ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVK-Vadodara (Gujarat) DURING 2018-19
(1st April 2018 to 31st March 2019)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
KVK-Vadodara (Mangalbharti) At.&Po.Golagamdi, Ta.Sankheda, Dist. Chhotaduepur.-391125	02665-243240 08141150500	``	kvkvdr@gmail.com	www.kvkvadodara.org (144165)

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

Address	Telephone		E mail	Website address
	Office	FAX		
Mangalbharti At.&Po.Golagamdi, Ta.Sankheda, Dist. Chhotaduepur.-391125	02665-243240 08141150500	-	kvkvdr@gmailcom	www.kvkvadodara.org

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. B. M. Mehta	02665-243240 08141150500	094268 34346	bmehta_61@rediffmail.com

1.4. Year of sanction: 1995

1.5. Staff Position (as on March 31, 2019)

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate		Date of joining
				Current Pay Band	Current Grade Pay	
1.	Senior Scientist and Head	Dr.B.M.Mehta	-	37400-9000-67000	9000	17/9/2013
2.	Subject Matter Specialist	C. R. Patel	Agronomy	15600-5400-39100	5400	23/6/2011
3.	Subject Matter Specialist	M. C. Brahmbhatt	Horticulture	-do-	5400	11/7/2011
4.	Subject Matter Specialist	J. P. Meena	Animal Science	-do-	5400	7/7/2011
5.	Subject Matter Specialist	K. J. Soni	Home Science	-do-	5400	2/7/2011
6.	Subject Matter Specialist	B. L. Dhayal	Ext.Edu	-do-	5400	23/8/13
7.	Subject Matter Specialist	V.D.Patel	Plant.Prot	-do-	5400	06/02/17
8.	Programme Assistant	K. K. Sutaria	-	9300-4200-34800	4600	1/12/2008
9.	Computer Programmer	M.R.Kulkarni	-	-do-	4600	21/01/2008
10.	Farm Manager	Hariom Sharma	-	-do-	4200	2/9/2013
11.	Accountant/Superintendent	V.V.Shah	-	-do-	4600	04/06/2001
12.	Stenographer	C.M.Raval	-	5200-2400-20200	2400	2/9/2013
13.	Driver 1	R.N.Prajapati	-	5200-2000	2400	17/01/2008
14.	Driver 2	Z. S.Vora	-	-do-	2000	27/6/2011
15.	Supporting staff 1	P.B.Rathwa	-	5200-1800	1900	5/9/2003
16.	Supporting staff 2	J.R.Tadvi	-	-do-	1900	29/7/2002

1.6. Total land with KVK (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	1.30
2.	Under Demonstration Units	2.00
3.	Under Crops	8.00
4.	Horticulture	1.50
5.	Pond	0.50
6.	Others if any	6.70

1.7. Infrastructural Development:

A. Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2001	561.43	18,23,216/-	-	-	-
2.	Farmers Hostel	ICAR	2011	300.75	26,57,744/-			
3.	Staff Quarters (8+6=14)	ICAR	2001	694.61	29,23,910/-	-	-	-
4	Fencing	ICAR	2006	1709 Rmt.	3,45,000/-	-	-	-
5	Rain Water harvesting system	ICAR	2007	62x39mt.	9,78,000/-	-	-	-
6	Threshing floor	ICAR	2010	41.82 (sqmt)	1,93,440/-	-	-	-
7	Farm godown	ICAR	2010	55.76 (sqmt)	2,86,422/-	-	-	-
8	Implement shed	ICAR	2010	55.76	2,99,000/-			

B. Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Messy tractor with trolley	28/03/95	2,82,058=00	12211 hrs.	Poor condition
Mahindra Bolero	29/03/10	6,25,000=00	195406	Working condition
Bajaj Discover	09/02/11	48,251=00	84968	Working condition

C. Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Electronic type writer	30/03/95	16,380=00	Poor condition due to technical fault
Steel cupboard	30/03/95	3,300=00	Good
Iron cupboard	30/03/95	3,100=00	Good
Iron Table	30/03/95	6,370=00	Good
Chair	30/03/95	5,860=00	Good
Tractor Plough	31/03/95	15,000=00	Good
Slide Projector	31/03/95	16,500=00	Poor condition due to fault
Overhead Projector	31/03/95	10,500=00	Poor condition
VCR (onida)	01/09/96	14,300=00	Poor condition
Micro Scope	19/09/96	3,500=00	Poor condition
Camera (Canon)	28/09/96	2,350=00	Poor condition due to fault
Moving trolley	28/09/96	6,500=00	Good
Store well	30/09/96	10,800=00	Good
Store well	30/09/96	3,200=00	Good
Office table	30/09/96	6,525=00	Good
Office chair	30/09/96	1,400=00	Good
Glass door cupboard	30/09/96	3,900=00	Good
Office Table	30/09/96	2,175=00	Good
Office chair	30/09/96	350=00	Poor condition
Colour T.V.(crown)	15/10/96	18,800=00	Poor condition
Office Table	30/10/96	3,200=00	Good
Office chair	30/10/96	350=00	Good
Microphone PCM with set accessories	11/03/98	8,495=00	Poor condition
Slide Projector with remote	01/04/98	11,300=00	Poor condition
Glass door cupboard	04/03/2000	3,150=00	Good

Wind wheel	20/10/2000	15,00=00	Good
Store well	31/01/2001	29,000=00	Good
Office chair	31/01/2001	3,000=00	Good
Table	31/01/2001	11,500=00	Good
File rake	31/01/2001	5,100=00	Good
Museum room self	28/02/2001	20,900=00	Good
Dias	01/03/2001	9,056=00	Poor condition
Library table	15/03/2001	22,000=00	Poor condition
Plastic chair	30/03/2001	11,900=00	Poor condition
Multi panel kit-12	31/03/2001	11,954=00	Poor condition
Flash kit-4	31/03/2001	12,5000=00	Good
Eco display with 3 panel	31/03/2001	5,773=00	Good
Info panel wall type	31/03/2001	6,611=00	Good
Kitchen mixture	31/03/2002	1,995=00	Good
Kitchen pressure cooker	31/03/2002	2,200=00	Good
Cupboard & stand	31/03/2003	9,975=00	Good
Xerox machine (Canon-7160)	30/03/2004	79,800=00	Poor condition
Rotavator (rotary)	31/12/2004	49,000=00	Poor condition
Office Table	30/09/2005	33,500=00	Poor condition
Office chair	30/09/2005	9,600=00	Good
File rake	30/09/2005	6,400=00	Good
Computer with Accessories (Compaq)	14/02/2006	64,500=00	Poor condition
Steel cupboard	26/02/2006	10,440=00	Good
Plastic chair	26/02/2006	4,560=00	Poor condition
Pneumatic cotton planter	28/03/2006	47,400=00	Under TMC-MM-II Grant
Power weeder	28/03/2006	33,500=00	Under TMC-MM-II Grant
Computer table	31/03/2006	3,165=00	Poor condition
Office table	31/03/2006	3,165=00	Poor condition
Computer chair	31/03/2006	4,310=00	Poor condition
Plastic chair	31/03/2006	8,125=00	Poor condition
Rake	31/03/2006	16,235=00	Poor condition
Storage cupboard	31/03/2006	25,250=00	Under STL grant
Storage cupboard	31/03/2006	5,150=00	”
Cupboard	31/03/2006	4,500=00	”
Angel rake	31/03/2006	7,100=00	”
Store well	31/03/2006	12,300=00	”
Office table	31/03/2006	7,500=00	”
Stand frame rake	31/03/2006	6,200=00	”
Revolving chair	31/03/2006	43,10=00	”
Revolving stool	31/03/2006	2,700=00	”
Plastic stool	31/03/2006	755=00	”
Store well cupboard	31/03/2006	15,000=00	”
Fixed wall steel cupboard	31/03/2006	85,021=00	”
Hot Plate Rectangular (Nova-NV-8535)	28/02/2006	7,500=00	Poor condition due to fault
Rotary shaker (Nova-NV-853)	28/02/2006	25,250=00	Good
Voltage stabilizer (Nova-NV/14)	28/02/2006	16,000=00	Faulty
“EL” Microprocessor Flame Photometer (Model-CL-387)	28/02/2006	35,250=00	Under STL grant
“EI” Microprocessor based pH meter (Model-1012)	28/02/2006	15,275=00	Poor condition due to fault
“EI” Microprocessor based Conductivity/TDS meter (Model-1601)	28/02/2006	17,450=00	Poor condition due to fault
Single pan balance ‘K-Roy” (Model: K-14 Deluxe)	28/02/2006	11,950=00	Good

Electronic Balance: Multi-function series (Model: Swis-310)	28/02/2006	14,900=00	Good
Visible Spectrophotometer (FGSL-177 Scanning)	02/03/2006	55,944=00	Good
Electronic Automatic Kel Plus Micro-processor based Twelve Place macro block Digestion System (Model: KES 12 L)	16/03/2006	96,020=00	Poor condition due to fault
Electronic Kel Plus Micro- processor based Automatic Distillation System (Model: DISTY-EM)	16/03/2006	1,25,350=00	Poor condition due to fault
Sampling Augers (Hand size 3")	25/03/2006	1,200=00	Good
Sampling Augers (Hand size 6")	25/03/2006	2,150=00	Good
Extension Rod - Size: 3"	25/03/2006	800=00	Under STL grant
Size: 6"	25/03/2006	1,050=00	Good
Refrigerator 330 Lit (Ken star-SR)	27/03/2006	15,000=00	Good
Stabilizer	27/03/2006	500=00	Poor condition due to fault
'Nova' Willey mill stainless steel body	06/03/2006	21,550=00	Poor condition due to fault
'Nova' Horizontal shaker-Kahn-Platform	06/03/2006	24,975=00	Poor condition due to fault
"Mac" Electrically Heated all glass Distillation apparatus (Model: MSW-193)	06/03/2006	16,350=00	Poor condition due to fault
Test Sieves Size: 3.35mm	25/03/2006	475=00	Good
Size: 2.00 mm	25/03/2006	475=00	"
Soil Hydrometer Range: 58-92%	25/03/2006	700=00	"
High speed stirrer: IS: 2720IV)	25/03/2006	11,400=00	"
Hand/Sugar Refractometer	25/03/2006	2,500=00	"
Hanna Pocket pH Meter	25/03/2006	2,600=00	"
Hanna Pocket TDS Meter	25/03/2006	2,450=00	"
Aero Blast Sprayer (Aspee-Mod.No.ATB/6HDP)	06/02/2007	86080=00	Poor condition & not working, Under TMC-MM-II
LCD Projector (Panasonic-Model. No.-PT-PISD1500luens.	16/03/07	73010=00	Poor condition and not working condition so, this projector is buyback and purchase new Projector EPSON-EX-31
DVD Handy Cam (Sony.Model:608E	20/03/07	20500=00	Poor condition
Digital Camera (Orite Mod.No.-C8000	20/03/07	9200=00	
Trolley With Cabinet	16/03/07	10688=00	
Projector Screen with Stand (Size:52"70)	16/03/07	11560=00	Poor condition
Seed cum fertilizer drill	28/11/10	30000=00	Under ICAR grant Poor condition
Projector EPSON-EX-31	24/3/17	33700=00	Under NRC Grant
Hitachi Air Condition No.2	23/3/17	80000=00	" "
Nikon Digital Camera D-5300 & Sony Handy-cam PJ-675	14/3/17	94800=00	" "
RO with Cooler	20/3/17	79990=00	" "
Computer with Accessorizes No.3	14/3/17	149953=00	" "
Office Table (7+2)	28/3/17	41800=00	" "
Mrida prikshak soli kit	30/3/17	90300=00	ICAR Grant
STRF Soil Kit	2017-18	80618=00	ICAR Grant
STRF Soil Kit	2018-19	20768=00	ICAR Grant

1.8. Details of SAC meetings to be conducted in the year

Date	Name and Designation of Participants	Salient Recommendations	Action taken
26-02-2019	1. Sh. Dhirubhai B. Desai Chairman, Mangalbharti Trust. 2. Sh. M.K.Kureshi Joint director of Agri (Ext.) Dept. of Agri. 3. Dr.P.R.Bhatnagar Director, CSWRTI, ICAR, IISWC, Vasad 4. Sh. Darshan Diore NABARD, Vadodara 5. Dr. S.K.Raval Professor , Dept. of Medicine, Veterinary College, AAU, Anand 6. Dr.N.I.Shah Professor & Head, Dept. of Horti., BACA,AAU,Anand. 7. Sh. K.C. Pathak LDM, Bank of Baroda, Bodeli 8. Dr. R.G. Machhar Unit Head, Pulse research station,AAU, 9. Sh. D.N.Patel Proj. Dir. ATMA Chhotaudepur 10. Sh. V.A. Pathan Veterinary Off. Bodeli 11. Dr.P.K.Sharma Seni. Scientist & Head, KVK Kheda 12. Sh. Ketan K. Patel ADH, Vadodara 13. Sh. K.K. Patel Ass. Dir. Sub division Dabhoi 14. Sh. N.B.Dasalaniya Ass. Dir, Sub division Jabugam 15. Sh. P.J.Bariya Hori. Offi. Chhotaudepur 16. Sh. J.C.Parmar Irri. Dep. Vadodara 17. Sh. M.M.Baria,Irrigation department 18. Sh. V.K.Rathva Forester, Forest Department 19. Sh. C.B.Rohit Forester, Forest Department, Bodeli 20. Sh. Ajaybhai Bariya Agrocel Ind. Dabhoi 21. Ms. Jasodaben Tarbada Progressive Women farmer. 22. Ms. Arunaben Rathva Progressive Women farmer. 23. Sh. Vijaybhai Bariya,Progressive farmer 24. Sh. Jagdishbhai J.Bariya,Progr.farmer 25. Dr.B.M.Mehta Seni. Scientist & Head, KVK Vadodara 26. Ms. K.J.Soni SMS (Home Science), KVK- Vadodara 27. Sh. C.R.Patel SMS (Agronomy), KVK- Vadodara 28. Sh. J.P.Meena SMS (Animal Science), KVK- Vadodara 29. Sh. M.C.Bhrambhatt SMS (Horticulture), KVK- Vadodara. 30. Sh. B.L.Dhayal SMS (Agril. Extension), KVK- Vadodara 31. Sh. V.D.Patel SMS (Plant. Protection), KVK- Vadodara	1. Identify the villages and Select the farmers in Chhotaudepur district for seed production of different crops in collaboration with line department & NABARD. Constitute the committee with line department for monitoring and selling of seeds of new varieties especially in Black gram and soybean. 2. Survey should be done on indegenious Dagari breed of cow in tribal belt of Chhotaudepur district. 3. In Okra variety GAO-5 observe the virus infestations and give feed back to the concerned Scientists of AAU, Anand. 4. Observe the effect of temperature on fruit setting (due to high temp.) in FLD Tomato variety Arka Rashak. 5. Laid down the FLD & OFT on fruit & flower crops with vegetables and SMS (Horti.) look out overall horticulture development. 6. Laid down the OFT / FLD on control of pink boll worm in Cotton & Fall army warm in Maize. 7. Impact analysis of FLDs, OFTs and trainings should be done with the help of SMS extension in all the discipline. 8. Try to use the square shape stool in OFT of milking stool & stand. 9. To develop the success story on Soya products making and increase the group size of Soya product farm women. Support for marketing of Soya product. 10. Use the sticky trap for sucking pest in IPM module demonstrations. 11. To develop the success stories of progressive farmers of the district. 12. To prepared the proposal for processing unit of Soybean and submit the respective authority for sanction. 13. To make the farmers aware about mushroom cultivation technologies and start unit at farmer's field. 14.Technologies to be demonstrated for crop rotation in maize. 15. Weightage should be given on effect of climate change in agriculture during training programme. 16. To make the farmers aware about SKY scheme, DFI villages should be selected for implementation. This scheme is implemented by MGVCL, so try to convergence with them for scheme. 17. To make the farmers aware regarding formation of FPO with the help of NABARD. 18. In paddy use GAR-14 variety.	

2. DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
Crop	Agril.alone Agril.Horticulture Agril.-Animal Husbundary Agril.-silviculture
Enterprise	Agriculture and Animal Husbandry

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

a. Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1	Middle Gujarat zone III	Average rain fall is 800-1000 mm. Geographically Vadodara district is located between 21^0 49' to 22^0 49' north latitude and 72^0 51' to 74^0 17' east longitude

b) Topography

S. No.	Agro ecological situation	Characteristics
1	Sandy loam soil with high rain fall	Altitude (in meter above MSL): 25-75 Taluka : Vadodara, Padara, Savli, Dabhoi, Waghodia
2	Medium black soil with high rain fall	Altitude (in meter above MSL): 75-150 Taluka :Pavijetpur, Chhotaudaipur, Naswadi, Karjan
3	Deep black soil with high rain fall	Altitude (in meter above MSL): 25-75 Taluka: Dabhoi, Sankheda, Shinor, Karjan
4	Light soil with high rain fall	Altitude (in meter above MSL): 150-300 Taluka: Chhotaudaipur (tribal base)

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Black soil	Moderate to severe erosive Poor soil Fertility Poor Irrigation facility	88864
2	Medium black	Water logging Very Poor Permeabliity Poor Soil Physical condition Low to medium in N & P Content	208646
3	Sandy loam	Highly erosive Shallow to medium in depth Poor permeability Low to medium N & P content	174021
4	Sandy	Sand soils are often dry, nutrient deficient and fast-draining. They have little (or no) ability to transport water from deeper layers through capillary transport.	36305
5	Salt affected	saline soils are those which have an electrical conductivity of the saturation soil extract of more than 4 dS/m at 25°C , Sodium and chloride are by far the most dominant ions	4888

2.4. Area, Production and Productivity of major crops cultivated in the district (2016-17)

Sr. No.	Crop	Area (ha)	Production (MT.)	Productivity (kg/ha)
A	**Kharif**			
1	Cotton	141657	509965	1800
2	Paddy Irrigated	23405	112344	4000
	Un irrigated	42400	106000	2500
3	Castor	20890	41780	2000
4	Maize	37700	75400	2000
5	Pigeon Pea	96472	115766	1200
6	Green gram	185	185	1000
7	Black gram	11514	9211	800
8	Tobacco	5415	8664	1600
9	Soybean	14183	21275	1500
B	**Rabi**			
1	Wheat	21500	60200	2800
2	Gram	280	336	1200
3	Maize	46449	255470	5500
C	**Summer**			
1	Groundnut	6945	15279	2200
2	Bajara	6735	23573	3500
3	Sesamum	50	20	400
4	Green gram	497	547	1100
5	Fruits	27885	1001072	35900
6	Vegetables	58906	1093884	18570

Statistical Dept., Govt.of Gujarat (2016-17)

2.5. Weather data (2018-19)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April'18	0	39.4	19.8	50.2	28.4
May'18	0	41.1	24.7	58.3	28.4
June'18	79.6	38.1	27.2	73.6	39.9
July'18	359.1	30.1	25.4	84.7	85.5
Aug'18	175.4	30.2	25.8	84.3	79.6
Sept'18	60.9	30.3	25.1	77.4	72.1
Oct'18	0	34.9	24.4	65.7	43.1
Nov.'18	0	32.7	19.8	71.3	36.6
Dec.'18	0	29.0	13.5	50.8	27.2
Jan.'19	0	30.0	9.4	52.0	26.1
Feb.'19	0	32.2	9.6	65.0	21.0
March.'19	0	39.8	15.6	62.0	22.0

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

Category	Population(00 No)	Production(mt)	Productivity(kg/day)
Cattle			
Crossbred	4860	33.71	11.85
Indigenous	2694	102	5.53
Buffalo	5878	253	6.24
Sheep	132	4.12	932
Goats	2916	13.45	0.66
Poultry			
Hens	3323	160.55	125
Desi	-	-	-

Statistical Report Govt.of Gujarat (2014-15)

2.7. Details of Operational area / Villages

Sl No	Tehsil	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Sankheda	Sankheda	Saradiya, Raipur, Sundarpura Kathmandva, Navapura, Ambapura Vagetha Deroli Amalpur Fajalpura Bamroli Manjrol Golgamdi Vatvatiya Amroli Timbi Kotiya	***Kharif*** Cotton Pigeonpea Castor Banana Vegetables ***Rabi*** Maize Wheat **Summer** Greengram	**Cotton :** 1. Higher application of nitrogenous fertilizers 2. Improper water management 3. No use of micronutrients 4. Problem of pest & diseases 5. Depends only on manual weeding **Pigeon pea** 1. Improper spacing 2. Use of higher seed rate 3. Improper pest and disease management 4. Improper water management 5. Depends only on manual weeding **Castor** 1. Use of higher seed rate 2. Improper spacing 3. Indiscriminate use of fertilizer 4. Improper water management 5. Problems of wilt, rootrot and semi looper **Banana** 1.No use of tissue culture plants 2. Not follow seed treatment to rhizome 3. Excess use of fertilizer 4. Excess use of water 5. Improper disease management **Maize** 1. Use of higher seed rate 2. Improper spacing 3. Higher application of nitrogenous fertilizer 4. Improper water management **Greengram** 1. Use of local seeds 2. Use of higher seed rate 3. Improper water management 4. Improper pest and disease management **Groundnut** 1.Use of local seeds 2.No use of micronutrients 3. Improper weed management	 INM Water Mgt. IPM IWM ICM INM IPM IWM ICM INM IWM IPM ICM IPM IDM IWM ICM INM IWM ICM IPM`    ICM IPM` IWM
2.	Naswadi	Naswadi	Dhamasiya Pochamba Payakui Kolamba Akona	***Kharif*** Cotton Paddy Castor ***Rabi*** Wheat Gram **Summer** Greengram	**Paddy** 1.Use of local seeds 2.Application of higher dose nitrogenous fertilizer 3.No use of micronutrients 4. T.P. at random method 5.In adequate and delayed plant protection 6.Use more seed rate 7.Problem of BLB, Hopper and stem borer **Wheat** 1. Use of local seeds 2. Delayed sowing	 ICM SRI INM IPM INM IWM ICM ICM

				Groundnut	3. Use of higher rate of seed 4. Improper water management 5. Improper nutrient management 6. No use of micronutrients and Bio-fertilizers **Greengram** 1. Use of local seeds 2. Use of higher seed rate 3. Improper water management 4. Improper pest and disease management **Groundnut** 1.Use of local seeds 2.No use of micronutrients 3. Improper weed management	INM IPM IDM ICM INM IPM IDM ICM IPM` IWM
3.	Waghodiya	Waghodiya	Goraj, Rojyapura Nurpuri Dolapura	***Kharif*** Cotton, Pigeonpea, Castor Vegetables ***Rabi*** Maize Gram **Summer** Greengram	**Cotton :** 1. Higher application of nitrogenous fertilizers 2. Improper water management 3. No use of micronutrients 4.Problem of pest & diseases 5. Depends only on manual weeding **Pigeonpea** 1. Improper spacing 2. Use of higher seed rate 3. Improper pest and disease management 4. Improper water management 5. Depends only on manual weeding **Castor** 1.Use of higher seed rate 2.Improper spacing 3.Indiscriminate use of fertilizer 4.Improper water management 5. Problems of wilt, rootrot and semi looper **Maize** 1. Use of higher seed rate 2. Improper spacing 3. Higher application of nitrogenous fertilizer 4. Improper water management **Greengram** 1. Use of local seeds 2. Use of higher seed rate 3. Improper water management 4. Improper pest and disease Management	INM IWM IPM Water Mgt. ICM INM IPM IWM ICM INM IWM IPM ICM INM IWM ICM INM IWM
4.	Kawant	Kawant	Khatiyawat Karajwant Raypur Piplada Kanalva Gordha Kanas Rangpur Vaniyadri	***Kharif*** Cotton, Pigeonpea, Castor Vegetables ***Rabi*** Maize Gram **Summer** Greengram	**Cotton :** 1. Higher application of nitrogenous fertilizers 2. Improper water management 3. No use of micronutrients 4.Problem of pest & diseases 5. Depends only on manual weeding **Pigeonpea** 1. Improper spacing 2. Use of higher seed rate 3. No use of micronutrients 4. Improper pest and disease management 5. Improper water management	INM IWM IPM Water Mgt. ICM INM IPM IWM ICM INM IWM IPM

					6. Depends only on manual weeding **Maize** 1. Use of higher seed rate 2. Improper spacing 3. No use of micronutrients 4. Higher application of nitrogenous fertilizer 5. Improper water management	 ICM INM IWM
5.	Pavijetpur	Pavijetpur	Ranbhunghati Butiyapura Kallarani Haripura Deriya Kosum Amalaug Shithol Shihod	***Kharif*** Cotton, Pigeonpea, Castor Vegetables ***Rabi*** Maize Gram **Summer** Greengram	**Paddy** 1.Use of local seeds 2.Application of higher dose nitrogenous fertilizer 3.No use of micronutrients 4. T.P. at random method 5.In adequate and delayed plant protection 6.Use more seed rate 7.Problem of BLB, Hopper and stem borer **Cotton :** 1. Higher application of nitrogenous fertilizers 2. Improper water management 3. No use of micronutrients 4.Problem of pest & diseases 5. Depends only on manual weeding **Maize** 1. Use of higher seed rate 2. Improper spacing 3. No use of micronutrients 4. Higher application of nitrogenous fertilizer 5. Improper water management	 INM IWM IPM Water Mgt. ICM INM IPM IWM ICM INM IWM
6	Bodeli	Bodeli	Kapdiya Nana Butiyapura Ranbunghati MotaButiyapura Navapura Kathmandva Pitha Bhagwanpura Tadndlja Khodiya Dholpur	***Kharif*** Cotton Pigeonpea Castor Banana Vegetables ***Rabi*** Maize Wheat **Summer** Greengram Groundnut	**Cotton :** 6. Higher application of nitrogenous fertilizers 7. Improper water management 3. No use of micronutrients 9. Problem of pest & diseases 10.Depends only on manual weeding **Pigeon pea** 1. Improper spacing 2. Use of higher seed rate 3. Improper pest and disease management 4. Improper water management 5. Depends only on manual weeding **Castor** 6. Use of higher seed rate 7. Improper spacing 8. Indiscriminate use of fertilizer 9. Improper water management 10. Problems of wilt, rootrot and semi looper **Banana** 1.No use of tissue culture plants 2. Not follow seed treatment to rhizome 3. Excess use of fertilizer 4. Excess use of water 5. Improper disease management **Maize**	 INM IWM IPM Water Mgt. ICM INM IPM IWM ICM INM IWM IPM ICM IPM IDM IWM ICM

					1. Use of higher seed rate 2. Improper spacing 3. Higher application of nitrogenous fertilizer 4. Improper water management **Greengram** 1. Use of local seeds 2. Use of higher seed rate 3. Improper water management 4. Improper pest and disease management **Groundnut** 1.Use of local seeds 2.No use of micronutrients 3. Improper weed management	INM IWM ICM IPM ICM INM IWM
7.	Chhotaudepur	Chhotaudepur	Dhandoda Rangpur,Zoz NaniDumali MotiDumali Rojkuva	***Kharif*** Cotton, Pigeonpea, Castor Vegetables ***Rabi*** Maize Gram **Summer** Greengram	**Cotton :** 1. Higher application of nitrogenous fertilizers 2. Improper water management 3. No use of micronutrients 4.Problem of pest & diseases 5. Depends only on manual weeding **Pigeonpea** 1. Improper spacing 2. Use of higher seed rate 3. No use of micronutrients 4. Improper pest and disease management 5. Improper water management 6. Depends only on manual weeding **Maize** 1. Use of higher seed rate 2. Improper spacing 3. No use of micronutrients 4. Higher application of nitrogenous fertilizer 5. Improper water management	INM IWM IPM Water Mgt. ICM INM IPM IWM ICM INM IWM IPM ICM INM IWM

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Cotton	Integrated Nutrient Management Integrated Pest Management Integrated Weed management Varietal evaluation
Rice	Varietal evaluation Water Management Integrated Weed Management Integrated Nutrient management Integrated pest Management
Pigeonpea	Varietal evaluation Production and use of organic inputs Integrated pest Management
Gram	Varietal evaluation Production and use of organic inputs Integrated pest Management
Wheat	Integrated crop management Varietal evaluation Integrated weed management Integrated Nutrient management
Maize	Varietal evaluation Integrated Nutrient Management Integrated weed management

Castor	Integrated Pest & Disease Management Varietal evaluation Integrated Nutrient Management Water Management
Green gram	Varietal evaluation Integrated Pest & Disease Management
Urd bean	Varietal evaluation Integrated Pest & Disease Management
Soybean	Varietal evaluation Integrated Pest & Disease Management
Cucurbits	Integrated Pest & Disease Management Integrated Nutrient management
Banana	Integrated Nutrient Management Integrated Weed management Water Management
Vegetables	Integrated Pest & Disease Management Integrated Nutrient management Nursery Management
Animal husbandry	Management of Dairy animal for maximize the milk production Clean milk production Animal Health management
Home science	Nutritional security for women and child popularize the drudgery reduction technology Value addition Income generation activity

3. TECHNICAL ACHIEVEMENTS

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

OFT				**FLD**			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
10	**10**	**68**	**68**	**15**	**14**	**600**	**575**
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
98	**111**	**2815**	**3159**	**732**	**734**	**21259**	**36834**
Seed Production (Qtl.)				Planting materials (Nos.)			
5				6			
Target		Achievement		Target		Achievement	
20		**12**		**100000**		**78950**	
Livestock, poultry strains and fingerlings (No.)				Bio-products (Kg)			
7				8			
Target		Achievement(Livestock)		Target		Achievement	
---		Goat (Surati)	06	---		---	
		Achievement(Poultry)					
		Eggs	680				
		Birds	87				

3.1. B. Operational areas details during 2018-19

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	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1.	Cotton	Injudicious use of chemical pesticides and lack of knowledge	525	Pitha, Saradiya	OFT On Assessment of IPM module for sucking pest in cotton
		Not using of bio pesticides	2000	Pitha, Vaniyadri	Training & method demonstration.
		Not using IPM Module.	1500	Sundarpura	FLD on IPM. Training and Field day.
		Non use of improved varieties.	200	Raipur,Kanalwa	FLD on Introduction of High density verity GTHH-49. Training and Field day.
		Not follow proper weed management practices.	1000	Raipur,Kanalwa	Training and Group meeting
		Not use of bio-fertilizer and Micro nutrient.	2000	Raipur,Kanalwa	Training and Group meeting
3	Maize	Not using of bio pesticides	550	Kathmandva, Navapura	FLD on bio-pesticide and Training and Field day.
		Low productivity Maize in intercropping system.	45	Kathmandva, Navapura	OFT on Assessments of varieties of Maize under inter cropping of Bt cotton.
		Not follow proper weed management practices.	200	Kathmandva, Navapura	Training and Group meeting
		Not use of bio-fertilizer and Micro nutrient.	250	Kathmandva, Navapura	Training and Group meeting
4	Urdbean	Non use of improved varieties.	450	Kanas, Rangpur,Surshi	OFT On Assessment of different varieties of urdbean under un irrigated/ rainfed condition. FLD on improve yielding variety pu-31/NUL-7
		Not follow proper weed management practices.	250	Rangpur, Surshi	Training and Group meeting
		Not using IPM Module.	250	Rangpur, Surshi	Training and Group meeting
5	Soybean	Non use of improved varieties.	300	Kanalva, Gordha	FLD on High yield Variety RVS 2001-04/NRC-37 and Field day
		Not follow proper weed management practices.	350	Kanalva, Gordha	Training and Group meeting
		Not using IPM Module.	320	Kanalva, Gordha	Training and Group meeting

6	Green gram	Non use of improved varieties.	150	Pitha Bhagvanpura	FLD on High yield Variety GAM-5 and Field day and training.
		Not follow proper weed management practices.	100	Jamli, Bhagvanpura	Training and Group meeting
		Not using IPM Module.	100	Bodeli	Training and Group meeting
7	Pigeon pea	Non use of improved varieties.	250	Golagamdi, Manjrol	FLD on High yield Variety Vaishali/ AGT-2 and Field day.
		Not follow proper weed management practices.	150	Golagamdi, Manjrol	Training and Group meeting
		Not using IPM Module.	150	Golagamdi, Manjrol	Training and Group meeting
8	Chilli	No use of weedicides High infestation of Leaf curl virus Poor Yield	100	Tokarva,Vaniyadri Fajalpura,Kathmandava	FLD on IWM in chilli Training on cultivation Practices, IPM and INM
9	Okra	Low yield Use of YVM susceptible varieties. Poor Knowledge of improved cultivation practices Improper use of fertilizer and pesticides.	150	Shihod, Shithol,Nana Butiyapura,Tokarva Ranbhun ghati	OFT On Assessment of Varieties of Okra Training on improved cultivation Practices like INM,IPM
10	Tomato	Low yield Poor Knowledge of improved cultivation practices Improper use of fertilizer and pesticides.	200	Tadndija, Dholpur, Kalarani,Khodiya Panej,Fajalpura Ambapura,	OFT On Assessment of Varieties of Tomato Healthy seedling Provision Training on INM and IPM in tomato
		High infection of TLMV, Late blight Yield losses due to diseases	200	Kalarani,Khodiya Panej,Fajalpura Kathmandava	FLD on Arka Rakshak Healthy seedling Provision Training on improved cultivation Practices
11	Brinjal	Injudicious use of chemical pesticides and Not using bio pesticides Infestation of fruit and shoot borer	70	Dhroliya Tokarva,Vaniyadri Panej,Khodiya Kathmandava	OFT On Assessment of IPM module for shoot and fruit borer in Brinjal Healthy seedling Provision of GOAB 2 Training on cultivation Practices with INM, IPM etc.
12	Banana+ Cabbage	Not following inter cropping in banana	100	Ambapura,Muldhar Fajalpura,	FLD on Inter Cropping with Cabbage(1:4) Training on INM and Irrigation management
13	Nutritional security by kitchen garden	Poor health and nutritional status of farm families	100 Nos	Kacchata,, Sundarpura, Khodiya	FLD & Training on Kitchen garden (Nutritional security by kitchen garden)
14	Drudgery reduction through Revolving stool	Drudgery involved in farm women during milking No. use of milking stool/stand.	10No.	Bhagwanpura Golagamdi	OFT On Assessment on Use of revolving stool and stand for milking

15	Drudgery reduction through cotton picking bags	Decrease working efficiency Musculoskeletal problems in farm women	50 Nos	Khatmadva, Bhagwanpura	FLD on Drudgery reduction through cotton picking bags
16	Harvesting mittens	Drudgery involved in farm women during harvesting of soybean crop	20 Nos.	Bhagwanpura Golagamdi	OFT On Assessment on use of soybean harvesting mittens.
17	Back yard Poultry	Low body weight Less eggs production	All local native breeds	Kanlva, sundrapura,vatvtiya	OFT On Assessment of three way cross breed under Back yard poultry
18	Feed Mang.in Milch Animal.	Low milk yield	200	Sundrapura, bhagwanpura,vatvatiya	. Training and Group meeting
		Problem of heat detection	100	Sundrapura, bhagwanpura,vatvatiya	OFT On Assessment of ovsynch protocol in Buffalo.
		Repeat breeding problem	150	Butiyapua,sundrapura, bhagwanpura	OFT On Assessment of ovsynch protocol in Buffalo.
		Problem of Anestrus and Silent Heat	100	Butiyapua,sundrapura, bhagwanpura	OFT On Assessment of ovsynch protocol in Buffalo.
		Long calving interval	150	Butiyapua,sundrapura, bhagwanpura	OFT On Assessment of ovsynch protocol in Buffalo.
19	Fodder Production	Low yield of fodder	250	Vanyadri, sundarpur , saradiya,butiyapura	FLD on Sorghum var. Cofs-29
		Non use of improved varieties	150	Vanyadri, sundarpur , saradiya,butiyapura	FLD on Sorghum var. Cofs-29
20	Feed Mang.in Milch Animal.	No feeding of by pass protien	200	Vanyadri, sundarpur , saradiya,butiyapura	FLD on Bypass protein feed
		Low milk yield and poor reproduction in cross bred cow	200	Vanyadri, sundarpur , saradiya,butiyapura	FLD on Bypass protein feed
21	Feed Supplement for milking Buffalo	Low milk yield and poor reproduction in buffalo	300	Vanyadri, sundarpur , saradiya,butiyapura, bhagwanpura	FLD on Bypass protein feed
		Long inter calving period	250	Vanyadri, sundarpur ,saradiya,butiyapura, bhagwanpura	FLD on Bypass protein feed
		Imbalance feeding	300	Vanyadri, sundarpur , saradiya,butiyapura ,bhagwanpura	. Training and Group meeting

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	Others	TOTAL
Varietal Evaluation	1				2					3
Integrated Crop Management		1								1
Integrated Pest Managemnet		1			1					2
Drudgery Reduction			1						1	2
Total	**1**	**2**	**1**		**3**				**1**	**8**

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	1	1	0	0	0	2

B. Achievements on technologies Assessed and Refined

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Varietal Evaluation	Black gram	Assessment of different varieties of Blackgram under un irrigated/ rainfed condition	03	03	1.2 ha
	Okra	Assessment of Varieties of Okra	03	03	1.2 ha
	Tomato	Assessment of Varieties of Tomato	03	03	1.2 ha
Integrated Crop Management	Cotton	Assessments of varieties of Maize under inter cropping of Bt cotton.	03	03	1.2 ha
Integrated Pest Management	Cotton	Assessment of management practices for sucking pest in cotton	03	03	1.2 ha
	Brinjal	Assessment of IPM module for shoot and fruits borer in Brinjal	03	03	1.2 ha
Drudgery Reduction	Milking Stand	Assessment on Use of revolving stool and stand for milking	10	10	-
	Harvesting Mittens	Assessment on use of soybean harvesting mittens.	20	20	-
Total			**48**	**48**	

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
Production and management	Buffalo	Assessment of ovsynch protocol in Buffalo.	10	10
Production and management	Poultry	Assessment of three way cross breed in back yard poultry	10	10
Total			**20**	**20**

C1.Results of Technologies Assessed- Results of On Farm Trial – Agronomy -1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Blackgram	Rainfed	Low productivity	Assessment of Blackgram under rainfed condition.	3	T1	**Intensity of YVM @ %**		Trials continue…			
						30 DAS 45 DAS 60DAS	2 4-5 10-20				
						Plant population/ m2 45 DAS	15-18				
						No.of Pods/Plants	40-50				
						No.of Branches	4-5				
					T 2	**Intensity of YVM @ %**					
						30 DAS 45 DAS 60DAS	0 0 2-5				
						Plant population/ m2 45 DAS	18-20				
						No.of Pods/Plants	55-62				
						No.of Branches	4-5				
					T 3	**Intensity of YVM @ %**					
						30 DAS 45 DAS 60DAS	0 0 2-5				
						Plant population/ m2 45 DAS	18-20				
						No.of Pods/Plants	53-60				
						No.of Branches	4-5				

Contd...

Technology Assessed	Source of Technology	Production	Please give the unit (t/ha)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 (FP)	G B Pant Uni. Of Agriculture Technology, Pantnagar	6.0	q/ha	10000	1.5
Technology option 2 Pant Urd-31		7.6	q/ha	18000	1.9
Technology option 3 Pant Urd-40		7.3	q/ha	16500	1.8

C2 .1 Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

Title	**:**	Assessment of different varieties of Blackgram under un irrigated/ rainfed condition
Problem diagnose/defined	**:**	• Low productivity • No use of improved varieties.
Details of technologies selected for assessment /refinement	**:**	**Treatments** T_1 : Farmers practices (Market available seed) T_2 : To be assessed : Pant Urd-31 T_3 : To be assessed : Pant Urd-40
Source of technology	**:**	G.B.Pant University of Agril & Technology, Pantnagar (2008)
Production system	**:**	Rain fed Condition & Varietal assessment
Thematic area	**:**	ICM
No. of Trials	**:**	03
Plot size and total area (ha)	**:**	0.4 x 3 =1.2 ha
Spacing	**:**	45 cm
Performance indicator 1. Indicator - I 2. Indicator - II 3. Indicator - III	: : :	**Technical Observation:(Indicator -I)** • No. of Plant infected due to YVM at 30, 45, 60 DAS. • Plant Population and number of pods/plant. • Number of branch per plant. • Suitability of variety for area specific cultivation. **Economic Indicator:(Indicator - II)** • Yield of each variety • Benefit cost ratio **Farmer Reflection:(Indicator – III)** • Seed quality as per market demand. • Keeping quality of Seed.

Farmer Reflection:

- **Seed/ grain quality as per market demand.**
- **YVM infestation not found.**

2.0 Results of On Farm Trial – Agronomy -2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cotton: Maize	Rainfed	Low productivity	Assessment of varieties of Maize under intercropping of BT Cotton	3	T1	Days of maturity	100-105	Trials continue…			
						No. of cob/plant	1				
					T2	Days of maturity	80-85				
						No. of cob/plant	1				
					T3	Days of maturity	80-85				
						No. of cob/plant	1-2				

Contd….

Technology Assessed	Source of Technology	LER	Yield (kg/ha)		Net Return (Profit) in Rs./ unit	BC Ratio
13	14	15	16		17	18
Treatments			Cotton:	Maize:		
Farmers practices: Bt Cotton + Maize (cv.Rasi-4794) 1:1	AAU, Anand	1.45	1650	2200	71900	2.49
To be assessed : Bt Cotton + Maize (cv.GAWMH-2)1:1		1.38	1700	1900	70400	2.46
To be assessed : Bt Cotton + Maize (cv.Narmada moti)1:1		1.39	1750	1850	72250	2.80

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

Title	**:**	Assessment of varieties of Maize under intercropping of Bt cotton.
Problem diagnose/defined	**:**	• Low productivity • Non use of improved varieties
Details of technologies selected for assessment /refinement	**:**	**Treatments** T_1 : Farmers practices: BT Cotton + Maize (Local Seed) 1:1 T_2 : To be assessed :BT Cotton + Maize (cv.GAWMH-1)1:1 T_3 : To be assessed : Bt Cotton + Maize (cv.Narmada moti)1:1
Source of technology	**:**	AAU,Anand (2013)
Production system	**:**	Rain fed/ Un irrigated
Thematic area	**:**	Cotton base cropping system
No. of Trials	**:**	3
Plot size and total area (ha)	**:**	0.4 x 3 = 1.2 ha
Spacing	**:**	120 x 30 cm
Performance indicator 1. Indicator - I 2. Indicator - II 3. Indicator - III	**:** **:** **:**	**Technical Observation:(Indicator -I)** ▪ Check suitability of each variety of maize in inter cropping system. ▪ Days of maturity. ▪ No. of cob/plant. **Economic Indicator:(Indicator - II)** ▪ Crop equivalent Yield. ▪ LER of each treatment. ▪ Benefit cost ratio **Farmer Reflection:(Indicator – III)** • Suitability of domestic (food) purpose.

Farmer Reflection:-

- **Due to short duration of variety cv. GAWMH-2 & Narmada Moti is benefitted to cotton crop..**
- **It is highly suitable of domestic (food)/ rotala) purpose.**

3.0 Results of On Farm Trial – Animal Science -1

Crop/ enterprise	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of Assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9
Buffalo	Problem of heat detection Repeat breeding problem Problem of anoestrus and silent heat Long calving interval Low milk yield	Assessment of ovsynch protocol in buffalo	10	Treatments T_1 : Farmers practice (NO specific treatment)	Heat induction and conception rate	Out of 10 animals 2 showed poor estrous	In anoestrus buffaloes, during winter seasons, The percent estrus induction 70% and conception rate 60%(out of 10 animals 6 conceived)	Satisfied and understand the importance of ovsynch protocol and feed and fodder management
				T_2 : Ovsynch protocol Detail of ovsynch protocol Day -0 inj. .recepta 2.5 ml Day -7 inj. Lutalyse 5.0 ml Day-9 inj. .recepta 2.5 ml Day-10 morning insemination and evening insemination	Heat induction and conception rate	Out of 10 animals 7 showed estrous cycle and 6 animals conceived.		

Contd….

Technology Assessed	*Production per unit (ltr/day)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T_1 : Farmers practice (NO specific treatment)	Out of 10 animals 2 showed poor estrous	-	-
T_2 : Ovsynch protocol Detail of ovsynch protocol Day -0 inj. . .recepta 2.5 ml Day -7 inj. Lutalyse 5.0 ml Day-9 inj. .recepta 2.5 ml Day-10 morning insemination and evening insemination	Out of 10 animals 7 showed estrous cycle and 6 animals conceived.	-	-

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

Title	**Assessment of ovsynch protocol in buffalo**
Problem diagnose/defined	• Problem of heat detection ,Repeat breeding problem, Problem of anoestrus and silent heat • Long calving interval, Low milk yield
Details of technologies selected for assessment /refinement	**Treatments** T_1 : Farmers practice (No specific treatment) T_2 : Ovsynch protocol Detail of ovsynch protocol Day -0 inj. .recepta 2.5 ml Day -7 inj. Lutalyse 5.0 ml Day-9 inj. .recepta 2.5 ml Day-10 morning insemination and evening insemination
Source of technology	AAU,Anand & NDRI, Karnal (2012)
Production system & Thematic Area	Animal production & semi-intensive system
Thematic area	Animal production & management
Performance of the Technology with performance indicators	Heat induction and conception rate
Feedback of technology	Satisfied and understand the importance of ovsynch protocol and feed and fodder management.

Farmer reflection :-

Reduce inter calving and dry period ,increase milk production

4.0 Results of On Farm Trial – Animal Science -2

Animal	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of Assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9
Poultry	• Low body weight • Less eggs production • More age at first egg production • Higher mortality of chicks	Assessment of three way cross breed in back yard poultry	10	**Treatments** T_1: Farmers practice – Local native (desi) birds rearing under back yard.	Body weight (gm) 20 weeks	860 (M) 810 (F)	Fast growth rate with average adult body weight of 20 week of age 1470 gm. (M) and 1255 gm (F), Higher egg production, which is four time higher the local native.	• Attractive multi color feather patterns as rural people like coloured birds. • Good adaptability in backyard / free range. • fast growth rate and higher egg production as compared to local native.
					egg production (No.of Egg)	43 egg /year		
				T_2: Triple cross birds under backyard. (Recom. AAU,Anand)	Body weight (gm) 20 weeks	1470 (M) 1255 (f)		
					egg production (No.of Egg) upto 40 weeks	62 egg (190 per year)		

Contd….

Technology Assessed	*Production per unit (ltr/day)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T_1: Farmers practice – Local native (desi) birds rearing under back yard.	Body weight (g) at 20 week 860 (M) and 810 (F) egg production 43 eggs/year	4423	2.03
T_2: Triple cross birds under backyard. (Recom. AAU)	Body weight (g) at 08 week 530, 20 week 1470 (M) 1255 (F) and 40 week 1485 (F) egg production 62 eggs up to 40 weeks Age at first egg production 160 days	8859	3.07

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

Title	**Assessment of three way cross breed in back yard poultry**
Problem diagnose/defined	• Low body weight • Less eggs production • More age at first egg production • Higher mortality of chicks
Details of technologies selected for assessment /refinement	**Treatments** T_1: Farmers practice – Local native (desi) birds rearing under back yard. T_2: Triple cross birds under backyard. (Recom. AAU)
Source of technology	AAU,Anand (2016)
Production system & Thematic Area	Poultry management
Thematic area	Poultry Management
Performance of the Technology with performance indicators	Increase egg production and fast growth rate
Feedback,of technology	• Attractive multi color feather patterns as rural people like coloured birds. • Good adaptability in backyard / free range. • Fast growth rate and higher egg production as compared to local native.

Farmer reflection:

Fast growth rate and higher egg production as compared to local native

Results of On Farm Trial – Home Science -1

5.0 Results of On Farm Table 1 :- Work output of milking animal with traditional and improved method

Name of Activity	**Parameter of observation**	**Traditional method**	**Improved method**	**% change due to technology**
Milking animal	Time required for milking (min/animal)	5.32	5.07	4.69%
	Drudgery Score	7	6	14.29%

Table 2: Perception of farmwomen about localized postural discomfort while milking animal

Level of Localized discomfort	**No. of Farm women rated their perception**									
	Neck		**Shoulder joint**		**Low back**		**Upper leg/thigh**		**Ankles/feet**	
	T	**I**	**T**	**I**	**T**	**I**	**T**	**I**	**T**	**I**
No discomfort (0)										
Some discomfort (1)								1		2
Minor discomfort (2)		6		10		4		8		8
Major discomfort (3)	8	4	10		3	6	3	1	4	
Severe discomfort (4)	2				6		7		6	
Very severe discomfort (5)					1					
Critically index	**6. 4**	**4.8**	**6**	**4**	**7.6**	**5.2**	**7.4**	**4.0**	**7.2**	**4**

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

Title	:	Assessment on Use of revolving stool and stand milking.
Problem diagnose/defined	:	Drudgery involved in farm women during milking No. use of stool/stand for milking.
Details of technologies selected for assessment /refinement	:	T1 – Traditional method T2 – Technology Assessed - Revolving stool& Stand for milking
Source of technology	:	AICRP- Home Science ,MPUAT (2005)
Production system & Thematic Area	:	Drudgery reduction
Thematic area	:	Drudgery reduction
No. of Trials	:	10
Performance indicator	: : :	1. Time requirement for milking activity 2. Reduction in drudgery (work posture squatting, Muscular skeletal problems.)

Farmer reflection:

- ***Reduce the pain in back, legs, knees and feet due to comfortable posture.***
- ***Work efficiency enhanced.***

6.0 Results of On Farm Trial – Home Science -2

Name of Activity	Parameter of observation	Traditional method	Improved method	% change due to technology
Cutting soybean plants with sickle	Work done / unit time (sqmt/hr)	129.71	149.82	15.5
	Work done / unit time (kg/hr)	145.0	158.4	9.24

Table 2: Perception of farmwomen about localized postural discomfort while performing soybean harvesting

Level of Localized discomfort	No. of Farm women rated their perception																	
	A		B		C		D		E		F		G		H		I	
	T	I	T	I	T	I	T	I	T	I	T	I	T	I	T	I	T	I
No discomfort (0)																		
Some discomfort (1)						7												
Minor discomfort (2)	9	9	4	4		13					8	8	8	8	11	11		14
Major discomfort (3)	11	11	9	9	5		13	13	13	13	12	12	12	12	9	9	15	6
Severe discomfort (4)			11	11	15		7	7	7	7							5	
Very severe discomfort (5)																		
Critically index	**5.1**	**5.1**	**7.9**	**7.9**	**7.5**	**3.3**	**6.7**	**6.7**	**6.7**	**6.7**	**5.2**	**5.2**	**5.2**	**5.2**	**4.9**	**4.9**	**6.5**	**4.6**

Description of parameters: **A**- Discomfort of Neck, **B**- Discomfort of Back, **C**- discomfort of Fingers, **D**- Discomfort of Left shoulder/Neck, **E**- discomfort of Right shoulder/Neck, **F**- Discomfort of Left Leg, **G**- Discomfort of Right leg, **H**- Discomfort of Feet, **I**- Discomfort of Whole body

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

Title	:	Assessment on use of soybean harvesting mittens.
Problem diagnose/defined	:	Drudgery involved in farm women during harvesting of soybean crop.
Details of technologies selected for assessment /refinement	:	T1 – Traditional method T2 – To be Assessed–Use of Soybean harvesting mittens.
Source of technology	:	VNMKU, Parbhani (2013)
Production system & Thematic Area	:	Drudgery reduction
Thematic area	:	Drudgery reduction
No. of Trials	:	20
Performance indicator	: : :	1. Work output : Work done/ Unit (Kg/hr) 2. Work output : Work done/ Unit (sq.mt/hr) 3. Drudgery score

Farmer reflection:

Reduce in discomfort rating & health hazards during harvesting & collecting plants of soybean.

7.0 Results of On Farm Trial – Horticulture-1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Okra	Irrigated	Low productivity	Assessment of Variety in Okra	3	T1	**No. of Plant infected due to YVM**		Trials continue…			
						30 DAP 45 DAP 60 DAP	33 62 78				
						Plant Population /m2	07				
					T2	**No. of Plant infected due to YVM**					
						30 DAP 45 DAP 60 DAP	00 12 31				
						Plant Population /m2	07				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (q/ha)	Net Return (Profit) in Rs./ unit	BC Ratio
13	14	15	16	17	18
Treatments	AAU				
T_1: Farmers practice- Local Hyb. Variety		68	q/ha	74790	3.31
T_2: Guj. Anand Okra-5		85	q/ha	93500	3.66

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

Title	:	Assessment of Varieties of Okra
Problem diagnose/defined	:	Low yield Use of YVM susceptible varieties. Poor Knowledge of improved cultivation practices Improper use of fertilizer and pesticides.
Details of technologies selected for assessment /refinement	:	Treatments T_1: Farmers practice- Local Hyb. Variety T_2: Guj. Anand Okra-5
Source of technology	:	AAU,Anand (2011)
Production system & Thematic Area	:	Irrigated/ Sole vegetable
Thematic area	:	ICM
No. of Trials	:	03
Plot size and total area (ha)	:	1.20 ha (0.40 x 3)
Spacing	:	45 x 20 cm
Performance indicator Indicator - I Indicator - II Indicator - III	: : :	**Technical Observation**:- No. of Plant infected due to YVM at 30, 45, 60 DAP Plant Population Suitability of variety for area specific cultivation. **Economic Indicator:-** Yield of variety Benefit cost ratio **Farmer Reflection:-** Fruit quality as per market demand. Keeping quality of fruits.

Farmer Reflection:-

(1)Fruits are long and tendor with dark green colour help in getting more market price

(2) Very less infestation of YVM

8.0 Results of On Farm Trial – Horticulture-2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Tomato	Irrigated	• Low yield • Poor Knowledge of improved cultivation practices • Improper use of fertilizer and pesticides.	Assessment of Varieties of Tomato	3	T1	Plant Population /ha	24600	Trials continue…			
						No. of fruits per plant.	28-32				
					T2	Plant Population /ha	24600				
						No. of fruits per plant.	34-38				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (q/ha)	Net Return (Profit) in Rs./ unit	BC Ratio
13	14	15	16	17	18
Treatments					
T_1 : **Tomato var. AT-3**	AAU	223	q/ha	178400	3.50
T_2: **Tomato var. GAT-5**		276	q/ha	220800	3.85

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

Title	**:**	**Assessment of Varieties of Tomato**
Problem diagnose/defined	**:**	• **Low yield** • **Poor Knowledge of improved cultivation practices** • **Improper use of fertilizer and pesticides.**
Details of technologies selected for assessment /refinement	**:**	**Treatments** **T_1 : Tomato var. AT-3** **T2: Tomato var.GAT-5**
Source of technology	**:**	**AAU (2008)**
Production system	**:**	**Irrigated/ Sole vegetable**
Thematic area	**:**	**ICM**
Performance of the Technology with performance indicators	**:**	**Yield**
No. of Trials	**:**	**03**
Plot size and total area (ha)	**:**	**1.20 ha**
Performance indicator **Indicator - I** **Indicator - II** **Indicator - III**	**:** **:** **:**	**Technical Observation:-** • **Plant Population per unit area.** • **No. of fruits per plant.** • **Insect pest Infestation** **Economic Indicator:-** • **Yield** • **B:C ratio** **Farmer Reflection:-** • **Easy in practicing inter culturing, picking and spraying of insecticides.** • **Quality of fruits as per market need.**

Farmer Reflection:-

- **GAT-5 gives higher yield then AT-3**
- **Infestation of TLMV is higher in AT-3 var. as compare to GAT-5**

9.0 Results of On Farm Trial – Plant Protection -1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cotton	Irrigated	Injudicious use of chemical pesticides due to lack of knowledge Not using of bio pesticides	**Assessment of management practices for sucking pest in cotton**	3	T1	**% of Plant infected due to sucking pest (22%)**		Trials continue…			
						30 DAS	**16%**				
						45 DAS	**30%**				
						60 DAS	**20%**				
						Pest Population /leaf (12 Nos.)					
						30 DAS	**8 Nos**				
						45 DAS	**15 Nos**				
						60 DAS	**13 Nos**				
					T2	**%of Plant infected due to sucking pest (9%)**					
						30 DAS	**8%**				
						45 DAS	**11%**				
						60 DAS	**8%**				
						Pest Population /leaf (07 Nos.)					
						30 DAS	**4 Nos**				
						45 DAS	**10 Nos**				
						60 DAS	**7 Nos**				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha)	Net Return (Profit) in Rs./ ha	BC Ratio
13	14	15	16	17	18
Treatments	AAU				
T_1 : Farmers practices (High dose and use of conventional chemical pesticides)		20.0	q/ha	73600	3.1
T_2: To be assessed : Alternate spray of Thiamethoxam 25 WG 0.01% @ (4 g/10 lit. of water) and *Beauveria bassiana* (40 gms/10 lit. of water) at 15 day interval starting from the pest infestation		20.9	q/ha	78960	3.3

9.1 On Farm Testing : Plant Protection

Title	**:**	**Assessment of management practices for sucking pest in cotton**
Problem diagnose/defined	**:**	Injudicious use of chemical pesticides due to lack of knowledge Not using of bio pesticides
Details of technologies selected for assessment /refinement	**:**	**Treatments** T_1 : Farmers practices (High dose and use of conventional chemical pesticides) T_2 : To be assessed : Alternate spray of Thiamethoxam 25 WG 0.01% @ (4 g/10 lit. of water) and *Beauveria bassiana* (40 gms/10 lit. of water) at 15 day interval starting from the pest infestation.
Source of technology	**:**	AAU, Anand (2012/2017)
Production system	**:**	Irrigated
Thematic area	**:**	IPM
No. of Trials	**:**	03
Plot size and total area (ha)	**:**	1.20 ha
Spacing	**:**	120x90 cm
Performance indicator Indicator - I Indicator - II Indicator – III	**:** **:** **:**	**Technical Observation:-** • %of Plant infected due to sucking pest at 15,30,45 DAS • Pest Population/leaf **Economic Indicator:-** • Yield of crop • Cost of cultivation • Benefit cost ratio

Farmer Reflection:-

(i) Bio-pesticides can greatly reduce the use of conventional pesticides, while crop yields remain high.

10.0 Results of On Farm Trial – Plant Protection -2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Brinjal	Irrigated	Injudicious use of chemical pesticides due to lack of knowledge Not using of bio pesticides	Assessment of IPM module for shoot and fruit borer in Brinjal	3	T1	% of fruit damage due to shoot and fruit borer	24%	Trials continue…			
						% of Shoot damage due to shoot and fruit borer	11%				
					T2	% of fruit damage due to shoot and fruit borer	15%				
						% of Shoot damage due to shoot and fruit borer	06%				

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha)	Net Return (Profit) in Rs./ ha	BC Ratio
13	14	15	16	17	18
Treatments	AAU	270	q/ha	86500	2.14
T_1 : Farmers practices (High dose and use of conventional chemical pesticides)					
T_2: To be assessed : Install pheromone trap@40/ha and need based application of Azadirachtin 1500 PPM (50 ml/10 lit. of water) OR Emamectin benzoate 5 SG @ 3 gm/10 lit. of water (at 5% shoot or fruit damage)		286	q/ha	97285	2.30

10. 1 On Farm Testing : Plant Protection

Title	**:**	**Assessment of IPM module for shoot and fruit borer in Brinjal**
Problem diagnose/defined	**:**	Injudicious use of chemical pesticides and Not using bio pesticides
Details of technologies selected for assessment /refinement	**:**	**Treatments** T_1 : Farmers practices (High dose and use of conventional chemical pesticides) T_2 : To be assessed : Install pheromone trap@40/ha and need based application of Azadirachtin 1500 PPM (50 ml/10 lit. of water) OR Emamectin benzoate 5 SG @ 3 gm/10 lit. of water (at 5% shoot or fruit damage)
Source of technology	**:**	AAU, Anand (2009/2016)
Production system	**:**	Irrigated
Thematic area	**:**	IPM
No. of Trials	**:**	03
Plot size and total area (ha)	**:**	1.20 ha
Spacing	**:**	120x90 cm
Performance indicator Indicator - I Indicator - II Indicator – III	**:** **:** **:**	**Technical Observation:-** • % of fruit damage due to shoot and fruit borer • % of shoot damage due to shoot and fruit borer **Economic Indicator:-** • Yield of crop • Cost of cultivation • Benefit cost ratio

Farmer Reflection:-

(i) The adoption of IPM strategies decreased the No. of chemical pesticides spray and cost of production without affecting the yield.

3.3. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 2017-18 and recommended for large scale adoption in the district

Sr. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Paddy	Varietal evaluation	New variety Paddy cv.GAR-13	FLD, Exposure visit of demo field, Organized Field day, through training programme	45	720	1070
2	Greengram	Varietal evaluation	New variety greengram cv. Meha	FLD, Exposure visit of demo field, Organized Field day, through training programme, Providing the seed of the variety.	28	418	280
3	Pigeon pea	ICM	New variety Pigeon pea cv.Vaishali	FLD, Exposure visit of demo field, Organized Field day, through training programme, Providing the seed of the variety.	28	410	880
4	Blackgram	ICM	New variety Blackgram cv.PU-31	FLD, Exposure visit of demo field, Organized Field day, through training programme, Providing the seed of the variety.	10	75	50
5	Soybean	ICM	New variety Soybean cv.NRC-37	FLD, Exposure visit of demo field, Organized Field day, through training programme, Providing the seed of the variety.	12	125	80
6	Chilli	INM	Bio-fertilizer and micro-nutrient	FLD, Exposure visit of demo field, Organized Field day, through training programme	10	75	48
7	Tomato	INM	Bio-fertilizer and micro-nutrient	FLD, Exposure visit of demo field, Organized Field day, through training programme	17	159	56
8	Fodder Crop	Fodder Production	Sorghum	FLD, Exposure visit of demo field, Organized Field day, through training programme	30	145	50
9	Feed management	Feed managem ent	Mineral Mixture	FLD, Exposure visit of demo field, Organized Field day, through training programme	10	150	50
10	Feed management	Feed managem ent	Bypass fat	FLD, Exposure visit of demo field, Organized Field day, through training programme	10	50	50
11	Nutritional gardening	Recommende d Seeds	monthly Savings	FLD, Exposure visit of demo field, Organized Field day, through training programme	10	113	10

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**.)

1. FLD – Cereals

a. Details of Implementation

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	
1	Maize	IPM	IPM	*Rabi-2018*	8.0	8.0	20	0	20	
2	Wheat	ICM	Varietal	*Rabi-18*	8.0	8.0	25	0	25	

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					
Maize	Rabi-18	irrigated	Medium black	L	M	H	Soybean	28/10/18	3/4/19	--	---
Wheat	Rabi-18	irrigated	Medium black	L	M	H	Maize	25/11/18	21/3/19	--	---

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Maize	• Farmers were convinced to use bio-pesticides and chemical pesticides for management of pests in Maize. • By using bio and chemical pesticides in proper sequence, expenses on pesticides can be reduced
Wheat	• Farmers were convinced to adopt new variety of Wheat.

Farmers' reactions on specific technologies

S. No	Feed Back
Maize	Use of carbofuran for stem borer management(During 30-45 DAS) in maize has given good results
Wheat	Production is higher than local variety. (GW-496).

Extension and Training activities under FLD

Sl.No.	Activity- Maize	No. of activities organized	Date	Number of participants	Remarks
1	Field days	1	6/3/19	39	
2	Farmers Training	1	22-25/10/18	20	
Sl.No.	**Activity-** Wheat	**No. of activities organized**	**Date**	**Number of participants**	**Remarks**
1	Field days	01	07-03-2019	21	
2	Farmers Training	03	02/11/2018,24/10/2018,09/01/2019	76	

2. FLD – Oilseed

b. Details of Implementation

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	
1	Soybean (CFLD)	ICM	JS-20-29	*Kharif-2018*	20	20	50	-	50	
2	Cotton	INM	INM	*Kharif-2018*	10	10	25	-	25	
3	Cotton	IPM	IPM	*Kharif-2018*	8	8	10	10	20	

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					
Soybean (CFLD)	*Kharif-18*	Rainfed	Medium black	L	M	H	cotton	28/6/2018	6/10/2018	749	34
Cotton (INM)	*Kharif-18*	Rainfed	Medium black	L	M	H	cotton	8/6/2018	3/3/2019	749	34
Cotton(IPM)	*Kharif-18*	irrigated	Medium black	L	M	H	cotton	8/6/2018	3/3/2019	749	34

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Soybean (CFLD)	Test weight found higher as compare to NRC-37 (18% high test weight) It is needed to work more on develop of pest resistance/tolerance for the variety.
Cotton (INM)	Adoption of INM resulted into better nutrient management.
Cotton(IPM)	• Pheromone traps, bio-pesticides has minimized the infestation of pink boll worm and good quality cotton was harvested • There is need to develop pink boll worm pest resistant varieties of cotton.

Farmers' reactions on specific technologies

S. No	Feed Back
Soybean (CFLD)	Seed shattering problem is less in this variety. Variety gives stable performance in water logged and dry condition
Cotton (INM)	Use of bio-fertilizer and micronutrient reduce the cost of fertilizer and also get good quality of cotton.
Cotton(IPM)	Use of Pheromone trap and bio-pesticides reduced no. of chemical pesticides sprays, which has minimized cultivation cost. It is safer for beneficial insects like beetles.

Extension and Training activities under FLD

Sl.No.	**Activity-** Soybean	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	17/9/2018 & 04/10/2018	85	-
2	Farmers Training	3	11-14/6/18, 18/6/18 ,19/6/18	48	-
Sl.No.	**Activity- Cotton (INM)**	**No. of activities organized**	**Date**	**Number of participants**	**Remarks**
1	Field days	1	15-11-2018	26	-
2	Farmers Training	3	08-09/06/2018,26/07/2018,07/08/2019	102	-
Sl.No.	**Activity-** Cotton **(IPM)**	**No. of activities organized**	**Date**	**Number of participants**	**Remarks**
1	Field days	1	18/12/2018	24	-
2	Farmers Training	2	23-26/7/18 & 7/6/18	49	-

3 FLD – Pulses Crop

c. Details of Implementation

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	
1	Black gram (CFLD)	ICM	Varietal, INM, IPM	*Kharif-2018*	20	20	50	0	50	-
2	Pigeon pea (CFLD)	ICM	Varietal, INM, IPM	*Kharif-2018*	20	20	50	0	50	-
3	Green gram (CFLD)	ICM	Varietal, INM, IPM	*Summer-2018*	30	30	50	24	74	--

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					
Black gram	*Kharif-2018*	Rainfed	Medium black	L	M	H	Maize	1/07/2018	1/10/2018	749	34
Pigeon pea	*Kharif-2018*	Irrigated	Medium black	L	M	H	Pigeon pea	1/07/2018	30/03/2019	749	34
Green gram	*Summer-2018*	Irrigated	Medium black	L	M	H	Maize	15/02/2018	10/06/2018	749	34

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Black gram	Adoption of IWM & INM resulted into better weed management and Plant growth
Pigeon pea	Less sterility mosaic as compare to BDN-2 variety.
Green gram	INM increase growth of plant and size of seed.

Farmers' reactions on specific technologies

S. No	Feed Back
Black gram	YVM infestation not found in this variety and Mature earlier as compare to Local variety
Pigeon pea	Wilt problem is less as compare to Vaishali variety and INM also increase the growth and yield of plant.
Green gram	YVM resistance variety. Bold seed size resulted in higher Market rate.

Extension and Training activities under FLD

Sl. No.	**Activity-** Black gram	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	8-9-18/12-9-18	86	-
2	Farmers Training	1	18-21/6/18	26	

Sl. No.	**Activity-** Pigeon pea	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	18-1-19,25-1-19	53	
2	Farmers Training	2	28-29/6/2018,22-23/11/2018	72	

Sl. No.	**Activity-** Green gram	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	5-5-18/9-5-18	81	
2	Farmers Training	3	15/2/18 ,25/4/18 & 15-17/2/18	97	

4. FLD – Other crops

d. Details of Implementation

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	
1	Bannana+ Cabbage	ICM	ICM	*Rabi-18*	5	5	3	9	12	
2	Chilli	INM	INM	*Kharif-18*	5	5	20	6	26	

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					
Bannana+Cabbage	*Rabi-18*	Irrigated	Sandy Loam	L	M	H	Crop Standing .				
Chilli	*Kharif-18*	Irrigated	Sandy Loam	L	M	H	Wheat	28-8-18	-	749	34

Farmers' reactions on specific technologies

S. No	Feed Back
Chilli	Weed competition is less during 2 months after transplanting. Good plant growth due to less weeds.

Extension and Training activities under FLD

Sl.No.	**Activity-** Bannana+Cabbage	**No. of activities organized**	**Date**	**Number of participants**	**Remarks**
1	Field days	-	-	-	
2	Farmers Training	01	30/6/18 & 10-13/9/18	44	

Sl.No.	**Activity-** Chilli	**No. of activities organized**	**Date**	**Number of participants**	**Remarks**
1	Field days	01	18/12/18	24	
2	Farmers Training	02	28-31/8/18 & 19-10-18	42	

5. FLD – Fodder Crops

e. Details of Implementation

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	
1	**Sorghum (F)**	Fodder production	Varietal demonstration	*Rabi-2018*	5	5	7	13	20	

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					
Sorghum (F)	*Rabi-2018*	Irrigated	Medium Black	L	M	H	Cotton	31-07-18	65 days interval	749	34

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Sorghum (F)	Farmers were convinced to adopt variety COFS-29

Farmers' reactions on specific technologies

S. No	Feed Back
Sorghum (F)	This Variety gave higher green fodder yield as compare to local variety Milk Production has increase due to introduction of fodder Sorghum use as green fodder

Extension and Training activities under FLD

Sl.No.	Activity- Sorghum (F)	No. of activities organized	Date	Number of participants	Remarks
1	Field days	01	19-1-19	37	--
2	Farmers Training	01	27 to 31-07-18	30	--

6. FLD – Livestock

f. Details of Implementation

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	
1	**Buffalo**	Animal Nutrition	Mineral Mixture+ Common salt	*Rabi-18*	20 Animal	20 Animal	-	20	20	---
2	**Cow**	Animal Nutrition	Bypass protein feed	*Rabi-18*	20 Animal	20 Animal	-	20	20	---

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1. **Buffalo**	Farmers were convinced to adopt supplementary feeding of mineral mixture.
2. Cow	Farmers were convinced to adopt supplementary feeding of Bypass Protein

Farmers' reactions on specific technologies

S. No	Feed Back
1. **Buffalo**	Milk yield and fat percentage has increased and reduced inter calving period.
2. Cow	Milk yield and fat percentage has increased and improved health condition .

Extension and Training activities under FLD

Sl.No.	Activity- Buffalo	No. of activities organized	Date	Number of participants	Remarks
1	Field days	01	06-02-19	38	--
2	Farmers Training	01	19 to 22-11-2018	20	--
Sl.No.	**Activity- Cow**	**No. of activities organized**	**Date**	**Number of participants**	**Remarks**
1	Field days	01	09-3-19	35	--
2	Farmers Training	01	19-22/12/18	20	--

7. FLD – Other Enterprise
Details of Implementation

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Nos.		No. of farmers/ demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Cotton Picking Bags	Drudgery reduction	Cotton Picking Bags	*Kharif-18*	50	50	0	50	50	--
2	Kitchen gardening	Nutritional Mang.	Kitchen gardening	*Kharif/Rabi-18*	125	125	63	62	125	--

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Cotton Picking Bags	• Farm women convinced to use Cotton picking bags because of saving time, and physical energy. • Use of Cotton picking bags also increases the working efficiency.
Kitchen gardening	Farm women are ready to adopt kitchen garden because of variety of vegetables available for their food. Farm women save the expenses as against vegetables purchases.

Farmers' reactions on specific technologies

S. No	Feed Back
Cotton Picking Bags	• Easy to wear, equal distribution of load • Higher carrying capacity to improve harvesting efficiency.
Kitchen gardening	Farm women are ready to adopt kitchen garden because of variety of vegetables available for their food. Farm women save the expenses as against vegetables purchases.

Extension and Training activities under FLD

Sl.No.	**Activity-** Cotton Picking Bags	No. of activities organized	Date	Number of participants	Remarks
1	Field days	02	29-12-18 / 8-1-19	82	--
2	Farmers Training	01	29-11-18	25	--

Sl.No.	**Activity-** Kitchen gardening	No. of activities organized	Date	Number of participants	Remarks
1	Field days	02	8-3-19 / 25-3-19 /	86	--
2	Farmers Training	05	26-6-18,2-5/7/18,5-8/9/18,27/11/18	171	--

C. Performance of Frontline demonstrations

Frontline demonstrations on cereals 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										
Maize	IPM	Integrated Pest Management	*Pvt.hy Cultivars.*	20	8	64.5	57.2	59.2	55	7.6	29800	118400	88600	3.9	31200	110000	78800	3.5
Wheat	ICM	Integrated Crop Management	*GW-451*	25	8	38.0	29.0	32.0	28.0	14	25000	58800	33880	2.35	24700	51520	26820	2.08

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 (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Cotton	IPM	IPM	Pvt.Hy.(Bt)	20	8	23.5	18.2	21.9	20.0	9.5	35300	118260	82960	3.3	36600	108000	71400	2.90
Cotton	INM	INM	Pvt.Hy.(Bt)	25	10	26	16	24	22	9	34500	129600	95100	3.75	34250	118000	84550	3.44

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change 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										
Chilli	IWM	IWM	26	05	387	255	365	335	8.96	390400	1267000	876600	3.24	411500	1190000	778500	2.89

Fodder Crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (t/ha)				% Change 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										
Sorghum (F)	Fodder production	Varietal (COFS-29)	20	5	125	110	115	78	47.44	29430	115000	85570	3.90	27330	78000	50670	2.85

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No.of Units (Animal/ Poultry/ Birds, etc)	Major parameters (Milk/Day/Animal)		% change in major parameter	Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Buffalo	Animal nutrition	Supplementary feeding of mineral mixture	20	20	6.13	5.40	13.52	135	275.85	140.85	2.04	126	243	117	1.92
Cow	Animal nutrition	Feeding of Bypass Protein	20	20	11.93	10.50	13.62	176	334.04	158.04	1.90	157	294	137	1.87

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters (output/man/hr)		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo (harvested cotton kg/hr)	Check (harvested cotton kg/hr)		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cotton Picking Bags	Drudgery reduction	50	50	7.33	5.3	18.15	-	-	-	-	-	-	-	-	-	-

FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
										Average rate (Rs./Kg)		Gross return (Rs.)					
					Demonstration	Check		Demo	Check	Demo	Check	Before FLD	After FLD	Gross Cost	Gross Return	Net Return	BCR (R/C)
Kitchen Gardening	Nutritional Mang.	Kitchen Gardening	125	125	75.8	25.3	-	-	-	21.5	15.5	392.2	1629.7	-	-	-	-

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										
Soybean	ICM	Variety+ INM	JS-20-29	50	20	20.5	13	16.9	15	12.66	17661	52728	35067	2.98	19550	46800	27250	2.39

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										
Blackgarm	ICM	Variety+ INM,IPM,IWM	PU-31	50	20	8.2	5.3	7.4	6.2	19	17675	37000	19325	2.09	17350	31000	13650	1.78
Pigonpea	ICM	Variety+ INM,IPM,IWM	AGT-2	50	20	16.0	12.0	14.0	12.0	17	37600	72800	35200	1.93	36800	62400	25600	1.7
Greengram	ICM	Variety+ INM,IPM,IWM	GAM-5	74	30	10	7	9.8	8.2	19	22850	49000	26150	2.14	23200	41000	17800	1.76

* 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	No. of Participants								
		Others			SC/ST			TOTAL		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Cropping Systems	5	65	0	65	95	0	95	160	0	160
Integrated Crop Management	5	99	0	99	32	0	32	131	0	131
Production of organic inputs	1	0	0	0	22	0	22	22	0	22
II Horticulture										
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low volume and high value crops	2	3	0	3	31	0	31	34	0	34
Nursery raising	1	5	0	5	25	0	25	30	0	30
Protective cultivation (Green Houses, Shade Net etc.)	2	36	0	36	20	0	20	56	0	56
IV Livestock Production and Management										
Dairy Management	2	0	0	0	24	32	56	24	32	56
Poultry Management	1	0	20	20		0	0	0	20	20
Disease Management	2	51	0	51	41	0	41	92	0	92
Feed management	1	0	30	30		0	0	0	30	30
Production of quality animal products	1	19	0	19	1	0	1	20	0	20
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	6	28	64	92	2	110	112	30	174	204
Value addition	4	0	75	75	0	74	74	0	149	149
VII Plant Protection		0	0	0	0	0	0	0	0	0
Integrated Pest Management	5	10	0	10	103	0	103	113	0	113
Integrated Disease Management	3	24	0	24	70	0	70	94	0	94
X Capacity Building and Group Dynamics		0	0	0	0	0	0	0	0	0
Group dynamics	1	0	30	30	0	0	0	0	30	30
Entrepreneurial development of farmers/youths	3	41	0	41	12	0	12	53	0	53
TOTAL	**45**	**381**	**219**	**600**	**478**	**216**	**694**	**859**	**435**	**1294**
(B) RURAL YOUTH				0			0	0	0	0
Seed production	1	20	0	20	0	0	0	20	0	20
Nursery Management of Horticulture crops	2	20	0	20	25	0	25	45	0	45
TOTAL	**3**	**40**	**0**	**40**	**25**	**0**	**25**	**65**	**0**	**65**
(C) Extension Personnel				0		0	0	0	0	0
Productivity enhancement in field crops	2	54	7	61	0	0	0	54	7	61
Integrated Pest Management	1	26	8	34	0	0	0	26	8	34
Integrated Nutrient management	1	40	5	45	0	0	0	40	5	45
TOTAL	**4**	**120**	**20**	**140**	**0**	**0**	**0**	**120**	**20**	**140**
G. Total	**52**	**541**	**239**	**780**	**503**	**216**	**719**	**1044**	**455**	**1499**

Farmers' Training including sponsored training programmes (off campus)

Thematic Area	No. of Courses	No. of Participants								
		Others			SC/ST			TOTAL		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	4	98	0	98	27	0	27	125	0	125
Cropping Systems	1	22	0	22	0	0	0	22	0	22
Water management	2	0	0	0	52	2	54	52	2	54
Integrated Crop Management	1	6	4	10	5	5	10	11	9	20
Production of organic inputs	2	46	7	53	0	0	0	46	7	53
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	4	17	0	17	65	7	72	82	7	89
Nursery raising	1	22	0	22	0	0	0	22	0	22
Protective cultivation (Green Houses, Shade Net etc.)	3	11	9	20	49	1	50	60	10	70
IV Livestock Production and Management										
Dairy Management	4	44	44	88	23	0	23	67	44	111
Poultry Management	1	16	10	26	3	0	3	19	10	29
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management/goat	0	0	0	0	0	0	0	0	0	0
Disease Management	0	0	0	0	0	0	0	0	0	0
Feed management	3	0	26	26	35	13	48	35	39	74
Production of quality animal products	2	0	0	0	51	3	54	51	3	54
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	31	31	0	31	31
Design and development of low/minimum cost diet	1	0	38	38	0	0	0	0	38	38
Value addition	5	0	103	103	0	66	66	0	169	169
Income generation activities for empowerment of rural Women	2	0		0	6	81	87	6	81	87
Location specific drudgery reduction technologies	2	0	19	19	6	23	29	6	42	48
VII Plant Protection										
Integrated Pest Management	6	71	29	100	31	12	43	102	41	143
Integrated Disease Management	4	26	24	50	54	13	67	80	37	117
X Capacity Building and Group Dynamics										
Group dynamics	4	38	40	78	34	9	43	72	49	121
Entrepreneurial development of farmers/youths	6	28	58	86	95	2	97	123	60	183
TOTAL	**59**	**445**	**411**	**856**	**536**	**268**	**804**	**981**	**679**	**1660**
G. Total	**59**	**445**	**411**	**856**	**536**	**268**	**804**	**981**	**679**	**1660**

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

Thematic Area	No. of Courses	No. of Participants								
		Others			SC/ST			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	4	98	0	98	27	0	27	125	0	125
Cropping Systems	6	87	0	87	95	0	95	182	0	182
Water management	2	0	0	0	52	2	54	52	2	54
Integrated Crop Management	6	105	4	109	37	5	42	142	9	151
Production of organic inputs	3	46	7	53	22	0	22	68	7	75
II Horticulture										
a) Vegetable Crops	0	0	0	0	0	0	0	0	0	0
Production of low volume and high value crops	6	20	0	20	96	7	103	116	7	123
Nursery raising	2	27	0	27	25	0	25	52	0	52
Protective cultivation (Green Houses, Shade Net etc.)	5	47	9	56	69	1	70	116	10	126
IV Livestock Production and Management										
Dairy Management	6	44	44	88	47	32	79	91	76	167
Poultry Management	2	16	30	46	3	0	3	19	30	49
Disease Management	2	51	0	51	41	0	41	92	0	92
Feed management	4	0	56	56	35	13	48	35	69	104
Production of quality animal products	3	19	0	19	52	3	55	71	3	74
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	7	28	64	92	2	141	143	30	205	235
Design and development of low/minimum cost diet	1	0	38	38	0	0	0	0	38	38
Value addition	9	0	178	178	0	140	140	0	318	318
Income generation activities for empowerment of rural Women	2	0	0	0	6	81	87	6	81	87
Location specific drudgery reduction technologies	2	0	19	19	6	23	29	6	42	48
VI Agril. Engineering	0	0	0	0	0	0	0	0	0	0
VII Plant Protection	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	11	81	29	110	134	12	146	215	41	256
Integrated Disease Management	7	50	24	74	124	13	137	174	37	211
X Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Group dynamics	5	38	70	108	34	9	43	72	79	151
Entrepreneurial development of farmers/youths	9	69	58	127	107	2	109	176	60	236
XI Agro-forestry	0	0	0	0	0	0	0	0	0	0
TOTAL	**104**	**826**	**630**	**1456**	**1014**	**484**	**1498**	1840	1114	**2954**
(B) RURAL YOUTH	0	0	0	0	0	0	0	0	0	0
Seed production	1	20	0	20	0	0	0	20	0	20
Nursery Management of Horticulture crops	2	20	0	20	25	0	25	45	0	45
TOTAL	**3**	**40**	**0**	**40**	**25**	**0**	**25**	65	0	**65**

(C) Extension Personnel	0	0	0	0	0	0	0	0	0	0
Productivity enhancement in field crops	2	54	7	61	0	0	0	54	7	61
Integrated Pest Management	1	26	8	34	0	0	0	26	8	34
Integrated Nutrient management	1	40	5	45	0	0	0	40	5	45
TOTAL	**4**	**120**	**20**	**140**	**0**	**0**	**0**	120	20	**140**
G. Total	**111**	**986**	**650**	**1636**	**1039**	**484**	**1523**	2025	1134	**3159**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	2	54	7	61	0	0	0	54	7	61
Integrated Pest Management	1	26	8	34	0	0	0	26	8	34
Integrated Nutrient management	1	40	5	45	0	0	0	40	5	45
Total	4	120	20	140	0	0	0	120	20	140

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
Animal Science										
Dairy Management	1	0	0	0	0	32	32	0	32	32
Disease Management	1	51	0	51	0	0	0	51	0	51
Crop Science										
Croping System	2	54	0	54	22	0	22	76	0	76
Extension Education										
Enterpnenuership Development	2	26	0	26	12	0	12	38	0	38
Group Dyanamics	1	0	30	30	0	0	0	0	30	30
Home Science										
Kithen Gardening	1	0	0	0	0	30	30	0	30	30
Value Addition	2	0	62	62	0	36	36	0	98	98
Horticulutre										
Nursery raising	1	5	0	5	25	0	25	30	0	30
Production of low volume and High value crops	1	0	0	0	14	0	14	14	0	14
Plant Protection										
Integrated Disease Management	1	0	0	0	50	0	50	50	0	50
Integrated Pest Management	1	0	0	0	30	0	30	30	0	30
Total	**14**	**136**	**92**	**228**	**153**	**98**	**251**	**289**	**190**	**479**

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
Horticulture										
Nursery raising	1	0	0	0	25	0	25	25	0	25

Details of trainings organized under ASCI

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Crop Science										
Seed Production	1	20	0	20	0	0	0	20	0	20
Horticulture										
Nursery raising	1	20	0	20	0	0	0	20	0	20
Grand Total	**2**	**40**	**0**	**40**	**0**	**0**	**0**	**40**	**0**	**40**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	55	13385	15	13400
Diagnostic visits	06	58	0	58
Field Day	20	699	12	711
Group discussions	48	1000	12	1012
Film Show	252	1294	0	1294
Self -help groups	03	89	0	89
Exhibition	05	3838	10	3848
Scientists' visit to farmers field	42	283	0	283
Plant/animal health camps	07	295	0	295
Farmers' seminar/workshop	02	309	0	309
Method Demonstrations	3	24	0	24
Celebration of important days	11	2418	15	2433
Others (Lecture Delivered)	44	7929	12	7941
Farmers Visit to KVK	232	232	0	232
KisanMela	02	2763	12	2775
Kisan Gosthi	02	111	0	111
Total	**729**	**34727**	**88**	**34815**

Details of other extension programmes

Particulars	Number
Extension Literature	11
Newspaper coverage	13
Popular articles /Publication	04
Animal health Camps (Number of animals treated)	1734
Others (Soil Sample)	257
Total	**2019**

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
Pulses	Greengram	GAM-5		11.89	142680	55
Total				**11.89**	**142680**	**55**

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Vegetable	F1 HYVs		78950	39475	124
Fruits	Lime	K Lime		138	1380	3
	Drumstick	PKM-1		120	1200	1
Total				**79208**	**42055**	**128**

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals				
Others (Goat) Kid	Surti	06	30000	-
Total		**06**	**30000**	**-**

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

A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.) June -2012, Half Yearly -100

B. Literature developed/published

Item	Title	Number
Research papers	• To measurers and compare the knowledge level and adoption gap of beneficiary and non beneficiary farmers of frontline demonstration regarding improved mungbean production technology in Chhotaudepur Dist. of Gujarat • Knowledge and adoption level of improved animal husbandry practices by Milk production in Chhotaudepur Dist. of Gujarat • One step ahead on doubling farmers income , Backyard poultry and goatry enhance income and social –economic status of tribal farmers • Correlates of Entrepreneurial Behavior of Mango Growers in Valsad District of Gujarat	04
Technical reports	ZEARC, Agrescco ,Annual Progress Report,Annual Action Plan	05
News letters	-	02
Extension literature		11
TOTAL		**22**

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).

Mr. Sanjaybhai Manaharbhai Rathva - A Role Model for Successful Dairy Farm

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Village: Nana Butiyapura,,,Taluka: Bodeli,,District: Chhotaudepur,State: Gujarat
Mobile No. - 8849241635

Situation analysis/Problem statement: ***Mr. Sanjaybhai Manaharbhai Rathva***, aged ***32 yrs*** belong to tribal district Chhotaudepur wants to expand the existing dairy as full time venture and hence started Dairy as a commercial farm in the year 2015 by purchasing ten HF cows. Initially he was practicing cultivation of traditional crops in own field and he was having two indigenous breed cows. Sometimes he also work in others farm as an agriculture labor on daily wages and in factories.

Plan, Implement and Support: He wanted to maintain dairy farm scientifically and hence, he joined the KVK to know more about Commercial Dairy and widen her Knowledge. He never missed the opportunities to participate in the training and other extension activities and he also participated in many exposure visits conducted by KVK and other departments to various places like Baroda dairy, NDDB Anand. He learnt a lot of information about Commercial Dairy and Fodder cultivation. Currently, he is having total twelve milch animals out of which eight are milking and remaining four are in dry period. He is growing fodder crops like maize, Sorghum, Lucerne in one acre of land to meet the fodder requirement of animals round the year. In addition to this, he uses paddy, wheat straw and concentrated feeds. He is making silage by chaffing the green and dry fodder used by treating with urea. Sanjaybhai fed the animals with balanced ration using green fodder, mineral mixture and concentrated feed. Milch animals vaccinated as per the schedule. Every day, animals are given bath and shed are cleaned. Animals are shifted alternatively inside and outside the shed for every 12 hrs to allow the shed to dry. He proudly says that due to scientific maintenance, he did not come across any major disease in the last four years to her animals including mastitis.

Output: Mr. Sanjaybhai earns about Rs 5.68 lakhs annually from milk and other bi-products of Dairy as a net profit. While describing in details about her earnings, he is getting 12 – 16 lit of milk/animal/day with the total average milk of 130 lit/day. He sells the milk to Baroda Dairy cooperative at the rate of Rs 25-27 /lit and also gets an annual bonus of about 16-18 %. He keeps heifers and sells on an average one cow in a year and thereby earns about Rs 50000 to 60000/-.

Outcome: He has inspired few of his Villagers to start the dairy farm. He felt that due to her success in dairy, the respect and recognition for enhanced within and outside her family. He is confident that in a single call, he can mobilise about 40 farmers in his and near by village for any program. Mr. Sanjaybhai is feeling happy that more than money, he got a lot of opportunities to interact with people from various states, respect and recognition within and outside the society. The dairy enterprise has given him empowerment, enhanced his self-image & Confidence and economic sustainability.

Impact: He proudly says that earlier I used to visit NDDB, University, KVK, etc to learn about better dairy practices but now many officials and farmers are visiting my farm across the district to see my dairy farm and learn from me. After adopting this enterprise improve his living standard and cash in hand every time so improve the purchasing power and risk bearing ability. He has been a source of inspiration for local youth in and around. Looking at his success more nos. of unemployed educated youths have been motivated to take up dairy farming. However, this success has been achieved distinctively over the short period of time in a sustainable manner.

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Anand Agricultural University, Anand	Technical Support
Model farm, Anand Agricultural University, Vadodara	Technical Support
State Department of Agriculture, and Dept. of Agriculture, District Panchayat, Vadodara / Chhotaudepur	Technical / Financial Support
State Dept. of Horticulture, Vadodara/ Chhotaudepur	Technical / Financial Support
National Horticulture Mission, Vadodara / Chhotaudepur	Technical / Financial Support
Dept. of Animal Husbandry, Vadodara / Chhotaudepur	Technical / Financial Support
ATMA Project, Vadodara / Chhotaudepur	Technical / Financial Support
Central ware housing Corporation	Technical Support
APMC Vadodara / Chhotaudepur	Technical / Financial Support
District Watershed Development Unit, Vadodara / Chhotaudepur	Technical Support
Main Research Station (Cotton), Surat, Navsari Agricultural University	Technical Support
National Bank for Agriculture and Rural Development (NABARD),Vadodara	Technical Support
LEAD Bank Bank Of Baroda/State Bank of India	Technical Support
SEWA, Bodeli	Technical Support
GGRC	Technical Support
GSFC	Technical Support
Baroda Swarojgar Vikas Sansthan, Vadodara / Chhotaudepur	Technical Support

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

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
-`-`	-	-	-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

If yes, role of KVK in preparation of SREP of the district? - YES (KVK is one of Member of SREP committee)

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	AGB Meeting, Convergence meeting FSI Meeting DFAC Meeting	3	3	
02	Training programmes	Sponsor Training	-	11	
03	Extension Programmes	Extension Programmes		32	
	KisanMela	KisanMela	02	02	
	Exhibition	Exhibition	02	02	
	Others (Lecture Delivered)	Others (Lecture Delivered)	18	0	
	Award Verification	Award Verification	06	-	

D. Give details of programmes implemented under National Horticultural Mission

S. No.	**Programme**	**Nature of linkage**	**Funds received if any Rs.in lacks**	**Expenditure during the reporting period in Rs.in lacks**	**Constraints if any**
1	**Plug Nursery**	**Financial**	**30.00**	**20.86**	**Work in progress**

E. Nature of linkage with National Fisheries Development Board

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

S. No.	**Programme**	**Nature of linkage**	**Funds received if any Rs.**	**Expenditure during the reporting period in Rs.**	**Remarks**
-	**Proposal submitted for Value addition unit**				

7. Convergence with other agencies and departments:

8. Innovator Farmer's Meet

Sr.No.	**Particulars**	**Details**
1	Have you conducted Farm Innovators meet in your district?	Yes
	Brief report in this regard	ATMA has organized Farm Innovators meet & KVK scientists facilitate the meeting in both the district.

9. Farmers Field School (FFS)

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

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

S. No	Feed Back
Black gram (cv.PU-31)	YVM infestation not found in this variety and Mature earlier as compare to Local variety
Black gram (cv.PU-40)	YVM infestation very less in this variety
Cotton (cv.GAWMH-2) Cotton (cv.Narmda moti)	• Due to short duration of variety cv. GAWMH-2 & Narmada Moti is benefitted to cotton crop.. • It is highly suitable of domestic (food)/ rotala) purpose
Ovsynch Protocol in buffalo	Reduce inter calving and dry period ,increase milk production
Backyard Poultry	Fast growth rate and higher egg production as compared to local native.
Revolving stool and Stand for milking	Reduce the pain in back, legs, knees & feet due to comfortable posture. Work efficiency enhanced.
Soybean Harvesting Mittens	There was reduce in discomfort ratings & health hazards during harvesting & colleting plants of soybeans.
Okra (cv.GAO-5)	• Fruits are long and tender with dark green colour help in getting more market price • Very less infestation of YVM
Tomato (cv.AT-3) Tomato (cv.GAT-5)	• GAT-5 gives higher yield then AT-3 • Infestation of TLMV is higher in AT-3 var. as compare to GAT-5 • It is required to work for minimizing fruit cracking while transportation.
Cotton (IPM)	Use of Pheromone trap and bio-pesticides reduced no. of chemical pesticides sprays, which has minimized cultivation cost. It is safer for beneficial insects like beetles.
Brinjal (IPM)	The adoption of IPM strategies decreased the No. of chemical pesticides spray and cost of production without affecting the yield.
Maize (IPM)	• Farmers convinced to use bio-pesticides and chemical pesticides for management of pests in maize • By using bio and chemical pesticides in proper sequence, expense on pesticides can be reduced.
Wheat (cv.GW-451)	• Farmers were convinced to adopt new verity of Wheat (GW-451) • Production of GW-451 higher than GW-496
Cotton (INM)	INM increase the yield and quality of cotton.
Chilli (IWM)	Less labour costing and good initiat growth. Lower infection of sucking pests.
Sorghum (cv.COFS-29)	This Variety gave higher green fodder yield as compare to local variety
Supplementary feeding of Mineral mixture in Buffalo	Farmers were convinced to adopt supplementary feeding of Mineral mixture

Feeding of Bypass protein in Cow	Farmers were convinced to adopt supplementary feeding of Bypass protein
Cotton Picking Bags	• Farm women convinced to use Cotton picking bags because of saving time, and physical energy. • Use of Cotton picking bags also increases the working efficiency.
Kitchen gardening	Farm women are ready to adopt kitchen garden because of variety of vegetables available for their food. Farm women save the expenses as against vegetables purchases.
Soybean cv.JS-20-29	Seed shattering problem is less in this variety. Variety gives stable performance in water logged and dry condition
Pigeon pea cv.AGT-2	Wilt problem is less as compare to Vaishali variety and INM also increase the growth and yield of plant.
Green gram cv.GAM-5	YVM resistance variety and Market rate more due to bold seed size.

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

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Soybean cv.JS-20-29	• Test weight found higher as compare to NRC-37 (20% high test weight) • It is needed to work more on develop of pest resistance/tolerance for the variety.
Black gram cv.PU-31	Better weed management found due to adoption IWM and Plant growth found better due to adoption INM and found resistance against YVM virus
Pigeon pea cv.AGT-2	Less sterility mosaic as compare to BDN-2 variety.
Green gram cv.GAM-5	INM increase growth of plant and size of seed and found resistance against YVM virus
Cotton (IPM)	• Pheromone traps, bio-pesticides has minimized the infestation of pink boll worm and good quality cotton was harvested • There is need to develop pink boll worm pest resistant varieties of cotton.
Maize (IPM)	• Use of Carbofuran for stem borer management(During 30-45 DAS) in maize has given good results • By using bio and chemical pesticides in proper sequence, expenses on pesticides can be reduced.
Wheat (cv.GW-451)	• In GW-451 variety more tillers(19-28)/ plants found as compare to local check(GW496)(19-25)
Cotton (INM)	Due to seed treatment of NPK consortium germination found better.
Chilli (IWM)	• Weed competition is less during 2 months after translating, • Good plant growth due to less weeds. • Less no. of weeds/ units area (sq.mt)
Sorghum(F) cv. COFS-29	Needs seeds availability of improved variety. Suitable for assured irrigated area.
Supplementary feeding of Mineral mixture in Buffalo	Milk yield and fat percentage has increased and get more market price.
Feeding of Bypass protein in Cow	Supplementary feeding for dairy animals to increase milk and fat percentage
Cotton Picking Bags	• Easy to wear, equal distribution of load • Higher carrying capacity to improve harvesting efficiency.
Kitchen gardening	Kitchen garden fulfill the requirement of **Carbohydrates**, **Vitamins** & Minerals to human diet By Kitchen garden green vegetable available round the year.

11. Technology Week celebration during 2018-19 - No

12. Interventions on drought mitigation (if the KVK included in this special programme) No

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)
Impact assessment of value addition in fruits and vegetables	144	32%	-	**25744/-**

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

Impact assessment of value addition in fruits and vegetables Year: 2013-14 to 2017-18

Farm women of the district have less knowledge about value addition and different value added products of fruits and vegetables. They are used to make some traditional products like mango pickle or chilli pickle, drying of raw mango slices etc. During the season, tomato, banana, lemon and other seasonal fruits and vegetables are easily available and very cheap in local market. When the lemons, seasonal vegetables are at high cost in market, they will not be able to purchase it for preparation of lemon juice or for daily consumption in food and also because of high cost of tomato ketchup and banana wafers, they are using it in rare case due to poor economic condition. Therefore, Krishi Vigyan Kendra, Chhotaudepur have given more focus on trainings on value addition in fruits and vegetables. In last five years, KVK have given about 8 vocational training of 4-6 days to the 270 farm women of different villages of the district. In this training programme, preparation of different products of fruits and vegetables like lemon squash, banan wafer, tutti-frutti, Mix vegetable pickle, tomato ketchup, raw mango squash and curry, different fruit squash, banana wafers, etc. are practically demonstrated. Follow up and group meetings were done after training and approx 144 women have started to make these products of their choice for the household utilization purpose.

Table 1: Adoption of recommended technology in different villages

Sr No.	**Name of Village**	**No. of FW trained**	**Adoption**									
			Lemon squash		**Banana wafer**		**Tomato ketchup**		**Tutti fruity**		**Mix veg Pickle**	
			No. of FW	Quantity (Kg.)	No. of FW	Quantity (Kg.)	No. of FW	Quantity (Kg.)	No. of FW	Quantity (Kg.)	No. of FW	Quantity (Kg.)
1	Sundarpura	34	4	12	20	33	*	*	3	2	*	*
2	Nurpuri	30	6	8	3	3	5	11	4	3	4	12
3	Bamroli	26	2	2	4	2	2	5	2	1.5	*	*
4	Haripura	42	2	5	1	0.5	3	10	7	5	2	3
5	Orwada	39	3	8	5	3	3	12	2	2	4	5
6	Nanabutiya pura	31	3	11	*	*	1	4	3	7	3	4
7	Pitha	36	2	6	*	*	2	5	4	4	3	10
8	Timbi	32	3	7	*	*	2	5	4	2.5	2	1
9	**Total**	**270**	**25**	**59**	**33**	**41.5**	**18**	**52**	**29**	**27**	**18**	**35**
	Adoption rate (%)		**9.26%**		**19.29 %**		**7.63 %**		**10.74 %**		**8.57 %**	

Table 2: Comparison between cost of market product and homemade product

Sr. No.	Food product	Market price (Rs.)	Homemade product (Rs.)
1	Lemon squash	120/- per litre	34/- per litre
2	Banana wafers	120/- per kg	23/- per Kg
3	Tomato ketchup	110/- per kg	30/- per kg
4	Tutty fruity	300/- per kg	45/- per kg
5	Mix veg pickle	260/- per kg	100/- per kg

Table 3: Economic gain of Food Product

Food Product	Total no. of farm women	Quantity (kg)	Cost of self prepared (Rs.)	Market price (Rs.)	Total saving (Rs.)
Lemon squash	25	59	2006/-	7080/-	5074/-
Banana wafers	33	41.5	954.5/-	4980/-	4025.5/-
Tomato ketchup	18	52	1560/-	5720/-	4160/-
Tutty fruity	29	27	1215/-	8100/-	6885/-
Mix veg pickle	18	35	3500/-	9100/-	5600/-
Total	**144**	**227.5**	**9235.5**	**34980/-**	**25744.5/-**

Feed back of farm women:

- Homemade product is cheaper than market
- Better quality of the product
- Save time and energy
- Product can be prepared as per taste required
- Proper storage of the product lengthen the shelf life and can be used in off season

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
July	06	13353	
August	01	13353	
September	02	13353	
October	15	13353	
November	10	13353	
December	02	13353	
March	02	13353	

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
Vadodara	Text only	2	4	4	0	13	0	23
	Total farmers Benefitted	**13353**	**13353**	**13353**	**0**	**13353**	**0**	**13353**

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.)	
				Variety	Produce	Qty.	Cost of inputs	Gross income
01	Vermicompost Unit	2016-17	0.05	-	Compost	-	2000	3000
02	Goatry Unit	2016-17	0.05	Surati	Breed	06	39363	84600
03	Poultry Unit	2016-17	0.05	TC	Eggs	680		
					Birds	87	10421	27950
04	Vegetable & Nursery Unit	2010-11	0.10	F1 Hyb	Seedling	78950	8800	39475

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. (kg)	Cost of inputs	Gross income	
Cereals									
Paddy	24-07-18	14-11-18	3.29	GR-11	Grain	12566	89489	194400	
Wheat	11-12-18	6-04-18	2.0	GW-451	Grain	3574	44950	66119	
Pulses									
Greengram	23-02-18	22-05-18	2.16	GAM-5	Seed	1189	62103	142680	
Pigeonpea	01-10-18	13-03-19	1.90	AGT-2, Guj-JP-1,BDN-711, Vaishali (BSMR-853)	Grain	2564	53892	129630	
Oilseeds									
Soybean	26-06-18	25-10-18	7.64	JS-335, RVS-01-04 JS2029, JS-2034	Grain	5440	63165	170030	
Castor	17-10-18	20-03-19	0.12	GAC-11	Grain	106	2810	5430	
						25589	**318159**	**716519**	

E. Utilization of hostel facilities

Accommodation available (No. of beds): 25

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2018	0	0	
May 2018	30	04	
June 2018	142	12	
July 2018	275	31	
August 2018	189	28	
September 2018	125	24	
October 2018	67	12	
November 2018	95	16	
December 2018	90	16	
January 2019	45	08	
February 2019	58	12	
March 2019	79	08	

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	State Bank of India	Sankheda	3497	Mangalbharti Krishi Vigyan Kendra	10683587608	391002514	SBIN0003497
With KVK							

B. Utilization of KVK funds during the year 2018-19 (Rs. in lakh)

Sr. No	Items/ Head	Approved Allocation for the year 2018-19	Grant received (council's share)	Expenditure
A	**Recurring Contingencies Items**			
1	Pay & Allowances	**12000000**	**12000000**	**11951867**
2	Traveling Allowances	**42000**	**42000**	**41653**
3	Contingencies	**9000000**	**900000**	**899028**
a	Stationery, Telephone, Postage & other expenditure on office running,	350000		241331
b	POL, repair of Vehicles, tractor & equipments			108617
	(Total a + b)	**350000**		**349948**
c	Meals/refreshment of trainees	550000		170290
d	Training materials			88130
g	Training of extension functionaries			19995
e	Frontline demonstration			224516
f	On farm testing			46149
h	Maintenance of building			0
	(Total c to h)	**550000**		**549080**
	Total (A)	**12942000**	**12942000**	**12892548**
B	**Non-Recurring Contingencies**			
	Total (B)	**0**	**0**	0
	Grand total (A+B)	**12942000**	**12942000**	**12892548**

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
2016-17	1161522=00	792018=00	768751=00	1184788=50
2017-18	1184788=50	1485041=00	1502291=82	1167537=68
2018-19	1167537=68	1345450=00	1115351=66	1397635=34

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

Name of the Staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.B.M.Mehta	Sr.Scientist and Head	Zonal Workshop of KVKs of Zone VIII	MPKV, Rahuri	5-5-18 to 7-5-18
Dr.B.M.Mehta	Sr.Scientist and Head	Orientation Prog.on Preparation & Discussion of AAS, of Block level	KVK Aurangabad	6-7-18 to 7-7-18
C.R.Patel	SMS (Crop Production)	Improved technologies for sustainable pulse production	IIPR, Kanpur, UP	3-10-18 to 17-10-18
Dr. B.M.Mehta V.D.Patel	Sr.Scientist and Head SMS (Plant Protection)	Workshop on weather and climate services for agriculture & Media	Gandhinagar	26-10-18
V.D.Patel	SMS (Plant Protection)	Workshop cum training on CFLDs pulses and oilseeds for KVKs of Guj	KVK Bhavnagar	7-12-18 to 9-12-18
Dr.B.M.Mehta	Sr.Scientist and Head	Training on Floriculture	DFR-Pune	14-11-18 to 28-11-18
V.D.Patel	SMS (Plant Protection)	On Farm production of bio-control agents & Microbial bio-pesticides	NIPHM Hyderabad	18-3-19 to 27-3-19

APR SUMMARY

(Note: While preparing summary, please don't add or delete any row or columns)

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	90	1568	907	2475
Rural youths	0	0	0	0
Extension functionaries	4	120	20	140
Sponsored Training	14	289	190	479
Vocational Training	3	65	0	65
Total	111	2042	1117	3159

2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	95	38	95
Pulses	174	70	174
Cereals	45	16	45
Vegetables	26	05	26
Other crops	20	05	20
Hybrid crops	0	0	0
Total	**360**	**134**	**360**
Livestock & Fisheries	40	0	40
Other enterprises	175	0	175
Total	**215**	**0**	**215**
Grand Total	**575**	**134**	**575**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	6	18	18
Livestock	2	20	20
Various enterprises	2	30	60
Total	10	68	68
Technology Refined			
Crops	00	0	0
Livestock	0	0	0
Various enterprises	0	0	0
Total	0	0	0
Grand Total	10	58	58

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	729	34815
Other extension activities	5	2019
Total	734	36834

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
Vadodara	Text only	2	4	4	0	13	0	23
	Total farmers Benefitted	**13353**	**13353**	**13353**	**13353**	**13353**	**13353**	**13353**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	11.89	142680
Planting material (No.)	79950	39475
Bio-Products (kg)	-	-
Livestock Production (No.)	06 (kid)	30000
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	257	
Water	66	
Plant	0	
Total	**323**	

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	03
2	Conferences	01
3	Meetings	11
4	Trainings for KVK officials	07
5	Visits of KVK officials	03
6	Book published	02
7	Training Manual	11
8	Book chapters	0
9	Research papers	04
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	0
13	Proceedings	01
14	Award & recognition	0
15	Ongoing research projects	0