

GUJARAT VIDYAPITH
KRISHI VIGYAN KENDRA
AMBHETI-VALSAD
GUJARAT

Annual Progress Report
April 2017-March-2018

SUBMITTED TO
INDIAN COUNCIL OF AGRICULTURAL RESEARCH
NEW DELHI – 110 012

INDEX

Sr. No	Description	Page
1	General information about the KVK	1
2	Details of District	6
3	Technical Achievements	10
4	Technology Assessment	12
5	Front Line Demonstrations	26
6	Training Programmes	32
7	Extension Programmes	38
8	Production of Seed/Planting material and bio products.	40
9	Publication	41
10	Case studies/ Success story	42
11	Functional Linkages with other Agencies	46
12	Technical Feedback of the Farmers	48
13	Kisan Mobile Advisory Services	53
14	Performance of infrastructure in KVK	53
15	Rain Water Harvesting Structure and MIS	56
16	Financial Performance	56
17	Status of Revolving Fund	57
18	APR Summary	58

ANNUAL PROGRESS REPORT

(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 & No. of visitors (hits)
Krishi Vigyan Kendra, AMBHETI Ta. Kaparada Di. Valsad Via. Vapi Gujarat Pin. 396 191	Office	FAX	kvkvalsad@gmail.com	www.kvkvalsad.org 2331
	(1) 02633 260055	02633 260055		

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

Address	Telephone		E mail	Website address
	Office	FAX		
Gujarat Vidyapith Ashram road AHMEDABAD Pin. 380 014	(1) 079 2754 5044 (2) 079 2754 1148	079 2754 25 47	registrar @ gujaratvidyapith.org	www.gujaratvidyapith.org

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. R.F.Thakor	02633 260055	94271 29451	rthakor1965@yahoo.co.in

1.4. Year of sanction : Sanction letter F. No. 5 (108) / 90 - KVK 28th March 1991

Year of Establishment : 21th Sept. 1992

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

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Pay Band	Current Grade Pay		
1.	Senior Scientist and Head	Dr. R.F.Thakor	Ext . Edu.	37400-67000	10000	19/05/01	
2.	Subject Matter Specialist	Sh. K.A.Patel	Pl. Prot.	15600-39100	7600	28/02/94	
3.	Subject Matter Specialist	Sh. A.R.Patel	Ext . Edu.	15600-39100	7600	23/01/96	
4.	Subject Matter Specialist	Sh. L.T.Kapur	Soil Science	15600-39100	6600	16/12/06	
5.	Subject Matter Specialist	Sh. M.M.Gajjar	Agronomy	15600-39100	5400	17/09/13	
6.	Subject Matter Specialist	--	Horti.	--		--	
7.	Subject Matter Specialist	Smt. P.R.Ahir	Home Sci.	9300-34800	5400	01/05/01	
8.	Programme Assistant	Sh. B.M.Patel	Ani .Sci.	9300-34800	4600	02/12/02	
9.	Computer Programmer	Sh. P.J.Joshi	Agri. Engg.	9300-34800	4600	23/12/02	
10.	Farm Manager	Sh. P.R.Patel	Farm manager	9300-34800	4600	01/05/01	
11.	Accountant/Superintendent	Sh. C.D.Patel	O.S	9300-34800	4200	27/09/13	
12.	Stenographer	Sh.V.B.Patel	Accountant	5200-20200	2800	01/11/99	
13.	Driver 1	Sh. R.D.Rohit	Driver	5200-20200	2400	16/06/08	
14.	Driver 2	Sh. H.G.Valand	Driver	5200-20200	2400	01/08/09	
15.	Supporting staff 1	Sh. A.R.Patel	Office attendant	5200-20200	1900	01/11/99	
16.	Supporting staff 2	--	Farm attendant	5200-20200	--	--	

1.6. Total land with KVK (in ha) : 20 ha

S. No.	Item	Area (ha)
1	Under Buildings	2.0 ha.
2.	Under Demonstration Units	1.0 ha
3.	Under Crops	8.0 ha
4.	Horticulture	6.0 ha
5.	Pond	--
6.	Others if any	3.0 ha.

1.7. Infrastructural Development:

A) Buildings

Sr. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR /GVP	1998	720 Sq.mt	2874422	--	--	--
2.	Farmers Hostel	ICAR		138 Sq.mt		--	--	--
3.	Staff Quarter	ICAR	1999	154 Sq.mt	1585055	--	--	--
4.	Demonstration Units -- Dairy Demo. Unit	ICAR , TSP ,Valsad	2006	100 Sq.mt	204312	--	--	--
5	Fencing	--		--		--	--	--
6	Bore well	ICAR	2012	300 ft	497095	--	--	--
7	Threshing floor	ICAR	2006	100 Sq.mt	123818	--	--	--
8	Farm godown	ICAR	2010	100 Sq.mt	373168	--	--	--
9	Implement shed	ICAR	2011	140 Sq.mt	300000	--	--	--
10	Soil-water testing lab.	ICAR	2007	--	612387	--	--	--
11	Plant Health Clinic	ICAR	2012	--	999953	--	--	--

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Tractor	1993	1,94,850	--	Condemned
Tractor Trolley	1995	61,500	--	Replacement requires.
Jeep (Bolero)	2010	477058	184257	Working condition.
Power tiller	2010	1,55,500	--	Working condition.
Motor Cycle	2011	49995	12870	Working condition.

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
P A S system	1997	10230	Working condition.
Computer -2	2007 & 2010	1,02,270 +50,000	Working condition.

L C D	2007	75,400	Working condition.
Camera -2	1997 & 2007	2675 + 15250	Working condition.
Lap Top -2	2007 & 2012	51,750	Working condition.
P A S system	2009	28057	Working condition.
Handicam	2009	12990	Working condition.
Generator set	2009	37972	Working condition.
Laptop -Lenevo	2012	36368	Working condition.
LED -Sony TV	2015	52000	Working condition.

1.8. Details SAC meeting conducted in the year

Date	Name and Designation of Participants	Salient Recommendations	Action taken
27/02/18	<ol style="list-style-type: none"> 1. Dr Rajendra Khimani Registrar, G.V. Ahmedabad Chairman 2. Dr. G.R.Patel DEE, NAU, Navsari 3. Dr.H.M.Viradia Asso. Res.Sci. NAU, Navsari 4. Dr. Kuldip Tyagi Asso. Res.Sci., L R S, NAU, Navsari 5. Dr. D.K. Sharma Res.Sci. (Horti.) NAU, Paria 6. Dr. V.D.mahajan, Asst. Director (A.H.) Valsad 7. Dr.H.G.Patel Veterinary Officer (A.H.), Dharampur 8. Shri H.M. Chaudhri Asst. Director (Agril.) Valsad 	<ol style="list-style-type: none"> 1. The feedback of Front Line Demonstration should be presented in ZREAC meeting. 2. Number of farmers who got higher or lower yield, than average yield of demonstration should be mention. 3. To check the availability of bio control measures recommended by SAU/ICAR for Pod fly in pigeon pea. If available it can be tested under OFT. 4. OFT on paddy for plant protection should be planned in Pardi block instead of Kaparada block. 5. Potash culture should apply in OFT on paddy instead of Potash fertilizer. 6. Soil analysis based research paper should be published in journals. 7. FLD and OFT should be revised according to suggestions made by research scientist. 8. The technical and economic analysis of technologies demonstrated in agri. engg. discipline must be prepare on the basis of situation analysis and submit to registrar and Sr. Scientist & head. 9. Performance of mango harvester developed by Anand Agri. Uni. Should be analysed. 10. Statistical analysis should be done for food pattern of tribals of the district . 11. OFT on By Pass Fat should be modified as advised by the members. 12. Demonstration on Sweet potato var. Bhukranti may be planned at kvk farm. 	Action taken planned

<p>9. Shri K.U.mahla Asst. Director (Agril.) Dharampur</p> <p>10. Shri Divyesh Patel BTM, ATMA, Valsad</p> <p>11. Dr. A. N. Thakare Vasudhara Dairy, Alipore</p> <p>12. Mrs. Sangita S. Thorat PC JNT Kaparada</p> <p>13. Shri Ramesh S. Bhoya J.N.Trust, Kaparada</p> <p>14. Dr. Jayatibhai Patel G.S.K. Ambheti</p> <p>15. Shri Shankarbhai.L.Patel Farmers Representative (Prog. farmer)</p> <p>16. Shri Hasmukh N. desai Farmers Rep. (Entrepreneur farmer)</p> <p>17. Mrs. Ramilaben.M.Patel Farm women Rep. (President, SHG)</p> <p>18. Mrs.Pushpaben Patel Farm women Rep.(Entre. farm women)</p> <p>19. Shri Mohanbhai Representative, Gramshilpi, GVP</p> <p>20 Dr. R.F.Thakor Member Secretary</p>	<p>13. The CMT test camp may be organized in selected five milk cooperatives.</p> <p>14. Training on Paddy seed production should be organized especially for the farmers group of JNCPT.</p> <p>15. More priority should be given to biological measures for pest disease control.</p> <p>16. Animal husbandry department may be contacted to provide doses for vaccination of goat.</p> <p>17. KVK may be collaborate with agencies for marketing of Mushroom produced by trainees.</p> <p>18. Only CIB notified pesticides should be used under demonstration and farmers advisory.</p> <p>19. A seed multiplication of Green gram var. GNM-6 may be planned at kvk farm.</p> <p>20. Chemical fertilizers and pesticides should not be demonstrated in the blocks of valsad district declared as organic by Govt. of Gujarat.</p> <p>21. Successful technologies should display through social media for more diffusion.</p> <p>22. Demonstration unit of drumstick (as animal fodder) must be developed at kvk farm.</p>	
---	--	--

2. DETAILS OF DISTRICT

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

Sr. No.	Farming systems / enterprises
1	Agri - Horti Farming systems
2	Agri – Silviculture farming systems
3	Agri - forestry farming systems

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

a) Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1	South Gujarat Heavy Rainfall Zone -I	Annual Average rainfall 2000-2200 mm
		Black to medium black soil.
		Sticky and Heavy soil.
		Stip slopes cause heavy runoff of rain water resulting into soil erosion.

b) Topography

S. No.	Agro ecological situation	Characteristics
1	Agro-ecological situation – I & II	- Costal belt - Western part
		- Medium black to black soil
		- Hilly ,Shallow ,Undulating land – Eastern part

2.3 Soil Types

Sr. No.	Soil type	Characteristics	Area in ha.
1	Shallow soil	- Poor fertility & water holding capacity.	--
2	Medium black to black soil	- Sticky and Heavy in nature .	--
3	Hilly ,Shallow ,Undulating land	- Non fertile and mostly non agril land	--
			2,94,412 ha.

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

Sr. No.	Crops	Area (,000 ha.)	Production (,000 tones.)	Productivity (Kgs / ha.)
1	Food grains			
	Paddy (irrigated)	21.184	55.523	2621
	Paddy (Unirrigated)	51.572	97.625	1893
	Total Paddy	72.756	153.148	2105
	Ragi (Finger millet)	4.304	4.304	1000
	Jowar	0.059	0.068	1156
	Pigeon Pea	7.640	5.424	710
	Urid	5.827	3.787	650
	Mung	0.065	0.034	532
	Val	2.808	2.017	718
	Gram	3.510	4.141	1180
	Groundnut	0.217	0.3276	1510
	Niger	3.588	1.5966	440
	Sugarcane	7.280	540.72	74275
2	Fruit crops			
	Mango	29.998	277.389	9246
	Chiku	2.907	30.146	10370
	Banana	0.886	48.842	55126
	Cashewnut	6.195	20.444	3300
	Coconut	3.289	26970000 no.	8200 no
	Total	43.275		
3	Vegetables			
	Brinjal	2.613	48.863	18609
	Okra	1.835	17.598	9590
	Tomato	1.955	48.580	24849
	Cucurbits	3.661	64.434	17600
	Chilly	0.118	0.224	18983
	Total	10.182	179.699	

Source: District agriculture department.

2.5. Weather data (2017-18)

Month	Rainfall (mm)	Temperature C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	0	31.68	9.35	72.7	33.73
February	0	32.27	12.71	84.61	45.95
March	0	35.94	15.13	67.32	38.96
April	0	36.07	19.76	70.48	46.87
May	0	36.03	25.21	76.07	55.25
June	168	34.13	26.38	81.04	70.79
July	1465	29.5	22.73	95.71	88.37
August	509	30.12	24.22	91.13	82.61
September	490	29.71	22.72	94.47	80.91
October	39	32.96	18.35	85.69	57.49
November	0	34.84	11.91	75.67	33.17
December	75	30.18	9.60	70.7	32.73

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

Category	Population (no)	Production(,000 lit)	Productivity (litre/day)
Crossbred cow	39206	240.6	6.137
Indigenous cow	170037	320.3	1.884
Buffalo	74409	224.2	3.014
Sheep	3433	--	--
Goats	105094	--	--
Pigs	1825	--	--
Poultry	773599	--	--

2.7. Details of Operational area / Villages

Name of block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Area
Kaparada	Mendha, Singartati, Khutali, Amdha, ,Dhodhadkuva, Kakadkopar, Dabkhal, Arnai,Khadakval	Paddy, Fingermillet, Pulses, Vegetables, Micro irrigation & Dairy.	Low productivity in all crops. Water scarcity Poor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.
Dharampur	Chinchozar, Panva,Sadadvera Kilvani,Nani vahiyal,Arnala , Pangarbari, Samarsingi,	Paddy , Pulses, Vegetables & Dairy .	Low productivity in all crops. Poor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.
Pardi	Ambach, Pati,Chival,Arnala Lakhmapore, Panchalai, Kherlav	Paddy, Sugarcane, Pulses, Vegetables , Mango & Dairy.	Low productivity in all crops. Poor milk production	ICM ,INM, IPM, IWM Feed & fodder mgt. Integrated livestock mgt.
Umargam	Saronda, Aklara, Borigam	Paddy & Vegetable.	Low productivity in all crops.	ICM ,INM, IPM, IWM
Valsad	Ozar	Paddy, Pulses & Vegetable.	Low productivity in all crops.	ICM ,INM, IPM, IWM

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Paddy	Varietal evaluation ,ICM, IWM, INM, IPM
Fingermillet	Varietal evaluation ,ICM, IWM, INM, IPM
Sweetpotato	Varietal evaluation ,ICM, IWM, INM, IPM
Greengram, Gram, Indianbean	Varietal evaluation ,ICM, IWM, INM, IPM
Cucurbits	Integrated Pest & Disease Management, INM.
Sugarcane	Varietal evaluation ,ICM, IWM, INM, IPM
Brinjal	Varietal evaluation ,ICM, IWM, INM, IPM
Livestock	Feed & fodder mgt., Integrated livestock mgt.
Income generation	Vocational training

3. TECHNICAL ACHIEVEMENTS

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

OFT				FLD			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
07	08	60	80	124	112.5	665	666

Training					Extension Programmes				
3					4				
Number of Courses			No. of Participants		Name of activities	Number of activities		No. of participants	
Clientele	Targets	Achievement	Targets	Achievement		Target	Achievement	Target	Achievement
Farmers	37	48	965	1363	Field day	08	10	560	1008
Rural youth	05	02	110	56	Farmers seminar	10	13	800	1950
Extension Functionaries	05	07	120	222	Sci.-farmers interaction	25	21	450	504
					Exhibition	02	02	2000	2400
					Sci. visit to farmers field	30	37	150	252
					Lecture delivered	25	29	2000	5390

Seed Production (Qt.)			Planting material (Nos.)		
Target	Achievement	Distributed to no. of farmers	Target	Achievement	Distributed to no. of farmers
Paddy – 100.00	77.20	573	Drumstick- 1500 nos.	1500 nos.	101
Greengram - 1.00	1.20	30	Sugarcane - 700.0 qt.	1090 qt.	16
Indianbean (NPS-1) 1.00	0.26	13	Veg.(Seedlings) – 5,00,000 nos.	188000 nos.	349
			Fodder tousseks- 50,000 nos.	102400 nos.	156
			Sweetpotato cuttings- 65,000 nos.	90000 nos.	35

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
Target	Achievement	Target	Achievement
--	--	Fruitfly trap (Mango) 1500 no	1447 no.
		Earthworms- 50kg	40 kg.
		Vermicompost 10000kg	6000 kg.

3.1. B. Operational areas details during 2017-18

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
1	Agronomy				
	Pigeon pea	Low productivity in all crops. Non availability of improved seeds. Shortage of labour. Heavy infestation of weeds	--	Arnala, Pati,Dhodhadkuva, Sadadvera ,Asma, Khuntli,Panas,Amdha	FLD, OFT, Training
	Paddy	Low productivity Non availability of improved seeds. Shortage of labour. Infestation of stem borer	--	Kakadkopar, Ozar, Amdha, Panas, Dhodhadkuva, Pati , Asma Sadadvera	FLD, OFT, Training
	Chickpea	Low productivity Non availability of improved seeds. Shortage of labour. Heavy infestation of weeds	--	Arnala, Pati,Dhodhadkuva, Sadadvera Khuntli,Panas,Amdha	FLD, Training
	Fingermillet	Low productivity Non availability of improved seeds.	--	Mendha,Panva,Samarsingi	FLD,Training
	Sugarcane	Low productivity Non availability of improved seeds. Shortage of labour	--	Kakadkuva, Bhensdhara, Motivahiyal	FLD,Training
2	Horticulture				
	Mango	Low productivity Heavy infestation of fruitfly	--	Ambach,Kherlav,Dumlav	FLD, ,Training
3	LPM				
	Livestock production	Low milk yield Mustitis disease Shortage of fodder	--	Ambach, Sukhala, Khuntli, Amdha , Panas, Chival, Dhodhadkuva	FLD,OFT,Training,

* Support with problem-cause and interventions diagram

3.2. Technology Assessment and Refinement

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	01		01							02
Integrated Nutrient Management					01					
Integrated Pest Management						01				
Integrated Disease Management					01					
Integrated Crop Management	02									
TOTAL	03		01		02	01				07

A.2. Abstract on the number of technologies to be refined in respect of crops : Nil

A.3. Abstract on the number of technologies to be assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Vermi culture	Fisheries	TOTAL
Nutrition Management	01							01
TOTAL	01							01

A.4. Abstract on the number of technologies to be refined in respect of livestock / enterprises : Nil

B. Achievements on technologies Assessed

Thematic areas	Crop	Name of the technology assessed	No. of trials	No. of farmers	Area in ha
Integrated Nutrient Management	Brinjal	Assessment of Integrated Nutrient Management in Brinjal.	05	05	1.5
Varietal Evaluation	Paddy	Assessment of Paddy variety for kharif cultivation	10	10	2.0
	Chickpea	Assessment of Gram variety for rainfed rabi cultivation	10	10	1.5
Integrated Pest Management	Mango	Assessment of diff. pesticides for mgt. of hoppers in Mango	15	15	3.0
Integrated Crop Management	Paddy	Assessment of seed rate of Paddy nursery on yield of crop.	05	05	2.0
	Paddy	Assessment of paddy seedling raising method	05	05	1.0
Integrated Disease Management	Bittergourd	Assessment of Bittergourd variety for mgt. of mosaic disease.	10	10	2.0
Total			60	60	13.00

B.2. Technologies Refined under various Crops -Nil

B.3. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition Management	Cow	Assessment of bypass fat feeding on milk production	20	20
Total			20	20

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

C1. Results of Technologies Assessed

A. Technology Assessment- Assessment of Integrated Nutrient Management in Brinjal

Results of On Farm Trials

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of Assessed	Data on the parameter			Results of Assessment	Feedback from the farmer	Details of Assessment done
1	2	3	4	5	6	7	8			9	10	11
Brinjal	Irrigated	Low return from Brinjal.	Assessment of Integrated Nutrient Management in Brinjal	05	Application of integrated Nutrient Management	Yield(kg/ha) Total cost of cultivation(Rs./ha) Net profit (Rs./ha) BCR	T1 30450 164054 216571 2.32	T2 38500 199823 281427 2.41	T3 35575 189043 255645 2.45	application of 60% of RDF with Use of LBF enriched FYM increased 21.46 % net profit and B:C ratio (2.45), compared to RDF (2.41) and Farmer practice (2.32) BCR without deterioration in soil fertility and environment	Availability of huge quantity of FYM with good quality is difficult to obtain. LBF is a cheaper and easily applicable	application of 60% of RDF with Use of LBF enriched FYM found more superior and cost effective than RDF and Farmer practice

Technology Assessed	Source of Technology for Technology Option1 / Justification for modification of assessed Technology Option 1	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15	16	17
Technology Option 1 – Farmer practice (i.e 148 : 138 : 87 kg NPK ha ⁻¹)	NAU, Navsari	30450	Kg/ha	216571	2.32
Technology Option 2 – 75% Recommended dose of fertilizer (75:28:28 kg N, P ₂ O ₅ , K ₂ O ha ⁻¹) + Bio-compost (10 tones ha ⁻¹)	NAU, Navsari	38500	Kg/ha	281427	2.41
Technology Option 3 60% Recommended dose of fertilizer (60:30:30 kg N, P ₂ O ₅ , K ₂ O ha ⁻¹) +12 t FYM ha ⁻¹ (20% Of RDF) +1.25 lt. ha ⁻¹ LBF(20% Of RDF)	NAU, Navsari	35575	Kg/ha	255645	2.45

C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of Integrated Nutrient Management in Brinjal					
2	Problem diagnose/defined	:	Low return from Brinjal.					
3	Details of technologies selected for assessment/refinement	:	T₁ : Farmer practice (i.e 148 : 138 : 87 kg NPK ha ⁻¹) T₂ : 75% Recommended dose of fertilizer (75:28:28 kg N, P ₂ O ₅ , K ₂ O ha ⁻¹) + Bio-compost (10 tones ha ⁻¹) (SAU recommendation) T₃ : 60% Recommended dose of fertilizer (60:30:30 kg N, P ₂ O ₅ , K ₂ O ha ⁻¹) +12 t FYM ha ⁻¹ (20% Of RDF) +1.25 lt. ha ⁻¹ LBF(20% Of RDF)					
4	Source of technology	:	NAU, Navsari / Progressive farmer					
5	Production system	:	Rainfed cereal based system (paddy-Vegetable-Paddy)					
6	Thematic area	:	Integrated Nutrient Management					
7	Performance of the Technology with performance indicators	:	Treatment	Yield (kg/ha)	Gross return (Rs./ha)	Total Cost of cultivation (Rs./ha)	Net profit	BCR
			T ₁	30450	380625	164054	216571	2.32

			T ₂	38500	481250	199823	281427	2.41	
			T ₃	35575	444688	189043	255645	2.45	
8	Final recommendation for micro level situation	:	Need to continue for next year						
9	Constraints identified and feedback for research	:	Trial is going on						
10	Process of farmers participation and their reaction	:	Farmers associated with the brinjal cultivation were identified. Information pertaining to cultivation of brinjal followed by farmers was collected. The problems faced by them was also discussed and prioritized by them. Then problem-causes analysis also has done with their active participation. Treatments were thoroughly discussed with them and lastly according to their suggestions treatments were finalized. From among these farmers five farmers were selected for testing the technology on their farm. The technological backstopping were provided by the KVK scientist as a facilitator as when required by the farmers.						

A. Technology Assessment - Assessment of Paddy variety for kharif cultivation

Results of On Farm Trial - 1

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy	Rainfed	Low return due to higher cost of production of paddy	Assessment of Paddy variety for kharif cultivation.	10	T1 - Farmers Practices (Hybrid Var. Suruchi 5629) T2 - NAU Recommendation (GNRH-1)	1. Productive tillers/hill 2. Grain Yield(kg/ha) 3. Straw Yield (kg/ha) 1. Productive tillers/hill 2. Grain Yield(kg/ha) 3. Straw Yield (kg/ha)	9.20 3353 3799 10.90 3861 4588	The new variety of Paddy GNRH-1 earned the maximum net returns (Rs 30692/- Yielding 38.61 q/ha with B:C ratio 1.9) as compare to T1 (19060 Rs. Net return and 33.53 q/ha yielding with B:C ratio 1.5). Farmers were satisfied with the results of GNRH - 1 new hybrid Paddy variety.	- Good germination - Lower rate of seed - More tillering - Less problem of pest and disease - Mid late (100-110 days) - 5 – 7 days than check variety. - Good cooking quality

Technology Assessed	Source of Technology	Production (kg/ha)	Please give the unit (kg/ha, t/ha, lit/animal,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T1 - Farmers Practices (Hybrid Var. Suruchi 5629)	Private co.	Grain Yield- 3353 Straw Yield - 3799	Kg/ha	19060	1.5
T2 - NAU Recommendation (GNRH-1)	N.A.U., Navsari	Grain Yield- 3861 Straw Yield - 4588	Kg/ha	30692	1.9

C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of Paddy variety for kharif cultivation.										
2	Problem Definition	:	Low return due to higher cost of production of paddy										
3	Details of technologies selected for assessment	:	T1 - Farmers Practices (Hybrid Var. Suruchi 5629) T2 - NAU Recommendation (GNRH-1)										
4	Source of technology	:	NAU, Navsari.										
5	Production system	:	Rain fed cereal based system (paddy based cropping system)										
6	Thematic area	:	Varietal evolution										
7	Performance of the Technology with performance indicators	:	Treatment	Productive tillers/hill	Grain Yield (kg/ha)	Straw Yield (kg/ha)	Income Grain (Rs./ha)	Income Straw (Rs./ha)	Expenditure (Rs/ha)	Gross Income (Rs/ha)	Net Profit (Rs/ha)	Increase in yield(%)	B:C Ratio
			T1	9.20	3353	3799	46942	7598	35480	54540	19060	15.15	1.5
			T2	10.90	3861	4588	54054	9176	32538	63230	30692		1.9
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Cost of seed reduced and Yield of Paddy crop was increased results increase in B:C ratio.										
9	Final recommendation for micro level situation	:	Farmer of Valsad district advise to grow paddy crop use the mid late(100-110 days) hybrid variety GNRH-1 released by N.A.U., Navsari for Kharif Rainfed condition.										

10	Constraints identified and feedback for research	:	- Availability of seed - Not used in slopy land
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. PRA and Group discussion ,planning, execution, monitoring, evaluation of the trial. Farmers evaluated that paddy variety GNRH – 1 mature early (5 – 7 days than check) and also lodging resistant with good cooking quality , more yield.

A. Technology Assessment - Assessment of Gram variety for rainfed rabi cultivation in Valsad district

Results of On Farm Trial - 1

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter	Results of assessed	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Gram	Rain fed	Low yield of Gram	Assessment of Gram variety for rainfed rabi cultivation in Valsad district	10	T ₁ - Farmers Practices (Growing local variety or Dahod yellow with local practices) T ₂ - Recommendation (Growing GJG-3 with improved practices)	1. No. of branches per plant at harvest 2. No. Of Pods per Plant 3. Grain Yield (Kg/ha)	3.78 38.70 939	The Chickpea variety GJG-3 gave 1369 Kg/ha yield with B : C ratio of 2.9 as compare to local variety – Dahod yellow with local practices (939 Kg/ha) with B : C ratio of 2.1 .	- Good germination - Bold seeded - More branches - More no. of pods per plant - Less problem of pest and disease - Early maturity (95-100 days) - Good cooking quality - Good yield

Cont...

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha.)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T ₁ - Farmers Practices (Growing local variety or Dahod yellow with local practices)	-	Grain Yield– 939	Kg/ha	25055	2.1

T ₂ - Recommendation (Growing GJG-3 with improved practices)	JAU, Junagadh	Grain Yield – 1369	Kg/ha	44713	2.9
--	---------------	--------------------	-------	-------	-----

C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of Gram variety for rainfed rabi cultivation in Valsad district.								
2	Problem Definition	:	Low yield of rainfed rabi Gram								
3	Details of technologies selected for assessment	:	T ₁ - Farmers Practices (Growing local variety or Dahod yellow with local practices) T ₂ - Recommendation (Growing GJG-3 with improved practices)								
4	Source of technology	:	JAU, Junagadh.								
5	Production system	:	Rain fed cereal based system (paddy-pulse cropping system)								
6	Thematic area	:	Varietal evolution								
7	Performance of the Technology with performance indicators	:	Treatment	No. of branches per plant at harvest	No. Of Pods per Plant	Grain Yield (Kg/ha)	Expenditure (Rs/ha)	Gross Income (Rs/ha)	Net Profit (Rs/ha)	Increase in seed yield (%)	B:C Ratio
T ₁			3.78	38.70	9.39	21920	46975	25055	45.63	2.1	
T ₂			5.36	57.53	13.69	23747	68460	44713		2.9	
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Increase in yield due to Bold size, less problem of pest and disease.								
9	Final recommendation for micro level situation	:	Farmer of Valsad district advise to grow chickpea on conserved soil moisture after harvesting of paddy use early maturing, bold seeded and high yielding variety GJG-3 specially released for rainfed rabi cultivation								
10	Constraints identified and feedback for research	:	<ul style="list-style-type: none"> - Availability of seed - Peacock our national bird damaged crop at early stage 								
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. PRA and Group discussion ,planning, execution, monitoring, evaluation of the trial. Farmers evaluated that Chickpea variety GJG-3 have good germination, very less problem of pest and disease, mature early, bold size, good cooking quality and more yield.								

A. Technology Assessment - Assessment of seed rate of paddy nursery on yield of crop .

Results of On Farm Trials

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy	Rainfed	Low yield of Paddy due to poor nursery management in rainfed condition.	Assessment of seed rate of paddy nursery on yield of crop	05	T1 : Farmers practices (>40 gm/m ² flatbed) T2 : (30 gm/m ² – 10 x 1 m raised bed 100 no./ha) (SAU reco.)	1. Productive tillers/hill 2. Grain Yield(kg/ha) 3. Straw Yield (kg/ha) 1. Productive tillers/hill 2. Grain Yield(kg/ha) 3. Straw Yield (kg/ha)	8.80 3294 3764 10.40 3566 4430	The result sown that the 30 gm/m ² – 10 x 1 m raised bed 100 no./ha gave 3566 kg/ha yield with net profit of 22602 Rs./ha as compare to Farm >40 gm/m ² flatbed yield 3294 kg/ha with net profit of 17380 Rs./ha .	- Good germination - Less seedrate - Healthy (Chipadar) seedling - More tillering - Less problem of pest and disease - Easy to control weed in nursery

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal,)	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14	15	16
T1 : Farmers practices (>40 gm/m ² flatbed)	--	Grain Yield (kg/ha) – 3294 Straw Yield (kg/ha) - 3764	Kg/ha	17380	1.78
T2 : Recommended (30 gm/m ² - 10x1m raised bed 100 no./ha)	N.A.U., Navsari	Grain Yield (kg/ha) – 3566 Straw Yield (kg/ha) - 4430	Kg/ha	22602	2.02

C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of seed rate of paddy nursery on yield of crop .
2	Problem Definition	:	Low yield of Paddy due to poor nursery management in rainfed condition.
3	Details of technologies selected	:	T1 : Farmers Practice (> 40gm/m ² flat bed) T2 : Recommended (30 gm/m ² - 10x1m raised bed 100 no./ha)

	for assessment																																					
4	Source of technology	:	NAU, Navsari.																																			
5	Production system	:	Rainfed cereal based system (paddy-pulses system)																																			
6	Thematic area	:	Integrated Crop Management																																			
7	Performance of the Technology with performance indicators	:	<table border="1"> <thead> <tr> <th>Treatment</th> <th>Productive tillers/hill</th> <th>Days of 50 % flowering</th> <th>Grain Yield (kg/ha)</th> <th>Straw Yield (kg/ha)</th> <th>Income Grain (Rs./ha)</th> <th>Income Straw (Rs./ha)</th> <th>Expenditure (Rs/ha)</th> <th>Gross Income (Rs/ha)</th> <th>Net Profit (Rs/ha)</th> <th>Increase in yield (%)</th> <th>B:C Ratio</th> </tr> </thead> <tbody> <tr> <td>T₁</td> <td>8.80</td> <td>98.40</td> <td>3294</td> <td>3764</td> <td>49410</td> <td>7528</td> <td><u>32030</u></td> <td>49410</td> <td>17380</td> <td rowspan="2">8.25</td> <td>1.78</td> </tr> <tr> <td>T₂</td> <td>10.40</td> <td>95.20</td> <td>3566</td> <td>4430</td> <td>53490</td> <td>8860</td> <td>30888</td> <td>53490</td> <td>22602</td> <td>2.02</td> </tr> </tbody> </table>	Treatment	Productive tillers/hill	Days of 50 % flowering	Grain Yield (kg/ha)	Straw Yield (kg/ha)	Income Grain (Rs./ha)	Income Straw (Rs./ha)	Expenditure (Rs/ha)	Gross Income (Rs/ha)	Net Profit (Rs/ha)	Increase in yield (%)	B:C Ratio	T ₁	8.80	98.40	3294	3764	49410	7528	<u>32030</u>	49410	17380	8.25	1.78	T ₂	10.40	95.20	3566	4430	53490	8860	30888	53490	22602	2.02
Treatment	Productive tillers/hill	Days of 50 % flowering	Grain Yield (kg/ha)	Straw Yield (kg/ha)	Income Grain (Rs./ha)	Income Straw (Rs./ha)	Expenditure (Rs/ha)	Gross Income (Rs/ha)	Net Profit (Rs/ha)	Increase in yield (%)	B:C Ratio																											
T ₁	8.80	98.40	3294	3764	49410	7528	<u>32030</u>	49410	17380	8.25	1.78																											
T ₂	10.40	95.20	3566	4430	53490	8860	30888	53490	22602		2.02																											
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Yield of Paddy crop was increased due to healthy seedling																																			
9	Final recommendation for micro level situation	:	Farmer of Valsad district advise to grow paddy crop use 30 kg of seed per ha. on raised bed resulting good healthy seedling and good yield.																																			
10	Constraints identified and feedback for research	:	Sometimes, Farmer not maintain the row spacing of 10 cm. and raised bed preparation due to early rainfall or labour crises.																																			
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. PRA and Group discussion ,planning, execution, monitoring, evaluation of the trial. Farmers evaluated that paddy crop use 30 kg of seed per ha. on raised bed produce good healthy seedlings results more yield.																																			

**A. Technology Assessment- Assessment of method of raising of paddy seedlings
Results of On Farm Trials**

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology assessed	Parameters of assessed	Data on the parameter		Results of assessed	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8		9	10	11	12
Paddy	Rainfed	Poor growth seedlings and deterioration in soil health by rabbing practice.	Assessment of method of raising of paddy seedlings	05	Dapog method of raising paddy seedling without rabbing	Yield(kg/ha) Cost of nursery(Rs./ha) Total cost of cultivation(Rs./ha) Net profit (Rs./ha) BCR	T1 3150 7130 50337 30604 2.52	T2 3325 4597 58505 33137 2.91	Dapog method gave 5.56 % seed yield and 16.21% net profit than traditional flat bed system without deterioration in soil fertility and environment	Seedlings produced with Dapog are much healthier, though number of seedlings per hill reduced the cost. Paddy plot with rabbing practice shown lodging in heavy rain.	--	--

Technology Assessed	Source of Technology	Production	Unit (kg/ha, t/ha, lit/animal,)	Net Return (Profit) in Rs. / ha	BC Ratio
13	14	15	16	17	18
T ₁ – Farmer practice - Flat bed with Rabbing.	--	3150	kg/ha	30604	2.52
T ₂ – Dapog method	N.A.U., Navsari	3325	kg/ha	33137	2.91

C2. Details of On Farm Trial for assessment –

1	Title	:	Assessment of method of raising of paddy seedlings
2	Problem diagnose/defined	:	Poor growth seedlings and deterioration in soil health by rabbing practice.
3	Details of technologies selected for assessment	:	T ₁ : Farmers practice (flat bed seedling nursery with rabbing practice) T ₂ : Dapog seedling nursery method (SAU recommendation)
4	Source of technology	:	NAU, Navsari / Progressive farmer

5	Production system	:	Rainfed cereal based system (paddy-pulse-Paddy)									
6	Thematic area	:	Integrated crop Management									
7	Performance of the Technology with performance indicators	:	Treatment	Seed yield (kg/ha)	Straw yield (kg/ha)	Gross Income (Rs./ha)	Total cost of Cultivation (Rs./ha)	Net profit (Rs./ha)	Increase in net profit (%)	Increase in seed yield (%)	BCR	
			T ₁	3150	3622	83475	33137	50337	16.23	5.56	2.52	
			T ₂	3325	3924	89110	30604	58505			2.91	
8	Final recommendation for micro level situation	:	Need to continue for next year									
9	Constraints identified and feedback for research	:	<ul style="list-style-type: none"> Seedlings produced with Dapog are much healthier, though number of seedlings per hill reduced the cost. Paddy plot with rabbing practice shown lodging in heavy rain Birds and Rat damage in bed 									
10	Process of farmers participation and their reaction	:	<p>Rabbing practice to raise the paddy seedling is common in Valsad district. Burning of farm waste and FYM directly affects microorganisms by either killing them directly or altering their reproductive capabilities. Soil fertility status degrades due volatilization loss of some nutrients, such as N, P, and S and organic matter at high temperature of soil during burning. Micronutrient deficiency mainly, chlorosis in seedlings at nursery stage is major problem of area. KVK-Valsad conducted on farm testing to assess the method of raising of paddy seedlings i.e T₁ : Farmers practice (flat bed seedling nursery with rabbing practice) and T₂ : Dapog seedling nursery method.</p>									

A. Technology Assessment- Assessment of variety for management of mosaic disease in bitter gourd

Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Bittergourd	Irrigated	low yield in Bittergourd due to mosaic disease	Assessment of variety for management of mosaic disease in bitter gourd	10	Mosaic Resistant variety (Vivek) + Removal of infected plant and spraying of systemic insecticide for control of vector	Incidence of mosaic (%)	T1 : 16% T2 : 4%	Mosaic disease incidence reduced from 16 to 4 % and yield increased by 19.23 %	Vivek variety of bittergourd gives high yield due to less incidence of mosaic disease

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 : Kohinoor Variety (Farmers Practice)	--	18400	Kg/ha	100450 Rs/ha	2.54
Technology option 2 : Mosaic Resistant variety (Vivek) + Removal of infected plant and spraying of systemic insecticide for control of vector	Sungrow Co.	21700	Kg/ha	127490 Rs/ha	2.88

C2. Details of On Farm Trial for assessment –

1	Title of Technology Assessed	:	Assessment of variety for management of mosaic disease in bitter gourd
2	Problem Definition	:	low yield in Bittergourd due to mosaic disease
3	Details of technologies selected for assessment	:	T 1 : Kohinoor Variety (Farmers Practice) T 2 : Mosaic Resistant variety (Vivek) + Removal of infected plant and spraying of systemic insecticide for control of vector
4	Source of technology	:	Sungrow Co.
5	Production system	:	Rainfed cereal based system (paddy-vegetable system)
6	Thematic area	:	Integrated Disease Management
7	Performance of the Technology with performance indicators	:	Result of third year showed that the technology of Mosaic Resistant variety (Vivek) + Removal of infected plant and spraying of systemic insecticide for control of vector reduced the percentage of disease incidence from 16 to 4 and yield was increased by 19.23 per cent.
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Yield of Vivek variety of bittergourd was increased due to less incidence of mosaic disease.
9	Final recommendation for micro level situation	:	Mosaic Resistant variety (Vivek) + Removal of infected plant and spraying of systemic insecticide for control of vector for Kaprada block of Valsad.
10	Constraints identified and feedback for research	:	Nil
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion

A. Technology Assessment- Assessment of pesticides for management of hoppers in mango

Results of On Farm Trial –

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Mango	Irrigated	low yield in Mango due to infestation of hoppers	Assessment of pesticides for management of hoppers in mango	10	First spray of Imidachloprid 17.8 SL@ 3 ml/10 lit at early stage of panicle formation and second spray of Thiomethoxam @ 3 g / 10 lit after fruit set	Infestation of Mango hoppers (%)	T1 : 19% T2 : 9%	Damage of hoppers reduced from 19 to 9% and increased yield by 22.04% .	Proper pesticide with recommended dose and time of spraying reduced hoppers in mango.

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1 : Arbitrary use of pesticides i.e. Monocrotophos @ 10 ml/ 10 lit, Cypermethrin 25 EC @ 3ml/10 lit and Imidachloprid 17.8 SL@ 3 ml/10 lit) (Farmers practices)	--	8300	Kg/ha	110875 Rs/ha	3.01
Technology option 2 : First spray of Imidachloprid 17.8 SL@ 3 ml/10 lit at early stage of panicle formation and second spray of Thiomethoxam @ 3 g / 10 lit after fruit set	NAU, Paria Recommendation, 2008	10130	Kg/ha	144780 Rs/ha	3.50

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

1	Title of Technology Assessed	:	Assessment of pesticides for management of hoppers in mango
2	Problem Definition	:	low yield in Mango due to infestation of hoppers
3	Details of technologies selected for assessment	:	T 1 : Arbitrary use of pesticides i.e. Monocrotophos @ 10 ml/ 10 lit, Cypermethrin 25 EC @ 3ml/10 lit and Imidachloprid 17.8 SL@ 3 ml/10 lit) (Farmers practices) T 2 : First spray of Imidachloprid 17.8 SL@ 3 ml/10 lit at early stage of panicle formation and second spray of Thiomethoxam @ 3 g / 10 lit after fruit set

4	Source of technology	:	NAU, Paria Recommendation, 2008
5	Production system	:	Rainfed cereal based system (paddy-vegetable system)
6	Thematic area	:	Integrated Pest Management
7	Performance of the Technology with performance indicators	:	Result showed that the technology of First spray of Imidachlopid 17.8 SL@ 3 ml/10 lit at early stage of panicle formation and second spray of Thiomethoxam @ 3 g / 10 lit after fruit set reduced the percentage of damage of hoppers from 19 to 9% and yield was increased by 22.04 per cent.
8	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Selection of proper pesticide with recommendation dose and time of spraying is important for management of hoppers in mango.
9	Final recommendation for micro level situation	:	Recommendation will be made after completion of third year.
10	Constraints identified and feedback for research	:	Nil
11	Process of farmers participation and their reaction	:	Farmers were involved and actively participated at every level i.e. planning, execution, monitoring, evaluation of the trial. PRA and Group Discussion

3.3. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during 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 (ha)
1	Paddy	Varietal Evaluation	HYVs of Paddy, Line sowing, Seed treatment	Demo. of improved variety seeds	25	420	110
2	Fingermillet	Varietal Evaluation	HYVs of Fingermillet, IPM	Demo. of improved variety seeds	06	100	40
3	Sugarcane	Varietal Evaluation	HYVs of Sugarcane,	Demo. of improved variety planting material	05	28	14
4	Brinjal	Varietal Evaluation	HYVs of Brinjal,	Demo. of improved variety seedlings	18	120	40
5	Sweetpotato	Varietal Evaluation	HYVs of Sweetpotato, turning of veins	Demo. of improved variety seeds	04	35	12
6	Greengram	Varietal Evaluation	HYVs of Greengram, line sowing	Demo. of improved variety seeds	08	125	20
7	Green fodder	Varietal Evaluation	HYVs of Perennial grass	Demo. of improved variety planting material	20	150	15

B. Details of FLDs implemented during 2017-18

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall
					Proposed	Actual	SC/ST	Others	Total	
1	Paddy	ICM	HYV, IPM, INM ,line sowing	Kharif	25	25	125	--	125	--
2	Sugarcane	ICM	HYV, LBF	Rabi	01	01	10	--	10	--
3	Finger millet	ICM	HYV,LBF, IPM	Kharif	16	16	50	--	50	--
4	Pigeonpea	ICM	HYV, IPM, LBF	Kharif	05	05	50	--	50	--
5	Bittergourd	ICM	HYV, IPM, LBF	Kharif	2.5	2.5	19	--	19	--
6	Sweetpotato	ICM	HYV, LBF	Kharif	01	01	20	--	20	--

7	Chickpea	ICM	HYV, IPM, LBF	Rabi	20	20	98	--	98	--
8	Indianbean	ICM	HYV, IPM, LBF	Rabi	04	04	50	--	50	--
9	Greengram	ICM	HYV,INM, IPM	Summer	20	20	50	--	50	--
10	Fodder sorghum	ICM	HYV	Summer	05	08	38	--	38	--
11	Greengram	ICM	HYV,INM, IPM	Summer	30	30	75	--	75	--
12	Sugarcane	ICM	HYV, LBF	Rabi	01	01	10	--	10	--

Details of farming situation

Sr. no.	Crop	Season	Farming situation	Type of soil	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal Rainfall	No of Rainy days
					N	P	K					
1	Paddy	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-17	Oct-17	2671	82
2	Sugarcane	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-16	Jan-17	2671	82
3	Finger millet	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	June-17	Oct-17	2671	82
4	Pigeonpea	Kharif	Rainfed	Medium black	Low	Medium	High	Pulses	July-17	Dec-17	2671	82
5	Bittergourd	Kharif	Irrigated	Hilly, Laterite	Low	Medium	High	Paddy	June-2017	Aug. to Nov.17	2671	82
6	Sweetpotato	Kharif	Irrigated	Medium black	Low	Medium	High	Paddy	July-17	Oct-17	2671	82
7	Greengram	Summer	Irrigated	Medium black	Low	Medium	High	Paddy	Feb-17	May- 17	--	--
8	Chickpea	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Dec-17	March- 18	--	--
9	Fodder Sorghum	Summer	Irrigated	Medium black	Low	Medium	High	Paddy	Jan-18	Mar-May -18	--	--
10	Indianbean	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Nov-17	March-18	--	--
11	Sugarcane	Rabi	Irrigated	Medium black	Low	Medium	High	Paddy	Oct – Nov-17	--	--	--
12	Greengram	Summer	Irrigated	Medium black	Low	Medium	High	Paddy	Feb-18	--	--	--

Technical feedback on the demonstrated technologies.

Sr. No	Feed Back
1	Fingermillet (Guj Nagli-5) variety gives good response in longer rainy season .
2	Paddy variety GAR-13 have more tillering, non lodging, Mid late and small seeded
3	Pigeon pea variety Vaishali – Mid late (160-170 Days) , Bold size with white colour, Good yield, less problem of Wilt and sterility mosaic virus.
4	Uniform maturity, Bold size, Good cooking quality found in GAM-5 variety of Greengram .
5	Gram variety GJG-3- Early maturity, Bold size, more number of pod per plant
6	Indianbean variety Guj.Val-2 erect flowering habit , flowering starts from each internode.
7	Sweetpotato variety C-71 having more tubers per plant resulted in higher yield.
8	Production of sugarcane variety Co-N-04131 may be reduced in case of late harvesting.
9	Demonstrated variety gave good yield. The variety also fetched good market price. Mosaic disease incidence was found less in demonstrated variety of bittergourd

Farmers' reactions on specific technologies

Sr. No	Name of Crop/ Commodity	Feed Back
1	Paddy	Mid late variety with small grain size, non lodging, seed rate as well as seedling rate has been reduced to 20-30 %. Grain quality is better for culinary purpose compared to hybrid varieties.
2	Fingermillet	Variety had less incidence of pest- disease compare to local variety.
3	Greengram	GAM-5 variety is found resistant to YMV with bold grain size and uniform maturity. Good yield with attractive shiny grain appearance
4	Gram	Gram variety GJG-3- early maturity, bold size with good attractive yellow colour, more number of pod per plant , good yield in rainfed condition
5	Pigeon pea	Vaishali variety - mid late (160-170 Days) , bold size with white colour, good for Dal making, good cooking quality, less problem of wilt and sterility mosaic virus.
6	Bittergourd	Management of fruitfly increased the yield.
7	Indianbean	More number of pods per branch, early pod setting .
8	Sugarcane	Seed rate has been reduced to 50%.
9	Sweetpotato	Good colour and uniform thickness fetches higher market price.

Extension and Training activities under FLD

Sr. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	10	20-05-17 26-05-17 13-07-17 20-09-17 04-10-17 10-01-17 10-01-18 25-01-18 07-02-18 09-02-18	128 221 51 66 33 98 84 81 146 100	
2	Farmers Training	08	31-05-17 to 03-06-17 26-07-17 to 29-07-17 11-09-17 to 14-09-17 25-09-17 to 28-09-17 27-12-17 to 30-12-17 20-02-18 to 23-02-18 28-02-18 to 03-03-18 07-03-18 to 10-03-18	28 32 24 32 23 30 29 21	
3	Media coverage	07	31-05-17 16-07-17 17-07-17 19-07-17 11-10-17 02-03-18 15-03-18		
4	Training for extension functionaries	--	--		

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops- Nil

Frontline demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						H	L	Av.										
Green Gram (NFSM)	ICM	Improved variety + Line sowing + INM + IPM	GAM-5	50	20	11.2	7.1	9.42	6.42	46.87	17800	51700	33900	2.90	16272	35189	18917	2.16
Pigeon pea	ICM	Improved variety + Line sowing + INM + IPM	Vaishali	50	05	9.6	6.3	7.62	5.91	28.93	22947	41921	18974	1.83	20820	32494	11674	1.56
Chick Pea (NFSM)	ICM	Improved variety + Seed treatment + Line sowing + IPM	GJG-3	98	20	15.6	10.3	13.20	9.96	32.53	23747	68656	44909	2.89	21920	49796	27876	2.27
Indian bean	ICM	Improved variety + Seed treatment + Line sowing + IPM	GV-2	50	04	12.2	10.6	10.98	8.08	35.89	17547	43920	26373	2.51	15300	32320	17020	2.11

FLD on Other crops

Crop	Thematic Area	Name of the technology	Variety	No. of Farmers	Area (ha)	Yield (q/ha)			Check	% Change in Yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo					Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Av.										
Cereals																		
Paddy	ICM	Improved variety + Seed treatment + INM + IPM	GAR-13	125	25	46.30	27.90	36.10	28.50	26.66	30888	62963	32075	2.04	32180	49256	17076	1.53
Finger millet	ICM	Improved variety, Biopesticides LBF	Guj. Nagli - 5	50	16	13.2	10.5	11.95	9.65	23.83	18720	33375	14655	1.78	17480	27625	10145	1.58

Vegetables																		
Bittergourd	ICM	Improved variety, IPM, LBF	F1 (Akash)	19	2.5	220	190	206.1	174.95	17.81	67737	185499	117762	2.74	61283	157455	96172	2.57
Sweetpotato	ICM	Improved variety	C-71	20	1.0	162	146	154.2	128.2	20.31	53253	184800	131546	3.47	46458	140800	94350	3.03
Commercial Crops																		
Sugarcane	ICM	Improved variety, LBF	Co-N 04131	10	1.0	1205	1065	1020	910	12.09	99950	275400	175450	2.76	97817	245700	147883	2.51

FLD on Livestock –Nil

FLD on Women Empowerment –Nil

FLD on Farm Implements and Machinery –Nil

FLD on Other Enterprise: Kitchen Gardening –Nil

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										
Water management	01	--	--	--	07	21	28	07	21	28
Weed management	01	--	--	--	25	07	32	25	07	32
Nursery management	01	--	--	--	21	03	24	21	03	24
Integrated Crop Management	05	--	--	--	83	64	147	83	64	147
Total	08	--	--	--	136	95	231	136	95	231
II Horticulture	--	--	--	--	--	--	--	--	--	--
III Soil Health and Fertility Management										
Soil and Water Testing	01	--	--	--	06	12	18	06	12	18
Total	01	--	--	--	06	12	18	06	12	18
IV Livestock Prod. and Management	--	--	--	--	--	--	--	--	--	--
Dairy farming	03	--	--	--	22	38	60	22	38	60
Feed and fodder management	04	--	--	--	12	86	98	12	86	98
Total	07	--	--	--	34	124	158	34	124	158
V Home Science/Women Empowerment		--	--	--						
Nursery management	01	--	--	--	02	19	21	02	19	21
Vermicomposting	01	--	--	--	01	33	34	01	33	34
Mushroom production	02				20	15	35	20	15	35
Total	04	--	--	--	23	67	90	23	67	90
VI Agril. Engineering										
Farm mechanization	01	--	--	--	27	00	27	27	00	27
Total	01	--	--	--	27	00	27	27	00	27
VII Plant Protection										
Integrated Pest-disease Management	01	--	--	--	18	10	28	18	10	28
Total	01	--	--	--	18	10	28	18	10	28

X Capacity Building and Group Dynamics										
Formation and Management of SHGs	01	--	--	--	24	08	32	24	08	32
Total	01	--	--	--	24	08	32	24	08	32
Grand Total	23	--	--	--	268	316	584	268	316	584

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
I Crop Production										
Weed Management	01	--	--	--	08	14	22	08	14	22
Water management	01	--	--	--	10	20	30	10	20	30
Integrated Crop Mgt.	04	--	--	--	106	33	139	106	33	139
Total	06	--	--	--	124	67	191	124	67	191
II Horticulture	--	--	--	--	--	--	--	--	--	--
III Soil Health and Fertility Mgt.										
Integrated Nutrient Management	02	--	--	--	37	36	73	37	36	73
Soil and Water Testing	01	--	--	--	15	08	23	15	08	23
Total	03	--	--	--	52	44	96	52	44	96
IV Livestock Production and Management	--	--	--	--	--	--	--	--	--	--
Dairy farming	01	--	--	--	02	26	28	02	26	28
Feed and fodder management	02	--	--	--	31	14	45	31	14	45
Total	03	--	--	--	33	40	73	33	40	73
V Home Science/Women empowerment										
Value addition in fingermillet	01				--	20	20	--	20	20
Mushroom production	01	--	--	--	--	24	24	--	24	24
Vermicomposting	01	--	--	--	--	35	35	--	35	35
Total	03	--	--	--	--	79	79	--	79	79
VI Agril. Engineering										
Micro irrigation systems	02	--	--	--	60	07	67	60	07	67
Water conservation-Farm pond	02				55	13	68	55	13	68
Farm mechanisation	01	--	--	--	43	11	54	43	11	54
Total	05	--	--	--	158	31	189	158	31	189

VII Plant Protection										
Integrated Pest-disease Management	03	--	--	--	58	13	71	58	13	71
Total	03	--	--	--	58	13	71	58	13	71
X Capacity Building and Group Dynamics										
Formation and Management of SHGs	02	--	--	--	65	15	80	65	15	80
Total	02	--	--	--	65	15	80	65	15	80
Grand Total	25	--	--	--	490	289	779	490	289	779

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	02	--	--	--	33	21	54	33	21	54
Water management	02	--	--	--	17	41	58	17	41	58
Nursery management	01	--	--	--	21	03	24	21	03	24
Integrated Crop Management	09	--	--	--	189	97	286	189	97	286
Total	14				260	162	422	260	162	422
II Horticulture	--	--	--	--	--	--	--	--	--	--
III Soil Health and Fertility Mgt.										
Soil and Water Testing	02	--	--	--	21	20	41	21	20	41
Integrated Nutrient Management	02	--	--	--	37	36	73	37	36	73
Total	04				58	56	114	58	56	114
IV Livestock Production and Mgt.	--	--	--	--	--	--	--	--	--	--
Dairy farming	04	--	--	--	24	64	88	24	64	88
Feed and fodder management	06	--	--	--	43	100	143	43	100	143
Total	10				67	164	231	67	164	231
V Women empowerment										
Nursery management	01	--	--	--	02	19	21	02	19	21
Vermicomposting	02	--	--	--	01	68	69	01	68	69

Mushroom production	03				20	39	59	20	39	59
Value addition in finger millet	01				--	20	20	--	20	20
Total	07				23	146	169	23	146	169
VI Agril. Engineering										
Farm mechanization	02	--	--	--	70	11	81	70	11	81
Micro irrigation systems	02	--	--	--	60	07	67	60	07	67
Water conservation-Farm pond	02				55	13	68	55	13	68
Total	06				185	31	216	185	31	216
VII Plant Protection										
Integrated Pest-disease Management	04	--	--	--	76	23	99	76	23	99
Total	04	--	--	--	76	23	99	76	23	99
X Capacity Building and Group Dynamics										
Formation and Management of SHGs	03	--	--	--	89	23	112	89	23	112
Total	03	--	--	--	89	23	112	89	23	112
Grand Total	48				758	605	1363	758	605	1363

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
Mushroom production	01	--	--	--	12	20	32	12	20	32
Power tiller Repair and maintenance	01				24	--	24	24	--	24
Total	02	--	--	--	36	20	56	36	20	56

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

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
Mushroom production	01	--	--	--	12	20	32	12	20	32
Power tiller repair and maintenance	01				24	--	24	24	--	24
Total	02	--	--	--	36	20	56	36	20	56

Training programmes for Extension Personnel 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
Integrated pest management	01	--	--	--	22	02	24	22	02	24
Soil and water testing	01	--	--	--	22	02	24	22	02	24
Formation and mgt.of SHGs	02	12	--	12	51	20	71	63	20	83
Total	04	12	--	12	95	24	119	107	24	131

Training programmes for Extension Personnel 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
Livestock feed and fodder production	02	--	--	--	40	02	42	40	02	42
Formation and mgt.of SHGs	01	12	--	12	31	06	37	43	06	49
Total	03	12	--	12	71	08	79	83	08	91

Training programmes for Extension Personnel 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
Integrated nutrient management	01	--	--	--	22	02	24	22	02	24
Soil and water testing	01	--	--	--	22	02	24	22	02	24
Livestock feed and fodder production	02	--	--	--	40	02	42	40	02	42
Formation and mgt.of SHGs	03	24	--	24	82	26	108	106	26	132
Total	07	24	--	24	166	32	198	190	32	222

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	01	--	--	--	37	25	62	37	25	62
Integrated Pest Management	01	--	--	--	07	38	45	07	38	45
Total	02	--	--	--	44	63	107	44	63	107
Production and value addition										
Soil health and fertility management	01	--	--	--	14	48	62	14	48	62
Production and use of organic inputs	02	--	--	--	54	--	54	54	--	54
Total	03	--	--	--	68	48	116	68	48	116
Farm machinery										
Others (Micro irrigation System)	01	--	--	--	22	01	23	22	01	23
Total	01	--	--	--	22	01	23	22	01	23

Livestock and fisheries										
Livestock production and management	01	--	--	--	04	55	59	04	55	59
Total	01	--	--	--	04	55	59	04	55	59
Home Science										
Household nutritional security	01	--	--	--	--	38	38	--	38	38
Total	01	--	--	--	--	38	38	--	38	38
Agricultural Extension										
Capacity Building and Group Dynamics	01	--	--	--	14	40	54	14	40	54
Total	01	--	--	--	14	40	54	14	40	54
GRAND TOTAL	09	--	--	--	152	245	397	152	245	397

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Income generation activities		--	--	--	--					
Repair and maintenance of farm machinery	01	--	--	--	24	--	24	24	--	24
Mushroom cultivation	01				12	20	32	12	20	32
Total	02	--	--	--	36	20	56	36	20	56

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Diagnostic visits	03	05	02	07
Field Day	10	1008	06	1014
Kisan Ghosthi	21	504	12	516
Farmers Seminar	08	1332	09	1341
Film Show	15	364	--	364

Kisan Mela	--	--	--	--
Exhibition	02	2400	25	2425
Farmers visit to kvk	1066	1066	--	1066
Scientists' visit to farmers field	37	252	08	260
Advisory Services	307	307	--	307
Method Demonstrations	14	253	05	258
Celebration of important days	04	221	08	229
Pre Rabi sammelan	01	397	09	406
Exposure visits	05	149	--	149
Soil Health camp	03	147	05	152
Lecture delivered in other programmes	29	5390	35	5425
Total	1525	13795	124	13919

Details of other extension programmes

Particulars	Number
Extension Literature	04
News paper coverage	29
Popular articles	09
Radio Talks	12
TV Talks	08
Animal health camps (Number of animals treated)	308
Others	-
Total	370

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

Production of seeds by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Paddy	GAR-13	--	35.40	1,06,200	573
		Navin	--	42.36	1,27,080	
Pulses	Green gram	GAM-5	--	1.20	12000	30
	Indianbean	NPS-1	--	0.26	7800	13
Others	Sugarcane	Co.N-04131	--	1090	490500	16
Total				1168.66	741900	632

Production of planting materials by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Brinjal	--	Mukta round	188000	131600	349
	Drumstick	PKM-1	--	1500	18000	101
Tuber	Sweet potato	C-71	--	90000 cuttings	45000	35
Fodder crop saplings	Perennial grass	Co-4	--	102400 (tousseks)	15000	156
Total				381900	209600	641

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Nos./Kg	Value (Rs.)	No. of Farmers
Bio Agents	Fruitfly trap (Mango)	1447 no.	55430	221
Others	Earthworms	40 kg.	8000	02
	Vermicompost	6000 kg.	24000	Farm use
Total			87430	223

Production of livestock materials: nil**4. Literature Developed/Published (with full title, author & reference)**

A. KVK News Letter - Date of start :January – 2012 Number of copies to be published : 400

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	1. Correlates of Entrepreneurial behavior of mango growers 2. Soil fertility status of nearby areas of kvk 3. Gangama Mandal – A promising Nutri kitchen garden.	• R.F.Thakor & B.M.Mehta • L.T.Kapur & R.F.Thakor • R.F.Thakor L.T.Kapur & P.R.Ahir	03
Technical reports	--	--	--
News letters	Half yearly news letter	R.F.Thakor et.al	02
Technical bulletins	--	---	--
Popular articles	1. Success story- Sci. cultivation of improved chickpea var- PKV-2 (Kabuli) 2. Scientific cultivation of kharif groundnut 3. Scientific cultivation of indianbean 4. Azolla - A wonderful experience of eco friendly fertilizer in paddy 5. Dangarni Kheti- Samruddhini kediye 6. Banana bunch cover 7. Fruitfly Trap – An eco friendly tool to enhance the quality of mango 8. Falmakhi Trap- Aam ki gunvatta badhane ke liye paryavarn anukul sadhan 9. Scientific cultivation of indianbean	M.M.Gajjar, R.F.Thakor M.M.Gajjar, R.F.Thakor A.R.Patel ,K.A.Patel , L.T.Kapur, R.F.Thakor L.T.Kapur; R.F.Thakor A.R.Patel K.A.Patel M.M.Gajjar, R.F.Thakor A.R.Patel ,K.A.Patel , L.T.Kapur, R.F.Thakor K.A.Patel ,R.F.Thakor K.A.Patel ,R.F.Thakor A.R.Patel ,K.A.Patel , L.T.Kapur, R.F.Thakor	09
Extension literature	1. Scientific cultivation of Paddy 2. Scientific cultivation of Pigeonpea	M.M.Gajjar & K.A.Patel M.M.Gajjar & K.A.Patel	1000 1000

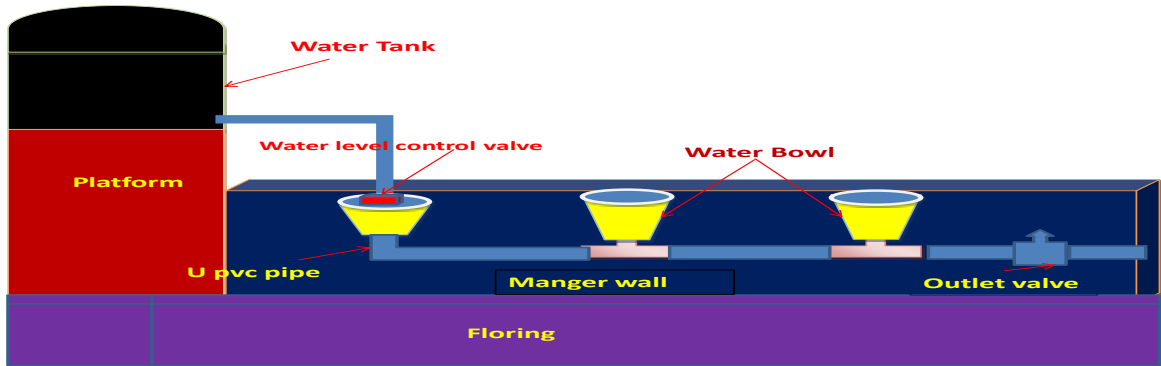
C. Details of Electronic Media Produced- Nil

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

D. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs).

Success Stories of Livestock of Krushi Vigyan Kendra , Valsad

Round the clock clean and continuous water supply to cattle		
1	Brief Introduction	Kaparada block of valsad district is hilly area with undulating land with steep slopes. Agri-Horti-AH is most common farming system in Kaparada and Dharampur block of the district. Both the block belongs to AES-I. Most of the farmers are keeping one or two milch animals i.e. Crossbred cows. The district data shows that the development of AH enterprise is very poor compared to AES-II. This is because of hilly area, shortage of water, poor fertile soils, migration of the people for seasonal job etc. Milk production is lowest in the district. Many govt and Non govt. agencies such as BAIF, Vasudhara milk co-op. are working for the development of the livestock enterprise along with development of agriculture and horticulture, to provide additional and steady income to the tribal farmers. KVK is also working with capacity building of tribal farmers through popularization of the low cost viable technologies amongst them.
2	Intervention/ Technology details	Provide continuous and fresh drinking water to livestock , Increase dry matter intake. Improve health of animal. Improve growth of young animal, Minimize the production loss at time of raise temperature and climate change. Water are directly related to saliva secretion and Saliva are useful to swallow feed and maintain PH of rumen, Drinking water are main and important component in animal nutrition for health and production aspect, Toxic substance in blood are easily and quick thrown from body through urinary canal, Mitigate drudgery of rural women engage in livestock ,Availability of drinking water at critical stage of thrust so animal are satisfied
3	Significant output	<ul style="list-style-type: none"> ➤ Enhanced 10 % milk production of milking animal. ➤ Improved health of animal ➤ Improved growth of young animal ➤ Minimized the production loss at time of raise temperature and climate change ➤ Minimized the digestive problem of ruminant animal

		<ul style="list-style-type: none"> ➤ Mitigated drudgery of rural women engage in livestock operation ➤ women engage in livestock save time to social benefits, ➤ Positive change of animal behaviour
4	Economic feasibility	24 hours drinking water availability system installation cost per two animal are 12000 Rs, 10% milk production are increase so system installation investment recover within one year and also system are working 20 years. Additional benefits are improve in health of animal and drudgery reduction of livestock owners especially women engage in livestock operation.
5	Impact of the technology	As many as 100 farmers of the district have installed this system.
6	Installation design of Technology	

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

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	All crops grown by seed sowing.	A white thin thread tied in three lines around the field.	-To protect the newly emerged shoots of seeds sown in the field from damage of the Peacock (birds). As they eats the shoots and tender leaves of plants.

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

A. Practicing Farmers

- a. Participatory Rural Appraisal
- b. Farmer group discussions
- c. Diagnostic services
- d. Existing cropping system

B. Rural Youth

- a. Participatory Rural Appraisal
- b. Farmer group discussions

C. In-service personnel

- a. Existing cropping system
- b. Feed back from state departments as well as NGOs

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

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

For FLD:

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

5.3. Field activities

Name of villages identified/adopted with block name (from which year) -

Block	Village	Year
Kaparada	Khuntali,	2012
	Mendha, Kakadkopar, Dhodhadkuva,	2015

Dharampur	Sadadvera , Pindval	2015
	Panva, Kilavani	2017
Pardi	Asma, Arnala, Pati Panchalai,	2014
	Lakhmapor, Chival	2015
Valsad	Ozar	2015
Umargam	Borigam ,Saronda	2015

- ii. No. of farm families selected per village : 25
- iii. No. of survey/PRA conducted : 04
- iv. No. of technologies taken to the adopted villages- 08
- v. Name of the technologies found suitable by the farmers of the adopted villages:
 - a) Use of azolla in paddy
 - b) Vermi cpmpost preparation at farm level
 - C) Use of methyl eugenol trap in Mango
 - d) Use of plastic tray for vegetable seed ling raising
 - e) Mashroom production
 - f) Improved variety of Indian bean
 - g) Perrenial fodder grass variety
- vi. Impact (production, income, employment, area/technological– horizontal/vertical): Pl see results item no.13
- vii. Constraints if any in the continued application of these improved technologies :
 - a) Non availability of spawn of mashroom
 - b) Unavailability of seeds of improved variety.
 - c) High cost of inputs i.e. chemical of trap, plastic tray etc.

6. LINKAGES

A. Functional linkage with different organizations

Sr. No.	Name of organization	Nature of linkage
1	Navsari. Agril. Uni. Navsari	Provides expertise for latest technology and supply of improved seeds of paddy, sugarcane, indian bean, sweetpotato.
2	ATMA	Training and organizing farmers shibir.
3	Dept. of Agril. Valsad.	Involvement of kvk experts for delivering lectures, farmers seminars and extension functionaries' trainings.
4	Dept. of Horticulture, Valsad	Involvement for lectures delivering in technology week.
5	Dept. of Animal husbandry, Valsad	Joint organization of cattle treatment camp & Pashupalan shibir
6	Dept. of Forest, Valsad	Joint organization of ext. functionaries training.
7	Vasudhara dairy	Joint implementation of farmers, farm women & ext. functionaries training.
8	Rural Technology Institute , Pardi	Joint implementation of vocational trainings.
9	J. N. Trust, Kaparada	Joint implementation of farmers trainings & seminars.
10	BAIF, Kaparada	Joint implementation of farmers trainings
11	Jain Irrigation Co , Dharampur	Soil and water sample analysis.
12	Disrtict Industrial Centre,Valsad	Approval of loan case of trainees for bank loan.

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

C. Details of linkage with ATMA

a) Is ATMA implemented in your district -- Yes

Role of KVK in preparation of SREP of the district –

- Dr.R.F.Thakor Sr. Sci. and Head KVK was a member of SREP preparation Team of Valsad district

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks
01	Meetings	AGB, AMC, Convergence	08	01	
02	Research projects	--	--	--	
03	Training programmes	Trainings, FFS	15	07	
04	Demonstrations	Field day	--	03	
05	Extension Programmes				
	Kisan Mela	--	01	--	
	Technology Week	--	--	--	
	Exposure visit	--	03	--	
	Exhibition	--	02	--	
	Soil health camps	--	--	--	
	Animal Health Campaigns	--	--	--	
	Others (Pl. specify)				
	Kisan Ghosthi		04	02	
	Sankalp se Siddhi	--	--	01	
	World Honey day	--	--	01	
06	Publications				
	Video Films	--	--	--	
	Books	--	01	--	
	Extension Literature	--	--	--	
	Pamphlets	--	--	--	
	Others (Pl. specify)	--	--	--	
07	Other Activities (Pl.specify)				
	Watershed approach	--	--	--	
	Integrated Farm Development	--	--	--	
	Agri-preneurs development	--	--	--	

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

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

F. Details of linkage with RKVY -nil

7. Convergence with other agencies and departments :

Sr. No.	Name of agencies and departments	Nature of convergence
1	Dept. of Agril. Valsad.	Involvement of kvk experts for delivering lectures, farmers seminars and extension functionaries trainings.
2	Dept. of Horticulture, Valsad	Involvement for lectures delivering in farmers sammelan.
3	Dept. of Animal husbandry, Valsad	Joint organization cattle treatment camp & farmers shibir
4	Dept. of Forest, Valsad	Joint implementation of organizing extension functionaries training.
5	ATMA, Valsad	Involvement of kvk experts for delivering lectures in training, FFS, seminars, etc.

8. Innovator Farmer's Meet –Nil

9. Farmers Field School (FFS) -Nil

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

Sr. No	Name of Crop/ Commodity	Technical Feedback
1	Paddy	Mid late variety with small grain size, non lodging, seed rate as well as seedling rate has been reduced to 20-30 %. Grain quality is better for culinary purpose compared to hybrid varieties.
2	Fingermillet	Variety had less incidence of pest- disease compare to local variety.
3	Greengram	GAM-5 variety is found resistant to YMV with bold grain size and uniform maturity. Good yield with attractive shiny grain appearance
4	Gram	Gram variety GJG-3- early maturity, bold size with good attractive yellow colour, more number of pod per plant , good yield in rainfed condition

5	Pigeon pea	Vaishali variety - mid late (160-170 Days) , bold size with white colour, good for Dal making, good cooking quality, less problem of wilt and sterility mosaic virus.
6	Bittergourd	Management of fruitfly increased the yield.
7	Indianbean	More number of pods per branch, early pod setting .
8	Sugarcane	Seed rate has been reduced to 50%.
9	Sweetpotato	Good colour and uniform thickness fetches higher market price.

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

- Indianbean variety with red colour seeds needs to be developed
- Pigeonpea variety which mature early on conserve rain moisture needed for slopy muram type soil.
- Early to midlate lodging resistant variety for paddy and fingermillet should developed for heavy rainfall area of south gujarat

11. Technology Week celebration during 2017-18 - No

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

13. IMPACT

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

Sr . No.	Name of specific technology/skill transferred	No . of participants	% Adoption	Change in income (Rs.)	
				Before training Rs / unit	After training Rs / unit
1	HYV s of Sugarcane	55	70	112,000 Rs. / ha.	135,000 Rs. / ha.
2	HYV s of Paddy	70	85	21,000 Rs. / ha.	23,500 Rs. / ha.
3	HYV s of Fingermillet	50	75	18,500 Rs. / ha.	21,500 Rs. / ha.
4	HYV s of Brinjal	40	65	80,500 Rs. / ha.	110,000 Rs. / ha.
5	HYV s of Green fodder	60	100	36,500 Rs. / ha.	45,500 Rs. / ha.
6	Q lure traps IPM in Vegetable crops (cucurbits)	60	85	35,000 Rs. / ha.	52,000 Rs. / ha.
7	Sewing work	20	70	--	3500 Rs. per month

B. Cases of large scale adoption

IMPACT OF LIQUID BIOFERTILISERS IN CROP PRODUCTION IN TRIBAL AREA OF VALSAD

Background:

Gujarat Vidyapath, Krishi Vigyan Kendra-Ambheti is located in Kaparada Block of Valsad district of Gujarat. The district is composed largely of tribal communities, primarily depends on agriculture for their livelihood. The soil of the valsad district is characterized by medium black, shallow soil with steep slopes which is poor in fertility. Major crops of Valsad district are Paddy, Finger millet, Mango, Sapota, Sugarcane and vegetables such as Brinjal, Chilly and Cucurbits. Farmers spend lots of money for costly fertilizers and increasing cost of production so they getting low return. There is a ample scope for reduction in cost of fertilizer and improvement in soil health through use of biofertilisers. Profitability can be increased with the reduction in cost of cultivation.

Interventions:

Liquid formulation technology developed by Navsari Agriculture University, Navsari (Guj.) found more advantageous than the carrier inoculants. Liquid formulation having longer shelf life, contamination is almost nil, better survive in soil and on seed, high export potential, quantity required per area is too minimum than carrier based inoculants and can be store upto 45⁰C temperature.

Process :

As a need of time GVKVK –Ambheti, considering the importance of liquid biofertilisers for sustainable soil health and productivity, started to aware tribal farmers, about importance of liquid biofertilisers for soil health and encourage them to adopt the cheapest alternative of costly chemical fertilisers. Kendra has given about 13 trainings on importance of liquid biofertilisers for sustainable crop productivity, Negative effect of excessive application of chemical fertilizer on soil health etc. About 8-10 method demonstrations on how to use liquid biofertilisers has also been conducted on farmer`s field and on GVKVK campus.



Method demonstration on use of Liquid Biofertilisers

For encouraging tribal farmers of district to adopt liquid biofertilisers, on basis of principle “seeing is believing“ GVKVK-Ambheti, has conducted multilocations field demonstrations on liquid biofertilisers i.e *Azotobactor* and *Phosphorus Solubilising Bacteria* in four villages of Pardi block and seven villages of Kaparada block of Valsad(Guj.) in Paddy, Fingermillet, Brinjal, Bottlegourd and Bittergourd.

Sr. No.	Crop	Area (ha.)	No. of Demonstration
1	Paddy	23.00	116
2	Fingermillet	23.00	115

3	Brinjal	5.00	25
4	Bottlegourd	5.00	25
5	Bittergourd	8.00	31
Total		64.00	312

GVKVK-Ambheti also organized Seminar and Exhibition to aware and encourage the farmers to adopt this technology, gives good return.



Exhibition



Seminar

Economic gain:

The results of frontline demonstration conducted by GVKVK-Ambheti in Kaparada and Pardi block of Valsad district shows that an application of liquid biofertilisers positively influenced the yield of crops with reduction of average cost of cultivation, 15.2, 7.41, 9.28 % , 14.25 % , 25.13 % and 17.4, 14.37, 15.68 % , 11.83 % ,15.02 % more average net profit ,respectively in Paddy, Fingermillet, Bottlegourd, Chilly and Brinjal cultivation without deteriorating the soil health

Impact:

Farmers were selected for demonstration feeling happy because demonstration results appreciating the importance of liquid biofertilisers to increase net profit. Farmers said that use of liquid biofertilisers reduced cost of fertilisers and severity of attack of pest and diseases. Though, they getting high quality produce with high market price. So they were got more profit in cultivation of Paddy, Fingermillet, Brinjal, Bottlegourd and Bittergourd crops. Farmers further said that Liquid biofertilisers can be a safe alternative to chemical fertilizers to minimize the ecological disturbance, improve soil fertility and productivity besides reducing the cost of chemical fertilizers

Horizontal Spread:

Farmers of district are pleased with our efforts for motivation and other nearby farmers came forward to adopt this ecofriendly fertilisers. Till today about 450 lit. liquid biofertilisers i.e *Azotobactor*, PSB and *Rhizobium* are distributed from GVKVK among the farmers of district.

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	01	7905	--
September	02	17157	--
November	01	6671	--
March	01	10480	--

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Valsad	Text only	04	--	--	--	--	01	05
	Total Messages	04	--	--	--	--	--	05
	Total farmers Benefitted	31727	--	--	--	--	10486	42213

15. PERFORMANCE OF INFRASTRUCTURE IN KVK**A. Performance of demonstration units (other than instructional farm)**

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermicompost	2003-04	0.1	Eudrilus eugeniae	Vermicompost	10 ton	20,000	40,000	
2	Vermiculture	2003-04	0.1	Eudrilus eugeniae	Vermiculture	100 kg.	5,000	20,000	
3	Dairy	2003-04	0.2	H.F.	Milk	9125 lit	5,09,579	2,83,133	
4	Dairy	2003-04	0.2	H.F.	FYM	20 tone	--	16,000	
5	Dairy	2003-04	0.5	Co.-4	Green fodder	50 ton	25,000	Nil	For Dairy unit
6	Veg. Nursery	2002-03	0.2	Hybrid seedling of Brinjal	Seedling	1,88,0000 no.	73,500	131600	
7	Mango germ plasm demo	2006-07	0.25	Keshar, Alphanso, Sonpari, Dasher, Amrapali, Rajapuri,	--	--	--	--	
8	Bio Agents	2009-10	--	--	ME trap	1447 no.	36175	55430	

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

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs with labour	Gross income	
Cereals									
Paddy	04/12/2016	07/05/2017	1	GAR-13	Seed production	3540 kg	36,000	1,06,200	
Paddy	10/06/2017	05/10/2017	1.5	GAR-13,Naveen	Seed production	4236 kg	57,000	1,27,080	
Paddy	12/06/2017	09/10/2017	0.3	GAR-13,Naveen GR-7,MTU-1010	Commercial	610 kg	5,600	6,000	Demo. Plot of diff. variety at kvk farm
Pulses									
Green gram	20/02/2017	17/05/2017	0.2	GAM-5	Seed production	120 kg	4,000	10,000	
Pigeon pea	14/06/2017	22/12/2017	0.1	Vaishali	Seed production	100 kg	3,800	9,000	
Indian bean	15/10/2016	20/1/2107	.05	NPS-1	Seed production	26 kg	2500	7800	
Spices & Plantation crops									
Fruits									
Mango	1999	-	3	Kesar Alphanso Dasheri	Commercial	4000 kg	60,000	1,03,000	
Vegetables									
Veg Demon. Kitchen garden	05/01/2017	21/05/2017	0.1	Brinjal, Tomato, Chilly and cabbage etc.	Commercial	300 kg	5,800	6000	
Others (specify)									
Sugarcane	20/02/2016	06/01/2018	2	Co.N. 41131 Co.N.-13073	Seed production	107 tone	1,73,600	4,81,500	
Sugarcane	18/10/2016	12/01/2018	1.5	Co.N.- 41131	Commercial	109 tone	1,40,000	2,40,000	
Fodder	23/05/2015	Multicut	0.10	Co.-4	Seed production	30,000 tussecks	10,000	15,000	
Eucalyptus	2015	--	2	JK-413	Commercial	--	1,35,000	---	
Casurina	2014	--	1	Clonal	Commercial	--	65,000	--	

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Fruitfly trap (Mango)	1447 no.	36175	55430	

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

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Cow	H.F.cross (06)	Milk	9125 lit	509579	283133	
			FYM	20 tone	--	16000	

E. Utilization of hostel facilities- Accommodation available (No. of beds) : 25 Beds

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2017	71	236	
May 2017	41	164	
June 2017	46	184	
July 2017	32	64	
August 2017	88	400	
September 2017	80	248	
October 2017	--	--	
November 2017	28	112	
December 2017	77	308	
January 2018	60	240	
February 2018	30	120	
March 2018	167	536	

F. Database management

S. No	Database target	Database created
1	500	794

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training	No. of Demonstrations	No. of plant materials produced	Visit by farmers	Visit by officials		
00	50000	Farm pond demo unit 50*50*5 ft.	03	05 method demo of Raingun	--	235	11	3.5 lakh litres	--

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of India,	Ahmedabad	2628	Gujarat Vidyapith	10295506650	380002006	SBIN0002628
With KVK	State Bank of India, Dena bank	Dehgam Motapondha	07811 ---	Gujarat Vidyapith Krishi Vigyan Kendra,Ambhti	35719395798 089810003112	396002026 396018505	SBIN0007811 BKDN0240898

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	13285000	14976000	13284646
2	Traveling allowances	131000		129205
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	460000		455525
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1100000		949743
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			

<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library			
	TOTAL (A)	14976000		14819119
B. Non-Recurring Contingencies				
1	Works	0		
2	Equipments including SWTL & Furniture	0		
3	Vehicle (Four wheeler/Two wheeler, please specify)	0		
4	Library (Purchase of assets like books & journals)	0		
	TOTAL (B)	14976000	14976000	14819119
C. REVOLVING FUND		0	0	0
GRAND TOTAL (A+B+C)		14976000	14976000	14819119

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

Year	Opening balance on 1 st April	Income during the year	Expenditure during the year	Net balance as on 1 st April of each year
April 2015 to March 2016	69,97,949	21,26,777	14,30,791	76,93,935
April 2016 to March 2017	76,93,935	20,64,524	16,55,877	81,02,582
April 2017 to March 2018	81,02,582	13,99,464	15,68,560	79,33,486

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.R.F.Thakor	Sr. Sci.& head	Regional workshop on skill development in agriculture.	SIAM, Jaipur	18/08/17
		National conference on improving income of farmers through agri. And acquaculture	CIFA, Bhuvaneshvar	5-7/06-17
Shri L.t.kaour	SMS	Training on proper handling of soil test kit	ATARI, Jodhpur	20/05/17
Shri K A Patel, A.R.Patel	SMS	National workshop on Empowering farmers of Tribal Areas	NASC, New Delhi	7-8/06/17
Shri M.M.Gajjar	SMS	Training on Organic farming curriculum	Gujarat Vidyapith, Ahmedabad	19/07/17
		Seminar on Sugarcane	NAU, Navsari	25/07/17
		Training cum workshop CFLD of KVK of Gujarat	NAU, Navsari	29-31/01/18
Shri B.M.Patel	Pro. Assistant	Communication skill for effective extension services.	NAU, Navsari	11-13/07/17
Shri A.R.Patel	SMS	Orientation programme on preparation of DAP,SIDP	NAU, Navsari	06/03/18

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

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	48	758	605	1363
Rural youths	--	--	--	--
Extension functionaries	07	190	32	222
Sponsored Training	09	152	245	397
Vocational Training	02	36	20	56
Total	66	1136	902	2038

2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	--	--	--
Pulses	273	59.00	--
Cereals	175	41.00	--
Vegetables	39	3.50	--
Other crops	48	9.00	--
Total	535	112.5	--
Livestock & Fisheries	76	--	76 animals
Other enterprises	55	--	55 units
Total	--	--	--
Grand Total	666	112.5	131

3. Technology Assessment & Refinement

Category	No. of Tech. Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	07	60	60
Livestock	01	20	20
Various enterprises	--	--	--
Total	08	80	80
Technology Refined	--	--	--
Grand Total	08	80	80

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1525	13919
Other extension activities	370	--
Total	1895	13919

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Valsad	Text only	04	--	--	--	--	01	05
	Total Messages	04	--	--	--	--	--	05
	Total farmers Benefitted	31727	--	--	--	--	10486	42213

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	1168.66	741900
Planting material (No.)	381900 no	209600
Bio-Products – (M E Traps)	1447 no.	55430

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil - 557	626	38930
Water - 229	114	11450
Plant - 072	91	--
Total - 858	831	50380

8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	06
2	Conferences	02
3	Meetings	06
4	Trainings for KVK officials	03
5	Visits of KVK officials	01
6	Book published	--
7	Training Manual	--
8	Book chapters	03
9	Research papers	--
10	Lead papers	--
11	Seminar papers	03
12	Extension folder	02
13	Award & recognition	--