ICAR-ATARI, PUNE

DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2019

(1st January 2019 to 31st December 2019)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with Phone, Fax and E-mail

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
	Office	FAX		
Krishi Vigyan Kendra, Junagadh Agricultural University, Morbi , Dist Morbi (Gujarat) – 363641	02822-224853	-	kvkmorbi@gmail.com	www.jau.in

1.2. Name and address of host organization with Phone, Fax and E-mail

Address	Telephone		E mail	Website address
	Office	FAX		
Junagadh Agricultural University, Junagadh (Gujarat)	0285-2672080	0285-2672653	dee@jau.in	www.jau.in

1.3. Name of the Senior Scientist and Head with Phone & Mobile No.

Name	Telephone / Contact		
	Mobile	Office	E mail
D. A. Saradava	9426784628	02822-224853	dasaradava@jau.in

1.4. Year of sanction: 2017 (Grant & Staff from March - 2017)

1.5. Faculty Information : (as on March 31, 2019)

				If Permanent, Please indicate			If Temporary, pl. indicate the consolidated amount paid (Rs./month)
No	**Sanctioned post**	**Name of the incumbent**	**Discipline**	**Current Pay Band**	**Current Grade Pay**	**Date of joining**	
1	Senior Scientist and Head	Vacant	-	-	-	-	-
2	IC/ Senior Scientist and Head & Subject Matter Specialist	D. A. Saradava	Plant Protection	57700 - 182400	UL-10	01/03/17	-
3	Subject Matter Specialist	Dr. H. D. Mehta	Home Science	57700 - 182400	UL-10	01/08/17	-
4	Subject Matter Specialist	Dr. A. H. Sipai	Soil Science	57700 - 182400	UL-10	01/11/19	-
5	Subject Matter Specialist	Vacant	-	-	-	-	
6	Subject Matter Specialist	Vacant	-	-	-	-	-
7	Subject Matter Specialist	Vacant	-	-	-	-	-
8	Agriculture Officer	Gamansinh S. Zala	B.Sc. Agri.	Fix Pay	Fix Pay	03/08/18	-
9	Programme Assistant	Vacant	-	-	-	-	-
10	Computer Programmer	Ravi R. Sida	BCA	Fix Pay	Fix Pay	01/04/19	-
11	Farm Manager	Vinuji V. Thakor	B.Sc. Agri.	Fix Pay	Fix Pay	31/07/18	-
12	Accountant/Superintendent	Vacant	-	-	-	-	-
13	Stenographer	Vacant	-	-	-	-	-
14	Driver 1	Vacant	-	-	-	-	-
15	Driver 2	Vacant	-	-	-	-	-
16	Supporting staff 1 & 2	Vacant	-	-	-	-	-

1.6. Total land with KVK (in ha) : 26

Sr. No.	Item	Area (ha)
1	Under Buildings	1.0 ha
2.	Under Demonstration Units Pond	1.5 ha.
3.	Under Crops	6.0 ha
4.	Horticulture	Nil
5.	Others if any	17.7 ha road, bund and river valley

1.7. Infrastructural Development :

A) Buildings

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	KVK	2019-20	575.32	143.00 Lacs	-	-	-
2	Farmers Hostel	KVK	2019-20	443.96	61.00 Lacs	-	-	-
3	Staff Quarters (6)	-	-	-	-	-	-	-
4	Demonstration Units (1) Azola Unit	SAU	2019-20	18.0	10000/-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	2018-19	-	2,00,000/-	-	-	-
7	Threshing yard	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9	ICT lab	-	-	-	-	-	-	-
10	Roof Rain Water harvesting structure	SAU	2019-20	1.40 lac ltr.	4.6 Lacs	-	-	-

B) Vehicles :

Type of vehicle	Year of purchase	Cost (Rs.)	Total km Run	Present status
Mahindra Bolero	2019	800000/-	5173 km	Working

C) Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Tractor MasseyDI-241	2017	607137/-	Working
Computer System Acer 18.5	2017	34115/-	Working
Computer System Acer 18.5	2017	34115/-	Working
Printer MF 3010 canon	2017	10266/-	Working
Printer LBP 6510	2017	8761/-	Working

1.8. Details SAC meeting conducted in the year

Date	Name and Designation of Participants	Salient Recommendations	Action taken
12/03/2020	Dr. V. P. Chovatiya, Honorable Vice Chancellor, J.A.U., Junagadh. Dr. B. K. Sagarka, Directorate of Extension, J.A.U., Junagadh Dr. D. S. Hirpara, Res. Sci. (DF), D.F.R.S., J.A.U., Targhadia Dr. G. R. Sharma, Principal of Polytechnic in Agril. Engg., J.A.U., Targhadia Dr. B. B. Kabaria , Senior Scientist & Head, K.V.K., J.A.U., Targhadia, Dist: Rajkot Dr. N. B. Jadav, Senior Scientist & Head, K.V.K., J.A.U., Pipalia (Dhoraji) , Dist. Rajkot Shri. D. A. Saradava ,	• Add one interventions in OFT (Management of White Grub in Groundnut) of Metarhizium application for white grub management. • Training programme of Beauty Parlor & Basic Computer knowledge should be organized in year 2019-20. **In chairman remarks**, Hon'ble Vice Chancellor, Dr. A. R. Pathak, Junagadh Agricultural University, Junagadh appreciated the activities	• Suggesion accepted and implemented. • Training on Beauty Parlor & Basic Computer knowledge included in 2019-20 action taken programme

	Senior Scientist & Head, K.V.K., J.A.U., Morbi, Dist. Morbi	carried out by the center.	
	Shri A. J. Chovatia, Assi. Director of Agriculture, District Panchayat, Rajkot		
	Shri. N. M. Kamariya, Assi. Director of Horticulture, Dept. of Horticulture, Rajkot		
	Shri M. B. Nasit, Dy. Project Director, ATMA, Rajkot		
	Dr. G. K. Vora, Veterinary Officer, Dept. of Animal Husbandry, Kuvadava , Dist : Rajkot		
	Dr. Amit H. Patel, Rajkot Dairy (Gopal Dairy), Rajkot		
	Shri. Vasantbhai Joshi, All India Radio, Rajkot		
	Dr. H. C. Chhodvadia, Asstt. Directorate of Extension, J.A.U., Junagadh		
	Ritaben Vora, Centre for Environment Education, Jasdan, Dist: Rajkot		
	Shree Hiteshbhai P. Kyada, Village : Rafala, Ta. Dist. : Rajkot		
	Shree Kalyanbhai C. Ramani, Village : Lilapur,Ta : Jasdan, Dist.: Rajkot		
	Shree Vinubhai R. Hirpara, Village : Lilapur, Ta : Jasdan, Dist.: Rajkot		
	Lilaben Lakhataria, Village : Lalavadar, Ta : Vinchhiya, Dist.: Rajkot		

2. DETAILS OF MORBI DISTRICT

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

Sr. No	Farming system/enterprise
1	Cotton-Wheat/Cotton-Cumin/Groundnut-Wheat/Groundnut-Cumin/Cotton-Summer Sesame
2	Animal husbandry – crop based enterprise /Dairy product
3	Farm Waste Management/ Crop residue management
4	Value addition in Groundnut/ Sesame

2.2. Description of Agro-climatic Zone & major agro ecological situations

A. Soil type

No.	Agro-climatic Zone	Characteristics
1	North Saurashtra Agro Climatic Zone Morbi,Wankaner and Tankara (Agro – eco-situation –No.7)	Semi arid- region with annual rainfall 550-600 mm, 29 rainy days. Maximum temp – 44˚C, Minimum range – 5 to 12˚C & high evaporation
2	North west agro climatic Zone- 5 Maliya (mi) and Halvad block	Arid to semi arid region with annual rain fall – 500 to 550 mm maximum temp - 45˚C, Minimum range – 3 to 12˚C & high evaporation

B. Topography

No.	Agro Ecological Situation	Characteristics
1	Situation No. 7	Plain & hilly areas in wankaner tehsil.
2	Situation No. 5	Plain costal region (saline) affected with desertification

2.3. Soil Types

No.	Soil type	Characteristics	Area in ha
1	Medium black clayey	Low in organic carbon, heavy cracking and clod formtion	202.4
2	Alluvial Soil (sand-loam lomy)	Low fertility status, high infiltration rate	91.8
3	Hilly Soil (light)	Undulating topography, low fertitile eroded soil	13.6
4	Silty Soil (loomy)	Low infiltration rate, water logging, difficult to cultivate	5.5

2.4. Area, Production and Productivity of major crops cultivated in the district (2018-19)

Sr. No.	Crop	Area (ha)	Production (M. T.)	Productivity (q/ha)
1	Groundnut	34945	40196	1150
2	Cotton (Bt)	157132	92464	588
3	Pearl millet	2362	1191	504
4	Sesame	7698	2069	269
5	Castor	14984	14665	979
6	Green gram	1283	761	593
7	Black gram	368	235	639
8	Vegetable	4026	94849	23559
9	Fodder	33959	719620	21191
10	Wheat	-	-	-
11	Gram	-	-	-
12	Cumin	-	-	-

2.5. Weather data (2019 - 20)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
June	08.6				
July	83.1				
August	441.9				
September	413.4				
October	22.0				
Total	**969.0**				

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

Category	Population	Production	Productivity
Cattle			
Crossbred	161857		12 lit/Day
Indigenous			
Buffalo	194019		17 lit/Day

Sheep	87357		
Goats	144309		
Pigs			
Crossbred			
Indigenous			
Rabbits			
Poultry			
Hens	1000000		3 kg/Bird
Desi			
Category		Production (Q.)	Productivity
Fish (Reservoir)			

2.7. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Morbi	Morbi	Gorkhijadia Jepur, Bharatnagar, Laxminagar,	Groundnut, Cotton, Sesame, Wheat, Cumin, Gram, Chickpea, Onion. Enterprises are dairy business Vermi composting preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton *phytopthora* disease in sesame and white grub infestation in groundnut.	IPM and INM in major crops of this area Increase drainage of soil Motivate the farmers for arid Horticultural crops. Efficient use of irrigation water
Tankara	Tankara	Sajjanpar Hadmatiya Nasitpar Harbattiyali Nasitpar	Groundnut, Cotton, Sesame, Wheat, Cumin, Gram, Chickpea, Garlic, Onion. Vermi composting preparation of roasted groundnut and chikki from groundnut seed	*phytopthora* disease in sesame and white grub infestation in groundnut. Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton ,Nutritional deficiency in animal feed and fodder Less area under Horticultural crops	IPM and INM in major crops of this area Increase drainage of soil Efficient use of irrigation water

Halvad	Halvad	Devipur Devalia,	*Groundnut, Cotton, Sesame, Wheat, Cumin, Gram. Enterprises are dairy business, Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton Heavy infestation of sucking pest in cotton *phytopthora* disease in sesame and white grub infestation in groundnut Long inter-calving period in Buffalo Nutritional deficiency in animal feed and fodder Less area under Horticultural crops	IPM and INM in major crops of this area Reducing the inter-calving period in Buffalo Motivate the farmers for arid Horticultural crops Efficient use of irrigation water

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Groundnut, Sesame etc	Increasing the productivity of the major crops by adopting the recommendation of dry farming technologies and to create awareness for value addition.
Water conservation	*In situ* soil moisture conservation and rainwater harvesting. Use of cotton stalk for organic manure.
Cotton	Motivating cotton growers to adopt IPM and INM practices for reducing the cost of production.
women empowerment	Providing self employment through skill oriented income generating activities
Agriculture	Developing interest among youth for agriculture as a profession.
Horticulture	Value addition in agriculture produces through proper grading, processing, marketing and information technology.
Income generating activities	Self employment among rural youth and skill oriented income generating activities.
Nutrition management	Care and importance of nutrition in children & pregnant women.

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
3	3	20 + 8	20 + 8	50	40 + 10	50	50

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
36	36	915	1069	-	231	-	204686

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
Groundnut – 14.00 Sesame – 2.00 Black gram – 5.00 Cumin – 8.0 Chickpea – 5.0	Groundnut – 13.00 Sesame – 0.70 Black gram – 5.07 Cumin – 8.0 Chickpea – 4.0	-	-

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

3.1. B. Operational areas details during 2019

No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Bt. cotton	Sucking Pest, Para Wilt, Pink Ball Worm	1,12,000 ha	Halvad, Tankara, Wakaner, Morbi block	FLD on pinkball worm management. Training on pink ball worm management
2	Groundnut	White Grub Stem Root	42,000 ha	Tankara , Halvad block	OFT on White grub management in groundnut. Training on test and Disease management in groundnut.
3	Cumin	Wilt and Blight	3900 ha	Morbi, Halvad, Maliya	FLD and OFT on Wilt management and also training for IDM in Cumin.

* 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	Oilseed	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Pest Management	-	1	-	-	-	-	-	-	-	1
Integrated Disease Management	-	-	-	1	-	-	-	-	-	1
Total	**-**	**1**	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**2**

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 **--- NIL ---**

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	-	White Grub Management in Groundnut	10	10	0.4
Integrated Disease Management	-	Wilt Management in Cumin through Trichoderma	10	10	0.4
Total	**-**	**-**	**20**	**20**	**0.8**

B.2. Technologies Refined under various Crops **--- NIL ---**

B.3. Technologies assessed under Livestock and other enterprises **--- NIL ---**

B.4. Technologies Refined under Livestock and other enterprises **--- NIL ---**

C1.Results of Technologies Assessed

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	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Ground nut	Nourth Saurashtra Agro-climatic Zone	Heavy infestation of white grub in ground nut	Management of White Grub in Groundnut crop	10	management of white grub in Groundnut	(1) yield (2) percentage of infected plant	T1 , T2 , T3 percentage of infected plant 6.0% , 2.0% , 3.8% yield 1562 kg/ ha 1739 kg/ ha 1674 kg/ ha	10.2 percentage higher yield received over farmer practice in T2 where as 7.1 percentage Higher in T3 over farmer practice.	seed treatment with chlorpyriphos is very effective to reduce the damage of white grub infestation	Nil	Nil

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Sowing of groundnut without Seed treatment. Farmers adopt drenching of Chlorpyriphos or Quinalphos @ 6 lit/ha with irrigation at initiation of pest incidence. (Farmers practice)	-	1562	kg/ ha	17200/-	1.28
Seed treatment with Chlorpyriphos or Quinalphos @ 25 ml/kg seed.(GAU Reco.)	Gujarat Agriculture University	1739	kg/ ha	24300/-	1.38
Application of Metarhizium anisoplii @ 5 kg/ha with 300 kg/ha castor cake at time of sowing.	Junagadh Agricultural University	1674	kg/ ha	21050/-	1.33

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	:	Management of white grub in ground nut crop.
2	Problem Definition	:	Heavy infestation of white grub in ground nut.
3	Details of technologies selected for assessment	:	Seed treatment with chlorpyriphos 20 EC.
4	Source of technology	:	Gujarat Agriculture University.
5	Production system and thematic area	:	Intigrated pest management.
6	Performance of the Technology with performance Indicators	:	-----
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques	:	Matrix scoring is 8 out of 10 done by farmer.
8	Final recommendation for micro level situation	:	Sowing of groundnut with the seed treatment of chlorpyriphos 20 E.C. 25 ml/ kg seed to minimise the damage of white Grub.
9	Constraints identified and feedback for research	:	-----
10	Process of farmer's participation and their reaction	:	Seed treatment is the best and cheapest method for management of white grub.

C1.Results of Technologies Assessed

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	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Cumin	Cotton-cumin Ground nut-cumin	Heavy incidence of wilt disease in cumin	Use of trichodarma for wilt disease management in cumin	10	wilt management through Trichodarma treatment	1) yield 2) Percentage of wilted plant	percentage of wilted/ plant T1 – 14.3 % T2 – 5.6 % T3 – 3.7 % yield T1 – 1113 kg/ ha T2 – 1247 kg/ ha T3 – 1300 kg/ha	12.0 percent higher yield obtain in T2 and 16.8 percent higher in T3 than farmer practice.	Trichodarma with compost two application 1st at time of sowing and 2nd 25 DAS sowing is very effective to control the wilt disease	Nil	Nil

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Sowing without use of Trichodarma. But they use fungicides viz., Carbendazim, Hexaconazole, Difenconazole, Tebuconazole, Propiiconazole, , etc after initiation of diseases. (Farmers practices.)	-	1113	kg/ ha	62800/-	3.50
Application of Trichoderma @ 5 kg /ha with organic manure @1000 kg / ha at the time of sowing.. (Recommended practices.)	Gujarat Agriculture University	1247	kg/ ha	78005/-	3.80
Application of Trichoderma @ 5 kg /ha along with organic manure @1000 kg / ha at the time of sowing and second application of Trichoderma @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination. (Intervention).	Gujarat Agriculture University	1300	kg/ ha	79925/-	3.87

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

1	Title of Technology Assessed	:	Use of trichoderma for wilt disease management.
2	Problem Definition	:	Heavy incidence of wilt disease in cumin effecting yield loss up to 9 to 20 percent.
3	Details of technologies selected for assessment	:	Application of trichoderma with compost
4	Source of technology	:	Junagadh Agriculture University, Junagadh
5	Production system and thematic area	:	Integrated disease management
6	Performance of the Technology with performance Indicators	:	-----
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques	:	7 out of 10 scoring
8	Final recommendation for micro level situation	:	Application of trichoderma 5 kg/ ha with compost @ 1000 kg/ ha at time of sowing and second application is DAS
9	Constraints identified and feedback for research	:	Nil
10	Process of farmer's participation and their reaction	:	Trichoderma application gave good result in supressing the wilt disease and increase yield.

C1. RESULT OF TECHNOLOGY ASSESSMENT

A reduce the malnutrition problem in preschool children (1 to 5 yr)

Definition of Malnutrition : The world Health Organized (WHO) Defines malnutrition as the cellular imbalance between the supply of nutrients and energy and the body's demand .

To ensure growth , maintenance and specific functions.

Title of Technology	Treatment	No. of Trial	Result	
			Percentage of weight up	Remarks
MALNUTRITION IN CHILDREN **1)**To Study the effect high calorie and protein diet on the growth of preschool children **2)**To reduce the malnutrition in children **3)** To reduce the high malnutrition in children	**1.** Use of mixture of Dalia Dal + Jiggery + Groundnut seed , Amla juice , Banana ,Soybean chips (per child 100 gram & juice 50 ml)	- 8 children (1.5-5 years) - 6 months Duration - EveryMonth BodyWeight (WHO- New Body mass index chart, male & female)	17 % up	Only Special Disease Affected
	2. Use of Rise , Pigeon Pea, Green grams, Chickpea, Pomegranate, Banana, Potato, Tomato (per child 100 gram & fruit 50 gram)		55% up	Malnutrition affected
	3. Use of wheat flour + Ghee + Jaggery or Til, Milk, Carrots, Rise, Pigeon Pea, Green grams, Potato, Tomato and Green Vegetables or Pomegranate. (per child 100 gram & fruit 50 gram)		69% up	High Malnutrition affected

RESULT

1) Technology Option1 is not effective of malnutrition child Measurements of Weight so they only disease affected food.
2) Technology Option2 is effective malnutrition child but not very effective of High Malnutrition Child Measurements of Weight.
3) Technology Option is 3 is very effective of malnutrition & high malnutrition child growth rate.

D1. Results of Technologies Refined

Results of On Farm Trial **--- NIL ---**

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 2018-19 and recommended for large scale adoption in the district

Sr. No	Crop/ Enterprise	Variety	Thematic Area*	Technology Demonstration	Horizontal spread of technology		
					No. of villa.	No. of farmer	Area in ha
1	Groundnut	GJG – 22	New Variety	Popularized New Variety GJG-22	6	10	4.0
2	Cotton	Bt. Cotton	IPM	Management of Pink Ball Warm through MDP	4	10	4.0
3	Cumin	GC - 4	IDM	Management of Wilt through Trichoderma	4	10	4.0
4	Chickpea	GG - 5	New Variety	Popularized New Variety GG-5	4	10	4.0
5	Pearl millet	GHB - 538	New Variety	Popularized New Variety GHB-538	4	10	4.0

B. Details of FLDs implemented during 2018-19 (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops)

No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstrations			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Groundnut	New Variety	Popularized New Variety GJG-22	*Kharif* - 2019	4.0	4.0	-	10	10	-
2	Cotton	IPM	Management of Pink Ball Warm through MDP	*Kharif* - 2019	4.0	4.0	1	9	10	-
3	Cumin	IDM	Management of Wilt through Trichoderma	Rabi - 2019	4.0	4.0	2	8	10	-
4	Chickpea	New Variety	Popularized New Variety GG-5	Rabi - 2019	4.0	4.0	1	9	10	-
5	Pearl millet	New Variety	Popularized New Variety GHB-538	*Kharif* - 2019	4.0	4.0	-	10	10	-

C. Details of farming situation

Crop	Season	Farming Situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Groundnut	*Kharif*	RF	Medium Black	Low	Low	High	Cotton	20th to 25th June	12th Oct.	222 mm	6
Cotton	*Kharif*	RF	Medium Black	Low	Low	High	Cotton	25th to 27th June	15th Dec.	222 mm	6
Cumin	*Rabi*	Irrigated	Medium Black	Low	Low	High	Groundnut	5th Nov.	5th March	-	-
Chickpea	*Rabi*	Irrigated	Medium Black	Low	Low	High	Groundnut / Sesame early cotton	20th Nov.	10th March	-	-
Pearl millet	*Summer*	Irrigated	Medium Black	Low	Low	High	Cotton	20th Feb.	19th May	-	-

***L – low M – Medium H – High**

Technical Feedback on the demonstrated technologies

No.	Feed Back
1.	GJG-22 Groundnut variety is high yielding.
2.	Trichoderma harzianium is very useful to suppress the wilt disease in cumin.
3.	Pheromone trap is very useful for mass trapping of pink ball warm moth in cotton crop.
4.	GG-5 chickpea variety is high yielding as well as disease resistant compare to GG-2, GJG-3.

Farmers' reactions on specific technologies

No.	Feed Back
1.	Farmers and Farm Women is very happy with establishment of to the KVK at Morbi.
2.	Pink ball warm problem in cotton.
3.	Para wilting in cotton crop.
4.	White grub problem in ground nut crop.
5.	Sucking pest particularly thrips problem in cotton, onion chilly and garlic crop.
6.	Falls army worm in Maize.

A. Performance of Frontline demonstrations

FLD on oilseed crops

Crop	Thematic Area	Technology Demonstrated	Variety	No. of Farmer	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						H	L	A										
Groundnut	New Variety	Popularized New Variety GJG-22	GJG-22	10	4.0	15.3	13.6	14.7	13.2	11.7%	61900	85700	23800	1.38	60900	77100	16200	1.26

FLD on Other crops

Crop	Thematic Area	Name of the techno -logy	No. of Farmer	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					H	L	A										
Cotton	IPM	Management of Pink Ball Warm through MDP	10	4.0	17.80	13.70	15.60	13.2	15.2	46200	77520	31320	1.68	42500	67320	24820	1.59
Cumin	IDM	Management of Wilt through Trichoderma	10	4.0	14.20	11.30	12.30	10.81	11.4	43950	162473	118523	3.69	42600	145935	103335	3.40
Chick-pea	New Variety	Popularized New Variety GJG-5	10	4.0	14.50	10.60	11.18	9.57	16.8	37300	55900	18000	1.5	36300	47850	11550	1.3
Pearl millet	New Variety	Popularized New Variety GHB-538	10	4.0	36.00	33.50	34.75	35.7	-2.6	44700	90325	45625	2.02	42850	96875	54025	2.26

FLD on Livestock

NIL

FLD on Fisheries

NIL

FLD on Other enterprises

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

Note : Remove the Enterprises/crops which have not been shown

3.4Farmers' Training including sponsored training programmes (On campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Integrated Farming	1	27	00	27	02	00	02	**29**
II Horticulture								
a) Vegetable Crops	-	-	-	-	-	-	-	**-**
b) Fruits	-	-	-	-	-	-	-	**-**
c) Ornamental Plants	-	-	-	-	-	-	-	**-**
d) Plantation crops	-	-	-	-	-	-	-	**-**
e) Tuber crops	-	-	-	-	-	-	-	**-**
f) Spices	-	-	-	-	-	-	-	**-**
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	**-**
III Soil Health and Fertility Management	-	-	-	-	-	-	-	**-**
IV Livestock Production & Management	-	-	-	-	-	-	-	**-**
V Home Science/Women empowerment								
Value addition	2	00	97	97	00	23	23	**120**
Income generation activities for empowerment of rural Women	1	00	24	24	00	01	01	**25**
Rural Crafts	1	00	13	13	00	17	17	**30**
Women and child care	1	00	23	23	00	04	04	**27**
VI Agril. Engineering	-	-	-	-	-	-	-	**-**
VII Plant Protection								
Integrated Pest Management	3	86	00	86	18	00	18	**114**
VIII Fisheries	-	-	-	-	-	-	-	**-**
IX Production of Inputs at site	-	-	-	-	-	-	-	**-**
X Capacity Building & Group Dynamics	-	-	-	-	-	-	-	**-**
XI Agro-forestry	-	-	-	-	-	-	-	**-**
TOTAL	**9**	**113**	**157**	**270**	**20**	**45**	**65**	**335**

Farmers' Training including sponsored training programmes (Off campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Integrated Farming	1	16	20	36	00	00	00	**36**
Integrated Crop Management	1	30	00	30	05	00	05	**35**
II Horticulture								
a) Vegetable Crops	-	-	-	-	-	-	-	**-**
b) Fruits								
Cultivation of Fruit	1	20	00	20	02	00	02	**22**
c) Ornamental Plants	-	-	-	-	-	-	-	**-**
d) Plantation crops	-	-	-	-	-	-	-	**-**
e) Tuber crops	-	-	-	-	-	-	-	**-**
f) Spices	-	-	-	-	-	-	-	**-**
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	**-**
III Soil Health and Fertility Management								
Soil fertility management	1	31	00	31	04	00	04	**35**
IV Livestock Production & Management	-	-	-	-	-	-	-	**-**
V Home Science/Women empowerment								
Income generation activities for empowerment of rural Women	2	10	29	39	07	30	37	**76**
Rural Crafts	1	00	25	25	00	02	02	**27**
Women and child care	3	13	63	76	00	26	26	**102**
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	1	33	00	33	03	00	03	**36**
VII Plant Protection								
Integrated Pest Management	4	124	00	124	06	00	06	**130**
Integrated Disease Management	3	98	00	98	08	00	08	**106**
Bio-control of pests and diseases	3	102	00	102	02	00	02	**104**
VIII Fisheries	-	-	-	-	-	-	-	**-**
IX Production of Inputs at site	-	-	-	-	-	-	-	**-**
X Capacity Building & Group Dynamics	-	-	-	-	-	-	-	**-**
XI Agro-forestry	-	-	-	-	-	-	-	**-**
TOTAL	**21**	**477**	**137**	**614**	**37**	**58**	**95**	**709**

Farmers' Training including sponsored Training Programmes (On + Off Campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Integrated Farming	2	57	00	57	07	00	07	**64**
Integrated Crop Management	1	16	20	36	00	00	00	**36**
II Horticulture								
a) Vegetable Crops	-	-	-	-	-	-	-	**-**
b) Fruits								
Cultivation of Fruit	1	20	00	20	02	00	02	**22**
c) Ornamental Plants	-	-	-	-	-	-	-	**-**
d) Plantation crops	-	-	-	-	-	-	-	**-**
e) Tuber crops	-	-	-	-	-	-	-	**-**
f) Spices	-	-	-	-	-	-	-	**-**
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	**-**
III Soil Health and Fertility Management								
Soil fertility management	1	31	00	31	04	00	04	**35**
IV Livestock Production & Management	-	-	-	-	-	-	-	**-**
V Home Science/Women empowerment								
Value addition	2	00	97	97	00	23	23	**120**
Income generation activities for empowerment of rural Women	3	10	53	63	07	31	38	**101**
Rural Crafts	2	00	38	38	00	19	19	**57**
Women and child care	4	13	86	99	00	30	30	**129**
VI Agril. Engineering								
Installation and maintenance of micro irrigation systems	1	33	00	33	03	00	03	**36**
VII Plant Protection								
Integrated Pest Management	7	210	00	210	24	00	24	**234**
Integrated Disease Management	3	98	00	98	08	00	08	**106**
Bio-control of pests and diseases	3	102	00	102	02	00	02	**104**
VIII Fisheries	-	-	-	-	-	-	-	**-**
IX Production of Inputs at site	-	-	-	-	-	-	-	**-**
X Capacity Building & Group Dynamics	-	-	-	-	-	-	-	**-**
XI Agro-forestry	-	-	-	-	-	-	-	**-**
TOTAL	**30**	**590**	**294**	**884**	**57**	**103**	**160**	**1044**

Training for Rural Youths including sponsored Training Programmes (On Campus)

Area of training	No. of Courses	No. of Participants						
		General			SC/ST			Grand Total
		M	F	T	M	F	T	
Any other (pl. specify)	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-

Training for Rural Youths including sponsored Training Programmes (Off Campus)

Area of training	No. of Courses	No. of Participants						
		General			SC/ST			Grand Total
		M	F	T	M	F	T	
Any other (pl. specify)	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-

Training for Rural Youths including sponsored Training Programmes (On + Off Campus)

Area of training	No. of Courses	No. of Participants						
		General			SC/ST			Grand Total
		M	F	T	M	F	T	
Any other (pl. specify)	-	-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-	-	-

Training Programmes for Extension Personnel including sponsored Training (On Campus)

Area of training	No. of Courses	No. of Participants						
		General			SC/ST			Grand Total
		M	F	T	M	F	T	
Any other (pl. specify)								
Integrated Pest Management	1	25	00	25	00	00	00	**25**
TOTAL	**1**	**25**	**00**	**25**	**00**	**00**	**00**	**25**

Training Programmes for Extension Personnel including sponsored Training (Off Campus)

Area of training	No. of Courses	No. of Participants						
		General			SC/ST			Grand Total
		M	F	T	M	F	T	
Any other (pl. specify)	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-

Training Programmes for Extension Personnel including sponsored Training (On + Off Campus)

Area of training	No. of Courses	No. of Participants						
		General			SC/ST			Grand Total
		M	F	T	M	F	T	
Integrated Pest Management	1	25	00	25	00	00	00	**25**
TOTAL	**1**	**25**	**00**	**25**	**00**	**00**	**00**	**25**

Sponsored Training Programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	Total
Crop production and management	-	-	-	-	-	-	-	-	-	-
Production and value addition	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Farm machinery	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
Home Science	-	-	-	-	-	-	-	-	-	-
Agricultural Extension	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL	-	-	-	-	-	-	-	-	-	-

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		
		M	F	T	M	F	T	M	F	Total
Crop production and management	-	-	-	-	-	-	-	-	-	-
Post harvest technology and value addition	-	-	-	-	-	-	-	-	-	-
Livestock and fisheries	-	-	-	-	-	-	-	-	-	-
Income generation activities	-	-	-	-	-	-	-	-	-	-
Agricultural Extension	-	-	-	-	-	-	-	-	-	-
Grand Total	-	-	-	-	-	-	-	-	-	-

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services	02	31	03	**34**
Diagnostic visits	01	06	01	**07**
Field Day	03	75	02	**77**
Group discussions	20	305	25	**330**
Kisan Ghosthi	16	205	13	**218**
Film Show	09	472	17	**489**
Self -help groups	-	-	-	-
Kisan Mela	06	5586	50	**5636**
Exhibition	06	5586	52	**5638**
Scientists' visit to farmers field	03	25	04	**29**
Plant/animal health camps	-	-	-	-
Farm Science Club	-	-	-	-
Ex-trainees Sammelan	-	-	-	-
Farmers' seminar/workshop	-	-	-	-
Method Demonstrations	-	-	-	-
Celebration of important days	08	858	19	**877**
Special day celebration	03	172	16	**188**
Exposure visits	-	-	-	-
Others (pl. specify)	98	12019	318	**12337**
Total	**175**	**25340**	**520**	**25860**

Details of other extension programmes

Particulars	Number	Beneficiary
Electronic Media (CD./DVD)	0	0
Extension Literature Publish	0	0
News paper coverage	16	653000
Popular articles	36	1368000
Radio Talks	3	-
TV Talks	1	-
Animal health camps (Number of animals treated)	0	0
Others (pl. specify)	0	0
Total	**56**	**2021000**

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
Oilseeds	Groundnut	GJG - 22	-	13.07	61540/-	
	Sesame		-	0.68	9940/-	
Pulses	Chickpea		-	14.96	Pending	Pending
	Black Gram		-	5.07	Pending	Pending
Spices	Cumin		-	8.14	40455/-	
Total	-	-	-			

Production of Planting Materials by the KVK :- Nil

Production of Bio-Products :- Nil

Production of livestock materials :- Nil

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	-	-	-
Technical reports	-	-	-
News letters	Kishan Samman Nidhi Yojna **Divya Bhaskar Dt.25/02/2019**	D. A. Saradava & Dr. Hemangi D. Mehta	60000 + Online
	International Women Empowerment Day **Sanj Samachar , Sandesh & Morbi Updates Dt.10/03/2019**	Dr. Hemangi D. Mehta	50000 + Online
			10000 + Online
			Online
	Seminar - Morbi ma Daudi Vhora Mahilao mate Rojgarlaxi Margdarshak **Sanj Samachar , Dt.09/07/2019**	Dr. Hemangi D. Mehta	50000 + Online

	Kheti ni Jamin Ghatvi Chintajanak Chhe **Sanj Samachar** **Dt.07/08/2019**	Dr. Hemangi D. Mehta	50000 + Online
	KVK , Morbi ma Pashu rog ange na Programme nu Sidhu Prasaran **Divya Bhashkar** **Dt.12/09/2019**	D. A. Saradava	60000 + Online
	Inauguration of Farmer Hostel by KVK , JAU , Morbi **Divya Bhashkar** **Sanj Samachar** **Morbi Updates** **Morbi Today** **Dt.01/10/2019**	D. A. Saradava & Dr. Hemangi D. Mehta	60000 + Online 50000 + Online Online Online
	Khedut Shibir **Wankaner Updates** **Dt.10/11/2019**	D. A. Saradava	Online
Technical bulletins	-	-	-
Popular articles	Adarsh Sendriy Khatar ane Svachchha Bharat **Sanjog News** **Dt.06/05/2019**	Dr. Hemangi D. Mehta	38000+ Online
	Aaj na Samaya ma Hathlathor ni Upayogita **Sanjog News** **Dt.20/05/2019**	Dr. Hemangi D. Mehta	38000+ Online
	Khedut na Dikra Dikri Agriculture Subject ma Career banave **Sanjog News** **Dt.03/06/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Bharat Desh na PM Modi Sir a Bhim App 30/12/2016 na Roj Lonch **Sanjog News** **Dt.10/06/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Pashupalan ma Mahilao nu shreshth Yogdan **Sanjog News** **Dt.17/06/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Anaj no Sangrah ane Jalavani karva mate Bahenoye dhyan ma rakhvani babto **Sanjog News** **Dt.24/06/2019**	Dr. Hemangi D. Mehta	38000 + Online

	“Sakar vina Molo Kansar Nari vina Suno Sansar **Sanjog News** **Dt.01/07/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Gir gay no Gujarat rajya ma Dudh harifai ma Pratham No. **Sanjog News** **Dt.08/07/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Ful no Aushdhiy Upayog **Sanjog News** **Dt.15/07/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Binfaldrup kharaba vistaro nu sachu Sonu RATANJYOT **Sanjog News** **Dt.22/07/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Svachchha ane Gunavttavala Dudh vishe jano **Sanjog News** **Dt.29/07/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Saune Priy Ambo **Sanjog News** **Dt.05/08/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Shakbhaji Pakomanthi rojinda aavak melvo **Sanjog News** **Dt.12/08/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Sargava ma Multivitamin na Guno **Sanjog News** **Dt.19/08/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Khedut ne Pak Mulyavruddhi karva mate Processing Unit banavva mate 10 Lac sudhini sahay **Sanjog News** **Dt.02/09/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Sasu-Vahu na Sankalp thi Pashupalan ma Siddhi melvi **Sanjog News** **Dt.09/09/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Pension Yojna for Indian Farmer **Sanjog News** **Dt.16/09/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Gun nidhi Shreefal **Sanjog News** **Dt.23/09/2019**	Dr. Hemangi D. Mehta	38000 + Online

	Svachchha Bharat Abhiyan dvara Aadarsh Sendriy Khatar(Part – 1) **Sanjog News Dt.30/09/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Svachchha Bharat Abhiyan dvara Aadarsh Sendriy Khatar(Part – 2) **Sanjog News Dt.07/10/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Dadam ek Uttam Fal **Sanjog News Dt.14/10/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Nabli Jamin mate Aelovera **Sanjog News Dt.21/10/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Cumin (Part – 1) **Sanjog News Dt.04/11/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Cumin (Part – 1) **Sanjog News Dt.11/11/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Scientific Farming of Chickpea **Sanjog News Dt.18/11/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Alasi na Sevan thi Cancer jevi Bimar thi Bachi Shakay(Part – 1) **Sanjog News Dt.25/11/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Alasi na Sevan thi Cancer jevi Bimar thi Bachi Shakay(Part – 2) **Sanjog News Dt.02/12/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Pink Ball Warm Management in Cotton(Part – 1) **Sanjog News Dt.09/12/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Pink Ball Warm Management in Cotton(Part – 2) **Sanjog News Dt.16/12/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Seeds and their Efficient Use **Sanjog News Dt.23/12/2019**	Dr. Hemangi D. Mehta	38000 + Online
	Kheti no Juna ma Juno Dushman RANTID **Sanjog News Dt.30/12/2019**	Dr. Hemangi D. Mehta	38000 + Online

Extension literature	-	-	-
Others (Pl. specify)	-	-	-
TOTAL			**+ Online**

C. Details of Electronic Media Produced

No.	Type of media (CD / VCD / DVD/ Audio-Cassette) and Video Clippings developed	Title of the programme	Number
1	**-**	**-**	**-**

D. Success Story

Farmer earns Double Income in Crop of Muskmelon through Plastic Mulching

Name	**: Shivabhai Maravaniya**
Address	**:** To, Rajpar
Age	**:** 50 year
Education	**:** 10th Pass
Source of Income	**:** Plastic Mulching

Shri Shivabhai is a hardworking, inside knowledge of agriculture and innovate farmer of village Rajpar. Last year (2018) he used plastic mulch in Muskmelon crop provided by college of Agriculture Engineering & Technology through KVK , Morbi in 1 acre area. During Kharif - 2018 only 178-mm rainfall was received at Rajpar due to which very limited water is available in the open well. Which run only 40-45 minutes. But due to plastic mulching no moisture stress was observed and he has harvested double production with good quality of sweet melon.

	Mulching	**Without Mulching**
Production	3200 kg / acre	1850 kg / acre
Price	Rs.45 / kg	Rs.38 / kg
Income	144000 / acre	66600 / acre
Cost of Cultivation	46000 / acre	32000 / acre
Net Profit	Rs.98000/-	Rs.34600/-

Successful White Onion Cultivation

Name	**: Prabhubhai Jivarajbhai Barasara**
Address	**:** To, Jodhpar Nadi
Age	**:** 60 year
Education	**:** 11th Pass
Source of Income	**:** Cultivation Farming

Prabhubhai is a business minded farmer and belongs to near by village of jodhpur (river). he is cultivating the crop technically working to requirement of the market before taking crop he performed soil analysis of the farm and as per the requirement of the onion he is applying fertilizer. He is NHRAF and apply their suggestion in this farm.

last year he harvested an average production of 19000 kg of white onion in one acre he sold 50% of production Rs.240/- 20 kg and remaining 50% of his production he has stored in his own storage mela and later he sold at Rs.265/- 20kg and earned Rs. 251750/- acre. the cost of cultivation of white onion is Rs. 86,000/- and earned a net profit of is 165750/- per acre.

Doubling Of Farm Women Income Through Dairy Farming

1. Bio-Data of Farmer :-

Name	**: Pragnaben Uttambhai Dubariya**
Address	**:** To, Rupavati Society ,"Laxmi Narayan", Tankara.
Date of Birth	**:** 08/09/1984 **Age :** 32 year
Education	**:** 10th Pass
Source of Income	**:** Dairy Farming & Farming **(Last three year)**

The vision of Hon'ble prime minister Mr. Narendra Modi to double the farmers' income by 2022 inspired multiple farmers and their families to move forward and empower their economic growth. Mrs. Pragnaben Uttambhai Dubariya (who belongs to taluka Tankara district Morbi) realized the importance of the vision and thought to give a start to dairy farming as it is associated with farming which is a primary source of income for her family. She started to utilize her time in dairy farming from other household work to generate more income for her family rather than solely dependent upon farming.

In 2017, she started with 1 buffalo with the purpose of dairy farming and later she owned 3 cows. Currently, in 2019 she has 25 cattle which includes 9 cows, 6 buffalos and 10 calves. She also helps her husband in farming and uses animal dung as organic fertilizer in her farm. This helps to fertilize soil in an organic way and saves the cost of chemical fertilizers. That's how she gives invaluable support in farming and dairy farming.

2. **Land Holding (ha.) -** From the farming in 6.5 ha. she makes profit of **Rs.5,00,000 per year**

3. **Utility of Innovation/GAPs :**

Her dairy farming she contributes 180 liters of milk per day on the rate of Rs.40/- per liter which gives her a daily income of Rs.7,200/- and monthly income of Rs. 2,16,000/-. She has a monthly expense or around Rs. 58,000/- and after all deductions she makes profit or Rs. 1,58,000/- per month.

No.	Year	Cattle	Milk Cattle	Income (One Month)	Expenditure of (one month)	Employed Salary (4 Em.) (one month)	Total Profit (One Month)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	2019	25	15	216000/-	43000/-	15000/-	**158000/-**

With the help of such monthly profit, she purchased a new land and currently looking for purchasing a batter living space.

4. **Spread of Innovation/GAPs :-**

By seeing her success story, other women in the surrounding areas are inspired and visited her dairy farm to understand how they can also boost up their economic growth.

5. **Recognition** :-

She has been honored by the prize of Rs. 20,000 to score 3rd rank in highest contribution of the milk in Mayur Cooperative Dairy in Morbi for year 2019.

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)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
-	-	-	-

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

A. Practicing Farmers

B. Rural Youth

C. In-service personnel

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT: i) Field level observations

ii) Farmer group discussions

For FLD: i) New variety/technology

i) Existing cropping system

ii) Problem at field level

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) – 2018

Block	Villages
Morbi	Gorkhijadia
	Jepur,
	Bharatnagar,
	Laxminagar,
Tankara	Sajjanpar
	Hadmatiya
	Nasitpar
	Harbattiyali
	Nasitpar
Halwad	Devipur
	Devalia,

ii. No. of farm families selected per village :

iii. No. of survey/PRA conducted :

iv. No. of technologies taken to the adopted villages

v. Name of the technologies found suitable by the farmers of the adopted villages:

vi. Impact (production, income, employment, area/technological– horizontal/vertical)

vii. Constraints if any in the continued application of these improved technologies

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

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Anandi sanstha	Training on organic farming and certification

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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

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

C. Details of linkage with ATMA

a) Is ATMA implemented in your district **Yes**

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

Yes, we have prepared the SREP of Morbi district.

Coordination activities between KVK and ATMA

No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
1	Meetings	2	2	-	-
2	Research projects	-	-	-	-
3	Training programmes	2	2	-	-
4	Demonstrations	-	-	-	-
5	Extension Programmes			-	-
KisanMela		1	1	-	-
6	Publications	-	-	-	-
7	Other Activities (Pl.specify)	-	-	-	-

D. Give details of programmes implemented under National Horticultural Mission

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

E. Nature of linkage with National Fisheries Development Board

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

F. Details of linkage with RKVY

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

7. Convergence with other agencies and departments : Nil

8. Innovator Farmer's Meet

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

9. Farmers Field School (FFS)

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

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

1 To enhance the farmers to use recently developed certified varieties of different crops.

2 Proper use of fertilizers, Irrigation, insecticides and fungicide as per recommendation to reduce the production cost.

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

1. Reduction in white grub problem in groundnut due to adoption of technology
2. Reduction in pink boll worm in cotton due to adoption of technology
3. Cumin variety GC-4 is high yielding but gradually loosing wilt resistant character
4. Heavy infestation of *Thrips* in crops like onion, cotton
5. Research needed for control of insect-pests and diseases in organic farming

11. Technology Week celebration during 2019 Yes/No, If Yes

Period of observing Technology Week : From 24/09/2018 to 29/09/2018
Total number of farmers visited : 175
Total number of agencies involved : 03
Number of demonstrations visited by the farmers within KVK campus : ---

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/ livestock technology
Gosthi	3	65	Crop / Human Nutrition / Value Adition/ Income Generating Activity
Lectures organized	6	35	Crop / Human Nutrition / Value Adition/ Income Generating Activity
Exhibition	1	175	Crop / Human Nutrition
Film show	2	75	Crop / Human Nutrition / Value Adition/ Income Generating Activity
Fair	-	-	-
Farm Visit	-	-	-
Diagnostic Practicals	-	-	-
Supply of Literature (No.)	7	175	Crop / Nutrition / Use of Biofertilizer
Supply of Seed (q)	-	-	-
Supply of Planting materials (No.)	-	-	-
Bio Product supply (Kg)	-	-	-

Types of Activities	No. of Activities	Number of Farmers	Related crop/ livestock technology
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week	**19**	**175**	**Crop / Human Nutrition / Value Adition/ Income Generating Activity**

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

A. Introduction of alternate crops/varieties

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

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	-	-
Pulses	-	-
Cereals	-	-
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 2019

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
January			
February			
March			
April			
May			
June			

July			
August			
September			
October			
November			
December			

Name of KVK	Message Type	Type of Messages						
		Crop	Live-stock	Weather	Marke-ting	Awarness	Other enterprise	Total
Morbi	Text only	05	-	-	-	-	-	**05**
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**05**	-	-	-	-	-	**05**
	Total farmers Benefitted	**44905**	-	-	-	-	-	**44905**

15. PERFORMANCE OF INFRASTRUCTURE IN KVK

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

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

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	
-	-	-	-	-	-	-	-	-	-

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

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

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

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 :-

Under Construction

F. Database management

No	Database target	Database created
1	36 farmers per village of 6 villages from Morbi district	36 farmers from 6 villages

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

---NIL---

16. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	SBI	Morbi	60071	Revolving Fund A/C,KVK,JAU, Morbi	36713882996	363002022	SBIN0060071
With KVK	SBI	Morbi	60071	Senior Scientist & Head , KVK,JAU, Morbi	36713882907	363002022	SBIN0060071

B. Utilization of KVK funds during the year 2019-20 (Rs. in Lac)

No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	36,24,565/-	36,24,565/-	36,40,134/-
2	**Traveling allowances**	1,37,726/-	1,00,000/-	1,12,847/-
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,00,000/-	1,00,000/-	88,216/-
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	99,833/-	99,833/-	90,216/-
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		**39,62,124/-**	**39,24,398/-**	**39,31,413/-**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	-	-	-
3	**Vehicle** (Four wheeler / ~~Two wheeler~~, please specify)	8,00,000/-	8,00,000/-	8,00,000/-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		**8,00,000/-**	**8,00,000/-**	**8,00,000/-**
C. REVOLVING FUND		**13,89,894/-**	**13,89,894/-**	**8,00,972/-**
GRAND TOTAL (A+B+C)		**61,52,018/-**	**61,14,292/-**	**55,32,385/-**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2016 to March 2017	-	3,01,000/-	4300/-	2,96,700/-
April 2017 to March 2018	2,96,700/-	21,80,514/-	19,98,445/-	4,78,769/-
April 2018 to March 2019	4,78,769/-	8,79,198/-	9,07,466/-	4,50,501/-
April 2019 to March 2020	4,50,501/-	11,95,154/-	9,10,619/-	7,35,036/-

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
-	-	-	-	-

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

---Nil---

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

- As the KVK, Morbi sanctioned during year 2017 and land acquired for the KVK is government waste land having very undulating topography. So, at initial stage requires much attention on farm development work particularly clearing of site by removing unwanted vegetation, wire fencing, land leveling etc., where as in infrastructure road and building, electric supply, water supply for domestic use as well as for irrigation also prime important to start basic activities.
- Keeping in view above mentioned aspect, we have started temporary office at Marketting Yard in Morbi city and started extension activities and other aspects

of mendatory works by KVK. We have popularized bio- control methods and arrange for timely supply of our Savaj brand Breauveria and Tricoderma to farmers of Morbi district.

- On farm activities of clearing the site as well as wire fencing almost completed. Office and hostel building constructon works are in progress. Land leveling and infrastructure facilities like road works are also in progress.

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	28			936
Rural youths	-	-	-	-
Extension functionaries	01	25	00	25
Sponsored Training	03	108	00	108
Vocational Training	-	-	-	-
Total				

2. Frontline demonstrations

Enterprise	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	10	4.0	-
Pulses	10	4.0	-
Cereals	10	4.0	-
Vegetables	-	-	-
Other crops	20	8.0	-
Hybrid crops	-	-	-
Total	**50**	**20.0**	-
Livestock & Fisheries	-	-	-
Other enterprises	-	-	-
Total	-	-	-
Grand Total	**50**	**20.0**	-

3. Technology Assessment

Category	No. of Technology Assessed	No. of Trials	No. of Farmers
Technology Assessed			
Crops	2	20	20
Livestock	-	-	-
Various enterprises	-	-	-
Other (Malnutrition)	1	08	08
Total	**3**	**28**	**28**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	174	2043435
Other extension activities	57	3425
Total	231	2046860

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Market -ing	Aware -ness	Other enterprise	Total
Morbi	Text only	05	-	-	-	-	-	**05**
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	**05**	-	-	-	-	-	**05**
	Total farmers Benefitted	**44905**	-	-	-	-	-	**44905**

6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	18.77 Qui.	
Planting material (No.)	-	
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	-	-
Water	-	-
Plant	-	-
Total	-	-

8. HRD and Publications

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