ANNUAL ZONAL WORKSHOP

ANNUAL PROGRESS REPORT

JANUARY – 2023 TO DECEMBER - 2023

To be presented in Annual Zonal Workshop
will be held on 04-06 September, 2024 at Junagadh

Senior Scientist & Head
Krishi Vigyan Kendra
Junagadh Agricultural University
Gorkhijadia – Morbi

ICAR-ATARI, Pune

DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2023

(January 2023 to December 2023)

1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra, Junagadh Agricultural University, Morbi Dist-Morbi (Gujarat) – 363641	**Office**	**FAX**	kvkmorbi@gmail.com	www.jau.in 2,97,34,110
	-	-		

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		
	Office	**Mobile**	**Email**
Prof. M.F. Bhoraniya	-	9428297863	mfbhoraniya@gmail.com

1.4. Date and Year of sanction: 2017

(Sanctioned vide letter No. F.No.A.Extn.13-1/2016-AE, Dated 18/10/2016 of Under Secretory (AE), ICAR, Krushi Anusandhan Bhavan, Pusa, New Delhi-110 012)

1.5. Staff Position (as on December, 2023)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	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	Prof. M.F. Bhoraniya	9428297863	Plant Protection	57700-182400	UL-10	01/11/23	-
2	Scientist	Prof. M.F. Bhoraniya	9428297863	Plant Protection	57700-182400	UL-10	01/09/23	-
3	Scientist	Dr. K.N. Vadaria	9824290555	Agronomy	57700-182400	UL-10	01/06/22	-
4	Scientist	Vacant	-	Home Science	-	-	-	-
5	Scientist	Vacant	-	Animal Science				-
6	Scientist	Vacant	-	Horticulture	-	-	-	-
7	Scientist	Vacant	-	Extension	-	-	-	-
8	Programme Assistant	Gamansinh S. Zala	8780953478	B.Sc. Agri.	39900-126600	L-7	03/08/18	-
9	Computer Programmer	R. R. Sida	-	B.C.A.	39900-126600	L-7	07/03/19	-
10	Farm Manager	Vinuji V. Thakor	8155049089	B.Sc. Agri.	39900-126600	L-7	31/07/18	-
11	Accountant/Superintendent	Vacant	-	-	-	-	-	-
12	Stenographer	N. M. Vadhadiya	9925182898	M.A. B.Ed.	25500-81100	L-4	01/03/22	-
13	Driver 1	Vacant	-	-	-	-	-	-
14	Driver 2	Vacant	-	-	-	-	-	-
15	Supporting staff 1	Vacant	-	-	-	-	-	-
16	Supporting staff 2	Vacant	-	-	-	-	-	Vacant

1.6. Total land with KVK (in ha):

Sl. No.	Item	Area (ha)
1.	Under Buildings	2.00
2.	Under Demonstration Units	1.80
3.	Under Crops	8.00
4.	Horticulture	0.00
5.	Pond	0.01
6.	Others (Barren submerged under Machchhu-3 dam , Bund and Water drain)	14.40
	Total	**26.21**

1.7. Infrastructural Development:

A) Buildings

Sl. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (m^2)	Expenditure (Rs.)	Starting year	Plinth area (m^2)	Status of construction
1.	Administrative Building	ICAR	2019-20	575.32	143.00 Lacs	-	-	-
2.	Farmers Hostel	ICAR	2019-20	443.96	61.00 Lacs	-	-	-
3.	Staff Quarters	-	-	-	-	-	-	-
4.	Fencing	JAU	2017-18	4535	7,95,480/-	-	-	-
5	Rain Water harvesting system	-	2018-19	-	2,00,000/-	-	-	-
6	Threshing floor	JAU	2020-21	400	3,15,838/-	-	-	-
7	Farm godown	-	-	-	-	-	-	-
8	Soil and water testing lab	-	-	-	-	-	-	-
9	Mini soil testing Kit							
10	Sell Contour	-	-	-	-	-	-	-
11	Demo unit							
i	Roof Rain Water harvesting structure	JAU	2019-20	1.40 lac ltr.	4.6 Lacs	-	-	-
ii	Nadep Compost	JAU	2019-20	18.0	10000/-	-	-	-
12	ICT lab	-	-	-	-	-	-	-
13	Solar Panel							
14	counter seal	-	-	-	-	-	-	-

B) Vehicles

Sl. No.	Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
1	Tractor Mini Captain 9.5 HP	2005	165000/-		-
2	Tractor Mini Trishul 10 HP	2007	183000/-		Working
3	Tractor Massey DL-241	2017	607137/-		Working
4	Mahindra Bolero	2019	800000/-	54000	Working

C) Equipment & AV aids

Sl. No.	Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
1	Computer System Acer 18.5	2017	34115/-	Working
2	Computer System Acer 18.5	2017	34115/-	Working
3	Printer MF 3010 canon	2017	10266/-	Working
4	Printer LBP 6230 canon	2017	8761/-	Working
5	Computer System SIS Agiledag-2277 LG	2010	24210/-	Working
6	Computer System Intel core i3 processor HCL	-	34596/-	Working
7	Printer MF 4350d canon	-	14327/-	Working
8	Xerox Machine RICHO Digital	2013	113755/-	Working
9	Computer system Acer	2009	31635/-	Working
10	Computer system Acer	2010	32270/-	Working
11	Printer Samsung	2013	4579/-	Working
12	Computer system Acer	2009	30968/-	Working
13	LG smart television	2021	189975/-	Working

1.8. Details of SAC meeting conducted in the year:

Date	Name and Designation of Participants	Salient Recommendations	Action taken
9th Feb-2023	**Dr. V. P. Chovatia** Hon'ble Vice Chancellor, J.A.U., Junagadh	Popularize *iKrushi Sanhita* mobile application among farmers community through extension activities.	Information and advised to download *iKrushi Sanhita* mobile application among farmers community was given to farmers in training programme and other extension activities. Total : 905
	Dr. H. M. Gajipara Director of Research & Director of Extension Education, JAU, Junagadh		
	Dr. L. L. Jivani Senior Scientist & Head, KVK, JAU,Morbi, Dist. Morbi		
	Dr. D. S. Hirpara, ADR, DFRS, Targhadia		
	Dr. H. C. Chhodvadia, Associate Extension Educationalist,DEE office, JAU, Junagadh	Adverse weather condition in normal season & pest attack, advance advisory to farmers community through SMS and Whats App groups.	Adverse weather condition in normal season & pest attack, advance advisory to farmers community through WhatsApp groups were given. Total Groups: 20 Total Farmers: 6050
	Shri A.L. Koradia Representative of District Agriculture officer, Morbi		
	Shri S.B. Dalsania, Dy. Director of Agril. (Ext.), Seva Sadan, Morbi		
	Dr. S.K. Tiwari, Nation Horticulture Research & Development Foundation, Naranaka,Rajkot.	The training on banned pesticides should be organized.	Information on banned pesticides was given in plant protection trainings.
	Prof. D. A. Saradava, Scientist(Plant Protection), KVK- Morbi	Advise farmers to take nematode free planting materials.	New plantation growers was advised to take nematode free planting materials during training programmes.
	Dr. K.N. Vadaria, Scientist (Agronomy), KVK- Morbi		
	Prof. Pinki S. Sharma, AEE, DEE office, JAU, Junagadh	Accountability of FLD's should be given	Accountability of FLD's was already given.
	Shri B. H. Kothariya, Horticultural officer,Seva Sadan, Morbi	Organized technology week with the period when maximum farmers can use newer technology and spread among maximum farmers	Technology week was organized in the month of September when maximum farmers used newer technology and spread among maximum farmers
	Ghanshyamsinh Jadeja, Farmer, Khanpar,Morbi		
	Govindbhai P. Sarsavadiya, Farmer, Jivapar,Morbi		
	Jethabhai A. Jetpariya, Farmer, Nasitpar,Morbi	Propose HRD trainings needs of scientists.	HRD trainings of scientists were proposed time to time.

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

Sl. No	Farming system/enterprise
1	Cotton-Wheat/Cotton-Cumin/Groundnut-Wheat/Groundnut-Cumin/Groundnut-Chickpea
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 (based on soil and topography)

Sl. No.	Agro-climatic Zone (Planning Commission)	Characteristics
1	North Saurashtra Agro Climatic Zone-VI, Morbi, Wankaner and Tankara	Semi arid – region with annual rainfall 550 - 600 mm. Maximum temp – 44˚C, Minimum range – 5 to 12˚C & high evaporation
2	North west agro climatic Zone- V 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

a) Topography

Sl. No.	Agro ecological situation	Characteristics
1	Situation No. 6	Plain & hilly areas in Wankaner Tehsil.
2	Situation No. 5	Plain costal region (saline) affected with desertification

2.3 Soil Types

Sl. No	Soil type	Characteristics	Area in 000’ ha
1	Medium black clayey	Low in organic carbon, heavy cracking and clod formation	202.4
2	Alluvial Soil (Sandy-loam)	Low fertility status, high infiltration rate	91.8
3	Hilly Soil (Light)	Undulating topography, low fertility eroded soil	13.6
4	Silty Soil (Loamy)	Low infiltration rate, water logging, difficult to cultivate	5.5

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2023)

S. No	Crop	Area (ha)	Production (000 T)	Productivity (Kg/ha)
1	Groundnut	97155	190.474	1960
2	Cotton	172926	88711 (Lint)	513 (Lint)
3	Sesame	10256	5.485	535
4	Castor	8470	27.784	3280
5	Green gram	2024	1.370	677
6	Black gram	6433	3.979	619
7	Pearl millet	1741	3.663	2104
8	Wheat	43655	156.294	3580
9	Chickpea	37645	74.193	1971
10	Cumin	23935	18.897	780
11	Vegetable	3590	78.280	21805

Source: Directorate of Agriculture (https://dag.gujarat.gov.in)

2.5. Weather data (2023)

Month	Normal RF(mm)	Normal Rainy days (number)	Temperature (^{0} C)		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
January	0	0	-	-	-	-
February	0	0	-	-	-	-
March	10	1	-	-	-	-
April	16	1	-	-	-	-
May	0	0	-	-	-	-
June	201	6	-	-	-	-
July	225	10	-	-	-	-
August	002	0	-	-	-	-
September	142	5	-	-	-	-
October	0	0	-	-	-	-
November	0	0	-	-	-	-
December	0	0	-	-	-	-
Total	**570+26**	21+2	-	-	-	-

Date	Rainfall (mm)	Date	Rainfall (mm)
13-06-2023	11	28-07-2023	21
15-06-2023	51	29-07-2023	02
16-06-2023	69	30-07-2023	10
26-06-2023	05	**July-2023**	**225**
29-06-2023	09	09-08-2023	02
30-06-2023	56	**August-2023**	**02**
June-2023	**201**	17-09-2023	20
05-07-2023	06	18-09-2023	49
08-07-2023	15	19-09-2023	58
09-07-2023	92	21-09-2023	10
19-07-2023	08	23-09-2023	05
21-07-2023	05	**September-2023**	**142**
23-07-2023	51		
25-07-2023	03	**Total Rainy Days**	**21**
27-07-2023	12	**Total Rainfall (mm)**	**570**

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

Category	Population (No)	Production	Productivity
Cattle			
Crossbred	5014	241670 T milk	1.36 kg/day
Indigenous	141470		
Buffalo	174976		
Goats	66893		
Sheep	97972	84570 kg wool	863 g/year
Pigs	-	-	-
Crossbred	-	-	-
Indigenous	-	-	-
Rabbits	-	-	-
Poultry			
Hens	1630273	823.02 lakh eggs	50 eggs/year
Desi			
Fish (Reservoir)	-	-	-

Source: Directorate of Animal Husbandry **(https://doah.gujarat.gov.in/livestock-census.htm)**

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Morbi	Chakampar Jivapar Dharampur Thorala Andarana	**Crops:** Groundnut, Cotton, Sesame, Wheat, Cumin, Chickpea, Onion, Garlic **Enterprises:** Dairy business, Vermi composting. Preparation of roasted groundnut and chikki from groundnut seeds	(1) Pink ball worm in cotton (2) Heavy infestation of sucking pests in cotton (3) *Phytophthora* disease in sesame (4) White grubs infestation in groundnut (5) Stem rot infestation in groundnut (6) Wilt and blight in cumin &Chickpea	(1) IPM and INM in major crops of this area (2) Increase drainage of soil (3) Motivate to farmers for arid horticultural crops (4) Efficient use of irrigation water (5) Judicious use pesticides
Tankara	Otala Saraya Neknam Lakhdhirgadh Bhutkotda	**Crops:** Groundnut, Cotton, Sesame, Wheat, Cumin, Chickpea, Onion, Garlic **Enterprises:** Vermi composting. Preparation of roasted groundnut and chikki from groundnut seeds	(1) Pink ball worm in cotton (2) Heavy infestation of sucking pests in cotton (3) *Phytophthora* disease in sesame (4) White grubs infestation in groundnut (5) Stem rot infestation in groundnut (6) Wilt and blight in cumin & Chickpea (7) Nutritional deficiency in animal feed and fodder (8) Less area under horticultural crops	(1) IPM and INM in major crops of this area (2) Increase the drainage of soil (3) Efficient use of irrigation water (4) Judicious use pesticides
Wankaner	Palas Panchdwarka Shekhradi Amarsar Pipaliya raj	**Crops:** Groundnut, Cotton, Sesame, Wheat, Cumin, Chickpea, Onion, Garlic **Enterprises:** Vermi composting. Preparation of roasted groundnut and chikki from groundnut seeds	(1) Pink ball worm in cotton (2) Heavy infestation of sucking pests in cotton (3) *Phytophthora* disease in sesame (4) White grubs infestation in groundnut (5) Stem rot infestation in groundnut (6) Wilt and blight in cumin (7) Nutritional deficiency in animal feed and fodder (8) Long inter calving period in buffalo (8) Less area under horticultural crops	(1) IPM and INM in major crops of this area (2) Reducing calving period in buffalo (3) Motivate to farmers for arid horticultural crops (4) Efficient use of irrigation water (5) Judicious use pesticides

2.8. Priority thrust areas:

Crop/Enterprise	Thrust area
Groundnut, Sesame etc	Increasing the productivity of the major crops by adopting 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. Recycling of the cotton stalk by cotton shredder
Agriculture	Developing interest among youth for agriculture as a profession.
Horticulture	Value addition in agriculture produces through proper grading, processing, marketing and information technology.
Farm waste	Recycling of the warm waste through composting, vermi-composting and green manuring.
Income generating activities	Self-employment among rural youth and skill oriented income generating activities.
Spices crop	Adopt recommended practice of IDM in spices crop i.e. Cumin & Ajwain.

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	9	9	7	7	70	70

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
47	53	1205	2889	-	455	-	36874

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
25.00	21.20	100	100

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

3.1. B. Operational areas details during 2023

Sl. 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	Bt. cotton	Sucking Pest, Para Wilt, Pink Boll Worm	1,12,000 ha	Halvad, Tankara, Wakaner, Morbi block	FLD on pink boll worm management. Training on pink boll worm management
2	Groundnut	White Grub Stem Rot	42,000 ha	Tankara , Halvad block	OFT on White grub management in groundnut. Training on pest 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.
4	Pomegranate	Seed rot and nematode	1000 ha	Morbi, Halvad and Maliya	Training programme and crop seminar

* Support with problem-cause and interventions diagram

3.2. Technology Assessment (Kharif 2023, Rabi 2022-23, Summer 2023)
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	-	1	-	-	-	-	-	-	-	1
Integrated Pest Management	-	1	-	-	-	-	-	-	-	1
Integrated Disease Management	-	-	-	1	-	-	-	-	-	1
Total	**-**	**2**	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**3**

A2. Abstract on the number of technologies assessed in respect of livestock enterprises: NilB. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trial covering all the Technological Options)
Varietal Evaluation	Sesame	Assessment of new variety of sesame	3	3	1.20
Integrated Pest Management	Ground nut	Management of White Grub in Groundnut crop	3	3	1.20
Integrated Disease Management	Cumin	Minimize the disease intensity through line sowing in cumin crop	3	3	1.20
Total			**9**	**9**	**3.60**

B. 2. Technologies assessed under Livestock & fishery assessment: Nil

B.3 Technologies assessed under other enterprises: Nil

B 4.Technologies assessed under Women empowerment assessment:

C. 1. 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
1	2	3	4	5	6	7	8			9	10
Ground nut	Limited irrigation	Heavy infestation of white grub in groundnut	Management of White Grub in Groundnut crop	3	1. Seed treatment with Imidacloprid 600 F.S. 4 ml/kg seed. 2. Soil application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at the time of sowing	Yield and percentage of dry plant	**T_1**	**T_2**	**T_3**	6.07 percentage higher yield received over farmer practice in T_2 where as 10.14 percentage higher in T_3 over farmer practice.	Application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at time of sowing remain effective to some extent.
							Pod damage (%)				
							4.5	3.1	2.7		
							Dry plants (%)				
							7.2	4.9	5.2		
Cumin	Irrigated	Heavy incidence of blight disease in cumin	Minimize the disease intensity through line sowing in cumin crop	3	1. Sowing of cumin at 30 cm distance between two raw. 2. Sowing of cumin at 15 cm distance between two raw	Yield and score of blight disease	**Blight score (1-9)**			14.93 percent higher yield was obtained in T_2 and 5.87 percent higher in T_3 than farmer practice.	line sowing in cumin crop is very effective to control the blight disease
							T_1	**T_2**	**T_3**		
							3.33	1.67	2.00		
Sesame	Irrigated	Low yield of sesame in summer	Assessment of new variety of sesame	3	1. G Til – 3 2. G J Til – 5	Yield and No. of capsules	**T_1**	**T_2**	**T_3**	27.10 percent higher yield obtain in T_2 and 30.98 percent higher in T_3 than farmer practice.	GJT – 5 is bold and white seeded and higher yielder (summer).
							No. of branches/plant				
							2.33	2.67	3.67		
							No. of capsules/plant				
							41.67	51.67	59.67		

Contd..

Technology Assessed	Source of Technology	Production	unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
11	**12**	**13**	**14**	**15**	**16**
OFT-1					
T_1 Sowing of groundnut without Seed treatment. Farmers adopt drenching of Chlorpyrifos or Quinalphos @ 6 lit/ha with irrigation at initiation of pest incidence. (Farmers practice)	-	2335	kg/ ha	100100	1.93
T_2 Seed treatment with Imidacloprid 600 F.S. 4 ml/kg seed. (JAU Reco-2020)	Junagadh Agriculture University	2477	kg/ ha	106800	1.99
T_3 Soil application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at the time of sowing. (JAU Reco-2020)	Junagadh Agricultural University	2572	kg/ ha	112700	2.03
OFT-2					
T_1 Sowing of cumin with broad casting method (Farmer practice)	-	449	kg/ ha	87573	1.56
T_2 Sowing of cumin at 30cm distance between two rows(Recommended practices.)	Junagadh Agriculture University	516	kg/ ha	108513	1.92
T_3 Sowing of cumin at 15 cm distance between two rows (Intervention).	-	475	kg/ ha	94400	1.64
OFT-3					
T_1 G Til - 2 or Local (Farmer Practice).		646	kg/ ha	46437	2.24
T_2 G Til – 3 (JAU Recommendation for *Kharif* & *Summer*)	Junagadh Agricultural University	821	kg/ ha	69187	2.84
T_3 GJ Til – 5 (JAU Recommendation for *Summer*)		846	kg/ ha	72437	2.93

C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:

OFT-1

1	Title of Technology Assessed	:	Management of white grub in groundnut crop.
2	Problem Definition	:	Heavy infestation of white grub in ground nut.
3	Details of technologies selected for assessment	:	Soil application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at the time of sowing..
4	Source of technology	:	Junagadh Agricultural University
5	Production system and thematic area	:	Integrated 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 application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at time of sowing is effective to reduce the infestation 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.

OFT-2

1	Title of Technology Assessed	:	Minimize the disease intensity through line sowing in cumin crop
2	Problem Definition	:	Fifteen to twenty percent yield reduction due to blight disease
3	Details of technologies selected for assessment	:	Sowing of cumin at 15 cm distance between two rows
4	Source of technology	:	Junagadh Agricultural 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	:	Disease Score
8	Final recommendation for micro level situation	:	Line sowing (30 cm) in cumin crop is very effective to control the blight disease
9	Constraints identified and feedback for research	:	-
10	Process of farmer's participation and their reaction	:	Line sowing is the best and cheapest method for management of blight disease.

OFT-3

1	Title of Technology Assessed	:	Assessment of new variety of sesame
2	Problem Definition	:	Low yield of sesame in summer.
3	Details of technologies selected for assessment	:	New variety of sesame (GJT-5)
4	Source of technology	:	Junagadh Agricultural University, Junagadh
5	Production system and thematic area	:	Varietal Evaluation
6	Performance of the Technology with performance Indicators	:	-----
7.	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring Techniques	:	-----
8	Final recommendation for micro level situation	:	GJT – 5 was recommended for summer cultivation
9	Constraints identified and feedback for research	:	Nil
10	Process of farmer's participation and their reaction	:	GJT – 5 is bold and white seeded and higher yielder (summer).

OFTs

OFT on white grub in groundnut

T_1

T_2

T_3

OFT on sesame improved variety

T_1 (GT-2)

T_2 (GT-3)

T_3 (GJT-5)

Plate-1

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 2023 and recommended for large scale adoption in the district

Sl. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmer	Area in ha
1	Cumin	Crop Improvement	Improved variety (GC-5)	Training and FLDs	5	78	62
2	Sesame	CI	Improved variety (GT-6)	Training and FLDs	7	36	20
3	Chickpea	CI	Improved variety (GG-5)	Training and FLDs	107	331	211
4	Pearl Millet	CI	Biofortified hybrid(GHB-1129)	Training and FLDs	10	30	10
5	Groundnut	INM	*Rhizobium* Culture (GJG-32)	Training and FLDs	44	271	215
6	Cotton	IPM	Management of PBW through Pheromone Trap and *Beauveria* in (Bt. Cotton)	Training and FLDs	11	28	31
7	Black gram	CI	Improved variety (GU-2)	Training and FLDs	10	33	25

B. Details of FLDs implemented during 2023 **(Kharif 2023, Rabi 2022-23, Summer 2023)** (Information is to be furnished in the following **three tables** for **each category** i.e. **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops**.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
1	Cumin	Crop Improvement	Improved variety (GC – 5)	*Rabi*-2022-23	4.0	4.0	1	9	10	-
2	Chickpea	CI	Improved variety (GT – 6)	*Rabi*-2022-23	4.0	4.0	2	8	10	-
3	Sesame	CI	Improved variety (GJT-5)	*Summer*-2023	4.0	4.0	3	7	10	-
4	Pear millet	CI	Improved bio fortified hybrid (GHB-1129)	*Summer*-2023	4.0	4.0	2	8	10	-
5	Groundnut	INM	*Rhizobium* Culture (GJG-32)	*Kharif*-2023	4.0	4.0	1	9	10	-
6	Cotton) (Bt)	IPM	Pheromone Trap and *Beauveria*	*Kharif*-2023	4.0	4.0	2	8	10	-
7	Blackgram	CI	Improved variety (GU-2)	*Kharif*-2023	4.0	4.0	1	9	10	-

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Cumin	*Rabi*	Irrigated	Medium Black	Low	Low	High	Groundnut	8th to 13th Nov.	23rd Feb	-	-
Chickpea	*Rabi*	Irrigated	Medium Black	Low	Low	High	Groundnut/Sesame	2nd to 10th Dec.	16th to 23rd Mar	-	-
Sesame	*Summer*	Irrigated	Medium Black	Low	Low	High	Cotton	20th to 28th Feb.	4th to 8th May	-	-
Pear millet	*Summer*	Irrigated	Medium Black	Low	Low	High	Cumin	20th to 28th Feb.	25th May	-	-
Groundnut	*Kharif*	RF	Medium Black	Low	Low	High	Cotton	25th to 31st June	1st to 5th Nov.	570	21
Cotton	*Kharif*	RF	Medium Black	Low	Low	High	Groundnut	25th to 31st June	15th to 30th Jan.	570	21
Blackgram	*Kharif*	RF	Medium Black	Low	Low	High	Cotton	25th to 31st June	1st to 5th Sep.	570	21

FLDs

FLD on black gram (GU-2)

FLD on Chickpea GG-5

FLD on *Rhizobium* culture in groundnut

FLD on sesame GT-6

FLD on pearlmillet (GHB-1129)

FLD on cumin (GC-5)

FLD on MDP in Cotton for pink bollworm

Technical Feedback on the demonstrated technologies

Sl. No	Feed Back
1.	Variety GJG–32 is resistant against tikka and rust disease in heavy rainfall condition as compared to TG-45,GJG–22,TAG–24.
2.	Application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at time of sowing is effective to reduce the infestation of white grub in groundnut.
3.	Line sowing in cumin crop is very effective to control blight disease
4.	Pheromone trap is very useful for mass trapping of pink boll worm moth in cotton crop.
5.	Chickpea variety GG-5 is high yielding as well as disease resistant compared to GG-2 & GJG-3.
6.	Sesame GJT–5 is bold and white seeded and higher yielder (summer).

Farmers' reactions on specific technologies

Sl. No	Feed Back
1.	Research needs for control of insect-pest and disease in organic& natural farming farming.
2.	Salinity problem in Maliya, Halvad and part of Morbi taluka.
3.	Seed rot problem in pomegranate fruit.
4.	Nematode problem in pomegranate crop.
5.	Variety GJG–32 is resistant against tikka and rust disease in heavy rainfall condition as compared to TG-45, GJG–22, TAG–24.
6.	Wilt in cumin Crop.(GC-4)
7.	Chickpea variety GG-5 is resistant to wilt & blight and change of adverse condition (Chilling effect) as compared to GG-2 and GJG-3.
8.	For better germination socking of cumin GC-4 seed in water for 2 to 4 hrs. Then dry in shade.
9.	Pod borer problem in groundnut.
10.	Ketosis, Mastitis, FMD, Brucellosis problems in cow and buffalo
11.	Soft rot disease on onion.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	August and December	50	-
2	Farmers Training	2	September and October	55	-
3	Media coverage	1	September	-	-
4	Training for extension functionaries	1	July	35	-

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	INM	*Rhizobium* Culture	GJG-32	10	4.0	31.91	10.02	21.37	20.24	5.57	55500	154652	99152	2.79	55000	146502	91502	2.66
Sesame	Crop Improvement	New variety	GT-6	10	4.0	9.4	6.8	7.7	6.8	13.20	37500	100360	62860	2.68	37500	88660	51160	2.36

Frontline demonstration on pulse crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Blackgram	Crop Improvement	New variety	GU-2	10	4.0	5.80	4.20	5.13	4.05	26.67	17100	16700	33345	1.95	16700	26325	9625	1.58
Chickpea	Crop Improvement	New variety	GG-5	10	4.0	22.5	12.2	17.04	14.80	15.14	43400	86904	43504	2.00	43400	75480	32080	1.74

FLD on Other crops:

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Spices & condiments																			
Cumin	Crop Improvement	Variety GC-5	10	4.0	9.8	6.0	7.7	6.6	17.20	-	-	75900	211750	135850	2.79	75900	180675	104775	2.38
Cotton	IPM	Pheromone Trap and *Beauveria*	10	4.0	28.75	11.25	21.29	19.65	8.37	1.95	4.53	57900	149030	91130	2.57	54900	137515	82615	2.50

Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Pearl-millet																		
Pearl-millet	Crop Improvement	New variety (Summer)	GHB-1129	10	4.0	34.5	23.8	30.3	30.3	0.02	48400	75800	27400	1.57	48400	68209	19809	1.41

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

3.4. Training Programmes (Online programmes if any should be included under On Campus category)

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										
Cropping Systems	3	99	3	102	30	0	30	129	3	132
Integrated Farming	1	18	0	18	6	0	6	24	0	24
Integrated Crop Management	2	49	17	66	13	2	15	62	19	81
Integrated nutrient management	2	116	29	145	45	11	56	161	40	201
Total	**8**	**282**	**49**	**331**	**94**	**13**	**107**	**376**	**62**	**438**
II Horticulture										
a) Vegetable Crops										
Nursery raising	1	12	6	18	4	3	7	16	9	25
Total (a)	**1**	**12**	**6**	**18**	**4**	**3**	**7**	**16**	**9**	**25**
b) Fruits										
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants: Nil										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops: Nil										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops: Nil										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	1	47	0	47	2	0	2	49	0	49
Total (f)	**1**	**47**	**0**	**47**	**2**	**0**	**2**	**49**	**0**	**49**
g) Medicinal and Aromatic Plants: Nil										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Grand Total (a to g)	**2**	**59**	**6**	**65**	**6**	**3**	**9**	**65**	**9**	**74**
III Soil Health and Fertility Management										
Soil fertility management	1	14	0	14	1	0	1	15	0	15
Soil and Water Testing	1	50	0	50	12	0	12	62	0	62
Total	**2**	**64**	**0**	**64**	**13**	**0**	**13**	**77**	**0**	**77**
IV Livestock Production and Management: Nil										
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	32	1	33	15	0	15	47	1	48
Total	**1**	**32**	**1**	**33**	**15**	**0**	**15**	**47**	**1**	**48**
VI Agril. Engineering: Nil										
VII Plant Protection										
Integrated Pest Management	1	10	2	12	2	0	2	12	2	14
Integrated Disease Management	1	28	0	28	2	0	2	30	0	30
Bio-control of pests and diseases	4	125	38	163	24	9	33	149	47	196

Others (Judicious use of pesticides)	1	12	6	18	4	3	7	16	9	25
Total	**7**	**175**	**46**	**221**	**32**	**12**	**44**	**207**	**58**	**265**
VIII Fisheries: Nil										
IX Production of Inputs at site: Nil										
X Capacity Building and Group Dynamics:Nil										
XI Agro-forestry: Nil										
GRAND TOTAL	**20**	**612**	**102**	**714**	**160**	**28**	**188**	**772**	**130**	**902**

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										
Cropping Systems	2	26	30	56	2	0	2	28	30	58
Integrated Farming	1	78	0	78	23	0	23	101	0	101
Integrated Crop Management	2	68	0	68	24	0	24	92	0	92
Integrated nutrient management	3	101	0	101	20	0	20	121	0	121
Total	**8**	**273**	**30**	**303**	**69**	**0**	**69**	**342**	**30**	**372**
II Horticulture										
a) Vegetable Crops										
Nursery raising	1	143	0	143	57	0	57	200	0	200
Total (a)	**1**	**143**	**0**	**143**	**57**	**0**	**57**	**200**	**0**	**200**
b) Fruits										
Total (b)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
c) Ornamental Plants: Nil										
Total (c)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
d) Plantation crops: Nil										
Total (d)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
e) Tuber crops: Nil										
Total (e)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
f) Spices										
Production and Management technology	1	19	0	19	0	0	0	19	0	19
Total (f)	**1**	**19**	**0**	**19**	**0**	**0**	**0**	**19**	**0**	**19**
g) Medicinal and Aromatic Plants: Nil										
Total (g)	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Grand Total (a to g)	**2**	**162**	**0**	**162**	**57**	**0**	**57**	**219**	**0**	**219**
III Soil Health and Fertility Management										
Micro nutrient deficiency in crops	1	26	0	26	13	0	13	39	0	39
Balance use of fertilizers	2	71	0	71	4	0	4	75	0	75
Soil and Water Testing	1	12	0	12	2	0	2	14	0	14
Total	**4**	**109**	**0**	**109**	**19**	**0**	**19**	**128**	**0**	**128**
IV Livestock Production and Management: Nil										
V Home Science/Women empowerment: Nil										
VI Agril. Engineering: Nil										
VII Plant Protection										
Integrated Pest Management	4	103	0	103	22	0	22	125	0	125
Integrated Disease Management	2	56	7	63	4	0	4	60	7	67
Bio-control of pests and diseases	2	286	0	286	114	0	114	400	0	400
Others (Judicious use of pesticides)	1	0	45	45	0	4	4	0	49	49
Total	**9**	**445**	**52**	**497**	**140**	**4**	**144**	**585**	**56**	**641**
VIII Fisheries: Nil										
IX Production of Inputs at site: Nil										
X Capacity Building and Group Dynamics:Nil										
XI Agro-forestry: Nil										
GRAND TOTAL	**23**	**989**	**82**	**1071**	**285**	**4**	**289**	**1274**	**86**	**1360**

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										
Cropping Systems	5	125	33	158	32	0	32	157	33	190
Integrated Farming	2	96	0	96	29	0	29	125	0	125
Integrated Crop Management	4	117	17	134	37	2	39	154	19	173
Integrated nutrient management	5	217	29	246	65	11	76	282	40	322
Total	**16**	**555**	**79**	**634**	**163**	**13**	**176**	**718**	**92**	**810**
II Horticulture										
a) Vegetable Crops										
Nursery raising	2	155	6	161	61	3	64	216	9	225
Total (a)	**2**	**155**	**6**	**161**	**61**	**3**	**64**	**216**	**9**	**225**
b) Fruits:Nil										
c) Ornamental Plants: Nil										
d) Plantation crops: Nil										
e) Tuber crops: Nil										
f) Spices										
Production and Management technology	2	66	0	66	2	0	2	68	0	68
Total (f)	**2**	**66**	**0**	**66**	**2**	**0**	**2**	**68**	**0**	**68**
g) Medicinal and Aromatic Plants: Nil										
Grand Total (a to g)	**4**	**221**	**6**	**227**	**63**	**3**	**66**	**284**	**9**	**293**
III Soil Health and Fertility Management										
Soil fertility management	1	14	0	14	1	0	1	15	0	15
Micro nutrient deficiency in crops	1	26	0	26	13	0	13	39	0	39
Balanced use of fertilizers	2	71	0	71	4	0	4	75	0	75
Soil and Water Testing	2	62	0	62	14	0	14	76	0	76
Total	**6**	**173**	**0**	**173**	**32**	**0**	**32**	**205**	**0**	**205**
IV Livestock Production and Management: Nil										
V Home Science/Women empowerment:										
Household food security by kitchen gardening and nutrition gardening	1	32	1	33	15	0	15	47	1	48
Total	**1**	**32**	**1**	**33**	**15**	**0**	**15**	**47**	**1**	**48**
VI Agril. Engineering: Nil										
VII Plant Protection										
Integrated Pest Management	5	113	2	115	24	0	24	137	2	139
Integrated Disease Management	3	84	7	91	6	0	6	90	7	97
Bio-control of pests and diseases	6	411	38	449	138	9	147	549	47	596
Others (Judicious use of pesticides)	2	12	51	63	4	7	11	16	58	74
Total	**16**	**620**	**98**	**718**	**172**	**16**	**188**	**792**	**114**	**906**
VIII Fisheries: Nil										
IX Production of Inputs at site: Nil										
X Capacity Building and Group Dynamics:Nil										
XI Agro-forestry: Nil										
GRAND TOTAL	**43**	**1601**	**184**	**1785**	**445**	**32**	**477**	**2046**	**216**	**2262**

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

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

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Household food security	1	32	1	33	15	0	15	47	1	48
Any other (Natural Farming)	2	53	1	54	20	0	20	73	1	74
TOTAL	**3**	**85**	**2**	**87**	**35**	**0**	**35**	**120**	**2**	**122**

Training programmes for Extension Personnel including sponsored training (off campus): Nil

Training programmes for Extension Personnel including sponsored training – CONSOLIDATED (On + Off campus)

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Household food security	1	32	1	33	15	0	15	47	1	48
Any other (Natural Farming)	2	53	1	54	20	0	20	73	1	74
TOTAL	**3**	**85**	**2**	**87**	**35**	**0**	**35**	**120**	**2**	**122**

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	1	80	0	80	30	0	30	**110**	**0**	**110**
Others (Natural farming)	5	243	32	275	101	0	101	344	32	376
Production and value addition										
Spices crops	1	19	0	19	0	0	0	**19**	**0**	**19**
Total	**7**	**342**	**32**	**374**	**131**	**0**	**131**	**473**	**32**	**505**

Details of vocational training programmes carried out by KVKs for rural youth (4 or more days): Nil

ON CAMPUS TRAINING

Integrated nutrient management on 12/07/23

Seed production in vegetables on 23/01/23

Pest and disease management on 10-01-23

Importance of soil analysis 30-04-23

Pest man in natural farming on 23/02/23

Training of extension workers on IPM 20-02-23

OFF CAMPUS TRAINING

IPM in kharif crops at Chandrapur (Wankaner) on 28/04/23

Importance of soil analysis at Bharat Nagar (Morbi) on 23/05/23

Pest management in *rabi* crops at Bhutkotda on 24/01/23

Importance and criteria for natural farming at Palas (Wankaner) 05/09/23

Plant nutrients and its management at Ganeshpar (Tankara) 04/09/23

Importance of parasites and predators at Charadva (Halvad) on 18/08/23

TRAININGS ON NATURAL FARMING

Natural farming training on 30/12/23

Natural farming training to teachers of Morbi district on 24/08/23

Natural farming training on 11/05/23

Natural farming training on 09/06/23

Natural farming training on 21/07/23

Natural farming training on 04/01/23

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory Services (Other than KMAS)	240	25694	0	**25694**
Diagnostic visits	3	35	12	**47**
Field Day	0	0	0	**0**
Group discussions	0	0	0	**0**
Kisan Ghosthi	14	157	0	**157**
Film Show	0	0	0	**0**
Self -help groups	0	0	0	**0**
Kisan Mela	1	135	12	**147**
Exhibition	4	1773	0	**1773**
Scientists' visit to farmers field	42	303	0	**303**
Plant/animal health camps	0	0	0	**0**
Farm Science Club	0	0	0	**0**
Ex-trainees Sammelan	0	0	0	**0**
Farmers' seminar/workshop	3	340	0	**340**
Method Demonstrations	2	88	0	**88**
Celebration of important days	5	332	0	**332**
Special day celebration	0	0	0	**0**
Exposure visits	0	0	0	**0**
Others				
Lecture delivered	6	1985	30	**2015**
Celebration of *Parthenium* week	6	363	0	**363**
Celebration of agricultural technology week	6	274	0	**274**
Programmes on organic fermented manure (LFOM)	2	97	0	**97**
Farmers visit to KVK	10	690	0	**690**
Soil and water sample tested	60	116	0	**116**
Live broadcast of PM Kisan Samman Nidhi	1	86	0	**86**
Live telecast of "Man Ki Bat" of Honorable PM	1	62	0	**62**
Different programmes under Mission Life Style for Environment (LiFE)	6	75	0	**75**
Different programmes on climate resilient	6	125	0	**125**
Awareness programme on millets	9	562	15	**577**
Awareness programme on natural farming	8	511	12	**523**
Jalshakti abhiyan	1	15	0	**15**
Viksit Bharat Sanklap Yatra	10	2301	50	**2351**
Swachhta Abhiyan	8	362	0	**362**
Total	**455**	**36743**	**131**	**36874**

Note- Advisory services includes social media, website, telephonic calls etc.

Details of other extension programmes:

Particulars	Number
Electronic Media (CD./DVD)	-
Extension Literature	-
Newspaper coverage	12
Popular articles	-
Radio Talks	-
TV Talks	-
Animal health amps (Number of animals treated)	-
Social Media (No. of platforms Used)	2
Others (Distribution of extension literature)	2322
Total	**2336**

3.6 Online activities during year 2023

Sl. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc)	Title of Program	No. of Programmes	No. of Participants/ Views
A	**Farmers training**				
1	Farmers training	Audio Conferencing	Modern cultivation of cotton	1	110
	Total			**1**	**110**
B	**Farmers scientist's interaction programme: Nil**				
C	**Farmers seminars**				
	International millets conference (Online)	Video conferencing	Awareness programme on millets and natural farming	1	38
	Total			**1**	**38**
D	**Expert lectures: Nil**				
E	**Any other (Pl. specify): Nil**				
	Grand Total (A+B+C+D+E)			**2**	**148**

DIFFERENT PROGRAMMES ON MILLETS

Awareness on millet 15/02/23

Awarness programme on importance of millets in diet on 08/03/23

Collaborative training on millet with DAO on 21/10/23

Deliver lecture in millet mela at Harbatiyali (Tankara) 29/10/23

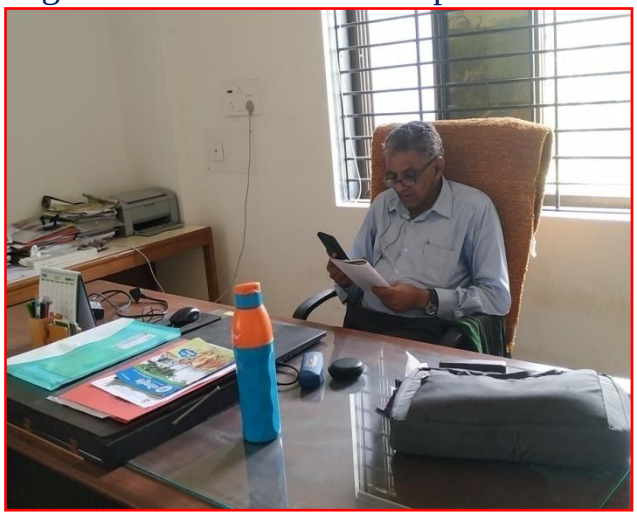
Deliver lecture and participated in millet mela at Wankaner 26/10/23

Exhibition cum selling of millet seeds at APMC, Morbi on 16/07/23

EXTENSION ACTIVITIES

Agri drone demo at Dhamalpar 14/12/23

Agri drone demo at Nasitpar 13/10/23



Audio Conference in collaboration with reliance foundation on 05/07/23

Farmers visit at KVK Farm on 05/08/23

Field day at Harbatiyali on 07/01/23

Jalshakti Abhiyan 04/01/23

IMPORTANT EVENTS

Celebration of world soil day at Chandrapur (Wankaner) 05-12-23

Celebration of ICAR Foundation Day 18-07-23

Independense Day Celebration 15-08-23

Krushimela at KVK Morbi on 21-10-23

Live telecast of Man ki baat 30-04-23

PM Samman Nidhi live on 27-02-23

Shibir on environment and natural farming on 11-06-23

Celebration of Republic day

Celebration of *Parthenium* week 16-22/08/23

Celebration of Technology week 11-16/09/23

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

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
Cereals	Pearl millet (General)	-	GHB-1129	8.80	22000	-
Oilseeds	Sesame (Truthful)	GT – 6	-	0.94	28200	90
	Sesame (General)	GT – 6	-	0.43	5795	-
Pulses	Blackgram (Truthful)	GU – 2	-	1.08	13770	43
Vegetables	Garlic (Truthful)	GJG-5	-	2.20	11000	1
	Garlic (General)	GJG-5	-	3.80	24633	-
	Onion (Labeled)	GJWO-3	-	0.65	78000	8
Spices	Cumin (Truthful)	GC – 4	-	3.30	121950	55
Total				**21.20**	**3,05,348**	**197**

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Commercial	-	-	-	-	-	-
Vegetable seedlings	Drumstick	-	-	25	-	25
Fruits	Jamun	-	-	25	-	25
Ornamental plants	-	-	-	-	-	-
Medicinal and Aromatic	-	-	-	-	-	-
Plantation	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	-	-	-	-	-	-
Total	**-**	**-**	**-**	**50**	**-**	**50**

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	Citation/ Title	Authors name	Number
Research papers	NA	-	-
Technical reports	SAC, Annual, ZEARC, AGRESSCO	-	5
News letters	JAU, news letters	-	4
Technical bulletins	-	-	-
Pamphlets	-	-	-
Popular articles	-	-	-

C. Details of Electronic Media Produced: Nil

D. Details of Social Media Platforms Created / Used

Sl. No.	Type of social media platform	No of events (uploaded video/post/story etc.	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel (no of video uploaded)	-	-	-
2	Facebook page/ Account (no of Post)	-	-	-
3	Mobile Apps	-	-	-
4	WhatsApp groups	**228**	20	6050
5	Twitter Account	**2**	@Kvkmorbi	10
6	Any other (Pl. Specify)	-	-	-

E. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

(A) Crop diversification : Horticultural crops

- Name — Dhedhi Sanjaybhai Harjibhai
- Village — Mitana, Ta-Tankara, Dist.-Morbi
- Age — 34 years
- Mobile No. — 9712999599
- Education — 10th Pass
- Total land — 1.60 ha

Sanjaybhai Dhedhi is a progressive farmer with 1.60 ha of land holding. Sanjaybhai getting normal income from field crops like groundnut, cotton, chick pea, cumin but due to price fluctuation and pest problem in this crop. Sanjaybhai shifted to horticulture crops like watermelon and papaiya with advance farming technology. He installed drip irrigation with plastic mulch in water melon crop. He got good yield and quality production, so he earns good revenue from small land. He is getting annual income of **Rs. 459000/-.**

Sl. No.	Particular of farming	Area (ha)	Production (kg)	Gross Income	Net Income
1	Water Melon (Kiran -1)	1.00	21500	428000	288000
2	Papaya (Taivan)	0.60	11900	311000	171000
	Total			**739000**	**459000**

Water melon at farmers field

Papaya at farmers field

(B) Crop management : IPM, Drip, New varieties

- Name :- Bhagiya Gordhanbhai Mavjibhai
- Village :-Haripar , Tahsil –Tankara, Dist. Morbi
- Age :- 68 years
- Mobile No. :- 9723478703
- Education :- 2nd Standard
- Total land :- 4.80 ha.

Gordhanbhai is an innovative farmer of village Haripar (Tankara). He faced problems like Stem rot problem in Groundnut GG-20, pink boll worm problem in cotton, lower price of Agriculture product. They select new Groundnut variety GJG-22 and also use IPM for pest management, shift some area in to vegetable crop like chilly with drip irrigation, also change the chick pea variety for getting higher yield (GJG-5) all over his goal to increase his income and he succeed to achieved his goal. He is getting annual income of Rs. 769500/-.

Sr. No.	Particular of farming	Area (ha)	Production (kg)	Gross Income (Rs.)	Net Income (Rs.)
1	Groundnut (GJG-22)	1.60	3650	169000	99500
2	Cotton (Bt.)	1.68	3700	166000	89000
	Chilly (Sanya)	1.52	29100	598000	412000
	Chick pea (GJG-5)	1.60	5800	266800	169000
	Total			**1199800**	**769500**



Drip irrigation in Chilly crop at farmers field

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

- IPM in Cotton-Use of Trap crop, Pheromone trap, MDP etc.
- Minimizing the chemical Fertilizer and Maximizing organic manure.
- Value addition in different agriculture crops like groundnut, sesame etc.
- Natural farming
- Use of drone in agriculture

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

Sl. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Gourd vegetables	For better germination of seeds of gourd vegetables, banana sheath split open and seed of guard vegetables are placed in a layer and put into a cow dung heap.	The water content in the banana sheath and temperature helps in better germination of seeds.
2	Coriander	Seeds of coriander is tying with a piece of cloth, preferably cotton cloth, deep in water for over night and then it is kept in a cow dung pit.	This will help in early germination of seed.
3	Scarring of birds	Using bell made by empty tin in the field, which is operated from a long distance with a long rope	Birds demanding the matured grains are scared due to sound produced by bell.
4	Banana	Binding loosely of banana bunch with plastic or light gunny beg in early stage	Monkey cannot damage bunch due to cover of plastic bag or gunny bag
5	Control of stem borer	Peeled rinds of citrus (*Citrus* spp) or lemon (*Citrus lemon*) are placed sporadically in the field.	Attracts insects like stem borer which are killed in contact with the citrus rinds
6	Preventing mango trees from mealy bug	Application of coal tar or any greasy substances around the trunk of the mango trees	The coal tar and greasy substance prevent climbing of mealy bug and thus it check infestation

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

A. Practicing Farmers: Nil

B. Rural Youth: Nil

C. In-service personnel: Nil

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 ii) Existing cropping system iii) Problems at field level

5.3. Field activities

Name of villages identified/adopted with block name (from which year) -2021

Block	Villages
Morbi	Chakampar, Jivapar, Dharampur Thorala, Andarana
Tankara	Otala, Saraya, Neknam, Lakhdhirgadh, Bhutkotda
Wankaner	Palas, Panchdwarka, Shekhradi, Amarsar, Pipaliya raj

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Dy. Director of Agriculture.	Most of the Organizations are members of Scientific Advisory Committee (SAC) of KVK and have linkage with different activities of KVK *viz*., Training Programme, Khedut Sibir, Farmers day, Animal health Camp, Farmers fair, Film Show, Ex-training meeting and Soil health card etc.
Dy. Director of Agril. Extension (FTC)	
Dy. Director of Horticulture	
Dy. Director of Animal Husbandry	
District Agriculture officer	
JillaUdhyong Kendra	
NHRDF	
Doordarshan Kendra	
All India Radio	
District Rural Development Agency(DRDA)	
ATMA	
District Watershed Development Agency (DWDA)	
GGRC	
Reliance foundation	
GSFC, GNFC	
IFFCCO	
KRIBHCO	
ANANDI NGO	

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(State Govt./Other Agencies)	Amount (Rs.)
-	-	-	-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

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

Coordination activities between KVK and ATMA

Sl. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	No of Farmers attending
1	**Meetings**	12	12	-	155
2	**Research projects**	-	-	-	-
3	**Training programmes**	2	2	-	61
4	**Demonstrations**	-	-	-	-
5	**Extension Programmes**	-	-	-	-
	Kisan Mela	1	1	1	147
	Technology Week	1	1	1	274
	Exposure visit	-	-	-	-
	Exhibition	-	-	-	-
	Soil health camps	-	-	-	-
	Animal Health Campaigns	-	-	-	-
	Others (Pl. specify)	-	-	-	-
6	**Publications**				
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
7	**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
G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana): Nil
H. Details of linkage with NFSM:Nil
I. Details of linkage with SMAF (Sub-mission on Agroforestry): Nil
7. Convergence with other agencies and departments:Nil

8. Innovative Farmers Meet

Sl.No.	Particulars	Details
1.	Have you conducted Farm Innovators meet in your district?	No
	Brief report in this regard	-

9. Farmers Field School (FFS)

Sl. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Expenditure	Brief report
Nil					

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

No.	Feed Back
1.	Variety GJG–32 is resistant against tikka and rust disease in heavy rainfall condition as compared to TG-45,GJG–22,TAG–24.
2.	Application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at time of sowing is effective to reduce the infestation of white grub in groundnut.
3.	Line sowing in cumin crop is very effective to control blight disease
4.	Pheromone trap is very useful for mass trapping of pink boll worm moth in cotton crop.
5.	Chickpea variety GG-5 is high yielding as well as disease resistant compared to GG-2, GJG-3.
6.	Sesame GJT–5 is bold and white seeded and higher yielder (summer).

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

No.	Feed Back
1.	Research needs for control of insect-pest and disease in organic& natural farming farming.
2.	Salinity problem in Maliya, Halvad and part of Morbi taluka.
3.	Seed rot problem in pomegranate fruit.
4.	Nematode problem in pomegranate crop.
5.	Variety GJG–32 is resistant against tikka and rust disease in heavy rainfall condition as compared to TG-45,GJG–22,TAG–24.
6.	Wilt in cumin Crop.(GC-4)
7.	Chickpea variety GG-5 is resistant to wilt &blight and change of adverse condition (Chilling effect) as comparedto GG-2 and GJG-3.
8.	For better germination socking of cumin GC-4 seed in water for 2 to 4 hrs. Then dry in shade.
9.	Pod borer problem in groundnut.
10.	Ketosis, Mastitis, FMD, Brucellosis problems in cow and buffalo
11.	Soft rot disease on onion.

11. Technology Week celebration during 2023: Yes, If Yes

Period of observing Technology Week : From **11th to 16thSeptember 2023**
Online / offline : offline
Total number of farmers visited : 274
Total number of agencies involved : 3
Number of demonstrations visited by the farmers within KVK campus : 2

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Gosthies	2	17	IPM, INM
Lectures organized	12	274	Groundnut/ Cotton/ Black gram/Natural farming
Exhibition	1	55	Natural farming products
Film show	-	-	-
Fair	-	-	-
Farm Visit	6	274	Sesame, Cotton
Diagnostic Practicals	4	23	Chili, lemon and cotton
Supply of Literature (No.)	6	274	Natural farming
Supply of Seed (q)	-	-	-
Supply of Planting materials (No.)	-	-	-
Bio Product supply (Kg)	-	-	-
Bio Fertilizers (q)	-	-	-
Supply of fingerlings	-	-	-
Supply of Livestock specimen (No.)	-	-	-
Total number of farmers visited the technology week	-	274	-

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
NA			

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	NA	NA
Pulses	NA	NA
Cereals	NA	NA
Vegetable crops	NA	NA
Tuber crops	NA	NA

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Nil			

D. Animal health camps organized

State	Number of camps	No.of animals	No. of farmers
Nil			

E. Seed distribution in drought hit states (Seed distribution/sold by KVK)

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

F. Large scale adoption of resource conservation technologies

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

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
Nil												

13. IMPACT

Management of white grub in groundnut

Talukawise adoption:

Sl. No.	Name of Taluka	No. of Farmer's	T_1 Sowing without seed treatment (Adoption in %)	T_2 Seed treatment with Imidacloprid 600 F.S. 4 ml/kg seed. (JAU Reco-2020) (Adoption in %)	T_3 Soil application of *Metarhizium anisopliae* @ 5 kg/ha with 300 kg/ha castor cake at the time of sowing. (JAU Reco-2020) (Adoption in %)
1.	Tankara	30	40.0	56.7	3.3
2.	Wankaner	25	64.0	36.0	0.0
3.	Halvad	60	31.6	66.7	1.7
4.	Morbi	10	80.0	20.0	0.0

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

14. Kisan Mobile Advisory Services: Nil

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	Roof Rain water harvesting system	2019-20	1.40 lac lit.	-	-	-	4.6 lacs	-	-
2	Farm pond	2018-19	1.0ha	-	-	-	2.0 lacs	-	-
3	Nadep Compost	2019-20	18 m^2	-	Compost	8600 kg	10000	-	-

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 (Number of farmers)
				Variety	Type of Produce	Qty. (q)	Cost of inputs	Gross income	
Cereals									
Pearlmillet	29/06/23	07/10/23	0.40	GHB-1126	General	8.80	-	22000	-
Pulses									
Black gram	30/06/23	21/10/23	2.00	GU – 2	Labeled	1.08	-	13770	43
Oilseeds									
Sesame	30/06/23	01/10/23	0.80	GT-6	Labeled	0.94	-	28200	90
Sesame	30/06/23	01/10/23	1.00	GT-6	General	0.43	-	5795	-
Spices & Plantation crops									
Cumin	20/10/22	30/01/23	0.70	GC-4	Labeled	3.30	-	121950	55
Vegetables									
Garlic	15/10/22	17/02/23	0.50	GJG-5	Labeled	2.20	-	11000	1
Garlic	06/11/22	17/02/23		GJG-5	General	3.80	-	24633	-
Onion	06/11/22	20/03/23	0.40	GJWO-3	Breeder	0.65	-	78000	8
Others									
Cotton	1/7/2023	31/1/2024	1.65	G.Cot.Hy-24 BG II	General	33.00		231000	-
Total			**7.05**			**54.20**		**5,36,348**	197

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

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

E. Utilization of hostel facilities

Accommodation available (No. of Beds): 15

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2023	4	1	-
February 2023	11	2	-
March 2023	-	-	-
April 2023	-	-	-
May 2023	-	-	-
June 2023	-	-	-
July 2023	1	2	-
August 2023	-	-	-
September 2023	-	-	-
October 2023	-	-	-
November 2023	-	-	-
December 2023	-	-	-

F. Database management

Sl. No	Database target	Database created
1	**-**	1246 farmers from Morbi district

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

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
2,00,000	2,00,000	Farm pond	1	-	50	450	10	2400	One life saving irrigation given in 0.4 ha. land
4,60,000	4,60,000	Roof Rain Water harvesting structure	-	-	-	450	10	140	Water useful for drinking purpose through out the year for this office staff and trainers

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? Yes/No

If yes,

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
0.01	Vegetable crops	7	450
-	Fruit crops	1	450
-	Others if any (Drum stick)	1	450

Nutritional Garden developed at Village Level (Area under nutritional garden): Nil

H. Details of Skill Development Trainings organized

Sl.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
Nil									

1. 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
With KVK	SBI	Morbi	60071	Refund of deposit for KVK Morbi	40133360588	363002022	SBIN0060071
With KVK	SBI	Morbi	60071	Gen Fund ACC KVK Morbi	37470516605	363002022	SBIN0060071

B. Utilization of KVK funds during the year 2023-24 (Rs. in lakh) (Till Dec, 2023)

No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	96.00	79.28	69.85
2	**Traveling allowances**	1.00	0.50	0.04
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	7.00	5.00	4.10
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	7.50	5.50	4.38
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)		**111.50**	**90.28**	**78.37**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	-	-	-
3	**Vehicle** (Four wheeler / ~~Two wheeler~~, please specify)	-	-	-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		**-**	-	-
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**111.50**	**90.28**	**78.37**

C. Status of revolving fund (Rs. in lakh) for the Four 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 2018 to March 2019	4.79	8.79	9.07	4.51
April 2019 to March 2020	4.51	11.95	9.11	7.35
April 2020 to March 2021	7.35	5.33	6.58	6.10
April 2021 to March, 2022	6.10	1.59	0.41	7.28
April 2022 to March 2023	7.28	6.86	2.00	12.14
April 2023 to Dec 2023	12.14	5.91	0.54	17.51

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

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/offline)	Dates
Mr. G.S. Zala	Agriculture officer	Workshop on Natural Farming and Millets	Shivajinagar, Pune,	offline	19/01/23
Prof. M.F. Bhoraniya	Senior Scientist and Head	To participate in Seminar organized by JAU, Junagadh and PPAG at Junagadh	JAU, Junagadh	offline	24/02/23
Prof. D.A. Saradva	Scientist (Plant Protection)	To improve knowledge for integrated management of soil borne diseases and pests	JAU, Junagadh	offline	24/02/23
Dr. K.N. Vadaria	Scientist (Agronomy)	Workshop on "Application of robotics and drone technologies in agriculture"	CAET, JAU, Junagadh	offline	02-03/03/23
Mr. V.V. Thakor	Agriculture officer	training on Competency skill enhancement for extension professional	JAU, Junagadh	offline	24-26/04/23
Mr. G.S. Zala	Agriculture officer	Next Generation Communication and Management Competencies for inspiring service Excellence of Extension professional	JAU, Junagadh	offline	27-29/04/23
Dr L L Jivani	Senior Scientist and Head	To present and attend Annual Action Plan 2023 of Gujarat and Goa	AAU, Anand	offline	15-16/05/23

Prof. M.F. Bhoraniya	Senior Scientist and Head	To participate in Seminar organized by JAU, Junagadh and GAAS, Gandhinar at Junagadh	JAU, Junagadh	offline	6/06/23
Prof. M.F. Bhoraniya	Senior Scientist and Head	To present and attend the Annual Progress Report-2022	Aurangabad, Maharashtra, India	offline	28-30/07/23
Dr. K.N. Vadaria	Scientist (Agronomy)	National training on natural farming	MPUAT, Udaipur	offline	04-18/09/23
Prof. M.F. Bhoraniya	Senior Scientist and Head	Short visit to organic farm at Gurukul, Kurukshetra	Kurukshetra (Haryana)	offline	20-22/11/23

18. Details of progress in Doubling Farmers Income (DFI) villages adopted by KVKs

Name of the village	**Total No. of families surveyed**	**Key interventions implemented**	**No. of farmers covered in each intervention**	**Change in income (Rs/unit)**	
				Before (base year)	**After (current year)**
Jepur, Haripar, Halvad, Tikar, Ranmalpur, Bagthala etc.	110	-	-	-	-

19. Details of activities planned under NARI /PKVY / TSP / KKA, etc.

S. No.	**Name of the programme**	**No. of villages adopted**	**Key activities performed**	**No. of activities carried out**	**No. of families covered**
1	OFT, Training	5	-	25	152

20. Details of Progress of ARYA Project: Nil

21. Details of SAP

S. No.	*Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.*	No. of Programmes conducted	No. of Participants
1	Cleaning and Sweeping of entire office premises / cleaning of KVK campus, Swachhta Awareness at local level, Cleaning and beautification of surrounding areas, Vermi composting and other activities on generate of wealth for waste.	12	486

Sr. No	Name of KVK	Date	***Activity***	No of VIPs	No of Farmers	Others	Total
1	Morbi	09/01/23	Cleaning of office and surrounding area, farm waste management, etc.	0	5	7	12
2		10/02/23	Cleaning of office and surrounding area, farm waste management, etc.	0	3	5	8
3		13/03/23	Cleaning of office and surrounding area, farm waste management, etc.	0	8	7	15
4		12/04/23	Cleaning of office and surrounding area, farm waste management, etc.	0	6	6	12
5		24/05/23	Awareness campaign, cleaning of office and surrounding area, household waste management into compost, farm waste management, etc.	0	19	6	25
6		08/06/23	Cleaning of office and surrounding area	0	12	3	15
7		20/07/23	Cleaning of office and surrounding area	0	7	8	15
8		21/08/23	Swachhta awareness to farmers, Cleaning of office and surrounding area and awareness create to students at Madhapar village school and farm waste management into compost etc.	0	20	7	27
9		14/09/23	Cleaning of office and surrounding area, farm waste management, etc.	0	13	7	20
10		17/10/23	Cleaning of office and surrounding area	0	0	222	222
11		07/11/23	Swachhta awareness to students of College of Horticulture, Junagadh (Coming at KVK)	0	0	108	108
12		12/12/23	Cleaning of office and surrounding area,	0	0	7	7

21. Books published 2023-24

Title of the Book	Authors	ISBN No	Publisher	Pages No	Description/review of the book (one paragraph/sentence)
Nil					

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

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	43	2046	216	2262
Rural youths	0	0	0	0
Extension functionaries	3	120	2	122
Sponsored Training	7	473	32	505
Vocational Training	0	0	0	0
Total	**53**	**2639**	**250**	**2889**

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	20	8.0	-
Pulses	20	8.0	-
Cereals	10	4.0	-
Vegetables	-	-	-
Other crops	20	8.0	-
Hybrid crops	-	-	-
Total	**70**	**28.0**	**-**
Livestock & Fisheries	-	-	-
Other enterprises	-	-	-
Total	-	-	-
Grand Total	**70**	**28.0**	**-**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	2	6	6
Livestock	-	-	-
Various enterprises	-	-	-
Total	**2**	**6**	**6**
Technology Refined			
Crops	1	3	3
Livestock	-	-	-
Various enterprises	-	-	-
Total	**1**	**3**	**3**
Grand Total	**3**	**9**	**9**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	455	36874
Other extension activities	3	2336
Total	458	39210

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marke-ting	Aware-ness	Other enterprise	Total
Morbi	Text only	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Voice only	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Voice & Text both	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Total Messages							
	Total farmers Benefitted							

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	21.20	3,05,345
Planting material (No.)	50.00	Supply in free
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	60	3000
Water	56	2800
Plant	-	-
Total	**116**	**5800**

8. HRD and Publications

Sr. No.	Category	Number
1	Abstract	-
2	Workshops	2
3	Conferences	1
4	Meetings	-
5	Trainings for KVK officials	-
6	Visits of KVK officials	4
7	Book published	-
8	Training Manual	-
9	Book chapters	-
10	Booklet	-
11	Leaflets/ Folder/ Pamphlet	-
12	Research papers	-
13	Technical Bulletin	-
14	Popular article	-
15	Lead papers	-
16	Seminar papers	-
17	Extension folder	-
18	Proceedings	1
19	Award & recognition	-
20	On-going research projects	-
21	Other	-

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