# **Annual Progress Report** (January to December-2023)







### 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 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	Office	FAX		
Junagadh Agricultural University			kulthanat Giou in	http://www.jau.in/index.php/extension-40/krishi-
Opp. Saint Joseph School, Adityana Road,	9408903062	-	kvkkhapat@jau.in	vigyan-kendras-kvks/khapat-porbandar
Khapat, Porbandar (Gujarat) -360 579				

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

A ddmose	Teleph	ione	E mail	Wabaita address
Address	Office	FAX	E mail	Website address
Junagadh Agricultural University	(1)0285-2671784	(1) 0285-2672004		ion in
Motibaug, Junagadh (Gujarat) – 362 001	(2)0285-2672080-90	(2) 0285-2672653	-	www.jau.in

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

Name	Telephone / Contact				
Dr. H. R. Vadar	Office	Mobile	Email		
	_	9426543628	hrvadar@jau.in		

#### **1.4. Date and year of sanction:** February, 2005

#### 1.5. Staff position (as on December, 2023)

S.	Sonationed next	Name of the Mobile No.		Dissipling	If Permanent, please indicate		Date of	If Temporary, pl. indicates
No.	Sanctioned post	incumbent	widdlie Ind.	Discipline -	Current Pay Band	Current Grade Pay	joining	the consolidated amount paid (₹/month)
1	Senior Scientist and Head	Dr. H.R. Vadar	9426543628	Soil & Water Engineering	131400-217100	-	01-07-2021	-
2	Subject Matter Specialist	Mr. V.M. Savaliya	9909989754	Horticulture	57700-182400	-	01-08-2017	-
3	Subject Matter Specialist	Vacant	-	-	57700-182400	-	-	-

4	Subject Matter Specialist	Vacant	-	-	57700-182400	-	-	-
5	Subject Matter Specialist	Vacant	-	-	57700-182400	-	-	-
6	Subject Matter Specialist	Vacant	-	-	57700-182400	-	-	-
7	Subject Matter Specialist	Vacant	-	-	57700-182400	-	-	-
8	Programme Assistant	Mr. D.N. Hadiya	8238757002	-	39900-126600	-	07-08-2018	-
9	Computer Programmer	Mr. J.J. Naliyapara	9998698063	-	44900-142400	-	12-06-2008	-
10	Farm Manager	Mr. A.M. Gamit	6354032874	-	39900-126600	-	02-08-2018	-
11	Accountant/ Superintendent	Mr. B.S. Bokhariya	9978055059	-	44900-142400	-	12-06-2008	-
12	Stenographer	Vacant	-	-	25500-81100	-	-	-
13	Driver 1	Vacant	_	-	19900-63200	-	-	-
14	Driver 2	Vacant	-	_	19900-63200	-	-	-

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

···· ····	2000	
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

			Stage						
<b>S.</b>	Name of building	Source of	Complete			Incomplete			
No.		funding	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	62402 hrs	Need replacement
Scorpio Jeep	2017	11,86,893	93400	Good
Moror cycle (Hero – Splendor)	2010	47,000	36588	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
Zerox 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 inter cultivator 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 handy cam	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
Multi-crop 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 <sup>th</sup>	Dr. V. P. Chovatia	Take precautionary steps to lower	The same was suggested to				
February,	Vice Chancellor, JAU, Junagadh	down incidence of Spodoptera	farmers in every training of				
2023	Dr. H. R. Vadar	<i>litura</i> in groundnut	plant protection and whenever				
	I/C Senior Scientist & Head, KVK, JAU, Khapat-Porbandar		needed				
	Dr. H. M. Gajipara	Include staff of ATMA and line	Two trainings were conducted				
	Director of Extension Education & Director of Research, JAU,	department in natural farming	during the year				
	Junagadh	training					
	Dr. Harish G.	<ul> <li>Remove residues of pesticides in</li> </ul>	<ul> <li>Suggestion implemented and</li> </ul>				
	Rep. Director, DGR-ICAR, Junagadh	cow dung and urine in natural	farmers were informed				
	Shri H. A. Trivedi	farming	Tatal 200 asil and water semula				
	District Agriculture Officer, Porbandar	Maximize the soil and water	Total 299 soil and water sample analysed during the year				
	Shri R. R. Tilva	<ul> <li>testing</li> <li>Conduct impact study of adopted</li> </ul>	<ul><li>analysed during the year</li><li>Study conducted and data</li></ul>				
	Dy. Director (Training), Porbandar	villages	presented in the report				
	Shri Ishwar Gehlot	<ul> <li>Weather based advisory should be</li> </ul>	<ul> <li>Total 6 need base messages</li> </ul>				
	Dy. Director of Animal Husbandry, Porbandar	broadcasted	were forwarded in WA groups				
	Smt. K. J. Panchal	<ul> <li>Training needs for the faculties</li> </ul>	<ul> <li>The same was included in the</li> </ul>				
	Dy. Director (Horticulture), Porbandar Dr. H.C. Chhodvadia	should be included in presentation	presentation				
	Associate Extension Educationist, JAU, Junagadh	<ul> <li>Include trainings on production</li> </ul>	<ul> <li>Training on other crops i.e.</li> </ul>				
	Dr. R. B. Vadher	technology of other crops in	vegetables, fruits and cereals				
	Rep. Principal, COA, Khapat	technology week	were added into the trainings				
	Shri R. L. Dasa	<ul> <li>CFLDs should be more focused</li> </ul>	➢ Total 50 FLDs were given in				
	Rep. ARS, Cotton Research Station, Khapat	on cluster basis	two villages				
	Shri A. B. Sarvaiya	<ul> <li>Focus on newly introduced pests</li> </ul>	Mite in coconut, smut in				
	RFO, Porbandar	and diseases	datepalm and scale in mango				
	Shri K.G. Balas	1	were observed				
	Rep. Project Director, DWDU, Porbandar	<ul><li>Conduct training on banned</li></ul>	<ul><li>Sponsored training on banned</li></ul>				
	Shri B. S. Rangey	pesticides on sponsored basis	pesticides was not possible				
	Manager (Lead Bank), Porbandar		during the year				
	Shri Jitendra Nimavat	1					
	Assistant Director (Information), Porbandar						
	Shri Vajshibhai Bapodara	1					
	Shri Bhaveshbhai Odedra	]					
	Smt. Prabhaben Ratilal Sadariya	]					
	Shri Dillepbhai Meramanbhai Goraniya	]					

#### 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/Buffalos)

#### 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	<b>Porbandar</b> district is located between 21° to 22° N latitude and 69° to 70° E longitude.			
		Khapat- N 21° 40' 12" and E 69° 37' 14"			
		Soil: medium black & silty loam with calcareous in nature			
		<b>pH:</b> pH of the soil is ranging from 8.01 to 8.58			
		Water: EC value up to 8.1 mmhos / cm			
		Average Rainfall: 1012 mm			
		Temperature Range: 8.0° C to 36.0 °C			

#### 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

S. No	Сгор	Area (ha)	Production (000 T)	Productivity (kg/ha)		
	Major Field crops			•		
1	Groundnut	77,035	195.30	2535		
2	Cotton <sup>#</sup>	9,835	34.49	596		
3	Wheat	23,120	87.67	3792		
4	Gram	45,760	94.55	2066		
5	Green gram (Summer)	10,520	12.77	1214		
6	Sesame (Summer)	2,500	2.47	990		
	Major Horticultural crops					
1	Cumin	11,665	10.33	885		
2	Coriander	21,690	31.87	1469		
3	Coconut*	753	6.75	8964		
4	Mango	490	3.63	7404		

#### 2.4 Area, production and productivity of major crops cultivated in the area of jurisdiction of KVK (2023)

Source: District Agriculture Department & District Horticulture Department, Porbandar

#Lint cotton productivity

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

#### **2.5 Weather data (2023)**

M4b	Normal RF	Normal Rainy days	Tempera	ture ( <sup>0</sup> C)	Relative	Humidity (%)
Month	( <b>mm</b> )	(number)	Maximum	Minimum	Maximum	Minimum
January-23	-	-	27.00	08.00	80.00	43.00
February-23	-	-	30.00	12.00	74.50	35.50
March-23	-	-	34.00	16.00	73.00	34.50
April-23	-	-	35.00	35.00 18.00 77.00		53.50
May-23	-	-	36.50	27.00	82.50	65.00
June-23	279	08	34.00	28.00	86.00	63.00
July-23	601	09	33.00	26.00	88.00	72.00
August-23	-	-	34.00	23.00	89.00	64.00
September-23	132	02	32.00	23.00	86.74	72.00
October-23	-	-	32.00	24.00	76.00	62.00
November-23	-	-	26.00	13.00	74.00	49.00
December-23	-	-	27.00	12.00	77.00	47.00
Total/Av.	1012	19	32.00	19.00	80.00	55.00

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

#### 2.6 Production and productivity of livestock, poultry, fisheries etc. in the district

#### 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	✓ ✓ ✓	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 Problematic soil Poor quality irrigation water

#### 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

	01	FT		FLD			
	1	l		2			
Numb	Number of OFTs Number of farmers			Number of FLDs Number of farmers			of farmers
Targets	Achievement	Targets Achievement		Targets	Achievement	Targets	Achievement
5	5	15	15	12 11		235	225

	Trai	ining		Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
59	41	1535	1215	19	14	2000	9214

Seed Pro	oduction (q)	Planting materials (Nos.)				
	5	6				
Target	Achievement	Target	Achievement			
150	190.74	10000	3070			

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

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 & pod/root rot in groundnut	5420	Bokhira	Training; Ext. Activities
	Cumin	✓ Wilt & blight in cumin	4150	Pandavadar Mander	Training; Ext. Activities
	Coriander	✓ Wilt & powdery mildew in coriander	3250	Chikasa	Training; Ext. Activities
	Cattle/ Buffalos	✓ Milk Fever & Mastitis	10200	Mocha	FLDs; Training; Ext. Activities
2	Groundnut	✓ White grub & pod/root rot in groundnut	5420	Digvijaygadh	Training; Ext. Activities
	Cotton	✓ Pink ball worm & sucking pest in cotton	3500	Adityana Bordi	FLDs; Training; Ext. Activities
	Cumin	✓ Wilt & blight in cumin	4150	Bhoddar	Training; Ext. Activities
	Cattle/ Buffalos	✓ Milk Fever & Mastitis	10200	Khambhala	FLDs; Training; Ext. Activities
3	Groundnut	✓ White grub & pod/root rot in groundnut	5420	Tarkhai	Training; Ext. Activities
	Cotton	✓ Pink ball worm & sucking pest in cotton	3500	Revadra Kavalka	FLDs; Training; Ext. Activities
	Cumin	✓ Wilt & blight in cumin	4150	Mohabatpara	Training; Ext. Activities
	Cattle/ Buffalos	✓ Milk Fever & Mastitis	10200	Devda	FLDs; Training; Ext. Activities

3.1 B. Operational areas details during 2023

\* Support with problem-cause and interventions diagram

#### 3.2 Technology Assessment (Kharif 2023, Rabi 2022-23, Summer 2023)

#### A.1 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

A.2 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	Сгор	Name of the technology assessed	No. of trials	tormore	Area in ha (Per trial covering all the Technological Options)
Integrated Nutrient Management	Wheat	Application of <i>Azatobacter</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		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 (Gir)	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 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	<ol> <li>Yield (q/ha)</li> <li>Economics</li> <li>Microbial population (collar rot causing) (CFU)</li> </ol>	CFU	T1- 0.11x10 <sup>3</sup> T2-0 T3-0	Bioagents is effective for control of soil fungus	-	-

#### Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in ₹/ha	B:C Ratio
13	14	15	16	17	18
<b>T-1</b> (Farmer's practice) – No seed treatment	-	25.37	q/ha	138558	3.33
T-2 Seed treatment with tebuconazole @ 1.5 g/kg seed	JAU, Junagadh	26.50	q/ha	148925	3.60
<b>T-3</b> 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	27.83	q/ha	160175	3.88

- 1. Title of technology assessed Management of collar rot in groundnut using bio inputs
- 2. Problem definition Low yield & quality deterioration of seed in groundnut
- 3. Details of technologies selected for assessment Integrated disease management
- 4. Source of technology JAU, Junagadh (SAU)
- 5. Production system and thematic area
- 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
- 9. Constraints identified and feedback for research
- 10. Process of farmers participation and their reaction Bioagents is effective for control of soil fungus

**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	<ol> <li>Yield (q/ha)</li> <li>Economics</li> </ol>	-	-	Use of biofertiliz ers effectively reduces consumpti on of chemical fertilizers	-	-

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in ₹/ha	B:C Ratio
13	14	15	16	17	18
<b>T-1</b> - Farmer's practice - Application of only DAP & Urea in different doses	-	48.00	q/ha	80800	3.06
<b>T-2</b> – Recommended practice - Application of Nitrogen @ 120 kg/ha in three splits ( <sup>1</sup> / <sub>4</sub> as basal + $\frac{1}{2}$ at 20 to 25 DAS + $\frac{1}{4}$ at 35 to 40 DAS) and 60 kg P <sub>2</sub> O <sub>5</sub> & K <sub>2</sub> O as basal	JAU, Junagadh	49.10	q/ha	84200	3.18
<b>T-3</b> – Intervention - Application of Azatobacter & PSB culture $(250 \text{ ml}/10 \text{kg}) + 75\%$ of N& P <sub>2</sub> O <sub>5</sub> (90-45 kg/ha NP) + 100 % K <sub>2</sub> O (60 kg/ha K)	JAU, Junagadh	51.90	q/ha	92117	3.45

- 1. Title of technology assessed Assessment of nitrogen management in wheat crop
- 2. Problem definition Reduce yield and soil fertility
- 3. Details of technologies selected for assessment Integrated nutrient management
- 4. Source of technology JAU, Junagadh (SAU)
- 5. Production system and thematic area -
- 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 -
- 9. Constraints identified and feedback for research -
- 10. Process of farmers participation and their reaction-Use of bio fertilizers effectively reduce 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 productio n in Summer chili	Integrated nutrient management in Summer chili	3	Integrated nutrient management	<ol> <li>Yeild (t/ha)</li> <li>Economics</li> </ol>	_	-	Use of banana pseudostem sap increase retention of flowers and quality of product	-	I

#### Contd..

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in ₹/ha	B:C Ratio
13	14	15	16	17	18
<b>T-1</b> - Farmer's practice - 150-50-00 (kg NPK/ha)	-	18.30	t/ha	245000	3.62
T-2 - Recommended practice - 100-50-50 (kg NPK/ha)	JAU, Junagadh	18.88	t/ha	257497	3.81
<b>T-3</b> – Intervention - RDF + spraying of banana pseudostem sap @ 1 % thrice. First spray at starting of flowering and another at 15 days intervals.	JAU, Junagadh	20.29	t/ha	287267	4.08

- 1. Title of technology assessed Integrated nutrient management in Summer chili
- 2. Problem definition Low production in Summer chili
- 3. Details of technologies selected for assessment Integrated nutrient management
- 4. Source of technology JAU, Junagadh (SAU)
- 5. Production system and thematic area -
- 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 -
- 9. Constraints identified and feedback for research -
- 10. 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 supplementatio n of concentrates on milk production of <i>Gir</i> cow	3	Nutrition management	<ol> <li>Milk yield</li> <li>Income</li> </ol>	Milk yield	T1 – 7.66 l/annum T2-8.55 l/annum T3-9.34 l/annum	This tech. increases milk yield	-	-

Technology Assessed	Source of Technology	Production	Please give the unit	Net Return (Profit) in ≹/animal	B:C Ratio
13	14	15	16	17	18
T-1 - Farmers Practice – Control – No supplement feeding	-	2375	lit/ani./annum	19497	1.20
T-2 - Feeding of concentrated mixture	-	2652	lit/ani./annum	24065	1.22
T-3 - Feeding of concentrated mixture + Mineral mixture	Animal Nutrition Research Station, AAU, Anand	2894	lit/ani./annum	31427	1.28

- 1. Title of technology assessed Effect of supplementation of concentrates on milk production of *Gir* cow
- 2. Problem definition Low fat %, Financial loss
- 3. Details of technologies selected for assessment Nutrition management
- 4. Source of technology Animal Nutrition Research Station, AAU, Anand (SAU)
- 5. Production system and thematic area
- 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 -
- 9. Constraints identified and feedback for research -
- 10. Process of farmer's participation and their reaction- This technology increases milk yield

**Results of On Farm Trial – 5** 

Crop/ enterprise	Farming situation	Problem definitio n	Title of OFT	No. of trial s	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	<ol> <li>Weight loss</li> <li>Bruchid damage</li> </ol>	%	Awaited	-	-	-

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

- 1. Title of technology assessed Assessment of PICS bag for groundnut storage
- 2. Problem definition Reduce storage loss & bruchid damage
- 3. Details of technologies selected for assessment Resource conservation
- 4. Source of technology JAU, Junagadh (SAU); formerly it was from ICRISAT, Hyderabad
- 5. Production system and thematic area
- 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 -
- 9. Constraints identified and feedback for research -
- 10. Process of farmer's participation and their reaction--

#### **3.3. FRONTLINE DEMONSTRATION**

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

S.	Cmom/			Details of popularization methods	Horizontal spread of technology			
S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	suggested to the Extension system	No. of	No. of	Area in	
190	Enterprise			suggested to the Extension system	villages	farmers	ha	
1	Wheat	Varietal Evaluation	Improved variety – GW-451	Trainings, FLDs	12	260	150	
2	Wheat	INM	Azatobacter + PSB	Trainings, OFTs	10	145	210	
3	Groundnut	Varietal Evaluation	Improved variety GJG-22	Trainings, FLDs & Field days	45	1550	3500	
4	Gram	Varietal Evaluation	Improved variety GJG-6	Trainings, FLDs & Field days	14	215	400	
5	Green gram	Varietal Evaluation	Improved variety GM -4	Trainings, FLDs	32	980	565	
6	Cotton	IPM	Pheromone trap + Beauveria bassiana	Trainings, FLDs & Field days	20	1150	3050	
7	Cattle/ buffalos	Nutrition management	Mineral mixture, Bypass fat	Trainings, FLDs	23	285	-	

List of technologies demonstrated during previous year and popularized during 2023 and recommended for large scale adoption in the district

#### B. Details of FLDs implemented during 2023 (Kharif 2023, Rabi 2022-23, Summer 2023)

Oilseeds

Sl. No.	Crop Thematic area		<b>Technology</b>	Season and year	Area (	(ha)	No. of farmers/ demonstration			Reasons for shortfall in
190.	_		Demonstrated		Proposed	Actual	SC/ST	Others	Total	achievement
1	Groundnut	Varietal	GJG-22	Kharif-2023	4	4	-	10	10	Nil

#### **Details of farming situation**

Сгор	eason	ırming uation Irrigated)	il type	S	tatus of soil	l	ious crop	ing date	vest date	asonal fall (mm)	of rainy days
	Ň	Fa sit (RF/)	Sc	Ν	Р	K	Prev	Sow	Har	Se rainf	No.
Groundnut	Kharif- 2023	Rainfed	Medium Black	Low	Medium	High	Groundnut/ wheat/cumin	15- 20/06/2023	10/2023	1012	19

#### 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 when rainfall is higher (~7.44 percent)

#### 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

SI.	Сгор	Thematic area	Technology	Season and year	Area (	(ha)		). of farmer monstratio	Reasons for shortfall in	
No.		Thematic area	Demonstrated	Season and year	Proposed	Actual	SC/ST	Others	Total	achievement
1	Chickpea	IPM	HNPV + Beauveria bassiana	Rabi – 2022-23	4	4	-	10	10	Nil
2	Green gram	Varietal	GM-4	Summer-2023	4	4	-	10	10	Nil

#### **Details of farming situation**

Сгор	Season	ırming tuation Irrigated)	Soil type	S	tatus of soi	l	ious crop	ing date	vest date	asonal fall (mm)	of rainy days
	x	Far situ (RF/In	Š	Ν	Р	K	Prev	Sow	Har	Sea	No.
Chickpea	<i>Rabi-</i> 2022-23	Rainfed	Medium Black	Low	Medium	High	-	20- 30/10/22	02/2023	1176	35
Green gram	Summer -2023	Irrigated	Medium Black	Low	Medium	High	Wheat/ Cumin/ Coriander	15 to 28/02/23	05/2023	1176	35

#### Technical feedback on the demonstrated technologies

S. No	Feed Back
1	Variety of greengram GM-4 is better performer than other varieties (~13 percent)
2	HNPV + Beauveria bassiana effectively control pod borer infestation & increase yield (~10 percent)

#### Farmers' reactions on specific technologies

S. No	Feed Back
1	Increase production than other varieties

#### Cereals

Sl. No.	Сгор	Thematic	Technology	Season and	Area	(ha)		No. of farmers/ demonstration		Reasons for shortfall in
INO.		area	Demonstrated	year	Proposed	Actual	SC/ST	Others	Total	achievement
1	Wheat	Varietal	GW-451	Rabi-2022-23	4	4	-	10	10	Nil

#### **Details of farming situation**

Сгор	eason	urming uation Irrigated)	il type	S	tatus of soi	l	ious crop	ing date	vest date	asonal fall (mm)	of rainy days
	S	Fa sit (RF/)	Soil	Ν	Р	K	Prev	Sow	Har	Se rainf	No.
Wheat	<i>Rabi-</i> 2022-23	Irrigated	Medium Black	Low	Medium	High	Groundnut	15-25/11/22	03/2023	1176	35

#### Technical feedback on the demonstrated technologies

S. No	Feed Back
1	Increase yield over variety GJW-496 /Lok-1
2	Higher tillering than other varieties grown by farmers

#### Farmers' reactions on specific technologies

S. No	Feed Back
1	Yield was higher (~10 percent) than Lok-1 variety

#### Horticultural crops

Sl. No.	Crop	Thematic	Technology Demonstrated	Season and year	Area (	ha)		). of farmer monstratio	Reasons for shortfall in	
190.		area			Proposed	Actual	SC/ST	Others	Total	achievement
1	Onion	Varietal	GJRO-11	Rabi – 2022-23	4	0	-	0	0	Non availability of seed
2	Onion	IDM	Pochonia chlamydosporia + Trichoderama harzianum	Rabi – 2022-23	4	4	-	10	10	Nil
3	Mango	IPM	Fruit fly trap	Summer-2022-23	4	4	-	10	10	Nil

#### **Details of farming situation**

		г										
	Сгор	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			vious crop	wing date	vest date	seasonal nfall (mm)	of rainy days
					Ν	Р	K	Prev	Sow	Har	Sc rain	No.
	Onion	<i>Rabi</i> – 2022-23	-	-	-	-	-	-	-	-	-	-
	Onion	<i>Rabi –</i> 2022-23	Irrigated	Medium Black	Low	Medium	High	Groundnut	20-30/10/22	05/2023	1176	35
	Mango	Summer- 2022-23	Irrigated	Red laterite	Low	Medium	High	-	-	-	1176	35

#### Technical feedback on the demonstrated technologies

S. No	Feed Back
1	Application of <i>Pochonia chlamydosporia</i> found useful to control nematode infestation in onion as well as in other vegetable crops
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 found to be good
2	Less infestation of fruit fly in mango

#### **Cotton & other commercial crops**

SI. No.	Сгор	Thematic area	Technology Demonstrated	Season and year	Area (	(ha)		). of farmer monstratio		Reasons for shortfall in
INU			Demonstrateu		Proposed	Actual	SC/ST	Others	Total	achievement
1	Cotton	IPM	Pheromone trap and <i>Beauveria bassiana</i>	Kharif- 2023	10	10	0	25	25	Nil

#### **Details of farming situation**

Сгор	eason	ırming uation [rrigated)	oil type	S	tatus of soi	l	ious crop	ing date	vest date	easonal fall (mm)	of rainy days
	S	F2 sit (RF/)	Š	Ν	Р	K	Prev	Sow	Har	Se rainf	No.
Cotton	Kharif- 2023	Rainfed/ Irrigated	Medium Black	Low	Medium	High	G. Nut/ Cotton	15- 20/06/2023	02/2024	1012	19

#### 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 Beauveria bassiana) in cotton reduces pink ballworm damage
2	Increases yield (~9 percent) and quality
3	Reduces labour charges

#### Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	2	10.10.2023	60	
1	Tield days		20.12.2023	00	-
2	Farmers Training	5	-	50	-
3	Media coverage	-	-	-	-
4	Training for extension functionaries	1	28.04.2023	44	_

#### C. Performance of frontline demonstrations

#### Frontline demonstrations on oilseed crops

Cross	Thematic	Technology	Variates	No. of	Area		Yiel	d (q/ha)		%	Econ		demonstr ha)	ation	E	conomic (₹/	s of checl ha)	k
Crop	Area	demonstrated	Variety	Farmers	(ha)	High	Dem Low	o Average	Check	Increase in yield	Gross Cost		Net Return	BCR (R/C)	Gross Cost		Net Return	BCR (R/C)
Grou	ndnut																	
	Varietal	Improved variety	GJG-22	10	4	31.25	23.75	26.19	24.38	7.44	58550	190844	132294	3.26	58550	177641	119091	3.03

#### Frontline demonstration on pulse crops

Crop	Thematic	Technology	Variety	No. of	Area		Yiel	ld (q/ha)		% Increase		(₹/	demonsti ha)	,		(₹/		·
Стор	Area	demonstrated	variety	Farmers	(ha)	High	Dem Low	o Average	Check		Gross Cost	Gross Return	Net Return		Gross Cost		Net Return	BCR (R/C)
Chick	pea																	
	IPM	HNPV + Beauveria bassiana	GJG-1/ Vijay	10	4	26.25	16.25	22.25	20.13	10.72	31640	118704	87064	3.75	32900	107367	74467	3.26
Green	Igram																	
	Varietal	Improved variety	GM-4	10	4	21.25	13.75	16.19	14.25	13.60	22900	130478	107578	5.70	23000	114859	91859	4.99

#### FLD on other crops

Crop	Thematic	Name of the technology	No. of Farmers	Area (ha)		Yield Demo	(q/ha)		% Change		mics of d (₹/h Gross		ation BCR	Econ Gross	omics of Gross	check (₹ Net	t/ha) BCR
	Area	technology	r ai mei s	( <b>II</b> a)	Н	L	A	Check	in Yield	Cost	Return		1	1		Return	1 1
Cerea	ls																
Whea	t																
	Varietal	Improved variety (GW-451)	10	4	56.25	37.50	48.63	44.13	10.45	39200	137844	98644	3.52	39200	124172	84972	3.17
Vegeta	ables																
Onion	L												-			-	
	Varietal	Improved variety (GJRO-11)	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-

	IDM	Pochonia chlamydosporia + Trichoderma harzianum	10	4	276.25	196.25	268.33	245.97	10.28	112454	395299	281844	3.48	123402	348247	224844	2.82
Fruit	crops																
Mang	0																
	IPM	Fruit fly trap	10	4	91.25	72.50	77.58	72.63	6.86	144300	601622	457322	4.17	149655	538250	388595	2.85
Comn	nercial Cro	ps															
Cotto	n																
	IPM	Pheromone trap + Beauveria bassiana	25	10	40.00	17.50	30.25	27.95	8.22	48682	229662	180980	4.72	53764	212226	158462	3.95

#### FLD on livestock

Cotogom	Thematic	Name of the	No. of	No.of Units (Animal/		ijor neters	% change		her meter	Econor	nics of d (₹	emonsti )	ration	Ec	onomics (₹	of chec	k
Category	area	technology demonstrated	Farmer	Poultry/ Birds, etc)	Demo	Check	in major parameter	Demo	Check		Gross Return			Gross Cost			BCR (R/C)
Buffalo			ii					i	1								
-	Nutrient Management	Bypass fat	20	20	2745	2525	8.71	-	-	121350	164700	43350	1.36	118350	151500	33150	1.29
-	Nutrient Management	Chelated mineral mixture	20	20	2850	2550	11.76	-	-	126930	171000	44070	1.34	116730	153000	36270	1.31

#### FLD on other Enterprise: Kitchen Gardening

Nutrition garden	Thematic	Area	No. of Farmer	No. of	Yield (Kg)- vegetables, from KG i	fruits, etc	% change		sehold umber)	]	Economics of demo (₹/ha)	onstration	ı		Economics (₹/h		
components	area	(sq mt)	Farmer	Units	Demons tration	Check*	in yield	Demo	Check	Gross Cost	Gross Return/Savings*	Net Return		Gross Cost	Gross Return/ Savings*	Net Return	BCR (R/C)
Kitchen Gardening ( <i>Rab</i> -2022-23)	Kitchen Gardening	Improved varieties by JAU	50	50/ crop	51.29	-	-	-	-	-	-	-	-	-	-	-	-
Kitchen Gardening ( <i>Kharif</i> -2023)	Kitchen Gardening	Improved varieties by JAU	50	50/ crop	45.18	-	-	-	-	-	-	-	-	-	-	-	-

\*check maybe family adopting different Nutrition garden model/ no adoption of Nutrition garden model Savings from produce of Nutrition garden used for home consumption

#### 3.4. Training Programmes

Farmers' training including sponsored training programmes (on campus)

	No. of		0.1			ticipa	nts		1 75	
Thematic area	courses		Others			SC/ST	m		and To	1
		Μ	F	Т	Μ	F	Т	Μ	F	Τ
I Crop Production	1	22		22	0		0	22		22
Resource Conservation Technologies	1	22	0	22	0	0	0	22	0	22
Increasing production and productivity of crops	1	20	3	23	0	0	0	20	3	23
Total	2	42	3	45	0	0	0	42	3	45
Total	4	42	5	43	U	U	U	42	5	43
II Horticulture										
a) Vegetable Crops										
Protective cultivation technology	1	17	0	17	0	0	0	17	0	17
Total (a)	1	17	<b>0</b>	17	0	0	0	17	0	17
b) Fruits			•				Ŭ			
Processing & value addition	1	0	19	19	0	0	0	0	19	19
Total (b)	1	0	19	19	0	0	0	0	19	19
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										
Increasing production and productivity	1	24	0	24	0	0	0	24	0	24
of crops					-	-	_		_	
Total (f)	1	24	0	24	0	0	0	24	0	24
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
Grand Total (a to g)	3	41	19	60	0	0	0	41	19	60
	4									
III Soil Health and Fertility Manageme		0		•	0	0	0		•	•
Total	0	0	0	0	0	0	0	0	0	0
IV Livestock Production and Managen	ont									
Management in farm animals	2	25	23	48	0	5	5	25	28	53
Animal Disease Management	2	23	23	56	0	0	0	23	28	56
Feed & fodder technology	1	18	0	18	0	0	0	18	0	18
Total	5	71	51	122	0	5	5	71	56	127
1.000	U				Ū	U	U	71	00	
V Home Science/Women empowermen	t									
Total	0	0	0	0	0	0	0	0	0	0
						•				
VI Agril. Engineering										
Total	0	0	0	0	0	0	0	0	0	0
VII Plant Protection										
	2	30	6	36	1	0	1	31	6	37
Integrated Pest Management		_	0	10	0	0	Δ	10	0	10
Integrated Pest Management Integrated Disease Management	1	18	0	18	0	0	0	18	0	18

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 Dynam	nics									
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	13	202	79	281	1	5	6	203	84	287

### Farmers' training including sponsored training programmes (off campus)

Farmers' training including sponsored		0	,			ticipar	nts			
Thematic area	No. of	(	Others		,	SC/ST		Gra	and To	tal
	courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
I Crop Production						-				
Increasing production and productivity	1	25	0	25	0	0	0	25	0	25
of crops										
Resource Conservation Technologies	1	15	0	15	0	0	0	15	0	15
Total	2	40	0	40	0	0	0	40	0	40
II Horticulture			1	1	1	1	1	1	1	r –
a) Vegetable Crops		-	•	•					•	•
Protected cultivation technology	1	0	28	28	0	0	0	0	28	28
Commercial production of vegetables	1	0	18	18	0	0	0	0	18	18
Total (a)	2	0	46	46	0	0	0	0	46	46
b) Fruits		-								
Total (b)	0	0	0	0	0	0	0	0	0	0
c) Ornamental Plants		-			-					
Total (c)	0	0	0	0	0	0	0	0	0	0
d) Plantation crops										
Production and Management	1	24	0	24	0	0	0	24	0	24
technology			-		-	_				
Total (d)	1	24	0	24	0	0	0	24	0	24
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Production and Management	1	0	13	13	0	0	0	0	13	13
technology		-			_			_		
Total (f)	1	0	13	13	0	0	0	0	13	13
g) Medicinal and Aromatic Plants										
Total (g)	0	0	0	0	0	0	0	0	0	0
Grand Total (a to g)	4	24	59	83	0	0	0	24	59	83
III Soil Hoolth and Fortility Marrow	ont									
III Soil Health and Fertility Managem		10	0	10	1	0	1	20	0	20
Soil fertility management Total	1 1	19 <b>19</b>	0	19 19	1 1	0 0	1 1	20 20	0	20 20
10tal	I	19	U	19		U		20	U	20
IV Livestock Production and Manager	nent									
Animal Disease Management	3	26	43	69	0	0	0	26	43	69
Livestock production and management	1	21	0	21	0	0	0	21	0	21

		1	1	T	r	1	T	1	1	1
Management in farm animals	1	26	0	26	0	0	0	26	0	26
Feed & fodder technology	1	17	0	17	0	0	0	17	0	17
Total	6	90	43	133	0	0	0	90	43	133
V Home Science/Women empowermen										
Total	0	0	0	0	0	0	0	0	0	0
VI Agril. Engineering		1		1	r	·	r	1		
Processing and value addition	1	28	0	28	0	0	0	28	0	28
Location specific drudgery reduction technologies	1	0	29	29	0	0	0	0	29	29
Total	2	28	29	57	0	0	0	28	29	57
							•			
VII Plant Protection										
Integrated Pest Management	2	21	23	44	0	0	0	21	23	44
Integrated Disease Management	1	12	0	12	0	0	0	12	0	12
Bio-control of pests and diseases	1	11	0	11	0	0	0	11	0	11
Total	4	44	23	67	0	0	0	44	23	67
						-				
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	nics									
Total	0	0	0	0	0	0	0	0	0	0
XI Agro-forestry						1				•
Total	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	19	245	154	399	1	0	1	246	154	400

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

					Par	ticipa	nts			
Thematic area	No. of	(	Others		1	SC/ST		Gra	and To	tal
	courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
I Crop Production										
Resource conservation technologies	2	37	0	37	0	0	0	37	0	37
Increasing production and productivity of crops	2	45	3	48	0	0	0	45	3	48
Total	4	82	3	85	0	0	0	82	3	85
II Horticulture										
a) Vegetable Crops										
Protective cultivation technology	2	17	28	45	0	0	0	17	28	45
Commercial production of vegetables	1	0	18	18	0	0	0	0	18	18
Total (a)	3	17	46	63	0	0	0	17	46	63
b) Fruits										
Processing & value addition	1	0	19	19	0	0	0	0	19	19
Total (b)	1	0	19	19	0	0	0	0	19	19
c) Ornamental Plants										
Total (c)	0	0	0	0	0	0	0	0	0	0

		1	1	1	1	1		1	1	
d) Plantation crops										
Production and Management	1	24	0	24	0	0	0	24	0	24
technology	1	24	U	24	0	0	0	24	0	24
Total (d)	1	24	0	24	0	0	0	24	0	24
e) Tuber crops										
Total (e)	0	0	0	0	0	0	0	0	0	0
f) Spices										
Increasing production and productivity										
of crops	2	24	13	37	0	0	0	24	13	37
Total (f)	2	24	13	37	0	0	0	24	13	37
g) Medicinal and Aromatic Plants			10	01	v	v	v		10	01
Total (g)	0	0	0	0	0	0	0	0	0	0
Grand Total (a to g)	7	65	78	143	0	0	0	65	78	143
Grand Total (a to g)	1	05	/ð	143	U	U	U	05	/ð	143
III Soil Health and Fartility Managame	t									
III Soil Health and Fertility Manageme		10	Δ	10	1	Δ	1	20	Δ	20
Soil fertility management	1	19	0	19	1	0	1	20	0	20
Total	1	19	0	19	1	0	1	20	0	20
IV Livestock Production and Managen		1	1		r	1	1	1	1	
Management in farm animals	3	51	23	74	0	5	5	51	28	79
Animal Disease Management	5	54	71	125	0	0	0	54	71	125
Feed & fodder technology	2	35	0	35	0	0	0	35	0	35
Livestock production and management	1	21	0	21	0	0	0	21	0	21
Total	11	161	94	255	0	5	5	161	99	260
				1			1		1	
V Home Science/Women empowermen	t									
Total	0	0	0	0	0	0	0	0	0	0
			-	-	-		_		-	-
VI Agril. Engineering										
Processing and value addition	1	28	0	28	0	0	0	28	0	28
Location specific drudgery reduction	1	20			0			20		
technologies	1	0	29	29	0	0	0	0	29	29
Total	2	28	29	57	0	0	0	28	29	57
10tai	4	20	29	57	U	U	U	20	29	57
VII Plant Protection	4	<b>7</b> 1	20	00	1		1	50	20	0.1
Integrated Pest Management	4	51	29	80	1	0	1	52	29	81
Integrated Disease Management	2	30	0	30	0	0	0	30	0	30
Bio-control of pests and diseases	1	11	0	11	0	0	0	11	0	11
Total	7	92	29	121	1	0	1	93	29	122
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 Dynam	nics									
Total	0	0	0	0	0	0	0	0	0	0
iotai	v	v	U	v	v	U	U	v	v	v
XI Agro-forestry										
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	32	447	233	680	2	5	7	449	238	687

	No. of				No. of	Partic	ipants			
Area of training	Courses	Gene	eral/ O	thers		SC/ST		Gra	and To	tal
	Courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
Nursery Management of Horticulture	1	Q	10	18	0	0	0	Q	10	18
crops	1	0	10	10	0	0	0	0	10	10
Production of organic inputs	1	17	0	17	0	0	0	17	0	17
Total	2	25	10	35	0	0	0	25	10	35

#### Training for rural youths including sponsored training programmes (On campus)

#### Training for rural youths including sponsored training programmes (Off campus)

	No. of				No. of	Partic	ipants			
Area of training	No. of Courses	Gene	ral/ O	thers		SC/ST		Gra	and To	tal
	Courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
Post harvest technology and value addition	1	1	14	15	0	0	0	1	14	15
Total	1	1	14	15	0	0	0	1	14	15

#### Training for rural youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

	No. of				No. of	Partic	ipants			
Area of training	Courses	Gene	ral/ O	thers		SC/ST	١	Gra	and To	tal
	Courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
Nursery Management of Horticulture	1	8	10	18	0	0	0	8	10	18
crops	_							-		
Production of organic inputs	1	17	0	17	0	0	0	17	0	17
Post harvest technology and value	1	1	14	15	0	0	0	1	14	15
addition	_	_			· ·	Ť	•	_		
Total	3	26	24	50	0	0	0	26	24	50

#### Training programmes for extension personnel including sponsored training (on campus)

	No. of	No. of Participants								
Area of training	Courses	Gene	eral/ O	thers		SC/ST		Gra	and To	tal
	Courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-

#### Training programmes for extension personnel including sponsored training (off campus)

	No. of				No. of	Partic	ipants			
Area of training	Courses	Gene	eral/ O	thers		SC/ST	1	Gra	and To	tal
	courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
Resource conservation technologies	1	39	1	40	4	0	4	43	1	44
Total	1	39	1	40	4	0	4	43	1	44

### Training programmes for extension personnel including sponsored training – CONSOLIDATED (On + Off campus)

	No. of Participants									
Area of training	No. of Courses	Gene	eral/ O	thers		SC/ST	1	Gra	and To	tal
	courses	М	F	Т	Μ	F	Т	Μ	F	Т
Resource conservation technologies	1	39	1	40	4	0	4	43	1	44
Total	1	39	1	40	4	0	4	43	1	44

Т

#### No. of Participants No. of Area of training SC/ST **General**/ Others **Grand Total** Courses F F F Μ Т Μ Т Μ **Crop production and management Resource Conservation Technologies** Increasing production and productivity of crops Total Production and value addition Fruit Plants Ornamental plants Bee-keeping Total Post harvest technology and value addition Total Farm machinery Total Livestock and fisheries Livestock production and management Total Home Science Total **Agricultural Extension** Total

#### **Sponsored/Collaborative training programmes**

**GRAND TOTAL** 

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

		No. of Participants								
Area of training		No. of Courses General/ Others						Gi	rand To	otal
	Courses	Μ	F	Т	Μ	F	Т	Μ	F	Т
-										
Total	-	-	-	-	-	-	-	-	-	-

#### **3.5. Extension Programmes**

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Advisory services (Other than KMAS)	2	982	0	982
Diagnostic visits	33	145	0	145
Field Day	2	60	0	60
Group discussions	0	0	0	0
Kisan ghosthi	0	0	0	0
Film show	3	176	2	178
Self -help groups	0	0	0	0
Kisan mela	3	1750	4	1754
Exhibition	4	2237	4	2241
Scientists' visit to farmers field	33	145	0	145

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	0	0	0	0
Method demonstrations	1	100	0	0
Celebration of important days	5	586	0	586
Special day celebration	13	2394	0	2394
Exposure visits	0	0	0	0
Night camp	1	58	0	58
Farmers meeting	2	155	0	155
Lecture delivered as a resource person	18	612	0	612
Farmers visit to KVK	1	495	0	495
Students visited KVK	7	289	0	289
Agri drone demonstration	6	166	0	166
Other activities as per ICAR, ATARI, SAUs	7	91	0	91
Total	141	10441	10	10351

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	11
Popular articles	1
Radio talks	0
TV talks	0
Animal health camps (Number of animals treated)	0
Social media (No. of platforms Used)	2
Others (pl. specify)	0
Total	14

#### 3.6 Online activities during year 2023

S. No.	Activity Type	Mode of implementation	Title of Program	No. of Programmes	No. of Participants/ Views
Α	Farmers training				
1	Training	Google meet	Safe use of glyphosate	1	20
	Total	-	-	1	20
B	Farmers scientist's i	interaction programme			
	Total				
С	<b>Farmers seminars</b>				
	Total				
D	Expert lectures				
	Total				
Ε	Live webcast				
1	Live webcast	You tube live	Live webcast of PM- KISAN Samman Nidhi	3	507
2	Live webcast	You tube live	Live webcast of Hon'ble PM speech on IYOM conference	1	102
3	Live webcast	You tube live	Live webcast for VBSY and Launch of New	2	59

		Schemes by Hon'ble Prime Minister		
Total	-	-	6	668
Grand Total (A+B+C+D+E)	-	-	7	688

#### **3.7. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS Production of seeds by the KVKs**

Сгор	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	-	48.81	153400	14
Oilseeds*						
	Groundnut	GG-20	-	105.3	1790100	-
	Groundnut	GJG-22	-	8.1	21870	-
	Groundnut	GJG-17	-	18.3	311100	-
Pulses*						
	Green gram	GM-4	-	10.23	-	-
Total	-	- Dii Nicom Dula	-	190.74	2276470	14

\* Oilseeds crops were sold to Bij Nigam. Pulse seed was used for FLD purpose

#### Production of planting materials by the KVK

Сгор	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings						
	Brinjal	GJB-3	-	960	480	34
	Brinjal	GRB-7	-	850	425	27
	Tomato	GT-6	-	1160	580	33
Forest Species						
	Forest trees	-	-	100	-	100
Total	-	-	-	3070	1485	194

#### **Production of Bio-Products**

<b>Bio Products</b>	Name of the bio-product	Quantity Kg/Lit	Value (Rs.)	No. of Farmers
-	-	-	-	-
Total	-	-	-	-

#### **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
-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

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

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

Item	Title	Authors name	Number
Research papers	-	-	-
Technical reports	39th ZREAC ( <i>Rabi</i> -Summer)	-	1
	40 <sup>th</sup> ZREAC ( <i>Kharif</i> )	-	1
	19th AGRESCO Report	-	1
	Annual Progress Report (2022)	-	1
	SAC report (2022)	-	1
	Annual Action Plan report (2023)	-	1
News letters	JAU news letter	-	4
Popular articles	Compost - Jamin nu amrut	D.N. Hadiya, V. M. Savaliya, Dr. B. V.	1
_		Thummar, Dr. H.R.Vadar	1
Extension literature	e Calendar – natural farming V. M. Savaliya, Dr. H. A. H		1
	techniques	Hadiya, A.M. Gamit, Dr. H. R. Vadar	1
TOTAL	-	-	12

#### **B.** Literature developed/published

#### 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	350
5	Twitter Account	-	-	-
6	Any other (Pl. Specify)	-	-	-

#### **D.** Success Stories / Case studies

#### 1. Dragonfruit cultivation in poor (alkali) soil

A. Farmer details

B.

i. Name of farmer	- Lakshamanbhai Sundavadara			
ii. Address	- At-Kolikhada, Block- Porbandar, District- Porbandar			
iii. Mobile no.	- 9825230541			
iv. Age	- 64 yrs			
v. Education	- Graduate			
. Agriculture details				
i. Land (ha) (Irrigate	<b>d</b> )- 0.94			
ii. Major crops growi	1			
Drago	Dragonfruit, groundnut, wheat			
iii. Animal husbandry				
Nil				

#### C. Details of Technology

- > pH level of his soil was 8.70 and EC level was 1.04 dS/m
- Presently, Kamalam (Dragonfruit) crop has been sown since 2018. Which is planted in a total area of 0.16 hectares
- In which there is a distance of 9 feet between the two lines of the pillar and 7 feet between the two pillars in one line
- > Drip irrigation method is used in orchard
- > There are total 220 pillars within 0.16 hectare area
- Each pillar is planted with four plants. Thus the total number of plants is 880
- > He sells his whole produce directly from the farm

<b>Yield and Economics</b>						
Details	2019-20		2020-21		2021-22	
Area (ha)	0.16	1.0	0.16	1.0	0.16	1.0
<b>Production</b> (kg)	1200	7500	1500	9375	2000	12500
Gross income (₹)	150000	937500	225000	1406250	315000	1968750
Gross cost (₹)	74500	465625	86750	542187	91400	571250
Net income (₹)	75500	471875	138250	864063	223600	1397500

Average selling price  $(\mathbf{F}/\mathbf{kg}) - 130$  to 180

#### D. Horizontal spread

Farmer in village Majivana develop a orchard of dragonfruit after visiting the orchard of Shri Lakshamanbhai.

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

NIL

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

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

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

- 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
District Agriculture Officer	Advisory Committee of this KVK and have linkage
АТМА	with different mandatory activities conducting
Deputy Director, FTC	training programmes and demonstration on
Dy. Director of Agriculture (Extension)	implements, Khedut Shibir, Kishan Gosthy, Field Day
Dy. Director of Horticulture	and Vocational Trainings, Sponsored trainings,
Dy. Director of Animal Husbandry	contribution received for infrastructural development
Asstt. Director of Fisheries	etc.
2. Asstt. Conservator of Forest	
3. Taluka purchase and sales Union (Porbandar, Kutiyana,	
Ranavav)	
4. State Bank of India	
5. DWDU, Porbandar	
6. Door darshan Kendra	Dissemination of activities
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.	18.05

# 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	-	-	
04	Demonstrations	-	-	-	-	
05	Extension Programmes					
	Kisan Mela	-	1	-	-	
	Technology Week	-	-	1	-	
	Exhibition	-	3	-	-	
	Others (Important day celebration)	-	-	2	-	
06	Publications					
	Video Films	-	-	-	-	
07	Other Activities (Pl.specify)					
	Watershed approach	-	-	-	-	

# 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
-	-	-	-	-	-

# H. Details of linkage with NFSM

	S. Io.	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	АТМА
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

- ✓ Application of *Azatobacter* + PSB with reduced dose of nitrogen and phosphorus (75 % RDF) gave higher yield (~8 %) and net profit as compared to traditional practice i.e. uncontrolled application of nitrogen
- ✓ Wheat var. GW-451 have production (~10%) than lok-1, GW-496
- ✓ Chickpea variety GJG-6 gave higher yield (~14 %) as compared to Vijay
- ✓ Application of *Beauveria bassiana* + HNPV effectively control pod borer in chickpea
- ✓ Feeding of mineral mixture powder to cattle & buffalo increases milk production (~11 %) & growth rate of animal
- ✓ Application of *Pochonia chlamydosporia* found useful to control nematode infestation in onion as well as in other vegetable crops
- ✓ 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 Horticulture

- ✓ Due to cyclone "Biporjoy", uprooting of mango plants and fruit drops were observed in mango orchards
- ✓ Wilting in coriander was observed in various parts of the districts
- ✓ Unseasonal fruiting in mango was observed in the orchard (village Adityana)
- ✓ Lower flowering (~30 35 percent flowering) in mango
- ✓ New pests/diseases observed in the district mite in coconut, scale insect in mango, smut in datepalm

# **Crop production**

- ✓ Soyabean crop covers 4300 ha (vs 300 ha last year) in the district and higher pod setting with good crop yield
- ✓ Higher yield in groundnut crop during *Kharif*-2023 (average 2854 kg/ha)
- $\checkmark$  Early earing of wheat due to higher temperature in current season

# **Plant protection**

- ✓ Heavy incidence of pod /root rot in groundnut
- ✓ Higher incidence of pink ball worm in cotton crop can cause yield loss
- ✓ Infestation of nematodes was observed in *Kharif* as well as *Rabi* crops in some part of the district
- ✓ Chickpea crop was damaged/wilting due to salinity in *Ghed* area (Village -Kadachch)

# Animal Husbandry

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

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

Period of observing Technology Week : 18.09.2023 to 23.09.2023

Online / Offline: OfflineTotal number of farmers visited: 514Total number of agencies involved: 5

Number of demonstrations visited by the farmers within KVK campus : 8

#### **Other Details**

Types of Activities	No. of Activities	Number of Farmers	Related crop/livestock technology	
Lectures organized	21	514	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	514	Implements water harvest structure vermicompo	
Film show	5	243	Oilseeds and pulses	
Farm Visit	5	514	-	
Supply of Literature (No.)	5	1050	-	
Total number of farmers visited the technology week	-	514	-	

#### **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 (q)	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

	Me	etings	Go	osthies	Fie	eld days	Farr	ners fair	Exhi	bition	Fil	m show
State	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

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

#### **B.** Cases of large scale adoption

NIL

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

A study was carried to assess the impact of KVK activities on Farmers' techno-economic and social aspects. The respondents were from following fifteen operational villages of KVK, who actively participated in KVK extension activities and/ or benefited with the FLDs or OFTs were considered for the survey. Total 101 randomly selected respondents were surveyed for the study, a simple questionnaire was prepared and data on profile, Technological impact, Economical impact and social impact were collected analyzed in terms of frequency and rank.

Operational villages

Porbandar	Ranavav	Kutiyana
Khapat	Ramgadh	Choliyana
Palkhada	Aaditpara	Sindhpur
Rinavala	Doltgadh	Frer
Kuchhadi	Daiyar	Gokran
Degam	Pipliya	Hamadpara

Primary infor	mation (profile of respondent)	1	n=101
	Detail	No. of Respondent	Perce
	Less than 35 years	49	48.5
Age	36 to 50 years	43	42.6
	More than 50 years	9	8.9
Education Occupation	Illiterate	30	29.7
	Up to std. 7	39	38.6
	Std. 7 to 10	29	28.7
	Std. 11 to 12	3	3.0
	Graduate	0	0.0
	Farming	22	21.8
	Farming + Animal husbandry (milch)	76	75.2
	Farming + Animal Husbandry (milch) + Other	3	3.0
	Less than 1.0 ha	22	21.8
Land holding	1.0 to 2.0 ha	65	64.4
	More than 2.0 ha	14	13.9
No. of animals	1	18	17.8
	2	53	52.5
	2 to 5	24	23.8
	More than 5	6	5.9

# II. Technological impact

Descrete	Befo	re	Afte	r
Parameter	Frequency	Rank	Frequency	Rank
Land preparation	32	6	100	1
Crop selection	40	4	100	1
Selection of variety	21	8	95	3
Time of sowing	66	1	96	2
Soil testing	6	13	93	5
Fertilizer management based on soil testing	12	11	81	10
Weed management	47	2	90	7
Irrigation management	47	2	92	6
Land cultivation and intercultural operation	13	10	88	8
Integrated diseases management	9	12	83	9
Integrated pest management	15	9	88	8
Nutrition management of animals	28	7	90	7
Hygienic milk production	43	3	94	4
Animal disease management	15	9	95	3
Artificial insemination	34	5	93	5
Average percentage	28.53		91.87	

# III Economic impact

III. Economic impact	III. Economic impact n=101							
Parameter	Befo	ore	Aft	ter				
rarameter	Frequency	Rank	Frequency	Rank				
Mechanization	9	5	84	5				
Labour management	39	2	97	2				
Crop harvesting	53	1	101	1				
Crop drying and storage	30	3	92	3				
Marketing	25	4	89	4				
Weather related information	5	6	80	6				
Government schemes related information	6	7	92	3				
Average percentage	23.85		90.71					

IV. Social impact			n=101			
Parameter	Befor	·e	After			
r al ameter	Frequency	Rank	Frequency	Rank		
Does other farmer seek information from you?	13	4	91	3		
Does other farmers visit your farm?	14	3	92	2		
Does government officer visit your farm?	22	2	92	2		
Do you feel that it is beneficial for you to get in touch with KVK?	36	1	100	1		
Average percentage	21.25		93.75			

# 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		Type of Messages								
KVK	Message Type	Crop	Livestock	Weather	Marke- ting	Aware- ness	Other	Total		
	Text only	-	-	-	-	-	-	-		
Porbandar	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)

	Demo	Year of	Aroo	Details	of product	tion	Amour	nt (Rs.)	
Sl. No	Unit	establishment	Area (ha)	Variety	Produce	Qty.	Cost of inputs	Gross income	Remarks
-	-	-	-	-	-	-	-	-	-

Name	Date of		a	Detai	ls of produ	ction	Amount (₹)	
of the	sowing	Date of harvest	Variety	Type of	Quantity	Cost of	Gross	
crop	sowing		ł	variety	Produce	( <b>q</b> )	inputs	income
Cereals								
Wheat	28.11.2022	15.03.2023	1	GW-451	Seed	48.81	-	-
Pulses								
Greengram	13.03.2023	18.05.2023	1	GM-4	Seed	10.23	-	-
Oilseeds								
Groundnut	28.06.2022	29.10.2022	10	GG-20	Seed	105.30	-	-
	30.06.2022	30.10.2022	2	GJG-17	Seed	18.30	-	-
	30.06.2022	30.10.2022	1	GJG-22	Seed	8.10	-	-

# **B.** Performance of instructional farm (crops) including seed production

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

Sl.	<b>Pic Products</b> Name of the Qty		Qty	Amou	Domonica		
No	Bio Products	Product	(kg/lit)	Cost of inputs	Gross income	Remarks	
	Bio- Fertilizers	-	-	-	-	-	
	Bio- Fungicides	-	-	-	-	-	
	Bio- pesticides	-	-	-	-	-	
	Bio-Agents	-	-	-	-	-	

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

Sl. No	Name	Details of production			Amoun		
	of the animal / bird /	Breed	Type of	Qty.	Cost of	Gross	Remarks
	aquatics		Produce	~ ~ ~	inputs	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

		Details of			Quantit	Area			
Amou nt sancti on (Rs.)	Expendit ure of ure (Rs.) / n irrig	infrastruct ure created / micro irrigation system etc.	No. of Training program mes	No. of Demonstrati ons	No. of plant materi als produc ed	Visit by farme rs (No.)	Visit by officia ls (No.)	y of water harvest ed in '000 litres	irrigate d / utilizati on pattern
-	-	5.0 ha micro sprinker	1	1	-	315	7	-	10 ha

# H. Performance of nutritional garden at KVK farm

# If Nutritional Garden developed at KVK farm/Village Level?YesIf yes,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	650
0.12	Fruit crops	4	450

#### Nutritional garden developed at village level (Area under nutritional garden)

No. of Villages covered	Component ofNo. of species / plants inNutritional Gardennutritional garden		No. of farmers covered
11	Vegetable crops	10	200

#### H. Details of skill development trainings organized

	Name of	Name of Duration OP/Job role (hrs)		]	No. of pa	articipants			
S.No.	KVKs/SAUs/ICAR			SC	Cs/STs	0	thers	Т	otal
	Institutes	<b>L</b> -7007 - 0-0	(5)	Male	Female	Male	Female	Male	Female
-	-	-	-	-	-	-	-	-	-

#### **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							
				Training			
With	SBI,	Porbandar	000456	Organizer, KVK,	10250767705	360002121	SBIN0000456
KVK	Porbandar	Forballuar	000430	Khapat –	10230707703	300002121	SDII\000430
				Porbandar			
With	SBI,	Porbandar	000456	K.V.K. Revolving	30028355777	360002121	SBIN0000456
KVK	Porbandar	Forballuai	000430	Fund Account	30028333777	300002121	SD1110000430
				Out Scaling of			
With	CDI			Natural Farming,			
	SBI,	Porbandar	000456	K.V.K., JAU,	42075064432	360002121	SBIN0000456
KVK	Porbandar			Khapat			
				(Porbandar)			

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

S. No.	Particulars	Sanctioned	Released	Expenditure
Α	Capital (Non recurring)	-	-	-
В	Salary	38.00	38.00	24.04
С	General (Contingencies and TA)	16.00	8.00	8.65
	TOTAL (A+B+C)	54.00	46.00	32.69

# **C.** Status of revolving fund (₹ in lakh) for the Five years

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance in hand as on 1 <sup>st</sup> 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*
April 2023 to December 2023	59.08	27.30	23.28	63.10

\* Reduced as Solar panel of 30 KW worth Rs is installed.

# 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
V.M.Savaliya	Scientist	Waste utilization and management for energy generation	CAET, JAU, Junagadh	Offline	16 <sup>th</sup> -17 <sup>th</sup> February, 2023
D.N.Hadiya	Agriculture Officer	Application of robotics and drone technology in agriculture	JAU, Junagadh	Offline	2 <sup>nd</sup> -3 <sup>rd</sup> March, 2023
V.M.Savaliya	Scientist	Naliyeri ni adhunik kheti	JAU, Junagadh	Offline	6 <sup>th</sup> June, 2023
A.M.Gamit	Agriculture Officer	Naliyeri ni adhunik kheti	JAU, Junagadh	Offline	6 <sup>th</sup> June, 2023
V.M.Savaliya	Scientist	Safe and Judicious use of Glyphosate	NIPHM, Hyderabad	Online	28 <sup>th</sup> June, 2023
Dr.H.R.Vadar	Senior Scientist & Head	Annual Zonal Workshop-2023	Aurangabad, Maharashtra	Offline	28 <sup>th</sup> -30 <sup>th</sup> July, 2023
V.M.Savaliya	Scientist	Natural Farming Training	Gurukul, Kurukshetra (HY)	Offline	20 <sup>th</sup> -22 <sup>nd</sup> November, 2023
Dr.H.R.Vadar	Senior Scientist & Head	The growing scale of AI in agriculture: Revolutionizing farming practices	CAET, JAU, Junagadh	Offline	4 <sup>th</sup> -5 <sup>th</sup> December, 2023
V.M.Savaliya	Scientist	Automation in protected cultivation	JAU, Junagadh	Offline	6 <sup>th</sup> -07 <sup>th</sup> December, 2023
Dr. H.R.Vadar	Senior Scientist & Head	Soft skill and e securities	DSW, JAU, Junagadh	Offline	11 <sup>th</sup> -12 <sup>th</sup> December, 2023

# 18. Details of progress in doubling farmers income (DFI) villages adopted by KVKs

Name of	Total No. of	Koy interventions	No. of farmers	Change in inc	come (Rs/unit)
the village	families surveyed	Key interventions implemented	covered in each intervention	Before (base year)	After (current year)
Degam	10	➢ Bench mark survey	≻FLDs – 21	320608	410513
Choliyana	10	regarding farmers status	farmers	514128	585000
		were done	➤Training – 84		
		➤ 3 FLDs on relevant	farmers		
		technologies & seed of			
		improved varieties were			
		provided to the farmers			
		➢ 7 ON & OFF campus			
		trainings were conducted			

# **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	No of Beneficiaries	No of Extension	No of Beneficiaries	No of Unit established		nge in ome	No. Of Groups		
Enterprise	Conducted	Denenciaries	Activities Denenciaries estublishe				After	Formed		
	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	Cleaning of campus	2	27
2	Vermicomposting	1	5
3	Awareness programme	3	74

# 22. Books published 2023-24

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) Natural farming campaign

Sr	Activities	No.	No. of participants			
No	Acuviues	INO.	Male	Female	Total	
1	Training	7	264	110	374	
2	Ext. functionaries training	1	43	1	44	
3	Kisan mela on natural farming	2	799	413	1212	
4	Awareness on natural farming	7	238	67	305	
5	Lecture delivered on natural farming	2	5	89	94	
6	Prakrutik krushi parisamvad	1	342	25	367	
7	Natural farming FLDs	1	8	0	8	
8	Publication	1	500	0	500	
	TOTAL	22	2199	705	2904	

One plot of 0.6 ha (groundnut) in *Kharif*-2023 and 0.4 ha (wheat) in *Rabi*-2023-24 allotted to natural farming demonstration

# **B)** Details of FPO

Sr. No.	Name of FPO	Registration no.	Year of Formation	Details of FPO	Supporting agency
1	Vachhraj Agro Farmer Producer Company Limited	129765	2022	Production of agri seeds	NCDC
2	Ranavav Agro Navkrishak Farmers Producer Company Ltd.	142134	2023	Production of agri seeds	NCDC
3	Lakshya Rojivada Navkrishak Farmers Producer Company Ltd.	142140	2023	Production of agri seeds	NCDC

# C) Soil and water analysis

Sr No	Scheme	No. of soil samples analyzed	No. of water samples analyzed	Total
1	KVK (ICAR)	81	87	168
2	ATIC	50	0	50
3	FLDs	20	0	20
4	CFLDs	50	0	50
5	Farm/others	11	0	11
	Total	212	87	299

# **D)** Participate in *karuna abhiyan*

Every year on day of 14<sup>th</sup> January, the *Makarsankranti*; birds were injured due to thread used in kite festival. 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 14<sup>th</sup> & 15<sup>th</sup> January, 2023. They rescued total 124 birds.

# E) Celebration of republic day

The 74<sup>th</sup> Republic Day was celebrated at Krishi Vigyan Kendra, Porbandar. The staff member of KVK, CoA and students of CoA, Porbandar remained present on this occasion. Dr. R.K. Odedra, Retd. Senior Scientist & Head unfurl the tricolor flag with salute to our national flag & sang our national anthem. Total 142 members and students remained present in this occasion.

# F) 18<sup>th</sup> SAC meeting & panel discussion on natural farming

18<sup>th</sup> SAC meeting of Krishi Vigyan Kendra, Porbandar was organized at training hall, KVK, Porbandar on 7<sup>th</sup> February, 2023. Dr. V.P. Chovatia, Hon'ble Vice Chancellor, JAU, Junagadh; Dr. H.M. Gajipara, Director of Research and Director of Extension Education, JAU, Junagadh; Shri H.A. Trivedi, DAO, Porbandar; Shri R.R. Tilva, ADA (Training), Porbandar; Shri Ishwar Gehlot, Dy. Dir., Ani. Hus.; Smt. K.J. Panchal, Dy. Dir. (Horti.); Staff of ATMA project; farmer members of SAC & progressive farmers remained present. Dr. H.M. Gajipara, DEE presented the recent trends in extension work & other key points taking into consideration which were contemporary. The progress report of 2022 was presented by respective scientists of various disciplines. Important suggestions were made by Hon. Vice Chancellor & DEE. At last, Dr. V.P. Chovatia, Hon. Vice Chancellor made chair persons remarks & praise the work done by KVK.

# G) Prakrutik krushi parisamvad

A *parisamvad* on natural farming was organized at Krishi Vigyan Kendra, JAU, Porbandar on 20<sup>th</sup> February, 2023. On this occasion farmers were invited to KVK, Porbandar and lecture cum interaction session on natural farming was organized between farmers and scientists.

Farmer Rameshbhai Savaliya who have precious experience in natural farming shared tips and experience regarding natural faming to other farmers. Dr. R. B. Thanki, Assistant professor, CoA, JAU, Khapat delivered lecture on 'Major difference between Conventional Farming and Natural Farming'. Mr. V. M. Savaliya, Scientist from KVK delivered lecture on 'Importance of Natural farming in current era' and also discussed different aspects of natural farming with farmers. Staff from KVK and CoA also remained present. Total 367 participants remained present.

# H) Live webcast of Hon'ble PM programme on PM-KISAN

Live webcast of Hon'ble PM programme releases of installment of PM-KISAN was organized at Krishi Vigyan Kendra, Porbandar on 27<sup>th</sup> February, 2023. Hon'ble PM Shri Narendrabhai Modi interacts with farmers on this ocassion. Staff of KVK, CRS, CoA and farmers (116 participants) was participated in this programme.

# I) Live webcast of Hon'ble PM speech on IYOM conference

Live webcast of Hon'ble PM speech on IYOM conference was organized at Krishi Vigyan Kendra, Porbandar on 18<sup>th</sup> March, 2023. Total 102 participants remained present.

# J) Participation in education expo

An Education Expo was organized by AAJ-KAL press at Porbandar on 27<sup>th</sup>-28<sup>th</sup> May, 2023. It was organized to provide information about agriculture education to students & other visitors. A stall is managed by 3 members from KVK in the expo.

# K) Awareness programme under Mission Life Style for environment

An awareness programme cum campaign was organized at Krishi Vigyan Kendra, Porbandar about Mission Life Style for Environment on 29<sup>th</sup> May to 6<sup>th</sup> June, 2023. During these event different programmes were organized by KVK related to Meri Life Theme. College students were admired to adopt healthy lifestyle; visit to solar roof top unit was made and awareness created among students about meri life programme & save energy theme etc. Pledge to save environment also taken by participants. Total 5 awareness programme was organized at KVK level and total 310 students and farmers (M-216; F-94) participated in the event.

# L) Celebration of world environment day

World Environment Day was celebrated at Krishi Vigyan Kendra, Porbandar on date 5<sup>th</sup> June, 2023. Awareness programme was organized for students and farmers about sustainable environment. A tree plantation drive was carried out at KVK campus. Total 157 participants (M-103; F-54) including staff remained present.

# M) Celebration of International Day of Yoga

International Day of Yoga was celebrated at Krishi Vigyan Kendra, Khapat on 21<sup>st</sup> June, 2023. The staff members of Krishi Vigyan Kendra; College of Agriculture & Cotton Research Station and college students were participated in this event. Total 152 (M-102; F-50) including staff members were participated in this event.

# N) Live webcast of Hon'ble PM programme on PM-KISAN

On July 27<sup>th</sup>, 2023, Krishi Vigyan Kendra in Porbandar orchestrated a live webcast of the Hon'ble Prime Minister's speech during the release of the PM-KISAN installment. Inviting local farmers to the KVK, the event also featured a practical demonstration of various agricultural implements, providing hands-on insights. The gathering, attended by 102 farmers, became an interactive platform for knowledge exchange. Notably, the staff from Krishi Vigyan Kendra, College of Agriculture, and Cotton Research Station actively participated, enhancing the collaborative spirit of the occasion. This event not only disseminated crucial information but also empowered the farming community with practical demonstrations.

# O) PCO training on safe use of glyphosate

A three days training of PCO was organized at KVK, Porbandar from 27<sup>th</sup> - 31<sup>st</sup> July, 2023. Two days online and one day offline training was organized. In this training V.M. Savaliya, Scientist discuss various topics of glyphosate application, its safe use etc.

# P) Tree plantation drive and oath taking under *Meri Mitti Mera Desh* campaign

A tree plantation drive and oath taking under *Meri Mitti Mera Desh* campaign was organized at CoA, Porbandar campus on 10<sup>th</sup> August, 2023. This campaign was inaugurated by our Hon'ble PM to tribute to the Veers and

Veeranganas who have made the supreme sacrifice for the country. All the staff of KVK, CoA and CRS were participated in this event. They take a pledge and planted tree at the campus.

# **Q)** Celebration of *parthenium* awareness week

Krishi Vigyan Kendra in Porbandar celebrated *Parthenium* Awareness Week from August 16<sup>th</sup> to 22<sup>nd</sup>, 2023, dedicated to combating the menace of this noxious weed. Each day brought diverse activities aimed at increasing awareness, including training sessions, hands-on uprooting of parthenium from the campus, and discussions on chemical control methods. A total of 88 participants, comprising 82 males and 6 females, including both farmers and staff members, actively engaged in the week-long initiatives. This concerted effort not only raised awareness about the detrimental impact of parthenium but also fostered a collective commitment to its control and eradication.

# **R**) Sponsored training on bee keeping (apiculture)

Krishi Vigyan Kendra, Porbandar hosted a sponsored Apiculture Training from September 14<sup>th</sup> to 15<sup>th</sup>, 2023. This training was sponsored by State Horticulture Department, Porbandar. The two-day program immersed 30 participants in the world of beekeeping through comprehensive training sessions, interactive discussions, and captivating live demonstrations of bees and beehives. Focused on both theory and practical aspects, the training aimed to equip attendees with essential skills and knowledge for successful apiculture practices. The hands-on approach allowed participants to gain a deeper understanding of bee behavior and hive management. This initiative not only fostered beekeeping expertise but also highlighted the crucial role of apiculture in sustainable agriculture.

# S) Celebration of technology week

From September 18<sup>th</sup> to September 23<sup>rd</sup>, 2023, Krishi Vigyan Kendra in Porbandar hosted an impactful Technology Week, dedicated to elevating agricultural practices. The week-long event showcased cutting-edge agricultural technologies, emphasizing their application in groundnut cultivation and various crops. Attendees experienced live demonstrations and insightful seminars covering every aspect of the agricultural process—from land preparation to marketing strategies. A noteworthy Start-Up event, in collaboration with the District Industries Center, featured esteemed guests like Dr. V.P. Chovatia, Hon'ble Vice-chancellor, JAU, Junagadh; Dr. N.B. Jadav, DEE, JAU, Junagadh and Shri K.D. Lakhani, Collector and DM, Porbandar providing valuable guidance. Partnering with ATMA and FTC, KVK's collaborative effort attracted 514 participants, reflecting the community's keen interest in embracing agricultural innovation.

# T) Live webcast of PM speech on launch of *Sankalp Saptaah* under the aspirational blocks programme

On September 30<sup>th</sup>, 2023, the air at KVK, Porbandar was charged with enthusiasm as 36 participants, including 13 staff members, gathered for a live webcast of the PM's speech during the launch of *Sankalp Saptaah* under the aspirational blocks programme. The digital waves carried the essence of the Prime Minister's vision, resonating with the collective spirit of the attendees. It was not just a virtual event but a shared commitment to the transformative journey ahead.

# U) Agricultural drone demonstration

Agricultural drone enhance efficiency by optimizing resource usage, minimizing manual labor, and ultimately contributing to higher yields and sustainable farming practices. On October, 7<sup>th</sup> and December 19<sup>th</sup>, 2023, the villages of Hamadpara, Adityana, Advana, Choliyana, Ranakandorana, and Degam witnessed a transformative event—the agricultural drone demonstration orchestrated by KVK, Porbandar in association with College of Agricultural Engineering, JAU, Junagadh. Scientist Shri V.M. Savaliya from KVK and Asst. Prof. D.B. Chavda from Engineering College with total 166 attentive farmers participated in this enlightening experience. The demonstration not only educated the farmers but ignited a spark of curiosity among the farming community, fostering a collective vision for a more efficient and sustainable agricultural future in Porbandar.

# V) Millet mela under IYOM-2023

A taluka level millet melas was organized at three talukas of Porbandar from 27<sup>th</sup> to 30<sup>th</sup> October, 2023 under International Year of Millet-2023. These events were organized by state agricultural department in association with KVK, Porbandar at village Khapat, Mahiyari and Bapodar. Scientists from KVK, V.M. Savaliya and D.N. Hadiya delivered lectures on importance of millets. A millet recipe competition and exhibition were also organized during the event. Total 1282 farmers and farmwomen remained present in these events.

# W) Live webcast of PM speech on PM-KISAN

Live webcast of Hon'ble PM programme releases of installment of PM-KISAN was organized at Krishi Vigyan Kendra, Porbandar on 15<sup>th</sup> November, 2023. Hon'ble PM Shri Narendrabhai Modi interacts with farmers on this ocassion. Staff of KVK, CRS, CoA and farmers (116 participants) was participated in this programme.

# X) Rabi krushi mahotsav

A Rabi Krushi Mahotsav - 2023 was organized at each talukas of the state on 24<sup>th</sup> and 25<sup>th</sup> November, 2023. Krishi Vigyan Kendra, Porbandar participated in this event by organizing stall at various places as well as working as a technical expert to deliver lecture. Dr. H.R. Vadar, V.M. Savaliya, D.N. Hadiya and A.M. Gamit delivered lectures on millets and natural farming during the event.

# Y) Viksit Bharat Sankalp Yatra

A Viksit Bharat Sankalp Yatra was organized by central government to aware farmers and farmwomen about various beneficiary schemes run by government. Scientists from KVK, Porbandar were also remain present in this yatra.

# **Z)** Millet recipe competition

A millet recipe competition was organized at three villages Adityana, Amardad and Khapat during 2023 under IYOM-2023 celebration. Total 27 millet recipes were prepared and displayed by participants in this contest.

# AA) 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 289 (male-166, female-123) students visited KVK, Porbandar and interacted with the staff of KVK.

#### **BB)** Activities conducted under Mera Gaun Mera Gaurav (MGMG)

Under MGMG, 10 villages of Porbandar district has been selected for different extension activities. Two teams of KVK, Khapat is working and each team has five villages. The activities conducted are given below.

Sr	Quartar	Visit to village		Meetings/Gosthis organised		
No	Quarter	No.	Participants	No.	Participants	
1	January to March 2023	3	46	3	46	
2	April to June 2023	3	42	3	42	
3	July to September 2023	3	42	3	42	
4	October to December 2023	2	36	2	36	

# **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	32	449	238	687
Rural youths	3	26	24	50
Extension functionaries	1	43	1	44
Sponsored Training	12	1190	663	1853
Vocational Training	0	0	0	0
Total	48	1708	926	2634

# 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	0
Livestock & Fisheries	40	-	40
Other enterprises	100	5.0	-
Total	140	5.0	40
Grand Total	225	39.0	40

# 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No of Trials	
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		141	10351
Other extension activities		14	-
	Total	155	10351

# Mobile Advisory Services

		Type of Messages						
Name of KVK	Message Type	Crop	Livesto ck	Weather	Marke -ting	Awar e-ness	Other enterpri se	Total
	Text only	-	-	-	-	-	-	-
	Voice only	-	-	-	-	-	-	-
	Voice & Text both	_	-	-	-	-	-	-
	Total Messages	-	-	-	-	-	-	-
	Total farmers Benefitted	-	-	-	-	-	-	-

# 5. Seed & Planting Material Production

	Quintal/Number	Value (₹)
Seed (q)	190.74	2276470
Planting material (No.)	3070	1485
Bio-Products (kg)	-	-
Livestock Production (No.)	-	-
Fishery production (No.)	-	-

# 6. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value (₹)
Soil	212	24300
Water	87	4350
Plant	-	-
Total	299	28650

# 7. HRD and Publications

Sr. No.	Category	Number
1	Abstract	0
2	Workshops	8
3	Conferences	0
4	Meetings	11
5	Trainings for KVK officials	2
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	1
12	Research papers	0
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	0
20	On-going research projects	0
21	Other	0