Annual Progress Report
(April-2017 to March-2018)

KRISHI VIGYAN KENDRA
NAVSARI AGRICULTURAL UNIVERSITY
ATHWA FARM, SURAT-395007

ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2017-18
(1st April 2017 to 31st March 2018)

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)
Krishi Vigyan Kendra Navsari Agricultural University Athwa Farm, Surat Dist. Surat, Gujarat-395007	Office (0261)2655565	FAX (0261)2668045 pp	kvkvsurat@nau.in	

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

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

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

Name	Telephone / Contact		
Dr. J. H. Rathod	0261 655565	8128686720	hariom.janaksinh@gmail.com

1.4. Year of sanction: 2012

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

1.5. Staff Position (as on 30th March, 2017)							
				If Permanent, Please indicate			**If Temporary, pl. indicate amount paid (Rs./month)**
Sl. No.	**Sanctioned post**	**Name of the incumbent**	**Discipline**	**Current Pay Band**	**Current Grade Pay**	**Date of joining**	
1.	Senior Scientist and Head	Dr. J. H. Rathod	Entomology	37400-67000	9000	16.11.16	Temporary (130558)
2.	Scientist	Vacant	Ext.Edu.	--	--	--	--
3.	Scientist	Dr. H. C. Parmar	Veterinary Science	15600-39100	6000	02.04.12	Temporary (64668)
4.	Scientist	Vacant	Agronomy	--	--	--	--
5.	Scientist	Prof. B. B. Panchal	Horticulture	15600-39100	6000	20.01.17	Temporary (55835)
6.	Scientist	Smt. G. J. Bhimani	Home Science	15600-39100	6000	05.02.16	Temporary (68610)
7.	Scientist	Dr. S. K. Chawda	Crop protection	15600-39100	6000	02.04.13	Temporary (62799)
8.	Farm manager	Mr. A. T. Patel	--	39900	00	12.07.12	Temporary (45477)
9.	Computer Programmer	Mr. C. G. Lad	--	39900	00	01.08.15	Temporary (45477)
10.	Prog. Assistant	Mr. Y. D. Patel	--	41100	00	10.08.15	Temporary (46829)
11.	Accountant / Superintendent	Mr. K. N. Kothari	--	9300-34800	4200	01.07.15	Temporary (50595)
12.	Stenographer	J. M. Verma	--	19950 Fix	--	19.08.15	Temporary (19950)
13.	Driver	Vacant	--	--	--	--	--
14.	Driver	Vacant	--	--	--	--	--
15.	Supporting staff	Vacant	--	--	--	--	--
16.	Supporting staff	Vacant	--	--	--	--	--

1.6. Total land with KVK (in ha) :

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

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	--	-- --	--	-- --	--	--	--
2.	Farmers Hostel	--		--		--	--	--
3.	Staff Quarters (6)	--	--	--	--	--	--	--
4.	Demonstration Units (2)	--	--	--	--	--	--	--
5	Fencing	--	--	--	--	--	--	--
6	Rain Water harvesting system	--	--	--	--	--	--	--
7	Threshing floor	--	--	--	--	--	--	--
8	Farm godown	--	--	--	--	--	--	--
9	ICT lab	--	--	--	--	--	--	--
10	Other	--	--	--	--	--	--	--

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Tata)	2012	599999	202276	Working
Tractor	2012	549900	3697(h)	Working

C) Equipments& AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Cultivator	2012-13	22500	Working
Plough	2012-13	22500	Working
Lenovo Computer with printer- 4	2015-16	162816	Working
Canon printer- 4	2015-16	34704	Working
Canon Copier machine	2015-16	47565	Working
Multi- media projector-2	2015-16	103691	Working

DSLR Camera	2015-16	39555	Working
Digital camera	2015-16	10305	Working
Multicrop Thresher	2016-17	180000	Working
Rotavetor	2016-17	67210	Working
Disc Harrow	2016-17	95000	Working
Multicrop seed cum fertilizer drill	2016-17	42000	Working
Bund former	2016-17	18000	Working
Cage wheel	2016-17	30450	Working
Ridger (with danti)	2016-17	13125	Working
Hydrulic luggage box	2016-17	16800	Working
V Ditcher	2016-17	12600	Working
Plank	2016-17	32550	Working
RO water purifier with cooler	2016-17	78000	Working
Mrida Parikshak Soil Testing minilab-kit	2016-17	86000	Working
.A/C-2	2016-17	80,000	Working

1.8. Details SAC meeting conducted in the year

Proceeding of 6th Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Surat held on 19/03/2018 at 03:30 p.m., at KVK, Surat

The Sixth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Surat was held at KVK, Surat on 19th March, 2018 to review the progress made by KVK during last year (1-4-2017 to 19-03-2018) and discuss the future action plan for the next year (April-2018 to March-2019). The meeting was inaugurated by Dr. C. J . Dangaria, Honorable Vice Chancellor, NAU, Navsari and Chairman of Scientific Advisory Committee, KVK, Surat. Dr. J. H. Rathod, Member Secretary & Senior Scientist and Head, Krishi Vigyan Kendra, Surat welcomed the dignitaries, committee members, farmers and other invitees. He presented the overall activities and achievements done by the KVK during the last year. Different Scientists also presented the discipline wise achievements made by them. Activities done by KVK, Surat was appreciated by the house and congratulated the Senior Scientist and Head and his team for addressing the key issues as per the need of the farmers of Surat district. The Action Plan for the next year was also presented before the house with due emphasis on mandatory activities with special reference to focus on tribal.

Shri D. K. Padaliya, DHO, Surat suggested to do the special training on rejuvenation in mango for the farmers. He suggested giving FLDs on mango graft (Sonpari) for the trial purpose in Surat.

Shri N. G. Gamit, Deputy Director of Agriculture(Extension), Surat suggested to do the value addition in Soybean. Progressive farmers gave their reaction on the FLDs given by KVK and also told how the KVK is beneficial for them.

Dr. G. R. Patel, Director of Extension Education, NAU, Navsari appreciated the performance of KVK and emphasized to increase the role of farm women in decision making activities.

Hon. Vice Chancellor and Chairman of the committee, Dr. C. J. Dangaria gave very positive remarks on KVK activities and focused to create the awareness about the organic farming among the farmers. He emphasized to make some plan to double the income of the farmer (mainly on honey production and fisheries).

6.1 Approval of the minutes of Fifth Scientific Advisory Committee.
The action taken report of the minutes of Fifth SAC meeting (Held on 02-03-2017) was presented before the house and it was approved by the Scientific Advisory Committee.

6.2 Progress made by KVK during April 2017 to March 2018.

Senior Scientist and Head and the scientists of the KVK, NAU, Surat presented the report on progress made by KVK, for the period of April-2017 to March 2018. The committee was satisfied with the activities and achievements made by the KVK.

6.3 Action plan for the period of April-2018 to March-2019.
Discussion was made on the Action Plan for the period of April-2018 to March-2019 which was approved by the house. However, few suggestions were made by the house to strengthen the action plan.

6.3.1	Give demonstrations of GM 6 variety of Green gram during summer.
6.3.2	Give demonstration of GG 31 or any other recent variety in place of TG 37 A for summer Groundnut.
6.3.3	Give demonstration of GT 5 in place of GT 3 for summer sesame.
6.3.4	Demonstrate Indian bean NPS 1 variety as intercrop with Sugarcane.
6.3.5	Make demonstration plot of Brinjal Var. GNRB-1 at KVK farm.
6.3.6	Organize special training on High density planting of Mango in collaboration with horticulture department.
6.3.7	Take the demonstration on Mango var. Sonpari
6.3.8	Organize special trainings, Sibir and other activities related to Fisheries in collaboration with line department.
6.3.9	Keep project in Tribal Sub Plan Scheme.
6.3.10	Keep training on scientific cultivation of Groundnut in Umarpada block.
6.3.11	Give demonstrations of rectangular kitchen garden model in place of round one.
6.3.12	Give demonstration on Goat farming in tribal area on collaboration with co operative society.
6.3.13	Give special emphasis on apiculture and fish culture to double the income of farmers.
6.3.14	Give training on value addition of Soybean.

The meeting was ended with vote of thanks by Dr. J. H. Rathod, Senior Scientist & Head, KVK, NAU, Surat.

Senior Scientist and Head
Krishi Vigyan Kendra
Athwa Farm, Surat

Vice – Chancellor and Chairman SAC
Navsari Agril. University,
Navsari

Following members and invitees were remained present in 6th Scientific Advisory Committee meeting.

1	Dr. C. J. Dangaria	Hon. Vice Chancellor, NAU, Navsari	Chairman
2	Dr. G. R. Patel	Director of Extension, NAU, Navsari	Member
3	Dr. J. D. Thanki	Professor and Head, Department of Agronomy, NMCA, NAU, Navsari	Member
4	Dr. V. K. Parmar	I/C Professor and Head, Department of Horticulture, NMCA, Navsari	Member
5	Dr. V. B. Kharadi,	Research Scientist, LRS,NAU, Navsari	Member
6	Mr. N. K. Gabhani	District Agricultural Officer Training, Surat	Member
7	Shri D. K.Padaliya	District Horticultural Officer, Surat	Member
8	Shri N. G. Gamit	District Agricultural Officer Extension Surat	Member
9	Dr. R. M. Patel	Professor (Horticulture), GABI,NAU, Surat,	Member
10	Shri P. F. Chaudhri	Representative, District Agricultural Officer Surat	Member
11	Mrs. P. S. Shah	Deputy Engineer, WALMI, Surat	Member
12	Mrs. Sonalben R. Chaudhari	Representative, Deputy Director of fisheries, Surat	Member
13	Dr. A. C. Patel	I/C, Assistant Deputy Director Animal Husbandry, Suart	Member
14	Shri Ghelabhai S. Patel	Progressive farmer, Village: Umara, Taluka: Mahuva, Surat	Member
15	Mrs. Vajaben Vasantbhai Vasava,	Progressive Woman Farmer, Village:Chitlada, Taluka:Umarpada, Surat	Member
16	Shri. Manojbhai Patel	Agri Entrepreneur, Village: Shekhpur, Surat	Member
17	Mrs. Nishaben S. Chaudhary	Chairmen, SHG, Village: Parvat, Taluka: Mandvi, Surat	Member
18	Lataben P. Patel	Progressive woman farmer, Village: Mandroi, Taluka: Olpad,	Member
19	Shri Ramsingbhai Chaudhri	Representative, Cooperative Leader, Village: Moritha, Taluka: Mandvi ,	Special Invitee
20	Dave Asha R.	Vice-President, SGPC, Surat	Special Invitee
21	Avni Raval	Reliance Foundation, Surat	Special Invitee
22	Shri. R. A. Sosa	RFO, Forest Department, Surat	Special Invitee
23	Shri D. M. Chitte	Forest Department, Surat	Special Invitee
24	Dr. J. H. Rathod	Senior Scientist and Head, KVK, Surat	Member Secretary
25	Dr. D. H.Patel	Representative, Research Scientist (Cotton), Main Research Station Cotton, Surat	Special Invitee
26	Shri B.K.Davda.	Research Scientist (Sorghum), Main Research Station Sorghum, Surat	Special Invitee
27		All SMS, KVK, Surat	

PROCEEDINGS AND ACTION OF THE FIFTH SAC MEETING HELD ON 02/03/2017.

Sr. No	Suggestions	Action Taken
5.3.1	Demonstrate new variety of Groundnut for summer	Demonstration of Groundnut var.TG 37 A demonstrated to 75 beneficiaries
5.3.2	Demonstrate new variety of Sorghum	Jointly given 50 demonstrations with Sorghum Research Station, Surat.
5.3.3	Impact study of training and FLDs should be reflected in report	Impact of training and FLDs was done and reflected in this report
5.3.4	Give more emphasis on organic farming during training	We conducted special programme on organic farming (One Seminar, Sibir and two trainings). We also emphasized on organic farming during all the trainings.
5.3.5	In presentation, detail about FLD's treatments (inputs), observations on insect pest and disease in IPDM demonstrations, Sponsoring agency in Sponsored training should mention.	Suggestion accepted and included in the presentations.
5.3.6	Conduct Demonstrations of banana sap on banana crop.	Conducted 30 demonstrations.
5.3.7	Arrange Kitchen Garden demonstrations with Suruchi in tribal area.	Conducted 50 demonstrations.

2. DETAILS OF DISTRICT

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

S. No	Farming system/enterprise
1	Crop production
2	Crop production and Horticulture
3	Crop production and Livestock
4	Crop production, Horticulture and Livestock

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

Taluka (AES)	Soil texture	Rainfall (mm)	Crops	Features
(AES-1) Mandvi (30%), Mangrol (40%), Umarpada	Hilly and highly undulating fine texture, highly erosive	< 1100	Paddy, Maize, Cotton, Sorghum, Pulses	Highly erosive Shallow to medium in depth Poor permeability Low to medium N & P content
(AES-2) Bardoli, Choryasi (75%), Kamrej, Palasana, Surat and Mahuva	Leveled, deep, fine textured	> 1450	Sugarcane, Paddy, Sorghum, Pulses, Orchards	Poor drainage Water logging Very poor permeability Poor soil physical condition Low to medium in N & P content
(AES-3) Mandvi (70%), Mangrol (60%), Olpad (70%)	Deep to medium black	1000 – 1250	Sorghum, Pulses, Paddy, Cotton, Oil Seeds	Moderate to severe erosive Poor soil fertility Poor irrigation facility
(AES-4) Choryasi (25%), Olpad (30%)	Coastal plain, deep, fine texture, salt affected	900-1000	Paddy - Cotton, Sorghum, Pulses, Wheat	High salt accumulation Poor soil physical condition High water table Water logging condition

2.3. Types of soils in Surat district: (according to AES)

SN	Soil type	Characteristics
1	(AES-1) Mandvi (30%), Mangrol (40%),Umarpada	Hilly and highly undulating fine texture, highly erosive
2	(AES-2) Bardoli, Choryasi (75%), Kamrej, Palasana,,Surat and Mahuva	Leveled, deep, fine textured
3	(AES-3) Mandvi (70%), Mangrol (60%), Olpad(70%)	Deep to medium black
4	(AES-4) Choryasi (25%), Olpad (30%)	Coastal plain, deep, fine texture, salt affected

2.4. Area, Production and Productivity of major crops cultivated in district (2017-18)

Sr. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
Kharif crops				
1	Paddy Irrigated	32907	113858	3460
2	Paddy rainfed	5701	9349	1640
3	Kh. Sorghum	11052	14091	1275
4	Kh. Maize	1245	1942	1560
5	Pigeon pea irrigated	916	1032	1127
6	Pigeon pea- rainfed	9506	7224	760
7	Green gram	944	690	651
8	Urid	1587	415	658
9	Other pulses	347	183	530
10	Ground nut	530	816	1540
11	Sesame	26	11	435
12	Castor	30	50	1667
13	Cotton	2352	4515	1920
14	Soybean	9830	8620	877
15	Vegetables	31991	0	--
16	Fodder	7164	0	--
17	Green manuring	7616	0	--
	Total	**123796**	**0**	--
Rabi-summer crops				
1	Paddy (Summer)	2732	12594	4610
2	Wheat	6305	24570	3942
3	Sorghum	6305	10863	1723
4	Maize	862	1873	2174
5	Bean	824	717	871
6	Pigeonpea	1085	1334	1230
7	Greengram summer	2041	1353	663
8	Gram	1453	1275	878
9	Groundnut Summer	409	889	2176
10	Sugarcane	84464	7816298	92540
11	Castor	43	78	1823
12	Mustard	79	93	1186
13	Fodder	2675	--	-
14	vegetables	9368	-	-
	Total	**118911**		

Source: DAO,Surat

2.4.2 Area, Production and Productivity of major fruit crops cultivated in the district (2017-18)

Crop	Area (Ha.)	Production (MT)	Productivity (MT)
Mango	9577	88970.33	9.29
Sapota	2200	24442.00	11.11
Citrus	95	856.90	9.02
Ber	8	24.00	3.00
Banana	8705	610220.50	70.10

Guava	82	966.78	11.79
Pomegranate	50	537.50	10.75
Papaya	865	52522.80	60.72
Other	261.8	1937.46	7.40
Total	21843.8	780478.27	35.73

2.4.3.1 Area and Production of Vegetable Crops in the district

Crop	Area (Ha.)	Production (MT)	Productivity(MT)
Brinjal	5390	107530.50	19.95
Okra	12045	165618.75	13.75
Cabbage	873	16936.20	19.40
Tomato	1691	41260.40	24.40
Clusterbean	1532	12118.12	7.91
Cow Pea	1596	19630.80	12.30
Pointed Gourd	3621	81472.50	22.50
Tindola	665	6650.00	10.00
Bitter Gourd	307	5771.60	18.80
Bottle Gourd	347	6523.60	18.80
Ridge Gourd	81	1522.80	18.80
Papadi	301	2829.40	9.40
Valol	255	2422.50	9.50
TOTAL(Major Crops)	28704	470287.17	16.38

2.4.3.2 Area and Production of Vegetable Crops in the district

Crop	Area (Ha.)	Production (MT)	Productivity(MT)
Watermelon	45	450.00	10.00
Kankoda	190	1615.00	8.50
Yam	915	13725.00	15.00
Beet	213	2928.75	13.75
Carrot	86	877.20	10.20
Radish	458	7213.50	15.75
Chilly-Salad	507	7605.00	15.00
Chilli-Dry (Green Chilli)	150	237.00	1.58
Turmeric	241	4964.60	20.60
other	2805	39616.05	14.12
Total	31509	509903.22	16.18

2.4.4 Area and Production of Flower Crops in the district

Crop	Area(Ha.)	Production (MT)	Productivity(MT)
Gadaliya	40.50	370.98	9.16
Rose	198.00	1892.88	9.56
Marigold	515.00	5180.90	10.06
Lily	130.00	1287.00	9.90
Mogra	7.00	30.10	4.30
Others	190.00	1740.40	9.16
TOTAL	1080.50	10502.26	9.72

2.4.5 Area, Production and productivity of Spices Crops in the district

Crop	Area (Ha.)	Production (MT)	Productivity (MT)
Ginger	192	3298	17.00
Turmeric	180	3060	17.00
Fenugreek	82	123	1.50
Coriander	38	68	1.80
Others	26	24.7	0.95
Total	**2358**	**20824.26**	**8.83**

Source: DDH,Surat

2.5. Weather data (2017-18)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
April 2017	00	43.0	16.8	73	48
May 2017	00	39.0	24.6	70	60
June 2017	374.2	36.2	22.2	86	65
July 2017	363.8	34.0	24.0	94	79
August 2017	306.2	33.6	24.0	95	77
September 2017	106.1	37.0	24.0	94	79
October 2017	42.6	38.0	25.0	86	76
November 2017	00	35.6	17.6	69	65
December 2017	14.6	34.5	16.0	83	73
January 2018	00	34.2	15.2	89	80
February 2018	00	35.2	15.8	90	75
March 2018	00	38.6	21.0	76	65

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

Category	Population	Production (MT)	Productivity
Cattle			
Crossbred	289402	134000	7.9 liters
Indigenous	289402	44000	3.8 liters
Buffalo	300282	192000	4.6 liters
Sheep	1936	-	-
Goats	150464	5000	-
Pigs			
Crossbred	94000	-	-
Indigenous	68000	-	-
Rabbits	-	-	-
Poultry			
Hens	204000	55100	-
Desi	10000	-	-
Category		Production (Q.)	Productivity
Fish (Reservoir)	5	10414	-

2.7. Details of Operational area / Villages

Sr. No.	Name of Block	Name of villages	Identified Thrust areas	Identified Problems	Specific activities
1	Mahuva	1. Umra 2. Vasrai 3. Dhundhesa 4. Mahudi	1. Increase productivity of major crops e.g. Paddy, sugarcane 2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6. Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Okra, brinjal and creepers are important crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding green house net house technology and crops Lack of technical knowhow about mango orchards plantation and management. 3.High use of water in canal command area and water scarcity in hilly area 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd. 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6.Lack of knowledge of small scale agricultural base enterprises, value addition	Training and demonstrations on new variety of rice and sugarcane. Demonstration on intercropping in sugarcane Training programmers on package of practices of these vegetable crops. And precision farming. Awareness programmes on protected cultivation on net house and green house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Training and demonstrations on INM and IPDM in different crops Training and demonstrations on scientific calf rearing, feeding mineral mixture and Popularize Fodder crops and feeds and fodder management Training on value addition and income generating activity Demonstrations on use of twin wheel hoe and other hand tools.

				etc. 7. Drudgery reduction through improved hand tools.	
2	Mandvi	1. Amba 2. Parvat 3. Uteva 4. Titoe	1. Increase productivity of major crops e.g. Paddy, sugarcane, Soybean 2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Brinjal and okra are important crops but the productivity is very low, problem of insect pests and disease No technical know how regarding green house net house technology and crops Lack of technical knows how about mango orchards plantation and management. 3.High use of water in canal command area and water scarcity in hilly area 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and fruit and shoot borer in brinjal 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder	Training and demonstrations on new variety of rice and sugarcane. Demonstration on intercropping in sugarcane Awareness programmes on protected cultivation on low cost net house and green house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Training and demonstrations on INM and IPDM in different crops Training and demonstrations on scientific calf rearing, feeding mineral mixture and Popularize Fodder crops and feeds and fodder management Training on value addition and income generating activity Demonstrations on use of twin wheel hoe and other hand tools.

				management 6.Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7.Drudgery reduction through improved hand tools.	
3	Umarpada	1. Kadvali 2. Kadavidadra 3. Vadpada 4. Khotarampura	1. Increase productivity of major crops e.g. Paddy, cotton, sorghum, pigeon pea 2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Indian bean is an important crops but the productivity is very low, problem of insect pests and disease Lack of technical knowhow about orchards plantation and management. 3. Water scarcity in rabi / summer due hilly area 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy vegetables etc, No use of bio fertilizers 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management	Training and demonstrations on new variety of Paddy, cotton, sorghum, pigeon pea, increasing seed replacement ratio Training programmers on package of practices of these vegetable crops. And precision farming. Awareness programmes on protected cultivation on Low cost net house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Promotion of water conservation technologies Training and demonstrations on INM and IPDM in different crops Training and demonstrations on

				Large no of non descript animals 6. Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7. Drudgery reduction through improved hand tools.	scientific calf rearing, feeding mineral mixture and Popularize Fodder crops and feeds and fodder management Training on value addition and income generating activity Demonstrations on use of twin wheel hoe and other hand tools.
4	Mangrol	1. Balethi 2. Mandan 3. Ghodbar	1. Increase productivity of major crops e.g. Paddy, cotton, sorghum 2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood. 7. Promotion of small scale farm mechanization in tribal area.	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Okra, brinjal and creepers are crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding net house technology and crops Lack of technical knowhow about plantation and management. 3.Water scarcity in hilly area and rain fed farming 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd. 5.Low milk productivity	Training and demonstrations on new variety of rice, pigeon pea, sorghum and cotton. Increase seed replacement ratio of these crops. Training programmers on package of practices of these vegetable crops. And precision farming. Awareness programmes on protected cultivation on low cost net house. Promotion of farm forestry through training and demonstrations Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Popularizing water conservation technologies for rain fed farming Training and demonstrations on INM

				High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6. Lack of knowledge of small scale agricultural base enterprises, value addition etc. 7. Drudgery reduction through improved hand tools.	and IPDM in different crops Training and demonstrations on scientific calf rearing, feeding mineral mixture and Popularize Fodder crops and feeds and fodder management Training on value addition and income generating activity Demonstrations on use of twin wheel hoe and other hand tools.
5	Olpad	1. Mandroi 2. Bhatgam	1. Increase productivity of major crops e.g. Paddy, sugarcane 2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Okra and creepers are important crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding green house net house technology and crops Lack of technical knowhow about fruit crops cultivation. 3.High use of water in canal command area and salinity problem in coastal area 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc,	Training and demonstrations on new variety of rice and sugarcane. Demonstration on intercropping in sugarcane Training programmers on package of practices of these vegetable crops. And precision farming. Awareness programmes on protected cultivation on net house and green house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Training and demonstration on drainage system to reduce salinity

			sustaining their livelihood.	Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd. 5. Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6. Lack of knowledge of small scale agricultural base enterprises, value addition etc.	and salinity tolerant crops Training and demonstrations on INM and IPDM in different crops Training and demonstrations on scientific calf rearing, feeding mineral mixture and Popularize Fodder crops and feeds and fodder management Training on value addition and income generating activity
6	Kamrej	1. Karjan 2. Choryasi	1. Increase productivity of major crops e.g. sugarcane 2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM.	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation 2. Banana is an important crop but the problem of insect pests and disease No technical knowhow regarding green house net house technology and crops 3.High use of water in canal command area problem of water logging 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in banana	Training and demonstrations on new variety of sugarcane. Demonstration on intercropping in sugarcane Training programmers on package of practices of banana cultivation Demonstration on quality improvement in banana. Awareness programmes on protected cultivation on net house and green house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Training on drainage system Training and demonstrations on INM and IPDM in different crops
7	Bardoli	1. Balda 2. Rajvad	1. Increase productivity of major crops e.g. Paddy, sugarcane	1.The productivity of crop is very low due to lack of technical knowhow regarding its	Training and demonstrations on new variety of rice and sugarcane.

		3. Afva	2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Increasing milk production by dissemination of latest technologies. 6 .Imparting skill oriented training to the tribal women for sustaining their livelihood.	scientific cultivation 2. Okra and creepers are important crops but the productivity is very low, problem of insect pests and disease No technical knowhow regarding green house net house technology and crops Lack of technical knowhow about fruit crops cultivation. 3.High use of water in canal command area and salinity problem in coastal area 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in crops like paddy sugar cane, okra, creepers etc, Injudicious use of fertilizers and pesticides High incidence of wilt and parval vine borer in pointed gourd. 5.Low milk productivity High calf mortality Problem of anoestrus Lack of awareness about Feeds and fodder management 6.Lack of knowleged of small scale agricultural base enterprises, value addition etc.	Demonstration on intercropping in sugarcane Training programmers on package of practices of these vegetable crops. And precision farming. Awareness programmes on protected cultivation on net house and green house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Training and demonstration on drainage system to reduce salinity and salinity tolerant crops Training and demonstrations on INM and IPDM in different crops Training and demonstrations on scientific calf rearing, feeding mineral mixture and Popularize Fodder crops and feeds and fodder management Training on value addition and income generating activity
8	Choryasi	1. Bhatha 2. Bhatpor 3. Budia	1. Increase productivity of major crops e.g. sugarcane 2. Dissemination of production	1.The productivity of crop is very low due to lack of technical knowhow regarding its scientific cultivation	Training and demonstrations on new variety of sugarcane. Demonstration on intercropping in sugarcane

			technology of fruits and vegetables and their post harvest management as well promotion of precision farming. 3.Management of natural resource, including salinity management 4. Popularize eco-friendly crop production with special reference to IPDM & INM. 5. Imparting skill oriented training to the tribal women for sustaining their livelihood.	2.No technical knowhow regarding green house net house technology and crops 3.High use of water in canal command area problem of water logging 4.Lack of knowledge about Insect pests and diseases and their management and nutrient management in banana	Awareness programmes on protected cultivation on net house and green house. Training on drip irrigation to rural youth. Promotion of drip irrigation through awareness programmes Training on drainage system Training and demonstrations on INM and IPDM in different crops Training on value addition and income generating activity

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Paddy, Sorghum, Vegetables, Sugarcane, Cotton & pulses	Crop production management (ICM)
Vegetables,	Eco friendly production
Paddy, Sugarcane, Cotton, Pigeon pea,Banana Vegetables	Integrated pest & disease management
Paddy, Sugarcane, Vegetables, ,Banana	Integrated nutrient management
Use of Bio-fertilizers	Eco-practice and to minimize the use of chemicals
Green house technology,	High tech horticulture
Salinity management & Micro irrigation	Soil and Water conservation
Formation of Self Help Groups	Women empowerment
Value addition in Fruits, Vegetables & pulses	Self employment to rural youth
Dairy management	Management of milch animals and calf rearing
Health & Nutrition	Health & nutrition for vulnerable groups.
Farm mechanization	Small scale farm mechanization
Information transfer , Marketing and credit availability	Value addition, market linkage, and Schemes

Major thrust areas

1. Increase productivity of major crops e.g. Paddy, Cotton, Sorghum, sugarcane.
2. Dissemination of production technology of fruits and vegetables and their post harvest management as well promotion of precision farming.
3. Management of natural resource, including salinity management
4. Popularizing of location specific farming system
5. Popularize eco-friendly crop production with special reference to IPDM & INM.
6. Increasing milk production by dissemination of latest technologies.
7. Imparting skill oriented training to the tribal women for sustaining their livelihood.
8. Promotion of small scale farm mechanization in tribal area

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 (ha)		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
8	6	45	40	90	698.1	225	2118

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
40	55	1090	2006	75	828	16750	21660

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
40	134.18	0	1,28000

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
00	00	00	00

3.1. B. Operational areas details during 2017-18

Sr. No	Thrust area	Crop/ Enterprise	Identified Problem	Interventions					
				Title of OFT if any	**Title of FLD if any**	**Title of Training if any**	**Title of training for extension personnel if any**	**Extension activities**	**Supply of seeds, planting materials etc.**
1	Increase productivity of major crops	Paddy, Soybean, Pigeon pea Sorghum Cotton, Sugarcane	Use of local variety High seed rate, Imbalance use of fertilizers No use of bio fertilizer lack of knowledge about SIRA & SRI technology	--	Demo. of improved variety	Scientific Cultivation of major crops	--	Field days, khedut shibirs, News paper coverage, film show Exhibitions etc.	Seed of improved variety

2	Dissemination of production technology of fruits and vegetables and their post harvest management as well as promotion of precision farming	Banana Brinjal Pointed gourd Okra Mango Green house/ net house technology High value crops	Use of local variety in brinjal Imbalance use of fertilizers in crops No use of bio- fertilizers No knowledge about post harvest management and processing Low technical know house regarding green house/ net house and production technology	1. Assessment of enriched banana sap on yield and quality of Mango	Demo. on INM	Scientific cultivation of various crops Training on protected cultivation and precision farming	--	Khedut shibirs,Training, News paper coverage, film show Exhibitions etc. Awareness programmes on net house/ green house	Demonstration on INM, IPDM

3	Popularize eco-friendly crop production with special reference to IPDM	Cotton, Pigeon pea Brinjal, Paddy, Sugarcane	Lack of knowledge about disease and insect pest management. Injudicious use of pesticides Lack of knowledge about Bio-fungicides	1.Assessment of effective methodology for the management of Banana Pseudo stem weevil 2. Assessment of stem application method of insecticide for management of sucking pest in okra	Demo. of IPM techniques	IPM practices	--	Kisan gosthi Diagnostic visits. Khedut shibirs,	IPM kits

4	Increasing milk production by dissemination of latest technologies.	Animal husbandry	Poor dairy management Large number of non-descript animals with low milk production Poor availability of fodder in hilly area. Poor cultivation of fodder crops High calf mortality due to poor management	1.Use of Chelated minerals in the diet of crossbred HF cows. 2.Reduction of Calving Interval in Cross bred cow.	Use of mineral mixture Urea treatment to paddy straw Teat dip treatment with $KMNO_4$ Scientific calf rearing	Animal health and care Dairy management Animal diseases and their management Scientific calf rearing	--	Pashu palan shibirs Animal health camps, awareness programmes, Literature publication etc	Mineral Mineral mixture Urea Plastic sheets Medicines etc.
5	Management of natural resource, including salinity management	Paddy, Sugarcane, Soybean, Vegetables	In hilly area problem of water conservation In middle canal command area due to excess irrigation problems of water logging and salinity In coastal area salinity problem						
5	Popularize eco-friendly crop production with special reference to INM.	Brinjal Okra, Banana Paddy	Imbalance use of fertilizers lack of awareness about use of bio-fertilizers	--	Demo. of improved variety	INM in Paddy and pigeon pea	--	Field days, khedut shibirs, News paper coverage, film show , etc.	Bio Fertilizers,

6	Imparting skill oriented training to the tribal women for sustaining their livelihood.	Value addition Small scale agricultural based entrepreneurship development	Lack of knowledge about value addition of locally available materials Lack of knowledge, skills regarding various small scale agricultural based enterprises	--		Value addition in fruits and vegetables by preparing jam, ketch-up and other products Value addition in spices and condiments for preparation of Mari- masala Preparation of Squash from Fruits Training on mushroom cultivation Preparation of various recipes from mushroom	Nutrition management in malnourished children for Anagan wadi workers	Training ,Mahila shibirs, Awareness programme ,News paper coverage, film show Literature publication , Exhibitions etc	Seeds & seedlings

3.2. Technology Assessment and Refinement

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Crop Management	--	--	--	--	1	1	--	--	--	2
Integrated Pest Management	--	--	--	--	1	1	--	--	--	2
Total					**2**	**2**				**4**

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

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
Production and Management	1	--	--	--	--	1
TOTAL	**2**	**--**	**--**	**--**	**--**	**2**

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

B. Achievements on technologies Assessed and Refined

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Integrated Pest Management	Banana	Assessment of effective methodology for the management of Banana Pseudo stem weevil	3	5	2 ha
	Okra	Assessment of stem application method of insecticide for management of sucking pest in okra	3	5	2 ha
Integrated Crop Management	Brinjal	Assessment of enriched banana sap on yield and quality of brinjal	3	5	2 ha
	Mango	Assessment of enriched banana sap on yield and quality of Mango	3	5	2 ha
		Total		**20**	

B.2. Technologies Refined under various Crops: Nil

B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition management	Crossbred HF cows.	Use of Chelated minerals in the diet of crossbred HF cows.	3	10
Production and management	Cross bred cow	Reduction of Calving Interval in Cross bred cow	3	10
		Total		**20**

B.4. Technologies Refined under Livestock and other enterprises: Nil

1. Crop Protection

(1): Assessment of effective methodology for the management of Banana Pseudo stem weevil.

Technology Option	No. of trials	% Infestation	Yield (Kg/ha)	BCR
T_1- Farmers method (Spraying of Chlorpyriphos on pseudostem)	5	1.93	573.5	3.32
T_2-Longitudinal Split stem traps (25 traps/0.2 ha) swabbed with Beauveria (20 gm/trap) (NRC, Banana)		1.43	694.7	4.16

(2): Assessment of stem application method of insecticide for management of sucking pest in okra

Treatments: **T_1.** Farmer's method

T_2. Spraying of recommended insecticides

No. of OFT	Area	Whitefly population/3 leaves		%Decrease over control	%Decrease over Farmers method	Jassid population/3 leaves		%Decrease over control	%Decrease over Farmers method
		T_1	T_2			T_1	T_2		
5	0.5	2.30	2.19	48.10	45.63	2.74	2.18	57.80	46.99

Average yield (q/ha)		% Increase	% Increase over Farmers method	BCR	
T_1	T_2			T_1	T_2
136.17	153.17	21.84	12.49	3.99	4.01

2. Horticulture:

(3) Assessment of enrich banana sap for yield and quality of brinjal

Technology Option	No.of trials	Yield (t/ha)	BCR
T_1: Farmers method	5	160.5	3.72
T_2: Spraying of banana sap @1.0 % twice at peak flowering stage (15 days interval)		174.42	3.98

(4) Assessment of enrich banana sap for yield and quality of mango

Technology Option	No.of trials	Yield (t/ha)	BCR
T_1: Farmers method	5	8.90	4.09
T_2: Spraying of 1.5 % banana sap at flowering and pea stage		11.92	5.80

3. Animal Husbandry:

On Farm Test: 1

Title	**:**	**Use of Chealated minerals in the diet of crossbred HF cows**
Objective	**:**	To improve milk production and Milk far percentage To improve body condition
Location	**:**	Mandvi and Mahuva Block
Treatments	**:**	T1: Animal rearing as per farmers tradition (Not give Mineral Mixture) T2: Animal give 50g chealated mineral Mixture per day
No. of beneficiaries	**:**	10
Season	**:**	*Rabi*
Observations:	:	Milk Yield, Fat percentage, Post partum estrus and body weight
Source of technology	**:**	NDDB, Anand

Results:

Parameters	**T1**	**T2**	**Difference**	**% Increase**
Milk Yield (L)	11.033±2.12	12.060±2.34	1.186	9.7
Fat %	3.85±.20	4.09±0.18	0.24	5.8
4% FCM	10.764±1.94	12.219±2.42	--	--
Body Weight (Kg)	376.46	369.28	--	--
Post partum estrus (D)	146	102	--	--

On Farm Test: 2

Title	**:**	**Reduction of Calving Interval in Cross bred cow.**
Objective	**:**	To Reduce Intercalving period
Location	**:**	Mandvi and Mahuva Block
Treatments	**:**	T1 : Farmers practice (No feeding of mineral mixture) T2: Mineral mixture @ 50 g./head/day + deworming + Herbal Hormone catalyst (Prajna Tablets) @ 3 tablets / day / animal for 3 Days.
No. of beneficiaries	**:**	10
Season	**:**	*Rabi*
Observations:	:	Post partum estrus, Conception and Calving
Source of technology	**:**	NDDB, Anand

Results:

Parameter	**Major Parameters**		**% change in major parameter**
	Demonstration	**Check**	
Animal coming in Estrus (I)	9 (10)	5 (10)	16 % reduced calving Interval
Animal become Pregnant (I)	8 (20)	3 (10)	
Calving Interval (D)	465	560	

D1. Results of Technologies Refined : Nil

3. FRONTLINE DEMONSTRATION

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

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

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
FLDs of KVK							
Cereal crops							
1	Paddy (NAUR – 1)	ICM	New variety	FLDs	4	20	8
2	Paddy (GNR – 3)	ICM	New variety	FLDs	3	20	8
3	Paddy (GAR –13)	ICM	New variety	FLDs	2	10	4
4	Paddy (Purna)	ICM	New variety	FLDs	3	10	4
5	Paddy	IPDM	New variety	FLDs	3	20	8
Pulses and oilseeds							
1	Cotton (G cot-12)	ICM	New variety	FLDs	2	10	4
Horticulture crops							
1	Okra (GJO-3)	ICM	New variety	FLDs	4	10	4
2	Banana	INM	INM	FLDs	4	20	8
3	Banana	IPDM	IPDM	FLDs	3	20	8
4	Pointed Gourd	INM	INM	FLDs	2	10	4
5	Pointed Gourd	IPDM	IPDM	FLDs	2	10	4
6	Vegetable crops	Kitchen Garden	Seeds	FLDs	4	20	20 kit

Animal Husbandry							
1	Cow	HF cross	Nutritional Management	FLDs	5	20	--
2	Calf	--	Nutritional Management	FLDs	5	20	--
Home Science							
1	Sickle	Drudgery deduction	Labour saving	FLDs	4	30	--
2	Wheel hoe	Drudgery deduction	Labour saving	FLDs	2	15	--
FLDs of Other Agency							
Crop production							
NFSM							
1	Udad Bean	ICM	Variety	FLDs	12	93	20
2	Gram	ICM	Variety	FLDs	10	100	20
3	Greengram	ICM	Variety	FLDs	8	40	20
NMOOP							
1	Soyabean	ICM	Variety	FLDs	4	74	20
2	Sesame	ICM	Variety	FLDs	6	50	20
TSP – ICAR (Mega Seed)							
1	Indian Bean (NPS 1)	ICM	Seed	FLDs	5	25	2
Adaptive Trials							
1	Okra (GAO 5)	Variety	New variety	FLDs	2	10	4
2	Banana	IPDM and INM	IPDM and INM	FLDs	6	50	20
3	Pointed Gourd	IPDM and INM	IPDM and INM	FLDs	8	50	20
4	Pigeon pea	IDM	IDM	FLDs	4	20	8
5	Brinjal	IPDM and INM	IPDM and INM	FLDs	6	50	20

6	Paddy	IPDM	IPDM	FLDs	5	30	20
7	Castor NCH 1	Variety	New variety	FLDs	6	12	2
8	Suruchi Sickle	Drudgery Reduction	-	FLDs	9	110	--
9	Twin Wheel Hoe	Drudgery Reduction	-	FLDs	8	65	--
10	Cow	Animal Feeding Management	Mineral mixture + Deworming Tablets	FLDs	16	200	--
11	Okra	IPDM	IPDM	FLDs	4	25	--

B. Details of FLDs implemented during 2017-18 (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	**Crop**	**Thematic area**	**Technology Demonstrated**	**Season and year**	**Area (ha)**		**No. of farmers/ demonstration**			**Reasons for shortfall in achievement**
					Proposed	**Actual**	**SC/ST**	**Others**	**Total**	
FLDs of KVK										
Cereal crops										
1	Paddy (NAUR –1)	ICM	New variety	*Kharif -17*	5	5	12	0	12	--
2	Paddy (GNR – 3)	ICM	New variety	*Kharif -17*	5	5	12	0	12	--
3	Paddy (GAR –13)	ICM	New variety	*Kharif -17*	5	5	12	0	12	--
4	Paddy (Purna)	ICM	New variety	*Kharif -17*	5	5	12	0	12	--
5	Paddy	IPDM	New variety	*Kharif -17*	4	4	10	0	10	--
6	Paddy (GNRH-1)	ICM	New variety	*Kharif -17*	5	5	12	0	12	--

Other crops										
1	Cotton (G cot-10)	ICM	New variety	*Kharif -17*	4	4	10	0	10	--
Oilseed and Pulses crops										
1	Pigeonpea (BDN 711)	ICM	New variety	*Kharif* -17	5	5	12	0	12	--
2	Green gram (Meha)	ICM	New variety	*Summer* -18	5	5	12	0	12	--
3	Soybean (NRC 37)	ICM	New variety	*Kharif* -17	5	5	12	0	12	--
4	Soybean (JS 335)	ICM	New variety	*Kharif* -17	5	5	12	0	12	--
Horticulture crops										
1	Banana	INM	INM	*Kharif -17*	4	4	0	10	10	--
2	Banana	IPDM	IPDM	*Kharif -17*	4	4	0	10	10	--
3	Brinjal	INM	INM	*Rabi -17*	4	4	0	10	10	--
4	Brinjal	IPDM	IPDM	*Kharif -17*	4	4	0	10	10	--
5	Pointed Gourd	INM	INM	*Kharif -17*	4	4	0	10	10	--
6	Pointed Gourd	IPDM	IPDM	*Kharif -17*	4	4	0	10	10	--
7	Vegetable crops	Kitchen Garden	Seeds	*Rabi-17*	20 kit	20 kit	20	0	20	--
8	Okra	IPDM	--	*Summer-18*	4	4	10	0	10	--
9	Mango	IPM	--	*Summer-18*	4	4	10	0	10	
Animal Husbandry										
1	Cow HF	Nutritional Management	Mineral Mixture + Deworming Tab	--	20	20	20	0	20	--
2	Calf	Nutritional Management	Concentrate + MM + dewormin	--	20	20	20	0	20	--

3	Cow HF	Disease Management	Mastitis prevention antibacterial Spray	--	20	20	20	0	20	--
4	Cow / Buffalo	Disease Management	Ectoparasitic infestation Treatment	--	20	20	20	0	20	--
Home Science										
1	Wheel hoe	Drudgery deduction	Labour saving	*Kharif-17*	10	10	10	0	10	--
FLDs of Other Agency										
Crop production										
NFSM										
1	Gram	ICM	New variety	*Rabi* -17	30	30	75	0	75	--
2	Greengram	ICM	New variety	*Summer*- 18	30	30	75	0	75	--
NMOOP										
1	Soyabean	ICM	New variety	*Kharif* -17	30	30	75	0	75	--
2	Sesame	ICM	New variety	*Summer* -18	30	30	75	0	75	--
3	Groundnut	ICM	New variety	*Summer*- 18	30	30	75	0	75	--
TSP – ICAR (Mega Seed)										
1	Indian Bean (NPS 1)	ICM	Seed	*Rabi* – 17	2	2	25	0	25	-
Adaptive Trials										
1	Paddy (NAUR – 1)	ICM	New variety	*Kharif -17*	20	20	50	0	50	--
2	Paddy (GNR – 3)	ICM	New variety	*Kharif -17*	124	124	310	0	310	--
3	Paddy (GAR –13)	ICM	New variety	*Kharif -17*	3.2	3.2	8	0	8	--
4	Paddy (GNR-6)	ICM	New variety	*Kharif -17*	8	8	20	0	20	--

5	Soybean (NRC-37)	ICM	New Variety	*Kharif-17*	18.4	18.4	46	0	46	--
6	Pigeon pea (GNP-2)	ICM	New variety	*Kharif-17*	18.4	18.4	46	0	46	--
7	Sugarcane (CoN13073)	ICM	New Variety	*Rabi-17*	1.6	0	4	0	4	--
8	Green gram (GM-6)	ICM	New Variety	*Summer-18*	4	4	10	0	10	--
9	Green gram (Meha)	ICM	New Variety	*Summer-18*	17.6	17.6	44	0	44	--
10	Green gram	ICM	New Variety	*Summer-18*	40	40	100	0	100	--
11	Brinjal	INM	INM	*Rabi-17*	8	8	20	0	20	--
12	Indian Bean	NPS-1	New variety	*Rabi-17*	2.5	2.5	12	0	12	--
13	Banana	Grand Naine	INM	*Kharif-17*	8	8	0	20	20	--
14	Pointed gourd	Local	INM	*Kharif-17*	12	12	30	0	30	--
15	Drumstick Seedlings	PKM-1	Seedlings	*Kharif-17*	--	--	150	0	150	--
16	Brinjal Seedlings	Hybrid	Seedlings	*Kharif-17*	7.5	7.5	30	0	30	--
17	Banana	Grand Naine	IPDM	*Kharif-17*	8	8	0	20	20	--
18	Brinjal	IPDM	IPDM	*Rabi-17*	10	10	25	0	25	--
19	Pointed gourd	Local	IPDM	*Kharif-17*	12	12	30	0	30	--
20	Paddy	IPDM	IPDM	*Kharif-17*	12	12	30	0	30	--
21	Okra	IPDM	IPDM	*Summer-18*	10	10	25	0	25	--
22	Cow HF	Nutritional Management	Mineral Mixture + Deworming Tab	*Rabi-17*	--	--	100	0	100	--

23	Cow / Buffalo	Disease Management	Ectoparasitic infestation Treatment	*Rabi-17*	--	--	50	0	50	--
24	Maize Fodder	Fodder Management	African tall	*Rabi-17*	--	5	50	0	50	--
25	Bajara Fodder	Fodder Management	Multi cutting Fodder Sundhiyu	*Rabi-17*	--	2.5	20	0	20	--
26	Wheel hoe	Drudgery deduction	Labour saving	*Rabi-17*	--	--	30	0	30	--
27	Vegetable Plastic crates	Reduce post harvest losses	Plastic crates	*Rabi-17*	--	--	50	0	50	--
28	Kitchen garden	Nutrition management	Vegetable seedlings & seeds	*Rabi-17*	--	--	50	0	50	--
Total					**692.2**	**698.1**	**2018**	**100**	**2118**	--

Technical Feedback on the demonstrated technologies

S.N.	Crop	Technology demonstrated	Feed back
1	Paddy	NAUR-1	1. High yielding 2. Early maturity as compared to hybrid 3. Good taste in rice plate/roti making as compare to hybrid
2	Paddy	GNR-3	1. High yielder and preferred by the farmers 2. Good quality 3. Low incidence of insect pest
3	Paddy	GAR – 13	1. Good performance as compare to GR-11 2. Good rice quality
4	Paddy	Purna	1. Good performance as drilled paddy
5	Paddy	IPDM	1. Increase in yield by decreasing infestation of pest at earlier stages in field. 2. Pheromone trap helps farmer to monitor pest in field. 3. Low intensity of BLB in field
6	Soybean	JS – 335	1. Good performance as compare to local varieties. 2. Low incidence of pest and diseases
7	Banana	IPDM & INM	1. Less incidence of wilt 2. Less infestation of weevil in the field. 3. Increase in yield.
8	Cotton	Hybrid-10	1. Good performance in Rainfed area
9	Soybean	NRC 37	1. High yielding variety 2. Low incidence of pest and diseases 3. Less lodging as compare to local variety. 4. Low loss at harvesting stage due to hairy structure on pod.
10	Groundnut	TG 37 A	1. Higher in yield 2. Low incidence of pest and diseases
11	Parvar	IPDM & INM	1. *Less incidence of wilt*
12	Indian bean	NPS 1	1. Good performance as intercrop with sugarcane
13	Pigeon pea	BDN711	1. Increase in yield and less incidence of wilt 2. Reduce the cost of cultivation by lowering the use of pesticide
14	Castor	NCH 1	1. Less infestation of pest and diseases
15	Okra	ICM- GJO-3	1. Lower yield as compare to hybrid
16	Gram	ICM	1. Bold size seed, low infestation of pest and diseases.
17	Green gram	ICM	1. Bold size seed, mosaic resistant
18	Sesame	ICM	1. Higher in yield as compare to local variety.
19	Cow - HF Cross	Antibacterial Udder Spray	1. Reduce mastitis cases

20	Calf (1 M)	Calf / Nutritional Management	1. Increase the growth rate 2. Reduced the parasitic problems 3. Improve health condition
21	Cow - HF Cross	Anti Parasitic solution application on back of animals	1. Reduce Parasitic Infestation 2. Reduce Skin Problems
22	Cow- all Breed	Nutritional management	1. Increase milk production 2. Increase fat percentage 3. Reduce Infertility problems
23	Twin Wheel Hoe	Drudgery reduction	1. Reduced the labour cost 2. Improved the work efficiency 3. Time saving by increase work efficiency

General feed back of the Farmers'/Scientists:

1. The problem of pointed gourd vine borer and nematodes are increasing day by day in Mandvi and Mahuva block of Surat district. Effective IPM module should be developing.
2. IPDM module for the management of Banana pseudo stem and wilt should be developing.
3. Compatibility study on use of Novel fertilizer with other organic or chemical should be done to cut down the cost of cultivation.

Extension and Training activities under FLD

Sr. No	Activity	No. of activities organized	Date	Number of participants	Remarks
1	**Field days**				
	Ground nut	1	29/04/2017	40	
	Soybean (NRC-37)	1	15/09/2017	60	
	Paddy (NAUR-1)	1	27/09/2017	35	
	Soybean	1	27/09/2017	31	
	Chick pea (GG-3)	1	21/02/2018	38	
2	**Farmers Training**				
	Plant Protection	4	16/06/207, 19/06/2017, 11/08/2017,06/02/2018	95	
	Horticulture	3	23/01/2018, 04/02/2018, 05/02/2018	57	
	Agronomy	2	19/06/2017, 21/06/2017	47	
	Animal Science	4	20/1/2018, 1/2/2018, 2/2/2018, 24/2/2018	95	
	Home Science	2	11/10/2017, 29/01/2018	34	

B. Front Line Demonstrations conducted in 2017-18

Sr. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Season	Demo. Yield Qtl/ha			Yield of local Check	Increase in yield	Data on technology demonstrated	
							H	L	A	Qtl./ha		Demo	Local
Cereal Crops													
1	Paddy	ICM	GNR-3	12	5	*Kharif-17*	53.80	48.85	51.25	45.95	11.53	2.44	2.08
2	Paddy	ICM	GNRH-1	12	5	*Kharif-17*	48.20	31.25	43.50	41.40	5.07	1.97	1.76
3	Paddy	ICM	GAR-13	12	5	*Kharif-17*	51.75	37.45	43.65	40.85	6.85	3.24	2.97
4	Paddy	ICM	NAUR-1	12	5	*Kharif-17*	53.45	36.90	42.15	38.25	10.20	2.05	1.69
5	Paddy	ICM	Purna	12	5	*Kharif-17*	27.35	21.50	23.65	21.85	8.24	1.20	1.08
6	Paddy	IPDM	--	10	4	*Kharif-17*	41.20	36.65	37.55	31.50	19.21	2.42	2.21
Pulses and Oilseeds													
7	Soybean	ICM	JS-335	12	5	*Kharif-17*	13.70	9.75	10.35	8.95	15.64	1.68	1.33
8	Soybean	ICM	NRC-37	12	5	*Kharif-17*	19.25	15.20	17.65	12.75	38.43	3.00	1.97
9	Pigeon Pea	ICM	BDN-711	12	5	*Kharif-17*	13.80	10.85	11.75	10.80	8.80	3.13	2.57
10	Cotton	ICM	Hybrid-10	12	5	*Kharif-17*	19.45	16.35	19.30	18.35	5.18	2.03	1.86
Horticultural Crops													
1	Okra	Variety	GJO-3	10	4	*Rabi-16*	96.10	85.55	88.75	102.89	-13.74	2.718	3.004
2	Banana	INM and IPDM	Grand Naine	4	10	*Kharif-17*	778.10	602.41	702.50	552.65	27.11	4.17	3.20
3	Brinjal	INM and IPDM	Surti	4	10	*Kharif-17*	185.55	138.67	159.85	157.45	1.52	3.67	3.53
4	Pointed gourd	INM and IPDM	Local	4	10	*Kharif-17*	182.55	151.75	165.10	130.55	26.46	2.57	2.00
5	Mango	IPM	Fruit fly Trap	4	10	*Kharif-17*	82.00	65.00	62.00	59.00	5.08	3.40	3.17

Home Science													
1	Vegetables and pulses	Drudgery reduction	Wheel hoe	--	--	*Rabi-17*	0.011	0.0076	44.74	88	130	1956	2918
FLDs of Other Agency													
Crop production													
NMOOP													
1	Soybean	INM and IPDM	NRC 37	72	30	*Kharif-17*	19.5	15.12	17.4	12.10	43.80	2.68	1.79
2	Ground nut	ICM	TAG-37 A	20	08	*Summer-17*	14.1	10.18	13.82	10.50	31.62	2.427	2.001
NFSM													
1	Gram	ICM	GG-3	100	40	*Rabi-16*	11.85	10.12	10.86	9.20	18.04	3.466	2.942
2	Green gram	ICM	*Meha*	50	20	*Summer-17*	9.85	5.82	5.72	4.65	23.01	2.357	2.029
TSP- ICAR (Mega Seed)													
1	Indian Bean	New Variety	NPS-1	10	04	*Rabi-16*	32.55	26.82	28.22	22.85	23.50	3.087	2.806

Economic impact continuation of previous table

Demonstration	**Average Cost of cultivation (Rs./ha)**		**Average Gross Return (Rs./ha)**		**Average Net Return (Profit) (Rs./ha)**		**Benefit-Cost Ratio (Gross Return / Gross Cost)**	
	Demo.	**Local Check**	**Demo.**	**Local Check**	**Demo.**	**Local Check**	**Demo.**	**Local Check**
Cereal crops								
Paddy	27300	28750	66625	59735	39325	30985	2.44	2.08
Paddy	28700	30500	56550	53820	27850	23320	1.97	1.76
Paddy	28300	28900	91665	85785	63365	56885	3.24	2.97
Paddy	26700	29400	54795	49725	28095	20325	2.05	1.69
Paddy	25700	26300	30745	28405	5045	2105	1.20	1.08
Paddy	31000	28500	75100	63000	44100	34500	2.42	2.21

Pulses and Oil seeds								
Soybean	14500	15800	24323	21033	9823	5233	1.68	1.33
Soybean	15000	16500	45008	32513	30008	16013	3.00	1.97
Pigeon Pea	15000	16800	47000	43200	32000	26400	3.13	2.57
Cotton	38000	39500	77200	73400	39200	33900	2.03	1.86
Horticultural Crops								
Okra	52250	54800	142000	164624	89750	109824	2.718	3.004
Banana	101140	103500	421500	331590	320360	228090	4.17	3.20
Brinjal	52200	53500	191820	188940	139620	135440	3.67	3.53
Pointed gourd	141000	143500	363220	287210	222220	143710	2.57	2.00
Mango	26910	27500	102687.5	96862.6	75777.5	69362.6	3.40	3.17
FLDs of Other Agency								
Crop production								
NMOOP								
Soybean	16200	16900	43475	30250	27275	13350	2.68	1.79
Ground nut	24200	22300	58735	44625	34535	22325	2.427	2.001
NFSM								
Gram	18800	17200	65160	50600	46360	33400	3.466	2.942
Green gram	12500	11800	29458	23947.5	16958	12147.5	2.357	2.029
TSP- ICAR (Mega Seed)								
Indian Bean	32000	28500	98770	79975	66770	51475	3.087	2.806

Use of mineral mixture + De-worming:

Category	Thematic area	Name of the Technology Demonstrated	No. of Farmer	No. of Units	Major Parameters		% change in major parameter
					Demo.	Check	
Cow	Nutrition Management	Mineral Mixture 40 mg per Day and De-worming 3 g Tablet	20	20	Avg. milk yield (L/Day)	Avg. milk yield (L/Day)	13.30
					9.92 (20)	8.60 (10)	
					Service Period (Days)	Service Period (Days)	34
					102 (19)	156 (8)	

Feed back: Use of mineral mixture increase milk production and reduced service periods and sometimes resolved reproductive problems also.

Prevention of mastitis by teat Spray:

Category	Thematic area	Name of the Technology Demonstrated	No. of Farmer	No. of Units	Major Parameters		% change in major parameter
					Demonstration	Check	
Cow	Preventive Measures	Mastitis prevention by Teat Spray Visprayk@	20	20	No. of Incidence	No. of Incidence	50% reduction of cases
					5 (20)	4(10)	

Prevention of Ectoparasite:

Category	Thematic area	Name of the Technology Demonstrated	No. of Farmer	No. of Units	Major Parameters		% change in major parameter
					Demonstration	Check	
Cow	Prevention / Treatment of Ectoparasite	Parasites prevention by Liquid application on back of animal Poron@	20	20	No. of Incidence	No. of Incidence	66% reduction of cases
					2 (20)	6(10)	

Scientific calf rearing:

Parameters	De-worming + calf Dan up to six months		Farmers method	
	3 Month	6 Month	3 Month	6 Month
Calf No.	20		10	
Av. Body Wt. (Kg)	61.95±5.3	86.6±4.19	52.7±6.9	73.9±6.9
% Increase	**14.9**	**14.66**	-	-

Feed back

Sr. No.	Technology	Animals	Feedback reported
1	Mineral Mixture	Cow	➢ Increase the milk yield ➢ Reduce service period
2	Teat spray Antiseptic Solution	Cow	➢ Reduce mastitis cases
3	Ectoparasitic solution application on back of animals	Cow	➢ Reduce parasitic infestation
4	De-worming and Dan to calf	Calf	➢ Increase the growth rate ➢ Reduced the parasitic problems ➢ Improve health condition

FLD on Fisheries: Nil

FLD on Other enterprises: Nil

FLD on Women Empowerment

1. **FLD on Use of Wheel Hoe for weeding to reduce women drudgery**

Crop	Thematic area	Name of the Technology Demonstrated	No. of Farmer	Major Parameters	Field observation Output/Man hr) (ha/hr)		% change in major parameter	Labour saving during weeding (Man-hr/ha)		Cost reduction** (Rs./ha/day)	
					Demo.	Check		Demo	Check	Demo	Check
Vegetables & Pulses	Drudgery reduction	Twin Wheel Hoe*	10	1.Field capacity(ha/hr) 2.Labour requiment(Man hr/ha) 3.Cost of operation	0.012 (0.097ha/day)	0.0084 (0.067ha/day)	42.85	83	120	1835	2657

*Twin wheel hoe technology recommended by CIAE, Bhopal-MP

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

Feed back:

1. Reduced the labour cost and Time saving
2. Increase the work efficiency

FLD on Other Enterprise: Kitchen Gardening

2. Result of FLD on Kitchen Gardening:

No. of Demonstration: 50 **Area: 1 Guntha/demo.**

Season: Rabi-2017

Name of Enterprise	Crop yield (Kg.) per demonstration							
	Chilli	Cabbage	Brinjal	Cauliflower	Cow pea	Indian Bean	Okra	Tur
1	2	3	4	5	6	7	8	9
Kitchen Garden	2.3	7.8	16.4	8.0	3.2	5.8	11.5	6.9

Crop yield (Kg.) per demonstration				Total Production (Kg.)	Average rate (Rs./Kg)	Gross return (Rs.)	
Tomato	Radish	Spinach	Bottle gourd			Before FLD	After FLD
10	11	12	13	14	15	16	17
3.5	5.6	3.2	7.0	81.20	30	950	2436 along with Domestic consumption

Feed Back:

1. Kitchen gardening gives continuous supply of fresh vegetables at lower cost.
2. Farm women can utilize maximum backyard space and waste water.
3. Income is generated by selling extra vegetables grown in kitchen garden.
4. Farm women are not applying any pesticides, so they produce organic vegetables in kitchen gardening.

FLD on Demonstration details on crop hybrids: Nil

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	3	0	0	0	61	5	66	61	5	66
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)										
Total	**3**	**0**	**0**	**0**	**61**	**5**	**66**	**61**	**5**	**66**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables										
Nursery raising	2	35	19	54	0	0	0	35	19	54
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	7	18	25	0	0	0	7	18	25
Others (pl specify)										

Total (a)	**3**	**42**	**35**	**79**	**0**	**0**	**0**	**42**	**35**	**79**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology										

Processing and value addition										
Others (pl specify)										
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**3**	**42**	**35**	**79**	**0**	**0**	**0**	**42**	**35**	**79**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management										
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	2	8	35	43	7	10	17	15	45	60
Disease Management										
Feed & fodder technology	1	0	0	0	0	19	19	0	19	19
Production of quality animal products										

Others (pl specify)										
Total	**3**	**8**	**35**	**43**	**7**	**29**	**36**	**15**	**64**	**79**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	20	20	0	20	20
Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs										
Storage loss minimization techniques										
Value addition	1	0	21	21	0	0	0	0	21	21
Women empowerment										
Location specific drudgery reduction technologies										
Rural Crafts										
Women and child care	1	0	20	20	0	0	0	0	20	20
Others (pl specify)										
Total	**3**	**0**	**41**	**41**	**0**	**20**	**20**	**0**	**61**	**61**
VII Plant Protection										
Integrated Pest Management	1	33	13	46	0	0	0	33	13	46
Integrated Disease Management	1	0	0	0	24	1	25	24	1	25
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides	1	31	0	31	0	0	0	31	0	31
Store grain pest and their management										
Total	**3**	**64**	**13**	**77**	**24**	**1**	**25**	**88**	**14**	**102**
GRAND TOTAL	**15**	**114**	**124**	**240**	**92**	**55**	**147**	**206**	**179**	**387**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	**No. of courses**	**Participants**		
		Others	**SC/ST**	**Grand Total**

		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production	2	0	0	0	38	3	41	38	3	41
Weed Management										
Resource Conservation Technologies										
Cropping Systems	1	0	0	0	22	5	27	22	5	27
Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)										
Total	**3**	**0**	**0**	**0**	**60**	**8**	**68**	**60**	**8**	**68**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables	2	0	0	0	14	24	38	14	24	38
Nursery raising	1	0	0	0	0	17	17	0	17	17
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation										
Others (pl specify)										
Total (a)	**3**	**0**	**0**	**0**	**14**	**41**	**55**	**14**	**41**	**55**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										

Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										
Others (pl specify)										
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management										

Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**3**	**0**	**0**	**0**	**14**	**41**	**55**	**14**	**41**	**55**
III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management	3	0	0	0	112	58	170	112	58	170
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	1	0	0	0	28	0	28	28	0	28
Disease Management										
Feed & fodder technology	1	0	0	0	20	0	20	20	0	20
Production of quality animal products	1	0	0	0	9	4	13	9	4	13
Others (pl specify)										
Total	**6**	**0**	**0**	**0**	**169**	**62**	**231**	**169**	**62**	**231**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	17	15	32	17	15	32

Design and development of low/minimum cost diet										
Designing and development for high nutrient efficiency diet	1	0	0	0	4	22	26	4	22	26
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	0	0	0	0	10	10	0	10	10
Storage loss minimization techniques										
Value addition	2	0	38	38	1	25	26	1	63	64
Women empowerment										
Location specific drudgery reduction technologies	1	0	0	0	0	24	24	0	24	24
Rural Crafts										
Women and child care										
Others (pl specify)										
Total	**6**	**0**	**38**	**38**	**22**	**96**	**118**	**22**	**134**	**156**
VII Plant Protection										
Integrated Pest Management	1	0	0	0	2	32	34	2	32	34
Integrated Disease Management	1	0	0	0	20	5	25	20	5	25
Bio-control of pests and diseases	1	0	0	0	28	5	28	28	5	28
Production of bio control agents and bio pesticides										
Others (pl specify)										
Total	**3**	**0**	**0**	**0**	**50**	**42**	**87**	**50**	**42**	**87**
GRAND TOTAL	**21**	**0**	**38**	**38**	**315**	**249**	**559**	**315**	**287**	**597**

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	5	0	0	0	99	8	107	99	8	107
Resource Conservation Technologies										
Cropping Systems	1	0	0	0	22	5	27	22	5	27

Crop Diversification										
Integrated Farming										
Micro Irrigation/irrigation										
Seed production										
Nursery management										
Integrated Crop Management										
Soil & water conservatioin										
Integrated nutrient management										
Production of organic inputs										
Others (pl specify)										
Total	**6**	**0**	**0**	**0**	**121**	**13**	**134**	**121**	**13**	**134**
II Horticulture										
a) Vegetable Crops										
Production of low value and high valume crops										
Off-season vegetables	2	0	0	0	14	24	38	14	24	38
Nursery raising	3	35	19	54	0	17	17	35	36	71
Exotic vegetables										
Export potential vegetables										
Grading and standardization										
Protective cultivation	1	7	18	25	0	0	0	7	18	25
Others (pl specify)										
Total (a)	**6**	**42**	**35**	**79**	**14**	**41**	**55**	**56**	**78**	**134**
b) Fruits										
Training and Pruning										
Layout and Management of Orchards										
Cultivation of Fruit										
Management of young plants/orchards										
Rejuvenation of old orchards										
Export potential fruits										
Micro irrigation systems of orchards										
Plant propagation techniques										

Others (pl specify)										
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants										
Nursery Management										
Management of potted plants										
Export potential of ornamental plants										
Propagation techniques of Ornamental Plants										
Others (pl specify)										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology										
Processing and value addition										
Others (pl specify)										
Total (f)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
g) Medicinal and Aromatic Plants										
Nursery management										
Production and management technology										
Post harvest technology and value addition										
Others (pl specify)										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GT (a-g)	**6**	**42**	**35**	**79**	**14**	**41**	**55**	**56**	**78**	**134**

III Soil Health and Fertility Management										
Soil fertility management										
Integrated water management										
Integrated Nutrient Management										
Production and use of organic inputs										
Management of Problematic soils										
Micro nutrient deficiency in crops										
Nutrient Use Efficiency										
Balance use of fertilizers										
Soil and Water Testing										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IV Livestock Production and Management										
Dairy Management	3	0	0	0	112	58	170	112	58	170
Poultry Management										
Piggery Management										
Rabbit Management										
Animal Nutrition Management	3	8	35	43	35	10	45	43	45	88
Disease Management										
Feed & fodder technology	2	0	0	0	20	19	39	20	19	39
Production of quality animal products	1	0	0	0	9	4	13	9	4	13
Others (pl specify)										
Total	**9**	**8**	**35**	**43**	**176**	**91**	**267**	**184**	**126**	**310**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	0	0	0	17	35	52	17	35	52
Design and development of low/minimum cost diet	1	0	0	0	4	22	26	4	22	26
Designing and development for high nutrient efficiency diet										
Minimization of nutrient loss in processing										
Processing and cooking										
Gender mainstreaming through SHGs	1	0	0	0	0	10	10	0	10	10

Storage loss minimization techniques										
Value addition	3	0	59	59	1	25	26	1	84	85
Women empowerment										
Location specific drudgery reduction technologies	1	0	0	0	0	24	24	0	24	24
Rural Crafts										
Women and child care	1	0	20	20	0	0	0	0	20	20
Others (pl specify)										
Total	**9**	**0**	**79**	**79**	**22**	**116**	**138**	**22**	**195**	**217**
VII Plant Protection										
Integrated Pest Management	2	33	13	46	2	32	34	35	45	80
Integrated Disease Management	2	0	0	0	44	6	50	44	6	50
Bio-control of pests and diseases										
Production of bio control agents and bio pesticides	2	31	0	31	28	5	28	59	5	59
Others (pl specify)										
Total	**6**	**64**	**13**	**77**	**74**	**43**	**112**	**138**	**56**	**189**
X CapacityBuilding and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
Others (pl specify)										
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL	**36**	**114**	**162**	**278**	**407**	**304**	**706**	**521**	**466**	**984**

Training for Rural Youths including sponsored training programmes (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
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-composting	1	0	15	15	0	5	5	0	20	20
Mushroom Production										
Bee-keeping										
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										

Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**1**	**0**	**15**	**15**	**0**	**5**	**5**	**0**	**20**	**20**

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

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										
Seed production										
Production of organic inputs										
Planting material production										
Vermi-culture										
Mushroom Production										
Bee-keeping	1	0	0	0	36	70	106	36	70	106
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										

Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**1**	**0**	**0**	**0**	**36**	**70**	**106**	**36**	**70**	**106**

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Protected cultivation of vegetable crops										
Commercial fruit production										
Integrated farming										

Seed production										
Production of organic inputs										
Planting material production										
Vermi-composting	1	0	15	15	0	5	5	0	20	20
Mushroom Production										
Bee-keeping	1	0	0	0	36	70	106	36	70	106
Sericulture										
Repair and maintenance of farm machinery and implements										
Value addition										
Small scale processing										
Post Harvest Technology										
Tailoring and Stitching										
Rural Crafts										
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Rabbit farming										
Poultry production										
Ornamental fisheries										
Composite fish culture										
Freshwater prawn culture										
Shrimp farming										
Pearl culture										
Cold water fisheries										
Fish harvest and processing technology										
Fry and fingerling rearing										
Any other (pl.specify)										
TOTAL	**2**	**0**	**15**	**15**	**36**	**75**	**111**	**36**	**90**	**126**

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										
Integrated Pest Management	1	37	6	43	30	14	44	67	20	87
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Formation and Management of SHGs										
Women and Child care										
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL	**1**	**37**	**6**	**43**	**30**	**14**	**44**	**67**	**20**	**87**

Training programmes for Extension Personnel including sponsored training (off 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										
Integrated Pest Management										
Integrated Nutrient management										
Rejuvenation of old orchards										

Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	1	0	0	0	0	130	130	0	130	130
Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL	**1**	**0**	**0**	**0**	**0**	**130**	**130**	**0**	**130**	**130**

Training programmes for Extension Personnel including sponsored training – CONSOLIDATED (On + Off 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										
Integrated Pest Management	1	37	6	43	30	14	44	67	20	87
Integrated Nutrient management										
Rejuvenation of old orchards										
Protected cultivation technology										
Production and use of organic inputs										
Care and maintenance of farm machinery and implements										
Gender mainstreaming through SHGs										
Formation and Management of SHGs										
Women and Child care	1	0	0	0	0	130	130	0	130	130

Low cost and nutrient efficient diet designing										
Group Dynamics and farmers organization										
Information networking among farmers										
Capacity building for ICT application										
Management in farm animals										
Livestock feed and fodder production										
Household food security										
Any other (pl.specify)										
TOTAL	**2**	**37**	**6**	**43**	**30**	**144**	**174**	**67**	**150**	**217**

Sponsored training programmes

Area of training	**No. of Courses**	**No. of Participants**								
		General			**SC/ST**			**Grand Total**		
		Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Crop production and management										
Increasing production and productivity of crops	**2**	107	00	107	**0**	**0**	**0**	107	00	107
Commercial production of vegetables	2	8	24	32	**0**	**0**	**0**	8	24	32
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops										
Soil health and fertility management										
Production of Inputs at site										
Methods of protective cultivation										
Others (pl. specify)										
Total	**4**	**115**	**24**	**139**	**0**	**0**	**0**	**115**	**24**	**139**
Post harvest technology and value addition										
Processing and value addition	1	00	45	45	**0**	**0**	**0**	00	45	45
Others (pl. specify)										

Total	**1**	**00**	**45**	**45**	**0**	**0**	**0**	**00**	**45**	**45**
Farm machinery										
Farm machinery, tools and implements										
Others (pl. specify)										
Total										
Livestock and fisheries										
Livestock production and management	**2**	40	40	80	**0**	**0**	**0**	40	40	80
Animal Nutrition Management	**1**	63	00	63	**0**	**0**	**0**	63	00	63
Animal Disease Management										
Fisheries Nutrition										
Fisheries Management										
Others (pl. specify)										
Total	**3**	**103**	**40**	**143**	**0**	**0**	**0**	**103**	**40**	**143**
Home Science										
Household nutritional security	**1**	25	18	43	**0**	**0**	**0**	25	18	43
Economic empowerment of women	3	**0**	**0**	**0**	00	147	147	00	147	147
Drudgery reduction of women										
Others (pl. specify)										
Total	**4**	**25**	**18**	**43**	**00**	**147**	**147**	**25**	**165**	**190**
Agricultural Extension										
CapacityBuilding and Group Dynamics	3	98	30	128	**0**	**0**	**0**	98	30	128
Others (pl. specify)										
Total	**3**	**98**	**30**	**128**	**0**	**0**	**0**	**98**	**30**	**128**
GRAND TOTAL	**15**	**341**	**157**	**498**	**00**	**147**	**147**	**341**	**304**	**645**

3.5. Extension Programmes

Activities	No. of programmes	Beneficiaries		
		No. of Male farmers	No. of Female Farmers	Total
Advisory Services	2092	1475	617	2092
Diagnostic visits	73	117	43	160
Field Day	5	175	132	307
Group Meetings	34	507	290	797
Kisan Ghosthi	14	1660	716	2376
Film Show	66	1157	1108	2265
Self -help groups	2	38	0	38
Kisan Mela	1	2100	400	2500
Exhibition participation	2	3200	1850	5550
Scientists' visit to farmers field	218	439	186	625
Farmers visit to KVK	337	221	116	337
Animal health camps	2	54 animals	0	54 animals
Pashupalan Shibir	5	1198	44	1242
Method Demonstrations	12	252	255	507
Celebration of Special day	10	351	755	1106
Exposure visit	2	11	32	43
Pre Kharif Campaign	1	340	16	356
MRS Students Kendra Nivas at KVK-Surat	1	-	-	3
RAWE Students at KVK-Surat	1	-	-	20
Farmers day	1	37	68	105
Mahila Sibir	3	6	210	216
Lectures delivered as resource persons	38	1937	1170	3107
Total	**2920**	**15221**	**8008**	**23752**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	18
News paper coverage	31
Popular articles	8
Radio Talks	2
TV Talks	1
Others (pl. specify)	0
Total	**60**

3.6. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	GNR-3	--	118.75	346750	950
Oilseeds						
Pulses	Green-gram	CO-4	-	4.93	49300	55
	Green-gram	GAM-5	-	10.50	94500	13
Commercial crops						
Vegetables						
Flower crops						
Spices						
Fodder crop seeds						
Fiber crops						
Forest Species						
Others	Paddy Straw	,,		171	60150	
Total				**305.18**	**5,50,700**	**1018**

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
Commercial						
Vegetable seedlings	Drumstick	PKM-1		3000	60000	150
	Tomato	-	Abhinav	23000	23000	40
	Brinjal	-	Sungrow-143	7000	7000	35
	Chilli	-	VNR-277	5000	5000	25
	Brinjal	-	Palitana Hybrid	90000	90000	30
Fruits						
Ornamental plants						
Medicinal and Aromatic						
Plantation						
Spices						
Tuber						
Fodder crop saplings						
Forest Species						
Others						
Total				**1,28,000**	**1,85,000**	**280**

Production of Bio-Products

Production of Bio products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilisers	--	--	--	--
Bio-pesticide	--	--	--	--
Bio-fungicide	--	--	--	--
Bio Agents	--	--	--	--
Others	--	--	--	--
Total	**0**	**0**	**0**	**0**

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
Dairy animals	--	--	--	--
Cows	--	--	--	--
Buffaloes	--	--	--	--
Calves	--	--	--	--
Others (Pl. specify)	--	--	--	--
	--	--	--	--
Poultry	--	--	--	--
Broilers	--	--	--	--
Layers	--	--	--	--
Duals (broiler and layer)	--	--	--	--
Japanese Quail	--	--	--	--
Turkey	--	--	--	--
Emu	--	--	--	--
Ducks	--	--	--	--
Others (Pl. specify)	--	--	--	--
	--	--	--	--
Piggery	--	--	--	--
Piglet	--	--	--	--
Others (Pl.specify)	--	--	--	--
Fisheries	--	--	--	--
Indian carp	--	--	--	--
Exotic carp	--	--	--	--
Others (Pl. specify)	--	--	--	--
	--	--	--	--
Total	**0**	**0**	**0**	**0**

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

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

B. Literature developed/published

Research papers:

H.C. Parmar, J.J. Pastagia and J.K. Movaliya (2017). Effect of urea treated local grass-'*Bhathdu' (Themeda Cymbaria)* on milk production of crossbreed cows. *Int. J. Sci. Environ.and Tech*.6**(2):**1327-1334.

J.M. Patel, M.C. Prasad, P.D. Vihol, I.H. Kalyani, M.G. Prajapati, **H.C. Parmar,** R.D. Variya and K.M. Patel (2017). Seroprevalance of *Leptospira hardjo* in Cattle of Gujarat, India. *Int. J. Microbiol. App. Sci.*, 6**(11)**: 1304-1310.

Bhakti B. Panchal, Gurjar, Tulsi D., Kalaria, V. D. and Patel, N. B. (2017). Study of Heterosis Breeding for Processing Characters in Tomato (*Solanum lycopersicum* L.). *Int. J. Pure App. Biosci.* 5**(4)**: 592-600.

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Popular articles:

1. Bhakti B. Panchal, Geetaben Bhimani, S. K. Chawda and J.H. Rathod (2017). Physiology and Biochemistry of Fruit Development. *Biotecharticle*: 1-4.
2. Geetaben J. Bhimani and Bhakti B. Panchal (2017). Aharma Katholni Agatyata, Krushivigyan:26.
3. Panchal Bhakti B. and Bhanderi D. R. (2017). Post harvest management of onion: *Biotecharticle*: 1-3
4. Geetaben J. Bhimani and Bhakti B. Panchal (2017). Ahar Ayojan for Diabetes, Krushivigyan, Febeuary,16
5. Geetaben J. Bhimani (2017).Kharekhma mulya vardhan, Krushivigyan,August,17
6. J. K. Movaliya, P. D. Verma, H. C. Parmar (2017). Dudhada Pasuoma 21 mi Sadi no Vaighanik Abhiyan. Vikaspedia.
7. J. K. Movaliya, P. D. Verma, H. C. Parmar (2017). Dairy Farm ma Kharch Ma Ghatado Karvani Tips. Vikaspedia
8. K. Movaliya, P. D. Verma, H. C. Parmar (2017). Dudhada Pasuoma 21 mi Sadi no Vaighanik Abhiyan. Krishijivan, 7: 27-29.

Item	Title	Authors name	Number
Research papers			4
Technical reports	ZREAC Report (*Rabi, Kharif*), AGRESCO, SAC, Annual Action Plan, Annual Progress Report	KVK, Surat	6
News letters	--	--	--
Technical bulletins	--	--	--
Popular articles	--	Scientist, KVK,Surat	8
Extension	Folder	Scientist,	19

literature		KVK,Surat	
Others (Pl. specify)	--	--	--
TOTAL	--	--	**37**

C. Details of Electronic Media Produced

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

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).

1. Successful leadership by tribal woman

1. Name: Mrs. Nishaben Shaileshbhai Chaudhari
2. Father's Name: Jivanbhai chhagenbhai Chaudhari
3. Address of correspondence: At ; Village: Parvat, Post :Regama, Ta.Mandvi,Dist. Surat.
4. Mobile No.: 9664713835, Adhar No.: 5843 2560 9595

6. Area of innovation: Mix farming
7. Innovations developed:

a. Participated in Rakhi making training programme organized by Baroda Swarojgar Vikas Sansthan.
b. Appreciation award from National Livelihood Mission.
c. Working as a Village President for Reliance Foundation.
d. Appreciation award from Mission Mangalam Yojna .

8. Innovations adopted in Farming (List only**)**

Nishaben Chaudhari is a farmer of Surat district. She has started her farming from 2005. She has 2 acres of land. She is associated with KVK and other government agencies of the district. Earlier she was doing sole like paddy, soybean, brinjal and pigeonpea without any integration of the farming system. After trainings and other motivational guidance, she started vermicompost unit at her farm with the help of TSP. From this, she produced 4 tonnes of vermicompost/1 cycle which gave 90000 Rs./year. After seeing her success, other 12 farmers also started vermicompost units at their home. As she is having back yard space, she made a Gangama model of kitchen garden organically. At present She has 5 milching animals. From which she earn nearly 55000 Rs. annually. She is also doing other crops paddy and Soydean which gave her 100000 Rs. Thus totally she earn nearly 242000 Rs/year and also good health by taking organic vegetables.

9. Activity wise income, cost-benefit ratio, gross and net income year-wise (previous five years):

S No.	Year	Area (Ha.)	Crop	Production (in kg)	Gross income(Rs.)	Net income (Rs.)
1	2013-14	1	Paddy & Pigeon pea	3500	72000	49000
2	2014-15	1	Paddy & Pigeon	3650	75000	58000

			pea			
3	2015-16	1	Paddy & Pigeon pea	3720	77200	61000
4	2016-17	1	Soybean & Paddy	3500	85500	67500
5	2017-18	1	Soybean & Wheat	2600	69000	58000

10. The contribution of the innovator in terms of
    i. New package of practices / management strategies
    ii. Saving or resources / inputs
    iii. Breaking technology transfer barriers
    iv. Prevention of outbreak of diseases and pests
    v. Bringing about radical change in management packages/contributing record production from land, water or animals
11. Extent of publicity of her innovations / contributions / success story
    1. Participated in Rakhi making training programme organized by Baroda Swarojgar Vikas Sansthan.
    2. Appreciation award from National Livelihood Mission.
    3. Working as a Village President for Reliance Foundation.
    4. Appreciation award from Mission Mangalam Yojna .

2. Organic farming and value addition/processing depends on cow rearing

1. Name: Lataben Prarbhubhai Patel
2. Father's/Husband's Name: Prarbhubhai Ranchhodbhai Patel
3. Address of correspondence: At.&Po. Mandroi,Ta. Olpad,Dist.Surat
4. Mobile No.: 9375157945
5. Adhaar No.:5522 4155 30221
6. Age: 45 Yrs.
7. Educational Status: 12^{th}
8. Occupation: Farming + Other(s)
9. Farm size (in ha) including leased land: 2 Ha.
10. Activity wise details (Annual):

(i) Field crops

S. No.	Crop	Variety	Area (ha.)	Total Production (q.)	Productivity (q/ha.)	Net income (Rs.)
1	Paddy	GNRH-1	1	12	12	72000
2	Wheat	Tukdi	1	8	8	16000
					Total	**88000**

(ii) Horticulture crops

S. No.	Crop	Variety	Area (ha.)	Total Production (q.)	Productivity (q/ha.)	Net income (Rs.)
1	Tomato	Hybrid	1-vingha	40	160	42,000
2	Chilli	Hybrid	1-vingha	9.5	38	38,000
3	Okra	Hybrid	1-vingha	43	172	35,000
4	Parval	Hybrid	1-vingha	80	320	1,15,000
					Total	**2,30,000**

(iii) Livestock

S. No.	Name of animal/bird	Breed	No. of units	Total Production	Productivity (per animal/bird)	Net income (Rs.)
1	Cow	Gir	40 cow	15,33,000	4-5 lit./day/cow	2,94,000

(iv) Processing and value addition

S.No.	Crop/Enterprise	Type and Qty. of value added product produced	Net income (Rs.)
1	Cow urine ark	120 lit./month	15000
2	Jivamrut	3000 lit./month	30000
3	Panchgavya	200 lit./month	10000
4	Dashparni ark	500 lit./month	5000
5	Phenyl	1000 lit./month	40000
6	Face pack	5 kg./month	1000
7	Hair Oil	100 lit./month	60000
		Total	**1,61,000**

11. Use of farm machinery/equipment

S. No	Farm machinery/equipment owned and used	Number
1	Tractor	1
2	Ark filter machine	1
3	Chaff cutter	1

12. Methods of marketing of farm produce adopted/market linkages:
- Direct consumer contact.
- Home delivery

13. Research/Extension contact for accessing farm advisory services:

S. No.	Research institutions contacted
1	Krishi Vigyan Kendra, Surat
2	ATMA, Surat
3	Agriculture / Horticulture Department, Surat
4	DRDA, Surat
5	SUMUL Dairy, Surat

14. Utilisation of media to access farm news and information on improved farm technologies

S. No.	Media	Utilisation (Yes/No)	If yes, details
1	News papers	Yes	Sandesh news paper
2	Farm journals	Yes	Agro sandesh magazine
3	Radio	No	--
4	Television	Yes	Agriculture related programmes
5	Internet	Yes	Whatapp,Youtube,Massages etc
6	ICT/Social media	Yes	Mobile

15. Involvement in Farmer Producer Organisations (FPOs)/SHGs

S. No.	FPO/SHGs	Participation (Yes/No)	If yes, details
1	SHGs	Yes	President-Nandini SHG
2	Mahila Dudh mandli - Mandroi	Yes	President – Dudh mandli Mandroi
3	ATMA –FIGs Member	Yes	Member – ATMA

B. Animal Husbandry – Success story

1. Economic empowerment of tribal and land less labor through animal Husbandry

Name: Bharatbhai Devabhai patel
Village: Umara (Nadi Faliya)
Age: 41 years Education: 12 std.
Size of land holding: 1.5 Vigha Motivation factor: Father
Source of information: KVK, SUMUL & Line Department

Farm Details:

Total herd strength: 9 HF cows, 2- Heifer, 2 – Female calf, 1 – Male calf.
Total Milk Production:
Rate: Rs. 27-28
Income: 35000/- per Month

Details of Progress:

In 2013 – only 2 cows with 7-8 L milk production per day.
Working as agricultural labor and income is very less.
Expenditure details:

Expenditure in year 2016-17

Sr. No.	Item	Rs.
1	Concentration	1,35,595
2	Green Fodder (Cultivation as well as purchase)	15,300
3	Dry Fodder (cultivation as well as Purchase)	12, 000
4	Miscellaneous cost (Animal Treatment, Utensils, Kaccha shed repairing etc.)	12,000
	Total	**1,74,895**

Income in year 2016-17

Sr. No.	Item	Rs.
1	Milk Production : Avg. production of 7 cows 11 Liters per day – 2970 Liters per lactation per animal	5,82,120
2	Farm Yard Manure (FYM) Half Manure used in own farm for cultivation	18,000
	Total	**6,00,120**

Note: - He has also benefited of Heifer cow 2-3 per 2 year i.e. in income 80,000/- to 1,20,000/-
per 2 years.

Net Profit per Month

Total Income per year	Total Expenditure per year	Total Profit
6,00,125/-	1,74,895	4,25,230
Income per Month: **35,435/-**		

2. Economic empowerment of tribal and land less labor through animal Husbandry
Name: Hashmukhbhai Ambubhai Chaudhari
Village: Umara (Chaudhari Faliya)
Age: 45 years
Education: 10 std.
Size of land holding : 7 Vigha
Motivation factor: Father
Source of information: KVK, SUMUL & Line Department

Farm Details:

Total herd strength: 6 Buffaloes, 3- Heifer buffaloes, 1 – Female buffalo calf.
Total Milk Production: 25 L per day
Rate: Rs. 32/-
Income: 20,000/- per Month

Details of Progress:

In 2012 – only 2 buffaloes with 4-5 L milk production per day.
Working as agricultural labor and income is very less.

Expenditure in year 2016-17

Sr. No.	Item	Rs.
1	Concentration	85,440
2	Green Fodder (Cultivation as well as purchase)	15,000
3	Dry Fodder (cultivation as well as Purchase)	10, 000
4	Miscellaneous cost (Animal Treatment, Utensils, Kaccha shed repairing etc.)	10,000
	Total	**1,20,440**

Income in year 2016-17

Sr. No.	Item	Rs.
1	Milk Production : Avg. production of 5 cows 7 Liters per day – 1960 Liters per lactation per animal	3,43,000
2	Farm Yard Manure (FYM) Half Manure used in own farm for cultivation	28,000
	Total	**3,71,000**

Note: - He has also benefited of Heifer cow 1-2 per 2 year i.e. in income 60,000/- to 1,00,000/- per 2 years.

Net Profit per Month

Total Income per year	Total Expenditure per year	Total Profit
3,71,000/-	1,20,440	2,50,560
Income per Month: **20,880/-**		

3. Economic empowerment of tribal and land less labor through animal Husbandry
Name: Hinaben Manharbhai patel
Village: Umara (Patel Faliya)
Age: 35 years Education: 10 std.
Size of land holding : 1 Vigha
Motivation factor: Less Income

Source of information: KVK, SUMUL & Line Department

Farm Details:

Total herd strength: 4 Cows, 1- Heifer, 2 – Female calf.
Total Milk Production: 42 L per day
Rate: Rs. 28/-
Income: 15000/- per Month

Details of Progress:

In 2014 – only 1 cow with 5-6 L milk production per day.
Working as agricultural labor and income is very less.
Expenditure details:

Expenditure in year 2016-17

Sr. No.	Item	Rs.
1	Concentration	1,05,000
2	Green Fodder (Cultivation as well as purchase)	10,000
3	Dry Fodder (cultivation as well as Purchase)	10, 000
4	Miscellaneous cost (Animal Treatment, Utensils, Kaccha shed repairing etc.)	7,000
	Total	**1,32,000**

Income in year 2016-17

Sr. No.	Item	Rs.
1	Milk Production : Avg. production of 4 cows 10 Liters per day – 2700 Liters per lactation per animal	3,02,400
2	Farm Yard Manure (FYM) Half Manure used in own farm for cultivation	20,000
	Total	**3,22,400**

Net Profit per Month

Total Income per year	Total Expenditure per year	Total Profit
3,22,400	1,32,000	1,90,400
Income per Month: **15,866**		

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

1. Technology transfer - Waste decompose method

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

Sr. No.	Crop/ Enterprise	ITK Practiced	Purpose of ITK
1.	Caster	Soak seed with sour butter milk overnight to control the catter piller in caster crop and may be used in other crops too.	**Plant Protection**
	Paddy	Removed of tips in Paddy and other seedlings to enhance	**Agronomy**

2.		drought tolerance and also sustained to water logging/ flowing condition.	
3.	Cattle	Using smoke of Honey comb in treating post partum udder edema in cattle.	**Animal Science**
4.	Cattle	Using hot sand cover with cloth in treating post partum udder edema in cattle.	**Animal Science**

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

A. Practicing Farmers

a) Group discussion
b) Power point presentation
c**)** Method demonstration

B. Rural Youth

a) Group discussion
b) Power point presentation
c**)** Method demonstration

C. In-service personnel

a) Group discussion
b) Power point presentation
c**)** Method demonstration

5.2. Indicate the methodology for identifying OFTs/FLDs – As per table 2.7 methodology mentioned

5.3. Field activities – Mentioned in Table No. 2.7 and 3.1 B

6. LINKAGES

A. Functional linkage with different organizations

Sl.No.	Name of organization	Nature of Linkage (pl. specify)
1.	ATMA	Training, Exhibitions, Best ATMA Award Participation
2.	Line departments (Horticulture & Agriculture	Training and Sibir
3.	Animal Husbandry	Pasupalan Sibir
4.	NABARD	Trainings, FLD distribution
5.	Ambuja Cement Foundation	Trainings, Sibir, Special Day Celebration
6.	Forest	Trainings, Sibir
7.	Reliance foundation	Trainings, Sibir

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.)
Sankal se Shidhdhi programme	**29/08/2017**	**ICAR**	**80000**

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

Sr. N	Programme	Nature of linkage
1	On campus training	Technical expertise , method demonstration .
2	Interface meeting	Technical expertise by KVK staff
3	Joint visit of ATMA villages	Diagnostic visit on farmers field
4	Kisan gosthi	Technical lectures by KVK staff
5	Lecture delivered	Technical expertise by KVK staff
6	Fair	Technical expertise by KVK staff
7	scientist farmers interaction	Technical expertise by KVK staff

D. Give details of programmes implemented under National Horticultural Mission: Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
1	--	--	--	--	--

E. Nature of linkage with National Fisheries Development Board: Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	--	--	--	--	--

F. Details of linkage with RKVY: Nil

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	--	--	--	--	--

6. **Convergence with other agencies and departments:**

Sl.No.	Name of organization	Nature of Linkage (pl. specify)
1.	ATMA	Training, Exhibitions, Best ATMA Award
2.	Line departments (Horticulture & Agriculture	Training and Sibir
3.	Animal Husbandry	Pasupalan Sibir
4.	NABARD	Trainings, FLD distribution
5.	Ambuja Cement Foundation	Trainings, Sibir, Special Day Celebration
6.	Forest	Trainings, Sibir
7.	Reliance foundation	Trainings, Sibir

8. Innovator Farmer's Meet

Sl.No.	Particulars	Details
1	Have you conducted Farm Innovators meet in your district?	No

9. Farmers Field School (FFS)

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Brief report
1	--	--	--	--

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

S.N.	Crop	Technology demonstrated	Feed back
1	Paddy	NAUR-1	3. High yielding 4. Early maturity as compared to hybrid 3. Good taste in rice plate/roti making as compare to hybrid
2	Paddy	GNR-3	4. High yielder and preferred by the farmers 5. Good quality 6. Low incidence of insect pest
3	Paddy	GAR – 13	3. Good performance as compare to GR-11 4. Good rice quality
4	Paddy	Purna	2. Good performance as drilled paddy
5	Paddy	IPDM	4. Increase in yield by decreasing infestation of pest at earlier stages in field. 5. Pheromone trap helps farmer to monitor pest in field. 6. Low intensity of BLB in field
6	Soybean	JS – 335	3. Good performance as compare to local varieties. 4. Low incidence of pest and diseases
7	Banana	IPDM & INM	1. Less incidence of wilt 2. Less infestation of weevil in the field. 3. Increase in yield.
8	Cotton	Hybrid-10	2. Good performance in Rainfed area
9	Soybean	NRC 37	5. High yielding variety 6. Low incidence of pest and diseases 7. Less lodging as compare to local variety. 8. Low loss at harvesting stage due to hairy structure on pod.
10	Groundnut	TG 37 A	3. Higher in yield 4. Low incidence of pest and diseases
11	Parvar	IPDM & INM	1. *Less incidence of wilt*
12	Indian bean	NPS 1	2. Good performance as intercrop with sugarcane
13	Pigeon pea	BDN711	3. Increase in yield and less incidence of wilt 4. Reduce the cost of cultivation by lowering the use of pesticide
14	Castor	NCH 1	2. Less infestation of pest and diseases
15	Okra	ICM- GJO-3	2. Lower yield as compare to hybrid
16	Gram	ICM	2. Bold size seed, low infestation of pest and diseases.
17	Green gram	ICM	2. Bold size seed, mosaic resistant

18	Sesame	ICM	1. Higher in yield as compare to local variety.
19	Cow - HF Cross	Antibacterial Udder Spray	2. Reduce mastitis cases
20	Calf (1 M)	Calf / Nutritional Management	4. Increase the growth rate 5. Reduced the parasitic problems 6. Improve health condition
21	Cow - HF Cross	Anti Parasitic solution application on back of animals	3. Reduce Parasitic Infestation 4. Reduce Skin Problems
22	Cow- all Breed	Nutritional management	4. Increase milk production 5. Increase fat percentage 6. Reduce Infertility problems
23	Twin Wheel Hoe	Drudgery reduction	4. Reduced the labour cost 5. Improved the work efficiency 6. Time saving by increase work efficiency

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

1. The problem of pointed gourd vine borer and nematodes are increasing day by day in Mandvi and Mahuva block of Surat district. Effective IPM module should be developing.
2. IPDM module for the management of Banana pseudo stem and wilt should be developing.
3. Compatibility study on use of Novel fertilizer with other organic or chemical should be done to cut down the cost of cultivation.

11. Technology Week celebration during 2017-18- Yes

Period of observing Technology Week: From: 19/02/2018 to 24/02/2018

Day & Place	Theme	Topic covered	Total No. of participants		Ext. Official	Public Representative	Total	Convergence
			ST	Other				
19/02/2018 (Mandroi)	Value Addition	Training on spices and condiments	0	38	2	Mrs.Lataben P. Patel Pramukh, Dudh Mandli, Mandroi, Mrs.Tarsilaben S. Patel Gram Panchayat Member, Mandroi	38	--
19/02/2018 (Umra, Mahuva)	Cropping practices on pulses	Kishan Goshthi	21	0	0	Mr. Ghelabhai Patel, farmers representative	21	--
20/02/2018 (Mahuva)	Cultivation practices of leguminous	Seminar on vegetable crops and FLD distribution	22	0	0	Mr. Ghelabhai Patel, farmers representative and Mr. Virendra Patel, Innovative farmer	22	--
20/02/2018 (Mandroi)	Women empowerment	Mahila sibir	0	35	2	Mr. R.G. Jethwa Director,Baroda Swarojgar Vikas Santhan,Surat Mr.Vipul Agravat Director,DRDA,Surat	35	Baroda Swarojgar Vikas Santhan,Surat and DRDA, Surat
21/02/2018 (Ghodbar)	Production and marketing of pulses	Field day on green gram and chick pea	38	0	0	Mr. Jayantibhai, Innovative farmers	38	--
22/02/2018 (Kadvidadra)	Fertilizers management	Field visit of green gram and chick pea	8	0	0	Mr. Jigar Desai, innovative Organic farmer	8	--
23/02/2018 (Mandvi)	Organic farming	Seminar on doubling the farmers income	405	25	50	Dr. C. G. Dangria, VC of NAU, Navsari, Dr. K. A. Patel, ADR, NAU, Navsari, Dr. A. S. Rajput, RCOF, Nagpur,	480	Collaboration with line departments, Surat

						Mr. K.S. Patel, DAO, Surat, Mr. D. K. Padaliya, DHO, Surat, Mr. N. G. Gamit, DDE, Surat (Extension) Mr. N. K. Ghabhani, Project Director, ATMA, Bardoli		
24/02/2018 (Dhundhesa)	Disease management of animals	Animal treatment camp	28 (Animals)	0	0	Pramukh, Dudh Mandli, Dhundhesa Sarpanch, Dhundhesa Dr. S N Patel, VO, Mahuva	28 (Animals)	District animal husbandry department, Surat
24/02/2018 (Dhundhesa)	Dairy management	Pashupalan sibir	34	0	2	Pramukh, Dudh Mandli, Dhundhesa Sarpanch, Dhundhesa Dr. S N Patel, VO, Mahuva	34	--
24/02/2018 (Bardoli)	Krishi mela	Pre-Kharif companion	2100	400	55	Mr. K.S. Patel, DAO, Surat, Mr. D. K. Padaliya, DHO, Surat, Mr. N. G. Gamit, DDE, Surat (Extension) Mr. N. K. Ghabhani, Project Director, ATMA, Bardoli	2555	ATMA, Surat FTC, Bardoli
24/02/2018 (Bardoli)	Agriculture exhibition	Pre-Kharif companion	2100	400	55	Dr. C. G. Dangria, VC of NAU, Navsari, Dr. K. A. Patel, ADR, NAU, Navsari, Dr. A. S. Rajput, RCOF, Nagpur, Mr. K.S. Patel, DAO, Surat, Mr. D. K. Padaliya, DHO, Surat, Mr. N. G. Gamit, DDE, Surat (Extension) Mr. N. K. Ghabhani, Project Director, ATMA, Bardoli	2555	ATMA, Surat, FTC, Bardoli

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

A. Introduction of alternate crops/varieties

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

B. Major area coverage under alternate crops/varieties

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

C. Farmers-scientists interaction on livestock management

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

D. Animal health camps organized

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

E. Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
--	--	--	--	
Total				

F. Large scale adoption of resource conservation technologies

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

G. Awareness campaign

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

13. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
-	-	-	-	-

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

B. Cases of large scale adoption
(Please furnish detailed information for each case)

C. Details of impact analysis of KVK activities carried out during the reporting period

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2017			
May			
June	1	**6291**	--
July			
August			
September	1	4738	--
October	1	4738	--
November			
December	1	4739	--
January 2018			
February			
March			

Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Surat	Text only	6291	-	14215	-	-	-	20506
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
Total Messages		**1**	**-**	**3**	**-**	**-**	**-**	**4**
Total farmers Benefitted		**6291**	**-**	**14215**	**-**	**-**	**-**	**20506**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK: Nil

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

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
--	--	--	--	--	--	--	--	--	--

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Pulses									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables									
Others (specify)									

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
--	--	--	--	--	--

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

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

E. Utilization of hostel facilities: Facilities not available

Months	**No. of trainees stayed**	**Trainee days (days stayed)**	**Reason for short fall (if any)**
April 2017	-	-	-

F. Database management

S. No	**Database target**	**Database created**
-	**-**	**-**

G. Details on Rain Water Harvesting Structure and micro-irrigation system: Facilities not available

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

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
ICAR KVK A/C	SBI	Surat	09166	Current A/c	32212880883	-	SBIN0009166
REVOVING FUND A/C	SBI	Surat	09166	Saving A/c	33390210202	-	SBIN0009166

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

S. No.	Particulars	Sanctioned	Released	Expenditure
A	**Recurring Contingencies**			
1	**Pay & Allowances**	**81.51**	**81.51**	**74,24,543**
2	**Traveling allowances**	**1.70**	**1.70**	**62,043**
3	**Contingencies**	**12.82**	**12.82**	**9,60,121**
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance			3,44,917
B	POL, repair of vehicles, tractor and equipments			2,38,618
C	Meals/refreshment for trainees			1,04,536
D	Training material			76,040
E	Frontline demonstration except oilseeds and pulses			1,96,010
F	On farm testing			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			

	Total (A)	**96.03**	**96.03**	**84,46,707**
B	**Non-Recurring Contingencies**	--	--	--
1	**Works**			
2	**Equipments including SWTL & Furniture**	--	--	--
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	--	--	--
4	**Library**	--	--	--
B	**Total Non Recurring**	--	--	--
C	**REVOLVING FUND**	--	--	--
GRAND TOTAL (A+B+C)		**96.03**	**96.03**	**84,46,707**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2015 to March 2016	2.86	1.00	1.96	1.90
April 2016 to March 2017	1.90	2.48	2.92	1.47
April 2017 to March 2018	2.91	6.35	5.30	0.35

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

Sr. No.	Training/ Workshop/Winter School/Seminar attended	Attended by
1	Winter school on "Upstream Reproduction Technologies for Augmentation of Live Production" at IVRI, Izatnagar(UP) during Sep.,2017	Dr. H. C. Parmar, Scientist (Animal Science)
2	Winter school on "Recent Advances in Production, Protection and Processing(PPP) technologies of underutilized and exotic horticultural crops" at SKN Agril. Univ., Jobner (Rajasthan) during Nov.,2017	Dr. S. K. Chawda, Scientist (Plant Protection)
3	National seminar on "Awareness and Promotion of Dry Flower Exports and Industry in Gujarat" at NAU, Navsari during June, 2017	Prof. B. B. Panchal, Scientist (Horticulture)
4	National seminar on "Awareness and Promotion of Dry Flower Exports and Industry in Gujarat" at NAU, Navsari during June, 2017	Prof. G. J. Bhimani, Scientist (Home Science)
5	Training programme on "Proper Handling of Mini Soil Testing Machine" at Jodhpur during May,2017	Prof. B. B. Panchal, Scientist (Horticulture)
6	Workshop on "Communication Skills for Effective Extension Services" at " at NAU, Navsari during July, 2017	Prof. G. J. Bhimani, Scientist (Home Science)
7	National seminar on protected cultivation of hi-valued vegetable crops organized by NAU, Feb.,2018	Prof. B. B. Panchal, Scientist (Horticulture)
8	National seminar on protected cultivation of hi-valued vegetable crops organized by NAU, Feb.,2018	Prof. G. J. Bhimani, Scientist (Home Science)

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	36	552	466	1068
Rural youths	2	36	90	126
Extension functionaries	2	65	152	217
Sponsored Training	15	341	304	645
Vocational Training	--	--	--	--
Total	**55**	**994**	**1012**	**2006**

2. Frontline demonstrations

Enterprise	No. ofFarmers	Area(ha)	Units/Animals
Oilseeds	12	5	--
Pulses	36	15	--
Cereals	70	24	--
Vegetables	80	32	--
Other crops	10	4	--
Hybrid crops	0	0	--
Total	**208**	**80**	**--**
Livestock & Fisheries	80	--	80
Other enterprises	140	--	140
Total	**220**	**0**	**220**
Grand Total	**428**	**80**	**220**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	4	3	20
Livestock	2	3	20
Various enterprises	0	0	0
Total	**6**	**6**	**40**
Technology Refined			
Crops	0	0	0
Livestock	0	0	0
Various enterprises	0	0	0
Total	0	0	0
Grand Total	**6**	**6**	**40**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	273	20698
Other extension activities	60	--
Total	**333**	**20698**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Lives tock	Weat her	Marke- ting	Aware- ness	Other enterpri se	Total
	Text only	6291	-	14215	-	-	-	20506
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**1**	**-**	**3**	**-**	**-**	**-**	**4**
	Total farmers Benefitted	6291	-	14215	-	-	-	20506

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	134.18	5,50,700
Planting material (No.)	1,28,000	1,85,000
Bio-Products (kg)	0	0
Livestock Production (No.)	0	0
Fishery production (No.)	0	0

7. Soil, water & plant Analysis

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

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	1
2	Conferences	2
3	Meetings	32
4	Trainings for KVK officials	3
5	Visits of KVK officials	2
6	Book published	-
7	Training Manual	-
9	Research papers	3
10	Lead papers	-
11	Seminar papers	4
12	Extension folder	17
13	Proceedings	1
14	Award & recognition	3
15	On going research projects	3