

Annual Progress Report

(January-2022 to December-2022)



Senior Scientist & Head
Krishi Vigyan Kendra
Junagadh Agricultural University
Khapat - 360 579
Porbandar (Gujarat)

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ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2022
(January 2022 to December 2022)

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 Opp. Saint Joseph School, Adityana Road Khapat – Porbandar – 360 579 (Gujarat)	94089 03062	-	kvkkhapat@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 – 362 001 (Gujarat)	0285-2671784 0285-2672080-90	0285-2672004 0285-2672653	-	www.jau.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. H.R. Vadar	94089 03062	094265 43628	hrvadar@jau.in

1.4. Date and Year of sanction: February, 2005**1.5. Staff Position (as on December, 2022)**

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 (I/C)	Dr. H.R. Vadar	9426543628	Soil & Water Engineering	131400-217100	-	01-07-2021	-
2	Scientist	Dr. H.A. Patel	9998687479	Animal Hus.	57700-182400	-	06-04-2015	-
3	Scientist	V.M. Savaliya	9909989754	Horticulture	57700-182400	-	01-08-2017	-

4	Scientist	Vacant	-	-	-	-	-	-
5	Scientist	Vacant	-	-	-	-	-	-
6	Scientist	Vacant	-	-	-	-	-	-
7	Scientist	Vacant	-	-	-	-	-	-
8	Programme Assistant (Lab. Tech.)	D.N. Hadiya	6355860120	Genetics & Plant Breeding	39900-126100	-	07-08-2018	Fix Pay
9	Programme Assistant (Computer)	R.R. Shida	8733822042	-	39900-126100	-	25-06-2019	-
10	Farm Manager	A.M. Gamit	6354032874	Genetics & Plant Breeding	39900-126100	-	02-08-2018	Fix Pay
11	Assistant	B.S. Bokhariya	9265795997	-	44900-142400	-	12-06-2008	-
12	Stenographer	Vacant	-	-	-	-	-	-
13	Driver 1	Vacant	-	-	-	-	-	-
14	Driver 2	Vacant	-	-	-	-	-	-
15	Supporting staff 1	Vacant	-	-	-	-	-	-
16	Supporting staff 2	Vacant	-	-	-	-	-	-

1.6. Total land with KVK (in ha): 20.59

S. No.	Item	Area (ha)
1	Under Buildings	2.451
2	Under Demonstration Units	0.337
3	Under Crops	14.660
4	Horticulture	2.798
5	Pond	0.344
6	Others if any (Specify)	-
Total		20.59

1.7. Infrastructural Development

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq. m)	Expenditure (Rs.)	Starting year	Plinth area (Sq. m)	Status of construction
1	Administrative Building	ICAR	2007	588	30,78,850	-	-	Completed
2	Farmers Hostel	ICAR	2008	288	21,02,300	-	-	Completed
3	Staff Quarters	ICAR	2007	446	28,38,616	-	-	Completed

4	Fencing	ICAR	2009	500 RM	-	-	-	Completed
5	Rain Water harvesting system	ICAR	2009	-	10,00,000	-	-	Completed
6	Threshing floor	ICAR	2014	164.87	1,52,338	-	-	Completed
7	Farm godown	ICAR	2009	129	-	-	-	Completed
8	Mini soil testing Kit	ICAR	2017	-	90,300	-	-	-
9	Godown	ICAR	2014	62.86	4,06,425	-	-	Completed

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Running	Present status
Tractor (Farmtrac)	2005	3,80,000	61257 hrs	Medium
Scorpio Jeep	2017	11,86,893	78078	Good
Moror cycle (Hero – Splendor)	2010	47,000	33822	Good

C) Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
LCD projector	2008-09	1,00,000	Running
Zerex machine	2008-09	1,24,000	Running
R.O. plant	2008-09	24,450	Running
HCL laptop computer	2008-09	47,500	Damaged
Food processor	2008-09	5,495	Running
Multipurpose bullock drawn pipe frame implement head peace	2008-09	27,500	Running
Rotavator tractor operated	2008-09	96,000	Running
Planter tractor operated	2008-09	44,000	Running
Tractor drawn harrow cum cultivator cum intercultivator frame 86"	2008-09	37,500	Running
Samsung double door refrigerator	2008-09	17,650	Running
Electrolux grill microwave / oven	2008-09	9,580	Running
Panasonic LCD projector	2008-09	1,03,912	Running
Multipurpose groundnut cum wheat thresher	2008-09	1,14,000	Running
Cotton shredder	2008-09	2,42,000	Running
Solar street light	2008-09	28,000	Running
Solar lanterns	2008-09	4,800	Running
Solar cooker	2008-09	3,300	Running

Mobile seed grading unit	2008-09	16,85,000	Not working
Decorticators	2008-09	95,850	Running
Winnowing fan	2008-09	8,500	Running
Chaff cutter	2008-09	30,188	Running
High tech sprayer pump	2008-09	1,850	Running
Split AC (2)	2008-09	59,980	Running
Sony handycam	2009-10	24,750	Running
Honda portable genset	2009-10	47,088	Damaged
PA conference system	2010-11	9,200	Running
Chairmen unit	2010-11	43,001	Running
Delegate unit	2010-11	3,839	Damaged
Water cooler & purifier	2010-11	39,165	Running
Water cooler	2010-11	24,955	Running
Dell desktop computer	2010-11	38,619	Running
HP laser printer	2010-11	11,336	Running
Groundnut grader	2010-11	42,000	Running
Winnower	2010-11	37,000	Running
LG Refrigerator	2010-11	19,610	Running
Multicrop cleaner cum grader	2010-11	2,30,000	Running
Laptop HP	2011-12	49,875	Not working
Samsung laser printer	2011-12	9,450	Not working
Canon SLR camera	2011-12	44,750	Working
Sony projector	2011-12	75,600	Running
Vestar AC (2)	2016-17	75,000	Running
Recoh digital zerox machine	2016-17	1,46,000	Running
Water cooler	2016-17	33,500	Running
Acer desktop (3)	2016-17	1,02,345	Not working
Samsung Printer	2016-17	12,546	Running
Integrated community computer (K-YAN)	2016-17	1,19,777	Running

1.8. Details of SAC meeting conducted in the year

Date	Name and Designation of Participants	Salient Recommendations	Action taken
7 th March, 2022	Dr. H. M. Gajipara Director of Extension Education, JAU, Junagadh	➤ Use word collar rot instead of aflarot in Plant Protection OFT	➤ Suggestion implemented
	Dr. H. R. Vadar I/C Senior Scientist & Head, KVK, JAU, Khapat-Porbandar	➤ Eliminate FLD (MDP) in cotton crop under ATIC	➤ FLD eliminated
	Shri N. D. Babaria Dy. Director Agriculture (Extension), Porbandar	➤ Take greengram variety GAM-5 instead of GM-4 in Summer FLDs	➤ The same will be taken in Summer-2023
	Shri B.V. Mandera Rep. Dy. Director of Animal Husbandry, Porbandar	➤ If possible proposed training under ASCI in Home Science discipline	➤ Was not proposed due to transfer of scientist (Home Science)
	Shri A.R. Ladumor Rep. Dy. Director (Horticulture), Porbandar	➤ Introduction of soybean crop in the district	➤ In every training of crop production, emphasis given on the same
	Dr. H.C. Chhodvadia Associate Extension Educationist, JAU, Junagadh	➤ Prepare SAC report for the JAN-DEC period	➤ Suggestion incorporated
	Shri A. B. Sarvaiya RFO, Porbandar	➤ Increase testing of number of soil and water samples	➤ Total 268 samples were analysed
	Shri K.G. Balas Rep. Project Director, DWDU, Porbandar	➤ Demonstrate implements and equipment developed by JAU at KVK campus	➤ Implements was demonstrated during the trainings
	Sh. Jayeshbhai Vajshibhai Bokhiriya Progressive farmer	➤ Include agricultural engineering related training in action plan	➤ Two trainings were included & one training conducted
	Sh. Vajshibhai Bapodara Progressive farmer	➤ Provide technical backstopping/ trainings to FPOs in the district	➤ The same was provided & one FPO is formed
	Sh. Bhaveshbhai Oedra Progressive farmer		
	Sh. Dhanjibhai Rudabhai Rathod Progressive farmer		
	Smt. Prabhabeen Ratilal Sadariya Progressive farmwomen		
	Ms. Dipa Dhirajlal Rathod Progressive farmwomen		
	Ms. Jignasa Arvindbhai Chudasama Progressive farmwomen		

2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise
1	Rainfed Farming System
2	Animal husbandry (Cattle/Bufalos)

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

S. No.	Agro-climatic Zone (Planning Commission)	Characteristics
1	South Saurashtra	<p>Porbandar district is located between 21° to 22° N latitude and 69° to 70° E longitude.</p> <p>Khapat- N 21° 40' 12" and E 69° 37' 14"</p> <p>Soil: medium black & silty loam with calcareous in nature</p> <p>pH: pH of the soil is ranging from 8.01 to 8.58</p> <p>Water: EC value up to 8.1 mmho / cm</p> <p>Average Rainfall: 668 mm</p> <p>Temperature Range: 12.0° C to 39.0 °C</p>

a) Topography

S. No.	Agro ecological situation	Characteristics
1	Shallow black soil with low rainfall	Soil: Sandy clay loam to clay with Rainfall: <750 mm
2	Hilly soil with low rainfall	Soil: Sandy clay loam to sandy clay with Rainfall: <750 mm
3	Medium black soil with low rainfall	Soil: Sandy clay to clay with Rainfall: <750 mm
4	Deep black soil with low rainfall (Ghed)	Soil: clay with Rainfall: <750 mm
5	Mix red & black soil with medium rainfall	Soil: Sandy clay loam to clay loam with Rainfall: 750-1000 mm

2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Sandy clay loam to clay	Rainfall: <750 mm	34241
2	Sandy clay loam to sandy clay	Rainfall: <750 mm	46080
3	Sandy clay to clay	Rainfall: <750 mm	86627
4	Clay	Rainfall: <750 mm	56880
5	Sandy clay loam to clay loam	Rainfall: 750-1000 mm	5707

2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2022)

S. No	Crop	Area (ha)	Production (000 T)	Productivity (Kg/ha)
Major Field crops				
1	Groundnut	78,800	156.10	1981
2	Cotton	4,100	3.72	907 [#]
3	Wheat	25,200	92.31	3663
4	Gram	53,800	106.95	1988
5	Green gram	6,200	8.21	1324
6	Sesame (Summer)	2,600	2.27	875
Major Horticultural crops				
1	Cumin	14,000	11.14	796
2	Coriander	13,400	22.85	1705
3	Coconut*	750	6750	9000
4	Mango	431	3.6	8420

Source: District Agriculture Department & District Horticulture Department, Porbandar

* Coconut production is in '000 nuts & productivity in nuts

#Total cotton productivity

2.5. Weather data (2022)

Month	Normal RF (mm)	Normal Rainy days (number)	Temperature (°C)		Relative Humidity (%)	
			Maximum	Minimum	Maximum	Minimum
January-22	52	01	28.00	09.00	79.00	41.00
February-22	-	-	32.00	11.00	76.50	37.50
March-22	-	-	33.00	18.00	73.50	34.50
April-22	-	-	34.50	19.50	79.50	48.50
May-22	-	-	37.00	26.00	80.00	67.00
June-22	105	04	35.00	26.50	87.00	65.00
July-22	533	13	32.00	25.00	89.00	69.00
August-22	360	13	35.00	24.00	88.00	67.00
September-22	126	04	30.00	21.00	89.74	74.00
October-22	-	-	31.00	23.00	77.00	60.00
November-22	-	-	29.00	17.00	72.00	51.00
December-22	-	-	28.00	14.00	75.00	44.00
Total/Av.	1176	35	32.04	19.50	80.52	54.88

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

Category	Population (No)	Production	Productivity
Cattle			
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	84,711	-	-
Buffalo	1,44,573	-	-
Sheep	21,675	-	-
Goats	17,891	-	-
Pigs			
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Rabbits	-	-	-
Poultry			
Hens (<i>Crossbred</i>)	2069	-	-
<i>Desi</i>	-	-	-
Category		Production (Q.)	Productivity
Fish (Reservoir)	7586 (Fisherman)	9,12,544	

2.7. Details of Operational area / Villages

Taluka / Block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Porbandar	Bokhira Pandavadar Mander Chikasa Mocha	Groundnut Wheat Cumin Coriander Sorghum Gram Fenugreek	✓ White grub & stem rot in groundnut ✓ Wilt & blight in cumin ✓ Powdery mildew in coriander	✓ IPM (Management of white grub in groundnut) ✓ INM ✓ Improved package of practices ✓ IDM ✓ Poor quality water
Ranavav	Digvijaygadh Adityana Bordi Bhoddar Khambhala	Groundnut Cotton Sorghum Wheat Cumin Pearl millet	✓ White grub & stem rot in groundnut ✓ Pink ballworm & sucking pests in cotton ✓ Wilt & blight in cumin	✓ IPM (Management of white grub in groundnut; pink ball worm in cotton) ✓ INM ✓ Improved package of practices ✓ IDM ✓ INM & IDM in Horticulture

Kutiyana	Tarkhai Revadra Kavalka Mohabatpara Devda	Groundnut Cotton Castor Sorghum Wheat Cumin Gram	<ul style="list-style-type: none"> ✓ White grub & stem rot in groundnut ✓ Pink ballworm & sucking pests in cotton ✓ Wilt & blight in cumin 	<ul style="list-style-type: none"> ✓ IPM (Management of white grub in groundnut; pink ball worm in cotton) ✓ INM ✓ Improved package of practices ✓ IDM ✓ Problematic soil ✓ Poor quality irrigation water
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2.8. Priority thrust areas

Crop/Enterprise	Thrust area
Groundnut	Integrated Nutrient Management, Integrated Pest & Disease Management, Soil moisture conservation, Improved variety, Natural farming
Cotton	Integrated Pest Management, Integrated Nutrient Management, Natural farming
Wheat	Integrated Nutrient Management, Soil moisture conservation
Cumin	Integrated disease management, irrigation management, Natural farming
Coriander	Improved variety, IDM
Chick pea	Improved variety, INM, Natural farming
Sorghum	Soil moisture conservation
Horticulture	Improved package of practices of spices, PHT in fruits & vegetables
Fisheries	Integrated fish farming, freshwater aquaculture, seaweed cultivation
Farm women	Income generating activities, Value addition in agricultural produce, women & child care

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
5	5	15	15	12	11	240	230

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
70	52	1795	2758	19	11	2000	3658

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
150.0	253.91	11500	-

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

3.1. B. Operational areas details during 2022

S.No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.)*
1	Groundnut	✓ White grub & stem rot in groundnut	4570	Bokhira	Training; Ext. Activities
	Cumin	✓ Wilt & blight in cumin	3550	Pandavadar	Training; Ext. Activities
	Coriander	✓ Powdery mildew in coriander	2125	Mander	Training; Ext. Activities
	Cattle/ Buffalos	✓ Milk Fever & Mastitis	15545	Chikasa Mocha	FLDs; Training; Ext. Activities
2	Groundnut	✓ White grub & stem rot in groundnut	4570	Digvijaygadh	Training; Ext. Activities
	Cotton	✓ Pink ball worm & sucking pest in cotton	1950	Adityana	FLDs; Training; Ext. Activities
	Cumin	✓ Wilt & blight in cumin	3550	Bordi	Training; Ext. Activities
	Cattle/ Buffalos	✓ Milk Fever & Mastitis	15545	Bhoddar Khambhala	FLDs; Training; Ext. Activities
3	Groundnut	✓ White grub & stem rot in groundnut	4570	Tarkhai	Training; Ext. Activities
	Cotton	✓ Pink ball worm & sucking pest in cotton	1950	Revadra	FLDs; Training; Ext. Activities
	Cumin	✓ Wilt & blight in cumin	3550	Kavalka	Training; Ext. Activities
	Cattle/ Buffalos	✓ Milk Fever & Mastitis	15545	Mohabatpara Devda	FLDs; Training; Ext. Activities

3.2. Technology Assessment (Kharif 2022, Rabi 2021-22, Summer 2022)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	1				1					2
Integrated Disease Management		1								1
Storage Technique		1								1
Total	1	2			1					4

A2. Abstract on the number of technologies assessed in respect of livestock enterprises

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

B. 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)
Integrated Nutrient Management	Wheat	Application of <i>Azotobacter</i> and PSB	3	3	3.6
	Chili	Application of banana pseudostem sap	3	3	3.6
Integrated Disease Management	Groundnut	Application of <i>Pseudomonas flueroscens</i> and <i>Trichoderma harzianum</i>	3	3	3.6
Storage Technique	Groundnut	Assessment of PICS bag for Groundnut storage	3	3	0
Total	-	-	12	12	10.8

B.2. Technologies assessed under Livestock & fishery assessment

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition management	Cattle (<i>Gir</i>)	Feeding concentrated mixture and mineral mixture	3	3
Total			3	3

B.3. Technologies assessed under other enterprises

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Post-harvest management	-	-	-
Other	-	-	-

B.4. Technologies assessed under Women empowerment assessment

Name of Enterprises	Name of the technology assessed	No. of trials	No. of farmers
Nutrition security	-	-	-
other	-	-	-

C. 1. Results of Technologies Assessed

Results of On Farm Trial - 1

Crop/enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Groundnut	Irrigated	Low yield & quality deterioration of seed in groundnut	Management of collar rot in groundnut using bio inputs	3	Integrated disease management	1. Yield (q/ha) 2. Economics 3. Microbial population (collar rot causing) (CFU)	CFU	T1- 0.33x10 ³ T2- 0.11x10 ³ T3-0	Use of bioagents to control soil fungus is effective	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs. / unit	B:C Ratio
13	14	15	16	17	18
T- 1 (Farmer's practice) – No seed treatment	-	24.93	q/ha	113433	3.26
T- 2 Seed treatment with tebuconazole @ 1.5 g/kg seed	JAU, Junagadh	25.87	q/ha	120633	3.48
T- 3 Soil application of <i>Trichoderma harzianum</i> @ 0.650 g/ha & <i>Pseudomonas fluorescens</i> @ 0.650 g/ha with castor cake @ 125 kg/ha twice; at the time of sowing & after 1 month of first application	JAU, Junagadh	27.23	q/ha	129680	3.72

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

- Title of Technology Assessed - Management of collar rot in groundnut using bio inputs
- Problem Definition - Low yield & quality deterioration of seed in groundnut
- Details of technologies selected for assessment - Integrated disease management
- Source of technology - JAU, Junagadh (SAU)
- Production system and thematic area
- Performance of the Technology with performance indicators
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques
- Final recommendation for micro level situation
- Constraints identified and feedback for research
- Process of farmers participation and their reaction - Use of bioagents to control soil fungus is effective

Results of On Farm Trial - 2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Wheat	Irrigated	Reduce yield and soil fertility	Assessment of nitrogen management in wheat crop	3	Integrated nutrient management	1. Yield (q/ha) 2. Economics	-	-	Use of biofertilizers effectively reduces consumption of chemical fertilizers	-	-

Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs./unit	B:C Ratio
13	14	15	16	17	18
T- 1 - Farmer's practice - Application of only DAP & Urea in different doses	-	49.20	q/ha	84550	3.16
T- 2 – Recommended practice - Application of Nitrogen @ 120 kg/ha in three splits (¼ as basal + ½ at 20 to 25 DAS + ¼ at 35 to 40 DAS) and 60 kg P ₂ O ₅ & K ₂ O as basal	JAU, Junagadh	52.50	q/ha	93157	3.39
T- 3 – Intervention - Application of <i>Azotobacter</i> & PSB culture (250 ml/10kg) + 75% of N & P ₂ O ₅ (90-45 kg/ha NP) + 100 % K ₂ O (60 kg/ha K)	JAU, Junagadh	55.00	q/ha	99853	3.59

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

- Title of Technology Assessed - Assessment of nitrogen management in wheat crop
- Problem Definition - Reduce yield and soil fertility
- Details of technologies selected for assessment - Integrated nutrient management
- Source of technology - JAU, Junagadh (SAU)
- Production system and thematic area -
- Performance of the Technology with performance indicators -
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -
- Final recommendation for micro level situation -
- Constraints identified and feedback for research -
- Process of farmers participation and their reaction- Use of bio fertilizers effectively reduces consumption of chemical fertilizers and ultimately reduces cost of cultivation

Results of On Farm Trial - 3

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
Chili	Irrigated	Low production in Summer chili	Integrated nutrient management in Summer chili	3	Integrated nutrient management	1. Yeild (q/ha) 2. Economics	-	-	Use of banana pseudostem sap increase retention of flowers and quality of product	-	-

Contd..

Technology Assessed*	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs./unit	B:C Ratio
13	14	15	16	17	18
T- 1 - Farmer's practice - 150-50-00 (kg NPK/ha)	-	21.70	q/ha	333700	5.17
T- 2 - Recommended practice - 100-50-50 (kg NPK/ha)	JAU, Junagadh	23.03	q/ha	349617	5.57
T- 3 – Intervention - RDF + spraying of banana pseudostem sap @ 1 % thrice. First spray at starting of flowering and another at 15 days intervals.	JAU, Junagadh	24.27	q/ha	381140	5.92

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

- Title of Technology Assessed - Integrated nutrient management in Summer chili
- Problem Definition - Low production in Summer chili
- Details of technologies selected for assessment - Integrated nutrient management
- Source of technology - JAU, Junagadh (SAU)
- Production system and thematic area -
- Performance of the Technology with performance indicators -
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -
- Final recommendation for micro level situation -
- Constraints identified and feedback for research -
- Process of farmers participation and their reaction- Use of banana pseudo stem sap increase retention of flowers and quality of product

Results of On Farm Trial – 4

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
Cattle	-	Low fat %, Financial loss	Effect of supplementation of concentrates on milk production of <i>Gir</i> cow	3	Nutrition management	1. Milk yield 2. Income	- -	9.71 138 Rs./animal/day	This tech. increases milk yield	-	-

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs./animal	B:C Ratio
13	14	15	16	17	18
T-1 - Farmers Practice – Control – No supplement feeding	-	2425	lit/ani./annum	27935	1.28
T-2 - Feeding of concentrated mixture	-	2760	lit/ani./annum	35495	1.33
T-3 - Feeding of concentrated mixture + Mineral mixture	Animal Nutrition Research Station, AAU, Anand	3010	lit/ani./annum	42995	1.38

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

- Title of Technology Assessed - Effect of supplementation of concentrates on milk production of *Gir* cow
- Problem Definition - Low fat %, Financial loss
- Details of technologies selected for assessment - Nutrition management
- Source of technology - Animal Nutrition Research Station, AAU, Anand (SAU)
- Production system and thematic area -
- Performance of the Technology with performance indicators -
- Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques -
- Final recommendation for micro level situation -
- Constraints identified and feedback for research -
- Process of farmer's participation and their reaction- This technology increases milk yield

Results of On Farm Trial – 5

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
Groundnut	-	Reduce storage loss & bruchid damage	Assessment of PICS bag for groundnut storage	3	Resource conservation	1. Weight loss 2. Bruchid damage	% %	T ₁ – 12.1 T ₂ – 6.3 T ₃ – 0.8 T ₁ – 19.8 T ₂ – 8.7 T ₃ – 1.2	This tech. reduces storage loss & prevent pests damage	-	-

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in Rs./animal	B:C Ratio
13	14	15	16	17	18
T-1 - Farmers Practice – Open heaps in storage godown	-	-	-	-	-
T-2 - Local practices for storage in plastic bag/ woven bags	-	-	-	-	-
T-3 - Storage in Triple layer hermetic “Purdue Improved Crop Storage”(PICS) bags	JAU, Junagadh	-	-	-	-

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

- Title of Technology Assessed - Assessment of PICS bag for groundnut storage
- Problem Definition - Reduce storage loss & bruchid damage
- Details of technologies selected for assessment - Resource conservation
- Source of technology - JAU, Junagadh (SAU); formerly it was from ICRISAT, Hyderabad
- Production system and thematic area -
- Performance of the Technology with performance indicators -
- Feedback, matrix scoring of various technology parameters done through farmer’s participation / other scoring techniques -
- Final recommendation for micro level situation -
- Constraints identified and feedback for research -
- Process of farmer’s participation and their reaction- This technology reduces storage loss & prevent pests damage

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 2022 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
1	Wheat	Varietal Evaluation	Improved variety – GW-451	Trainings, FLDs	8	215	135
2	Wheat	INM	<i>Azotobacter</i> + PSB	Trainings, OFTs	10	105	140
3	Groundnut	Varietal Evaluation	Improved variety GJG-22	Trainings, FLDs & Field days	38	1225	2450
4	Gram	Varietal Evaluation	Improved variety GJG-6	Trainings, FLDs & Field days	11	180	350
5	Green gram	Varietal Evaluation	Improved variety GM -4	Trainings, FLDs	29	880	505
6	Cotton	IPM	Pheromone trap + <i>Beauveria bassiana</i>	Trainings, FLDs & Field days	20	1025	2550
7	Cattle/ buffalos	Nutrition management	Mineral mixture, Bypass fat	Trainings, FLDs	21	255	-

B. Details of FLDs implemented during 2022 (Kharif 2022, Rabi 2021-22, Summer 2022)

Cereals

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	Wheat	Varietal	GW-451	Rabi-2021-22	4	4	-	10	10	Nil

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					
Wheat	Rabi-2021-22	Irrigated	Medium Black	Low	Medium	High	Groundnut	15-25/11/21	03/2022	1004	31

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Increase yield over variety GJW-496 and other private varieties
2	Higher tillering than other varieties

Farmers' reactions on specific technologies

S. No	Feed Back
1	Yield was higher than Lok-1 variety

Horticultural 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	Onion	Varietal	GJRO-11	Rabi – 2021-22	4	0	-	0	0	Non availability of seed
2	Onion	IDM	<i>Pochonia clematidosporium</i> + <i>Trichoderma harzianum</i>	Rabi – 2021-22	4	4	-	10	10	Nil
3	Mango	IPM	Fruit fly trap	Rabi – 2021-22	4	4	-	10	10	Nil

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					
Onion	Rabi-2021-22	-	-	-	-	-	-	-	-	-	-
Onion	Rabi-2021-22	Irrigated	Medium Black	Low	Medium	High	Groundnut	10-25/11/21	05/2022	1004	31
Mango	Rabi-2021-22	Irrigated	Red laterite	Low	Medium	High	-	-	-	1004	31

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Application of <i>Pochonia clematidosporium</i> found useful to control nematode infestation in onion
2	Quality of mango was improved due to less infestation of fruit fly

Farmers' reactions on specific technologies

S. No	Feed Back
1	Quality of onion was good
2	Less infestation of fruit fly in mango

Oilseeds

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	Groundnut	Varietal	GJG-22	Khariif-2022	4	4	-	10	10	Nil

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	Khariif-2022	Rainfed	Medium Black	Low	Medium	High	Groundnut/ wheat/cumin	15-20/06/2022	10/2022	1176	35

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Improved variety of Groundnut GJG -22 is better than the existing variety GG-20 in production

Farmers' reactions on specific technologies

S. No	Feed Back
1	Production of GJG-22 was higher
2	Higher oil percentage in GJG-22 preferred by oil miller

Pulses

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	Green gram	Varietal	GM-4	Summer-2022	4	4	-	10	10	Nil

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					
Green gram	Summer -2022	Irrigated	Medium Black	Low	Medium	High	Wheat/ Cumin/ Coriander	25 to 28/02/22	05/2022	1004	31

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Variety of greengram GM-4 is better performer than local varieties

Farmers' reactions on specific technologies

S. No	Feed Back
1	Increase production than local varieties

Cotton & other 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	Cotton	IPM	Pheromone trap and <i>Beauveria bassiana</i>	<i>Kharif- 2022</i>	10	10	2	23	25	Nil

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					
Cotton	<i>Kharif- 2022</i>	Rainfed/ Irrigated	Medium Black	Low	Medium	High	G. Nut/ Cotton	15- 20/06/2022	01/2023	1176	35

Technical Feedback on the demonstrated technologies

S. No	Feed Back
1	Quality of lint was improved as less pink ball worm infestation occurs

Farmers' reactions on specific technologies

S. No	Feed Back
1	IPM (Pheromone trap and <i>Beauveria bassiana</i>) in cotton reduces pink ballworm damage
2	Increases yield and quality
3	Reduces labour charges

Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average Yield (q/ha)	Local Yield (q/ha)	% increase in productivity over local check
Chickpea	Rabi-2021-22	HNPV + <i>Beauveria bassiana</i>	Rainfed	24.31	21.81	11.55

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	-	-	-	-
2	Farmers Training	11	-	190	-
3	Media coverage	-	-	-	-
4	Training for extension functionaries	1	-	71	-

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																		
	Varietal	Improved variety	GJG-22	10	4	37.50	10.00	29.63	26.19	13.13	48500	175813	127313	3.63	48500	155430	106930	3.20

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										
Greengram																		
	Varietal	Improved variety	GM-4	10	4	17.50	12.50	15.38	13.75	12.36	22100	96269	74169	4.36	22100	86050	63950	3.89

FLD on Other crops

Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					H	L	A										
Cereals																	
Wheat																	
	Varietal	Improved variety (GW-451)	10	4	56.25	43.75	52.75	48.13	9.65	39200	132116	92916	3.37	39200	120526	81326	3.07
Vegetables																	
Onion																	
	Varietal	Improved variety (GJRO-11)	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
	IDM	<i>Pochonia chlamydosporia</i> + <i>Trichoderma harzianum</i>	10	4	400.0	200.0	311.81	279.86	11.58	100581	345955	245374	3.44	110173	310594	200420	2.82
Fruit crops																	
Mango																	
	IPM	Fruit fly trap	10	4	98.75	81.88	90.99	81.50	11.75	141800	530366	388566	3.74	148500	422969	274469	2.85
Commercial Crops																	
Cotton																	
	IPM	Pheromone trap + <i>Beauveria bassiana</i>	25	10	37.50	15.00	26.85	24.68	8.98	45454	213599	168145	4.70	48303	191498	143195	3.96

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Buffalo																	
-	Nutrient Management	Bypass fat	20	20	2650	2400	10.41	-	-	110000	163000	53000	1.48	107000	145000	38000	1.35
-	Nutrient Management	Chelated mineral mixture	20	20	2750	2430	13.16	-	-	115000	170000	55000	1.47	106000	147000	41000	1.39

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
Drudgery reduction	Revolving milking stool	5	Relevance factor	Highly relevant	Medium relevant

FLD on Other Enterprise: Kitchen Gardening

Nutrition garden components	Thematic area	Area (sq mt)	No. of Farmer	No. of Units	Yield (Kg)- supply of vegetables, fruits, etc from KG in the year		% change in yield	Household size (number)		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check*		Demo	Check	Gross Cost	Gross Return /Savings*	Net Return	BCR (R/C)	Gross Cost	Gross Return / Savings*	Net Return	BCR (R/C)
Kitchen Gardening (Rab-2021-22)	Kitchen Gardening	Improved varieties	50	50/ crop	48.52	-	-	-	-	-	-	-	-	-	-	-	-
Kitchen Gardening (Kharif-2022)	Kitchen Gardening	Improved varieties by JAU*	50	50/ crop	40.19	-	-	-	-	-	-	-	-	-	-	-	-

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
I Crop Production										
Weed Management	1	13	0	13	0	0	0	13	0	13
Natural Resource Management	1	15	3	18	0	0	0	15	3	18
Total	2	28	3	31	0	0	0	28	3	31
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	1	15	0	15	0	0	0	15	0	15
Protective cultivation	1	0	22	22	0	0	0	0	22	22
Total (a)	2	15	22	37	0	0	0	15	22	37
b) Fruits										
Processing & value addition	1	0	25	25	0	0	0	0	25	25
Total (b)	1	0	25	25	0	0	0	0	25	25
c) Ornamental Plants										
Total (c)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Total (d)	0	0	0	0	0	0	0	0	0	0
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	1	9	8	17	0	0	0	9	8	17
Total (f)	1	9	8	17	0	0	0	9	8	17
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
Grand Total (a to g)	4	24	55	79	0	0	0	24	55	79
III Soil Health and Fertility Management										
Total	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Management										
Dairy Management	1	0	29	29	0	0	0	0	29	29
Disease Management	3	25	46	71	0	0	0	25	46	71
Feed & fodder technology	1	25	0	25	0	0	0	25	0	25
Production of quality animal products	1	0	21	21	0	0	0	0	21	21
Total	6	50	96	146	0	0	0	50	96	146
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	25	25	0	0	0	0	25	25
Processing and cooking	1	0	21	21	0	0	0	0	21	21
Value addition	1	0	26	26	0	0	0	0	26	26
Total	3	0	72	72	0	0	0	0	72	72
VI Agril. Engineering										
Total	0	0	0	0	0	0	0	0	0	0

VII Plant Protection										
Integrated Pest Management	2	17	28	45	0	0	0	17	28	45
Integrated Disease Management	3	49	0	49	1	0	1	50	0	50
Total	5	66	28	94	1	0	1	67	28	95
VIII Fisheries										
Total	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site										
Total	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics										
Total	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry										
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	20	168	254	422	1	0	1	169	254	423

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
I Crop Production										
Crop Diversification	1	25	0	25	0	0	0	25	0	25
Production and Management technology	2	9	24	33	0	0	0	9	24	33
Total	3	34	24	58	0	0	0	34	24	58
II Horticulture										
a) Vegetable Crops										
Protective cultivation	1	0	29	29	0	0	0	0	29	29
Total (a)	1	0	29	29	0	0	0	0	29	29
b) Fruits										
Layout and Management of Orchards	1	25	0	25	0	0	0	25	0	25
Total (b)	1	25	0	25	0	0	0	25	0	25
c) Ornamental Plants										
Total (c)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	1	0	27	27	0	0	0	0	27	27
Total (d)	1	0	27	27	0	0	0	0	27	27
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	1	11	0	11	0	0	0	11	0	11
Total (f)	1	11	0	11	0	0	0	11	0	11
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
Grand Total (a to g)	4	36	56	92	0	0	0	36	56	92
III Soil Health and Fertility Management										
Soil fertility management	1	25	0	25	0	0	0	25	0	25
Total	1	25	0	25	0	0	0	25	0	25

IV Livestock Production and Management										
Disease Management	1	0	25	25	0	0	0	0	25	25
Feed & fodder technology	1	18	4	22	0	0	0	18	4	22
Total	2	18	29	47	0	0	0	18	29	47
V Home Science/Women empowerment										
Processing and cooking	1	0	35	35	0	0	0	0	35	35
Value addition	1	0	21	21	0	0	0	0	21	21
Location specific drudgery reduction technologies	1	0	24	24	0	0	0	0	24	24
Women and child care	1	0	19	19	0	0	0	0	19	19
Total	4	0	99	99	0	0	0	0	99	99
VI Agril. Engineering										
Post Harvest Technology	1	0	27	27	0	0	0	0	27	27
Total	1	0	27	27	0	0	0	0	27	27
VII Plant Protection										
Integrated Pest Management	1	12	0	12	2	0	2	14	0	14
Integrated Disease Management	2	16	20	36	0	0	0	16	20	36
Total	3	28	20	48	2	0	2	30	20	50
VIII Fisheries										
Total	0	0	0	0	0	0	0	0	0	0
IX Production of Inputs at site										
Total	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics										
Total	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry										
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	18	141	255	396	2	0	2	143	255	398

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
I Crop Production										
Weed Management	1	13	0	13	0	0	0	13	0	13
Crop Diversification	1	25	0	25	0	0	0	25	0	25
Natural Resource Management	1	15	3	18	0	0	0	15	3	18
Production and Management technology	2	9	24	33	0	0	0	9	24	33
Total	5	62	27	89	0	0	0	62	27	89
II Horticulture										
a) Vegetable Crops										
Off-season vegetables	1	15	0	15	0	0	0	15	0	15
Protective cultivation	2	0	51	51	0	0	0	0	51	51
Total (a)	3	15	51	66	0	0	0	15	51	66

b) Fruits										
Layout and Management of Orchards	1	25	0	25	0	0	0	25	0	25
Processing & value addition	1	0	25	25	0	0	0	0	25	25
Total (b)	2	25	25	50	0	0	0	25	25	50
c) Ornamental Plants										
Total (c)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management technology	1	0	27	27	0	0	0	0	27	27
Total (d)	1	0	27	27	0	0	0	0	27	27
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management technology	2	20	8	28	0	0	0	20	8	28
Total (f)	2	20	8	28	0	0	0	20	8	28
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
Grand Total (a to g)	8	60	111	171	0	0	0	60	111	171
III Soil Health and Fertility Management										
Soil fertility management	1	25	0	25	0	0	0	25	0	25
Total	1	25	0	25	0	0	0	25	0	25
IV Livestock Production and Management										
Dairy Management	1	0	29	29	0	0	0	0	29	29
Disease Management	4	25	71	96	0	0	0	25	71	96
Feed & fodder technology	2	43	4	47	0	0	0	43	4	47
Production of quality animal products	1	0	21	21	0	0	0	0	21	21
Total	8	68	125	193	0	0	0	68	125	193
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	1	0	25	25	0	0	0	0	25	25
Processing and cooking	2	0	56	56	0	0	0	0	56	56
Value addition	2	0	47	47	0	0	0	0	47	47
Location specific drudgery reduction technologies	1	0	24	24	0	0	0	0	24	24
Women and child care	1	0	19	19	0	0	0	0	19	19
Total	7	0	171	171	0	0	0	0	171	171
VI Agril. Engineering										
Post Harvest Technology	1	0	27	27	0	0	0	0	27	27
Total	1	0	27	27	0	0	0	0	27	27
VII Plant Protection										
Integrated Pest Management	3	29	28	57	2	0	2	31	28	59
Integrated Disease Management	5	65	20	85	1	0	1	66	20	86
Total	8	94	48	142	3	0	3	97	48	145
VIII Fisheries										
Total	0	0	0	0	0	0	0	0	0	0

IX Production of Inputs at site											
Total	0	0	0	0	0	0	0	0	0	0	0
X Capacity Building and Group Dynamics											
Total	0	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry											
Total	0	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	38	309	509	818	3	0	3	312	509	821	

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	1	0	13	13	0	0	0	0	13	13
Production of organic inputs	1	13	0	13	0	0	0	13	0	13
Total	2	13	13	26	0	0	0	13	13	26

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Value addition	1	0	22	22	0	0	0	0	22	22
Total	1	0	22	22	0	0	0	0	22	22

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Nursery Management of Horticulture crops	1	0	13	13	0	0	0	0	13	13
Production of organic inputs	1	13	0	13	0	0	0	13	0	13
Value addition	1	0	22	22	0	0	0	0	22	22
Total	3	13	35	48	0	0	0	13	35	48

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Low cost and nutrient efficient diet designing	1	0	61	61	0	10	10	0	71	71
Natural Farming	1	23	2	25	0	0	0	23	2	25
Total	2	23	63	86	0	10	10	23	73	96

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Productivity enhancement in field crops	-	-	-	-	-	-	-	-	-	-
Total	0	0	0	0	0	0	0	0	0	0

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Low cost and nutrient efficient diet designing	1	0	61	61	0	10	10	0	71	71
Natural Farming	1	23	2	25	0	0	0	23	2	25
Total	2	23	63	86	0	10	10	23	73	96

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop production and management										
Total										
Production and value addition										
Fruit Plants										
Ornamental plants										
Spices crops	1	5	0	5	53	3	56	58	3	61
Total	1	5	0	5	53	3	56	58	3	61
Post harvest technology and value addition										
Total										
Farm machinery										
Soil & water conservation	1	54	34	88	9	2	11	63	36	99
Total	1	54	34	88	9	2	11	63	36	99
Livestock and fisheries										
Livestock production and management	5	958	475	1433	62	33	95	1020	508	1528
Total	5	958	475	1433	62	33	95	1020	508	1528
Home Science										
Total										
Agricultural Extension										
Grading & standardization	1	78	1	79	11	0	11	89	1	90
Total	1	78	1	79	11	0	11	89	1	90
GRAND TOTAL	8	1095	510	1605	135	38	173	1230	548	1778

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

Area of training	No. of Courses	No. of Participants								
		General/ Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop production and management										
Total										
Post harvest technology and value addition										
Total										
Livestock and fisheries										
Total										
Income generation activities										
Skill development in recent trends (Beauty Parlour)	1	0	15	15	0	0	0	0	15	15
Total	1	0	15	15	0	0	0	0	15	15
GRAND TOTAL	1	0	15	15	0	0	0	0	15	15

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of extension personnel	Total
Advisory Services (Other than KMAS)	3	1282	0	1282
Diagnostic visits	11	47	0	47
Field Day	0	0	0	0
Group discussions	0	0	0	0
Kisan Ghosthi	1	87	2	89
Film Show	5	263	0	263
Self -help groups	0	0	0	0
Kisan Mela	1	324	5	329
Exhibition	0	0	0	0
Scientists' visit to farmers field	11	47	0	47
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	1	268	3	271
Method Demonstrations	0	0	0	0
Celebration of important days	9	478	0	478
Special day celebration	9	1053	0	1053
Exposure visits	0	0	0	0
College/School students visited KVK	12	625	0	625
Agricultural drone demonstration	2	180	3	183
Capacity building programme - disease management in animals	2	83	0	83
Farmers visit to KVK	1	114	0	114
Total	68	4851	13	4864

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

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	0
Newspaper coverage	8
Popular articles	1
Radio Talks	7
TV Talks	0
Animal health camps (Number of animals treated)	0
Social Media (No. of platforms Used)	1
Research paper	1
Abstract	5
Total	23

3.6 Online activities during year 2022

S. No.	Activity Type	Mode of implementation	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training				
	Total				
B	Farmers scientist's interaction programme				
	Total				
C	Farmers seminars				
1	Natural farming	You Tube live	Natural farming	1	106
	Total	-	-	1	106
D	Expert lectures				
	Total				
E	Any other (Pl. specify)				
1	Live webcast	You tube live	Live webcast of Hon'ble PM pogrammes at KVK	3	716
	Total	-	-	3	716
	GRAND TOTAL (A+B+C+D+E)	-	-	4	822

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						
	Wheat	GW-451	-	48.41	153411	24
Oilseeds						
	Groundnut#	GG-20	-	64.31	269652	0
	Groundnut#	GJG-17	-	21.25	219895	0
	Groundnut#	GJG-22	-	4.9	28655	0
Pulses						
	Green gram	GM-4	-	8	90600	21
Others						
	Coconut*	TxD	-	2809	56180	0
Total	-	-	-	2956	818393	45

*coconut in numbers

#groundnut breeder seed was not sold to farmers

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	-	-	-	-	-	-
Total	0	0	0	0	0	0

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity kg/lit	Value (Rs.)	No. of Farmers
Bio Fertilizers	-	-	-	-
Total	0	0	0	0

Production of livestock materials

Particulars of Live stock	Name of the animal / bird / aquatics	Name of the breed	Type of Produce	unit (no./ lit/kg)	Quantity	Value (Rs.)	No. of Farmers
Dairy animals							
Cows	-	-	-	-	-	-	-
Total	0	0	0	0	0	0	0

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

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

B. Literature developed/published

Item	Title	Authors name	Number
Research papers	A review on milking management practices of dairy animal in India	Dr.H.A.Patel, Dr.M.D.Odedra, Dr.A.R.Ahlawat, Dr.V.V.Gamit, Dr.V.S.Prajapati and Dr.P.H.Agravat	-
Technical reports	ZREAC (<i>Khariif</i>)	-	-
	ZREAC (<i>Rabi-Summer</i>)	-	-
	AGRESCO Report	-	-
	Annual Progress Report (2021)	-	-
	SAC report (2021-22)	-	-
	Annual Action Plan report (2022)	-	-
News letters	JAU news letter	-	4
Technical bulletins	-	-	-
Popular articles	<i>Jamin Sudharak: Lilo Padvash</i>	D.N.Hadiya, V.M.Savaliya, H.A.Patel and H.R.Vadar	-
Extension literature			
Abstract	Impact of frontline demonstrations on yield of chickpea (<i>Cicer arietinum</i> L.) in Porbandar district of Gujarat state	V.M.Savaliya, J.V.Chovatia & D.N.Hadiya	
	Analysis of FLDs on integrated nutrient management in wheat in the Porbandar district of Gujarat	S.J.Sindhi, V.M.Savaliya & P.S.Gorfad	
	Scale for attitude of farmers towards agricultural technology management agency (ATMA)	J.V.Chovatia, V.M.Savaliya & P.N.Panchani	
	Technological gap in adoption of crop production technology of greengram	H.R.Vadar, R.K.Odedra & J.V.Chovatia	
	Constraints faced by farmers in use of smartphone for agricultural information	P.S.Gorfad, H.R.Vadar & K.P.Gorfad	
TOTAL	17	-	-

C. Details of Electronic Media Produced

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

D. Details of Social Media Platforms Created / Used

S. 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	2	WhatsApp	245
5	Twitter Account	-	-	-
6	Any other (Pl. Specify)	-	-	-

E. Success Stories / Case studies, if any**1. Natural farming****A. Farmer details**

- i. Name of farmer - Hemantbhai Rajashibhai Ravaliya
- ii. Address - At-Kantol, Block- Kutiyana, District- Porbandar
- iii. Mobile no. - 9574678862
- iv. Age - 43yrs
- v. Education - 7th std

B. Agriculture details

- i. Land (ha) (Irrigated)- 2.0
- ii. Major crops grown
 - Kharif* - Groundnut
 - Semi Rabi* - Castor
- iii. Animal husbandry
 - Gir Cow- 3
 - Buffalo- 2

C. Details of Technology**Formulation Prepared**

1. For seed treatment- *Bijamrut*
2. FYM - FYM prepared at farm level
3. Pesticide- *Agniastra, Bramhastra, Dasparni ark*
4. Plant Growth promoter- Milk + Jaggery, *Jivamrut*

Cultural Practices

- i. Seed treatment – *Bijamrut*
- ii. Irrigation Practices

Crop	No. of Irrigation	Irrigation System Adopted
Groundnut	As per requirement	Sprinkler
Castor	As per requirement	Flood

iii. Nutrient Management of Soil Fertility

Name	Material and Method Used	Quantity (t/ha)
FYM	Dung, Farm waste	9.00

iv. Plant Protection Practices

Name of pest/diseases	Natural formulation used for control	Quantity
Helicoverpa, Heliothis, Castor Semi looper, sucking pest (Whitefly, Jassids, Aphids)	<i>Agniastra</i> <i>Bramhastra</i> <i>Dasparni ark</i>	200-300 ml/15 liter water – Initial 1 lit/15 liter water- at final stage

v. Plant growth promoter

Natural formulation used for growth	Quantity
Milk + Jaggery	250ml Milk + 100gm Jaggery /15 liter water
<i>Jivamrut</i>	400-500 ml/15 liter water – Initial 1 to 1.5 lit/15 liter water- at final stage

D. Yield and Economics

Parameters	Groundnut	Castor
Year	2021-22	2021-22
Area	1.6 ha	1.6 ha
Economic yield (kg/ha)	2500	2750
Cost of cultivation (Rs/ha)	30000	27000
Net returns (Rs/ha)	110000	168250
Price (Rs/kg)	56	71

E. Horizontal spread

Many farmers visited his field & appreciated him for the success and showed interest to do the same practice.

2. Feeding of mineral mixture to milking animals**A. Farmer Details**

- i. Name of farmer - Goraniya Dilipbhai Meramanbhai
- ii. Address - At -Kolikhada, Ta –Porbandar, Di - Porbandar
- iii. Mobile number - 7016562520
- iv. Age - 28 yr
- v. Education - 10th std.
- vi. Size of land holding (ha) : 2.0

B. Intervention /Technology details

Farmer has adopted the scientific concepts to rear his animals as per the suggestions given by KVK scientist. Scientist suggests him to use mineral mixture powder daily @ 50g/animal. He gets better milk production by practicing this. He gets net profit of Rs.58400/- instead of Rs.43400/- per animal.

C. Economic information**Farmer practices (without feeding mineral mixture)**

Year	Milking animal	Total production	Total income	Total expenditure	Net profit
2021-22	1	3100	191000	147600	43400

Suggested practice (Use of mineral mixture)

Year	Milking animal	Total production	Total income	Total expenditure	Net profit
2021-2022	1	3410	209600	151200	58400

D. Horizontal spread

Observing these scientific practices of feeding the mineral mixture to milking animals, 120 farmers started to use mineral mixture powder at Kolikhada village of Porbandar taluka.

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

NIL

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)

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

5.1. Indicate the specific training need analysis tools/methodology followed for**A. Practicing Farmers**

a) Nil

B. Rural Youth

a) Nil

C. In-service personnel

a) Nil

5.2. Indicate the methodology for identifying OFTs/FLDs**For OFT:**

i) Field level observations

For FLD:

i) New variety/technology

ii) Poor yield at farmers level

iii) Existing cropping system

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year) - 2022-23

Sr No	Taluka	Name of the block	Name of the village
1	Porbandar	Cluster I	Bokhira Pandavadar Mander Chikasa Mocha
2	Ranavav	Cluster II	Digvijaygadh Adityana Bordi Bhoddar Khambhala

3	Kutiyana	Cluster III	Tarkhai Revadra Kavalka Mohabatpara Devda
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- ii. No. of farm families selected per village : -
- iii. No. of survey/PRA conducted : 15
- 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: -

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
1 State department of Agriculture	Most of organizations are members of Scientific Advisory Committee of this KVK and have linkage with different mandatory activities conducting training programmes and demonstration on implements, <i>Khedut Shibir</i> , <i>Kishan Gosthy</i> , Field Day and Vocational Trainings, Sponsored trainings, contribution received for infrastructural development etc.
District Agriculture Officer	
ATMA	
Deputy Director, FTC	
Dy. Director of Agriculture (Extension)	
Dy. Director of Horticulture	
Dy. Director of Animal husbandry	
Asstt. Director of Fisheries	
2. Asstt. Conservator of Forest	
3. Taluka purchase and sales Union (Porbandar, Kutiyana, Ranavav)	
4. State Bank of India	Dissemination of activities
5. DWDU, Porbandar	
6. Doordarshan Kendra	
7. All India Radio	

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 (Lakh Rs.)
ATIC	April, 2014	State Govt.	18.50

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?

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	Meetings	-	2	1	-
02	Research projects	-	-	-	-
03	Training programmes	-	2	1	-
04	Demonstrations	-	-	-	-

05	Extension Programmes				
	Kisan Mela	-	1	-	-
	Technology Week	-	-	1	-
	Exposure visit	-	-	-	-
	Exhibition	-	1	-	-
	Soil health camps	-	-	-	-
	Animal Health Campaigns	-	-	-	-
	Others (Important day celebration)	-	-	2	-
06	Publications				
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	Other Activities (Pl. specify)				
	Watershed approach	-	-	-	-
	Integrated Farm Development	-	-	-	-
	Agri-preneurs development	-	-	-	-

D. Give details of programmes implemented under National Horticultural Mission

S. 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

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

F. Details of linkage with RKVY

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

G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana)

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Trainings	With ATMA	0	0	-

H. Details of linkage with NFSM

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

I. Details of linkage with SMAF (Sub-mission on Agroforestry)

S. 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

Sr. No.	Name of organization
1	District Agriculture Officer
2	ATMA
3	Deputy Director, FTC
4	Dy. Director of Agriculture (Extension)
5	Dy. Director of Horticulture
6	Dy. Director of Animal husbandry

8. Innovative Farmers Meet

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

9. Farmers Field School (FFS)

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

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

- ✓ Chickpea variety GJG-6 gave higher yield (~15 %) as compared to Digvijay
- ✓ Wheat var. GW-451 have production (~10%) than other local varieties
- ✓ Application of *Beauveria bassiana* + HNPV effectively control pod borer in chickpea
- ✓ Application of *Pochonia chlamydosporia* + *Trichoderma harzianum* effectively control rotting in onion
- ✓ Feeding of mineral mixture powder to cattle & buffalo increases milk production & growth rate of animal
- ✓ Less infestation of Yellow Vein Mosaic Virus was observed in greengram var. GM-4
- ✓ Adoption of vegetable varieties released by JAU was increasing due to kitchen gardening FLDs
- ✓ Number of kitchen gardens were found in trend especially in vicinity of the FLDs

10.2. Technical Feedback from the KVK Scientists (Subject wise) to the research institutions/ universities**1. Horticulture**

- ✓ Heavy incidence of sucking pests was observed in *Rabi* crop – cumin
- ✓ Heavy incidence of spiraling whitefly was observed in horticultural and ornamental crops
- ✓ Malformation is major issue in mango

2. Plant protection

- ✓ Low incidence of pink ball worm in cotton crop but heavy and continuous rainfall cause yield loss
- ✓ Chickpea crop was damaged/wilting due to salinity in *Ghed* area (Village -Kadachch)
- ✓ Incidence of *Spodoptera litura* in groundnut crop in later stage
- ✓ Wilting in coriander was observed in various parts of the districts can cause lower production

3. Crop production

- ✓ Growth and development of wheat and coriander is not upto the mark, may be due to climatic condition
- ✓ Certified seed of latest groundnut varieties should be made available to the farmers

4. Home Science

- ✓ To develop the machineries and tools for reduce the drudgery for farm women
- ✓ To develop models of urban agriculture to ensure food and nutritional security
- ✓ To develop package of practices for organic management of pest and disease in kitchen gardening vegetables

5. Animal Husbandry

- ✓ For lumpy skin disease in animals, use of natural remedies for control the disease gave effective results
- ✓ Use of ivermectin bolus is effective to control the ecto and endo parasite infection in animals

11. Technology Week celebration during 2022: Yes/No, If Yes

Period of observing Technology Week : From 19th to 23rd September, 2022
 Online / Offline : Offline
 Total number of farmers visited : 263
 Total number of agencies involved : 2
 Number of demonstrations visited by the farmers within KVK campus: 7

Other Details

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology
Lectures organized	20	263	PHT & value addition in groundnut, seed production technology, IPDM in groundnut, Protected cultivation, animal nutrition and health care, artificial insemination, nursery management technology
Exhibition	5	263	Implements, water harvest structure, vermicompost unit, crop cafeteria, green house, net house
Film show	5	263	Oilseeds and pulses
Farm Visit	5	263	-
Supply of Literature (No.)	5	750	-
Total number of farmers visited the technology week	-	263	-

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	-	-
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 (Seed distribution/sold by KVK)

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

-- NIL --

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

-- NIL --

14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
-	-	-	-

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other	Total
Porbandar	Text only	-	-	-	-	-	-	-
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	-	-	-	-	-	-	-
	Total farmers Benefitted	-	-	-	-	-	-	-

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	
-	-	-	-	-	-	-	-	-	-

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.)	
				Variety	Type of Produce	Qty (qtl.)	Cost of inputs	Gross income
Cereals								
Wheat	30-11-21	16-03-22	1	GW-451	Seed	48.41	-	-
Pulses								
Greengram	08-03-22	11-05-22	1	GM-4	Seed	8.00	-	-
Oilseeds								
Groundnut	19-07-21	15-11-21	10	GG-20	Seed	64.31	-	-
	22-06-21	11-11-21	2	GJG-17	Seed	21.25	-	-
	21-07-21	13-11-21	1	GJG-22	Seed	4.90	-	-

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

Sl. No	Bio Products	Name of the Product	Qty (kg/lit)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
	Bio- Fertilizers	-	-	-	-	-
	Bio- Fungicides	-	-	-	-	-
	Bio- pesticides	-	-	-	-	-
	Bio-Agents	-	-	-	-	-

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

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

E. Utilization of hostel facilities

Accommodation available (No. of beds): 30

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

F. Database management

S. No	Database target	Database created
-	-	-

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

Amount sanctioned (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.)		
-	-	5.0 ha micro sprinkler	1	1	-	315	7	-	10 ha

H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level?

Yes

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
0.025	Vegetable crops	5	550
0.12	Fruit crops	4	245
-	Others if any	-	-

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

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
15	Vegetable crops	10	200
3	Fruit crops	2	15
-	Others if any	-	-

I. Details of Skill Development Trainings organized

S.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
1	Porbandar	As an expert	24	0	0	0	30	0	30

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	-	-	-	-	-	-	-
With KVK	SBI, Porbandar	Porbandar	000456	Training Organizer, KVK, Khapat – porbandar	10250767705	360002121	SBIN0000456

B. Utilization of KVK funds during the year 2022-23 (Rs. in lakh) (Till Dec, 2022)

S. No.	Particulars	Sanctioned	Released	Expenditure
A	Capital (Non Recurring)	-	-	-
B	Salary	77.00	79.29	29.77
C	General (Contingencies and TA)	7.10	5.37	5.46
TOTAL (A+B+C)		84.10	84.66	35.23

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

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2018 to March 2019	33.96	40.49	26.01	48.44
April 2019 to March 2020	48.44	30.53	22.12	56.85
April 2020 to March 2021	56.85	22.92	29.08	50.69
April 2021 to March, 2022	50.69	30.62	13.28	68.03
April 2022 to March 2023	68.03	13.83	22.78	59.08

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	Dates
Dr.H.A.Patel	Scientist	Faculty Development Programme for Extension Functionaries	DEE, JAU	Online	03-05.02.2022
V.M.Savaliya	Scientist	Faculty Development Programme for Extension Functionaries	DEE, JAU	Online	03-05.02.2022
A.M.Gamit	Agriculture Officer	Faculty Development Programme for Extension Functionaries	DEE, JAU	Online	03-05.02.2022
Dr.H.N.Der	Scientist	Innovations in Potato Improvement, Production & Utilization of Technologies for Doubling Farmer's Income	CPRI, ICAR, Shimla	Offline	18.01.2022 to 7.02.2022
V.M.Savaliya	Scientist	Workshop for entry of DFI stories into Excel	ATARI, Pune	Offline	23-24.05.2022
Dr.H.R.Vadar	Senior Scientist and Head	National KVK conference	Shimla	Offline	01-02.06.2022
Dr.H.N.Der	Scientist	Success story writing skills for print and electronic media	DEE, JAU, Junagadh	Offline	08-10.06.2022
V.M.Savaliya	Scientist	Success story writing skills for print and electronic media	DEE, JAU, Junagadh	Offline	08-10.06.2022
A.M.Gamit	Agriculture Officer	Success story writing skills for print and electronic media	DEE, JAU, Junagadh	Offline	08-10.06.2022
Dr.H.N.Der	Scientist	Upgradation of HRD skills for extension personnel	DEE, JAU, Junagadh	Offline	13-15.06.2022
Dr.H.A.Patel	Scientist	Upgradation of HRD skills for extension personnel	DEE, JAU, Junagadh	Offline	13-15.06.2022
D.N.Hadiya	Agriculture Officer	Upgradation of HRD skills for extension personnel	DEE, JAU, Junagadh	Offline	13-15.06.2022
V.M.Savaliya	Scientist	Synergetic Extension approaches for livelihood improvement and agricultural development	JAU, Junagadh	Offline	24-25.06.2022
Dr.H.R.Vadar	Scientist	Synergetic Extension approaches for livelihood improvement and agricultural development	JAU, Junagadh	Offline	24-25.06.2022
Dr.H.A.Patel	Scientist	Natural Farming	JAU, Junagadh	Offline	30.06.2022
D.N.Hadiya	Agriculture Officer	Use of social media skills for extension	EEL, Anand	Offline	10-14.10.2022
V.M.Savaliya	Scientist	Natural Farming	Gurukul, Kurukshetra, Haryana	Offline	8-9.12.2022

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)
Degam	10	<ul style="list-style-type: none"> ➤ Bench mark survey regarding farmers status were done ➤ 3 FLDs on relevant technologies & seed of improved varieties were provided to the farmers ➤ 7 ON & OFF campus trainings were conducted 	<ul style="list-style-type: none"> ➤ FLDs – 21 farmers ➤ Training – 84 farmers 	320608	410513
Choliyana	10			514128	585000

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
-	-	-	-	-	-

20. Details of Progress of ARYA Project

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	
NIL								

21. Details of SAP

S. No.	Types of major Activity conducted- <i>Swachhta Pakhwada</i> , Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	<i>Swachhta pakhvada</i>	1	301

22. Books published 2022-23

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

23. Please include any other important and relevant information which has not been reflected above**A) Live Webcast of Hon'ble PM programme on release of PM-KISAN**

Live webcast of Hon'ble PM programme releases of installment of PM-KISAN was organized at Krishi Vigyan Kendra, Porbandar on 1st January, 2022. Hon'ble PM Shri Narendrabhai Modi interacts with FPO farmers & pushes the organizations to promote FPOs. Staff of KVK, CRS, CoA and farmers (67 participants) was participated in this programme.

B) Participate in *Karuna Abhiyan*

Every year on day of 14th January (the *Makarsankranti*) birds were injured due to thread used in kite flying. Government of Gujarat runs *Karuna Abhiyan* to save the life of injured birds. Department of Animal Husbandry in association with other NGOs runs this programme in Porbandar. Dr. H. A. Patel, a scientist of KVK participated in this *abhiyan* on 14th & 15th January, 2022. They rescued total 110 birds. He was honoured by Administration on 26th January, 2022 for his service in this noble cause.

C) Celebration of republic day

The 73rd republic day was celebrated at Krishi Vigyan Kendra, Porbandar. The staff member of KVK, CRS & CoA remained present on this occasion. Dr. H. R. Vadar, Senior Scientist & Head unfurl the tricolor flag with salute to our national flag & sang our national anthem. Total 26 members remained present in this occasion.

D) Celebration of world pulse day & demonstration of drone

World pulse day was celebrated at Krishi Vigyan Kendra, Porbandar on 10th February, 2022. Farmers and farmwomen invited to participate in this event. Training cum awareness programme was organized on importance of pulses in our diet, importance of pulse production in our economy and advanced production technology of pulses. V. M. Savaliya, Scientist took these trainings on this event.

A demonstration of agricultural drone was also organized as a part of event. Technical team from Garuda Aerospace – an agricultural drone company, remained present in this event and demonstrated the agricultural drone in front of participants. They also provide basic information and benefits of agricultural drone. Total 98 farmers were participated in this event.

E) Capacity building programme on disease management in animals

Capacity building programme on disease management in animals was organized at Krishi Vigyan Kendra, Porbandar during 2nd to 3rd March, 2022. Dr. H. A. Patel, Scientist of KVK took lectures on disease management in cattle as well as buffaloes. Points on preventive measure for disease management were also discussed. Total 83 farmwomen were participated in the programme.

F) Celebration of international women's day

International women's day is a global holiday celebrated annually on March 8th to commemorate the cultural, political, and socio-economic achievements of women. On this day *Krush Mahila Divas* was celebrated at Krishi Vigyan Kendra, Porbandar. Farm women were participated in this event. Lectures were delivered on subjects like awareness about women safety, women's role in agriculture etc. Total 32 participants (31-women & 1 –men) including staff were remained present.

G) Kisan mela cum exhibition

A *Kisan mela* cum Exhibition was organized under “*Kisan Bhagidari Prathmikta Hamari*” campaign at Krishi Vigyan Kendra, Porbandar (Gujarat) on 26th April, 2022 by KVK & ATMA, Porbandar as per the guidelines of ICAR. On this occasion farmers were invited by KVK at campus and lecture cum interaction session were organized between farmers and scientists. Different aspects were covered under this event was; important beneficiary schemes run by state as well as central government for agriculture, horticulture and animal husbandry. A session for lectures on natural farming was also organized. Shri Babubhai Bokhiriya, MLA, GoG (Porbandar), Shri Kiritbhai Modhvadiya, President, BJP, Porbandar district, Shri Avdabhai, Chairman, Education committee, District panchayat, Porbandar, Shri V. K. Advani, Collector & DDO, Porbandar and staff from line department remained present. An exhibition on natural farming was organized by KVK at the campus and different stalls were displayed by various state departments, KVK and progressive farmers of Porbandar district doing natural farming. Total 329 (170-male & 159 –female) participants remained present including staff.

H) Live webcast of Hon'ble PM programme

Live Webcast of Hon'ble PM Shri Narendrabhai Modi programme was organized under *Garib Kalyan Sammelan* at Krishi Vigyan Kendra, Porbandar (Gujarat) on 31st May, 2022 by KVK & ATMA, Porbandar. On this occasion farmers were invited by KVK and ATMA, Porbandar at campus and lecture cum interaction session on natural farming was organized between farmers and scientists. Staff from KVK, CRS, CoA and other line department remained present. Total 270 (152-male & 118 –female) participants remained present including staff.

I) Celebration of ICAR foundation day

ICAR foundation day was celebrated at Krishi Vigyan Kendra, JAU, Porbandar on 16th July, 2022. On this occasion farmers were invited to KVK, Porbandar and lecture cum interaction session on natural farming was organized between farmers and scientists. Staff from KVK, CRS and CoA remained present. Live webcast of Shri Narendra Singh Tomar, Hon'ble Minister, Agriculture & Farmers Welfare, GoI speech was also webcasted at campus for farmers. Total 88 (69-farmers & 19–staff members) participants remained present.

J) Special training on pink ball worm management cum certificate distribution programme for input dealers

Special training on pink ball worm management cum certificate distribution programme for input dealers was organized by Krishi Vigyan Kendra, Porbandar on 18th July, 2022. Dr. H. M. Gajipara, DEE, JAU, Junagadh; Dr. G. R. Gohil, Ex-Asso. DEE, JAU, Junagadh remained present on this occasion. Certificate of input dealer course were distributed to trainees. Total 75 participants remained present. Importance of cotton growing, pink boll worm incidence in cotton crop as well as management of pink boll worm in cotton was discussed among participants and Scientists.

K) Training on ground water conservation

A sponsored training on ground water conservation was organized at Krishi Vigyan Kendra, JAU, Porbandar on 27th July, 2022. In this training farmers and farmwomen were invited to KVK, Porbandar and lecture cum interaction session on ground water conservation, its importance, contemporary needs were organized between farmers and scientists. Staff from KVK, CRS and CoA remained present. Total 99 (63-farmers & 36-farmwomen) participants remained present including staff.

L) Live webcast of training on natural farming

A live webcast of training on natural farming was organized at Krishi Vigyan Kendra, Porbandar on 5th August, 2022. Total 106 participants (farmers-72, staff-25, line department-9) were remained present.

M) Inauguration of demonstration of drone and nano urea by Hon'ble CM

An inauguration of demonstration of agricultural drone and spraying of nano urea by Hon'ble CM Shri Bhupendrabhai Patel was organized on 5th August, 2022. A live webcast as well as simultaneous demonstration was organized all over in Gujarat. The same demonstration was organized at village Khageshri. V. M. Savaliya, Scientist from KVK attained the programme and discussed with farmers on benefits of nano technology in agriculture. Total 85 farmers remained present in this programme.

N) Celebration of independence day

The 76th Independence day was celebrated at Krishi Vigyan Kendra, Porbandar. The staff member of KVK, CRS, CoA & students of CoA remained present on this occasion. Dr. H. R. Vadar, Senior Scientist & Head hoisted the tricolor flag with salute to our national flag. Students of CoA gave performance on various patriotism themes. Total 29 members participated in the celebration & honour their respect to the tricolor.

O) Workshop on natural farming

A workshop on Natural Farming was organized at Krishi Vigyan Kendra, JAU, Porbandar on 22nd August, 2022. On this occasion farmers were invited to KVK, Porbandar and lecture cum interaction session on natural farming was organized between farmers and scientists. Shri Acharya Dev Vrat, Hon'ble Governor, Gujarat; Shri Rameshbhai Dhaduk, MP, Porbandar; Shri Babubhai Bokhiriya, MLA, Porbandar; Collector, DDO and other line department staff, press & media remained present in this event. Staff from KVK and CoA also remained present. Total 271 (170-farmers & 101-farmwomen) participants remained present.

P) Poshan maah celebration and tree plantation drive

The whole September was celebrated as “*Poshan Maah*”. On occasion of *Poshan Maah* celebration, one day event of tree plantation drive and awareness about nutrition was held at Krishi Vigyan Kendra, Porbandar. Event *Poshan Vatika & Vruksharopan Abhiyan* was carried out on 17th September, 2022. Seeds of vegetables were also distributed to participants in association with IFFCO. 75 seed packets were distributed to farmwomen. 84 participants (71- females and 13-staff member) were participated in this event.

Q) Celebration of technology week

A Technology week was celebrated on groundnut crop during 19th to 23rd September, 2022 with a view to provide an opportunity to show the worth of the technologies through seminars and live demonstration in order to boost up technology transfer. During the week, different improved technologies of groundnut right from the land preparation and sowing to harvesting and postharvest technologies up to marketing were demonstrated lively and discussed thoroughly in the seminars. During the week total 263 farmers (208 farmers + 55 farm women) have actively participated in seminar and discussion. Dr. H. M. Gajipara, DEE, JAU, Junagadh also remained present on 20th September to interact with participants and guide them.

R) Live webcast of PM KISAN sammelan

A live webcast of Hon'ble PM speech on occasion of release of PM-KISAN installment was arranged at Krishi Vigyan Kendra, Porbandar on 17th October, 2022. Farmers and farmwomen were invited at KVK. A demonstration of various implements at KVK was also organized during this event. Total 379 farmers and farmwomen attend the event physically as well as through online mode. Staff of Krishi Vigyan Kendra, College of Agriculture and Cotton Research Station also attended the programme.

S) Celebration of world soil health day

World soil health day was celebrated at Krishi Vigyan Kendra, JAU, Porbandar on 5th December, 2022. Total 89 participants (43-farmers, 41-students and 5-staff members) participated in this event. On this occasion, soil health card was distributed to the farmers and various lectures on soil fertility and its health was delivered by CoA, CRS & KVK staff of this campus.

T) Students visited KVK

Students of different schools and colleges visited Krishi Vigyan Kendra, Porbandar for their projects, to know the working ethics and area of Krishi Vigyan Kendra as well as agricultural universities. Total 625 (male-196, female-429) students visited KVK, Porbandar and interacted with the staff of KVK.

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	38	312	509	821
Rural youths	3	13	35	48
Extension functionaries	2	23	73	96
Sponsored Training	8	1230	548	1778
Vocational Training	1	0	15	15
Total	52	1578	1180	2758

2. Frontline demonstrations

Crops/Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	10	4.0	-
Pulses	20	8.0	-
Cereals	10	4.0	-
Vegetables	10	4.0	-
Other crops	35	14.0	-
Hybrid crops	-	-	-
Total	85	34.0	-
Livestock & Fisheries	40	-	40
Other enterprises	105	5.0	-
Total	145	5.0	-
Grand Total	230	39.0	-

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	4	4	12
Livestock	1	1	3
Various enterprises	-	-	-
Total	5	5	15
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	0	0	0
Grand Total	5	5	15

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	68	4864
Other extension activities	23	-
Total	91	4864

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
	Text only							
	Voice only							
	Voice & Text both							
	Total Messages							
	Total farmers Benefitted							

6. Seed & Planting Material Production

	Quintal/Number	Value (Rs.)
Seed (q)	146.87	762213
Planting material (No.)	-	-
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

7. Soil, Water & Plant Analysis

Samples	No. of Beneficiaries	Value (Rs.)
Soil	72	21600
Water	64	3200
Plant	0	0
Total	136	24800

8. HRD and Publications

Sr. No.	Category	Number
1	Abstract	5
2	Workshops	4
3	Conferences	1
4	Meetings	0
5	Trainings for KVK officials	11
6	Visits of KVK officials	0
7	Book published	0
8	Training Manual	0
9	Book chapters	0
10	Booklet	0
11	Leaflets/ Folder/ Pamphlet	0
12	Research papers	1
13	Technical Bulletin	0
14	Popular article	1
15	Lead papers	0
16	Seminar papers	0
17	Extension folder	0

18	Proceedings	1
19	Award & recognition	1
20	On-going research projects	0
21	Other	0