**	**15**	**15**	**30**	**15**	**15**	**30**
d) Plantation crops										
Production and Management technology	1	0	0	0	11	5	16	11	5	16
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)	**1**	**0**	**0**	**0**	11	5	16	11	5	16
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
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify) Vermicompost production	1	0	0	0	0	51	51	0	51	51
Total (g)	**1**	**0**	**0**	**0**	**0**	**51**	**51**	**0**	**51**	**51**
GT (a-g)	**12**	**0**	**0**	**0**	**155**	**351**	**506**	**155**	**351**	**506**
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	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
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	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**
IV Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	2	0	0	0	16	19	35	16	19	35
Disease Management	1	0	0	0	8	9	17	8	9	17
Feed & fodder technology	3	0	0	0	64	113	177	64	113	177
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	**6**	**0**	**0**	**0**	**88**	**141**	**229**	**88**	**141**	**229**

V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	1	0	0	0	1	16	17	1	16	17
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	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	2	0	0	0	7	86	93	7	86	93
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	1	0	0	0	0	51	51	0	51	51
Others (pl specify) Income generation activities for empowerment of rural women	1	0	0	0	0	21	21	0	21	21
Total	**5**	**0**	**0**	**0**	**08**	**174**	**182**	**08**	**174**	**182**
VI Agril. Engineering										
Farm Machinary 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	3	0	17	17	29	20	49	29	37	66
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) Mushroom Cultivation	3	1	20	21	21	96	117	22	116	138
Total	**6**	**1**	**37**	**38**	**50**	**116**	**166**	**51**	**153**	**204**
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0

Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	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**
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify) Scientific cultivation of gram and oil seed crops	1	0	0	0	57	44	101	57	44	101
Total	**1**	**0**	**0**	**0**	**57**	**44**	**101**	**57**	**44**	**101**
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	**46**	**1**	**37**	**38**	**682**	**1160**	**1842**	**683**	**1197**	**1880**

Farmers' Training including sponsored training programmes (Off campus)

Thematic area	No. of	Participants

	courses	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	1	0	0	0	3	27	30	3	27	30
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	6	0	0	0	176	70	246	176	70	246
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	1	0	0	0	0	21	21	0	21	21
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	**8**	**0**	**0**	**0**	**179**	**118**	**297**	**179**	**118**	**297**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	1	0	0	0	13	19	32	13	19	32
Off-season vegetables	2	0	0	0	15	47	62	15	47	62
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)	**3**	**0**	**0**	**0**	**43**	**113**	**156**	**43**	**113**	**156**
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
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0

Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**3**	**0**	**0**	**0**	**43**	**113**	**156**	**43**	**113**	**156**
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	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
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	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**
IV Livestock Production and Management										
Dairy Management	0	0	0	0	0	0	0	0	0	0
Poultry Management	1	0	0	0	0	25	25	0	25	25
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	16	4	20	16	4	20
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	**1**	**0**	**0**	**0**	**0**	**25**	**25**	**0**	**25**	**25**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	1	0	0	0	0	18	18	0	18	18

Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	1	0	0	0	0	21	21	0	21	21
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	1	0	0	0	0	32	32	0	32	32
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	1	0	0	0	9	23	32	9	23	32
Others (pl specify) Income generation activities for empowerment of rural women	1	0	0	0	0	30	30	0	30	30
Others- Entrepreneurial development of farmers/youths	1	0	0	0	4	22	26	4	22	26
Total	**6**	**0**	**0**	**0**	**13**	**155**	**168**	**13**	**155**	**168**
VI Agril. Engineering										
Farm Machinary 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	4	0	0	0	41	80	121	41	80	121
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Bio-control of pests and diseases	1	0	0	0	22	10	32	22	10	32

Production of bio control agents and bio pesticides	0	0	0	0	0	0	0	0	0	0
Others (pl specify) Mushroom production	1	0	0	0	2	18	20	2	18	20
Total	**6**	**0**	**0**	**0**	**65**	**108**	**173**	**65**	**108**	**173**
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	1	0	0	0	34	21	55	34	21	55
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**1**	**0**	**0**	**0**	**34**	**21**	**55**	**34**	**21**	**55**
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0

Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	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**
X Capacity Building and Group Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	0	0	0	8	22	30	8	22	30
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify) ICM	2	0	0	0	64	49	113	64	49	113
Total	**3**	**0**	**0**	**0**	**72**	**71**	**143**	**72**	**71**	**143**
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	**26**	**0**	**0**	**0**	**311**	**590**	**901**	**311**	**590**	**901**

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	1	0	0	0	1	29	30	1	29	30
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	2	0	0	0	19	37	56	19	37	56
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	5	0	0	0	114	74	188	114	74	188
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	3	0	0	0	34	37	71	34	37	71
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl specify) PPV & FRA	0	0	0	0	0	0	0	0	0	0
Total	**11**	**0**	**0**	**0**	**168**	**177**	**345**	**168**	**177**	**345**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops	2	0	0	0	41	21	62	41	21	62
Off-season vegetables	3	0	0	0	15	97	112	15	97	112
Nursery raising	2	0	0	0	18	58	76	18	58	76
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) Organic Farming	0	0	0	0	0	0	0	0	0	0
Total (a)	**7**	**0**	**0**	**0**	**74**	**176**	**250**	**74**	**176**	**250**
b) Fruits	0	0	0	0	0	0	0	0	0	0
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	0	0	0	0	0	0	0	0	0	0
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	1	0	0	0	36	0	36	36	0	36
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)	**1**	**0**	**0**	**0**	**36**	**0**	**36**	**36**	**0**	**36**

c) Ornamental Plants										
Nursery Management	1	0	0	0	15	15	30	15	15	30
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)	**1**	**0**	**0**	**0**	**15**	**15**	**30**	**15**	**15**	**30**
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
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**9**	**0**	**0**	**0**	**125**	**191**	**316**	**125**	**191**	**316**
III Soil Health and Fertility Management										
Soil fertility management	0	0	0	0	0	0	0	0	0	0

Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	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
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	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**
IV Livestock Production and Management										
Dairy Management	1	0	0	0	37	5	42	37	5	42
Poultry Management	1	0	0	0	0	25	25	0	25	25
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	1	0	0	0	16	4	20	16	4	20
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**	**53**	**34**	**87**	**53**	**34**	**87**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	3	0	0	0	16	109	125	16	109	125
Design and development of low/minimum cost diet	1	0	0	0	0	18	18	0	18	18
Designing and development for high nutrient efficiency diet	0	0	0	0	0	0	0	0	0	0
Minimization of nutrient loss in processing	1	0	0	0	0	21	21	0	21	21
Processing and cooking	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0

Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	4	0	0	0	14	125	139	14	125	139
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	2	0	0	0	6	74	80	6	74	80
Others (pl specify) Income generation activities for empowerment of rural women	2	0	0	0	0	51	51	0	51	51
Total	**13**	**0**	**0**	**0**	**36**	**398**	**434**	**36**	**398**	**434**
VI Agril. Engineering										
Farm Machinary 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	4	0	0	0	55	64	119	55	64	119
Integrated Disease Management	1	0	0	0	21	0	21	21	0	21
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) Mushroom Cultivation	4	0	0	0	34	47	81	34	47	81
Total	**9**	**0**	**0**	**0**	**110**	**111**	**221**	**110**	**111**	**221**
VIII Fisheries										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0

Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IX Production of Inputs at site										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	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**
X Capacity Building and Group										

Dynamics										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	1	0	0	0	8	22	30	8	22	30
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify) Scientific cultivation of gram and oil seed crops	3	0	0	0	111	123	234	111	123	234
Total	**4**	**0**	**0**	**0**	**119**	**145**	**264**	**119**	**145**	**264**
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	**49**	**0**	**0**	**0**	**611**	**1056**	**1667**	**611**	**1056**	**1667**

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

Nursery Management of Horticulture crops										
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	0	0	0	0	0	0	0	0	0	0
Mushroom Production	2	27	16	43	17	15	32	44	31	75
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	0	0	0	0	0	0	0	0	0	0

and implements										
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
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) Health & Nutrition	1	0	0	0	3	23	26	3	23	26
Other (women and child care)	1	0	10	10	0	7	7	0	17	17
TOTAL	**4**	**27**	**26**	**53**	**20**	**45**	**65**	**47**	**71**	**118**

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	0	0	0	0	0	0	0	0	0	0
Mushroom Production	1	7	8	15	28	22	50	35	30	65
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	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
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	**1**	**7**	**8**	**15**	**28**	**22**	**50**	**35**	**30**	**65**

Training for Rural Youths including sponsored training programmes - CONSOLIDATED (On + 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	0	0	0	0	0	0	0	0	0	0
Mushroom Production	3	34	24	58	45	37	82	79	61	140
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	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
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) Health & Nutrition	1	0	0	0	3	23	26	3	23	26
Any other (pl. specify) Women & childcare	1	0	10	10	0	7	7	0	17	17
TOTAL	**5**	**34**	**34**	**68**	**48**	**67**	**115**	**82**	**101**	**183**

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

Productivity enhancement in field crops	1	23	1	24	35	13	48	58	14	72
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	1	0	0	0	35	25	60	35	25	60
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	1	0	0	0	0	31	31	0	31	31
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	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**3**	**23**	**1**	**24**	**70**	**69**	**139**	**93**	**70**	**163**

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
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	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
TOTAL	**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	23	1	24	35	13	48	58	14	72
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	1	0	0	0	35	25	60	35	25	60
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	1	0	0	0	0	31	31	0	31	31
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										
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)										
TOTAL	**3**	**23**	**1**	**24**	**70**	**69**	**139**	**93**	**70**	**163**

Table. Sponsored training programmes

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										
Integrated crop management	4	0	0	0	94	118	212	94	118	212
Production of Organic inputs	1	0	0	0	25	26	51	25	26	51
Production and value addition	0	0	0	0	0	0	0	0	0	0
Fruit Plants	1	0	0	0	0	57	57	0	57	57
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	1	0	0	0	0	51	51	0	51	51
Methods of protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (mushroom cultivation)	1	0	0	0	1	43	44	1	43	44
Total	**8**	**0**	**0**	**0**	**120**	**295**	**415**	**120**	**295**	**415**
Post harvest technology and value addition	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	0	0	0	0	0	0	0	0	0	0
Farm machinery	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
Livestock production and management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	1	0	0	0	25	60	85	25	60	85
Animal Disease Management	1	0	0	0	8	9	17	8	9	17
Fisheries Nutrition	0	0	0	0	0	0	0	0	0	0
Fisheries Management	1	0	0	0	34	21	55	34	21	55
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Home Science	0	0	0	0	0	0	0	0	0	0
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) women and child care	1	0	0	0	36	0	36	36	0	36
Total	0	0	0	0	0	0	0	0	0	0
Agricultural Extension	0	0	0	0	0	0	0	0	0	0
Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Others (pl. specify) Gender Sensitization	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	**12**	**0**	**0**	**0**	**343**	**680**	**1023**	**343**	**680**	**1023**

Name of sponsoring agencies involved: ATMA-Tapi, ATMA-Navsari, SPARSH-Songadh, DAO-Tapi, FTC-Vyara, Kamdhenu University-Gandhinagar, Gujarat Matikam Kalakari Ane Rural Technology Sansthan-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	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition										
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**
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,	0	0	0	0	0	0	0	0	0	0
bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery	0	0	0	0	0	0	0	0	0	0
and implements	0	0	0	0	0	0	0	0	0	0
Rural Crafts	2	0	0	0	2	55	57	2	55	57
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.	1	26	2	28	5	2	7	31	4	35
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	**3**	**26**	**2**	**28**	**7**	**57**	**64**	**33**	**59**	**92**
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	**3**	**26**	**2**	**28**	**7**	**57**	**64**	**33**	**59**	**92**

Details of trainings organized under ASCI: ---

3.5 Extension Programmes

Activities	No. of programmes	No. of farmers			No. of Extension Personnel	TOTAL
		Male	Female	Total		
Advisory Services	73	427	514	941	15	1897
Diagnostic visits	36	45	14	59	14	132
Field Day	17	274	482	756	12	1524
Group discussions	30	841	1456	2297	24	4618
Kisan Ghosthi	05	682	776	1458	7	2923
Film Show	55	382	616	998	14	2010
Self Help Groups	0	0	0	0	0	0
Kisan Mela	1	97	353	450	7	907
Exhibition	2	206	838	1044	5	2093
Scientists' visit to farmer's field	41	143	44	187	11	385
Plant/Animal health camps	0	0	0	0	0	0
Farm Science Club	0	0	0	0	0	0
Ex-trainees Sammelan	7	51	188	239	7	485
Farmers' seminar/workshop	0	0	0	0	0	0
Method Demonstrations	36	365	910	1275	18	2568
Celebration of important days			0			0
National Productivity Day on oil seed & pulse (12/2/2019)	1	23	71	94	**5**	193
National Productivity Week on oil seed & pulse(13/2/2019)	1	14	8	22	**4**	48
Celebration of International Yoga Day (21/6/2019)	1	4	17	21	5	47
Celebration of ICAR Foundation Day (16/7/2019)	1	5	25	30	6	66
Celebration of Van Mahotsav (16/7/2019)	1	5	25	30	3	63
Celebration of Van Mahotsav (18/7/2019)	1	12	28	40	3	83
Celebration of 'Mahila Krushi Divas' under Women Empowerment Fortnight(6/8/2019)	1	50	300	350	3	703
Awareness about scientific activities in kharif crops(23/7/2019)	1	150	0	150	3	303
Women in Agriculture (15/10/2019)			0		3	3
Celebration of world food day (16/10/2019)	1	9	33	42	4	88
Celebration of constitution Day (26/11/2019)	1	39	8	47	6	100
Information reg. role of women in Agriculture & Animal Husbandry (04/12/2019)	1	3	30	33	3	69
Celebration of World soil day (05/12/2019)	1	456	310	766	2	1534
Celebration of Constitution Day (23/12/2019)	1	40	53	93	7	193
Celebration of KISAN DIWAS (23/12/2019)	1	40	53	93	7	193

Celebration of KISAN AND VIGYAN DAY (24/12/2019)	1	9	34	43	7	94
Special day celebration			0			
Mahila Kisan Divas (15/10/2018)	1	3	30	33	7	
World Soil Day (5/12/2019)	1	0	330	330	2	
Exposure Tour	7	89	134	223	2	
Others (pl. specify)			0			
Guest lecture	108	6141	5883	12024	14	
Farmer's visit to KVK	209	1750	1795	3545	26	
Khedut shibir	12	1671	729	2400	18	
Mahila shibir	1	29	52	81	6	
Pashupalan Shibir	4	191	372	563	3	
Farmers-Scientists Interaction	3	70	59	129	3	
Extension literature distributed	37	209	437	646	6	
GRAND TOTAL	**702**	**31565**	17007	**31857**	**702**	

Details of other extension programmes

Particulars	Number
Electronic Media (CD/DVD)	00
Extension Literature (Folder)	28
News paper coverage	33
Popular articles	07
Radio Talks	00
TV Talks	00
Animal health camps (Number of animals treated)	00
Others (pl. specify)	
Book chapter	01
Research papers	03
Research paper abstracts	02
Total	**67**

(Annexure –II is attached)

: Mega Events:

1. Celebration of International Women's day

KVK, Tapi has celebrated 'International Women's day' on 8th March, 2019 at Chichbardi village, Shivshakti society, Vyara and KVK campus, Vyara. Scientist (Home Science) gave technical lecture on 'Health and nutrition and women empowerment through entrepreneurial activities'. Scientist(Crop production) delivered the lecture on organic farming. Senior Scientist & head gave information about water harvesting. Smt.Gajaraben Chaudhari, President, District Panchayat, Tapi and Smt.Leelaben Gamit, Member of Extension Education Council, NAU, Navsari were present at Chichbardi and KVK, Vyara respectively. Total 1256 tribal women and farmers were participated in all three programmes. Pregressive tribal farm women performed AADIVASI Dance and gave their feedback regarding adoption of scientific technology.

2. Celebration of International Yoga day

KVK, Tapi had celebrated 'International Yoga day' on 21st June, 2019 at KVK campus. Total 21 participants (KVK Scientist, KVK staff and SHRAMYOGI of KVK farm) were actively present in the programme.

3. Celebration of 'Mahila Krushi Divas'

KVK, Tapi, Dist. Panchayat and ATMA, Tapi celebrated 'Mahila Krushi Divas' under women empowerment fortnight 1st August to 14th August 2019 at Jilla Sewa Sadan, Vyara. Total 300 tribal farm women and 50 farmers were actively participated in programme. Smt. Gajaraben Chaudhari, Pramukh, Dist. Panchayat, Tapi was present and gave valuable guidance. Scientist(Home Science) delivered the lecture on 'role of women in agriculture'. Horticulture officer and Veterinary officers also gave technical information on horticultural crops and animal husbandry. Progressive farm women gave their own feedback about adoption of scientific technology.

4. Live webcasting For Launching of NADCP for FMD & Brucellosis, NAIP, PM-KISAN, PM-KMY and Swachhta Hi Sewa by Hone'ble PM of India at Krishi Vigyan Kendra, Vyara (Tapi)

Krishi Vigyan Kendra, Vyara (Tapi) has organized a Pashupalan Shibir cum live webcasting for launching of NADCP for FMD & Brucellosis, Nationwide Artificial Insemination Programme and other three programmes by Hone'ble Prime minister of India on date 11.09.2019 at morning 11.00 am onwards.

This event was arranged in the presence of Shri Prabhubhai Vasava, Hone'ble Member of Parliament, 23-Bardoli constituency. He gave his valuable speech on promoting clean milk production using scientific methods. He also added to work with unity for effective output in agricultural field in future. He also emphasized on increasing productivity of milk per animal. Shri R. J. Halani (IAS), District Collector-Tapi remain present and appreciated the farmers for using different governmental subsidiary projects.

In beginning of programme, Dr. C. D. Pandya, Sr. Scientist & Head, KVK-Tapi welcomed all the dignitaries; Govt. officials and farmers with identified the objective of this event. Officers of Animal Husbandry Department-Tapi delivered their lectures on advantages of Artificial Insemination and prevention for FMD and Brucellosis diseases. Also, District Agricultural Officer of Tapi gave their valuable ideas on PM-KISAN and PM- KMY yojana. In continuation of this programme, at regional Rice Research Station, NAU, Vyara total 46 Surati buffaloes were vaccinated.

Total 108 progressive farmers and farm women of Tapi district remain present and get benefited. Moreover, 25 governmental officials of different Agricultural and Animal Husbandry department have joined in this programme. At the end, Dr. C. M. Rana, Dy. Director of AH-Tapi proposed vote of thanks.

5. Mass tree plantation and Kisan Goshthi programme

Mass tree plantation and Kisan Goshthi programme was organized at KVK, Tapi on 17th September, 2019 in collaboration with IFFCO-Tapi. Dr. C. D. Pandya, Senior Scientist & Head explained the importance of this programme and welcome all the dignitaries and farmers. He also emphasized the crop planning in *rabi* season by using conserved moisture. Chief guest and Principal, Agriculture Polytechnic, NAU, Vyara Dr. N. M. Chauhan has explained the importance of tree plantation and emphasized the farmers to plant more number of trees around their home and on farm. Dr. V. P. Patel, Associate Research Scientist,

Regional Rice Research Station, NAU, Vyara has explained the importance of horticultural tree plantation. Dr. Dharmishtha Patel, Scientist (Horticulture) has explained about land and water management and gave detail information about importance of tree plantation. Shri. N. M. Gajera, Senior Marketing manager, IFFO-Tapi gave information about the various fertilizers made by IFFCO. Question – answer session was also organized. In the beginning of this programme various 30 no. of trees were planted by the dignitaries and farm women at KVK campus. Total 500 different trees *viz.* Saptparni, Guava, Aonla, Pendula, Cashew nut and Jamun were distributed among the farmers. Total 205 farm women and farmers of twelve villages of Tapi district were actively participated. Vote of thanks was proposed by Dr. Dharmishtha Patel, Scientist (Horticulture) and anchoring was done by Dr. J. B. Butani, Scientist (Animal Science).

6. *'Swachhhata Hi Sewa'* programme at *Gyandeep Aashramshala, Khurdi*

Krishi Vigyan Kendra, Navsari Agricultural University, Vyara, Dist.Tapi organized *'Swachhata Hi Sewa'* programme on 2nd October, 2019 at *Gyandeep Aashramshala, Vanvasi Manav Kalyan Trust, Khurdi*. Total 222 tribal students were actively participated in programme. During programme, Debate competition on the subject of '*Mahatma Gandhiji* and *Swachhata Abhiyan'* was also organized at Aashramshala, Khurdi. Total 15 students were participated in debate competition and prize distributed to winner students by Krishi Vigyan Kendra, Tapi. Dr.C.D.Pandya, Senior Scientist & head, KVK, Tapi delivered the technical lecture on '*Jal Shakti Abhiyan'* and Agriculture education in *Swachhata* awareness programme. Prof. Arti N.Soni, Scientist(Home Science) gave valuable information about importance of Swachhata Abhiyan and plastic waste management. After Swachhata awareness programme, rally regarding Swachhata Abhiyan was also organized at Khurdi village with use of Swachhata awareness slogan/ posters by KVK, Tapi in collaboration with *Gyandeep Aashramshala, Khurdi* to aware tribal community. All students, teachers from *Gyandeep Aashramshala* and KVK Scientists were participated in Swachhata awareness rally enthusiastically.

7. Farmer's Day- Paddy crop symposium Organized at Regional Rice Research station, NAU, Vyara

Krishi Vigyan Kendra and ATMA-Tapi with Regional Rice Research station have jointly organized one day "Farmers Day-Paddy crop symposium" at Regional Rice Research station, Vyara of Navsari Agricultural University on Date 5th October 2019.

Dr. C. J. Dangaria, Hon'able Vice Chancellor and president of the programme remain present and delivered motivational speech to farmers. He also encourages farmers to do value addition to increase farm income. Moreover he motivates farmers towards demand based agriculture and appreciated more participation of women in agriculture. The chief guest Dr. G. R. Patel, Director of Extension Education, N.A.U., Navsari explained about various activities of Research, Education and Extension of Navsari Agricultural University. At the beginning of programme, Associate Research scientist of Regional Rice Research Station, Dr. V. P. Patel gave the welcome speech and provide keys to increase rice production. Dr. Kedarnath, Assistant Research scientist, RRRS, Vyara explained about pest and disease management of paddy. The points to increased the income of sugarcane farmers were highlighted by Dr. S. C. Mali, Associate Research Scientist. Dr. Ronak Bhakta, ARS, Pulse

Research Station, NAU, illustrated the possibility of castor crop in Tapi district. The information for increase the income through scientific cultivation of Turmeric and mango-ginger were provided by Dr. Gopal Vadodaria, Assistant professor, Dept. of Genetics and Plant Breeding, NAU, Navsari. Shree P. R. Chaudhary, project director, ATMA-Tapi explained in brief about the various extension activities through ATMA. Shree S. B. Gamit, DAO, Tapi informed about various schemes of Agriculture. In the programme total 450 farmers of Tapi district were actively participated as well as observed various varieties displayed in agricultural exhibition stall. Dr. C. D. Pandya, Sr. Sci. & Head, KVK, Vyara, Concluded the programme through vote of thanks. Anchoring was done by Shree K. N. Rana, Scientist (Agronomy), KVK, Vyara.

8. Khedut Shibir on Marketing of Agricultural Produce

Krishi Vigyan Kendra, Tapi Organized Khedut Shibir on Marketing management of different agricultural produce on date 14/10/2019. At the beginning of programme Dr. C. D. Pandya, Senior Scientist & Head elaborate the importance of programme and explained about marketing management of agricultural produce to increase farmers' income. Chief Guest of programme Shree Hirenbhai, Managing Director of Kashi Export, Dharampura, Kalkava explained about importance of export different agricultural produce like Okra, Brinjal, Little gourd, pointed gourd, Elephant yam etc. and also explained about make more profit by export. In this programe total 65 farmers of Gatadi, Ukhalda village of Songadh block and Unchamala and Dhat village of Vyara Block were actively particpated in this programme. At the end of programme also discussed the market related problem of farmers and solve their query by healthier discussion.

9. Awareness programme on Jal Shakti Abhiyan at Borakhadi Village of Vyara Block

Krishi Vigyan Kendra, Vyara organized “Awareness programme on Jal Shakti Abhiyan” at Borakhadi village of Vyara Block on Date 16/10/2019. In this programme Scientists of KVK were enlighten water conservation and rain water storage.

At the beginning of programme, Prof. Arti N. Soni, Scientist (Home Science), KVK, Vyara explained about importance of water and gave details for save water by different activities. Dr. A. J. Dhodia, Scientist (Extension Education), KVK, Vyara explained about Water conservation and rain water harvesting, Renovation of traditional water bodies, reuse bore well recharge structures and also guided farmers about the rain water harvesting with different methods, Prof. K. N. Rana (Scientist Agronomy) explained about drip irrigation and its role in water conservation and also aware farmers for Intensive afforestation. Dr. J. B. Butani, (Scientist Animal Science) provide information about water availability of different areas of Gujarat state and also explained about watershed development.

10. Skill Development training for tribal farm women

KVK, Tapi has organized skill development training on ‘Preparation of decorative articles from coconut fibers and preparation of doormats’ for tribal farm women in collaboration with *GUJARAT MATIKAM KALAKARI ANE RURAL TECHNOLOGY SANSTHAN*, Govt. of Gujarat, Bajipura from 10th September, 2019 to 09th October, 2019 (30 days) at Borakhadi village of Vyara block. Total 27 tribal farm women were actively participated in training programme.

11. Celebration of World food Day

KVK, Tapi has celebrated 'World Food day' on 16th October, 2018 at Borakhadi village of Vyara Block. Total 42 tribal farmers and farm women were actively participated in programme. Scientist (Home Science, Agronomy, Agricultural Extension, Veterinary Science) gave the technical lecture on 'importance of World Food day, scientific storage of food grain, fruits and vegetable preservation technology & dairy technology'.

12. Celebration of Constitution Day

Celebration of Constitution Day programme was organized at Krishi Vigyan Kendra, Vyara on 26th Nov. 2019 and 23rd Dec. 2019 to create awareness about Constitution and its importance among students and farmers. On date 26th Nov. 2019, total 47 participants (35 Students of Polytechnic in Agriculture college, Vyara and 12 KVK staff) were remain present. All the KVK staff and Students of Polytechnic in 23rd Dec. 2019, total 103 participants including Farmers, Farm women, BRS students and officials were actively participated in programme. Dr. C. D. Pandya Senior Scientist and Head gave welcome speech and explained importance of programme. President of programme Shree Nitinbhai Pradhan, President of BAR association, Vyara explained the fundamental rights as well as fundamental duties of citizen and also explained about the rules regarding tribals' land. Dr. N. M. Chauhan, Principal, Polytechnic in Agriculture, Vyara explained the Constitutional facts and importance of Constitution. Then after Question answer session was organized and Shree Nitinbhai Pradhan solve the queries of farmers. After the completion of question answer session whole participants and officials read the preamble of Constitution.

13. Celebration of Women in Agriculture Day

KVK, Tapi has celebrated 'Women in Agriculture day' at Lakhali village on date 4th December 2019. Main objective of the programme were to motivate tribal farm women about scientific technologies of Agriculture and allied subject. Total 33 tribal farm women were actively participated in said programme. Scientist (Home Science) gave the technical information about 'Role of women in agriculture and women drudgery reducing technologies'. Dr. J. B. Butani, Scientist (Animal Science) delivered the lecture on Animal husbandry and Dr. A. J. Dhodia, Scientist (Agril. Extension) gave the information about importance of women in Agriculture and explained about improved agricultural technologies. Smt. Urmilaben Gamit, Committee member, Gram Panchayat was also present in programme.

14. Celebration of World Soil Day

Krishi Vigyan Kendra, Tapi, District Agriculture Department-Tapi and ATMA-Tapi jointly organized "Awareness programme on Soil health" at Aashram Shala, Village: Gadat, block: Vyara on date 05-12-2019 along with "Prakrutik Kheti Workshop". Shri. Ganapatbhai Gamit, President, Gram Seva Samaj encourage farmers for better agriculture. Shri Satishbhai Gamit, District Agriculture Officer, Tapi, gave information about the schemes related to losses in crop by natural hazards. Shri Prafulbhai Chaudhari, Deputy Director of Agriculture & Project Director, ATMA-Tapi, gave welcome speech and also aware farmers about the importance of World Soil Day. Shri. Nikunjbhai Patel, Deputy Director of Horticulture,Tapi gave the information about soil health and soil health card. Prof. A. J. Dhodia, Scientist (Extension Education), gave the technical lecture on Soil sampling techniques and Soil testing. Total 741 farmers were remains present in this programme.

15. Celebration of Kisan Diwas

At Krishi Vigyan Kendra, Vyara,organized Celebration of Kisan Diwas on Date: 23rd Dec. 2019. Total 94 farmers and farm-women actively participated in Celebration of "KISAN DIWAS". Farm women of Borakhadi village did prayer at the beginning the programme. Dr.

C. D. Pandya, Senior Scientist and Head gave welcome speech and explain the importance of programme. Prof. Arpit J. Dhodia (Extension Education) explained the importance of Farmers' Day and encourage farmers to adopt new agricultural technologies for agricultural development. Shri Harshadbhai Trivedi, Technical officer, Gujarat Matikam Kalakari and Rural technology institutes, Govt. of Gujarat and Deepakbhai Chaudhari, Centre Assistant,ujarat Matikam Kalakari and Rural technology institutes, Bajipura remain present during programme and guided farmers about different vocational training programmes.

16. Celebration of Kisan and Vigyan Day

On the occasion of birth anniversary of Late shri. Atal Bihari Bajapay, Former Prime Minister of India Kisan and Vigyan Day Celebration programme organized at Krishi Vigyan Kendra, Vyara. Total 43 farmers and BRS girl students were actively participated in the programme. Dr. C. D. Pandya, Senior Scientist and Head, KVK, Vyara gave welcome speech. Dr. N. M. Chauhan, Principal, Polytechnic in Agriculture, Vyara explain the importance of Scientific agriculture and also encourage BRS students for career development in Agriculture and allied field. Whole programme was Manage by Dr. A. J. Dhodia, Scientist(Extension Education), KVK, Tapi.

17. Innovative Farmers Meet

Indian council of Agricultural Research, New Delhi Funded and Navsari Agricultural University, Navsari Operated Krushi Vigyan Kendra of Tapi district is working at Vyara. KVK Organized a 'Innovative Farmer's Meet' on 31st December 2019. Total 68 Farmers and farm women, officers from Regional Rice Research Station, Officers from Polytechnic Collage- Vyara and Officers from line department had been participated in the event. At the beginning of the Programmed, Dr. C. D. Pandya, Senior Scientist & Head of KVK welcomed guests and informed them about the progressive Farmers. He explained the importance of white-chilli powder and the importance of different village level researches. Guests were welcomed by bouquet. The chairperson of programme Dr. Noushad Parvez, Senior Innovation Fellow informed Farmers about activity of National Innovation Foundation. The Farmers were also made aware of various awards sponsored by NIF for Farmers and they were inspired to take advantage of NIF'S award by solving Problems in their routine life through Creative ideas and innovation. Dr. Parth Dave explained 'Ignite Competition' and 'Inspire Competition' of NIF with various examples for the Children. The Chief guest of Programme Dr. V. P. Patel, Research Scientist, RRRS encouraged farmers to understand their Problems and solve them with own creative ideas. The Chief guest Dr. N. M. Chauhan, Principal of Agricultural Polytechnic, Vyara provided encouragement to farmers. Total 77 local varieties of different crops were exhibited during the Program by farmers. NIF also displayed various awarded implements and Farmers varieties. Prof. K. N. Rana (Sci. Agronomy) did successful managed of the entire programme and vote of Thanks.

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	GNRH-2		5.56	18681.6	186
		GNR-6		43.7	157320	0
	Paddy	GAR-13		22.62	76003.2	0
		Jaya		11.9	38080	6
		GNR-7		18	60480	0
		GNR-3		17.3	55360	16
		Sardar(GR-17)		7.54	24128	2
		Gurjari		7.7	24640	4
Oilseeds	Mustard	GDM-4		0.1	650	4
Pulses	Chickpea	GG-5		29.5	236000	324
	Chickpea	GG-3		3.5	28000	37
	Greengram	Meha		1.1	9900	1
	Blackgram	GU-1		2.09	18810	0
Commercial crops	--	--	--	0	--	0
Vegetables	--	--	--	0	--	0
Flower crops	--	--	--	0	--	0
Spices	--	--	--	0	--	0
Fodder crop seeds	--	--	--	0	--	0
Fiber crops	--	--	--	0	--	0
Forest Species	--	--	--	0	--	0
Others	--	--	--	0	--	0
				170.61		**580**

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	-	-	-	-	-	-
Vegetable seedlings	Brinjal	GAOB-2		85053	85053	378
	Tomato	Arka rakshak		37100	37100	257
	Chilli green	Eagle		23755	23755	319
	Cabbage	Pusa Drumhead		1030	1030	1
	Cauliflower	Doctor	--	21335	10667.5	228
	Bottlegourd	Local	--	6019	24076	137
	Ridgegourd	Local	--	590	2360	8
	Pumpkin	Local	--	240	960	1
	Drumstick	Local	--	235	4700	18

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
	Little gourd		--	6041	60410	678
	Pointed gourd		--	18	270	3
	Broccoli		--	3010	3010	58
			Total-A	**184426**	**253391.5**	**2086**
Fruits	Cashew	Vengurla-4		13	260	11
	Mango	Sonpari-Approach Grafting	--			
		Kesar-Approach Grafting	--	57	2850	48
	Dragon fruit	Red in white		70	2800	56
			Total-B	**140**	**5910**	**115**
Ornamental plants						
Medicinal and Aromatic	-	-	-	-	-	-
Plantation	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	-	-	-	-	-	-
			Total (A + B)	**184566**	**259301**	**2201**

Production/supply of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers	*Azotobactor*	14	1680	09
	NOVEL	565	73450	276
	Posphorus Solubilizing Bacteria	25	3000	18
	Potash Mobilizing Bacteria (KMB)	18	2160	08
	Azospirilum	7	840	6
Bio-pesticide	Pseudomonas	38	2660	35
Bio-fungicide	Tricoderma	66	7920	58
Bio Agents	Rhizobium	5	600	3
Others	Vermicompost	1030	6180	278
	Earth worms	17	5100	5
	Methyl Eugenol Trap	204	8000	110
	Culure trap	237	16590	203
	Culure block	112	6160	89

	culure box	4	80	2
	Total	**2342**	**134420**	**1100**

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	**Details of Publications are given in**		2
Technical reports	***Annexure-II***		08
News letters			0
Technical bulletins			0
Popular articles			7
Extension literature (Folder)			0
Others (Pl. specify)			
Research paper abstracts			4
Book chapter			1
Newspaper coverage			30
TOTAL			**52**

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. Mr. Nileshbhai Valvi - Successful quality seed producer of Pigeonpea

1	**Name**	Mr. Nileshbhai Valvi
2	**Address:**	Village: Bortha, Block: Nizar
3	**Education**	12^{th} Pass
4	**Mobile no.**	-
5	**Age**	37
6	**Total land**	10 acre
8	**Area under Pigeonpea**	4.0 acre (*Kharif*-2018)
9	**Situation analysis/Problem statement:**	Seed is a vital component for harvesting good yields from any crop by way of ensuring optimum plant population, proper crop health and growth. In pulses, quality seed supply always remains a major constraint limiting production and productivity. Pulses are known as cheap source of protein for largely agrarian population worldwide, particularly in India. Realizing importance of protein from plant sources, the consumption is becoming more popular in different parts of the globe. Accordingly, demand for pulses has gone up internationally. To make India self-sufficient in pulses production through productivity enhancement, availability of quality seed needs special attention of the policy makers and researchers. There is need of about 25- 30 lakh quintals of quality seed every year to achieve 30% seed replacement rate to enhance production and productivity of these crops. Mr. Nileshbhai is a hard worker. He cultivated different crops *viz.,* cotton, pigeonpea, maize, wheat and Ajwain. Through Ambedkar Trust he was in touch with KVK, Tapi. He joined with KVK for seed production programme.
10	**Plan, Implement and Support**:	Government of India is fully aware of its responsibility to increase quality seed supply in major pulse growing regions of the country. Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture and Farmers Welfare, Government of India (GoI) has approved project namely "Creation of seed hubs for increasing indigenous production of pulses in India" under the aegis of Indian Council of Agricultural Research (ICAR) for increasing supply of quality seeds to boost pulses production and productivity. Krishi Vigyan Kendra, Vyara is one of the Seed Hub center under this project. KVK, Vyara has been started seed production of pulse crops *viz.*, pigeonpea,

		chickpea and greengram in kharif, rabi and summer season, respectively. Mr. Nileshbhai joined the training programme on quality seed production at KVK, Tapi. KVK, supplied 30 kg foundation seed of pigeonpea-variety-BSMR 853 locally known as *Vaishali.* All the pre-requisites *viz*., registration procedure of seed producer; field inspection in collaboration with Seed Certification agency, regular monitoring visit, conduction of different extension activities *viz*., field visit, diagnostic visit, field day etc were also followed by KVK. **Technology adopted** ➢ Adoption of the right agronomic package of practices ➢ Followed the need based plant protection measures ➢ Followed the field inspection and certification procedures without deviation in collaboration with KVK, and Gujarat Seed Certification Agency
12	**Output**	By adoption of scientific package of practices of pigeonpea, Nileshbhai harvested good quality seeds of pigeonpea. He invested Rs. 39100 as total cost of cultivation and he produced 2411 kg pigeonpea seed. Out of which 150 kg seed kept for own consumption and for sowing in next season.
13	**Outcome**	KVK, Vyara had bought all the seeds as per the price (Rs. 6000/- per quintal) finalized by Gujarat State Seed Corporation, from Nileshbhai under Seed Hub Project. By this way, he got net income of Rs. 1,44,660/-. The Government has declared the seed price @ 60.00/ kg for this year. Had they produced the commercial grain crops, and sold as grain only, they would have received @ 56.75/ kg only. Thus by going for seed production, Nileshbhai earned almost **30.43 per cent more** rate of the pigeonpea by selling these seeds. The total revenue for the Nileshbhai was 1,05,560/- while as grain, their revenue would have been Rs.71,806/- only.
14	**Impact**:	Mr. Nileshbhai was fully satisfied by this seed production programme. He also urged to nearby farmers to join with KVK for seed production programme.

Table: Economics of seed production by Mr. Nileshbhai

Cost of Cultivation (Rs.)	Total Production (Kg)	Kept as seed and own consumption (Kg)	Sold as seed (Kg)	Price (Rs,/Qt)	Gross income (Rs.)	Net income (Rs.)	B:C ratio
39100	2411	150*	2261[@]	6000	1,44,660 (1,35,660[@] & 9,000*	1,05,560	3.67

[@] Income from seed sold *For own consumption

Prevailing market price of Pigeonpea (*Kharif* 2018)	Rs. 4600/- per Qt
Price fixed by Gujarat Seed Certification Agency	Rs. 6000/- per Qt

Table: Details of Cost Of cultivation

Sr.No.	Particular	Cost (Rs.)
1	Land preparation	5000
2	Sowing (with the help of bullocks)	1300
3	Weeding (16 labour)	1600
4	Fertilizer	1500
5	Irrigation (with the help of kerosene engine- 115 lit fuel)	5050
6	Irrigation (labour)	2000
7	Pesticide cost including labour	7200
8	Harvesting	5000
9	Threshing	4450
10	Transportation	2000
11	Other miscellaneous exp.	4000
	Total	39100

2. Mr. Rohintonbhai K. Jokhi - Successful quality seed producer of Chickpea

1	**Name**	**Mr. Rohintonbhai K. Jokhi**
2	**Address:**	Village:Kapura, Block: Vyara
3	**Education**	Graduate
4	**Mobile no.**	9426890111
5	**Age**	42
6	**Total land**	15 acre
8	**Area under Chickpea**	7.0 acre (*Rabi*-2018)
9	**Situation analysis/Problem statement:**	Seed is a vital component for harvesting good yields from any crop by way of ensuring optimum plant population, proper crop health and growth. In pulses, quality seed supply always remains a major constraint limiting production and productivity. Pulses are known as cheap source of protein for largely agrarian population worldwide, particularly in India. Realizing importance of protein from plant sources, the consumption is becoming more popular in different parts of the globe. Accordingly, demand for pulses has gone up internationally. To make India self-sufficient in pulses production through productivity enhancement, availability of quality seed needs special attention of the policy makers and researchers. There is need of about 25- 30 lakh quintals of quality seed every year to achieve 30% seed replacement rate to enhance production and productivity of these crops. Mr. Rohintonbhai is a sincere, hard worker and progressive farmer. He cultivated different crops *viz.*, mango, sugarcane, oil-palm. He joined with KVK for seed production programme.
10	**Plan, Implement and Support**:	Government of India is fully aware of its responsibility to increase quality seed supply in major pulse growing regions

		of the country. Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture and Farmers Welfare, Government of India (GoI) has approved project namely "Creation of seed hubs for increasing indigenous production of pulses in India" under the aegis of Indian Council of Agricultural Research (ICAR) for increasing supply of quality seeds to boost pulses production and productivity. Krishi Vigyan Kendra, Vyara is one of the Seed Hub center under this project. KVK, Vyara has been started seed production of pulse crops *viz*., pigeonpea, chickpea and greengram in kharif, rabi and summer season, respectively. Mr. Rohintonbhai joined the training programme on quality seed production at KVK, Tapi. KVK, supplied 150 kg foundation seed of chickpea-variety-GKG-5. All the pre-requisites *viz*., registration procedure of seed producer; field inspection in collaboration with Seed Certification Agency, regular monitoring visit, conduction of different extension activities *viz*., field visit, diagnostic visit, field day etc were also followed by KVK. **Technology adopted** ➢ Adoption of the right agronomic package of practices ➢ Followed the need based plant protection measures. He mainly used waste decomposer and botanical pesticides. ➢ Followed the field inspection and certification procedures without deviation in collaboration with KVK, and Gujarat Seed Certification Agency
12	**Output**	By adoption of scientific package of practices of chickpea, Rohintonbhai harvested good quality seeds of chickpea. He invested Rs. 79,400/- as total cost of cultivation and he produced 4436 kg chickpea seed.
13	**Outcome**	KVK, Vyara had bought all the seeds as per the price (Rs. 5100/- per quintal) finalized by Gujarat State Seed Corporation, from Rohintonbhai under Seed Hub Project. By this way, he got net income of Rs. 2,26,236/-. The Government has declared the seed price @ 51.00/ kg for this year. Had they produced the commercial grain crops, and sold as grain only, they would have received Rs. 40.00/- per kg only. Thus by going for seed production, Rohintonbhai earned almost **27.50 per cent more** rate of the chickpea by selling these seeds. The total revenue for the Rohintonbhai was 2,26,236/- while as grain, their revenue would have been Rs.1,77,440/- only.
14	**Impact**:	Mr. Rohintonbhai was fully satisfied by this seed production programme. He also urged to nearby farmers to join with KVK for seed production programme.

Table1: Economics of seed production by Mr. Nileshbhai

Cost of Cultivation (Rs.)	Total Production (Kg)	Sold as seed (Kg)	Price (Rs,/Qt)	Gross income (Rs.)	Net income (Rs.)	B:C ratio
79400	4436	4436	5100	2,26,236	1,46,836	2.84

Prevailing market price of Pigeonpea (*Kharif* 2018)	Rs. 4000/- per Qt
Price fixed by Gujarat Seed Certification Agency	Rs. 5100/- per Qt

Table2: Details of Cost Of cultivation

Sr. No.	Particular	Cost (Rs.)
1	Land preparation	14000
2	Sowing (with the help of bullocks)	5000
3	Weedicide (cost with labour)	4000
4	Weeding (16 labour)	10000
5	Fertilizer	3000
6	Irrigation (Total 3)	3400
7	Pesticide cost including labour	8000
8	Harvesting	14000
9	Threshing	7000
10	Transportation	7000
11	Other miscellaneous exp.	4000
	Total	79400
	Seed supplied by KVK at free of cost	

3. Successful Women Entrepreneur in Mushroom cultivation- Anjanaben Gamit

1	**Name**	AnjanabenNileshbhaiGamit	
2	**Address:**	Village:NaniChikhali, Block: Vyara	
3	**Education**	Diploma (Civil Engineering)	
4	**Mobile no.**	9898916768	
5	**Age**	34 year	
6	**Total land**	1.2 ha	
7	**Crops Cultivated**	Sugarcane, Mango, Watermelon, Wheat	
8	**Situation analysis/ roblem 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. Civil Engineer (Diploma) lady Mrs. Anjanaben Gamit, building/construction is her main occupation. She is extremely talented, hard worker & skilled lady. It was one dream of Mrs. Anjanaben Gamit to do something without land/marginal land for securing livelihood in	

		general and tribals particular. She wanted to be independent and carve out and identify for herself. Meanwhile, she read an article on Oyster Mushroom cultivation published by Krishi Vigyan Kendra- Tapi in Agro-Sandesh dated 20th February, 2017. Then she visited KVK and decided to go for Mushroom cultivation under the guidance of KVK Tapi and joining with KVK, proved to be a boon for her.
9	**Plan, Implement and Support**:	Krishi Vigyan Kendra, Vyara have been made an effort to disseminate mushroom cultivation technology through various extension activities in different villages of Tapi district. During training programme, Scientist (Plant Protection)) 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), 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. Anjanaben joined 4 days (19.09.2017 to 22.09.2017) skill development training programme at KVK, Tapi and decided to initiate the mushroom cultivation at available resources/low cost. Consequently, near his home there was a parking shed and she had decided to grow mushroom production at small scale in this parking shed. KVK, Vyara has been supported her for paddy straw cutting at chaff cutter demonstration unit. All the inputs *viz*., spawn (mushroom seed), polythene bags, seeds and chemicals (Carbendazim & formalin) has been supplied by KVK, Tapi. Follow up visit, diagnostic visit has also been made by Scientists of KVK-Tapi During 2018-19, she also joined 200 hrs (27 days-01/12/2018 to 26/12/2018) training programme of '**Mushroom Grower**" at KVK, Tapi sponsored by Agricultural Skill Council Of India (ASCI) under RKVY.
10	**Outcomes**:	She started Mushroom cultivation first time in October-December 2017 and harvest about 140 kg Mushroom with a value of Rs.28000/- in a simple small low cost shed (Size 15' x 10') within three months. This encouraging results motivated her to start mushroom cultivation on regular basis and design a structure (Size 30' x 20') (Table 1) based on one time expenditure. From January 2018 to April 2019, she harvested total 1170 kg of mushroom with a value of Rs.4,09,500/-. She was benefitted in a good way. Therefore its clear with the adoption of Mushroom cultivation, she proved her dream true and enough to convey a message to secure livelihood in tribal areas without land /marginal land. Anjanaben's success in mushroom production up to March 2019 and 18 months experience in mushroom cultivation motivate herself to extend mushroom production unit. So, she enlarged his mushroom house (size of 23'x80') by investing additional Rs. 172000/- during 2019-20 (Table. 1). From May-2019 to December 2019, she used 225 kg spawn and produced 1143 kg of mushroom with a gross income of Rs. 2,85,750/- .

		Total cost of production was Rs. 80,300/-. By this way she get net profit of Rs.2,05,450/- during 2019-20. **Marketing**: Based on demand she packed 100 to 200 gram packet and sold in Vyara town with the help of Anganwadi workers. Consumers also have been booked mushroom on telephone. That approach makes marketing very easy.
11	**Impact**:	1.The results of her success, farmers of nearby villages and also the interested people visited mushroom unit. Mrs. Anjanaben has motivated other farmers to adopt the mushroom farming technology. 2.She also feels delighted when other farmers in the area visit their home to see her endeavor. She inspired and facilitated many farmers to start mushroom farming. 3.She also inspired by Hon.VC and Hon.DEE of NAU Navsari. She also share his experience in "Innovative Farmers Meet Programme" of KVK, Vyara and KVK, Navsari during 18/06/2018 at KVK, Tapi 4.Due to outstanding contribution in Mushroom cultivation, Mrs. Anjanaben also honoured by Smt. Smriti Irani, Hon. Union Textile Minister, Govt. of India at KVK, Tapi during 21st Sept., 2018. 5.Her success story was also telecasted in DD Girnar news channel and in Dhartiputra programme of TV-9 Gujarati channel during 11/02/2019 and 13/03/2019, respectively. 6.She also shared his experience of mushroom cultivation in"Khedut Mela" programme jointly organized by ATMA and FTC Tapi during 12/01/2020.

Table 1: Details of expenditure and income from mushroom cultivation (2017-18)

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**			

Table 2: Details of expenditure for preparation of well designed *pucca* mushroom house (18-19 and 19-20)

SN	Particulars	Cost of Cultivation (Rs.)		
		2018-19	**2019-20**	**Total**
1	Mushroom house	40000 **(30'x20')**	130000 **(80'x23')**	170000
2	Bamboos for preparation of side wall and racks	22000	13000	35000
3	Spray pumps, gunny bags	7000	3000	10000
4	Sprinkler/Fogger system	15000	16000	35000
5	Irrigation Tank with motor	7000	8000	15000
6	Tubs and drums and other miscellaneous	9000	2000	7000
	Total (A)	**1,00,000**	**172000**	**272000**

Table 3: Expenditure for upgrading mushroom house and economics of mushroom cultivation (2018-19)

SN	Particulars with Cost of Cultivation (Rs.)		Total Production	Gross Income (Rs.)	Net Income (Rs.) within 19 months
1	Mushroom house	100000	1310 kg	140 kg @ Rs. 200/- per kg + 1170 kg @ 350/- per kg = **4,37,500.00**	**2,45,705.00**
2	Paddy straw 4580 nos. (Rs.3/- per)	13740			
3	Sugarcane Bagas 2.6 ton	6400			
4	Polythene bags 1260 no. (Rs.5 per bag)	6825			
5	Spawn (326 kg @ 120/- per kg)	39120			
6	Formaline 70 lit @ 100/- per lit	7000			
7	Carbendazim 6.5 kg @ 600/- per kg	3900			
8	Labor charges and other miscellaneous exp	14800			
	Total (B)	**91785**			
	Total Production cost (A+B)	**191785**			

Table 4 Expenditure for upgrading mushroom house and economics of mushroom cultivation (2019-20-upto December 2019)

SN	Particulars with Cost of Cultivation (Rs.)		Total Production	Gross Income (Rs.)	Net Income (Rs.) within 19 months
1	Paddy straw 3000 nos. (Rs. 3/- per)	9000	**1143 kg**	**2,85,750.00** (Rs. 250/- per kg)	**2,05,450.00**
2	Sugarcane Bagas 2.0 ton	3000			
3	Wheat straw 1500 kg	1500			
4	Polythene bags 1100 no. (Rs.2 per bag)	2200			

5	Spawn (225 kg @ 120/- per kg)	27000			
6	Formaline 45 lit @ 100/- per lit	4500			
7	Carbendazim 4.5 kg @ 600/- per kg	2700			
8	Labour charges and other	30400			
	Total (B)	**80300**			

Table 5: Month wise economics of mushroom cultivation (2018-19)

S.N.	Month	Production (Kg)	Expenditure (Rs.)	Gross income (Rs.)	Net income (Rs.)
1	Oct-17	50	4000	10000	6000
2	Nov-17	40	3500	8000	4500
3	Dec-17	50	3540	10000	6460
4	Jan-18	60	9240	21000	11760
5	Feb-18	85	13090	29750	16660
6	Mar-18	0	0	0	0
7	Apr-18	0	0	0	0
8	May-18	0	0	0	0
9	Jun-18	0	0	0	0
10	Jul-18	80	12320	28000	15680
11	Aug-18	80	12000	28000	16000
12	Sep-18	90	13860	31500	17640
13	Oct-18	130	20075	45500	25425
14	Nov-18	150	23100	52500	29400
15	Dec-18	165	25410	57750	32340
16	Jan-19	127	19560	44450	24890
17	Feb-19	82	12700	28700	16000
18	Mar-19	30	4800	10500	5700
19	Apr-19	91	14600	31850	17250
	Total	**1310**	**191795**	**437500**	**245705**

Table 6: Month wise economics of mushroom cultivation (2019-20)

S.N.	Month	Spawn used (Kg)	Mushroom Production (Kg)	Expenditure (Rs.)	Gross income (Rs.)	Net income (Rs.)
1	May-19	30	123	10500	30750	20250
2	Jun-19	50	225	17500	56250	38750
3	Jul-19	0	0	0	0	0
4	Aug-19	0	0	0	0	0
5	Sep-19	0	0	0	0	0
6	Oct-19	40	200	14000	50000	36000
7	Nov-19	70	350	24500	87500	63000
8	Dec-19	35	245	13800	61250	47450
	Total	**225**	**1143**	**80300**	**285750**	**205450**

Case study

1. Title: Income Generation through Mushroom Cultivation

<table>
<tr><td>Name of farmer</td><td>:</td><td>Smt. Arunaben Rajeshbhai Gamit</td></tr>
<tr><td>Address</td><td>:</td><td>Village:Kukadzar, Block: Songadh,Dist. Tapi</td></tr>
<tr><td>Mobile No.</td><td>:</td><td>9327787078</td></tr>
<tr><td>Education</td><td>:</td><td>7th pass</td></tr>
<tr><td>Age</td><td>:</td><td>35 Year</td></tr>
<tr><td>Intervention of KVK</td><td>:</td><td>1. Arunaben attended 4 days training at KVK during 16 to 19/01/2018
2. KVK also provide all the critical inputs for mushroom cultivation
3. Follow up visit, diagnostic visit, telephonic guidance were also carried by KVK.</td></tr>
<tr><td>Cost of cultivation</td><td>:</td><td>- Opposite site of her home, she has small shed and upgrade this shed for mushroom cultivation
<table>
<tr><th>Particular</th><th>Cost in Rs.</th></tr>
<tr><td>Paddy straw 700 No. (Rs.3/- per kg)</td><td>2100</td></tr>
<tr><td>Spawn 33 kg (Rs.120/- per kg)</td><td>3960</td></tr>
<tr><td>Formaline 4 lit (Rs. 120/- per lit)</td><td>480</td></tr>
<tr><td>Carbendazim 500 gm</td><td>300</td></tr>
<tr><td>Polythene bags 170 no. (Rs.3/- per kg)</td><td>510</td></tr>
<tr><td>Gunny bags and other miscellaneous exp.</td><td>1200</td></tr>
<tr><td>Total</td><td>8550</td></tr>
</table></td></tr>
<tr><td>Marketing arrangement</td><td>:</td><td>Local market/ religious contact/ Social contact</td></tr>
<tr><td>Total production</td><td>:</td><td>165 kg.</td></tr>
<tr><td>Prevailing market price</td><td>:</td><td>Rs. 250 per kg</td></tr>
<tr><td>Gross income</td><td>:</td><td>Rs.41250/-</td></tr>
<tr><td>Net Income</td><td>:</td><td>Rs. 32700/-</td></tr>
</table>

Arunaben attended 4 days training at KVK during 16 to 19/01/2018


Mushroom cultivation unit

Scientist Visit to mushroom unit

2. Title: Income Generation through Mushroom Cultivation

Name of farmer	:	Mr. Jigneshbhai Hatabhai Gamit
Address	:	Village:Ghoda, Pipla faliu, Block: Songadh,Dist. Tapi
Mobile No.	:	9825428409
Education	:	MSW
Age	:	27 Year
Intervention of KVK	:	4. Technical guidance by KVK 5. KVK provide all the critical inputs for mushroom cultivation 6. Follow up visit, diagnostic visit, telephonic guidance were also

<table>
<tr><td></td><td></td><td>carried by KVK.</td></tr>
<tr><td>Cost of cultivation</td><td>:</td><td>- Near house, he has small shed and use this shed for mushroom cultivation
<table>
<tr><th>Particular</th><th>Cost in Rs.</th></tr>
<tr><td>Wheat straw</td><td>200</td></tr>
<tr><td>Spawn 15 kg (Rs.120/- per kg)</td><td>1800</td></tr>
<tr><td>Formaline 2 lit (Rs. 120/- per lit)</td><td>240</td></tr>
<tr><td>Carbendazim 500 gm</td><td>300</td></tr>
<tr><td>Polythene bags 80 no. (Rs.3/- per kg)</td><td>240</td></tr>
<tr><td>Gunny bags and other miscellaneous exp.</td><td>500</td></tr>
<tr><td>Total</td><td>3280 i.e 3300</td></tr>
</table></td></tr>
<tr><td>Marketing arrangement</td><td>:</td><td>Local market/ religious contact/ Social contact</td></tr>
<tr><td>Total production</td><td>:</td><td>84 kg.</td></tr>
<tr><td>Prevailing market price</td><td>:</td><td>Rs. 250 per kg</td></tr>
<tr><td>Gross income</td><td>:</td><td>Rs.21000/-</td></tr>
<tr><td>Net Income</td><td>:</td><td>Rs. 17700/-</td></tr>
</table>

Month	**Production (Kg)**	**Gross income (Rs.)**
September 2019	**14.2**	**3550**
October 2019	**19.4**	**4850**
November 2019	**21.4**	**5350**
December 2019	**13.8**	**3450**
January 2019 upto 10.01.19	**15.2**	**3800**
Total	**84.0**	**21000**


Scientist Visit to mushroom production unit of Jigneshbhai


Mushroom production unit of Jigneshbhai

3. Successful Mushroom Grower- Mr. Saurabhbhai Karubhau Vasava

Name of farmer	**:**	Mr. Saurabhbhai Karubhau Vasava
Address	**:**	Village:Limbi, Block: Songadh,Dist. Tapi
Mobile No.	**:**	9638144993
Education	**:**	B.A.
Age	**:**	35 Year
Intervention by KVK		7. Saurabhbhai attended training at KVK during 26 to 27/11/2018 8. KVK also provide all the critical inputs for mushroom cultivation 9. Follow up visit, diagnostic visit, telephonic guidance were also carried by KVK.
Investment	**:**	- In backyard of his home, he has small shed and upgrade this shed for mushroom cultivation

Paddy straw 500 No. (Rs.4/- per kg)	2000

			Gunny bags	800
			Spawn 19 kg (Rs.120/- per kg)	2280
			Formaline 3 lit (Rs. 120/- per lit)	360
			Carbendazim 500 gm	300
			Polythene bags 100 no. (Rs.3/- per kg)	300
			Other	500
			Total	**6540**
Marketing arrangement	**:**	Local market/ religious contact/ Social contact		
Total production	**:**	98 kg. (November, 2018 to March-2019)		
Prevailing market price	**:**	Rs. 300 per kg		
Gross income	**:**	Rs. 29400/-		
Net Income	**:**	Rs. 22860/-		

Saurabhbhai attended training at KVK

Mushroom cultivation unit


Mushroom cultivation unit

Scientist Visit to mushroom unit

4. Quality Seed Production under Seed Hub Project- A boon for tribal farmers

Situation analysis/Problem statement: Seed is a vital component for harvesting good yields from any crop by way of ensuring optimum plant population, proper crop health and growth. In pulses, quality seed supply always remains a major constraint limiting production and productivity. Pulses are known as cheap source of protein for largely agrarian population worldwide, particularly in India. Realizing importance of protein from plant sources, the consumption is becoming more popular in different parts of the globe. Accordingly, demand for pulses has gone up internationally. To make India self-sufficient in pulses production through productivity enhancement, availability of quality seed needs special attention of the policy makers and researchers. There is need of about 25- 30 lakh quintals of quality seed every year to achieve 30% seed replacement rate to enhance production and productivity of these crops.

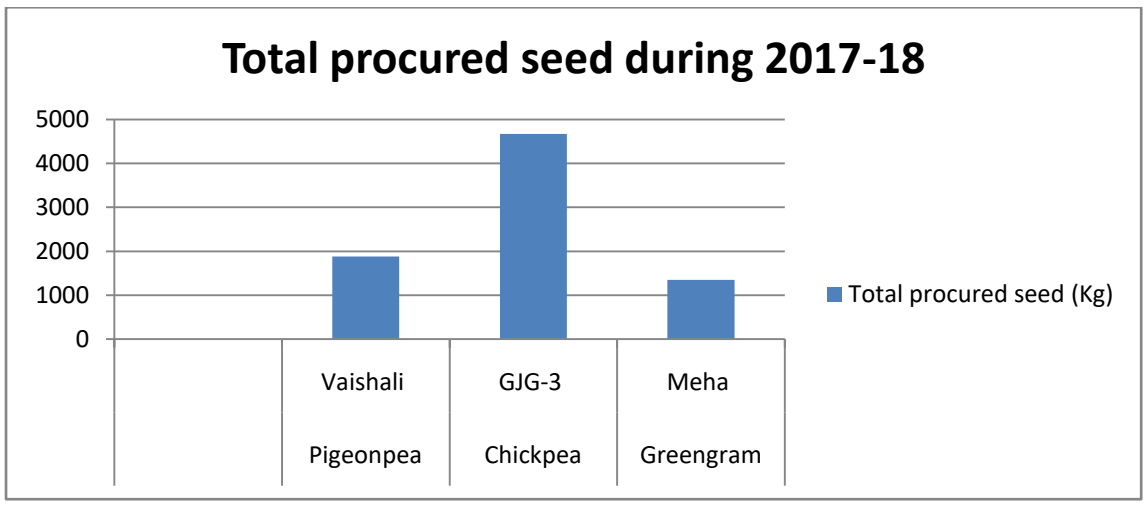
Plan, Implement and Support: Government of India is fully aware of its responsibility to increase quality seed supply in major pulse growing regions of the country. Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW), Ministry of Agriculture and Farmers Welfare, Government of India (GoI) has approved two projects *viz*., "Creation of seed hubs for increasing indigenous production of pulses in India" and "Enhancing breeder seed production for increasing indigenous production of pulses in India" to Indian Council of

Agricultural Research (ICAR) for increasing supply of quality seeds to boost pulses production and productivity. Krishi Vigyan Kendra, Vyara is one of the Seed Hub center under this project. KVK, Vyara has been started seed production of pulse crops viz., pigeonpea, chickpea and greengram in kharif, rabi and summer season, respectively. All the pre-requisites *viz*., selection of progressive farmers, training programmes on scientific seed production technologies, distribution of seeds, registration procedure of seed producer; field inspection in collaboration with Seed Certification agency, regular monitoring visit, conduction of different extension activities viz., field visit, diagnostic visit, field day etc were also followed.

Output: KVK, Vyara has been planned to produce pigeonpea, chickpea and greengram during *kharif, rabi* and summer season of 2017-18 and 2018-19. Total 1882 kg, 4669kg, 1150 kg certified seeds of pigeonpea, chickpea and greengram was produced during 2017-18. Whereas, total 4630 kg, 13292 kg (GG 5 & GG 3) and 543 kg seed of pigeonpea, chickpea and greengram were produced, respectively during 2018-19. All the produced seeds during 2017-18 were sold to farmers during 2018-19. Likewise, seed produced during 2018-19 has been sold during 2019-20. About 50% seed of chickpea (GG-5) was unsold due to less demand and issues of price fluctuation of Gujarat State Seed Corporation and University selling price.

Outcome: All the **s**eed produced during 2017-18 was sold during 2018-19 to farmers, NGOs, government institute. Total gross income of 6.18 lakh (1.69 lakh, 3.27 lakh and 1.21 lakh from pigeonpea, chickpea and greengram, respectively) were generated. By this way total net profit of 1,81 lakh (by deducting the payment paid for seed procurement) was generated under revolving fund of Seed Hub Project. Likewise, total 3.16 lakh rupees were generated during 2018-19. But, about 50% seed of chickpea (GG-5) was unsold due to less demand and issues of price fluctuation of Gujarat State Seed Corporation and University selling price. All these unsold kept in seed storage godown and will be sold during 2020-21.

Impact: Due to this seed production programme under seed hub project, seed growers get maximum profit because selling price of seed is high as compared to ordinary seed sold in market as grain. Moreover, farmers were satisfied as quality seed were easily available for them. About 1400 farmers of Tapi district, NGOs, and other government organizations were benefited through the seed production programme under seed hub project.



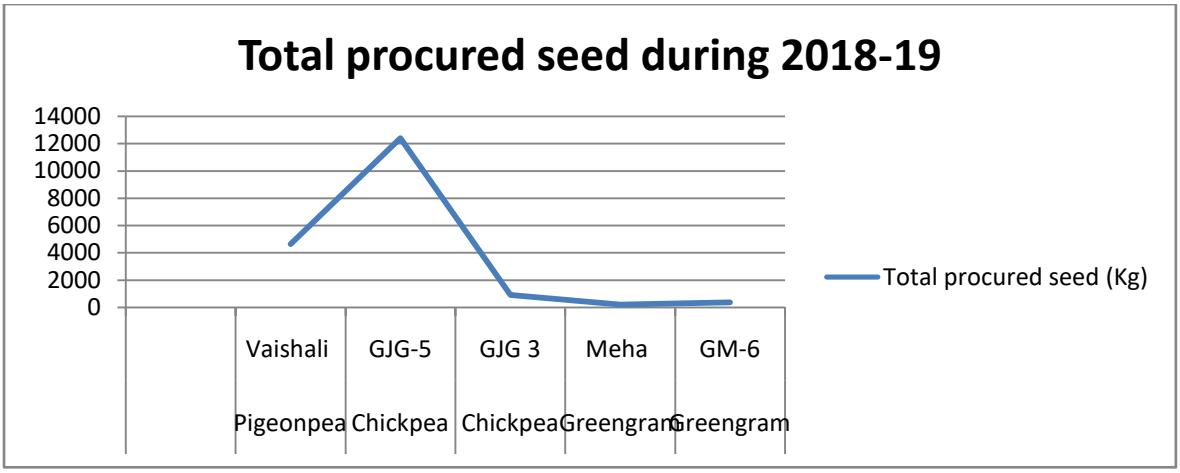

Total procured seed during 2018-19
14000
12000
10000
8000
6000
4000
2000
0
Vaishali
Pigeonpea
GJG-5
Chickpea
GJG 3
Chickpea
Meha
Greengram
GM-6
Greengram
Total procured seed (Kg)

Table: Status of seed production during 2017-18 at KVK, Vyara

Crop	Variety	Seed procured (kg) (2017-18)		Total procured seed (Kg)	Rate at which procured (Rs/qt)	Total payment paid to seed growers (Rs)	Rate at which sold (Rs/qt)	Total receipt after sale (Rs)	Total net Profit (Rs)
		Farmers field	Govt. farm						
1. Pigeonpea	Vaishali	1882	-	1882	6000	1,12,920	9000	1,69,380	56,460
2.Chickpea	GJG-3	2049	2620	4669	5100	2,38,119	7000	3,26,830	88,711
3. Greengram	Meha	1150 *	200	1350	6350	85,725	9000	1,21,500	35,775
Total		**5081**	**2820**	**7901**		**4,36,764**		**6,17,710**	**1,80,946**

***200 kg seed was produced during Summer 2017**

Table: Status of seed production during 2018-19 at KVK, Vyara

Crop	Variety	Seed procured (kg) (2018-19)		Total procured seed (Kg)	Rate at which procured (Rs/qt)	Total payment paid to seed growers (Rs)	Rate at which sold (Rs/qt	Total receipt after sale (Rs)	Total net Profit (Rs)
		Farmers field	Govt. farm						
1. Pigeonpea	Vaishali	4630	-	4630 kg	6000	2,77,800	9000	4,16,700	1,38,900
2.Chickpea	GJG-3	6298	5994 kg	12392 kg *	5100	6,31,992	7500	4,41,225	1,41,192
	GJG 3	-	900 kg	900 kg	5100	45,900	7500	67,500	21,600
3. Greengram	Meha	-	195 kg	195 kg	6350	12,382	9000	17,550	5,167
	GM-6	348	-	348 kg	6350	22,098	9000	31,320	9,222
Total		**11,276**	**7,089**	**18,365**		**9,90,172**		**9,74,295**	**3,16,081**

***5883 kg seed sold**

1. Seed Production Plots at Karod, Block-Ucchhal, Dist Tapi

2. Assist.Seed Certi. Officer from Gujarat Seed Certi. Agency monitor the seed plots

3. Seed Production Plots-Pigeonpea at Maypur, Block-Vyara, Dist Tapi

4. Scientist guide farmers about roughing operation

5. Seed Production Plots (Chickpea GG-5) at Kapura, Block-Vyara, Dist Tapi

6. Seed distribution to progressive farmer

Field day celebration-Pigeonpea seed production technology

Field day celebration-Chickpea seed production technology

Seed sampling and sealing of bag

Seed storage with fumigation

Infrastructure Developed (Processing unit & godown) was completed

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

- Following are the innovative methodology or innovative technology of Transfer of Technology developed and used during the year:

1. Accessibility of mushroom spawn
2. Plug tray nursery
3. Accessibility of novel organic novel liquid nutrient
4. Accessibility of phoromone trap/ sticky trap

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-**

5.4 No. and Name of villages adopted for Doubling Farmers Income. Indicate whether benchmark survey of the villages are done or not

Sl. No.	Taluka	Name of the block	Name of the village	whether benchmark survey of the villages are done or not
1	Vyara	Vyara	Dolara	Yes
2			Zankhari	Yes
3			Nani Chikhali	Yes
4	Songadh	Songadh	Bedi	Yes
5			Amli	Yes

6. LINKAGES

A. Functional linkage with different organizations

Sl.No.	Name of organization	Nature of Linkage
1.	Dept. of Agriculture	Participation ∗ *Khedut Shibir/Krishi Mela* ∗ Soil Health Card ∗ Extension Activities
2.	Dept. of Horticulture	Participation ∗ Khedut Shibir ∗ Extension Activities, NHB & NHM
3.	ATMA (Tapi/Navsari/Kheda/Vadodara/Narmada)	Participation ∗ Khedut Shibir / Mahila Shibir ∗ Extension Activities ∗ Training Programmes, FLDs

Sl.No.	Name of organization	Nature of Linkage
4.	NIF(National Innovation Foundation)- Gandhinagar	* Khedut Shibir * Extension Activities
5.	DGVS-Vyara	* Khedut Shibir * Extension Activities
6.	Research Stations, NAU	Participation – * Extension activities * Seeds * FLDs & OFT
7.	FTC, Vyara	Joint implementation – Farmers visit and guest lectures, Farmer's Fair, Trainings
8.	Govt. of Gujarat	Collaboration – *Krishi Mahotsav*, ATMA Convergence
9.	State Bank of India / Bank of Baroda	SHG work – Finance for entrepreneurship-development
10.	Integrated Child Development Services	For technical guest lecture for ICDS Training Centre
11.	Udaybhansinhji regional institute of Co-operation and management	Training programmes
12.	Department of Agril. Eng., NMCA, NAU, Navsari	Training programme, Extension activities
13.	NAU, Navsari	For Technical products, technical guidance and supports.
14.	SEWA, Vyara	For Training Programmes, Extension activities & technical support
15	*JIVAN DEEP*AADIVASI *MAHILA* BACHAT ANE DHIRAN KARNARI SAHAKARI MANDALI, Bardipada	For Trainings, FLDs, extension activities
16.	Dr. Ambedkar Vanvasi Kalyan Trust, Surat	Trainings, FLD, Seed distribution
17.	*GUJARAT MATIKAM KALAKARI ANE RURAL TECHNOLOGY SANSTHAN*-Bajipura	Vocational training/ Skill development training for rural youth and farm women
18.	*Vedrunaniketan Nari Shakti Mahila Co-operative Society, Unai.*	In-service training, Trainings, FLD, Extension activities
19.	*UTTHAN MAHILA* BACHAT ANE DHIRAN KARNARI SAHAKARI MANDALI, Vyara	For Trainings, FLDs, extension activities
20.	BIAF Foundation-Vyara	Training Programme and Extension Activities
21.	Kamdhenu Universiry-Gandhinagar	Training Programme and Extension Activities

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
Adaptive Trials	2013-14	State
Cluster FLDs on Oil Seeds	2015-16	ICAR
Cluster FLDs on Pulses	2015-16	ICAR
FLS Under TSP-DGR, Junagadh	2015-16	ICAR

Sub Mission on Agriculture Mechanization		State
Seed Hub Project	2015-16	ICAR
TSP-Mega Seed	2015-16	State
PMFBY	2015-16	ICAR
Sankalp se Sidhdhi	2017-18	ICAR

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 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)
01	Meetings	Review meeting of KVK-ATMA, Krishi Kalyan Mela-2018 Programe, Planning for Krishi Mela, AGB Meeting, World Soil Heath Day, Training of STRY Planning for Training for farmers, extension activities	6	5	
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 (2418 farmers)	0	
	Technology Week	-	0	0	
	Exposure visit	Wthin district	2 (1124 farmers)	1 (56 farmers)	
	Exhibition	-	**0**	**4**	
	Soil health camps	--	0	0	
	Animal Health Campaigns	--	0	0	

	Others (Pl. specify)	Animal Husbandry Field Visit, Vagetable Crops and Rose Plantation Visit, Demo Plot field visit, Farmers award (BAFA) related	20 (102 farmers)	12 (58farmers)	
		Kisan Gosthi	2 (848 farmers)	2 (1876 farmers)	
		Diagnostic visit	0	8 (38 farmerrs)	
		farmers Scientist Interaction	1 (375 farmers)	73 (farmers)	
		Capacity Building	1 (1160 farmers)	1 (160 farmers)	
		Farm School	1 (25 farmers)		
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: Activities may be specifiedd under DAESI, YCMOU study centres and Others: --NIL--

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	Detail is given on page no. 94

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.	Feedback
1	GNRH-2 rice hybrid variety is high yielding new variety.
2	High yielding new variety of Sugarcane CON-13073 gave high return compare to old varieties.
3	New variety of Indian Bean GNIB-21 gave 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	Tomato cv. Arka Rakshak gave higher yield in Tapi district.
6	Gall *like* symptoms found in okra.

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

Crop production:

1	Early variety in hybrid rice should be developed.

Horticulture:

Sr. No.	Technical Feedback
1	Yellow Vein Mosaic Virus resistent and High Yelding variety of okra should be developed.
2	Gall *like* symptoms found in okra. So, remedies should be provided.
3	urgent need for recommendation of quantity and schedule of waste decomposer
4	There is urgent need to release recommendations on herbal plant pesticides for management of pest and diseases in relation to organic farming

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.

Animal Science:

Sr. No.	Technical Feedback
1	Still need to be improvement in cost of production for compound cattle feed
2.	Increased the efficiency of available fodder utilizations
3	How to recovered milk production losses by infectious diseases *like* mastitis

11. Technology Week celebration during 2018-19 Yes/~~No~~, If Yes

Period of observing Technology Week: From 21/01/19 to 27/02/19
Total number of farmers visited : 548
Total number of agencies involved : 2
Number of demonstrations visited by the farmers within KVK campus: 548

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies/Shibir	6	398	Low cost technology in horticultural crops, Sickle cell anemia & its control measures, Importance of bio-fertilizers, Entrepreneurship development through mushroom cultivation, Advanced technology in dairy farming, Mahila shibir on water & soil management
Lectures organized	12	398	As per above
Exhibition	3	398	Bio fertilizers, Plug tray nursery, Mushroom cultivation
Film show	3	398	Low cost technology in horticultural crops, Mushroom cultivation, Dairy farming
Fair	--	--	--
Farm Visit	6	398	Visit to KVK indtructional units at KVK-Tapi
Diagnostic Practicals	0	0	
Supply of Literature (No.)	0	0	
Supply of Seed (q)	0	0	--
Supply of Planting materials (No.)	0	0	--
Bio Product supply (Kg)	0	0	--
Bio Fertilizers (q)	0	0	--
Supply of fingerlings	0	0	--
Supply of Livestock specimen	0	0	--

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
(No.)			
Total number of farmers visited the technology week	--	**548**	--
Others	0	0	

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

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

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation	Area (ha)	Number of

	technologies introduced		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

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

:---

Impact of Training programme

4.1 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

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

4.2 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

a. Title of In-service Training: Health and Nutrition for tribal women

Sr. No.	Technical practices	No. of Trainees	Knowledge of Field workers			
			Before Training		After Training	
			No.	Percent	No.	Percent
1	Protein is essential for growth and development of body	31	02	06.45	14	45.16
2	1 gm fat gives 9.0 Kcal. energy		08	25.80	18	58.06
3	Goiter is caused by iodine deficiency in body.		18	58.06	24	77.41
4	Calcium is essential for building and maintaining bones & teeth		19	61.29	23	74.19
5	Kwashiorkor disease is caused by protein deficiency in children.		0	0	15	48.38
6	Sprouted pulses are the rich source of vitamin-C.		07	22.58	28	90.32
7	Iron is available in green leafy vegetables.		11	35.48	12	38.70
8	Soybean is a rich source of protein.		15	48.38	23	74.19
9	Sign & Symptoms of Anemia		17	54.83	29	93.54
10	Folic acid and Vitamin-B_{12} are responsible for formation of RBC.		07	22.58	22	70.96
11	According to WHO, vitamin-C is an essential for adequate absorption of iron in body.		09	29.03	16	51.61

Sr. No.	Technical practices	No. of Trainees	Knowledge of Field workers			
			Before Training		After Training	
12	During pregnancy period, pregnant woman can gain on an average 7 to 10 kg weight.		11	35.48	25	80.64
13	Healthy lactating mother should produce app. 600 to 800 ml milk per day.		03	09.67	19	61.29
14	Initial two to three days of mother's milk is known as 'Colostrum'.		09	29.03	20	64.51
15	Age of normal RBC is about 120 days in human body.		13	41.93	26	83.87
16	Probiotic foods		13	41.93	19	61.29
17	Combination of cereals & pulses is rich source of complete protein.		11	35.48	24	77.41
18	Prenatal testing for sickle cell disease during pregnancy.		02	06.45	03	09.67
19	Causes of Sickle cell Anemia		02	06.45	18	58.06
20	Oral Rehydration Solution		0	0	23	74.19
	Average			**28.55**		**64.67**

b. Title of On campus Training: Health and Nutrition for vulnerable groups

Sr. No.	Health and Nutritional aspects	No. of Trainees	Knowledge of Rural youth			
			Before Training		After Training	
			No.	Percent	No.	Percent
1	Daily requirement of vegetables in balanced diet.	39	19	48.71	37	94.87
2	1 gm fat gives 9.00K.Cal.energy.		04	10.25	28	71.79
3	Kwashiorkor disease is caused by protein deficiency in children.		14	35.89	31	79.48
4	Fruit fly trap is used for IPM in cucurbitaceous vegetables.		08	20.51	34	87.17
5	Sprouted pulses are the best source of vitamin-C.		13	33.33	32	82.5
6	Effect on human health by using excess amount of chemical fertilizers and		35	89.74	37	94.87

Sr. No.	Health and Nutritional aspects	No. of Trainees	Knowledge of Rural youth			
			Before Training		After Training	
			No.	Percent	No.	Percent
	pesticides in Agri. crops.					
7	Normally human (adult at rest) takes 15 breaths in one minute.		11	28.20	38	97.43
8	In addition to minerals & vitamins, protein is also available in drumstick as compared to other vegetables.		25	64.10	28	71.79
9	Iron is available in green leafy vegetables.		25	64.10	31	79.48
10	Calcium is essential for building and maintaining bones & teeth and green leafy vegetables are rich source of calcium.		23	58.97	33	84.61
11	Soybean is a rich source of protein.		24	61.53	33	84.61
12	Folic acid and Vitamin-B_{12} are responsible for formation of RBC.		11	28.20	31	79.48
13	According to WHO, vitamin-C is an essential for adequate absorption of iron in body.		10	25.64	28	71.79
14	Normally lifespan of human Red Blood Cell is approximately 120 days.		25	64.10	35	89.74
15	Probiotic foods		24	61.53	27	69.23
16	Leptospirosis disease, first detected in Gujarat in the year 1994.		11	28.20	33	84.61
17	Prenatal testing for sickle cell disease during pregnancy.		09	23.7	22	56.41
18	Causes of sickle cell anemia		11	28.20	34	87.17
19	Leptospirosis disease is seen in human being during monsoon season in south Gujarat.		22	56.41	38	97.43
20	Combination of cereals & pulses is rich source of complete protein which is useful for preventing malnutrition in children		24	61.53	37	94.87
	Average			**44.64**		**82.97**

c. Title of Off campus 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	32	09	28.12	32	100.00
2	Washing and cleaning of fruits and vegetables		20	62.50	32	100.00
3	Processing for Tomato ketchup, Papaya jam & Lemon squash:					
3.1	Juice extraction and filtration		08	25.00	32	100.00
3.2	Cooking:					
	(i)Tomato ketchup: juice is reduced to about 1/3 of its original volume		0	0	23	71.87
	(ii)Papaya jam: The quantity of jam prepared is about 2 times the weight of sugar used		0	0	25	78.12
	(iii)Use of citric acid & essence in jam		0	0	21	65.62
	(iv)Lemon Squash: The quantity of sugar used is about double of the weight of lemon juice		0	0	30	93.75
4	Use of preservatives for better shelf life of products such as Vinegar, Sodium benzoate, Potassium metabisulphate		0	0	12	37.50
5	Sterilization of glass bottles		0	0	29	90.62
6	Bottling of products		0	0	32	100.00
7	Storage of products		0	0	32	100.00
		Average		**10.51**		**85.22**

d. Title of On campus Training: Human Leptospirosis and its control measures

Sr. No.	Technical practices	No. of Trainees	Knowledge of farm women			
			Before Training		After Training	
			No.	Percent	No.	Percent

Sr. No.	Technical practices	No. of Trainees	Knowledge of farm women			
			Before Training		After Training	
1	Leptospirosis is seen in human being during monsoon season in south Gujarat.	51	22	43.13	51	100.00
2	Leptospirosis disease, first detected in Gujarat in the year 1994.		0	0	31	60.78
3	Leptospirosis disease is mostly seen in the month of August to September.		11	21.56	42	82.35
4	Leptospirosis disease occurs in peoples who are working in agriculture and Animal husbandry sector.		07	13.72	49	96.07
5	Causes of Leptospirosis disease		05	09.80	44	86.27
6	Sign and Symptoms of Leptospirosis		07	13.72	45	88.23
7	Control measures of disease		02	03.92	48	94.11
	Average			**15.12**		**86.83**

e. Title of On campus FLD Training: Nutritional kitchen gardening

Sr. No.	Technical practices	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
			No.	Percent	No.	Percent
1	Daily requirement of vegetables in balanced diet.	70	0	0	51	72.85
2	Major nutrients available in vegetables.		7	10.00	48	68.57
3	Iron is available in green leafy vegetables.		9	12.85	59	84.28
4	Fruit fly trap is used for IPM in cucurbitaceous vegetables.		4	05.71	45	64.28
5	Citrus fruits & vegetables are rich source of Vitamin-C.		0	0	54	77.14
6	Effect on human health by using excess amount of chemical fertilizers and pesticides in Agri. crops.		11	15.71	62	88.57
7	Vitamin-A is essential for good vision.		0	0	37	52.85
8	In addition to minerals & vitamins, protein is also available in drumstick as		0	0	41	58.57

Sr. No.	Technical practices	No. of Trainees	Knowledge of tribal farm women			
			Before Training		After Training	
	compared to other vegetables.					
9	Deficiency of iron produces the Anemia disease in human beings.		5	07.14	55	78.57
10	Calcium is essential for building and maintaining bones & teeth and green leafy vegetables are rich source of calcium.		0	0	42	60.00
		Average		**5.14**		**70.57**

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
January 2019	0	0	-NIL-
February 2019	0	0	-NIL-
March 2019	0	0	-NIL-
April-2019	0	0	-NIL-
May-2019	1	10167	-NIL-
June-2019	1	10167	-NIL-
July-2019	0	0	-NIL-
August-2019	0	0	-NIL-
September-2019	4	10167	-NIL-
October-2019	4	10167	-NIL-
November-2019	3	10167	-NIL-
December-2019	0	0	-NIL-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
KVK, NAU, Vyara, Dist.Tapi	Text only	4	4	1	0	3	1	13
	Voice only	--	--	--	--	--	--	--
	Voice & Text both	--	--	--	--	--	--	--
	Total Messages	**4**	**4**	**1**	**0**	**3**	**1**	**13**
	Total farmers Benefitted/Message	**10167**	**--**	**--**	**--**	**--**	**--**	**-**

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	2012	0.25	Different variety of Vegetables & fruit crops	vegetable seedlings	185239		260031.5	--

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	20-21/2/19	28-29/5/19	0.6	GNRH-2	CF	5.56	13843	18681.6	
	15-21/2/19	27-28/5/19	0.9	GNR-6	CF	43.7	19467	157320	
	13-18/7/2019	9-11/10/2019	0.60	GAR-13	CF	22.62	15244	76003.2	
	22-23/7/2019	14-15/11/2019	0.24	Jaya	CF	11.9	6097	38080	
	17/7/2019	5-6/11/2019	0.39	GNR-7	CF	18	9908	60480	
	10-16/7/2019	11-13/11/2019	0.90	GNR-3	CF	17.3	22866	55360	
	17-18/7/2019	20-22/10/2019	0.71	Sardar (GR 17)	CF	7.54	18039	24128	
	5-16/7/2019	1-4/11/2019	1.17	Gurjari	CF	7.7	29726	24640	
Pulses	20-22/12/19	6-10/3/19	1.01	GG-5	CF	29.5	8900	236000	
	16/3/19	31/5/18 to 7/6/19	0.53	GG-3	CF	3.5	2400	28000	
	5/9/18	5/4/19	Border	Meha	CF	1.1	90	9900	
				GU-1		2.09		18810	
Oilseeds	--	--	--	GDM-4	--	0.1	--	650	--
Fibers	--	--	--	--	--	--	--	--	--
Spices & Plantation crops									
Floriculture	--	--	--	--	--	--	--	--	--
Fruits	2010-11	May-2019	2.0	Kesar, Rajapuri, Dasheri, Mix varieties	Fruit	Auction		425000	
	--	--	--	--	--	--	--	--	--

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	1030 kg		6180	benefitted to 278 farmers

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)
January 2019	**10**	**30**	
February 2019	**30**	**2**	
March 2019	**0**	**0**	
April 2019	2	54	--
May 2019	0	0	--
June 2019	0	0	--
July 2019	17		--
August 2019	0	0	--
September 2019	13	4	--
October 2019	100	4	--
November 2019	53	2	--
December 2019	59	32	--

F. Database management

S. No	Database target	Database created
1	Whole District	175 villages

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.)		
--NiL-									

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 2018-19 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	86.00	86.00	**80.15**
2	**Traveling allowances**	1.28	1.28	**1.44**
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	18.50	18.50	**18.48**
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)	**105.78**	**105.78**	**100.07**
B. Non-Recurring Contingencies				
1	**Works**	1.10	1.10	1.10
2	**Equipments including SWTL & Furniture**	10.95	10.95	18.94
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	8.00	8.00	
4	**Library** (Purchase of assets like books & journals)	--	--	--
	TOTAL (B)	**20.05**	**20.05**	**19.95**
C. REVOLVING FUND		--	--	--
	GRAND TOTAL (A+B+C)	**125.83**	**125.83**	**120.02**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2016 to March 2017	53747	1272574	1087909	238412
April 2017 to March 2018	238412	1454898	1215698	477612
April 2018 to March 2019	477612	1889048.49	1140066	1226594

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

Name of the staff	Designation	Title of the training programme	Dates
Dr. P. K. Modi	Scientist (Horticulture)	National Conference on alliance for seed reliance	12-13/1/19
Dr. P. D. Verma	Sr. Scientist and Head	Master trainers workshop	27-30/1/19
Dr. C. D. Pandya Prof. Arti N. Soni	Sr. Scientist & Head, Scientist (Home Science)	National Symposium on "Praqgmatic perpectives of agricultural development programmes in present scenario" organised by SEEG, Anand and NAU, Navsari during 8-9/6/2019 at NAU, Navsari. Page No. 251	10/6/2019
Dr. P. K. Modi	Scientist (Horticulture)	Training on "Advances in horticulture production technology"	4-6/7/2019
Prof. Arti N. Soni	Scientist (Home Science)	Meeting attended reg. POSHAN Abhiyan	09/10/2019
Dr. A. J. Dhodia	Scientist (Agricultural Extension)	Quarterly meeting of ATMA-KVK convergence & presentation of Quarterly progress report of 2nd quarter and planning of 3rd quarter	10/10/2019
Dr. Dharmishtha M. Patel	Scientist (Horticulture)	Awareness seminar on Vertical farming, Aquaponics and Biofloc	16/10/2019
Dr. C. D. Pandya Prof. Arti N. Soni	Sr. Scientist & Head, Scientist (Home Science)	Gujarat Jaherseva Adhiniyam-2005	16/10/2019
Dr. S. M. Chavan	Scientist (Plant Protection)	Advances in Biology, Conservation, Rearing and management of Apis and Non Apis bees	04/10/2019 to 24/10/2019
Dr. S. M. Chavan	Scientist (Plant Protection)	To present the performance of KVK during QRT period (2011-12 to 2018-19)	25/11/2019
Dr. J. B. Butani	Scientist (Animal Science)	To present oral presentation on topic " Effect of dietary supplementation of probiotics on production performation of lactating buffaloes"	05-06/12/2019
Dr. Dharmishtha M. Patel		Training attended on ToT programme for KVKs/SAUs/ICAR Institutes Trainers	05-07/12/2019
Prof. K. N. Rana	Scientist (Agronomy)	To become and Mater trainer of SBNF	05/12/2019
Dr. S. M. Chavan	Scientist (Plant Protection)	Workshop on Subhash Palekar Prakrutik Kheti (SPNF)	05/12/2019 to 11/12/2019

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

18. List the other collaborative research/ extension projects and also write brief key achievements of the projects.

- **Pro SOIL: -NIL-**
- **NARI (Please indicate the name of one adopted village and give the activities carried over on nutri sensitive agriculture)**

S.N.	Name of adopted village	Block	District	Name of activity
1	Nani Chikhali	Vyara	Tapi	-PRA Survey -FLDs was given (detail is given below)

FLD on Kitchen Gardening (Rabi-Summer: 2018-19) under Nutri-sensitive Agril. Research and Innovations prog.

Category and Crop	Thematic area	Name of the technology demon-strated	No. of Farm women	No. of Units	Average Yield (Kg)		% change in yield	Economics of demonstration (Rs./demon.)				Economics of check (Rs./demon.)			
					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, yellow sticky trap & fruitfly trap	Household food security by kitchen gardening	Nutritional Kitchen garden	20	20	-- Continue--										

Area per demonstration: 500 sq.ft.

Critical input supplied: Tomato, Brinjal, Chilli, Little gourd, Cauliflower, Palakh, Fenugreek, Coriander, Beetroot, Radish, Indian bean, Ridge gourd, Bottle gourd, Sponge gourd, Bitter gourd, Okra, Pumpkin, Cow pea, Vermicompost, Yellow sticky trap & Fruitfly trap

- **VATICA: --NIL—**
-
- **Seed Hub: "Creation of Seed Hubs for Increasing Indigenous Production of Pulses in India"**

  1. Name of KVK: Krishi Vigyan Kendra, Tapi

  2. Physical Progress:

Season & Year	Crop	Target of Seed Production (q)	Achievement in Seed Production (q)	Variety with year of release	Seed producing centres/Farmer's Field	Area (ha)	Class of seed produced (F/S, C/S)
Kharif, 2016-17	Pigeonpea	150	178.5	BSMR 853 (2007)	Farmers field	20	C/S
Rabi, 2016-17	Chickpea	200	153.6	GJG-3 (2010)	Farmers field	20	C/S

Summer, 2016-17	Greengram	150	151.2	Meha (2007)	Farmers field	20	C/S
Kharif, 2017-18	Pigeonpea	300	137.5*****	BSMR 853 (2007)	Farmers field	25	C/S
Rabi, 2017-18	Chickpea	200	207.5	GJG-3 (2010)	Farmers field and KVK Farm	23	C/S
Summer, 2017-18	Greengram	300	224.0**@**	Meha (2007)	Farmers field and KVK Farm	20	C/S
Kharif, 2018-19	Pigeonpea	300	Seed collection is in process	BSMR 853 (2007)	Farmers field	25	C/S
Rabi, 2018-19	Chickpea	400	Harvesting is in process	GG-5 (2017)	Farmers field and KVK Farm	20	C/S
Summer, 2018-19	Greengram	300	Crop is standing	GM-6 (2017)	Farmers field and KVK Farm	20	TF

*****Quality seed production was not obtained during *Kharif* 2017 as crop was severely affected by *Okhi cyclone* in December-2017.

@Due to scarcity of water in summer season (2018) and crop was affected due to pre-monsoon rain

3. Financial Progress:

Year	**Fund allocated (Rs.)**		**Fund received (Rs.)**		**Expenditure (Rs.)**		**Unspent balance (Rs.)**	**Remarks**
	Infrastructure	**Revolving Fund**	**Infrastructure**	**Revolving Fund**	**Infrastructure**	**Revolving Fund**		
2016-17	50,00,000	30,00,000	50,00,000	30,00,000	0	0	80,00,000	
2017-18	-	70,00,000	-	36,00,000	35,00,000	4,48,002	76,51,998	
2018-19	-	-	-	34,00,000	6,55,200	9,05,644	94,91,154	
Total	50,00,000	100,00,000	50,00,000	100,00,000	41,55,200	13,53,646	94,91,154	

4. Infrastructure Development:

Item	Progress	Remarks
Seed processing unit	Purchasing of seed processing machinery has been completed and their installation is in process and will be completed as soon as roofing and plaster work of seed storage structure/godown is completed	
Seed storage structure	Roofing and Plaster work is remaining	

- **Others (if any): --NIL--**

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

19.1 FLDs under TSP-NRCG, Junagadh:

Sr. No.	Season	Crop	Technology Demonstrated	Variety	Local Check	No. of farmers	Area (ha)	Average production (q/ha)		Percent increase
								Demon	Local Check	
1	*Summer-2018*	groundnut	Improved Variety	TAG-37 A	J-11	40	15	18.6	12.9	30.14

Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
33500	74400	40900	2.22	32000	51600	19600	1.61

19.2 FLD on Other enterprises: Kitchen Gardening (Kharif:2018) under Adaptive trial

Category and Crop	Thematic area	Name of the technology demon-strated	No. of Farm women	No. of Units	Average Yield (Kg)		% change in yield	Economics of demonstration (Rs./demon.)				Economics of check (Rs./demon.)			
					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	Household food security by kitchen gardening	Organic Kitchen garden	80	80	78	45	73.33	300	2340	2040	7.80	200	1350	1150	6.75

Area per demonstration: 200 sq.ft.

Critical input supplied: Tomato, Brinjal, Chilli, Cluster bean, Okra, Cow pea, Palakh, Bottle gourd, Bitter gourd, Little gourd, Ridge gourd, Sponge gourd, Vermicompost

Feedback of Farm women:

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.

19.3 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	

19.4 Adaptive trials:

PLAN SCHEME
Annual Development Progress Report
(Period: 01-04-2018 to 31-03-2019)

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

)A) Financial Progress : (Rs. Lakhs)

Sr. No.	Item	Total Grant Allotment for Year 2018-19	Expenditure 1-04-2018 to 31-03-2019	Puls (+) Minus (-)	Reason for Puls (+) Minus (-)
1	**2**	**3**	**4**	**5**	**6**
1	Pay	-	-	-	-
2	Recurring	7.0	6.99	+ 0.00013	-
3	Non-Recurring	-	-	-	-
4	Civil	-	-	-	-
	Total :	7.0	6.99	+ 0.00013	

(B) Physical Progress and Achievement:

Objectives of Scheme		Physical Progress / Achievement against each objective
1.	To strengthen the university technologies	- Improved seeds of different varieties of paddy, Cotton, pigeonpea, chickpea, Indian bean, green gram were disseminated among tribal farmers of Tapi district (Total no. Of demonstrations 589) - Kitchen garden kits were also distributed to 50 farmers.

		- Mango grafts were also distributed to 90 farmers - Different non-pesticidal management inputs *viz*, Trichoderma, fruit fly traps of cue-lure and methyl eugenol were also distributed to farmers (details as per below) - 200 demonstration on Mineral mixture were also distributed

(C) Detail information of Demonstrations:

SN	Technology	Crop	Variety	No. of demon.	No. of Beneficiaries
1	Improved seed	Paddy	GNR-3	4	4
2	Improved seed		GNR-6	10	10
3	Improved seed		GAR-13	53	53
4	Improved seed		NAUR-1	50	50
5	Improved seed		Purna	2	2
6	Improved seed		GRH-2	25	25
7	Improved seed	Cotton	G.Cot.Hy.-8 BG-II	10	10
8	Improved seed		G.Cot.Hy.-10 BG-II	5	5
9	Improved seed		G.Cot.Hy.-12 BG-II	5	5
10	Improved seed	Pigeon pea	Vaishali	235	235
11	Improved seed	Chick pea	GJG-3	63	63
12	Improved seeds (Certified)	Greengram	Meha	10	10
13	Improved seeds (TF)	Greengram	Meha	5	5
14	Improved seed	Chick pea	GJG-3	82	82
15	Improved seed	Indian Bean	GNIB-22	30	30
16	Plantation of fruit crops	Mango		90	90
17	Kitchen Garden	-	-	50	50
18	Mineral Mixture	For Dairy animals	-	200	200
19	Layer mesh	Backyard poultry	-	25	25
19	Fruit fly trap (Cue lure)	Cucurbit crops	-	25	25
20	Fruit fly trap (Methyl Eugenol)	Mango	-	25	25
21	*Trichoderma*	Chick pea & Okra	-	25	25
			Total	**1029**	**1029**

Feedback:

1.	All the improved varieties of different crops performed best at farmer's field.
2.	'NAUROJI' fruit fly trap of both cue-lure for cucurbits and methyl eugenol for mango also performed best
3.	Awareness among farmers regarding kitchen garden has been increased day by day.

19.5 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.) 2.Prof.Arti N.Soni (Home Science.) 3.Dr.S.M.Chavan(Pl.Prot.) 4.Dr.M.R.Gami(Crop Prod.)	1.Dolara	Vyara	Tapi	Completed
		2.Zankhari	Vyara	Tapi	Completed
		3.Bardipada	Dolvan	Tapi	Completed
		4.Jamaliya	Dolvan	Tapi	Completed
		5.Ukhalda	Songadh	Tapi	Completed

Table 2: Activities carried out up to 31st March, 2019 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	25	78	8	256	ICM in groundnut	1	1
					Vermicomposting	1	6
					ICM in gram	1	39
					New variety of Indian bean GNIB-21	1	17
					Use of paddy thresher to reduce drudgery of farm women	1	30
					Use of winnowing fan to reduce women drudgery	1	40
					Infertility management in surati buffalo	1	2
					Correction of negative energy balance in mehsani buffalo	1	1
					IPDM in okra	1	15
					Effect of novel organic nutrient in mango	1	1
					Total	**10**	**158**

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	12	210	640	32	25	67	9.8	158

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	-Sickle cell anemia	-Lack of knowledge about	-Balanced diet from locally available	18

Team	Linkages created with Other departments/ agencies (furnish name)	Problem diagnosed		Awareness created	
		General problem	Agriculture problem	Subject matter	No. of farmers
	-JEEVANDEEP MAHILA MANDAL, Bardipada -RSETI, Vyara -AAU, Anand -GUJARAT MATIKAM KALAKARI & Rural Tech. Insti., Bajipura	-Leptospirosis -Irregular supply of electricity	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. practices	food material - Preparation of different types of masala - PM Kisan Yojna - Drudgery reduction technologies for farm women during farm operations -Scientific cultivation pulse crops - Mushroom cultivation	15 20 70 39 20

Table 3: Any other activity carried out up to 31st March, 2019

Team	Name of activity	No. of farmers
1	2	3
Team 33	Celebration of different days-3	60
	Farmers visit to KVK	145
	Method demonstration paddy straw cuttings and its chemical sterilization, waste decomposer, plug nursery preparation of horticultural & sugarcane crops, herbal pesticide, mango garfting, preparation of vermicompost, use of paddy thresher to reduce women drudgery, Grinding of masala in pulvarizer machine	189
	Diagnostic Visit	03
	Field Day-3	81

19.6 Awards:

Sr. No.	Date of Received	Place	For What	Subject	Name of Staff
1	27/4/2018	AAU-Anand	Oral Presentation	Adoption of fruits & vegetable preservation technology by tribal farm women of Tapi district.Abstract published in Souvenier of National Seminar on " Extension strategies for doubling the farmers' income for livelihood security" organised by SEEG & AAU-Anand at AAU-Anand during 26-27/4/2018.	Arti. N. Soni P. D. Verma Dipal N. Soni

2	5-7/5/2018	MPKV, Rahuri	Best Presentation Award	Annual Progress report	Dr. P. D. Verma
3	30/5/2018	Chennai	Outstanding excellence and remarkble achievements in research and publication	Best Young Scientist Award By IRDP Group of Journal, Chennai	Dr. S. M. Chavan
4	26/6/2018	KRSHI Go VIDHYA AAU-Anand	Subject of Dairy, Food processing & Home Science	Best Article Award (First rank) for the year 2017-18 Article: Fal ane shakbhaji parirakshan technology na upyog dwara aadivasi mahila sashktikaran - Year:70(4), August-2017	Arti. N. Soni P. D. Verma Dipal N. Soni
5	22/1/2019	NAU, Navsari	Young Scientist Award	Awarded for meritorious services in Entomology	S M Chavan
6	7/3/2019	IARI-New Delhi	Innovative farmer award	Organic Farming	Jigar P. Desai Siker (Valod)

19.6 Assigned duties by Director of Research, NAU, Navsari :-Survey on invasive insect pest, fall army worm, *Spodoptera frugiperda*

Fall Armyworm (FAW), or *Spodoptera frugiperda*, is an insect that is native to tropical and subtropical regions of the Americas. In the absence of natural control or good management, it can cause significant damage to crops. It prefers maize, but can feed on more than 80 additional species of crops, including rice, sorghum, millet, sugarcane, vegetable crops and cotton. FAW was first detected in Central and Western Africa in early 2016 and has quickly spread across virtually all of Sub-Saharan Africa. In May 2018, it was first observed in Karnataka state of Maharashtra and confirmed its present status India. ICAR also announced the pest alert of this pest in India. Based on this, Hon. Director of Research, NAU, Navsari assigned duties to carried out pest infestation survey of FAW. In August, we carried survey of this pest. But, initially we could not found its infestation. But, in last week of August and first week of September we found severe infestation of this pest in Maize crop. Immediately, we collect insect sample and sent it for identification. The insect was identified as *Spodoptera frugiperda* by NBAIR, Bangalore.

Table 1: Details of survey report on invasive pest-Fall army worm, *Spodoptera frugiperda* in Tapi district

SN	Crop	Approximate area	crop stage	GPS location	Village	Block	District	Status of pest
1	Soybean	1.5 ha	Pod formation	$21^0$09’55.3” N $73^0$43’58.4” E	Sakarda	Uchchhal	Tapi	Not observed
2	Soybean	0.8 ha	Flowering	$21^0$10’15.6” N $73^0$45’19.8” E	Bhintbudrak	Uchchhal	Tapi	Not observed
3	Sorghum	1.5 ha	Vegetative (Fully	$21^0$11’00.8” N	Manekpur	Uchchhal	Tapi	Not observ

SN	Crop	Approximate area	crop stage	GPS location	Village	Block	District	Status of pest
			emerged leaves)	73^{0}46’50.3” E				ed
4	Sorghum	1 ha		21^{0}12’29.7” N 73^{0}48’10.9” E	Babarghat	Uchchhal	Tapi	Not observed
5	Paddy	0.2ha	Tillering	21^{0}16’58.3” N 73^{0}50’20.9” E	Vadgam	Uchchhal	Tapi	Not observed
6	Paddy	0.3 ha	Tillering	21^{0}16’56.9” N 73^{0}50’27.6” E	Vadgam	Uchchhal	Tapi	Not observed
7	Paddy	0.3 ha	Tillering	21^{0}16’57.8” N 73^{0}50’26.4” E	Vadgam	Uchchhal	Tapi	Not observed
8	Maize	0.4 ha	flowering and cob development	21^{0}16’58.3” N 73^{0}50’20.9” E	Vadgam	Uchchhal	Tapi	Not observed
9	Maize	0.3 ha	Five leaf stage	21^{0}18’20.2” N 73^{0}55’14.4” E	Karod	Uchchhal	Tapi	Not observed
10	Maize	0.5 ha	Kernel development	21^{0}18’20.2” N 73^{0}55’14.4” E	Karod	Uchchhal	Tapi	Not observed
11	Maize	0.4 ha	Kernel development	21^{0}18’34.4” N 73^{0}55’09.2” E	Karod	Uchchhal	Tapi	Not observed
12	Soybean	3 ha	Pod formation	21^{0}28’50.9” N 74^{0}07’37.9” E	Velda	Nizer	Tapi	Not observed
13	Cotton	2.0 ha	Flower bud formation	21^{0}31’28.3” N 74^{0}07’23.1” E	Fulvadi	Kukarmunda	Tapi	Not observed
14	Maize	0.75 ha	Grain filling	21^{0}28’12.4” N 74^{0}07’10.0” E	Kvelde	Nizer	Tapi	Not observed
15	Drilled Paddy+ Sorghum	0.8 ha	Milky grain stage + Flowering	21^{0}27’57.5” N 73^{0}99’17.5” E	Borde	Nizer	Tapi	Not observed

SN	Crop	Approximate area	crop stage	GPS location	Village	Block	District	Status of pest
16	Cotton	0.4 ha	Flower bud formation	21^{0}27’57.4” N 74^{0}04’35.2” E	Borde	Nizer	Tapi	Not observed
17	Cotton	0.4 ha	Flowering commences	21^{0}25’10.0” N 73^{0}02’20.8” E	Borde	Nizer	Tapi	Not observed
18	Cotton	0.4 ha	Flowering commences	21^{0}26’12.2” N 74^{0}00’23.9” E	Raygadh	Nizer	Tapi	Not observed
19	Sorghum+ drilled Paddy + pigeonpea	0.8 ha	Leaves fully emerged+ tillering+ branching	21^{0}10’00.2” N 73^{0}41’07.0” E	Virpore	Vyara	Vyara	Not observed

Table 2: Pest population data (Per 20 plants) of Fall army worm, *Spodoptera frugiperda* and other observed pests, natural enemies on different crops in Tapi district

SN	Crop	Village	Block	Pest population of *S. frugiperda* (Avg. of 20 plants)			Per cent infestation	Remarks	
				No. of egg masses	No. of larvae	No. of infested plants		Any other pests infestation	Natural enemies population (Avg. of 20 plants)
1	Soybean	Sakarda	Uchchhal	0	0	0	0	Hairy caterpillar (5%)	-
2	Soybean	Bhintbudrak	Uchchhal	0	0	0	0	-	-
3	Sorghum	Manekpur	Uchchhal	0	0	0	0	Stem borer, *Chilo* sp. (15%)	LBB 1.75
4	Sorghum	Babarghat	Uchchhal	0	0	0	0	Stem borer, *Chilo* sp. (10%)	LBB 2.4
5	Paddy	Vadgam	Uchchhal	0	0	0	0	-	-
6	Paddy	Vadgam	Uchchhal	0	0	0	0	-	-
7	Paddy	Vadgam	Uchchhal	0	0	0	0	-	-
8	Maize	Vadgam	Uchchhal	0	0	0	0	-	LBB 2.2
9	Maize	Karod	Uchchhal	0	0	0	0	-	LBB 1.9

SN	Crop	Village	Block	Pest population of *S. frugiperda* (Avg. of 20 plants)			Per cent infestation	Remarks	
				No. of egg masses	No. of larvae	No. of infested plants		Any other pests infestation	Natural enemies population (Avg. of 20 plants)
10	Maize	Karod	Uchchhal	0	0	0	0		LBB 1.7
11	Maize	Karod	Uchchhal	0	0	0	0		LBB 2.8
12	Soybean	Velda	Nizer	0	0	0	0	Hairy caterpillar (10%)	-
13	Cotton	Fulvadi	Kukarmunda	0	0	0	0	-	LBB 0.35
14	Maize	Kvelde	Nizer	0	0	0	0	Stem/corn borer, *Chilo* sp. (15%)	LBB 2.4
15	Drilled Paddy+ Sorghum	Borde	Nizer	0	0	0	0	-	-
16	Cotton	Borde	Nizer	0	0	0	0	One egg mass of *Spodoptera litura* **@**	LBB 0.55
17	Cotton	Borde	Nizer	0	0	0	0	Mealybug (10%)	LBB 0.5
18	Cotton	Raygadh	Nizer	0	0	0	0	-	LBB 0.4
19	Sorghum+ drilled Paddy + pigeonpea	Virpore	Vyara	0	0	0	0	-	-

LBB- Lady Bird Beetle

@ One hatched (not freshly laid) egg mass of *Spodoptera* sp. was observed and collected it for further rearing in laboratory. This collected egg mass was already hatched, but only 10-11 first instar larvae was hatched at the time collection (see photographs). Moreover, it was noted that, as per the morphological characters of early instar larva of *Spodoptera frugiperda*, the collected larvae was different (not matched with the characters of *S. frugiperda*). That means this species was different or regular i.e. *S. litura*.

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & Farm women	58	912	1240	2152
Rural youths	5	82	101	183
Extension functionaries	3	93	70	163
Sponsored Training	12	187	436	623
Vocational Training	3	33	59	92
Total	**81**	**1307**	**1906**	**3213**

2. Front Line Demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	171	59.6	--
Pulses	150	60	--
Vegetables	200	17.4	--
Other crops	91	40	--
Hybrid crops	0	0	--
Total	**612**	**177**	
Livestock & Fisheries	65	0	
Other enterprises (Home Science)	30	0	
Total	**95**	**0**	
Grand Total	**707**	**354**	

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	**2**	**15**	**15**
Livestock	**1**	**6**	**6**
Various enterprises	**0**	**0**	**0**
Total	**3**	**21**	**21**
Technology Refined			
Crops	**0**	**0**	**0**
Livestock	**0**	**0**	**0**
Various enterprises	**0**	**0**	**0**
Total	**0**	**0**	**0**
Grand Total	**3**	**21**	**21**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	368	13177
Other extension activities	334	18680
Total	**702**	**31857**

Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
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**	**--**	**--**	**--**	**--**	**--**	**-**

5. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	258.49	849318
Planting material (No.)	117609	202800
Bio-Products (kg)	1119 lit/ 68518 kg/ 505 no.	577044
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

6. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	308	123200
Water	32	1600
Plant	55	0
Total	**395**	**124800**

7. HRD and Publications

Sr. No.	Category	Number
1	Workshops	5
2	Conferences	2
3	Seminar	4
4	Meetings	11
5	Trainings for KVK officials	3
6	Visits of KVK officials	1
7	Book published	0
8	Training Manual	0
9	Book chapters	6
10	Research papers	3
11	Lead papers	0
12	Seminar papers	0
13	Extension folder	34
14	Proceedings	1
15	Award & recognition	6
16	On going research projects	3

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

Annexure-I

Proceeding of Sixteenth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Vyara held on 16/03/2019 at 3:30 pm 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. V. P. Patel	Member	Associate Research Scientist, Regional Rice Research Station, Navsari Agricultural University, Vyara
5	Mr. Jigar Gohil	Member	Assistant Professor (Horticulture Expert), Polytechnic in Agril. Navsari Agricultural University, Vyara
6	Dr. M. A. Kataria	Member	Assistant Research Scientist, LRS, NAU, Navsari
7	Mr. Prafulbhai R. Chaudhari	Member	Project Director,ATMA-Tapi, Vyara
8	Mr. S.B.Gamit	Member	District Agriculture Officer, Department of Agriculture, District Panchayat, and Project Director, ATMA-Tapi, Vyara.
9	Mr. Nikunj Patel	Member	Deputy Director of Horticulture, Tapi district,Vyara
10	Dr. C. M. Rana	Member	Deputy Director of Animal Husbandry, District Panchayat,Tapi District, Vyara
11	Mr. Samir Ardesana	Member	Assistant Director (Fisheries), Near CRPF Campus, Ukai, Dist. Tapi
12	Mr. Ghanshyambhai S. Patel	Member Progress farmer	At & Po. Bahurupa Ta. Kukarmunda
13	Jayaben Mahendrabhai Chaudhari	Member Progress farm women	At & Po. Unchchamala Ta. Vyara
14	Mr. Kantibhai Desai	Member	Agri-Enterpreneur, Sardar Agro Centre, APMC, Vyara

15	Rubinaben Somabhai Gamit	Invitee Member	President, SHG, At & Po. Zankhari Ta. Vyara
16	Shri Pravinbhai Gamit	Invitee Member	APMC, Vyara, Dist. Tapi
17	Smt. Shantaben Kalidas Gamit	Invitee Member	Progressive Women Farmer, At. Bedi, Ta. Songadh, Dist. Tapi
18	Shri D.T.Desai	Invitee Member	Patidar Agro Centre, APMC, Vyara
19	Mr. Dharmesh Vani	Invitee Member	Press Reporter-Gujarat Raksha, Vyara
20	Mr. Anup Bhatt	Invitee Member	Press Reporter-Dhabkar & Sandesh News TV
21	Shri Narendrasinh R. Rahevar	Invitee Member	Ambedkar Vanavasi Kalyan Trust-Surat
22	Shri Manshukhabhai Somabhai Gamit	Invitee Member	Progress Farmer & Resource Person-KVK, At & Po. Nani Chikhali, Ta. Vyara
23	Smt. Lilaben Gamit	Invitee Member	Progressive Women Farmer, Member of GSSC Ltd., Gandhinagar, Extension Council-NAU, Navsari At. Bedi, Ta. Songadh, Dist. Tapi
24	Shri J. A. Chotaliya	Invitee Member	LDM, Bank of Baroda, Vyara
25	Dr. C. D. Pandya	Special invitee	Scientist (Extension), KVK,Vyara
26	Pro. Arti. N. Soni	Special invitee	Scientist (Home Science), KVK,Vyara
27	Dr. S. M. Chavan	Special invitee	Scientist (Plant Protection), KVK,Vyara
28	Dr. P. K. Modi	Special invitee	Scientist (Horticulture), KVK,Vyara
29	Dr. J. K. Movaliya	Special invitee	Scientist (Animal Science), KVK,Vyara
30	Dr. M. R. Gami	Special invitee	Scientist (Crop Production), KVK,Vyara

- **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	Dr. Anilbhai Chinchmalatpure, Principal Scientist & Head, Indian Soil Salinity Institute, ICAR-Bharuch	Member
3	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.

16.1	**Approval of minutes of Fifteenth Scientific Advisory Committee.**	
	The action taken on the minutes of Fifteenth Scientific Advisory Committee Meeting of KVK, Vyara held on 12th March, 2018 was presented by Senior Scientist and Head and approved by the house.	
16.2	**Progress made by KVK during 01-02-2018 to 28-02-2019.**	
	Dr. P. D. Verma, Senior Scientist and Head, KVK, NAU, Vyara and all scientists presented the report on progress made by KVK, Vyara for the period of 01-02-2018 to 28-02-2019 and it was accepted by the house.	
16.3	**Action plan for the period of April-2019 to March-2020.**	
	Discussion was made on the Action Plan for the period of April-2019 to March-2020 presented by Senior Scientist and Head, KVK, NAU, Vyara which was approved with following suggestions.	
	16.3.1	Sesame variety GJT-5 released by JAU should be taken in Front Line Demonstration.
	16.3.2	Green gram variety GM-6 also should be taken in Front Line Demonstration.
	16.3.3	Varietal Front Line Demonstration on Paddy - GNR-7 should be taken.
	16.3.4	Procedure for accreditation of mango orchard should be initiated.
	16.3.5	Varieties released by SAUs should be taken in Front Line Demonstrations of vegetable crops.

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

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	Saksham Khedut, Samrudhdha Bharat	Dr. J. K. Movaliya, Dr. P. D. Verma
2	Nutritional Gardening	Prof. Arti N. Soni, Dr. P. D. Verma
3	Mahilao mate khetikaryama shram ghate teva upyogi ojaro/yantro	Prof. Arti N. Soni, Dr. P. D. Verma
4	Padurog (Anemia) ane tene atkavavana upayo	Prof. Arti N. Soni, Dr. P. D. Verma
5	Soybenni ghargaththu banavato	Prof. Arti N. Soni, Dr. P. D. Verma
6	Aadivasi samajma sicklecell anemia vishe jagruti lavia	Prof. Arti N. Soni, Dr. P. D. Verma
7	Leptosyrosis	Prof. Arti N. Soni, Dr. P. D. Verma
8	padurog (Anemia) ane tene atkavavana upayo	Dr. M. R. Gami, Dr. P. D. Verma
9	Bij ane teni mavjat	Dr. M. R. Gami, Dr. P. D. Verma
10	Chanani vigyanik kheti	Dr. M. R. Gami, Dr. C. D. Pandya Dr. P. D. Verma
11	Chomasu dangarma dharuuchher	Dr. M. R. Gami, Dr. P. D. Verma
12	Chomasu khetima aayojannu mahatva	Dr. M. R. Gami, Dr. P. D. Verma
13	Fangavel bijthi dangarnu vavetar	Dr. M. R. Gami, Dr. P. D. Verma
14	Divelani vaigyanik kheti padhdhati	Dr. M. R. Gami, Dr. P. D. Verma
15	Talnu utpadan vadharva unalu magfalinu vaigyanik padhdhatithi vavetar karia	Dr. M. R. Gami, Dr. C. D. Pandya Dr. P. D. Verma
16	Kharsani-Ramtalni Kheti	Dr. M. R. Gami, Dr. P. D. Verma
17	Dakshin Gujaratna agatyana pakoma nindan niyantran vyavsthapan	Dr. M. R. Gami, Dr. P. D. Verma
18	Oran dangarni kheti	Dr. M. R. Gami, Dr. P. D. Verma
19	Tuverni vigyanik kheti padhdhati	Dr. M. R. Gami, Dr. C. D. Pandya Dr. P. D. Verma
20	Rayni vaigyanik kheti padhdhati	Dr. M. R. Gami, Dr. C. D. Pandya Dr. P. D. Verma
21	Jamin ane panima pruththakaran karavo, khetima vadhu aavak melvo	Dr. M. R. Gami, Dr. P. D. Verma
22	Soybenni kheti	Dr. M. R. Gami, Dr. C. D. Pandya Dr. P. D. Verma
23	Shrdini sudharel kheti padhdhati	Dr. M. R. Gami, Dr. P. D. Verma
24	Talni aadhunik kheti padhdhati	Dr. M. R. Gami, Dr. C. D. Pandya Dr. P. D. Verma
25	Sendriy khetima poshaktatvonu vyavsthapan: Khatar/vermicompost banavat ane mahatva	Dr. M. R. Gami, Dr. P. D. Verma
26	Varsadi khetima jal sangrahnu mahatva	Dr. M. R. Gami, Dr. P. D. Verma
27	Ghauni kheti padhdhati	Dr. M. R. Gami, Dr. P. D. Verma
28	Kapasma gulabi eyalnu sankalit vyavasthapan	Dr. S. M. Chavan, Dr. P. D. Verma Dr. P. K. Modi
29	Khedutna khetare vividha jaivik jantinashako banavavani padhdhati	Dr. S. M. Chavan, Dr. P. D. Verma Dr. P. K. Modi
30	Khetima pakshionu mahatva	Dr. S. M. Chavan, Dr. P. K. Modi Dr. P. D. Verma

Sr. No.	Subject	Name of Authors
31	Dangarni jivato ane tenu vyavasthapan	Dr. S. M. Chavan, Dr. P. K. Modi Dr. P. D. Verma
32	Dangarni rogo ane tenu vyavasthapan	Dr. S. M. Chavan, Dr. P. K. Modi Dr. P. D. Verma
33	Tuverni jivato ane tenu vyavasthapan	Dr. S. M. Chavan, Dr. P. K. Modi Dr. P. D. Verma
34	Tuverni rogo ane tenu vyavasthapan	Dr. S. M. Chavan, Dr. P. K. Modi Dr. P. D. Verma

2. News paper coverage

S.N.	Subject, News Paper & Date
1	Krishi Vigyan Kendra, Vyara Khate Mashroomni Kheti Vishe Ek Divasiy Karyashala Yojay, GUJARAT RAKSHA, Dated: 16/4/2018
2	Krishi Vigyan Kendra, Vyara Khate aatarrashtriy madhmakhi divas ni ujavani , GUJARAT RAKSHA, Dated: 28/5/2018
3	Krishi Vigyan Kendra, Vyara khate "Vaigynanik padhdhatithi nafakarak bakrapaln kravani padhdhati " vishe seminar yojayo. GUJARAT RAKSHA, Dated: 11/6/2018
4	Krishi Vigyan Kendra, Vyara khate Tapi ane Navsari jillani pragatishil mahilaoni interface meeting yojay. GUJARAT RAKSHA, Dated: 25/6/2018
5	Krishi Vigyan Kendra, Vyara khate "Pandurog (Anemia) ane sarvar" vishay par be divsiy In-Service talim yojay. GUJARAT RAKSHA, Dated: 2/7/2018
6	Jilla Lokvigyan Kendra, Tapi dwara Haripura, Vyara khate jillano National Science seminar spardha ujavayo. GUJARAT RAKSHA, Dated: 23/7/2018
7	Vyara Krishi Vigyan Kendra khate 'Sendriy Kheti' ange talim yojay. DHABKAR, Dated: 4/8/2018
8	K.V.K. Vyara khate "Sendriy Kheti" vishay upar gram-sevakoni In-Service talim yojay. GUJARAT RAKSHA, Dated: 6/8/2018
9	Amba game KVK, Vyara dwara pashupalan shibir yojay. GUJARAT RAKSHA, Dated: 3/9/2018
10	Krishi arthvyavstha j deshni arthvyavstha ne sudradha kare. SANDESH, Dated: 21/9/2018
11	Vyara ma khedut sabhama Smruti Irani hajar rahiya. GUJARAT SAMACHAR, Dated: 22/9/2018
12	Vyara na Keishi Vigyan Kendra ma khedutoni aavak bamni karva ange seminar yojayo. GUJARAT MITRA. Dated: 22/9/2018
13	Aayushman bharat yojna hethal 50 karod labharthione aavari levase. Smruti Irani., GUJARAT GARDIAN, Dated: 22/9/2018
14	Vyara khate khedutoni aavak bamni karva ange seminar yojayo. DHABKAR, Dated: 22/9/2018
15	Aayushman bharat yojna vishwani sauthi moti swasthya yojna banase: Kendriya Mantri. GUJARAT RAKSHA, Dated: 22/9/2018
16	KVK Vyara dwara Nizar khate kapasma gulabi eyalna sankalit vyavasthapan visheni khedut shibir yojay. GUJARAT RAKSHA, Dated: 22/9/2018
17	Chhupa dushman jem nukshan karti gulabi eyalnu niyantran jaruri: Dr. Chavan. SANDESH, Dated: 26/9/2018
18	Krishi Vigyan Kendra, Vyara ane Baroda Swarojgar Vikas Santhan, Vyara dwara pashupalan ane alasiya khatarni banavat vishay par 10 divasiy vyavsayik talim yojay. GUJARAT RAKSHA, Dated: 01/10/2018
19	Krishi Vigyan Kendra Vyara ma khedut din-v- dangar pak parisamvadnu aayojan.

	GUJARAT RAKSHA, Dated: 8/10/2018
20	Vyara Krishi Vigyan Kendra ma kheduto a mushroomni kheti mate talim lidhi. SANDESH, Dated: 9/10/2018
21	Vyara Krishi Vigyan Kendra dwara sanklit rog-jivat vyavsthapan ange margadarshan. SANDESH, Dated: 13/10/2018
22	Videshi aakramak pinchhade char tapkavali lashkari eyal (FAW) jivat vishe jagrukta karyakram. GUJARAT RAKSHA, Dated: 15/10/2018
23	Krishi Vigyan Kendra, Vyara khate Mahila Kisan Divas ni ujavani. GUJARAT RAKSHA, Dated: 22/10/2018
24	Krishi Vigyan Kendra, Vyara dwara Navi Kachali game ek masno kaushlya vikas talim karyakram yojayo. GUJARAT RAKSHA, Dated: 22/10/2018
25	Kisan Diwas ni Ujavani. GUJARAT SAMACHAR, Dated: 29/12/2018
26	KVK, Vyara khate Kisan Diwas ni Unjavani. GUJARAT RAKSHA, Dated: 31/12/2018
27	Vyara na Krishi Vigyan Kendra khate Kisan Diwas ni Ujavani karay. DHABKAR, Dated: 29/12/2018
28	Navsari Krishi University Samlagna Krishi Vigyan Kendra panvadi dwara Jilla Lok Vigyan Kendra Vyara na sahyog thi Virpur shalama Swachchhata abhiyan yojayo. GUJARAT RAKSHA, Dated: 07/01/2019
29	Krishi Vigyan Kendra, Vyara dwara Technology Saptah ni Ujavani karvama avi. GUJARAT RAKSHA, Dated: 04/02/2019
30	Krishi Vigyan Kendra, Vyara dwara "sherdi ni vaigyanik kheti padhdhati" upar In-Service talim yojay. GUJARAT RAKSHA, Dated: 21/01/2019
31	Kheduto aarthik rite samridhdha bane tevo sarkarno prayas. SANDESH, Dated: 25/02/2019
32	Aarthik rite sadhdhar thava vaigyanik padhdhati thi nafakarak kheti karvi padse: Ishwar Patel. GUJARAT GARDIAN, Dated: 24/02/2019

3. Popular articles

S.N.	**Subject, News Paper/Magazine, Date**
1	Dr. J. K. Movaliya, Dr. P. D. Verma, Dr. H. C. Parmar (April-2018). Gay-Bhensana poshan mate pashuaaharni char sutriy vyavastha. **KRISHI GO VIDHYA** (12):18-20
2	Pravinkumar Modi, Dr. C. D. Pandya (April-2018). Tunkagalama Vadhu Utpadan aapati papayani kheti. **SANDESH** NEWS paper, Dated: 9/4/2018
3	Dr. J. K. Movaliya, Dr. P. D. Verma (June-2018). Bakara palan vyavsay sathe sankdayel pashupalko a dhyan ma rakhava jevi babato. **AGRO SANDESH**, Dated:4/6/2018, Page No. 8
4	Dr. J. K. Movaliya, Dr. P. D. Verma (July-2018). Silage-Chomasa ma malta lila ghaschara no sangrah. **SANDESH,** Dated:2/7/2018,
5	Dr. J. K. Movaliya, Dr. P. D. Verma (August-2018). Ek vishes khorakthi pashuoma doodnu utpan vadharva mate total mishrit rashan. **KRISHI JIVAN,** Page no. 9-10
6	Dr. S. M. Chavan (27 August-2018). Vatavaranma ferfar ane khetima avata badlavthi kapasma gulabi eyalno updrav. **AGRO-SANDESH**, Dated: 27/8/2018
7	Dr. C. D. Pandya (8/10/2018). Kheti tatha aarogya mate nuksankarak underna niyantran mate kheduto a janava jevi babato. **AGRO-SANDESH**, Dated: 8/10/18
8	Dr. S. M. Chavan (29/10/2018).Makaina pakma dakhal thayel navi videshi jivat fall army worm thi pakne bachavo. **AGRO-SANDESH**, Dated: 29/10/18
9	Dr. S. M. Chavan (29/10/2018).Khedut Mitro, jano makaina pakma dakhal thayel navi videshi aakramak jivat " punchhade char tapkavali lashkari eyal" vishe . **AGRO-SANDESH**, Dated: 29/10/18
10	Dr. Pravinkumar Modi, Dr. Sachin M. Chavan, Dr. P.D. Verma. (Dec.,2018). Safal Varta-Papadini navi jat GNIB-21. KRISHO GO VIDHYA, 8:42
11	Dr. Pravinkumar Modi, Dr. Sachin M. Chavan, Dr. P.D. Verma. (Dec.,2018). Safal Varta-Papadini navi jat GNIB-21 apanavine khedutoni aavak bamni thay.. KRISHI JIVAN:32

12	Dr. Sachin M. Chavan, Dr. Pravinkumar Modi, Dr. P.D. Verma. (Jan.,2019). Mushroom ni kheti- Laghu udhyog, Krishi Vigyan, Anka-12, Page No. 29
13	Dr. Sachin M. Chavan, Dr. P. K.Modi, Dr. P.D. Verma. (March.,2019). Successful women entrepreneur in mushroom cultivation. KRISHI JIVAN, Page No. 12-13

4. TV Talks

Sr. No.	Date	Place	Subject	Resource person
1	12/6/2018	DD GIRNAR	Vermicompost kheti	Dr. P. K. Modi

5. Chapters published in various local publications

Year	Name of Book	Subject/Chapter	Authors
2018	MASALA PAKO	Mari masalani Vividh Banavato	Dipal N. Soni, Rita R. Patel, Arti N. Soni
2018	Dairy Udhyog	Bal Poshan Mate Matanu Doodh	Dipal N. Soni, Arti N. Soni, Priti V. Thakkar
2018	Dairy Udhyog	Bal Poshan Mate Pshuonu Doodh	Arti N. Soni, Dipal N. Soni, Priti V. Thakkar
2018	Dairy Udhyog	Magfali ane soyabeanna danamathi vanasptijanya doodh	Dipal N. Soni, Arti N. Soni
2018	Dairy Udhyog	Nariyel (Shreefal)nu Amrut Saman Doodh	Dipal N. Soni, Arti N. Soni
2018	Vruksho ni vaigyanik kheti	Vansa na resano textile udhyog ma upyog	Dipal N. Soni, Arti N. Soni

6. Research papers

1	S.M.Chavan, K.G.Patel (March-2018). Morphological basis of resistance in rice against yellow stem borer, Scirpophaga incertulas (Walker). ***Indian Journal of Entomology***, 80(1):27-35
2	Chavan S. M., Patel K. G. (2018). Biochemical basis of resistance in rice varieties against yellow stem borer, Scirpophaga incertulas. Indian Journal of Entomology, 80(3):1074-1079 NAAS rating:4.5
3	Soni Arti N., Verma P. D., Soni Dipal N. (2018). Adoption of fruits and vegetable preservation technology by tribal farm women of Tapi district. Gujarat Journal of Extension Education, 29(I): 9-15 NAAS: 3.86

7. Research paper abstracts

1	Arti N. Soni, P. D. Verma, Dipal N. Soni (April-2018). Fruits and vegetable preservation technologies: Viable option to empower tribal farm women. Abstract published in Souvenier of National Seminar on " Extension strategies for doubling the farmers' income for livelihood security" organised by SEEG & AAU-Anand at AAU-Anand during 26-27/4/2018. Page No. 158

2	Arti N. Soni, P. D. Verma, Dipal N. Soni (April-2018). Adoption of fruits & vegetable preservation technology by tribal farm women of Tapi district. Abstract published in Souvenier of National Seminar on " Extension strategies for doubling the farmers' income for livelihood security" organised by SEEG & AAU-Anand at AAU-Anand during 26-27/4/2018. Page No. 170
3	J K Movaliya, P D verma (Jan-2019) Role of Bypass fat in milk production of bufaaloes during ISBD-2019 conference at Navasri
4	S M Chauvan, P K Modi and P D Verma (Jan-2019) Pesticides use pattern of okra growers in controlling insects -pests and diseases in Tapi district of Soth Gujarat during National smposium in NAU Navasti'

8. Workshop /Seminars/Conference/Meeting *etc*. attended

Sr. No.	Date	Place	Subject	Resource Person
1	12/4/2018	ATIC-NAU, Navsari	KVK review meeting attended	Arti N. Soni, Nirav N. Makani
2	12/4/2018	ATIC-NAU, Navsari	21st Quarterly Convergence meeting	Arti N. Soni, Nirav N. Makani
3	24/4/2018	Narayangaon KVK, Pune	One day workshop on "Farming System for Nutrition Approach	Dr. S. M. Chavan
4	24/4/2018	Shree Ram Krishna Hall, 4th floor, Near Makai Pool, Surat	National seminar on "Agri Food Processing connect through Prime Minister Kisan Sampada Yojna"	Shri N. N. Makani
5	26-27/4/2018	AAU-Anand	National Seminar on "Extension strategies for doubling the farmers' income for livelihood security" organised by SEEG & AAU-Anand during 26-27/4/2018	Arti N. Soni,
6	1-2/6/2018	AAU-Anand	State level workshop on "Doubling farmers' income by 2022- A strategic initiative"	Dr. C. D. Pandya
7	16-21/7/2018	EEI-Anand	ICT applications and use of M-kishan portals in agriculture & allied fields	Dr. J. K. Movaliya
8	8/8/2018	Dediapada	Interface meeting of innovative farm women of KVK-Tapi & KVK-Narmada	Dr. P. D. Verma, Dr. C. D. Pandya, Dr. J.K.Movaliya, Arti N. Soni
9	8/8/2018	Dediapada	Review meeting of KVKs	Dr. P. D. Verma, Dr. C. D. Pandya, Dr. J.K.Movaliya, Arti N. Soni
10	11/9/2018	KVK-Waghai	Interface meeting of innovative farm women of KVK-Tapi & KVK-Narmada	Arti N. Soni
11	11/9/2018	KVK-Waghai	Review meeting of KVKs	Arti N. Soni

12	25-29/9/18	EEI-Anand	Attended 3 days training on "Training of Trainers (TOT) of skill development jointly organised by ATARI, Pune, ASCI and EEI, AAU, Anand	Dr. S.M.Chavan
13	29/9/18	SDAU, Sardar Krishinagar	Attended seminar on "Plant protection in hoerticultural crops in North Gujarat"	Dr. S.M.Chavan
14	11/10/18	SSK,NAU, Navsari	29th ZREAC meeting	Dr. C. D. Pandya, Dr. J.K.Movaliya
15	11/10/18	SSK,NAU, Navsari	23rd KVK-ATMA convergence meeting	Dr. C. D. Pandya, Dr. J.K.Movaliya
16	11/10/18	SSK,NAU, Navsari	KVK review meeting	Dr. C. D. Pandya, Dr. J.K.Movaliya
17	25/10/18	ASAI,NAU,Surat	Seminar on "Bagayati pako ma sajiv kheti"	Dr. P. K. Modi
18	26/10/18	GDMI, Gandhinagar	Workshop on Awareness about forecasting by IMD for Agromet Advisory Services	Shri N. N. Makani
19	7-9/12/18	Sanosara (Bhavnagar)	Workshop on "CFLDs on Pulses & Oilseeds Organised by ATARI-Pune	Dr. C. D. Pandya
20	1-10/10/18	PDKV, AKOLA	Short course training on solar energy	Dr. P. D. Verma
21	24-25/10/18	Surat	National conference on human and animal driven equipment	Dr. P. D. Verma
22	12-13/1/19	Nandurbar	National Conference on alliance for seed reliance	Dr. P. K. Modi
23	27-30/1/19	Narayan Gaon-pune	Master trainers workshop	Dr. P. D. Verma

9. On going research projects:

Sr. No.	Title of Research Study	Investigators
1	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
2	Adoption of improved dairy husbandry practices by the tribals of Tapi District	1. Dr. P.D.Verma, Senior Scientist & Head, KVK,NAU, vyara 2. Dr. J. K. Movaliya, Scientist (Animal Husnabdry), KVK, NAU, Vyara 3. Dr. C.D.Pandya, Scientist (Extn), 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

Sr. No.	Title of Research Study	Investigators
		3. Dr. P.D.Verma, Senior Scientist & Head, KVK, NAU, Vyara, Dist. Tapi

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